

11 July 2023

The Chief Executive Officer  
Burdekin Shire Council  
145 Young Street  
AYR QLD 4807

Dear Sir / Madam,

**REQUEST FOR DEVELOPMENT APPLICATION UNDER SUPERSEDED PLANNING SCHEME  
PURSUANT TO S29 OF *PLANNING ACT 2016***

**DEVELOPMENT PERMIT FOR MATERIAL CHANGE OF USE FOR BULK STORE, GENERAL  
INDUSTRY, ENVIRONMENTALLY RELEVANT ACTIVITY 7 AND HAZARDOUS CHEMICAL  
FACILITY OVER LAND AT 39 – 57 HOME HILL ROAD, AYR (LOT 1 ON RP718903)**

Mewing Planning Consultants act on behalf of Nutrien Ag Solutions (**the Applicant**) in relation to the site at 39 – 57 Home Hill Road, Ayr (**the site**).

On behalf of the Applicant, and pursuant to section 29 of the *Planning Act 2016* (**Planning Act**) and section 11 of the *Planning Regulation 2017* (**Planning Regulation**), we hereby submit a request for the now superseded 2011 Burdekin Shire Planning Scheme (**Superseded Planning Scheme**) to be applied to a Development Application over the site for the following:

- Development Permit for a Material Change of Use for Bulk Store and General Industry;
- Development Permit for a Material Change of Use for an Environmentally Relevant Activity (ERA 7) for Chemical Manufacturing;
- Environmental Authority for ERA 7; and
- Development Permit for a Material Change of Use for Hazardous Chemical Facility.

In accordance with Section 115(1)(a) of the *Environmental Protection Act 1994*, this development application for a Material Change of Use under the Planning Act is also taken to be an application for an environmental authority for the prescribed ERA.

The applicant is wishing Burdekin Shire Council (**Council**) (as the Assessment Manager) to apply the now superseded planning scheme to this development application. This request is sought as comparison of the superseded planning scheme and the current planning scheme shows that the intent for the site remains for industrial uses and the proposed development compliant with that intent. However, the Burdekin Shire Council Planning Scheme 2022 (**Current Planning Scheme**) increases the level of assessment from code to impact assessment.

The applicant is voluntarily seeking retrospective approval for the on-site activities, which have been operating without complaint for several years. There is little benefit from proceeding with an impact assessable process compared with the code assessment, given the site is existing and the local community would be aware of the uses being undertaken on the site.

A review of the current planning scheme indicates that the development for which the approval is sought is generally consistent with the planning scheme intent for the site.

The Burdekin Shire Planning Scheme 2022 commenced on 1 March 2023 and is the current Planning Scheme for the assessment of development proposals within the Burdekin Shire.

The current Planning Scheme defines the existing operations as both Agricultural Supplies Store and Special Industry (for fertiliser manufacture), both of which are Impact Assessable in the Industry Zone.

The Strategic Framework outlines economic growth through diverse rural futures. The Burdekin has a strong and diverse rural economy underpinned by sugar cane production but including an increasing mix of horticultural crops. The existing operations provides agricultural supplies and fertilisers that enable the increase in agricultural production.

The proposed development generally complies with the overall outcomes of the Industry Zone as the existing operations do not compromise the future use of premises for industry activities. The Industry Zone accommodates a range of service and low to medium impact industry and transport and storage uses.

Therefore, based on the above the existing, historical use of the site and that of the Industrial zoning does not change from the Burdekin Shire IPA Planning Scheme 2011 and the Burdekin Shire Planning Scheme 2022. As such the existing operations generally complies with the intent of the zone and the Strategic Framework.

In accordance with section 11 of the Planning Regulation, the following information is provided:

Requirement under Section 11 of the Planning Regulation	Response
(a) the name, residential or business address, electronic address and phone number of the person making the request	This request is being made by:  Nutrien Ag Solutions Limited c/- Mewing Planning Consultants GPO Box 1506 Brisbane QLD 4000  Contact: Nicole Boulton Email: <a href="mailto:nicole.boulton@mewing.com.au">nicole.boulton@mewing.com.au</a> Phone: 0403 155 291
(b) the address or property description of the premises that the request relates to; and	39-57 Home Hill Road, Ayr Lot 1 RP718903
(c) a statement about whether the person making the request is asking the local government— (i) to accept, assess and decide a superseded planning scheme application; or (ii) to apply a superseded planning scheme to the carrying out of development that was accepted development under the superseded planning scheme; and	This request is asking the local government to accept, assess and decide a superseded planning application in accordance with (c)(i).
(d) for a request under paragraph (c)(i)—a copy of the proposed superseded planning scheme application; and	A copy of the superseded planning application is attached.
(e) for a request under paragraph (c)(ii)—a description and plan of the proposed development; and	Not Applicable
(f) details of the superseded planning scheme that the request relates to; and	The Planning Scheme to which this relates is the 2011 Burdekin Shire Planning Scheme, which was superseded on 1 March 2023.
(g) if the local government has set a fee under subsection (3) for considering the request—the fee.	In accordance with Burdekin Shire Council's Schedule of Fees and Charges for 2023/24, the fee for a request for an application to be considered under the Superseded Planning Scheme is \$1,356 (not subject to GST). We would appreciate confirmation from Council on the preferred method of payment of this fee.

We would welcome the opportunity to discuss any aspect of this request. Should you wish to discuss, please contact myself on 0403 155 291 or at [nicole.boulton@mewing.com.au](mailto:nicole.boulton@mewing.com.au).

Yours sincerely,

A handwritten signature in black ink, appearing to read 'NBoulton'.

Nicole Boulton  
Principal  
**Mewing Planning Consultants**

# Town Planning Assessment

<b>Address</b>	37-59 Home Hill Road, Ayr
<b>Application</b>	Development Permit for Material Change of Use for Bulk Store and General Industry, ERA 7 and Hazardous Chemical Facility
<b>Applicant</b>	Nutrien Ag Solutions
<b>Date</b>	July 2023



**Prepared for: Nutrien Ag Solutions Limited**

**Prepared by: Mewing Planning Consultants**

**Our reference: 22372**

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You must read the disclaimer appearing at the conclusion of this report.

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**Appendix B** – Certificate of Title

**Appendix C** – Architectural Package

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**Appendix E** – Traffic Impact Assessment

**Appendix F** – Stormwater Management Plan

**Appendix G** – Hazardous Assessment Report (Draft)

**Appendix H** – ERA 7 Assessment Report

## Summary

### Site and Planning Framework Details

Table 1: Site Details and Planning Framework	
Site Details	
Address	39-57 Home Hill Road, Ayr
RP Description	Lot 1 on RP178903
Site Area	12,140m <sup>2</sup>
Owner	Nutrien Ag Solutions Limited (A.C.N 008743 217)
Easements	None
Planning Framework	
Burdekin Shire IPA Planning Scheme 2011 (Superseded Planning Scheme)	
Local Government	Burdekin Shire Council
Zone	Industry
Overlays	Natural Features or Resources Overlays - Low Bushfire Hazard
2022 Burdekin Shire Planning Scheme (Current Planning Scheme)	
Local Government	Burdekin Shire Council
Zone	Industry
Overlays	<ul style="list-style-type: none"> <li>• Acid sulfate soils - 5-20m contour</li> <li>• Flood hazard – low hazard</li> <li>• Regional Infrastructure – State controlled road and Railway corridor</li> </ul>
State Designations	
State Designations and mapping	<ul style="list-style-type: none"> <li>• Water Resources               <ul style="list-style-type: none"> <li>○ Water resource planning area boundaries</li> </ul> </li> <li>• Native Vegetation Clearing               <ul style="list-style-type: none"> <li>○ Regulated vegetation management map (category X)</li> </ul> </li> <li>• State Transport Corridor               <ul style="list-style-type: none"> <li>○ State-controlled Road and area within 25m of a State-controlled Road</li> <li>○ State controlled Railway and area within 25m of a railway corridor.</li> <li>○ State Code 22: Environmentally relevant activities</li> </ul> </li> </ul>

## Development Application Details

Table 2: Development Application Details	
<b>Proposal Overview</b>	<p>The site is currently used for fertiliser manufacturing (blending). This application is seeking retrospective approval for this use, as well as some building works proposed on site.</p> <p>The site contains four large buildings/ sheds with associated outdoor storage and vehicle manoeuvring areas. The existing site operations have an annual volume output of 16,000 tonnes mixed fertiliser products and 120,000 litres of liquid fertiliser products.</p> <p>There are also approvals triggered for Environmentally Relevant Activities and Hazardous Chemical Facilities triggered under the Planning Regulation 2017.</p> <p>In accordance with Section 115(1)(a) of the Environmental Protection Act 1994, this development application for a Material Change of Use under the Planning Act is also taken to be an application for an environmental authority for the prescribed ERA.</p> <p>The approval for this development is sought under the now superseded Burdekin IPA Planning Scheme.</p> <p>Refer to the Architectural Package in <b>Appendix C</b> and <b>Section 3</b> of this report for further details.</p>
<b>Development Description</b>	<p>Development Permit for Material Change of Use for Bulk Store and General Industry under the Superseded Planning Scheme</p> <p>Development Permit for a Material Change of Use for Environmentally Relevant Activity (ERA 7) for Chemical Manufacturing, including the associated Environmental Authority.</p> <p>Development Permit for a Material Change of Use for Hazardous Chemical Facility.</p>
<b>Defined Land Use (Superseded Planning Scheme)</b>	Bulk Store and General Industry
<b>Level of Assessment (Superseded Planning Scheme)</b>	Code Assessment
<b>Assessment Manager</b>	Burdekin Shire Council
<b>Referral Agencies</b>	State Assessment and Referral Agency
<b>Public Notification</b>	N/A
<b>Applicant</b>	Nutrien Ag Solutions
<b>Consultant</b>	<p>Nicole Boulton, Principal Mewing Planning Consultants GPO Box 1506, Brisbane Qld 4001 nicole.boulton@mewing.com.au 0403 155 291</p>
<b>Supporting Material</b>	<p><b>Appendix A</b> – Burdekin Shire Code Assessment</p> <p><b>Appendix B</b> – Certificate of Title</p> <p><b>Appendix C</b> – Proposed Site Plan</p> <p><b>Appendix D</b> – Draft Site Based Management Plan*</p> <p><b>Appendix E</b> – Traffic Impact Assessment</p> <p><b>Appendix F</b> – Stormwater Management Plan</p> <p><b>Appendix G</b> – Draft Hazard Assessment Report*</p>



	<p><b>Appendix H – ERA 7 Assessment Report</b></p> <p>* The Site Based Management Plan and Hazard Assessment Report will both be finalised upon receipt of the Environmental Authority</p>
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## 1. Introduction

This Town Planning Assessment accompanies a development application made by Nutrien Ag Solutions (**the Applicant**) over land at 39-57 Home Hill Road, Ayr (**the site**).

The Applicant proposes a retrospective development application to the existing fertiliser storage, distribution and blending facility located at the site. The site has existing car parking and landscaping features. It is also proposed to construct a new warehouse building near the southern boundary and relocate the chemicals currently stored in a smaller shed on-site into the new warehouse. The smaller shed will then be demolished.

For further details regarding the proposed development refer to **Chapter 3** of this report and the Proposed Site Plan is included in **Appendix C**.

This development application comprises a Development Permit for the following:

- Material Change of Use for Bulk Store and General Industry;
- Material Change of Use for Environmentally Relevant Activity (ERA 7) for Chemical Manufacturing, including the associated Environmental Authority; and
- Material Change of Use for Hazardous Chemical Facility.

The development application is subject of assessment pursuant to the Planning Act 2016 (the **Planning Act**). The planning scheme under which this approval is sought is the Burdekin Shire IPA Planning Scheme 2011 (**Superseded Planning Scheme**).

The proposal is assessable development pursuant to the Planning Act and the Superseded Planning Scheme. A Code Assessable development application is triggered, with Burdekin Shire Council (**Council**) being the assessment manager for the application.

The same application under the 2022 Burdekin Planning Scheme would trigger an impact assessable development application.

The applicant is seeking retrospective approval for the on-site activities, which have operated over the site for many years and, as such, there is little benefit from proceeding with an impact assessable process compared with the code assessment, given the community would be aware of the site operations.

This Town Planning Assessment provides a comprehensive assessment of the proposed development having regard to the Planning Act and the Superseded Planning Scheme. Key components of the Town Planning Assessment comprise:

- An overview of the site details and local context (Chapter 2);
- A description of the proposed development (Chapter 3); and
- An assessment against the applicable town planning framework (Chapter 4)

The Town Planning Assessment is supported by specialist reports and other material including:

- Code Assessment (**Appendix A**);
- Certificate of Title and Owner's Consent (**Appendix B**);
- Proposed Site Plan prepared by Nutrien Ag Solutions (**Appendix C**);
- Draft Site Based Management Plan prepared by Stantec (**Appendix D**);

- Traffic Impact Assessment prepared by PSA Consulting (**Appendix E**)
- Stormwater Management Plan prepared by Northern Consulting Engineers (**Appendix F**);
- Draft Hazard Assessment Report prepared by Stantec (**Appendix G**); and
- ERA 7 Application Report (prepared by Stantec (**Appendix H**)).

## 2. Site Details and Local Context

### 2.1 Site Details

#### 2.1.1 Address and Real Property Description

The subject site is located at 39-57 Home Hill Road, Ayr, and is properly described as Lot 1 on RP718903. The extent of the existing facility is outlined in **Figure 1** below.



Figure 1: Subject site (shown in yellow) and surrounding area (Queensland Globe, 2023)



### **2.1.2 Location**

The site is approximately 3km south of the Ayr Town Centre and is bound by Home Hill Road to the east and the North Coast Railway to the west.

### **2.1.3 Shape and Size**

The lot is triangular in shape with a site area of 12,140m<sup>2</sup> and a frontage to Home Hill Road of approximately 210m.

### **2.1.4 Ownership and Encumbrances**

The registered owner of the site is Nutrien Ag Solutions Limited (A.C.N. 008 743 217).

### **2.1.5 Current Use**

The site receives and stores bulk granular fertiliser. Some of the fertiliser products are blended together to produce mixed products.

The site contains several large buildings/sheds with associated outdoor storage, as well as loading/unloading areas and an ancillary administration component.

### **2.1.6 Employee numbers**

The existing facility has a total of 26 full time equivalent (**FTE**) employees. This is not proposed to change.

### **2.1.7 Hours of Operation**

The hours of operation for the development are 7:00am – 5:00pm. This is not proposed to change.

### **2.1.8 Vehicle Access**

The site is currently provided with vehicular access from Home Hill Road via two site access points on Home Hill Road, with the southern driveway providing access into the site and the northern driveway providing only egress from the development.

### **2.1.9 Car Parking**

A total of 18 car parking spaces are provided on site, including 1 Persons with Disability (PWD) parking space. 14 of these spaces are located near the site entry and the remaining four (4) are provided near the site exit. In addition to the 18 formal parking spaces, several unmarked spaces are also provided on-site.

### **2.1.10 Infrastructure Networks**

The site is currently connected to water, sewer, telecommunication, and electricity.

### **2.1.11 Topography**

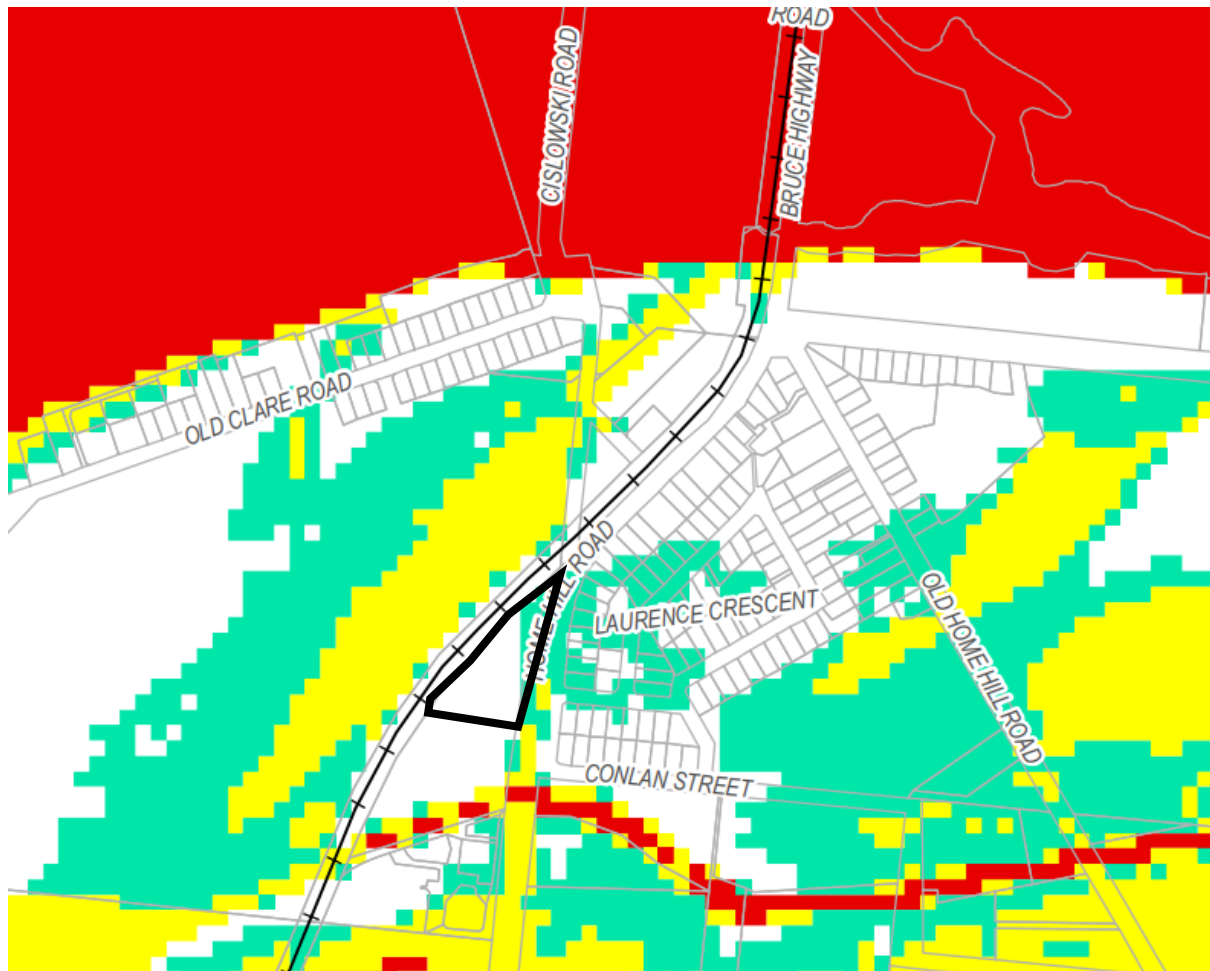
The site is relatively flat in topography and low lying ranging from 12m Australian Height Datum (**m AHD**) to 13m AHD.

### **2.1.12 Vegetation**

The site is clear of native vegetation, with some minor landscaping at the frontage and street trees located sporadically along the site frontage.

### **2.1.13 Flooding**

A review of the Burdekin Shire Council Flood Hazard Overlay Map (in the Current Planning Scheme) indicates that the site is mapped as having a low flood hazard near the Home Hill Road frontage and in the north-eastern corner. Refer to **Figure 2**.



**Figure 2: Flooding mapping over the subject site (2022 Burdekin Planning Scheme, 2023)**

#### 2.1.14 Approval History

Without having evidence that confirms the existing land use was lawfully established as 'accepted development' or granted under a development approval, this development application seeks retrospective approval for existing and ongoing operations on the site.

The site history shows the following previous and current development approval/s over the site:

- 1965 – 1037 – Bld – Storage Facilities
- 977 – 1975 – Bld – 5m Vertical Height Rise to Shed
- 1977 – 2294 – Bld – Alter Amenities – New Office
- 1981 – Letter – Town Planning – Extension to Present Facilities
- 1982 – 4090 – Bld – New Bulk Storage Shed

- 1984 – 5255 – Bld – New Storage Shed
- 1991 – 9700 – Bld – Re-site Storage Shed
- 1991 – 9724 – Bld – New Storage Shed
- 1991 – 9776 – Bld – Partial Re-roof of Building
- 1994 – 11746 – Bld – New Storage Shed
- 1999 – 52/99 – Bld – New Office
- 2002 – 108/02 – Bld – Removal of Aqua-Ammonia Tank
- 2002 – 171/02 – Bld – Extension to Warehouse & Office
- 2014 – BLD14/0901 – Class 7b New Storage Shed
- 2020 – BLDPA20/0191 – Class 7 New Storage Shed & Skillion Roof

It appears there is no original development approval issued for the establishment of the land use but there is a letter issued the Council of the Shire of Ayr on the 27 April 1981 which authorised a proposed extension to the facilities (at that time described as ‘Mirrigan Depot’ which was presumably described so due to the site’s proximity to Mirrigan Road) and was subject to compliance with several development conditions. The applicant is listed as ‘Consolidated Fertilizers Limited’.

The existing activities for dangerous goods storage and fertiliser blending may have lawfully established as accepted development (without needing planning approval) prior to 1981, with building approvals over the site dating back to 1965, and Consolidated Fertilisers Limited identified as the owner of the site.

However as there is no confirmation of the use of the site having either an approval or an exemption/accepted development path, approval is now sought to ensure all approvals are in place.

Nevertheless, there is ongoing acknowledgement of the use over an extended period of time.

## 2.2 Site Surrounds

The site is situated 3km south of the town of Ayr (refer to **Figure 4**) with Home Hill Road to the east, which is a state-controlled road, North Coast rail line to the north and west, The area consists of established industrial activities (Visy Boxes and More and Goodyear Autocare Ayr) to the south, low density residential land uses to the east and rural land uses to the west and north.

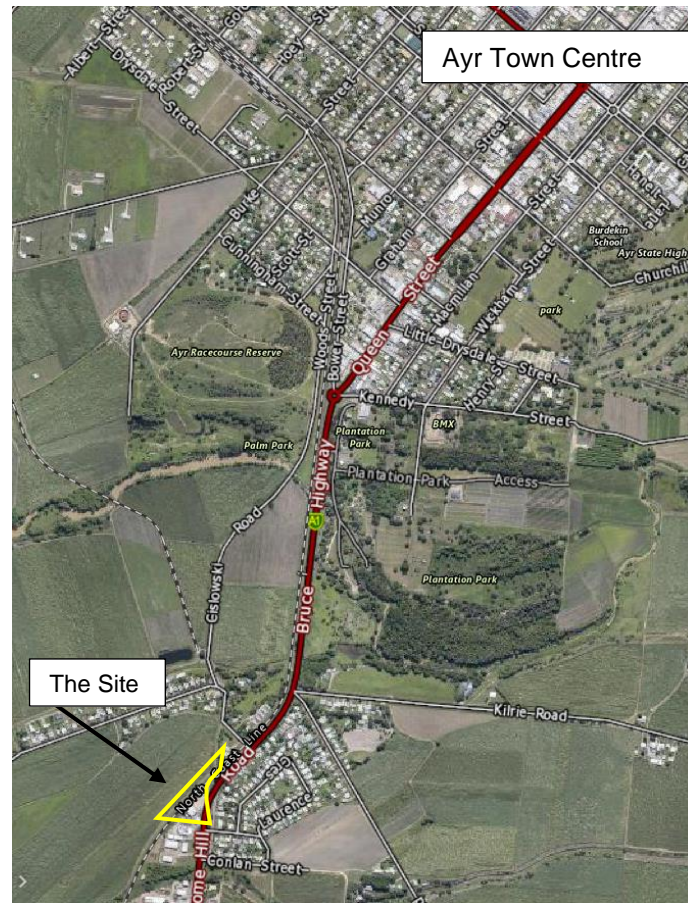


Figure 3: The site (shown in yellow) and surrounding area (Queensland Globe, 2023)



## 3. Proposed Development

### 3.1 Approvals sought

The primary use of the existing facility is for the storage of processed fertiliser ingredients (pre-manufactured fertiliser granules) and involves the mixing of the individual ingredients to create custom fertiliser blends. The blends are bagged on site and distributed to customers. The fertiliser ingredients are delivered in separate packets, and the facility does not undertake manufacturing of the fertiliser granules. The process of combining the various fertiliser products has the potential to produce off-site impacts, however the site operations are conducted to reduce and minimise the release of excess dust and odour emissions. A draft Site Based Management Plan (**SBMP**) has been prepared by Stantec and is attached in **Appendix D**. This document will be finalised once the Environmental Authority is received.

In accordance with Section 115(1)(a) of the Environmental Protection Act 1994, this development application for a Material Change of Use under the Planning Act is also taken to be an application for an environmental authority for the prescribed ERA. An Application Report has been prepared for the ERA 7 Application and is included in **Appendix H**.

The facility also involves the storage and mixing of liquid fertilisers, and the storage of other chemicals, including both dangerous and hazardous goods (i.e. combustible liquids and poisons). Given that a significant quantity of fertiliser and secondary chemicals are being stored and/or blended on site, it is critical to ensure that proper management procedures are in place to prevent environmental impacts. A draft Hazardous Assessment Report has been prepared by Stantec and is attached in **Appendix G**. This document will be finalised once the Environmental Authority is received.

Nutrien Ag Solutions primarily operate a “direct to farm” business model. This involves loading goods into the warehouse / storage areas on site, undertaking the mixing of fertiliser components on site, and delivering products direct to farms. The site operations also includes approximately 150m<sup>2</sup> of ancillary sales area for direct retail sales to the public.

**Table 3** provides a summary of the development application land uses and category of assessment.

Table 3 – Land Use and Category of Assessment (Superseded Planning Scheme)			
Land Use and Definition	Level of Assessment and Definition	Assessment Benchmarks	Assessment
Bulk Store:	Premises used for the storage and handling of goods in bulk whether or not such goods are stored within a building or buildings, prior to their distribution and subsequent use elsewhere. The term does not include the treatment, processing or packaging of any kind of such goods to be stored.	Industry Zone Code	Please refer to <b>Chapter 4</b> of this report.
	Code Assessment		
General Industry	Premises used for any industrial activity such as the manufacturing, processing, fabrication, packaging, repair, storage or maintenance of any item, machine or product, which activity involves one or more of the following: (a) the intense emission of noise, light, heat, waste material or by-products of any kind; (b) the generation of high traffic flows in the context of the locality or the road network; and	Industry Zone Code	Please refer to <b>Chapter 4</b> of this report.

Table 3 – Land Use and Category of Assessment (Superseded Planning Scheme)			
Land Use and Definition	Level of Assessment and Definition	Assessment Benchmarks	Assessment
	(c) an elevated demand for services such as treated water, sewerage and solid waste disposal, electricity, roads, stormwater drainage and the like.		
	Code Assessment		
Chemical Manufacturing (ERA 7)	Chemical manufacturing (the relevant activity) consists of any of the following activities— (a) manufacturing a total of 200m <sup>3</sup> or more of coating, food additives, industrial polish, sealant, synthetic dye, pigment, ink, adhesives or paint in a year; (b) manufacturing a total of 200t or more of chemicals, other than chemicals mentioned in paragraph (a), in a year; (c) using in the manufacturing process a total of 200t or more of chemicals as feedstock in a year.	SDAP Code 22: Environmentally relevant activities	Please refer to <b>Chapter 4</b> of this report.
	Code Assessment		
Hazardous Chemical Facility	Hazardous chemical facility means the use of premises for a facility at which a prescribed hazardous chemical is present or likely to be present in a quantity that exceeds 10 percent of the chemical's threshold quantity under schedule 15 of the Work Health and Safety Regulation 2011.	SDAP Code 21: Hazardous Chemical Facilities	Please refer to <b>Chapter 4</b> of this report.
	Code Assessment		

A summary of each of these component is provided below.

### 3.1.1 Material Change of Use for Bulk Store and Industry

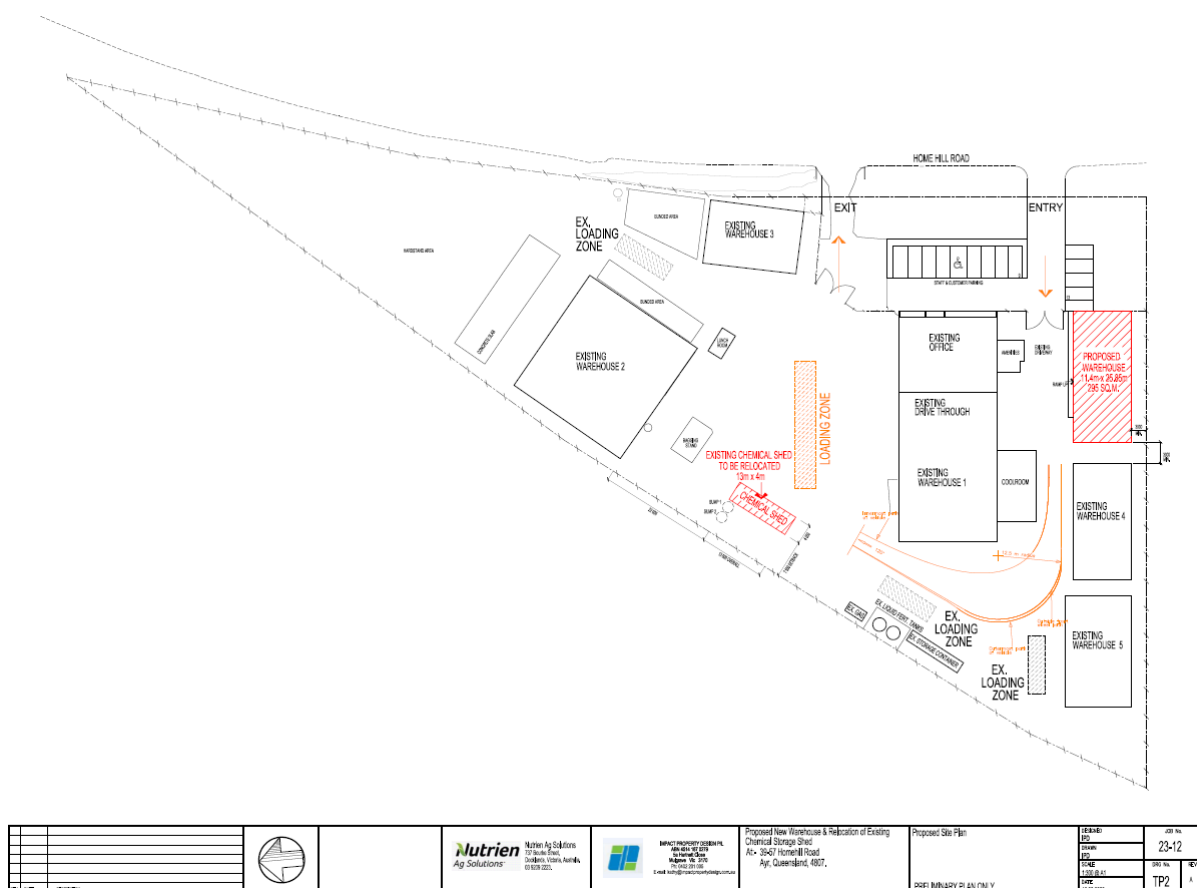
This application is seeking approval for the existing Bulk Store and General Industry activities on site.

The Bulk Store component applies to the component of the operations involving storage of the individual fertiliser ingredients and liquid fertilisers on site and the subsequent storage of the bagged fertiliser mixtures after the combining process. The use also applies to the sale of the bagged fertiliser mixtures and other products to customers.

The storage of goods does not meet the definition of a Storage Depot under the planning scheme as the storage of goods on site exceeds a capacity of 1 tonne, and therefore the scale of the storage operations is such that the appropriate land use definition is Bulk Store.

General Industry applies to the component of the operations for the combining of granular fertiliser components to form custom fertiliser blends.

As part of these uses, there will be some building work proposed comprising demolition of an existing chemical shed located on the western boundary and construction of a new warehouse building on the southern boundary of the site (refer to **Figure 4**).



**Figure 4: Proposed site plan (Nutrien Ag Solutions, 2023)**

### 3.1.2 Material Change of Use for Chemical Manufacturing (ERA 7)

The solid granular fertiliser products blended and stored on site comprise:

- Mono-ammonium phosphate (non-dangerous good, non-hazardous substance);
- Dibasic ammonium phosphate (non-dangerous good, non-hazardous substance);
- Urea (non-dangerous good, non-hazardous substance); and
- Trace element - blends of metals, salts other ingredients used to alleviate micronutrient deficiencies in soil (non-dangerous goods, but classified as a hazardous substance).

The liquid fertiliser products blended and stored on site consist of blends of nitrogen, phosphorus and potassium (NPK) containing compounds with a small amount of zinc included.

The quantities of fertiliser blended on site meet the threshold for an Environmentally Relevant Activity (**ERA**) as per Schedule 2 of the Environmental Protection Regulation 2019. Particularly, ERA 7 sub item 4b, for manufacturing >5000 tonnes of fertiliser. As a result, an application for an Environmental Authority (**EA**) must be obtained from the Queensland Government.

The annual volume output for the site is 16,000 tonnes mixed fertiliser products and 120,000 litres of liquid fertiliser products. The operations on site do not involve the mixing of the abovementioned pre-manufactured fertiliser products with any natural fertilisers (such as organic products / waste).

The site involves the storage of 120,000 litres (120m<sup>3</sup>) of liquid fertiliser. Blending of liquid fertilisers is also undertaken on site.

The operations do not involve any mixing of the above dangerous goods. These goods are received to site and stored in individual bottles and sold to customers. The dangerous goods are not manufactured, mixed or bottled on site. Individually these chemicals are low in volume, but combined are sufficient in volume to be listed on the Hazardous Goods register.

In accordance with Section 115(1)(a) of the Environmental Protection Act 1994, this development application for a Material Change of Use under the Planning Act is also taken to be an application for an environmental authority for the prescribed ERA. An Application Report has been prepared for the ERA 7 Application and is included in **Appendix H**.

### 3.1.3 Material Change of Use for Hazardous Chemical Facility

Hazardous Chemical Facility applies to the component of the operations at which a prescribed hazardous chemical is present or likely to be present in a quantity that exceeds 10% of the chemical's threshold quantity under Schedule 15 of the Work Health and Safety Regulation 2011 (WHS Regulation).

As the site operations include storage of a prescribed hazardous chemical in a quantity that exceeds 10% of the chemical's threshold quantity under schedule 15, this aspect of the site operations is also defined as a Hazardous Chemical Facility and triggers assessment by the State under Schedule 10, Part 7, Division 3 of the Planning Regulation.

To assist in the assessment and regulation of the Hazardous Chemical Facility, a draft Hazardous Assessment Report is provided in **Appendix G**.

## 3.2 Application Particulars

**Table 4** provides a summary of the key development parameters.

Table 4: Proposed Development Parameters		
<b>Site Area</b>	12,417m <sup>2</sup>	
<b>Proposed Uses</b>	Bulk Store, General Industry, Chemical Manufacturing (ERA 7), Hazardous Chemical Facility and Environmental Authority	
	<b>Existing</b>	<b>Proposed</b>
<b>Height</b>	One (1) Storey	No change
<b>Site Cover</b>	20%	23%
<b>Gross Floor Area</b>	2,563m <sup>2</sup>	2,858m <sup>2</sup>
<b>Number of Tenancies</b>	One (1)	No change
<b>Setbacks</b>	Eastern boundary (Home Hill Road) - 1m (PS4) Southern boundary – 3m (PS8 and PS6) Western boundary (Railway) – 3m (Warehouse Store 3) Northern boundary – 106m (measured from the triangular point to Warehouse Store 3)	Eastern boundary (Home Hill Road) – no change Southern boundary – 3m (PS9, PS8 and PS6) Western boundary (Railway) – 3m (Warehouse Store 3) Northern boundary – no change



**Table 4: Proposed Development Parameters**

<b>Landscaping</b>	Existing turf of between 7m-22m, within the south-eastern corner of the site  Some street trees located within Home Hill Road road reserve near the northern end of the site	No change
<b>Access</b>	Via two (2) separate crossovers to Home Hill Road	No change
<b>Car Parking</b>	18 formal parking spaces, several unmarked spaces	No change
<b>Design Vehicle Type</b>	AV Design Service Vehicle	No change
<b>Infrastructure Networks</b>	Connected to the existing water, sewer, telecommunication, electricity	No change

### 3.2.1 Landscape

The site and verge contains some landscaping in the form of street trees and turf areas.

### 3.2.2 Transport

A Traffic Assessment has been prepared by PSA Consulting and is included in **Appendix E** of this assessment. A summary of the report is provided in the following sections.

#### 3.2.2.1 Carparking

The Burdekin Shire IPA Planning Scheme 2011, Schedule 2 specifies the parking requirement for 'Industry' (non-Extractive) as 1 space per 100m<sup>2</sup> gross floor area or 1 space per 2 employees, whichever is the greater. Based on the number of employees (26), the development requires a total of 13 parking spaces. Based on the total gross floor area of the development (2,910m<sup>2</sup>), the number of parking spaces required is 29.

Therefore, the maximum of these two requirements is 29 parking spaces. A total of 18 car parking spaces are provided on site, including 1 Persons with Disability (PWD) parking space. 14 of these spaces are located near the site entry and the remaining four (4) are provided near the site exit. In addition to the 18 formal parking spaces, several unmarked spaces are also provided on-site.

In addition to the 18 formal parking spaces, several unmarked spaces are also provided on-site. Considering there are no parking issues experienced currently on site, the onsite parking provision is sufficient.

It is recommended that the line marking for the available on-site parking be in accordance with AS2890.1 standard requirements for general parking.

#### 3.2.2.2 Vehicular Access

Access to the site is currently gained directly from Home Hill Road. There are two site access points on Home Hill Road the southern driveway serves as an entry and the northern driveway serves as an exit.

#### 3.2.2.3 Servicing

The relevant design vehicles for the proposed development are 26m B-Double vehicle (as the largest vehicle type having access to the development) entering and exiting.

The full swept path assessment for access to/from the site off Home Hill Road is contained in **Appendix E**. Swept path analysis has demonstrated that the largest vehicle having access to the development, a 26m B-Double vehicle, is able to enter, exit and manoeuvre through the site satisfactorily.

#### **3.2.2.4 Traffic Generation**

The existing operation of the facility generates in the order of 38 vehicle trips in the AM and PM peak hours, where trip refers to a one way movement (either to the site or from the site).

#### **3.2.3 Waste Management**

An assessment of the existing waste management activities was prepared by Stantec and is included in **Appendix E** of this assessment. It is noted that control measures and monitoring of the generated waste is provided in the assessment.

The following types of waste are generated on site: Sump and washdown water, Solid Granular fertiliser sweepings, Cardboard, Waste Oil stored on site; and General waste unrelated to site operations. A summary of the assessment is provided below:

- Sump and washdown water will be regularly pumped out into storage tanks, from which a local farmer will collect the water and use it as a nutrient supplement on their field;
- Solid granular fertiliser sweepings will also be collected by local farmers for re-use;
- Cardboard is emptied four (4) times a year in a dedicated cardboard recycling skip bin;
- Two (2) wheelie bins are located on site for general waste which are emptied on a regular basis, taken to a landfill facility near the site; and
- Waste oil is stored on site and will be disposed of in accordance with the SBMP.

#### **3.2.4 Stormwater Management Plan**

A Stormwater Management Plan has been prepared by Northern Consulting Engineers and is included in **Appendix F** of this assessment. A summary of the report is provided in the following sections.

##### **3.2.4.1 Stormwater Quantity**

An assessment of the change in run-off due to the construction of the new warehouse will result in a 0.7% increase to the existing impervious area (74.2%). A range of runoff scenarios were assessed for annual exceedance probabilities and found there is no increase in peak flow and therefore no impact to the run-off characteristics as a result of the development.

##### **3.2.4.2 Stormwater Quality**

Stormwater quality is addressed in section 7.4 of the SBMP. The control measures to ensure that water quality objectives are met are as follows:

- Wastewater generated from toilets, general staff facilities, etc, must be directed to the site sewerage connection;
- Any trade wastes (i.e. cleaned up chemical spills, oils etc) must be disposed of via an appropriately licenced; waste disposal contractor. These must not be discharged to site sewerage or the site stormwater collection system;
- Stormwater from the fertiliser storage and bagging area is directed via bunding and drainage to a sump. Water which collects in the sump is to be pumped into the storage tanks where it can be drawn from and dispersed to land at an offsite location on an as needs basis.

- The daily operation and maintenance of the sump and associated drains and storage tanks is the carried out by a suitably trained, experienced or qualified person.
- Any defects found within the sump/drainage tank system are to be repaired as soon as possible.

#### **3.2.4.3 Flood Assessment**

The Current Planning Scheme Flood Hazard Overlay Map identified the site as only having a small portion of the site (north-eastern corner) as being constrained by a low flood hazard. The remaining site is not included within the flood hazard overlay. This is supported by the flood extents, illustrated in Figure 4 of **Appendix F**, which shows isolated flooding within the north-eastern portion of the site.

As the development will generally imitate the existing site levels to maintain positive fall towards the eastern boundary, there will be not impediment to flow paths or loss of flood storage in areas shown to experience flooding. It is anticipated that the construction of the new sump will slightly increase storage capacity. Therefore, as the development will not impact the on-site storage of flood water or existing flow paths, there will be no impact to the flood characteristics outside the development extents and no impacts upstream or downstream.

Furthermore, the mapped flooding area is clear of hazardous goods.

#### **3.2.4.4 Water and Sewer Connections**

The site has existing access to the Council's water and sewer infrastructure and the proposed development will not result in an increase in capacity to Council's infrastructure.

#### **3.2.5 Site Based Management Plan**

A draft Site Based Management Plan (SBMP) has been prepared by Stantec and is included in **Appendix D** of this assessment. A summary of the report is provided in the following sections.

##### **3.2.5.1 Air (Odour and Dust)**

The activities associated with the ERA 7 have the potential to generate air borne dust primarily from the loading and unloading of fertilisers and other products and site vehicle movements. As demonstrated in the SBMP the existing operations can continue to be conducted in a way that will not impact the surrounding sensitive environments. Objectives and Control measures have been provided as part of the SBMP. These can be conditioned as part of a development approval.

##### **3.2.5.2 Noise**

Site operation activities may include the operation of machinery resulting in noise emissions impacting on nearby sensitive receptors. As demonstrated in the SBMP the existing operations can continue to be conducted in a way that will not impact surrounding sensitive environments. Objectives and Control measures have been provided as part of the SBMP. These can be conditioned as part of a development approval.

##### **3.2.5.3 Water, Land and Stormwater**

Surface waters, groundwater and water quality have the potential to be impacted by the ERA 7 activity through the runoff from hardstand areas and other exposed areas of the site used for the activity. Additionally, the potential exists for spills of hydraulic oil and fuels from plant, equipment, and vehicles. Fertiliser also contains substantial amounts of nutrients which can be quite harmful to both aquatic and terrestrial ecosystems.

As demonstrated in the SMBP the continued operations at the site can be conducted in a way that will not impact surrounding sensitive environments. Objectives and Control measures have been provided as part of the SBMP. These can be conditioned as part of a development approval.

#### **3.2.5.4 Hazardous Materials Handling and Storage**

The major findings demonstrated in the Hazardous Assessment Summary found that the risks from the existing dangerous goods storage or handling system have been minimised to as low as reasonably practical to people, property, and the environment. After the implementation of the mitigation measures detailed in Section 6.2 the residential risk assessment identified 5 low risks and 13 medium risks but there was a decrease from 12 high risks to 0 high risks.

Compliance with the State Development and Assessment Provisions – State Code 21: Hazardous Chemicals is presented in Section 6. Furthermore, the site can be managed in accordance with the SBMP.

Objectives and Control measures have been provided as part of the SBMP. These can be conditioned as part of a development approval.

## 4. Statutory Town Planning Framework

### 4.1 Introduction

This Chapter of the Town Planning Assessment identifies the applicable components of the statutory town planning framework and provides an assessment against those components. A summary of the proposed development's compliance with the statutory town planning framework is provided at the conclusion of this Chapter.

### 4.2 State Planning Framework

#### 4.2.1 Planning Act 2016

The Planning Act is the statutory instrument for the State of Queensland under which, amongst other matters, development applications are assessed by local governments.

#### 4.2.2 Application for assessment under the Superseded Planning Scheme

Under section 29 of the Planning Act, an applicant is able to request an assessment manager to apply a superseded planning scheme to a proposed development application.

#### 4.2.3 Decision Rules

This development proposal involves assessable development under the superseded Burdekin Shire IPA Planning Scheme and is subject to a Code Assessable development application to be made to the Assessment Manager, in this case Burdekin Shire Council.

According to Section 45(3) of the Planning Act:

- (3) A **code assessment** is an assessment that must be carried out only—
  - (a) against the assessment benchmarks in a categorising instrument for the development; and
  - (b) having regard to any matters prescribed by regulation for this paragraph.

Assessment benchmarks for Code Assessment are described in Section 26 of the Planning Regulation 2017 (**Planning Regulation**):

*“(1) For section 45(3)(a) of the Act, the code assessment must be carried out against the assessment benchmarks for the development stated in schedules 9 and 10.*

- (2) Also, if the prescribed assessment manager is the local government, the code assessment must be carried out against the following assessment benchmarks—

- (a) the assessment benchmarks stated in—
  - (i) the regional plan for a region, to the extent the regional plan is not identified in the planning scheme as being appropriately integrated in the planning scheme; and
  - (ii) the State Planning Policy, part E, to the extent part E is not identified in the planning scheme as being appropriately integrated in the planning scheme; and
  - (iii) any temporary State planning policy applying to the premises;
- (b) if the local government is an infrastructure provider—*the local government's LGIP*

- (3) However, an assessment manager may, in assessing development requiring code assessment, consider an assessment benchmark only to the extent the assessment benchmark is relevant *to the development.*”

At the time of the lodgement of the development application, the common material comprises the application material only. The application material includes an assessment of the proposed development against the relevant assessment benchmarks. Information arising from the Information Request Stage (if applicable) will also form part of the common material to be accessed by Council.

#### 4.2.4 Public Notification

Pursuant to Section 53 of the Planning Act, the notification stage of the development assessment process applies to an application if either of the following applies –

- “(a) any part of the application requires impact assessment; or*
- (b) the application includes a variation request.”*

As the development application requires Code Assessment and does not require a variation request, public notification is not required pursuant to the Planning Act.

#### 4.2.5 State Planning Policy

The State Planning Policy was released on 3rd July 2017. It is a State planning instrument made under Chapter 2 Part 2, Section 10 of the Planning Act.

As prescribed in Section 26(2)(a)(ii) of the Planning Regulation, the State Planning Policy represents an assessment benchmark, and the assessment manager must have regard to State Planning Policies if it is not identified as being appropriately reflected in the planning scheme.

The Burdekin Shire IPA planning Scheme 2011 (superseded) predates the State Planning Policy 2017. The proposed development is for a retrospective development application to the existing fertiliser storage, distribution and blending facility.

Part E of the State Planning Policy identifies agriculture as essential to Queensland’s economic productivity and employment. The proposed development is consistent with the following State interest – agriculture, as follows:

- (d) facilitating opportunities for co-existence with development that is complementary to agricultural uses that do not reduce agricultural productivity (e.g. on-farm processing, farm gate sales, agricultural tourism etc)
- (e) considering the provision of infrastructure and services necessary to support a strong agriculture industry and associated agricultural supply chains

#### 4.2.6 Referral Jurisdiction and State Development Assessment Provisions

Section 55(2) of the Planning Act states that:

- “For any other referral agency, a regulation may prescribe the matters the referral agency–*
- (a) may, must or must only assess a development application against; and*
- (b) may, must, or must only have regard to for the assessment. “*

Part 4, Section 22(1) of the Planning Regulation states that:

- “Schedules 9 and 10 prescribe—*
- (a) for section 54(2)(a) of the Act, the referral agency for the development applications stated in the schedules; and*
- (b) for section 55(2) of the Act, the matters the referral agency—*
- (i) may or must assess the development application against; and*



*(ii) may or must assess the development application having regard to.”*

The proposed development triggers referral to State Assessment and Referral Agency (**SARA**), due to:

- Proximity to the State Controlled Road;
- Proximity to the State Controlled Rail Corridor;
- The use including an Environmentally relevant activities (ERA 7) for a Chemical Manufacturing; and
- The use including a Hazardous Chemical Facility.

#### **4.2.7 North Queensland Regional Plan**

The North Queensland Regional Plan (the Regional Plan) has been prepared to support the established and emerging industries in the region and to address changes expected to occur in the region. Most notably the Regional Plan looks to strengthen established industries and the already-diverse regional economy.

As prescribed in Section 26(2)(a)(i) of the Planning Regulation, the regional plan represents an assessment benchmark, and the assessment manager must have regard to regional plan if it is not identified as being appropriately reflected in the planning scheme.

The Burdekin Shire IPA Planning Scheme 2011 pre-dates the North Queensland Regional Plan (2020).

It is noted that the existing development has been identified as a use consistent with Goal 1: A leading economy in regional Australia of the North Queensland Regional Plan.

##### Established and emerging industry

##### Regional Outcome

1.1 Facilitate the growth of new and established industries in appropriate locations and protect their ongoing function.

##### Regional Policies

1.1.1 Ensure the sufficient long-term supply of suitably located and serviced land to meet the requirements of existing and emerging industries within the region.

1.1.2 Ensure existing and new industrial areas remain appropriately buffered from incompatible land uses and that the functionality of connecting infrastructure corridors is protected.

The proposed development is consistent with the North Queensland Regional Plan as the continuation of the existing fertiliser blending facility provides a key resource to the surrounding agriculture pursuits.

There are no assessment benchmarks for the proposed development in the regional plan. Nonetheless, the proposed development and existing are consistent with the State interest as the continuation of the existing fertiliser manufacturing (blending) facility provides a key resource to the surrounding agriculture pursuits.

### **4.3 Local Planning Framework**

#### **4.3.1 Assessment against the Burdekin Shire IPA Planning Scheme 2011**

The Planning Scheme commenced on 4 March 2011 and has since been superseded by the Burdekin Shire Council Planning Scheme 1 March 2023.

### 4.3.2 Defined Land Use

The proposed development comprises the following land use, which defined in Schedule 1 of the Superseded Planning Scheme, with the relevant definitions reproduced below:

**Bulk Store** - Premises used for the storage and handling of goods in bulk whether or not such goods are stored within a building or buildings, prior to their distribution and subsequent use elsewhere. The term does not include the treatment, processing or packaging of any kind of such goods to be stored. The term also does not include "Produce Store".

**General Industry** - Premises used for any industrial activity such as the manufacturing, processing, fabrication, packaging, repair, storage or maintenance of any item, machine or product, which activity involves one or more of the following:

- (a) the intense emission of noise, light, heat, waste material or by-products of any kind;
- (b) the generation of high traffic flows in the context of the locality or the road network; and
- (c) an elevated demand for services such as treated water, sewerage and solid waste disposal, electricity, roads, stormwater drainage and the like. The term does not include the use of land for the purpose of any other industry defined in this sub-section.

### 4.3.3 Category of Assessment

**Table 5** sets out the applicable category of assessment triggers for the development.

Table 5: Category of Assessment			
Zone	Application Triggers	Level of Assessment	Assessment Benchmarks
Industry	MCU within the Industry Zone	Code Assessment	Industry Zone Code
Bulk Store	MCU within the Industry Zone	Code Assessment	Industry Zone Code
Overlays (IPA)			
Natural Features or Resources Map Overlay Map 9: Low Bushfire Hazard	Not Applicable	Not Applicable	Not Applicable

### 4.3.4 Zone

The Burdekin Planning Scheme includes the site in the Industry Zone.

The overall outcomes are the purpose of the Industry Zone and are follows:

- (a) provide for a range of activities to facilitate sustainable economic development in the shire, including alternative forms of industrial development, particularly those industries *which value add to the shire's natural resources*;
- (b) establish and operate extractive industrial uses preferably within the Extractive Industry sub area;
- (c) protect any adjoining residential use from the effects of industrial development;
- (d) protect preferred industrial areas from inappropriate non-industrial development; and

- (e) maintain the quality of the surrounding environment by reaching acceptable environmental management standards for both the construction and operation phases of the use in respect of:
  - (i) management of soil erosion and sedimentation control and possible contaminated land;
  - (ii) management of environmental and operational risks and hazards; and
  - (iii) the protection of air quality, water quality and the acoustic environment

#### **4.3.5 Overlays**

The Burdekin Shire IPA Planning Scheme includes several overlays which provide additional information in relation to state and local interests. The site is located within the Natural Features and Resource Overlay Map 9 Low Bushfire Hazard of the Bushfire Overlay, which does not change the level of assessment or apply any assessment benchmarks to the site.

#### **4.3.6 Temporary Local Planning Instruments**

There are no Temporary Local Planning Instruments applicable to the site.

#### **4.3.7 Applicable Assessment Benchmarks**

Having regard to the sections above, the following are the assessment benchmarks applicable to the assessment of the proposed development:

- Burdekin Shire IPA Planning Scheme Industry Zone Code;
- State Code 1: Development in a state-controlled road environment (PO15, PO16, PO25, PO26); and
- State Code 2: Development in a Railway environment (PO35 – PO38)
- State Code 21: Hazardous chemical facilities
- State Code 22: Environmentally relevant activities

#### **4.3.8 Compliance Summary**

The following sections comprise a summary of compliance against the assessment benchmarks of the applicable codes that apply to the proposed development.

##### **4.3.8.1 Industry Zone Code**

The proposed development complies with the applicable Acceptable Solutions and Specific Outcomes of the Industry Zone Code.

A detailed response to the industry Zone Code and overall outcomes is included in **Appendix A**.

##### **4.3.8.2 State Code 1: Development in a state-controlled road environment**

For a response to the State Development and Assessment Provisions (**SDAP**) State Code 1 please refer to the Traffic Assessment prepared by PSA Consulting (**Appendix E**).

The proposed development complies with the Performance and Acceptable Outcomes of the State code 1: Development in a state-controlled road environment.

##### **4.3.8.3 State Code 2: Development in a Railway environment**

For a response to the SDAP State Code 2 please refer to the Traffic Assessment prepared by PSA Consulting (**Appendix E**).

The proposed development complies with the Performance and Acceptable Outcomes of the State code 2: Development in a railway environment.

#### **4.3.8.4 State Code 21: Hazardous chemical facilities**

For a response to the SDAP State Code 21, please refer to the draft Site Based Management Plan prepared by Stantec (**Appendix D**) and the draft Hazardous Assessment Report prepared by Stantec (**Appendix G**).

The proposed development complies with the Performance and Acceptable Outcomes of the State code 21: Hazardous chemical facilities.

#### **4.3.8.5 State Code 22: Environmentally relevant activities**

For a response to the SDAP State Code 22 please refer to the draft Site Based Management Plan prepared by Stantec (**Appendix D**).

The proposed development complies with the Performance and Acceptable Outcomes of the State code 22: Environmentally relevant activities.

An Assessment Report for ERA 7 is also provided in **Appendix H**.

## **5. Conclusions and Recommendations**

This report accompanies an application by Nutrien Ag Solutions seeking approval of a Development Permit for Material Change of Use for Bulk Store, General Industry, Chemical Manufacturing (ERA 7), associated Environmental Authority and Hazardous Chemical Facility located at land on 39-57 Home Hill Road, Ayr formally described as Lot 1 on RP718903.

An assessment has been undertaken with regard to both the existing and proposed development in order to assess the application against the applicable assessment benchmarks, including relevant Planning Scheme codes, used by Council to assess the proposed development.

The information provided in this proposal report (and accompanying material) demonstrates that the proposed development complies with all relevant and applicable provisions of the statutory town planning framework.

We therefore recommend that Council favourably consider the development and approve the development application, subject to reasonable and relevant conditions.



# Superseded Planning Scheme Request Form

1 March 2023



Address all communications to  
The Chief Executive Officer

PO Box 974, Ayr Qld 4807

Telephone: (07) 4783 9800

Email: [planning@burdekin.qld.gov.au](mailto:planning@burdekin.qld.gov.au)

Burdekin Shire Council is collecting your personal information to provide the services requested, perform associated Council functions and services and to update and maintain Council's customer information records. Your information is handled in accordance with the Information Privacy Act (Qld) 2009 and will only be used by authorised Council Officers for the purpose of this application and ensuring our records are accurate. Your information will not be given to any other person or agency unless you have given us permission or we are required by law to do so.

This form is to be completed when requesting to apply a superseded planning scheme to a proposed development application or proposed development (under section 29 of the Planning Act 2016).

## Applicant Details: (must complete)

Name: (individual or company)	Nutrien Ag Solutions Limited		
Postal Address:	c/- Mewling Planning Consultants, GPO Box 1506		
Email:	Brisbane QLD 4000 nicole.boulton@mewling.com.au		
Telephone:	0403 155291		
Contact Person:	Nicole Boulton	Applicant Reference	22372

## Property Details: (must complete)

Property Address:	39-57 Home Hill Road Ayr
Lot/s on Plan/s:	Lot 1 RP718903
Current land use:	General industry, Bulk store, ERA 7
Site Area: (if applicable)	12,140 m <sup>2</sup>

### Nature of the request:

- ☒ To accept, assess and decide a development application under a superseded planning scheme
- ☐ To apply a superseded planning scheme to the carrying out of assessable development or prohibited development that was under the superseded planning scheme, accepted development, exempt development or self-assessable development

### Select application type:

- ☒ Material Change of Use (MCU) ☐ Reconfiguring a Lot (RAL) ☐ Operational Works (OPW)

### Level of assessment under the superseded Planning Scheme:

- ☐ Accepted/Self-assessable/Exempt ☒ Code ☐ Impact

### What is the nature of the proposal:

- ☐ Preliminary Approval ☐ Variation Request
- ☒ Development Permit ☐ Not applicable (proposed development was self assessable development under the superseded planning scheme)

### Provide a brief description of the proposal:

Retrospective approval for existing general industry, bulk store ERA 7 and Hazardous chemical facility

### What are the details of the superseded planning scheme?

Title of superseded planning scheme or amendment creating the superseded planning scheme	Date new planning scheme or planning scheme amendment took effect	Provisions of superseded planning scheme relevant to the proposal
2011 Burdekin Planning Scheme	1 March 2023	Industry zone



# Superseded Planning Scheme Request Form

2022-2023

## Supporting information (Please provide one hard copy and one pdf copy of the complete application):

Cover letter outlining the request and a description of the proposed development (for Accepted/Self/Exempt development only)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Report describing the proposed development, and identifying and assessing the proposal against the nominated superseded planning scheme	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Relevant drawing (site plan, floor plans, elevations) drawn to A3	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Other	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Amount</b>	
Request for superseded planning scheme assessment (Note: This fee is for Council to determine whether the application will or will not be considered under a superseded planning scheme. See Council's Fees and Charges for the application fee for the subsequent development application where assessable development)	\$1,356.00

## Declaration

I understand and acknowledge that:

- the information provided in this form is true and complete to the best of my knowledge, and I have read the Privacy Notice.
- By making this application/request, I the applicant, declare that the owner(s) has given written consent to the making of this application.
- Council may refuse this application if it becomes evident that any information or supporting documents provided in incomplete or false.
- I approve of the information that has been provided in this application.
- I acknowledge that where an application is assessable development under a superseded Planning Scheme, the proposed application requires additional fees to paid to assess the application.
- I acknowledge Queensland State Laws will accept this communication as containing my signature with the meaning of the (*Electronic Transactions (Queensland) Act 2001.*)

Signature	<i>N Boulton (on behalf of applicant)</i>	Date	5/7/23
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## Notes for completing this form

A superseded planning scheme is a planning scheme, together with related planning scheme policies, that was in effect immediately before any of the following events (a planning change) happens:

- The planning scheme was amended or replaced;
- Any of the planning scheme policies were amended, replaced or repealed; or
- A new planning scheme policy was made for the planning scheme.

Council will decide whether or not to agree to a superseded planning scheme request within 30 business days after the request is received. Council will provide a decision notice to the applicant within 5 business days after making the decision.

If Council decides to agree, or is taken to have agreed to a request, the superseded planning scheme application must be made within 6 months after Council provides a decision notice to the applicant, or is taken to have agreed to the request.

If Council decides to agree, or is taken to have agreed to a request, the superseded planning scheme application may be made for prohibited development, despite section 50(2) of the *Planning Act 2016*.

## To submit your form to Council

Post: Burdekin Shire Council, PO Box 145, AYR. QLD 4807  
In person: Burdekin Shire Council, Customer Service Centre, 145 Young Street, Ayr.  
Email: [planning@burdekin.qld.gov.au](mailto:planning@burdekin.qld.gov.au)

# DA Form 1 – Development application details

Approved form (version 1.3 effective 28 September 2020) made under section 282 of the Planning Act 2016.

This form **must** be used to make a development application **involving code assessment or impact assessment**, except when applying for development involving only building work.

For a development application involving **building work only**, use *DA Form 2 – Building work details*.

For a development application involving **building work associated with any other type of assessable development (i.e. material change of use, operational work or reconfiguring a lot)**, use this form (*DA Form 1*) and parts 4 to 6 of *DA Form 2 – Building work details*.

Unless stated otherwise, all parts of this form **must** be completed in full and all required supporting information **must** accompany the development application.

One or more additional pages may be attached as a schedule to this development application if there is insufficient space on the form to include all the necessary information.

This form and any other form relevant to the development application must be used to make a development application relating to strategic port land and Brisbane core port land under the *Transport Infrastructure Act 1994*, and airport land under the *Airport Assets (Restructuring and Disposal) Act 2008*. For the purpose of assessing a development application relating to strategic port land and Brisbane core port land, any reference to a planning scheme is taken to mean a land use plan for the strategic port land, Brisbane port land use plan for Brisbane core port land, or a land use plan for airport land.

**Note:** All terms used in this form have the meaning given under the Planning Act 2016, the Planning Regulation 2017, or the Development Assessment Rules (DA Rules).

## PART 1 – APPLICANT DETAILS

1) Applicant details	
Applicant name(s) (individual or company full name)	Nutrien Ag Solutions Limited
Contact name (only applicable for companies)	C/- Mewing Planning Consultants Nicole Boulton
Postal address (P.O. Box or street address)	GPO Box 1506
Suburb	Brisbane
State	QLD
Postcode	4001
Country	Australia
Contact number	0403 155 291
Email address (non-mandatory)	<a href="mailto:nicole.boulton@mewing.com.au">nicole.boulton@mewing.com.au</a>
Mobile number (non-mandatory)	
Fax number (non-mandatory)	
Applicant's reference number(s) (if applicable)	22372

2) Owner's consent	
2.1) Is written consent of the owner required for this development application?	
<input checked="" type="checkbox"/> Yes – the written consent of the owner(s) is attached to this development application	
<input type="checkbox"/> No – proceed to 3)	

## PART 2 – LOCATION DETAILS

### 3) Location of the premises (complete 3.1) or 3.2), and 3.3) as applicable)

**Note:** Provide details below and attach a site plan for any or all premises part of the development application. For further information, see [DA Forms Guide: Relevant plans](#).

#### 3.1) Street address and lot on plan

- ☒ Street address **AND** lot on plan (all lots must be listed), **or**  
☐ Street address **AND** lot on plan for an adjoining or adjacent property of the premises (appropriate for development in water but adjoining or adjacent to land e.g. jetty, pontoon. All lots must be listed).

a)	Unit No.	Street No.	Street Name and Type	Suburb
		37-59	Home Hill Road	Ayr
	Postcode	Lot No.	Plan Type and Number (e.g. RP, SP)	Local Government Area(s)
	4807	1	RP18903	Burdekin Shire Council
b)	Unit No.	Street No.	Street Name and Type	Suburb
	Postcode	Lot No.	Plan Type and Number (e.g. RP, SP)	Local Government Area(s)

#### 3.2) Coordinates of premises (appropriate for development in remote areas, over part of a lot or in water not adjoining or adjacent to land e.g. channel dredging in Moreton Bay)

**Note:** Place each set of coordinates in a separate row.

- ☐ Coordinates of premises by longitude and latitude

Longitude(s)	Latitude(s)	Datum	Local Government Area(s) (if applicable)
		<input type="checkbox"/> WGS84 <input type="checkbox"/> GDA94 <input type="checkbox"/> Other: <input type="text"/>	

- ☐ Coordinates of premises by easting and northing

Easting(s)	Northing(s)	Zone Ref.	Datum	Local Government Area(s) (if applicable)
		<input type="checkbox"/> 54 <input type="checkbox"/> 55 <input type="checkbox"/> 56	<input type="checkbox"/> WGS84 <input type="checkbox"/> GDA94 <input type="checkbox"/> Other: <input type="text"/>	

#### 3.3) Additional premises

- ☐ Additional premises are relevant to this development application and the details of these premises have been attached in a schedule to this development application  
☐ Not required

### 4) Identify any of the following that apply to the premises and provide any relevant details

- ☐ In or adjacent to a water body or watercourse or in or above an aquifer

Name of water body, watercourse or aquifer:

- ☐ On strategic port land under the *Transport Infrastructure Act 1994*

Lot on plan description of strategic port land:

Name of port authority for the lot:

- ☐ In a tidal area

Name of local government for the tidal area (if applicable):

Name of port authority for tidal area (if applicable):

- ☐ On airport land under the *Airport Assets (Restructuring and Disposal) Act 2008*

Name of airport:

<input checked="" type="checkbox"/> Listed on the Environmental Management Register (EMR) under the <i>Environmental Protection Act 1994</i>	
EMR site identification:	Currently notified with DES
<input type="checkbox"/> Listed on the Contaminated Land Register (CLR) under the <i>Environmental Protection Act 1994</i>	
CLR site identification:	

**5) Are there any existing easements over the premises?**

*Note: Easement uses vary throughout Queensland and are to be identified correctly and accurately. For further information on easements and how they may affect the proposed development, see [DA Forms Guide](#).*

- ☐ Yes – All easement locations, types and dimensions are included in plans submitted with this development application
- ☒ No

## PART 3 – DEVELOPMENT DETAILS

### Section 1 – Aspects of development

#### 6.1) Provide details about the first development aspect

a) What is the type of development? *(tick only one box)*

- ☒ Material change of use    ☐ Reconfiguring a lot    ☐ Operational work    ☐ Building work

b) What is the approval type? *(tick only one box)*

- ☒ Development permit    ☐ Preliminary approval    ☐ Preliminary approval that includes a variation approval

c) What is the level of assessment?

- ☒ Code assessment    ☐ Impact assessment *(requires public notification)*

d) Provide a brief description of the proposal *(e.g. 6 unit apartment building defined as multi-unit dwelling, reconfiguration of 1 lot into 3 lots):*

Development Permit for Material Change of Use for Bulk Store and General Industry.  
 Development Permit for a Material Change of Use for Environmentally Relevant Activity (ERA 7) for Chemical Manufacturing.  
 Development Permit for a Material Change of Use for Hazardous Chemical Facility.

e) Relevant plans

**Note:** *Relevant plans are required to be submitted for all aspects of this development application. For further information, see [DA Forms guide: Relevant plans](#).*

- ☒ Relevant plans of the proposed development are attached to the development application

#### 6.2) Provide details about the second development aspect

a) What is the type of development? *(tick only one box)*

- ☐ Material change of use    ☐ Reconfiguring a lot    ☐ Operational work    ☐ Building work

b) What is the approval type? *(tick only one box)*

- ☐ Development permit    ☐ Preliminary approval    ☐ Preliminary approval that includes a variation approval

c) What is the level of assessment?

- ☐ Code assessment    ☐ Impact assessment *(requires public notification)*

d) Provide a brief description of the proposal *(e.g. 6 unit apartment building defined as multi-unit dwelling, reconfiguration of 1 lot into 3 lots):*

e) Relevant plans

**Note:** *Relevant plans are required to be submitted for all aspects of this development application. For further information, see [DA Forms Guide: Relevant plans](#).*

- ☐ Relevant plans of the proposed development are attached to the development application

#### 6.3) Additional aspects of development

- ☐ Additional aspects of development are relevant to this development application and the details for these aspects that would be required under Part 3 Section 1 of this form have been attached to this development application
- ☒ Not required

## Section 2 – Further development details

### 7) Does the proposed development application involve any of the following?

Material change of use	<input checked="" type="checkbox"/> Yes – complete division 1 if assessable against a local planning instrument
Reconfiguring a lot	<input type="checkbox"/> Yes – complete division 2
Operational work	<input type="checkbox"/> Yes – complete division 3
Building work	<input type="checkbox"/> Yes – complete <i>DA Form 2 – Building work details</i>

## Division 1 – Material change of use

**Note:** This division is only required to be completed if any part of the development application involves a material change of use assessable against a local planning instrument.

### 8.1) Describe the proposed material change of use

Provide a general description of the proposed use	Provide the planning scheme definition (include each definition in a new row)	Number of dwelling units (if applicable)	Gross floor area (m <sup>2</sup> ) (if applicable)
Bulk Store	Bulk Store – refer to <b>Section 4.3.2</b> of the Town Planning Report prepared by Mewing Planning Consultants.	N/A	N/A
General Industry	General Industry - refer to <b>Section 4.3.2</b> of the Town Planning Report prepared by Mewing Planning Consultants.	N/A	N/A
Chemical Manufacturing (ERA 7)	Chemical Manufacturing – refer to <b>Section 4.3.2</b> of the Town Planning Report prepared by Mewing Planning Consultants.	N/A	N/A
Hazardous Chemical Facility.	Chemical Manufacturing – refer to <b>Section 4.3.2</b> of the Town Planning Report prepared by Mewing Planning Consultants.	N/A	N/A

### 8.2) Does the proposed use involve the use of existing buildings on the premises?

☒ Yes

☐ No

## Division 2 – Reconfiguring a lot

**Note:** This division is only required to be completed if any part of the development application involves reconfiguring a lot.

### 9.1) What is the total number of existing lots making up the premises?

### 9.2) What is the nature of the lot reconfiguration? (tick all applicable boxes)

<input type="checkbox"/> Subdivision (complete 10))	<input type="checkbox"/> Dividing land into parts by agreement (complete 11))
<input type="checkbox"/> Boundary realignment (complete 12))	<input type="checkbox"/> Creating or changing an easement giving access to a lot from a constructed road (complete 13))

## 10) Subdivision

### 10.1) For this development, how many lots are being created and what is the intended use of those lots:

Intended use of lots created	Residential	Commercial	Industrial	Other, please specify:

Number of lots created		
<b>10.2) Will the subdivision be staged?</b>		
<input type="checkbox"/> Yes – provide additional details below <input type="checkbox"/> No		
How many stages will the works include?		
What stage(s) will this development application apply to?		

<b>11) Dividing land into parts by agreement – how many parts are being created and what is the intended use of the parts?</b>				
Intended use of parts created	Residential	Commercial	Industrial	Other, please specify:
Number of parts created				

<b>12) Boundary realignment</b>			
<b>12.1) What are the current and proposed areas for each lot comprising the premises?</b>			
Current lot		Proposed lot	
Lot on plan description	Area (m <sup>2</sup> )	Lot on plan description	Area (m <sup>2</sup> )
<b>12.2) What is the reason for the boundary realignment?</b>			

<b>13) What are the dimensions and nature of any existing easements being changed and/or any proposed easement?</b> (attach schedule if there are more than two easements)				
Existing or proposed?	Width (m)	Length (m)	Purpose of the easement? (e.g. pedestrian access)	Identify the land/lot(s) benefitted by the easement

### Division 3 – Operational work

**Note:** This division is only required to be completed if any part of the development application involves operational work.

<b>14.1) What is the nature of the operational work?</b>	
<input type="checkbox"/> Road work <input type="checkbox"/> Drainage work <input type="checkbox"/> Landscaping <input type="checkbox"/> Other – please specify:	<input type="checkbox"/> Stormwater <input type="checkbox"/> Earthworks <input type="checkbox"/> Signage <input type="checkbox"/> Water infrastructure <input type="checkbox"/> Sewage infrastructure <input type="checkbox"/> Clearing vegetation
<b>14.2) Is the operational work necessary to facilitate the creation of new lots? (e.g. subdivision)</b>	
<input type="checkbox"/> Yes – specify number of new lots:	
<input type="checkbox"/> No	
<b>14.3) What is the monetary value of the proposed operational work? (include GST, materials and labour)</b>	
\$	

## PART 4 – ASSESSMENT MANAGER DETAILS



15) Identify the assessment manager(s) who will be assessing this development application

Burdekin Shire Council

16) Has the local government agreed to apply a superseded planning scheme for this development application?

- ☐ Yes – a copy of the decision notice is attached to this development application
- ☐ The local government is taken to have agreed to the superseded planning scheme request – relevant documents attached
- ☒ No

## PART 5 – REFERRAL DETAILS

17) Does this development application include any aspects that have any referral requirements?

**Note:** A development application will require referral if prescribed by the Planning Regulation 2017.

- ☐ No, there are no referral requirements relevant to any development aspects identified in this development application – proceed to Part 6

Matters requiring referral to the **Chief Executive of the Planning Act 2016:**

- ☐ Clearing native vegetation
- ☐ Contaminated land (*unexploded ordnance*)
- ☒ Environmentally relevant activities (ERA) (*only if the ERA has not been devolved to a local government*)
- ☐ Fisheries – aquaculture
- ☐ Fisheries – declared fish habitat area
- ☐ Fisheries – marine plants
- ☐ Fisheries – waterway barrier works
- ☐ Hazardous chemical facilities
- ☐ Heritage places – Queensland heritage place (*on or near a Queensland heritage place*)
- ☐ Infrastructure-related referrals – designated premises
- ☒ Infrastructure-related referrals – state transport infrastructure
- ☐ Infrastructure-related referrals – State transport corridor and future State transport corridor
- ☐ Infrastructure-related referrals – State-controlled transport tunnels and future state-controlled transport tunnels
- ☐ Infrastructure-related referrals – near a state-controlled road intersection
- ☐ Koala habitat in SEQ region – interfering with koala habitat in koala habitat areas outside koala priority areas
- ☐ Koala habitat in SEQ region – key resource areas
- ☐ Ports – Brisbane core port land – near a State transport corridor or future State transport corridor
- ☐ Ports – Brisbane core port land – environmentally relevant activity (ERA)
- ☐ Ports – Brisbane core port land – tidal works or work in a coastal management district
- ☐ Ports – Brisbane core port land – hazardous chemical facility
- ☐ Ports – Brisbane core port land – taking or interfering with water
- ☐ Ports – Brisbane core port land – referable dams
- ☐ Ports – Brisbane core port land – fisheries
- ☐ Ports – Land within Port of Brisbane's port limits (*below high-water mark*)
- ☐ SEQ development area
- ☐ SEQ regional landscape and rural production area or SEQ rural living area – tourist activity or sport and recreation activity
- ☐ SEQ regional landscape and rural production area or SEQ rural living area – community activity
- ☐ SEQ regional landscape and rural production area or SEQ rural living area – indoor recreation
- ☐ SEQ regional landscape and rural production area or SEQ rural living area – urban activity
- ☐ SEQ regional landscape and rural production area or SEQ rural living area – combined use
- ☐ Tidal works or works in a coastal management district
- ☐ Reconfiguring a lot in a coastal management district or for a canal
- ☐ Erosion prone area in a coastal management district

<input type="checkbox"/> Urban design <input type="checkbox"/> Water-related development – taking or interfering with water <input type="checkbox"/> Water-related development – removing quarry material <i>(from a watercourse or lake)</i> <input type="checkbox"/> Water-related development – referable dams <input type="checkbox"/> Water-related development – levees <i>(category 3 levees only)</i> <input type="checkbox"/> Wetland protection area
<b>Matters requiring referral to the local government:</b> <input type="checkbox"/> Airport land <input type="checkbox"/> Environmentally relevant activities (ERA) <i>(only if the ERA has been devolved to local government)</i> <input type="checkbox"/> Heritage places – Local heritage places
<b>Matters requiring referral to the Chief Executive of the distribution entity or transmission entity:</b> <input type="checkbox"/> Infrastructure-related referrals – Electricity infrastructure
<b>Matters requiring referral to:</b> <ul style="list-style-type: none"> <li>• The <b>Chief Executive of the holder of the licence</b>, if not an individual</li> <li>• The <b>holder of the licence</b>, if the holder of the licence is an individual</li> </ul> <input type="checkbox"/> Infrastructure-related referrals – Oil and gas infrastructure
<b>Matters requiring referral to the Brisbane City Council:</b> <input type="checkbox"/> Ports – Brisbane core port land
<b>Matters requiring referral to the Minister responsible for administering the Transport Infrastructure Act 1994:</b> <input type="checkbox"/> Ports – Brisbane core port land <i>(where inconsistent with the Brisbane port LUP for transport reasons)</i> <input type="checkbox"/> Ports – Strategic port land
<b>Matters requiring referral to the relevant port operator, if applicant is not port operator:</b> <input type="checkbox"/> Ports – Land within Port of Brisbane's port limits <i>(below high-water mark)</i>
<b>Matters requiring referral to the Chief Executive of the relevant port authority:</b> <input type="checkbox"/> Ports – Land within limits of another port <i>(below high-water mark)</i>
<b>Matters requiring referral to the Gold Coast Waterways Authority:</b> <input type="checkbox"/> Tidal works or work in a coastal management district <i>(in Gold Coast waters)</i>
<b>Matters requiring referral to the Queensland Fire and Emergency Service:</b> <input type="checkbox"/> Tidal works or work in a coastal management district <i>(involving a marina (more than six vessel berths))</i>

<b>18) Has any referral agency provided a referral response for this development application?</b>		
<input type="checkbox"/> Yes – referral response(s) received and listed below are attached to this development application <input checked="" type="checkbox"/> No		
Referral requirement	Referral agency	Date of referral response
Identify and describe any changes made to the proposed development application that was the subject of the referral response and this development application, or include details in a schedule to this development application <i>(if applicable)</i> .		

## PART 6 – INFORMATION REQUEST

<b>19) Information request under Part 3 of the DA Rules</b>
<input checked="" type="checkbox"/> I agree to receive an information request if determined necessary for this development application <input type="checkbox"/> I do not agree to accept an information request for this development application <b>Note:</b> By not agreeing to accept an information request I, the applicant, acknowledge:

- that this development application will be assessed and decided based on the information provided when making this development application and the assessment manager and any referral agencies relevant to the development application are not obligated under the DA Rules to accept any additional information provided by the applicant for the development application unless agreed to by the relevant parties
  - Part 3 of the DA Rules will still apply if the application is an application listed under section 11.3 of the DA Rules.
- Further advice about information requests is contained in the [DA Forms Guide](#).

## PART 7 – FURTHER DETAILS

### 20) Are there any associated development applications or current approvals? (e.g. a preliminary approval)

- ☐ Yes – provide details below or include details in a schedule to this development application
- ☒ No

List of approval/development application references	Reference number	Date	Assessment manager
<input type="checkbox"/> Approval			
<input type="checkbox"/> Development application			
<input type="checkbox"/> Approval			
<input type="checkbox"/> Development application			

### 21) Has the portable long service leave levy been paid? (only applicable to development applications involving building work or operational work)

- ☐ Yes – a copy of the receipted QLeave form is attached to this development application
- ☐ No – I, the applicant will provide evidence that the portable long service leave levy has been paid before the assessment manager decides the development application. I acknowledge that the assessment manager may give a development approval only if I provide evidence that the portable long service leave levy has been paid
- ☒ Not applicable (e.g. building and construction work is less than \$150,000 excluding GST)

Amount paid	Date paid (dd/mm/yy)	QLeave levy number (A, B or E)
\$		

### 22) Is this development application in response to a show cause notice or required as a result of an enforcement notice?

- ☐ Yes – show cause or enforcement notice is attached
- ☒ No

### 23) Further legislative requirements

#### **Environmentally relevant activities**

#### 23.1) Is this development application also taken to be an application for an environmental authority for an **Environmentally Relevant Activity (ERA)** under section 115 of the *Environmental Protection Act 1994*?

- ☒ Yes – the required attachment (form ESR/2015/1791) for an application for an environmental authority accompanies this development application, and details are provided in the table below
- ☐ No

**Note:** Application for an environmental authority can be found by searching “ESR/2015/1791” as a search term at [www.qld.gov.au](http://www.qld.gov.au). An ERA requires an environmental authority to operate. See [www.business.qld.gov.au](http://www.business.qld.gov.au) for further information.

Proposed ERA number:	7	Proposed ERA threshold:	More than 5,000 tonnes
Proposed ERA name:	Chemical manufacturing		
<input type="checkbox"/> Multiple ERAs are applicable to this development application and the details have been attached in a schedule to this development application.			

#### **Hazardous chemical facilities**

23.2) Is this development application for a **hazardous chemical facility**?

☒ Yes – *Form 69: Notification of a facility exceeding 10% of schedule 15 threshold* is attached to this development application

☐ No

**Note:** See [www.business.qld.gov.au](http://www.business.qld.gov.au) for further information about hazardous chemical notifications.

### **Clearing native vegetation**

23.3) Does this development application involve **clearing native vegetation** that requires written confirmation that the chief executive of the *Vegetation Management Act 1999* is satisfied the clearing is for a relevant purpose under section 22A of the *Vegetation Management Act 1999*?

☐ Yes – this development application includes written confirmation from the chief executive of the *Vegetation Management Act 1999* (s22A determination)

☒ No

**Note:** 1. Where a development application for operational work or material change of use requires a s22A determination and this is not included, the development application is prohibited development.  
2. See <https://www.qld.gov.au/environment/land/vegetation/applying> for further information on how to obtain a s22A determination.

### **Environmental offsets**

23.4) Is this development application taken to be a prescribed activity that may have a significant residual impact on a **prescribed environmental matter** under the *Environmental Offsets Act 2014*?

☐ Yes – I acknowledge that an environmental offset must be provided for any prescribed activity assessed as having a significant residual impact on a prescribed environmental matter

☒ No

**Note:** The environmental offset section of the Queensland Government's website can be accessed at [www.qld.gov.au](http://www.qld.gov.au) for further information on environmental offsets.

### **Koala habitat in SEQ Region**

23.5) Does this development application involve a material change of use, reconfiguring a lot or operational work which is assessable development under Schedule 10, Part 10 of the Planning Regulation 2017?

☐ Yes – the development application involves premises in the koala habitat area in the koala priority area

☐ Yes – the development application involves premises in the koala habitat area outside the koala priority area

☒ No

**Note:** If a koala habitat area determination has been obtained for this premises and is current over the land, it should be provided as part of this development application. See koala habitat area guidance materials at [www.des.qld.gov.au](http://www.des.qld.gov.au) for further information.

### **Water resources**

23.6) Does this development application involve **taking or interfering with underground water through an artesian or subartesian bore, taking or interfering with water in a watercourse, lake or spring, or taking overland flow water under the *Water Act 2000***?

☐ Yes – the relevant template is completed and attached to this development application and I acknowledge that a relevant authorisation or licence under the *Water Act 2000* may be required prior to commencing development

☒ No

**Note:** Contact the Department of Natural Resources, Mines and Energy at [www.dnrme.qld.gov.au](http://www.dnrme.qld.gov.au) for further information.

DA templates are available from <https://planning.dsdmp.qld.gov.au/>. If the development application involves:

- Taking or interfering with underground water through an artesian or subartesian bore: complete DA Form 1 Template 1
- Taking or interfering with water in a watercourse, lake or spring: complete DA Form 1 Template 2
- Taking overland flow water: complete DA Form 1 Template 3.

### **Waterway barrier works**

23.7) Does this application involve **waterway barrier works**?

☐ Yes – the relevant template is completed and attached to this development application

☒ No

DA templates are available from <https://planning.dsdmp.qld.gov.au/>. For a development application involving waterway barrier works, complete DA Form 1 Template 4.

### **Marine activities**

23.8) Does this development application involve **aquaculture, works within a declared fish habitat area or removal, disturbance or destruction of marine plants**?

☐ Yes – an associated resource allocation authority is attached to this development application, if required under the *Fisheries Act 1994*

☒ No

**Note:** See guidance materials at [www.daf.qld.gov.au](http://www.daf.qld.gov.au) for further information.

### **Quarry materials from a watercourse or lake**

23.9) Does this development application involve the **removal of quarry materials from a watercourse or lake** under the *Water Act 2000*?

- ☐ Yes – I acknowledge that a quarry material allocation notice must be obtained prior to commencing development  
☒ No

**Note:** Contact the Department of Natural Resources, Mines and Energy at [www.dnrme.qld.gov.au](http://www.dnrme.qld.gov.au) and [www.business.qld.gov.au](http://www.business.qld.gov.au) for further information.

### **Quarry materials from land under tidal waters**

23.10) Does this development application involve the **removal of quarry materials from land under tidal water** under the *Coastal Protection and Management Act 1995*?

- ☐ Yes – I acknowledge that a quarry material allocation notice must be obtained prior to commencing development  
☒ No

**Note:** Contact the Department of Environment and Science at [www.des.qld.gov.au](http://www.des.qld.gov.au) for further information.

### **Referable dams**

23.11) Does this development application involve a **referable dam** required to be failure impact assessed under section 343 of the *Water Supply (Safety and Reliability) Act 2008* (the Water Supply Act)?

- ☐ Yes – the 'Notice Accepting a Failure Impact Assessment' from the chief executive administering the Water Supply Act is attached to this development application  
☒ No

**Note:** See guidance materials at [www.dnrme.qld.gov.au](http://www.dnrme.qld.gov.au) for further information.

### **Tidal work or development within a coastal management district**

23.12) Does this development application involve **tidal work or development in a coastal management district**?

- ☐ Yes – the following is included with this development application:
- ☐ Evidence the proposal meets the code for assessable development that is prescribed tidal work *(only required if application involves prescribed tidal work)*
  - ☐ A certificate of title
- ☒ No

**Note:** See guidance materials at [www.des.qld.gov.au](http://www.des.qld.gov.au) for further information.

### **Queensland and local heritage places**

23.13) Does this development application propose development on or adjoining a place entered in the **Queensland heritage register** or on a place entered in a local government's **Local Heritage Register**?

- ☐ Yes – details of the heritage place are provided in the table below  
☒ No

**Note:** See guidance materials at [www.des.qld.gov.au](http://www.des.qld.gov.au) for information requirements regarding development of Queensland heritage places.

Name of the heritage place:		Place ID:	
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### **Brothels**

23.14) Does this development application involve a **material change of use for a brothel**?

- ☐ Yes – this development application demonstrates how the proposal meets the code for a development application for a brothel under Schedule 3 of the *Prostitution Regulation 2014*  
☒ No

### **Decision under section 62 of the Transport Infrastructure Act 1994**

23.15) Does this development application involve new or changed access to a state-controlled road?

- ☐ Yes – this application will be taken to be an application for a decision under section 62 of the *Transport Infrastructure Act 1994* (subject to the conditions in section 75 of the *Transport Infrastructure Act 1994* being satisfied)  
☒ No



### Walkable neighbourhoods assessment benchmarks under Schedule 12A of the Planning Regulation

23.16) Does this development application involve reconfiguring a lot into 2 or more lots in certain residential zones (except rural residential zones), where at least one road is created or extended?

☐ Yes – Schedule 12A is applicable to the development application and the assessment benchmarks contained in schedule 12A have been considered

☒ No

**Note:** See guidance materials at [www.planning.dsdmip.qld.gov.au](http://www.planning.dsdmip.qld.gov.au) for further information.

## PART 8 – CHECKLIST AND APPLICANT DECLARATION

### 24) Development application checklist

I have identified the assessment manager in question 15 and all relevant referral requirement(s) in question 17

☒ Yes

**Note:** See the Planning Regulation 2017 for referral requirements

If building work is associated with the proposed development, Parts 4 to 6 of [DA Form 2 – Building work details](#) have been completed and attached to this development application

☐ Yes

☒ Not applicable

Supporting information addressing any applicable assessment benchmarks is with the development application

**Note:** This is a mandatory requirement and includes any relevant templates under question 23, a planning report and any technical reports required by the relevant categorising instruments (e.g. local government planning schemes, State Planning Policy, State Development Assessment Provisions). For further information, see [DA Forms Guide: Planning Report Template](#).

☒ Yes

Relevant plans of the development are attached to this development application

**Note:** Relevant plans are required to be submitted for all aspects of this development application. For further information, see [DA Forms Guide: Relevant plans](#).

☒ Yes

The portable long service leave levy for QLeave has been paid, or will be paid before a development permit is issued (see 21)

☐ Yes

☒ Not applicable

### 25) Applicant declaration

☒ By making this development application, I declare that all information in this development application is true and correct

☒ Where an email address is provided in Part 1 of this form, I consent to receive future electronic communications from the assessment manager and any referral agency for the development application where written information is required or permitted pursuant to sections 11 and 12 of the *Electronic Transactions Act 2001*

**Note:** It is unlawful to intentionally provide false or misleading information.

**Privacy** – Personal information collected in this form will be used by the assessment manager and/or chosen assessment manager, any relevant referral agency and/or building certifier (including any professional advisers which may be engaged by those entities) while processing, assessing and deciding the development application. All information relating to this development application may be available for inspection and purchase, and/or published on the assessment manager's and/or referral agency's website.

Personal information will not be disclosed for a purpose unrelated to the *Planning Act 2016*, Planning Regulation 2017 and the DA Rules except where:

- such disclosure is in accordance with the provisions about public access to documents contained in the *Planning Act 2016* and the Planning Regulation 2017, and the access rules made under the *Planning Act 2016* and Planning Regulation 2017; or
- required by other legislation (including the *Right to Information Act 2009*); or
- otherwise required by law.

This information may be stored in relevant databases. The information collected will be retained as required by the *Public Records Act 2002*.

## PART 9 – FOR COMPLETION OF THE ASSESSMENT MANAGER – FOR OFFICE USE ONLY

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Date received:  Reference number(s):

### Notification of engagement of alternative assessment manager

Prescribed assessment manager	
Name of chosen assessment manager	
Date chosen assessment manager engaged	
Contact number of chosen assessment manager	
Relevant licence number(s) of chosen assessment manager	

### QLeave notification and payment

*Note: For completion by assessment manager if applicable*

Description of the work	
QLeave project number	
Amount paid (\$)	Date paid (dd/mm/yy)
Date receipted form sighted by assessment manager	
Name of officer who sighted the form	

**Company owner's consent to the making of a development application  
under the *Planning Act 2016***

I, Adrian Capogreco

Director/Secretary of the company mentioned below.

*POWER OF ATTORNEY.*

[Delete the above where *company* owner's consent must come from both director and director/secretary]

I, Ian Jansen

Director of the company mentioned below.

*POWER OF ATTORNEY.*

Of Nutrien Ag Solutions Limited (A.C.N. 008 743 217)

the company being the owner of the premises identified as follows:

37-59 Home Hill Road, Ayr (Lot 1 on RP718903)

consent to the making of a development application under the *Planning Act 2016* by:

Nutrien Ag Solutions Limited

C/- Mewing Planning Consultants Pty Ltd

on the premises described above for:

**Development Permit for Material Change of Use (Bulk Store and General Industry)**

Company Name and ACN: Nutrien Ag Solutions Limited (A.C.N. 008 743 217)

Signature of Director

*POWER OF ATTORNEY.*

20/06/23

Date

Signature of Director/Secretary

*POWER OF ATTORNEY.*

20/06/2023

Date

## 6.2.5.2 Industry zone code

Overall Outcome	Response
<b>(2) The overall outcomes sought for the Industry Zone Code are the following:</b>	
<i>(a) provide for a range of activities to facilitate sustainable economic development in the shire, including alternative forms of industrial development, particularly those industries which value add to the shire's natural resources.</i>	<p><b>Complies with Overall Outcomes</b></p> <p>The proposal is seeking a retrospective development application for an existing facility used for the blending and storing of both solid granular fertiliser and liquid fertiliser products that supports the surrounding agricultural activities. Accordingly, the use of the site incorporates a range of activities that facilitate economic development in the shire and are industrial activities that add value to the shire's natural resources (agriculture).</p>
<i>(b) establish and operate extractive industrial uses preferably within the Extractive Industry sub area;</i>	<p><b>Not applicable</b></p> <p>The proposed development does not involve an extractive industrial use.</p>
<i>(c) protect any adjoining residential use from the effects of industrial development</i>	<p><b>Complies with Overall Outcomes</b></p> <p>Please refer to the Site Based Management Plan (<b>Appendix E</b>) prepared by Stantec for further details on the air and noise impacts associated with the site. It is noted that the site has an existing facility used for the blending and storing of both solid granular fertiliser and liquid fertiliser products.</p>
<i>(d) protect preferred industrial areas from inappropriate non-industrial development; and</i>	<p><b>Complies with Overall Outcomes</b></p> <p>The proposed development is for a retrospective development application to an existing facility used for the blending and storing of both solid granular fertiliser and liquid fertiliser products that is an existing industrial use in an established industrial area.</p>
<i>(e) maintain the quality of the surrounding environment by reaching acceptable environmental management standards for both the construction and operation phases of the use in respect of:</i>	<p><b>Complies with Overall Outcomes</b></p> <p>Please refer to the Site Based Management Plan (<b>Appendix E</b>) prepared by Stantec for further details on the air and noise impacts associated with the site.</p>

Overall Outcome	Response
(i) <i>management of soil erosion and sedimentation control and possible contaminated land;</i>	
(ii) <i>management of environmental and operational risks and hazards; and</i>	
(iii) <i>the protection of air quality, water quality and the acoustic environment.</i>	

Specific outcomes	Acceptable solutions	Response
<b>Assessable Development</b>		
<b>Site Suitability</b>		
<b>O1</b> The site is of a size suitable for the intended use.	<b>S1</b> The site has a minimum site area and frontage of 1000m <sup>2</sup> and 20m respectively except where for the purpose of a noxious or offensive industry or a general industry where a minimum site area of 4000m <sup>2</sup> and a frontage of 20m is provided.	<b>Complies with Acceptable Solutions</b> The site has an area of 12,140m <sup>2</sup> and site frontage of 216m.
<b>O2</b> Development and the impacts of development can be accommodated within the site, including: (a) industrial processes and activities; (b) vehicle parking and access areas; and (c) appropriate buffer and landscape areas.	<b>S2</b> Development has the following: (a) a maximum site coverage of 75%; (b) a maximum setback of 10m from the road frontage; (c) road frontage to the allotment is at least 20m with a carriageway of at least 12m, sealed; and (d) vehicle parking and access and manoeuvring areas are provided in	<b>Complies with Acceptable Solutions</b> <ul style="list-style-type: none"> <li>- The existing fertiliser facility has a site coverage of 2,823m<sup>2</sup> and does not exceed the maximum site coverage of 75%.</li> <li>- Existing Warehouse 3 is the closest building to Home Hill Road, as such has a setback of 7m from the road meeting the maximum setback of 10m.</li> </ul>

Specific outcomes	Acceptable solutions	Response
	accordance with Schedule 2 – Vehicle Parking Rates & Standards.	- The Traffic Impact Assessment (Appendix F) prepared by PSA Consulting in accordance with Schedule 2 – Vehicle Parking Rates and Standards identifies that the site consists of 18 formal parking spaces and several unmarked spaces. Considering there are no parking issues experienced currently on site, the onsite parking provision is sufficient.
<b>Lighting Nuisance</b>		
<b>O3</b> The operation of the activity does not cause undue disturbance to any person or activity because of the light it emits.	<b>S3</b> The vertical illumination resulting from direct, reflected or incidental light coming from a site does not exceed 8 lux when measured at any point 1.5m outside of the boundary of the property at any level from ground level up.	<b>Complies with Acceptable Solutions</b> The site contains an existing facility used for the blending and storing of both solid granular fertiliser and liquid fertiliser products. The existing facility does not result in direct reflected or incidental light coming from the site and does not exceed 8 lux. Please refer to the Site Based Management Plan ( <b>Appendix E</b> ) prepared by Stantec for further details on light emissions.
<b>Energy Efficiency</b>		
<b>O4</b> Buildings are designed and sited to: (a) maximise indoor climatic comfort;	<b>S4.1</b> Window and skylight placement and internal layout favours prevailing breezes and cross ventilation and allows natural light access into the building.	<b>Complies with Specific Outcomes</b> The site contains an existing facility used for the blending and storing of both solid granular fertiliser and liquid fertiliser products. The existing buildings represents an appropriate alternative



Specific outcomes	Acceptable solutions	Response
<p>(b) minimise energy requirements for cooling during the summer months by minimising the need for air-conditioning;</p> <p>(c) have adequate access to breezes and daylight in habitable rooms;</p> <p>(d) incorporate lighting to meet usage requirements while minimising energy usage; and</p> <p>(e) minimise the climatic environmental impact on adjoining properties.</p>		<p>outcome for the site and complies with S4.1 for the reasons set out below:</p> <ul style="list-style-type: none"> <li>- The existing fertiliser facility is well ventilated and insulated to ensure climatic comfort is achieved. It is noted that the facilities include airconditioned and heated areas for optimum climatic comfort.</li> <li>- The site has existing solar panels to assist in energy consumption.</li> <li>- The site has access to adequate ventilation and is well lit.</li> <li>- The existing fertiliser facilities are subject to the best climatic environmental designs.</li> </ul>
	<p><b>S4.2</b></p> <p>Buildings do not cast a shadow over more than 30% of an adjoining residential lot between the hours of 9am and 3pm on 22 June.</p>	<p><b>Complies with Acceptable Solution</b></p> <p>The existing facility is located approximately 60m from the nearest residential lot and does not result in any overshadowing to these residential lots.</p>

Landscaping		
<p><b>O5</b></p> <p>Landscaping is provided to:</p> <p>(a) soften the visual impact of the land use and/or associated building(s) from the street and adjoining land;</p>	<p><b>S5</b></p> <p>Premises incorporate landscaping as follows:</p> <p>(a) landscaped area along the entire frontage of the site, with a minimum width of 3m; and</p>	<p><b>Complies with Specific Outcome</b></p> <p>The site contains an existing facility used for the blending and storing of both solid granular fertiliser and liquid fertiliser products that has established landscaping features. It is noted that</p>

Specific outcomes	Acceptable solutions	Response
(b) reduce radiant heat and glare to adjoining properties.	(b) species that mature to at least 10m are included where there are buildings and structures of 2 or more storeys in height.	<p>the frontage of the site is used for drainage purposes. The existing landscaping represents an appropriate alternative outcome for the site and complies with O5 for the reasons set out below:</p> <ul style="list-style-type: none"> <li>- The site has existing landscaped features at the front of the site including small hedges and a street tree that creates a positive interface to the site.</li> <li>- The site consists of large industrial sheds made of non-reflective material.</li> <li>- Conditions for increased landscaping is at Councils discretion.</li> </ul>
<b>Infrastructure Provisions</b>		
<b>O6</b> Premises have an appropriate level of infrastructure for the efficient functioning of the use while not impacting on adjoining land uses or the environment.	<b>S6.1</b> Premises are connected to a reticulated water supply or a reliable supply of potable water.	<b>Complies with Acceptable Solutions.</b> The premises is connected to the existing water mains.
	<b>S6.2</b> Premises are either: <ul style="list-style-type: none"> <li>(a) connected to reticulated sewerage system where one exists in the locality of the site; or</li> <li>(b) provided with an on-site sewerage treatment and disposal system.</li> </ul>	<b>Complies with Acceptable Solutions</b> The premises is connected to Council's reticulated sewerage system.
	<b>S6.3</b> All stormwater drainage is conveyed across the site to a legal point of discharge.	<b>Complies with Acceptable Solutions</b> Please refer to the Stormwater Management Plan ( <b>Appendix F</b> ).

Specific outcomes	Acceptable solutions	Response
	<b>S6.4</b> The premises has frontage to a sealed road with kerbing and channelling.	<b>Complies with Acceptable Solutions</b> The site has frontage to Home Hill Road that is a sealed road that contains kerb and channelling.
<b>Air Quality</b>		
<b>O7</b> All activities maintain the air quality and consequently, public health standards, including: <ul style="list-style-type: none"> <li>(a) minimising emission and odour levels; and</li> <li>(b) preventing the generation of dust.</li> </ul>	<b>S7</b> Activities are provided with: <ul style="list-style-type: none"> <li>(a) adequate physical measures for removing pollutants from emissions prior to discharge to the atmosphere;</li> <li>(b) adequate physical measures for reducing the temperature gradient between emissions and the atmosphere prior to discharge; and</li> <li>(c) effective operational systems, including monitoring systems for industry, which maintain emissions within ANZECC guideline standards.</li> </ul>	<b>Complies with Acceptable -Outcomes</b> The site contains an existing facility used for the blending and storing of both solid granular fertiliser and liquid fertiliser products. Please refer to the Site Based Management Plan ( <b>Appendix D</b> ) prepared by Stantec for further details on air quality.
<b>Water Quality</b>		
<b>O8</b> All activities maintain the water quality of Burdekin Shire's groundwater, waterways and surface water storages.	<b>S8.1</b> Premises: <ul style="list-style-type: none"> <li>(a) with activities which involve the handling of water-borne pollutants are provided with bunded, impervious surfaces linked to an integrated drainage and treatment system;</li> <li>(b) with activities which involve the storage of waste water are provided with properly</li> </ul>	<b>Complies with Acceptable Solutions</b> The site contains an existing facility used for the blending and storing of both solid granular fertiliser and liquid fertiliser products. Please refer to the Site Based Management Plan ( <b>Appendix D</b> ) and Stormwater Management Plan ( <b>Appendix F</b> ) for further detail on the water quality and treatment associated with the site.

Specific outcomes	Acceptable solutions	Response
	<p>designed and constructed, secure, sealed storage facilities; and</p> <p>(c) contain all liquid wastes and discharge them to a sewer or removed from the site for treatment and disposal to an approved facility.</p>	
	<p><b>S8.2</b></p> <p>Development is set back:</p> <ul style="list-style-type: none"> <li>- 25 metres for stream orders 1 or 2;</li> <li>- 50 metres for stream orders 3 or 4;</li> <li>- 100 metres for stream orders 5 or greater.</li> </ul> <p>With stream orders determined by 1:100,000 DNRM topographic mapping (or 1:250,000 where 1:100,000 is unavailable).</p>	<p><b>Complies with Acceptable Solutions</b></p> <p>The site contains an existing facility used for the blending and storing of both solid granular fertiliser and liquid fertiliser products please refer to the Site Based Management Plan (<b>Appendix D</b>) prepared by Stantec for further details.</p>
<p><b>O9</b></p> <p>Development has adequate provision for managing stormwater, to ensure that the environmental values of the surface and ground water resources are not diminished.</p>	<p><b>S9</b></p> <p>Premises have:</p> <ul style="list-style-type: none"> <li>(a) Adequate physical measures for intercepting and treating surface water drainage and spilled substances prior to their release to the waterways.</li> <li>(b) Bunding of sites or areas within sites or integrated drainage systems which include waste water treatment measures, where chemicals, fuels lubricants and other soluble pollutants are being handled on site; and</li> </ul>	<p><b>Complies with Acceptable Solutions</b></p> <p>Please refer to the Site Based Management Plan (<b>Appendix D</b>) and Stormwater Management Plan (<b>Appendix G</b>) for further details on stormwater distribution.</p>

Specific outcomes	Acceptable solutions	Response
	(c) Banks and channels constructed to divert stormwater runoff.	
<b>O10</b> Development prevents erosion occurring on the site or to allow sediments to leave the site.	<b>S10</b> Development incorporates soil erosion and sedimentation management by: <ul style="list-style-type: none"> <li>(a) avoiding extensive land clearing and earthworks of land with a slope steeper than 15% (1:5)</li> <li>(b) minimising the extent of disturbance on slopes steeper than 10% (1:10);</li> <li>(c) managing and controlling surface drainage by using natural flow paths wherever possible; and</li> <li>(d) incorporating sediment traps to prevent the movement of sediment off site.</li> </ul>	<b>Complies with Acceptable Solutions</b> The site contains an existing facility used for the blending and storing of both solid granular fertiliser and liquid fertiliser products. The proposed development is for a retrospective development application and includes the following: <ul style="list-style-type: none"> <li>- No land clearing and earthworks are proposed.</li> <li>- The site does not contain slopes steeper than 10%</li> <li>- There will be no impediment to flow paths or loss of flood storage in areas shown to experience flooding. It is anticipated that the proposed sump will slightly increase storage. Therefore, as the development will not impact the on-site storage of flood water or existing flow paths, there will be no impact to the flood characteristics outside the development extents and no impacts upstream or downstream.</li> </ul>

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<b>Title Reference:</b>	<b>20636130</b>	<b>Search Date:</b>	29/03/2023 15:36
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<b>Previous Title:</b>	20625159		

#### ESTATE AND LAND

Estate in Fee Simple

LOT 1 REGISTERED PLAN 718903  
Local Government: BURDEKIN

#### REGISTERED OWNER

Dealing No: 720539524 21/01/2021

NUTRIEN AG SOLUTIONS LIMITED A.C.N. 008 743 217

#### EASEMENTS, ENCUMBRANCES AND INTERESTS

1. Rights and interests reserved to the Crown by  
Deed of Grant No. 20625159 (POR 391)

#### ADMINISTRATIVE ADVICES

NIL

#### UNREGISTERED DEALINGS

NIL

\*\* End of Current Title Search \*\*







**NUTRIEN AYR**  
Site Based Management Plan

24 May 2023

Prepared for:  
Nutrien Ag Solutions

Prepared by:  
Mark Farrey

Project Number:  
304500701

## Nutrien Ayr

Revision	Description	Author	Date	Quality Check	Date	Independent Review	Date
01							



The conclusions in the Report titled Nutrien Ayr are Stantec's professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

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Prepared by: \_\_\_\_\_  
Signature

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Printed Name

Reviewed by: \_\_\_\_\_  
Signature

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# 1 Introduction

Nutrien Ag Solutions Limited (Nutrien) blend and store both solid granular fertiliser and liquid fertiliser products at the Ayr site, located within Lot 1 on Plan (RP) 718903 at 39-57 Home Hill Road, Ayr, QLD (the site). Figure 1-1 presents the site location.

The solid granular fertiliser products blended and stored on site include:

- Mono-ammonium phosphate (non-dangerous good, non-hazardous substance).
- Dibasic ammonium phosphate (non-dangerous good, non-hazardous substance).
- Urea (non-dangerous good, non-hazardous substance).
- Trace element - blends of metals, salts other ingredients used to alleviate micronutrient deficiencies in soil (non-dangerous goods, but classified as a hazardous substance).

The liquid fertiliser products blended and stored on site consist of blends of nitrogen, phosphorus and potassium (NPK) containing compounds with a small amount of zinc included.

The quantities of fertiliser blended on site meet the threshold for an Environmentally Relevant Activity (ERA) as per Schedule 2 of the *Environmental Protection Regulation 2019*. Particularly, ERA 7 sub item 4b, for manufacturing >5000 tonnes of fertiliser. As a result, an application for an Environmental Authority (EA) must be obtained from the Queensland Government (**pending Appendix A**).

Secondary chemicals are stored and sold on site. These consist of various pesticides/herbicides etc which are stored in small containers which are sold “off the shelf” to customers. Many of these chemicals are classed as both dangerous goods and hazardous chemicals, Some of these chemicals are listed in Schedule 15 of the *Work Health and Safety Regulation*, and the collective volumes of these listed chemicals exceeds the 10% threshold, therefore the site is classified as a Hazardous Chemical Facility under Schedule 10 Part 7 of the *Planning Regulation 2017*. Please see **Appendix B** for the Form 69 – notification of a facility exceeding 10% of schedule 15 threshold.

Given that a significant quantity of fertiliser and secondary chemicals are being stored and/or blended on site, it is critical to ensure that proper management procedures are in place to prevent environmental impacts. The instrument by which this can be achieved is this Site Based Management Plan (SBMP).



## Nutrien Ayr



Figure 1: Site Location



Project Number: 304500701

## **1.1 Objectives**

The objectives of this SBMP are to:

- Avoid minimise and mitigate any impacts to the environment resulting from site operations or unforeseen emergency situations.
- Ensure the operations comply with EA conditions for the site (EA pending).
- Ensure that all parties (management, staff, contractors) are aware of their respective responsibilities.

## **1.2 Scope**

The SBMP covers the daily operations of the site, providing a structured framework to:

- Identify and address all environmental objectives and standards for the site;
- Identify and minimise the risk of contamination at the site which may occur during the site's normal operations;
- Ensure proper storage and containment management measures are documented;
- Establish contingency and/or response plans for potential extraordinary factors which may occur as part of the site's operations;
- Ensure a system is in place to have all site personnel are trained and aware of the sites environmental risks, and ensure site personnel are competent in the application of contingency and response plans detailed in this SBMP;
- Implementation of environmental performance monitoring to ensure effectiveness of environmental measures and contingency plans, as required;
- Implement reliable and accurate record keeping systems to assist in the communication of internal and external environmental performance; and
- Ensure that periodic review of the SBMP is undertaken to measure and guide continual improvement.

This SBMP is intended to be a preliminary document, and will be updated to reflect changes in site operations as they arrive or as an EA prescribes.

## **1.3 Associated Documents**

The following documents are relevant to the Nutrien Ayr operations:

- ERA Environmental Authority (Appendix A once obtained)
- Form 69 – Notification of a facility exceeding 10% of schedule 15 threshold (Appendix B)



**Nutrien Ayr**  
**Dangerous Goods Manifest Summary**

- Hazardous Chemicals Site Plan (Appendix C)
- Hazardous Chemicals Risk Assessment (Appendix D)
- Nutrien Incident, Hazard & Near Miss Reporting Procedure (Appendix E)
- Nutrien Investigation & Corrective Actions Procedure (Appendix F)
- Nutrien Weekly Inspection Checklist (Appendix G)
- Nutrien Hygiene Dust Prevention Checklist (Appendix H)

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## 2 Site Description

### 2.1 Cadastral Details

The site is located within Lot 1 on RP 718903, 39 – 57 Home Hill Road, Ayr, QLD, 4807 (refer to Figure 1 for site locality plan).

**Table 1: Cadastral Description**

Site Attributes	Details
Lot Plan	Lot 1 on Registered Plan (RP) 718903
Area	1.214 ha
Locality	Ayr
Local Government	Burdekin Shire
Tenure	Freehold

### 2.2 Operations/Activities

#### 2.2.1 SOLID FERTILISER BLENDING

The site receives and stores bulk granular fertiliser. Some of the fertiliser products are blended together to produce mixed products. The blending process is as follows:

1. Individual solid fertiliser pellets products are received by truck delivery at the unloading area (orange location in Figure 2).
2. Trucks are unloaded using a multiveyor to transfer the solid fertiliser pellets into storage bunkers within warehouse 3 (yellow shed in Figure 2). (Photos 2 and 3)
3. The multiveyor transfers the fertiliser pellets from storage bunkers to weigher and blender.
4. A coarse screen over the final multiveyor to remove lumps of solid fertiliser pellets. The residue may be collected and sold separately.
5. The fertiliser pellets are mixed in the blender. The blender has a vent for the minor traces of dust discharged in the process.
6. Blended pellets are transferred to the bagging unit by the multiveyor (purple area in Figure 2) (Photo 4) and then packed into 1 tonne bags. A small amount is sold in bulk.



7. Blended pellets in 1 tonne bags are stored on concrete slab for same day collection.

In order to prevent fertiliser runoff into watercourses the above operations are to take part on a sealed concrete surface which drains into a site collection system, including a sump and storage tanks. The current drain and sump system can be seen in Figure 2 however upgrades are proposed to this system and are described in Section 2.2.5 and Figure 3.

## **2.2.2 LIQUID FERTILISER BLENDING**

The site receives and stores liquid fertiliser in silos within a bunded area. The blending of the fertilisers all takes place within the bunded area and consists of the following process:

1. Liquid fertiliser products are received via trucks and pumped into their respective silo's.
2. As requests for blends arise the liquid fertiliser from each silo is pumped into a mixing tank. Sometimes trace element granular fertiliser is also added into the mix.
3. The blended product is then pumped into a bulk transport tank or intermediate bulk containers (IBC's) for delivery to customers.

## **2.2.3 WASTE ACTIVITIES**

The following types of waste are generated on site:

- Sump and washdown water (discussed in Section 2.2.5);
- Solid Granular fertiliser sweepings.
- Cardboard;
- Waste Oil stored on site; and
- General waste unrelated to site operations.

Solid granular fertiliser sweepings are taken by a local farmer on a regular basis. Cardboard is emptied four (4) times a year in a dedicated cardboard recycling skip bin. Two (2) wheelie bins are located on site for general waste which are emptied on a regular basis, taken to a landfill facility near the site.

## **2.2.4 SECONDARY CHEMICALS**

Secondary chemicals are stored on site. These consist of various Dangerous Goods including pesticides/herbicides etc which are stored in small containers which are sold "off the shelf" to customers. Some of these chemicals are listed under Schedule 15 of the *Work Health and Safety Regulation 2011*, and the collective volumes of these listed chemicals exceeds the 10% threshold. Accordingly, the site is classified as a Hazardous Chemical Facility under Schedule 10 Part 7 of the *Planning Regulation 2017* (refer to **Appendix B** for details regarding the subject chemicals and volumes).





**Nutrien Ayr**  
**Dangerous Goods Manifest Summary**

The chemicals are stored in the clearly defined chemical storage locations (refer to Figure 2-1):

1. Building PS1 (which will be replaced by PS9) stores Dangerous Goods including Flammable liquids. This building is bunded with the capacity to hold 7000 L. The bund drains to underground sumps which have capacity to store another 7000 L.
2. Building PS2 stores Dangerous Goods. This portion of the admin shed has its own bunding system which has the capacity to hold 25,000 L.
3. Building PS7 consists of a 40-foot-long container which stores Dangerous Goods. The container is bunded with capacity to hold 4,070 L.
4. Building PS8 stores Dangerous Goods. This portion of the building has its own bunding system which has the capacity to hold 4,500 L.
5. Building PS9 will store Dangerous Goods including Flammable liquids. The building will have its own bunding system.



**Nutrien Ayr**  
**Dangerous Goods Manifest Summary**



Photo 1: Warehouse 3, including mobile hopper and unloading area



Photo 2: Trucks unloading into mobile hopper



Photo 3: Close up of truck unloading into mobile hopper



Photo 4: Blending and discharging fertiliser

## Nutrien Ayr Dangerous Goods Manifest Summary



Figure 2: Site Layout





## 2.2.5 SOLID GRANULAR FERTILISER HANDLING AREA STORMWATER CAPTURE SYSTEM

Currently the solid granular fertiliser storage shed and surrounding catchment drain towards a small 3000 L subsurface sump (as per Figure 3). Upgrades are proposed to improve the drainage and capture system in accordance with the concept design in Figure 3. An additional spoon drain will be constructed which will service the fertiliser bagging/unloading area and the receiving sump will be significantly expanded in order to capture a “first flush (15mm)” from the catchment (catchment outlined in broken red line). The sump will be 6m x 12m x 1m (deep) and capable of capturing 72m<sup>3</sup> of water before it overflows.

The sump will be regularly pumped out into storage tanks, from which a local farmer will collect the water and use it as a nutrient supplement on their field. Refer to Section 3.3 regarding *End of Waste Code fertiliser wash water and slurry* registration.

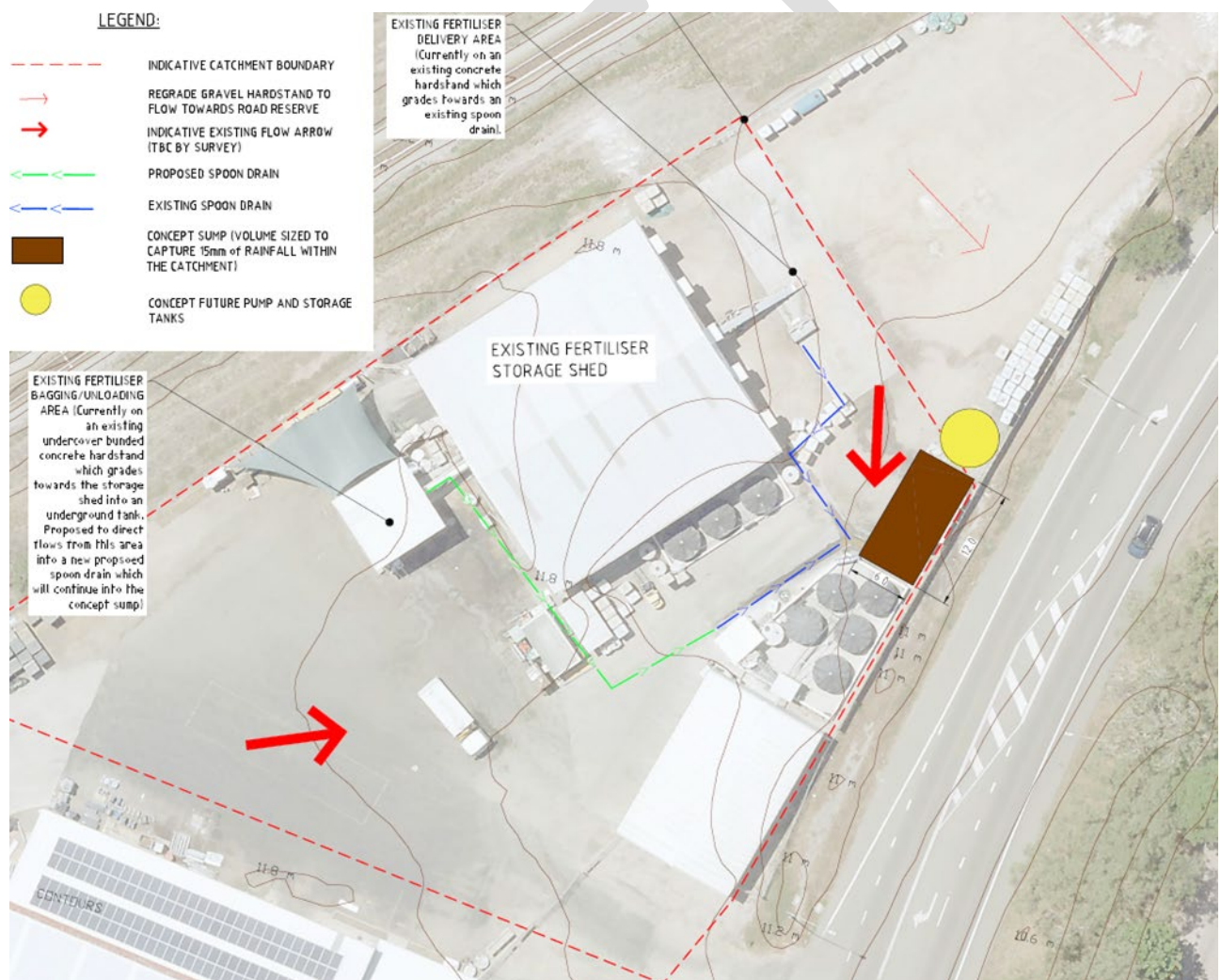


Figure 3: Fertiliser Handling Area Stormwater Capture System

## 2.3 Land Use, Zoning and Tenure

The zoning, land use and land tenure of the site is detailed in Table 2: Zoning, Land Use and Land Tenure. Residential properties are located to the east of the site, commercial properties located immediately south and rural properties are located southwest, further south and west of the site.

**Table 2: Zoning, Land Use and Land Tenure**

Property Description	Zoning	Lawful Land Use	Land Tenure
Lot 1 on RP 718903	Industry Zone	Bulk Store / General Industry	Freehold

## 2.4 Climate

The climate zone, as defined by the Bureau of Meteorology (BOM), for the site locality is a typical tropical climate characterised by hot humid summers.

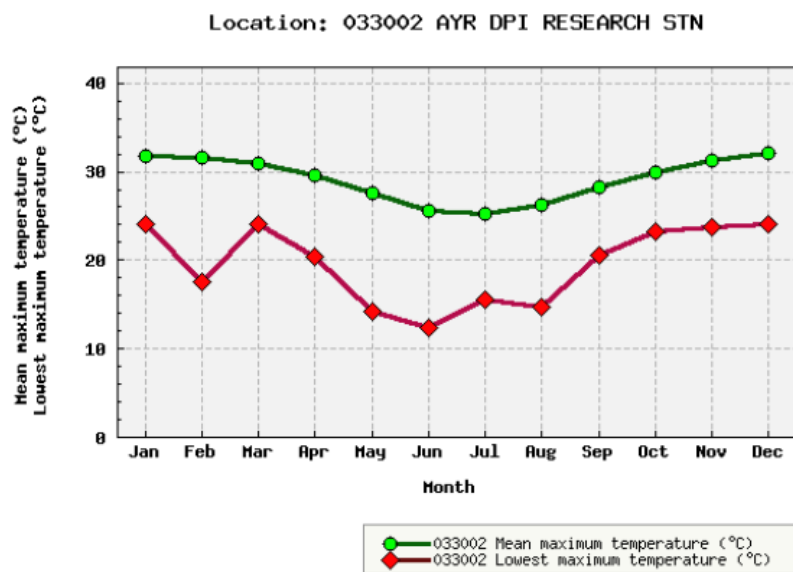
Climate data collected from the Ayr DPI Research STN weather station (033002) from 1951 to 2022 provided some indicative weather patterns. The Ayr DPI Research STN weather station (033002) is approximately 2.9km southwest of the site. The mean maximum temperatures ranged from 32.1°C in December to 25.3°C in July. The mean minimum temperatures from 1951 to 2022 ranged from 24.1°C in December to 12.4°C in June (BOM, 2022) (refer to Figure 4).

Average annual rainfall from the weather station 033002 is 937mm, with the wet season extending over the summer months. The highest mean monthly rainfall recorded is in February (231.2mm) and the lowest mean monthly rainfall recorded is in September (9.6mm) (BOM, 2022) (refer to Figure 5).

Wind conditions in January are predominantly north easterly with predominant wind speeds of  $\geq 10$  to  $< 20$ km/hr in the morning and are south westerly with predominant wind speeds of  $\geq 10$  to  $< 20$ km/hr in the afternoon (refer to Figure 6). Winter winds (July) are predominantly north to north westerly with predominant speeds of  $\geq 0$  to  $< 20$ km/hr in the morning and range from westerly to south westerly with predominant speeds of  $\geq 0$  to  $< 10$ km/hr in the afternoon (refer to Figure 6).

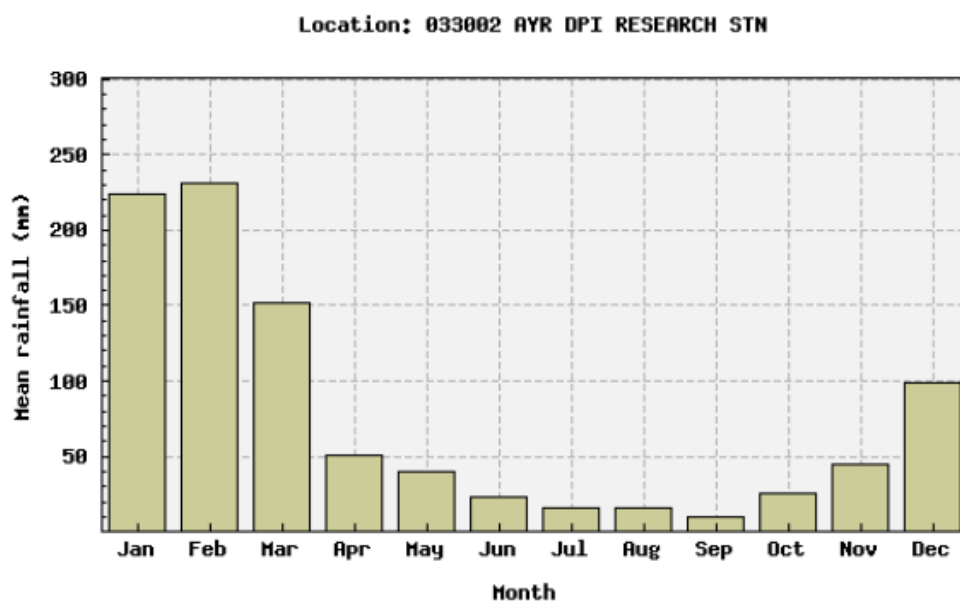


Nutrien Ayr  
Dangerous Goods Manifest Summary



Source: BOM 2022

Figure 4: Mean Maximum and Minimum Temperature – Ayr DPI Research STN Weather Station (033002)

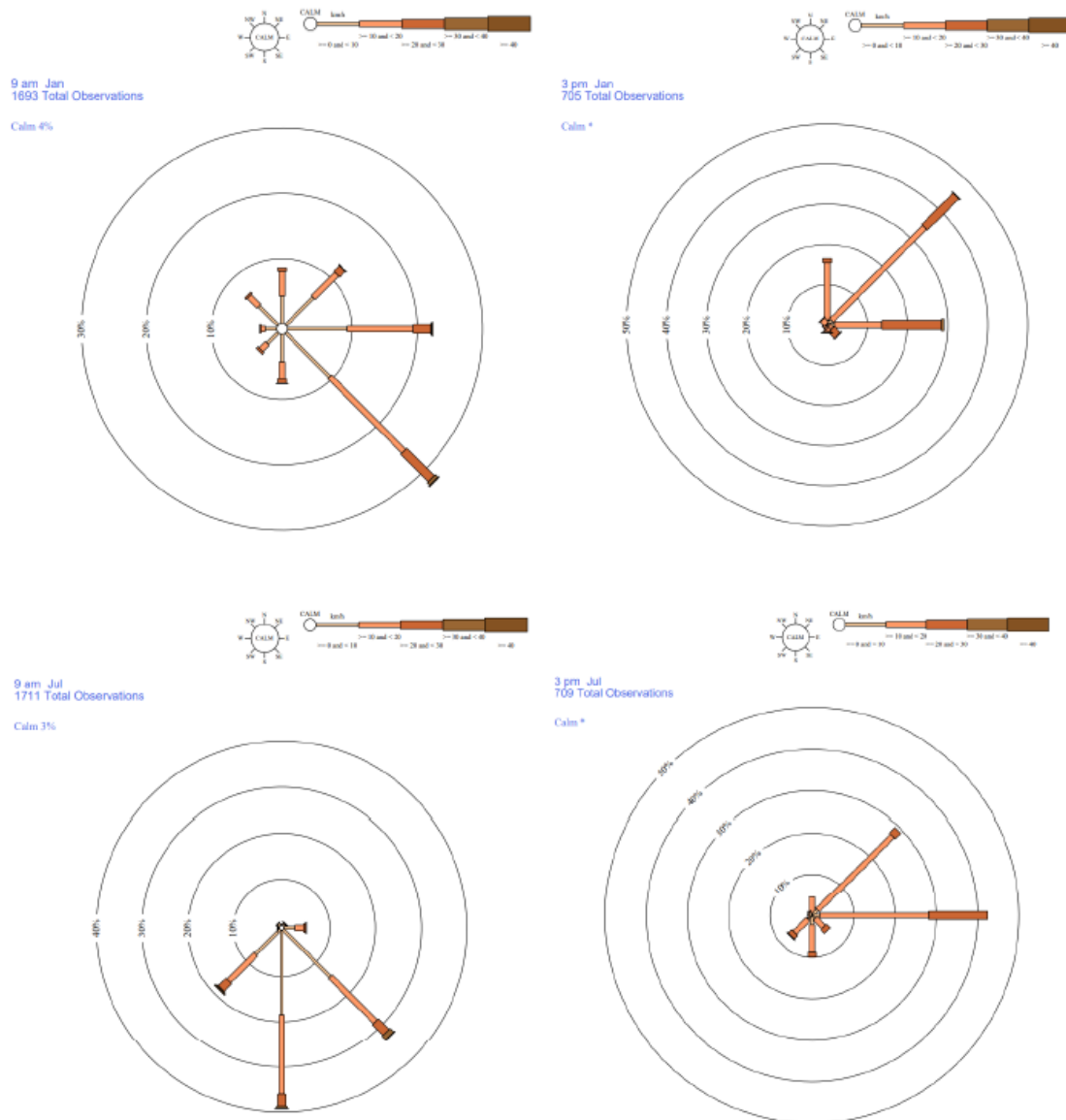


Source: BOM 2022

Figure 5: Mean Rainfall



## Nutrien Ayr Dangerous Goods Manifest Summary



Source: BOM 2022

**Figure 6: Wind Roses – Summer (January 9am and 3pm) and Winter (July 9am and 3pm) Averages at the Ayr DPI Research STN Weather Station**

## 2.5 Topography, Geology and Soils

### 2.5.1 TOPOGRAPHY

The site is relatively flat in topography and low lying ranging from 12m Australian Height Datum (m AHD) to 13m AHD (Figure 7). Given that site is <20m AHD, it is mapped within the Burdekin Shire Council Acid Sulfate Soil Overlay, however as per Section 2.5.3 the likelihood of acid sulfate soils occurring is low.





The majority of the site is concrete hardstand and buildings, with the entrance at the south-western corner, southern boundary and the northern portions of the site having exposed surfaces of sand / clay fill material.

## **2.5.2 GEOLOGY**

A review of QLD Globe's detailed 1:100k Geological Map indicated the site's regional surface geology is quaternary alluvium (Qa-QLD) as detailed in Table 3.

**Table 3: Surface Geology**

Surface	Dominant Rock	Rock Type	Lithological Summary	Age
Qa-QLD	Alluvium	Stratified unit (including volcanic and metamorphic)	Clay, silt, sand and gravel; flood-plain alluvium	Quaternary

## **2.5.3 SOILS**

A review of the Australian Soil Resource Information System (ASRIS) revealed that the Australian Soil Classification for the site is Tenosols to the south and Dermosols to the north of the site. These are soil types with minimal texture contrast and are not highly prone to issues such as sodicity/dispersion. ASRIS also indicated that there is extremely low probability of acid sulfate soils.

## **2.6 Surrounding Surface and Groundwater**

Local topography and drainage are presented below in Figure 7. The site is relatively flat in topography and low lying and approximately 10 m AHD. The site drains gently in a west to east direction towards the Bruce Highway. Runoff from the site exits into the table drain on the western side of the Bruce Highway. From here the table drain flows southwards into what appears to be drainage line approximately 90 m south of the site. The drainage line would rarely experience flow and appears to eventually terminate into a pond. It is assumed that following substantial rainfall events/flooding the pond would overtop and then eventually flow into Plantation Creek.

A review of QLD Globe's registered water bores layer indicated that there are seventeen (17) registered groundwater bores within a 500 m radius from the site. The closest registered groundwater bore (RN 175936) is located approximately 90m southwest of the site, the standing water level at this bore is 10.10m below ground level (bgl) and indicates that the water quality is potable. The depth of the groundwater well is 30m bgl.



## Nutrien Ayr Dangerous Goods Manifest Summary



Figure 7: Topography and Drainage



### **2.6.1 ENVIRONMENTAL VALUES AND WATER QUALITY OBJECTIVES**

The Site is located within the Houghton drainage basin, the Barratta Creek drainage sub-basin and the Lower Burdekin Catchment (QLD Globe).

As described above site runoff eventually flows into a drain approximately 90m south of the site. The drain terminates in a pond. It is assumed when the pond overflows it would make its way towards Plantation Creek which forms part of the Burdekin River within the Houghton drainage basin.

There are currently no specific water quality objectives for the Houghton drainage basin as they are currently under development, however Draft environmental values and water quality guidelines: Burdekin Basin fresh and estuarine waters (DES, 2017) contain draft environmental values and water quality objectives for this catchment. According to Figure 9 in the DES 2017 Draft guidelines, the site is located within lowland fresh waters. The Environmental Values for the site are as per the below:

- Aquatic ecosystems.
- Irrigation.
- Farm supply.
- Stock water.
- Aquaculture.
- Human consumption.
- Primary recreation.
- Secondary recreation.
- Visual recreation.
- Industrial use.
- Cultural and spiritual values.

The Water Quality guidelines (80th percentile assuming a moderately disturbed system) suggested to protect the above Draft Environmental Values of the Lower Burdekin River are listed as follows:

- Ammonium (N) <20 µg/L.
- Oxidised nitrogen <55 µg/L.
- Total nitrogen: <650 µg/L.
- Filterable reactive phosphorus <20 µg/L.
- Total phosphorus <60 µg/L.
- Chlorophyll a: <4 µg/L.



- Dissolved oxygen: 85 – 110% saturation.
- Turbidity: <100 NTU.
- Suspended solids: <40 mg/L.
- pH 6.5 – 8.5.
- Conductivity: <300 µS/cm.
- Sulfate: 37 mg/L as SO<sub>4</sub><sup>2-</sup>.

Given that the lower Burdekin catchment is a major contributor of water and contaminants to the Great Barrier Reef (GBR) , it is critical that the fertilisers (and their associated nutrients) on site are managed carefully.

## **2.7 Surrounding Receivers for Noise, Dust and Air Emissions**

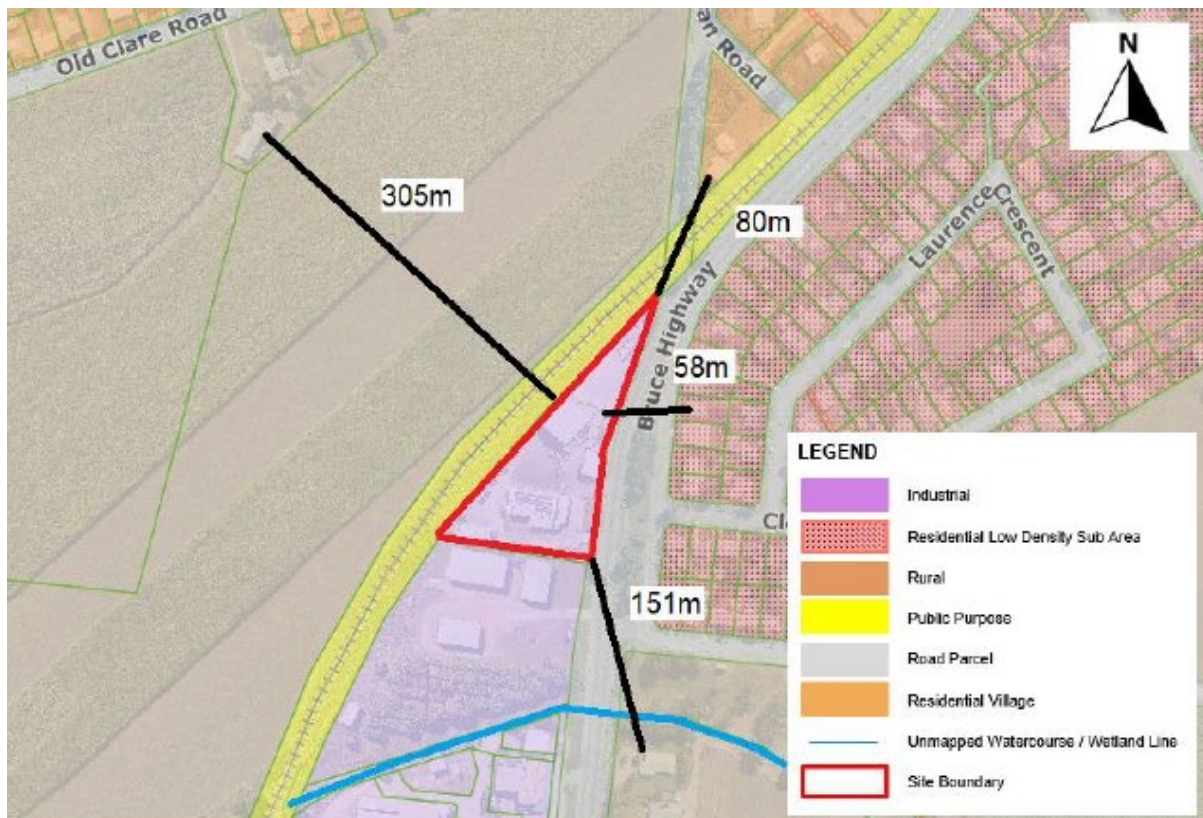
The sensitive receptors located adjacent of near the site are as follows:

- The several isolated onsite trees and the potential fauna they may use these trees for habitat or foraging.
- The onsite workers.
- The low-density residential dwellings located approximately 42m east of the site, with the closest residential dwelling approximately 58m from where the ERA 7 activities would occur.
- The rural properties to the north/west, approximately 24m, with the closest dwelling approximately 305m from the site.
- The rural properties to the southeast, approximately 75m, with the closest dwelling approximately 115m from the site.
- The residential village located approximately 80m north of the site.
- The unmapped watercourse / wetland line approximately 95m south of the site.

The closest dwellings are shown in Figure 8.







Source: Burdekin Regional Council Interactive Mapping

Figure 8: Proximity to Sensitive Receptors

## 2.8 Flora and Fauna

A review of the QLD Globe layers, undertaken on 10 May 2022, identifies

- The site is mapped as Category X (non-remnant) vegetation under the Vegetation Management Act 1999. During a site visit a few isolated trees were identified, with the remainder of the site predominantly hardstand or cleared.
- The site is mapped within the following biosecurity zones:
  - State grape phylloxera risk zone
  - Sugar cane biosecurity zone 2
  - Cattle tick infested area.
- The site is not mapped as containing:
  - Essential habitats
  - Protected plants

- Wetlands of high or general ecological significance
- Waterways for waterway barrier works
- Fish Habitats

## **2.9 Natural Hazards**

A review of Shire of Burdekin Planning Scheme maps indicates the following:

- The site is mapped within a Low Bushfire Hazard area as per the Natural Features or Resources Overlays Burdekin Shire Natural Features Map 9.

Searches on Queensland Globe reveal the following:

- The site is not mapped within a flood hazard area as per the Qld Globe overlay maps or the Burdekin Shire Council Flood Hazard Overlay Map.
- Of note is that the general surrounding area is subject to flooding, with Plantation Creek to the north, and the Burdekin River to the south both being mapped in the extreme flood hazard area.
- The site is not mapped as being within a bushfire prone area under the current State Planning Policy mapping.

## 3 Environmental Regulatory Requirements

### 3.1 Environmentally Relevant Activities

Operations currently being undertaken at the site is classified as triggering the following ERA under the Environmental Protection Regulation 2019:

**ERA 7 – Chemical Manufacturing** at threshold 4(b) manufacturing, in a year, more than 5000 tonnes of fertiliser

Item	Storage type & number	Description	On site capacity (tonnes)	Annual volume blended /" manufactured" (tonnes)
Solid granular fertilisers	Bays/Bunkers	<ul style="list-style-type: none"><li>▪ Mono-ammonium phosphate</li><li>▪ Dibasic ammonium phosphate</li><li>▪ Urea</li><li>▪ Trace elements</li></ul>	500 Tonne	12,612
Liquid fertiliser	Silos	<ul style="list-style-type: none"><li>▪ Blends of nitrogen, phosphorus and potassium (NPK) containing compounds with small amount of zinc included.</li></ul>	120 Tonne	220 - 260

The site must operate in accordance with the ERA 7 Environmental Authority conditions. (**Appendix A – pending**).

### 3.2 Hazardous Chemical Facility

Some of the chemicals stored on site are listed under Schedule 15 of the Work Health and Safety Regulation 2011, and the collective volumes of these listed chemicals exceeds the 10% threshold, . Accordingly, the site is classified as a Hazardous Chemical Facility under Schedule 10 Part 7 of the Planning Regulation 2017. (Refer to **Appendix B** for details regarding the subject chemicals and volumes).

### 3.3 End of Waste Code – Fertiliser Wash Water and Slurry

The EOW code states when the fertiliser wash water and slurry become a **resource** and any relevant requirements and/or conditions for its use *Waste Reduction and Recycling Act 2011*. If the **resource** is not being used in accordance with the relevant requirements and/or conditions of the EOW code, or another type of permit that allows for its use, it is considered a waste under section 13 of the Environmental Protection Act 1994 (EP Act) and must be lawfully transported and disposed of appropriately at a facility that is **lawfully** able to receive the waste.

Nutrien are registered to provide the fertiliser wash water to a local farmer as a nutrient supplement. This is provided the water:

- Does not contain more than the maximum permissible concentration of impurities for fertiliser in accordance with the Biosecurity Regulation 2016; and





- ii. Does not contain more than the following levels of Total Petroleum Hydrocarbons (TPH) on a volumetric basis:
  - a. C6 – C9 – 100 mg/L
  - b. C10 – C15 – 100 mg/L
  - c. C16 – C34 – 300 mg/L
  - d. C34 – C36 – 500 mg/L

### 3.4 Notifiable Activities

Notifiable activities are defined in Schedule 3 of the Environmental Protection Act 1994. These are activities considered to have potential to cause land contamination. If a parcel of land caters for a notifiable activity it is then listed on the QLD government Environmental Management Register (EMR) for potentially contaminated land.

At this point in time the site is **carrying out Notifiable Activity 7** – the land parcel is therefore listed on the EMR for this activity. The rationale is provided below in Table 4. Nutrien must carry out an annual review of operations to ensure Table 4 remains valid. Should the operations, chemical classes or quantities change upon annual review, and any breach any of the thresholds occurs, Nutrien has a duty to notify the Department of Environment and Science (refer to Section 3.4 item 3).

**Table 4: Assessment of Notifiable Activities**

Notifiable Activity Number	Description	Relevance to site
Notifiable Activity 16	Fertiliser manufacture	<u>Not applicable</u>  The site only blends fertiliser. The definition of Notifiable Activity 16 specifically excludes blending of fertilisers. It is intended only for manufacturing fertilisers.
Notifiable Activity 6	Chemical manufacture or formulation	<u>Not applicable.</u>  The site does not blend dangerous goods. Notifiable activity 6 is only relevant if dangerous goods are being blended on site.
Notifiable Activity 7	Chemical storage (other than petroleum products or oil)	<u>Applicable</u>  >10 tonnes of chemicals that are dangerous goods are being stored on site



<p>Notifiable Activity 29</p>	<p>Petroleum product or oil storage</p>	<p><u>Not applicable</u></p> <p>Only applicable if storing petroleum products or oil at quantities greater than those described below:</p> <ul style="list-style-type: none"> <li>a) In underground tanks with more than 200L capacity; or</li> <li>b) In above ground tanks with <ul style="list-style-type: none"> <li>• For petroleum products or oil in class 3 in packaging groups 1 and 2 of the dangerous goods code – more than 2,500 L capacity; or</li> <li>• For petroleum products or oil in class 3 in packaging groups 3 of the dangerous goods code – more than 5,000 L capacity; or</li> <li>• For petroleum products that are combustible liquids in class C1 or C2 in Australian Standard AS 1940 – more than 25,000 L capacity.</li> </ul> </li> </ul> <p>A small above ground diesel tank is present on the site to the side of Warehouse 3. However, its volume is far lower than the quantities listed above.</p>
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### 3.5 Duty to Notify: Site Contamination

Sections 320 to 320G of the Environmental Protection Act 1994 details the duty to notify regarding contaminated land. An owner or occupier, a contaminated land auditor or a local government should notify the administering authority (Department of Environment and Science):

1. Within 24 hours of becoming aware for the first time of the happening of an event involving the spillage, leakage, exposure, combustion, mobilisation or other form of dispersal of a contaminant on the relevant land where the event:
  - a. Was not authorised under an instrument listed under Section 320A(4) of the Act;
  - b. Has not been previously notified by the responsible party (i.e. owner or occupier, auditor or local government); and
  - c. Is causing or is reasonably likely to cause serious or material environmental harm.
2. Within 24 hours of becoming aware for the first time of a change in the condition of land, relative to the previous condition (as either known or reasonably inferred) of the land, where the change in condition
  - a. Is either known to be or reasonably likely to relate to the nature or extent or impact of contamination; and
  - b. Either is causing or is reasonably likely to cause or constitute serious or material harm.



3. Within 20 business days of becoming aware for the first time of a notifiable activity (as listed under Schedule 3 of the Act) (the most relevant of which are listed in Table 3-1); where the activity:
  - a. Is currently being carried out, or
  - b. Was previously carried out

The occurrence of a notifiable activity is considered to provide sufficient grounds to conclude that serious or material environmental harm is reasonably likely to occur.

Refer to the duty to notify for contaminated land for further guidance.

[https://environment.des.qld.gov.au/data/assets/pdf\\_file/0028/90676/contam-land-guideline-duty-to-notify.pdf](https://environment.des.qld.gov.au/data/assets/pdf_file/0028/90676/contam-land-guideline-duty-to-notify.pdf)

### **3.6 Duty to Notify: Off Site Release**

Sections 320 to 320G of the Environmental Protection Act 1994 details the duty to notify regarding environmental harm. A person is obligated to notify the Department of Environment and Science (DES) within 24 hours of pollution incidents and activities (not authorised under the Act) that cause or threaten to cause *serious environmental harm* or *material environmental harm*.

*Material environmental harm* is environmental harm:

- that is not trivial or negligible in nature, extent or context;
- that causes actual or potential loss or damage to property of an amount of, or amounts totalling more than the threshold amount (\$5,000), but less than the maximum amount (\$50,000); or
- that results in costs of more than the threshold amount (\$5,000) but less than the maximum amount (\$50,000) being incurred in taking appropriate action to:
  - Prevent or minimise the harm; and
  - Rehabilitate or restore the environment to its condition before the harm.

*Serious environmental harm* is environmental harm (other than environmental nuisance):

- that is irreversible, of a high impact or widespread;
- caused to an area of high conservation value or special significance, such as the Great Barrier Reef World Heritage Area;
- that causes actual or potential loss or damage to property of an amount of, or amounts totalling, more than the threshold amount (\$50,000); or
- that results in costs of more than the threshold amount (\$50,000) being incurred in taking appropriate action to:
  - prevent or minimise harm; and



- rehabilitate or restore environment to its condition before harm.

Refer to the duty to notify for environmental harm for further guidance.

[https://environment.des.qld.gov.au/\\_data/assets/pdf\\_file/0027/90666/cm-gl-duty-notify-environmental-harm.pdf](https://environment.des.qld.gov.au/_data/assets/pdf_file/0027/90666/cm-gl-duty-notify-environmental-harm.pdf)

### **3.7 Internal Nutrien Notification Procedures**

Refer to Section 5.

### **3.8 External Notification Procedures**

Refer to Section 6.

## **4 Workplace Health and Safety Regulatory Requirements**

### **4.1 Hazardous Chemicals**

Many of the secondary chemicals (the “off the shelf” bottles of pesticides, herbicides, poisons) are hazardous chemicals. Hazardous chemicals are substances, mixtures and articles that can pose a health or physical hazard to humans. Health hazards are the properties of a chemical that cause adverse health effects. Examples of chemicals with health hazards include poisonous (toxic) chemicals, chemicals which cause skin corrosion (such as acids) and carcinogens (chemicals that cause cancer). Exposure to these chemicals usually occurs through inhalation, ingestion or skin contact.

Hazardous chemicals are classed according to their hazard class and their associated hazard category. The hazard classes are split into:

- Physical Hazards: i.e. explosives, flammables, oxidising agents, reactive substances etc.
- Health Hazards: i.e. acute toxicity, skin and eye irritants, carcinogens, mutagens, reproductive toxicity, aspiration toxicity, target organ systemic toxicity (single and repeated exposure).
- Environmental Hazards: i.e. Acute and chronic aquatic toxicity.

### **4.2 Hazardous Chemicals Codes of Practice**

Codes of Practice are practical guides to achieving the standards of health, safety and welfare required under the WHS Act and the WHS Regulation. A code of practice applies to anyone who has a duty in the circumstances described in the code. In most cases, following an approved code of practice would achieve compliance with the health and safety duties in the WHS Act, in relation to the subject matter of the code. Like regulations, codes of practice deal with particular issues and do not cover all hazards or risks which may arise. The health and safety duties require duty holders to consider all risks associated with work, not only those for which regulations and codes of practice



exist. The Workplace Health and Safety *Queensland Code of Practice 2021: Managing risks of hazardous chemicals in the workplace* covers issues associated with storing and handling hazardous chemicals. In general, the code provides advice on:

- Ensuring safe design, location and installation of storage and handling systems (e.g. racking systems, tanks).
- Separating incompatible substances to prevent reactive chemicals interacting.
- Controlling potential ignition sources around flammable substances.
- Having appropriate safety signage and placards.
- Being prepared for spill containment and having clean up systems.
- Having emergency plans in place to deal with an incident involving the hazardous chemicals.
- Having the appropriate personal protective equipment (PPE) and store it correctly.
- Having firefighting equipment that is easily accessible.
- Securing chemicals from unauthorised access.

### **4.3 Hazardous Chemical Management Practices on Site**

Practices are in place on site to manage the risk of hazardous chemicals. Such measures include:

- The storage of chemicals in an isolated and secured shed with appropriate signage and Safety Data Sheets (SDS's).
- A bunding/containment system which holds runoff from the chemical storage sheds and fertiliser storage areas.
- An emergency shower and eye wash facilities within the solid granular fertiliser storage shed. A first aid kit is provided within the lunch room.
- Provision of a suitable fire extinguisher (dry chemical powder) within the solid granular fertiliser storage shed, with a further ten dry chemical powder extinguishers provided throughout the rest of the site. A further two carbon dioxide extinguishers, one foam extinguisher and four fire hose reels are also provided across the site.
- Provision of an emergency information box at the front entrance to the site.

### **4.4 Combustible Materials**

The site contains class C1 and class C2 combustible liquids on site. The majority of the combustible liquid is of C2 classification with a flash point of above 93 degrees Celsius. The management and storage of these chemicals must be compliant with the WHS Act and the WHS Regulations associated with dangerous goods.



Specific control measures for the prevention of fires must be in place in accordance with Section 355 of the Work Health and Safety Regulation 2011. Persons on site must ensure that an ignition source is not introduced into areas which store combustible materials deemed as hazardous spaces. Unavoidable introduction of ignition sources into hazardous spaces is deemed a hazardous atmosphere if the concentration of flammable gas, vapour, mist, or fumes exceeds 5% of the lower explosive limit for the substances within the hazardous space. Once hazardous atmospheres are identified, control measures should be put in place to reduce the likelihood of a safety incident.

Key control measures for managing these risks include

- Having hazardous areas identified and managed;
- Putting control measures for flammable vapours, gases and mists;
- Controlling emissions of flammable vapours, gases and mists (see below);
- Installing ventilation systems to control vapours of normal and abnormal conditions;
- Eliminating ignition sources in hazardous areas;
- Employ the use of intrinsically safe or flame proof equipment;
- Look for substitutes of flammable materials;
- Reducing the amount of flammable materials kept on site;
- Ensure that equipment used to manage flammable or explosive material are maintained and up to date in accordance with manufacturer specifications; and
- Adopting good housekeeping practices to minimise the accumulation of flammable dust.

Conducting “hot work”, defined as grinding, welding, brazing, oxy cutting, heat treatment or any other similar process that generates heat or continuous streams of sparks, should be strictly prohibited in hazardous atmospheres.

## **4.5 Hazardous Chemicals Site Plan**

The Hazardous Chemicals Site Plan attached in **Appendix C** provides an aerial view of the site. It indicates where hazardous chemicals are stored as well as associated bunding, storage, fire extinguishers, spill kits etc.

## **4.6 Hazardous Chemicals Risk Assessment**

In order to comply with the performance outcomes of State Code 21: Hazardous Chemical Facilities a risk assessment for the Schedule 15 chemicals stored on site has been completed. The risk assessment determines the potential to cause adverse effects to human health and the environment and ensures that applicable control measures are in place. The key component, the risk assessment register, is attached in **Appendix D**. The greater document is referenced as *Hazardous Assessment Report: 39-57 Home Hill Road, Ayr, QLD 4807, May 2023*.



## 5 Nutrien Internal Notification, Reporting and Investigation Procedures

### 5.1 Incident, Hazard and Near Miss Reporting Procedures (Internal Hotline 1300 751 764)

Refer to **Appendix E** for a copy of the Nutrien *Incident, Hazard and Near Miss Reporting Procedure*. The procedure outlines the requirements and responsibilities for the reporting of incidents and issues on site.

The procedure includes a classification system for incidents and the corresponding requirement for escalation:

- Level one “red”: serious incident – escalation will be immediate.
- Level two “amber” significant incident – escalation within 2 hours.
- Level three “yellow” moderate incident/issue – escalation within 24 hours.
- Property maintenance issue “green” – escalation within 24 hours.

### 5.2 Incident Investigation and Corrective Actions Procedure

Refer to **Appendix F** for a copy of the Nutrien *Investigation and Corrective Actions Procedure*. The procedure provides instructions on:

- Appointing an investigation team.
- Gathering the facts.
- Determining a sequence of events.
- Determining the immediate cause.
- Developing an investigation outcome summary.
- Identifying preventative and corrective actions.
- Responsibilities.





## 6 General Responsibilities under Environmental Authority (EA Pending)

**Note:** Once an EA has been granted for the Ayr site, the following section will be updated according to the general conditions the EA contains. The following sections are currently primarily reflective of Nutriens Maryborough EA.

### 6.1 Compliance with Environmental Authority

Contaminants must not be released to the environment other than in accordance with the environmental authority

The holder of this environmental authority must:

- Install and operate all work and control equipment, and
- Take all measures perform all acts and do all things, necessary to ensure compliance with the conditions of this environmental authority.

### 6.2 Display of Environmental Authority

A copy of the environmental authority must be kept in a location readily accessible to personnel carrying out the activity.

### 6.3 Records

Any record required to be kept by a condition of this environmental authority must be kept at the licensed place and be available for examination by an authorised officer.

Copies of any record required to be kept by a condition of the environmental authority must be provided to any authorised person or the Administering Authority on request.

### 6.4 Alterations

No change, replacement or operation of any plant or equipment is permitted if the change, alteration or operation of the plant or equipment increases, or is likely to substantially increase, the risk of environmental harm or environmental nuisance.

### 6.5 Incident Recording

A record must be maintained of events including but not limited to:

- The time date and duration of equipment malfunctions;
- Any releases from the stormwater bunding/sump system; and
- The hours of operation of the plant.



The record required by condition number (AS-1) shall be maintained for a period of not less than 5 years.

## 6.6 Notification of Emergencies and Incidents

As soon as practicable after becoming aware of any emergency or incident which results in the release of contaminants not in accordance, or reasonably expected to be not in accordance with the conditions of this environmental authority, the holder of this environmental authority must notify the administering of the release by telephone or facsimile.

The notification of emergencies or incidents as required by condition (6-1) must include but not be limited to the following:

- The holder of the environmental authority;
- The location of the emergency or incident;
- The number of the environmental authority;
- The name and telephone of the designated contact person;
- The time of the releases;
- The time the holder of the environmental authority became aware of the release;
- The suspected cause of the release;
- The environmental harm and or environmental nuisance caused, threatened, or suspected to be caused by the release; and
- Actions taken to prevent further any release and mitigate any environmental harm and or environmental nuisance caused by the release.

Not more than 44 days following the initial notification of an emergency or incident, the holder of the environmental authority shall provide written advice regarding:

- Proposed actions to prevent a recurrence of the emergency or incident;
- Outcomes of actions taken at the time to prevent or minimise environmental harm and or environmental nuisance; and
- The results of any environmental monitoring performed.

## 6.7 Report Submission

The holder of this environmental authority must ensure that the results of all monitoring performed in accordance with this environmental authority are submitted with the initial annual return. Each subsequent annual return must include details of the results of monitoring performed during the 12 months preceding that annual return.



## 6.8 External Notification Contact Details

### 6.8.1 INCIDENT REPORTING

The following table displays options for contacting the DES Pollution Hotline in the event of an incident.

Table 1-1 Incident Reporting Information for the Pollution Hotline

Method	Contact Methods	Details
Email	<a href="mailto:pollutionhotline@des.qld.gov.au">pollutionhotline@des.qld.gov.au</a>	Include "Duty to notify of environmental harm" in the subject line and include details of the event, its nature and the circumstances in which the event happened or attach a completed copy of the Duty to Notify of Environmental Harm notice; (ESR/2016/2230):
Phone (24/7)	1300 130 372	Line is open 24 hours, 7 days a week for all related matters
Post	Permit and Licence Management Department of Environment and Science GPO Box 2454 Brisbane QLD 4001	Provide written notice including details of the event, its nature and the circumstances in which the event happened or a completed copy of the form titled "Duty to Notify of Environmental Harm".

## 7 Site Based Environmental Controls

According to the site's operational activities, there are several environmental elements that have been identified as requiring risk management.

- Element 1: General Operation and Maintenance.
  - Consideration of general site operations and how they impact human and environmental health.
- Element 2: Air.
  - Need to consider any fugitive emissions (e.g., loading, unloading, venting).
- Element 3: Noise.
  - Noise mostly dominated by vehicle movements on the site.
- Element 4: Water and Land.
  - Impacts to the receiving environment (surface waters) from contaminated stormwater runoff and spills.
  - Impacts to groundwater from leakage of underground storage tanks and pipe work and spills on permeable substrates.
  - Potential impacts from release of contaminated firefighting water.
  - Impact of site operations on soil, fauna and flora.
- Element 5: Hazardous Materials Handling and Storage
  - Handling and storage of chemicals and fuels on site.
- Element 6: Waste Management
  - Handling and disposal of waste on site.

Each element will have details describing:

- Impact: details regarding the impact the sites ERA may have on the environment;
- Objectives/Targets: a description of clear objectives to be achieved for relevant environmental legislation;
- Control Measures: implementation of control measures which would aid in achieving the objectives to ensure impact mitigation;
- Monitoring: details for measuring performance indicators relating to compliance, and providing measurement frequencies for monitoring; and
- Corrective Actions/Contingency: actions to be taken in the event of non-compliance according to performance indicators occur.



## 7.1 Element 1: General Operation and Maintenance

Impacts
The operations of the site have the potential to cause human or environmental harm through the release of pollutants.
Objectives/Targets
The site is to be operated in a manner that considers the sensitivity of the surrounding environment and the health of the site operators, where the site will actively work to prevent and minimise harm. Additionally, the site is to have compliance with this SBMP, associated management plans and conditions of the site EA.
Control Measures
<p>The following control measures are to be implemented at the site:</p> <ul style="list-style-type: none"> <li>– A valid EA is held pursuant to the EP Act to lawfully operate the site (pending);</li> <li>– A copy of the EA, this SBMP, and associated management plans is maintained and available on site;</li> <li>– Plant and equipment are to be operated, inspected and maintained in appropriate fashion in accordance with manufacturer specifications;</li> <li>– Operations and maintenance at the site need to be undertaken by appropriately trained persons;</li> <li>– Daily operations of the site need to be undertaken according to this SBMP and Standard Operating Procedures;</li> <li>– Only authorised persons are permitted to access the site. All contractors and visitors to the site undergo a site induction. All visitors are to be accompanied by employees when on the site; and</li> <li>– Appropriately qualified staff need to be available to call 24 hours a day in the event of an emergency.</li> </ul>
Monitoring
<p>The following monitoring activities should be implemented at the site.</p> <ul style="list-style-type: none"> <li>– Inspection of site fencing and gates; and</li> <li>– Inspection of all infrastructure at the site, including storage area, waste management areas and processing equipment. Specific details for monitoring will be discussed in the following tables below.</li> </ul> <p>A Nutrien Weekly Environmental Inspection Checklist example has been prepared for this site. Please refer to <b>Appendix F</b> for details</p>
Corrective Actions/Contingency
Nutrien Incident Investigation & Corrective Actions Procedure is attached in <b>Appendix F</b> . This details all of Nutriens internal procedures. Against each element below some additional guidance is also provided.



## 7.2 Element 2: Air (odour and dust)

### Impacts

The activities associated with the ERA 7 have the potential to generate air borne dust primarily from loading and unloading of fertilisers and other products and site vehicle movements. These activities may release dust particles to air, which can impact human health and wellbeing at nearby residents, surrounding agricultural land uses, aesthetics and the health and biodiversity of ecosystems.

### Objectives/Targets

The site will have its operations conducted in a way that will not impact surrounding sensitive environments, preventing the release of excessive dust and odorous emissions, Specifically the current objectives are **(to be updated to reflect EA once obtained)**:

- That activities must be carried out by such practicable means which may be necessary to prevent or minimise the release of contaminants to the atmosphere;
- No odour determined to be noxious or offensive by an authorised person is to be released beyond the boundaries of the property; and
- No release of contaminants, including but not limited to odour, dust, smoke, fume, particulates and aerosols is to cause or be likely to cause an environmental nuisance beyond the boundaries of the site.

Indicator	Environmental Value	Air Quality Objectives		Period	Days
		µg/m <sup>3</sup>	ppm (volume / volume)		
PM <sub>2.5</sub>	Health and wellbeing	25	-	24 hours	-
	Health and wellbeing	8	-	1 year	-
PM <sub>10</sub>	Health and wellbeing	50	-	24 hours	-
	Health and wellbeing	25	-	1 year	-

### Control Measures

Control measures to be implemented are:

- Site inspection done daily, especially the storage bunkers/bagging area, chemical storage shed, processing areas and transport routes to ensure levels of dust/particulates are not excessive. Inspect sump and storage tanks to ensure nutrient laden water has not stagnated (which can become odorous);
- All bins shall be covered and emptied routinely, before reaching capacity;
- Chemicals on site are to be used in designated areas only that have adequate ventilation to ensure dispersal of fumes;
- Loading and unloading needs to be kept to a minimum if done on non-hardstand areas such as dirt roads and parking spaces. If loading must be done on such non-hardstand areas, clean water may need to be used to suppress dust;
- Loading and unloading to be avoided in high wind conditions;
- Any fertiliser, chemical or fuel leaks will be cleaned up as soon as practicable to prevent odour emissions; and
- Any maintenance tasks identified by the daily inspector needs to be actioned within the nominated time frame.

A Hygiene Dust Prevention Checklist example for the Albany business has been provided in **Appendix H**. The checklist provides examples of how various items of equipment and machinery can be inspected and cleaned to minimise dust emissions. It can be adapted to suit the requirements of the Ayr site.

### Monitoring



A Nutrien Weekly Environmental Inspection Checklist example has been prepared for this site. Please refer to **Appendix G** for details.

Some specific advice relating to air emissions includes:

- Focus on locations with highest potential to generated dust. i.e: storage bunkers, bagging area, tanks, bunds and chemical storage areas and waste storage areas.
- Record dates and times that product is blended/bagged along with prevailing wind direction. This information is to be kept on file so that it can be correlated with any potential future dust complaints.
- If requested by DES, dust/particulate monitoring shall be carried out in accordance with either the Australian Standards (AS3580. 10-1991 or AS3580.9.6-2003, or a method permitted by the DES Air Quality Sampling Manual at a dust sensitive place downwind from the site as requested by the DES.

#### **Corrective Actions/Contingency**

Nutrien Incident Investigation & Corrective Actions Procedure is attached in **Appendix F**. This details all of Nutriens internal procedures. Some more specific recommendations relating to air and dust may include:

- Identifying the source(s) of excessive dust and odorous emissions;
- Implementing corrective measures according to the advice of a suitable qualified person, such as an environmental scientist or consultant;
- Undertaking monitoring by a suitably qualified person for air impurity concentrations at nominated locations, if requested by DES; and
- Validating whether relevant monitoring or actions have been effective for reducing dust/odour emissions.





## 7.3 Element 3: Noise

### Impacts

Site operation activities may include the operation of machinery resulting in noise emissions impacting on nearby sensitive receptors. The site is situated within an area zoned for medium impact industry, with the current background noise levels surrounding the site influenced primarily by current onsite and nearby activities, including medium impact industry to the south, traffic on surrounding roads, specifically the Bruce Highway and the railway line to the west.

Using a desktop worst case scenario assessment (assuming trucks, vehicles, tools, forklifts and tubeveyors were operating simultaneously in the same location) 112dB(A) would be emitted and equate to 65 dB(A) when measured at the nearest residential property. This would breach the acoustic quality objectives in Table 1-2

### Objectives/Targets

The site will have its operations conducted in a way that will not impact surrounding sensitive environments, preventing the release of excessive noise. Specifically, the objectives are (to be updated to reflect EA once obtained):

- That activities must be carried out by such practicable means which may be necessary to prevent or minimise the emission of noise; and
- The emission of noise from the site must not result in levels greater than those specified in Table 1-2.

Table 1-2 Acoustic Quality Objectives

Sensitive Receptor	Time of Day	Acoustic quality objectives (measured at the receptor) dB(A)		
		L <sub>Aeq</sub> , adj, 1hr	L <sub>A10</sub> , adj, 1hr	L <sub>A1</sub> , adj, 1hr
Residence (for outdoors)	Daytime and evening (7am – 10pm)	50	55	65

### Control Measures

Control measures to be implemented are:

- Where practicable, noise generating activities must occur outside the hours of 10pm – 7am (i.e. time loading/unloading and blending operations ideally between 7am – 6pm);
- Where practicable undertake a noise generating activity where a site building/structure can be placed between the nearest residential property and the noise generating activity (in order to “shield” the residential property from the noise to some extent);
- Where practicable avoid undertaking noisy activities upwind of the nearest residential properties;
- Where practicable avoid running numerous noisy activities all at once in the same location.
- Machinery to be regularly maintained and moving parts lubricated to minimise friction; and
- Notify neighbouring properties in advance of any unusual highly noisy planned activities.
- Limiting the amount of equipment on site and using the lowest power equipment suitable for the job.
- All plant and equipment not in use is to be turned off.
- Utilise UHF communications where possible.
- Utilise broadband/white noise movement / reverse alarm.
- Care is to be taken when handling equipment, i.e. no dropping or banging of materials.
- Revving of machinery is to be minimised.

### Monitoring

A Nutrien Weekly Environmental Inspection Checklist example has been prepared for this site. Please refer to **Appendix G** for details.

Further specific advice regarding noise include the identification and monitoring need to take note of unusual, offensive and excessive vibration noise which may cause nuisance to surrounding land users. Specific monitoring for any noise complaint the site receives may need to be undertaken. Monitoring shall include

- LA10, adjusted to 10 minutes and LA1, adjusted to 10 minutes;



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- Note of the frequency and level of the noise being emitted;
- Wind speed and direction, among other atmospheric conditions;
- Extraneous factors such as traffic noise; and
- Location, date and time of recording.

All records, methods, measurements and reporting of noise emissions needs to be compliant with the DES *Noise Measurement Manual*.

**Corrective Actions/Contingency**

Nutrien Incident Investigation & Corrective Actions Procedure is attached in **Appendix F**. This details all of Nutriens internal procedures. Some more specific recommendations relating to noise may include:

- Visit the location of the complaint for validation and determine appropriate corrective measures;
- Identify the source(s) of excessive noise emissions;
- Implement corrective measures according to the advice of a suitable qualified person, such as an environmental scientist or consultant;
- Undertake monitoring by a suitably qualified person for noise levels at nominated locations, following a complaint; and
- Validate whether relevant monitoring or actions have been effective for reducing noise emissions.



## 7.4 Element 4: Water and Land

Impacts
<p>Surface waters, groundwater and water quality have the potential to be impacted by the ERA 7 activity through run off from hardstand areas and other exposed areas of the site used for the activity. Additionally, the potential exists for spills of hydraulic oil and fuels from plant, equipment or vehicles.</p> <p>Fertiliser contains substantial amounts of nutrients which can be quite harmful to both aquatic and terrestrial ecosystems. For instance if concentrated fertiliser runs off it causes grass/vegetation to be chemically "burnt" and die. At slightly lower concentrations the nutrients cause eutrophication of waterbodies. Eutrophication describes the process when algal blooms occur (promoted by abundance of nutrients), and once the algae dies off the biodegradation process strips all of the oxygen out of the water (resulting in the death of fish etc).</p>
Objectives/Targets
<p>The site will have its operations conducted in a way that will not impact surrounding sensitive environments, preventing the release of contaminated water. <b>The following will be updated to reflect the water specific conditions of the EA once obtained.</b></p> <p><b>Release of Contaminants to Waters</b></p> <p>Except as otherwise provided by the conditions of the Water Schedule of the EA the environmentally relevant activity must be carried out by such practicable means which may be necessary to prevent or minimise the release of contaminants to waters.</p> <p>Contaminants must not be directly or indirectly released from the licensed place to any waters or the bed and banks of any waters except as permitted under this schedule or the storm water schedule or to a sewer under a trade waste agreement as approved from time to time by the relevant Local Government.</p> <p><b>Release Points</b></p> <p>Contaminants must not be directly or indirectly released from any source on the licensed place to any waters at any location other than the contaminants and sources at the locations listed below:</p> <ul style="list-style-type: none"> <li>– Release point W1- Sump overflow.</li> </ul> <p><b>Quality Characteristics of Release to Waters</b></p> <p>The release of contaminants to waters must comply with the following qualitative characteristics:</p> <ol style="list-style-type: none"> <li>The release must not have any properties nor contain any organisms or other contaminants which, in the opinion of the administering authority, are capable of causing environmental harm or an environmental nuisance.</li> <li>The release must not produce any slick or other visible evidence of oil or grease, nor contain visible floating oil, grease, scum, litter or other objectionable matter.</li> </ol> <p><b>Release of Contaminants Caused by Rainfall</b></p> <p>Except as provided by the conditions of the of the environmental authority, the environmentally relevant activity must be carried out by such practicable means which may be necessary to prevent or minimise the contact of incident rainfall and stormwater runoff with wastes or other contaminants, and the release of any such contaminated runoff from the licensed place.</p> <p><b>Release of Storage Sump Water</b></p> <p>The water which collects in the sump shall not be released into watercourses. The sump shall be pumped into holding tanks with the intention of land-based disposal at an off-site location. Resource is to be used by approved local agricultural operations for irrigation watering of various crops and pastoral land for users with an approved Reef Plan that permits a resource of this type to be used in accordance with the End of Waste code for fertiliser wash water and slurry (ENEW07278417).</p>
Control Measures
<p>The following control measures will need to be in place as part of this SBMP:</p> <ul style="list-style-type: none"> <li>– Wastewater generated from toilets, general staff facilities etc must be directed to the site sewage connection;</li> <li>– Any trade wastes (i.e. cleaned up chemical spills, oils etc) must be disposed of via an appropriately licenced; waste disposal contractor. These must not be discharged to site sewerage or the site stormwater collection system;</li> </ul>



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- Stormwater from the fertiliser storage and bagging area is directed via bunding and drainage to a sump. Water which collects in the sump is to be pumped into the storage tanks where it can be drawn from and dispersed to land at an offsite location on an as needs basis;
  - The intent of the stormwater system and sump is only to collect water which is contaminated by fertiliser nutrients. This water is to be collected and supplied to a local farmer for distribution on a cane field.
  - In the event a rain event is too large for the sump to cater for (greater than the 15mm first flush), overflow will be released at the stormwater discharge point.
  - In the event the sump has collected chemical spills, the chemical spills are to be cleaned up or pumped out and disposed of via an appropriately licenced waste disposal contractor. Chemical spills must not be discharged to land at an offsite location nor via the stormwater discharge point.
- The daily operation and maintenance of the sump and associated drains and storage tanks is to be carried out by a suitable trained, experienced or qualified person. New employees involved in the daily operation or maintenance the system need to have proper training and experience prior to full operational responsibility; and
- Any defects found within the sump/drainage/tank system need to be repaired as soon as practicable.

### Monitoring

A Nutrien Weekly Environmental Inspection Checklist example has been prepared for this site. Please refer to **Appendix G** for details.

In the event sump water overflows, the following details should be recorded:

- The estimated volume of water (estimated based on the volume of the sump).
- The date and duration of the release.
- Include a photograph of the water, so that water quality can be observed (ideally this would provide evidence that it is free of any oil/chemical sheens etc)
- A sample of the released water should be obtained and analysed for:
  - Total Nitrogen (mg/L);
  - Total Phosphorus (mg/L); and
  - pH.

Nutrien must keep the following records regarding the removal and disposal of sump water. Time and date of the removal;

- Estimated volume removed; and
- Transport details regarding waste water receiving facility or persons.

### Corrective Actions/Contingency

Nutrien Incident Investigation & Corrective Actions Procedure is attached in **Appendix F**. This details all of Nutriens internal procedures. Some more specific recommendations relating to water may include

- Visit the location of the complaint and obtain photos;
- If possible trace the impact upstream to identify if source of the problem is from the Nutrien site, or further upstream;
- If Nutrien site is suspected to be the cause, and the impact on the receiving water body is to an extent that is classified as material or serious environmental harm, notify DES as per Section 5; and
- Undertake an investigation to determine the cause (typically by engaging a suitably qualified consultant/scientist). This may include sampling and analysis of sump water and downstream water bodies to confirm if any unexpected contaminants are being released from the site, tracing the source and rectifying.
- Ensure flood contingency plan is in place for when site is cut off by flood waters. i.e. in the lead up to predicted large rainfall events ensure adequate storage is available to place all fertiliser product indoors in relevant bunkers etc.



## 7.5 Element 5: Hazardous Materials Handling and Storage

Impacts
The mishandling and storage of hazardous materials on site can have an impact on human health and the environment.
Objectives/Targets
<p>The primary objectives and targets of this SBMP are:</p> <ul style="list-style-type: none"> <li>– No release of chemicals or hazardous materials due to inappropriate handling and storing procedures;</li> <li>– Implementing effective storage and handling procedures to prevent exposure of hazardous materials and chemicals to humans and the environment;</li> <li>– Procedures to be in accordance with the SBMP, standard operating procedures, EA conditions, Applicable safety data sheets, Work Health and Safety regulations (2011) and State Code 21 Hazardous Chemical Facilities; and</li> <li>– Spillage of chemicals and fuels is managed in a way that prevents harm to humans and the environment.</li> </ul>
Control Measures
<p>The following control measures needs to be implemented as part of this SBMP:</p> <ul style="list-style-type: none"> <li>– Dangerous goods or hazardous substances stored in drums shall be located on hardstand containment areas, banded where the capacity of the bund can hold at least 25% of the maximum design storage volume, preferably undercover;</li> <li>– Loading and unloading areas involving tankers should be located on impervious hardstand and banded, where the bund is able to contain 100% of the largest compartment of the tanker on site;</li> <li>– Smaller amounts of hazardous chemicals shall be stored in fireproof and banded cabinets above hardstand surfaces;</li> <li>– Stormwater diversion systems shall be in place to prevent stormwater intrusion to other areas storing hazardous chemicals;</li> <li>– Chemicals that need to be used on site are to be used in designated areas only, above hardstand and within banded areas;</li> <li>– Maintenance of a chemical register specific to the site for all hazardous materials, which should be available onsite at all times;</li> <li>– Chemical register is to include an emergency contact list;</li> <li>– Applicable safety data sheets for each hazardous chemical on site should be available at all times;</li> <li>– Permanently banded areas should have a collection sump to facilitate the removal of liquids, with the banded areas flooring graded towards the sump;</li> <li>– Handling hazardous chemicals should require appropriate PPE as defined by the respective chemical safety data sheet;</li> <li>– Readily available spill kits and HAZMAT boxes should be accessible at all locations where chemical spills may occur, and shall be restocked after each use;</li> <li>– Staff on site should be trained in how to use spill kits and HAZMAT boxes; and</li> <li>– All cleaning of equipment and machinery should be undertaken within designated areas that are located on hardstand and banded.</li> </ul> <p>All plant and equipment cleaning and maintenance shall be conducted in designated areas which include relevant containment systems and controls to prevent contamination.</p> <p>Reference to</p>
Monitoring
<p>A Nutrien Weekly Environmental Inspection Checklist example has been prepared for this site. Please refer to <b>Appendix G</b> for details. Further specific information relevant to hazardous materials handling may include:</p> <ul style="list-style-type: none"> <li>– Regular inspections of all hazardous chemical storage areas on site to ensure spills or leaks have not occurred, and to ensure the integrity of the bunding;</li> <li>– Stormwater diversion and containment areas are to be regularly inspected for functionality, integrity, and signs of contamination; and</li> </ul>



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- Regular inspections of all spill kits and HAZMAT boxes on site to ensure they are fully stocked and ready to use.

**Corrective Actions/Contingency**

Nutrien Incident Investigation & Corrective Actions Procedure is attached in **Appendix F**. This details all of Nutriens internal procedures. Some more specific recommendations relating to hazardous materials may include:

- Spill kits to ensure fast and effective response times to any incidents;
- Readily available safety data sheets for each chemical on site;
- A HAZMAT box is kept at the site entrance and up to date;
- Bunding of chemical storage areas;
- Chemical spill response procedures;
- Emergency response plans, and staff trained in them; and
- Defects found with any bunded areas, plant equipment, storage tanks or storage drums needs to be repaired as soon as practicable.



## 7.6 Element 6: Waste Management

Impacts
Improper management of waste can lead to negative environmental and human health impacts
Objectives/Targets
<p>The following objectives and targets are to be achieved at the site:</p> <ul style="list-style-type: none"> <li>– Avoid, reduce, reuse, recycle, recover, treat and dispose of waste appropriately;</li> <li>– Effectively manage waste to prevent all forms of pollution including air, water and soil contamination at the site and surrounds; and</li> <li>– Comply with conditions of the EA (<b>pending</b>) which requires a Waste Management Plan to be in place. The Waste Management Plan must detail at least the following: <ul style="list-style-type: none"> <li>• The quantity and nature of each waste produced;</li> <li>• The current method of disposal;</li> <li>• Proposed methods of pre-treatment or disposal;</li> <li>• Expected reduction in quantity of waste produced; and</li> <li>• Provisions for carrying out and submitting to DES a waste audit within 2 years from the date of issue of the EA and thereafter every 5 years.</li> </ul> </li> </ul>
Control Measures
<p>The following control measures needs to be implemented for waste at the site in accordance with the EA conditions:</p> <ul style="list-style-type: none"> <li>– Waste must not be allowed to burn;</li> <li>– An area must be set aside for the segregation and storage of recyclable solid wastes.</li> <li>– Where a no-cost recycling service is available, recyclable waste must not be deposited in the general waste stream.</li> <li>– All storage of raw waste or processed materials must be sealed or covered to prevent loss of contents or exposure of the contents to the atmosphere;</li> <li>– All loading/unloading of bulk materials must take place only within designated vehicle loading/unloading areas</li> <li>– Waste bags and other contaminated wastes must be stored on the concrete work area or in a roofed area;</li> <li>– The development of a Waste Management Plan which details the types and quantities of waste generated on the site, the storage, on site management requirements, transport provisions and disposal of wastes;</li> <li>– Regulated Waste needs to have special provisions for disposal;</li> <li>– Regulated waste is stored, transported and disposed of as per the requirements of the EA and the Environmental Protection Regulation 2019; and</li> <li>– All trackable wastes must have appropriate tracking procedures</li> </ul> <p>Day to day operations are not expected to generate regulated or trackable waste under Schedule 9 of the Environmental Protection Regulation 2019. On the occasion following accidental chemical spills and clean up, such waste would be disposed of following trackable and regulated waste requirements.</p> <p>Overall, all waste generated by the site is collected by Remondis, a waste disposal company with necessary authorities to handle standard, recyclable and regulated wastes.</p>
Monitoring
<p>A Nutrien Weekly Environmental Inspection Checklist example has been prepared for this site. Please refer to <b>Appendix G</b> for details. Further specific guidance on monitoring of waste may include:</p> <ul style="list-style-type: none"> <li>– Regular inspections of waste receptacles and storage areas to ensure waste is being appropriately stored and handled.</li> <li>– Regular inspections of site and surroundings to ensure no uncontrolled waste have left the site.</li> </ul>
Corrective Actions/Contingency





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Nutrien Incident Investigation & Corrective Actions Procedure is attached in **Appendix F**. This details all of Nutriens internal procedures.

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## 8 Record Keeping

Records that need to be kept on site are:

- Inspections, maintenance, calibrations and repairs for all equipment and infrastructure on site (Appendix F weekly inspections) (Appendix G hygiene/dust prevention).
- Site inductions, employee training and inductions.
- All complaints.
- Remediation measures and corrective actions (Appendix E), including the results of any air, noise or water quality investigations.
- Stormwater releases from the sump (as detailed in the monitoring requirements in Section 7.4)
- Records of waste removed from site, particularly waste type and volume, needs to be maintained
- Copies of Waste Tracking Forms for all trackable regulated waste collected from the site needs to be maintained.

All records are to be supplied to DES upon request.



## 9 References

Environmental Protection (Air) Policy 2019

(<https://www.legislation.qld.gov.au/view/html/inforce/current/sl-2019-0153>)

Environmental Protection (Noise) Policy 2019

(<https://www.legislation.qld.gov.au/view/html/inforce/current/sl-2019-0154>)

Environmental Protection (Water and Wetland Biodiversity) Policy 2019

(<https://www.legislation.qld.gov.au/view/html/inforce/current/sl-2019-0156>)

Burdekin Shire Council – Draft Burdekin Shire Planning Scheme 2021 V1

(<https://www.burdekin.qld.gov.au/downloads/file/1768/draft-burdekin-planning-scheme>)

Guideline – Application requirements for activities with impacts to water

([https://environment.des.qld.gov.au/\\_data/assets/pdf\\_file/0029/87851/era-gl-water-impacts.pdf](https://environment.des.qld.gov.au/_data/assets/pdf_file/0029/87851/era-gl-water-impacts.pdf))

Guideline – Stormwater and environmentally relevant activities

([https://environment.des.qld.gov.au/\\_data/assets/pdf\\_file/0028/89119/pr-gl-stormwater-guideline-era.pdf](https://environment.des.qld.gov.au/_data/assets/pdf_file/0028/89119/pr-gl-stormwater-guideline-era.pdf))

Guideline – The duty to notify of environmental harm

([https://environment.des.qld.gov.au/\\_data/assets/pdf\\_file/0027/90666/cm-gl-duty-notify-environmental-harm.pdf](https://environment.des.qld.gov.au/_data/assets/pdf_file/0027/90666/cm-gl-duty-notify-environmental-harm.pdf))

Guideline – The duty to notify for contaminated land ([Guideline - The duty to notify for contaminated land \(des.qld.gov.au\)](https://environment.des.qld.gov.au/_data/assets/pdf_file/0027/90666/cm-gl-duty-notify-environmental-harm.pdf))

Workplace Health and Safety Queensland Code of Practice 2021: Managing risks of hazardous chemicals in the workplace

([https://www.worksafe.qld.gov.au/\\_data/assets/pdf\\_file/0027/72639/managing-risks-of-hazardous-chemicals-cop-2021.pdf](https://www.worksafe.qld.gov.au/_data/assets/pdf_file/0027/72639/managing-risks-of-hazardous-chemicals-cop-2021.pdf))

Australian Standard AS 1940: The storage and handling of flammable and combustible liquids.

## Appendix A Dangerous Goods Manifest Summary

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## Appendix B Hazardous Chemicals Site Plan

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## Appendix C Nutrien Incident, Hazard & Near Miss Reporting Procedure

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## Appendix D Nutrien Investigation & Corrective Actions Procedure

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## Appendix E Nutrien Weekly Inspection Checklist Example

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## Appendix F Hygiene Dust Prevention Checklist (Albany Example)

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Our Ref: **MJ2406/01:IG**  
Your Ref: **22372 (SARA 2212-32557 SPL)**

22 February 2023

Mewing Planning Consultants  
Level 13, 340 Adelaide Street  
**BRISBANE CITY, QLD 4001**

**Attention:** Nicole Boulton  
**Email:** [nicole.boulton@mewing.com.au](mailto:nicole.boulton@mewing.com.au)

Dear Nicole,

**RE: EXISTING FERTILISER STORAGE DISTRIBUTION & BLENDING SITE AT 39-57 HOME HILL ROAD,  
AYR – STORMWATER ASSESSMENT**

This letter report has been prepared in support of development application for the site.

**Existing Conditions**

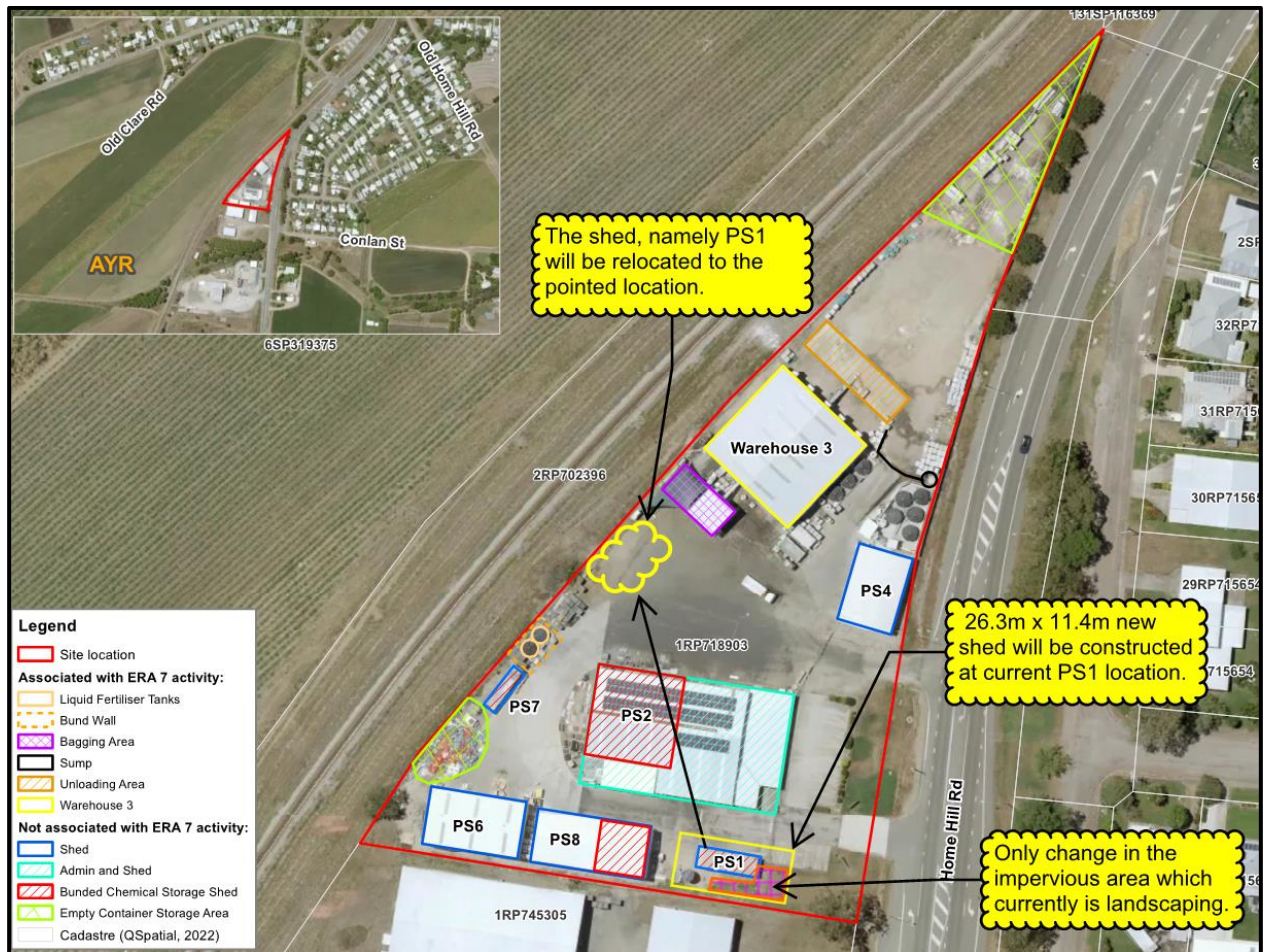
The site currently has concrete and gravel hardstand areas, existing warehouses, sheds, storage areas and landscaping area.

The site generally drains east from the rail corridor towards Home Hill Road at an average slope of ~1.0%. In accordance with the Queensland Urban Drainage Manual (QUDM) tests in determining the lawful point of discharge (LPOD), Home Hill Road and the North Coast Line rail corridors are defined as LPOD as they're under the lawful control of the state government being the legal point of discharge.

**Proposal**

The proposed development involves minor changes to the existing development inclusive of relocating an existing shed and a construction of a new shed with approximately 300m<sup>2</sup> footprint. The new shed is proposed to be located over the current PS1 location which includes some landscaping area. Therefore, change in impervious area will only occur where the proposed shed overlays the existing landscaping area. These are illustrated on **Figure 1**.

An assessment of the change in impervious area associated with the proposed development is only 0.7% due to the minor increase in the footprint of the proposed shed. Although there is 0.7% change in the impervious area, this does not affect the critical time of concentration (tc) since the landscaping area is not on the critical run-off path.



**Figure 1** 39-57 Home Hill Road Proposed Shed Locations (mark-up on M31800-Site Layout Plan)

## Stormwater Assessment

The existing lawful point of discharge (LPOD) will be maintained, namely Home Hill Road road reserve.

### Stormwater Quantity

An assessment of the change in run-off due to the minor change in impervious area does not affect the  $t_c$  as mentioned above. The contributing catchment, defined as 1.214 ha which is the entire lot area. Impervious area is calculated as 74.2% for the existing conditions. Following construction of the additional shed, the impervious area will result in a 0.7% increase. The Friends equation has been adopted for assessment of the critical time of concentration ( $t_c$ ) which was found to be 10-minutes for both existing and developed cases.

IFD's were sort from the BOM website with the pre- and post-development flows being calculated using the Rational Method. The peak runoff for both existing and developed scenario were assessed for annual exceedance probability (AEP) of 63.2%, 39%, 18%, 10%, 5%, 2% and 1% events. Due to the minor change in impervious area, the 10-year discharge coefficient increase from 0.836 to 0.837, resulting in a minor increase in the run-off coefficient of 0.001 for the 63.2% to 2% AEP events. The 1% AEP event coefficient remained unchanged at 1.0.

The pre- and post-development peak flows for the events have been summarised and provided in **Table 1**.



### Table 1 Peak Flows Summary

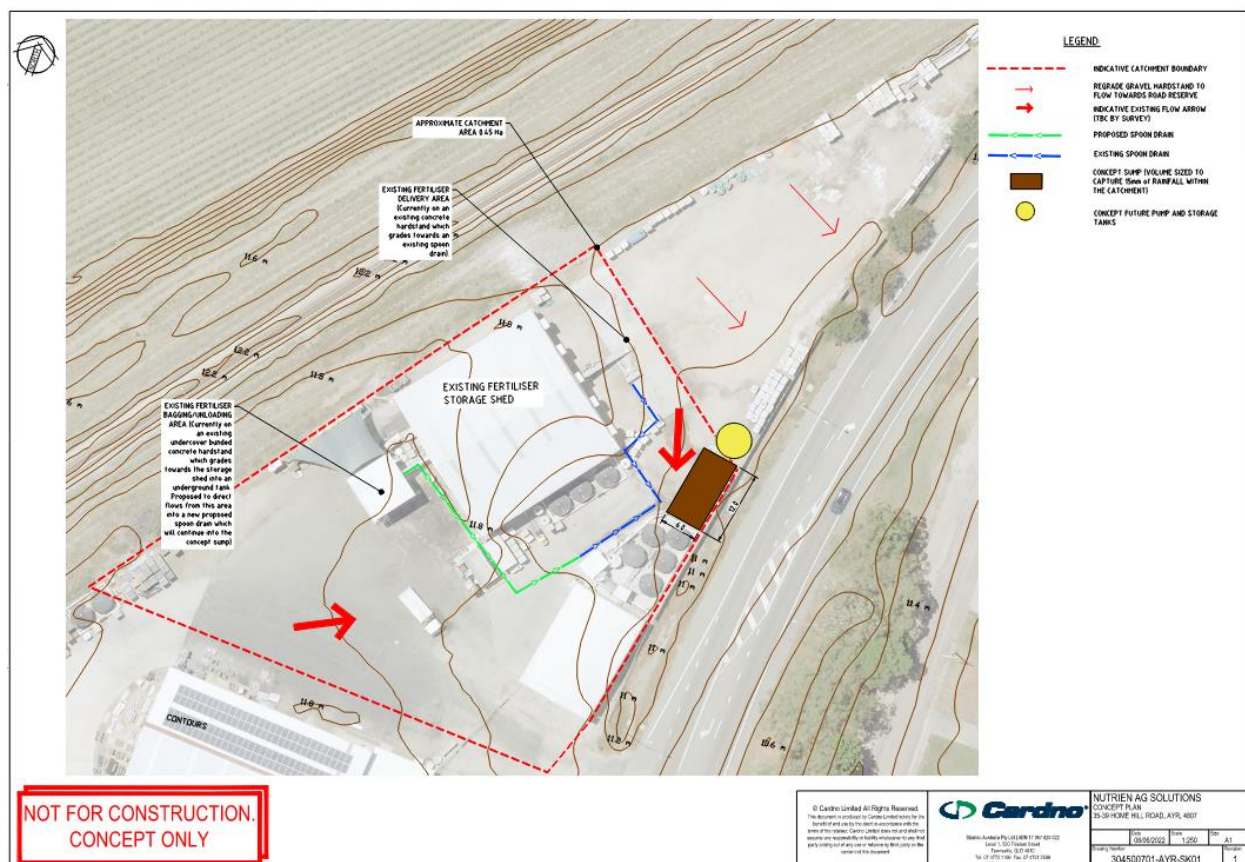
Q peak flow (m³/s)	Annual Exceedance Probability (AEP) Events						
	63%	39%	18%	10%	5%	2%	1%
Pre	0.218	0.295	0.414	0.501	0.598	0.754	0.846
Post	0.218	0.295	0.414	0.502	0.599	0.755	0.846
Difference	0.000	0.000	0.000	0.001	0.001	0.001	0.000

For the frequent and major of the events (63% and 1% AEP), there is no increase in peak flow, therefore no impact to the run-off characteristics as a result of the development. In the 10%, 5% and 2% AEP events, an increase of 0.001 m<sup>3</sup>/s is observed which equates to a 0.1% increase. In our opinion this is a negligible increase which is highly unlikely to result in any impact to the carriageway or functionality of Home Hill Road.

Furthermore, the inclusion of the treatment sump (discussed below) will act as mitigation to the post-development flows. We trust the above demonstrates that the proposed development has negligible impact beyond the site extents.

## Stormwater Quality

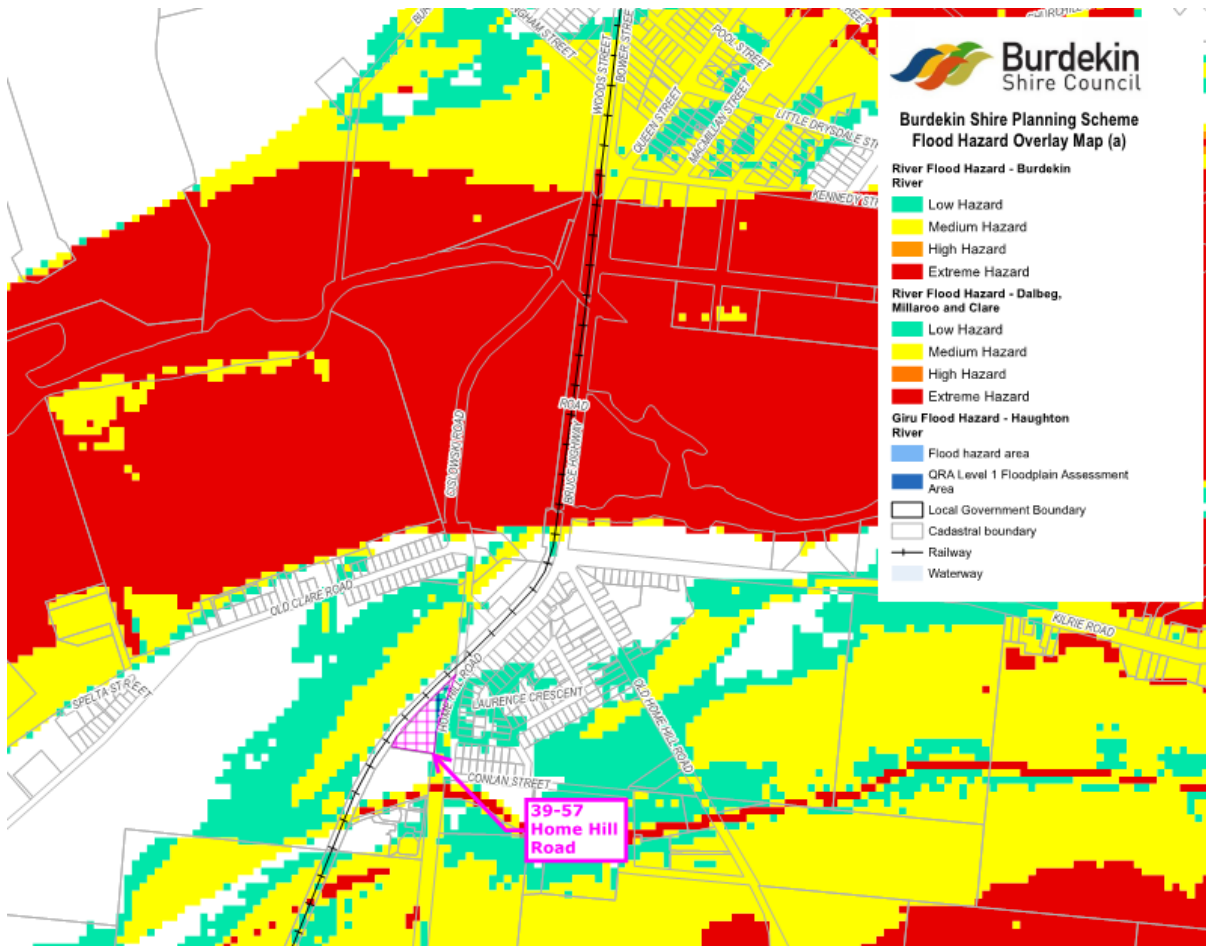
Stormwater quality assessment will be undertaken by others which is understood to include a first flush treatment system, which will adopt a new sump located on mid-eastern boundary. This concept is illustrated in **Figure 2**.



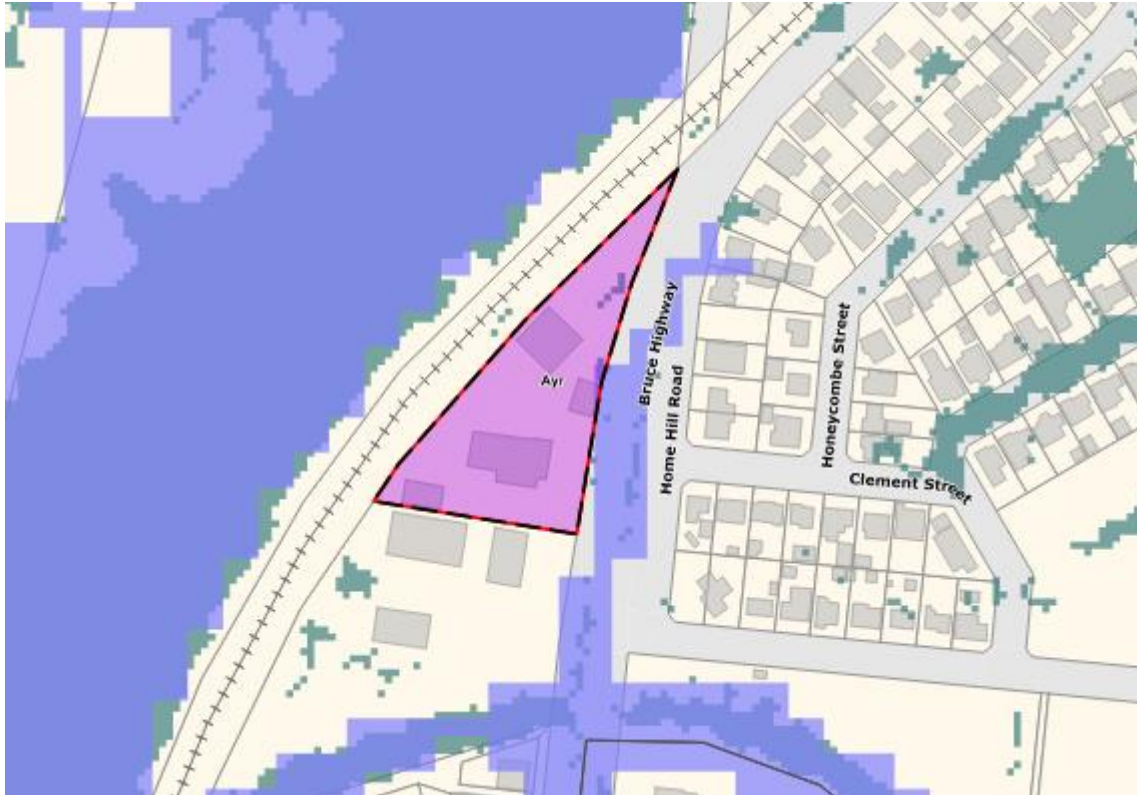
**Figure 2** First flush treatment concept (sump shown as brown rectangle)

## Flood Assessment

The site extent is marked on **Figure 3** which is extracted from Burdekin Shire Council Flood Hazard Overlay Map. As seen, only small portion of the site (north-eastern corner) is defined as being constrained by low flood hazard. The remaining site is not in the flood hazard overlay. This is supported by the flood extents, illustrated in **Figure 4**, which shows isolated flooding within the north-eastern portion of the site.



**Figure 3** Burdekin Shire Planning Scheme Flood Hazard Overlay Map (a)



**Figure 4** Burdekin Shire supplied flood extents extract

As the development will generally imitate the existing site levels to maintain positive fall towards the eastern boundary, there will be no impediment to flow paths or loss of flood storage in areas shown to experience flooding. It is anticipated that the proposed sump will slightly increase storage. Therefore, as the development will not impact the on-site storage of flood water or existing flow paths, there will be no impact to the flood characteristics outside the development extents and no impacts upstream or downstream.

Yours sincerely,



**IREM GUNEY**  
Civil Engineer

Approved,



**JOHN SINGLE**  
Senior Civil Engineer (RPEQ 24378)





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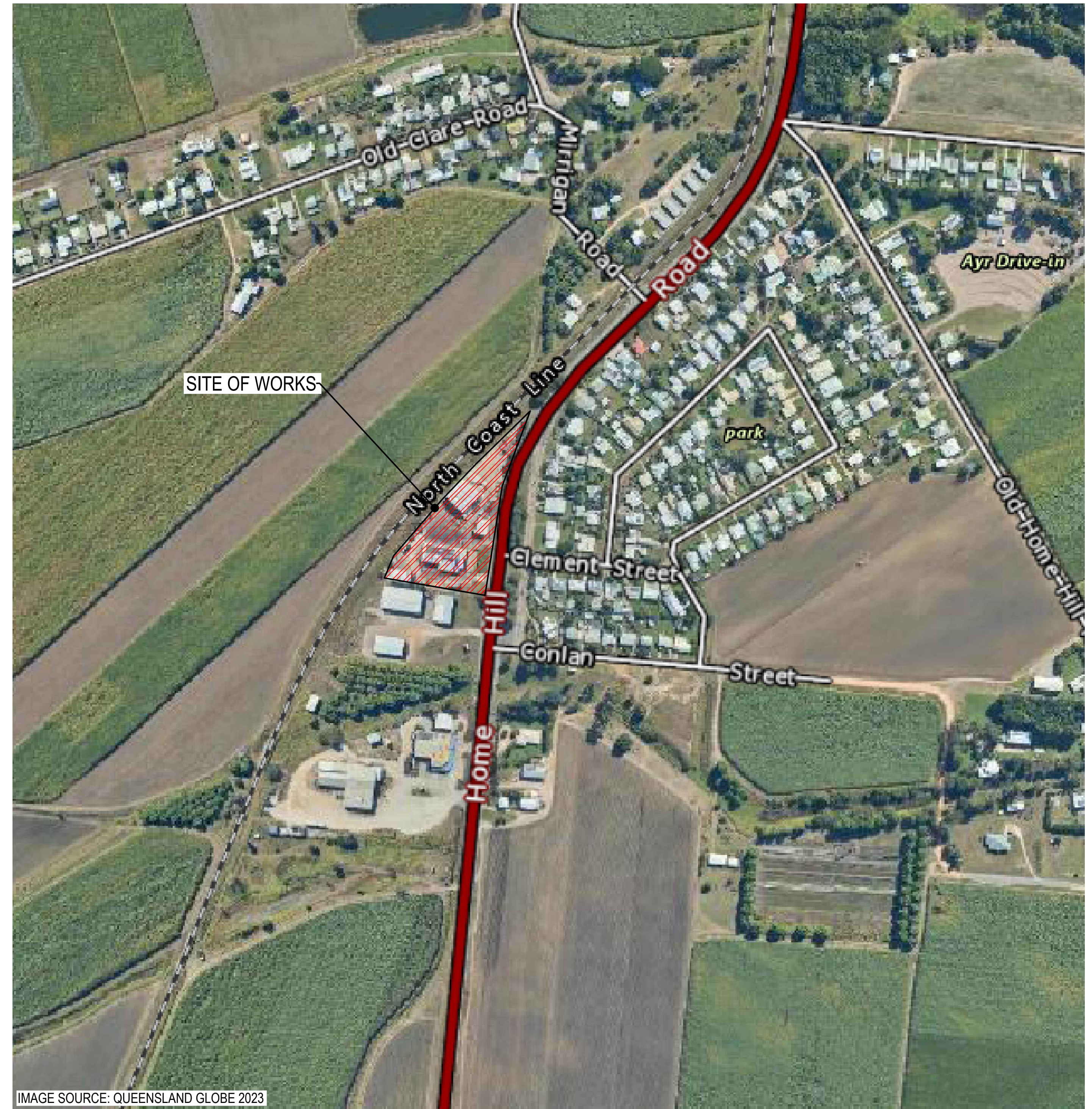
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NUTRIEN AG SOLUTIONS

STORMWATER SUMP DESIGN

AYR SITE







SCALE A1 - N.T.S.  
A3 - N.T.S.

SCHEDULE OF DRAWINGS	
DRAWING No.	DESCRIPTION
304500701-CI-01	COVER SHEET
304500701-CI-02	LOCALITY AND SCHEDULE
304500701-CI-03	EXISTING FEATURES SHEET 1 OF 2
304500701-CI-04	EXISTING FEATURES SHEET 2 OF 2
304500701-CI-05	FINAL SITE LAYOUT
304500701-CI-10	DRAINAGE DESIGN PLAN
304500701-CI-11	SUMP DESIGN PLAN

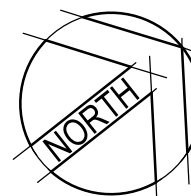
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Rev.	Date	Description	Des.	Verif.	Appd.

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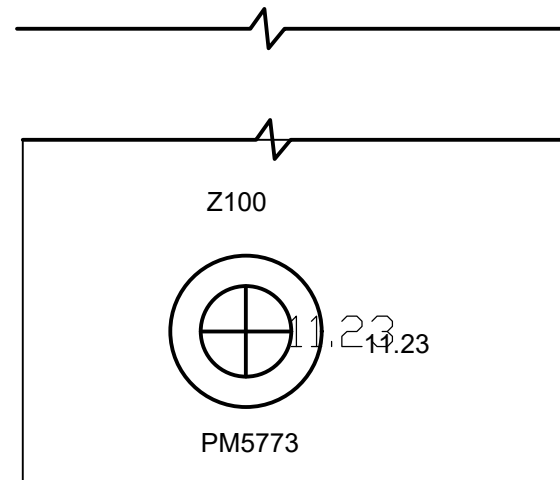


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Checked LV	Date 31/03/23	Project STORMWATER SUMP DESIGN AYR SITE			Status  FOR CONSTRUCTION			
Designed LV	Date 31/03/23							
Verified BM	Date 31/03/23	Title LOCALITY AND SCHEDULE			DATUM AHD	DATE 25/01/2023	Scale AS SHOWN	Size A1
Approved 	24432				Drawing Number 304500701-CI-02		Revision A	
BM 	31/03/23							





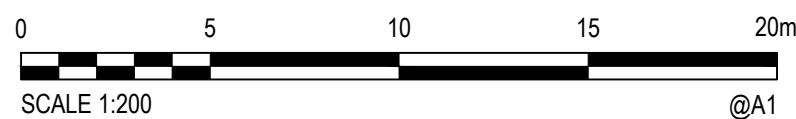
1  
RP718903



CO-ORDINATE DATUM:	ARBITRARY
LEVEL DATUM	AHD D
AS DETERMINED BY	PSM 5773
LEVEL VALUE USED	RL 11.23
MERIDIAN DATUM	IS265915

SURVEY CONTROL TABULATION				
No.	EASTING	NORTHING	ELEVATION	TYPE
Z100	427.555	57.374	11.230	PSM 5773
T3	303.830	175.081	11.938	PIN
T104	352.929	167.579	11.600	GI NAIL
T200	383.254	262.137	11.357	GI NAIL
T201	331.211	226.432	11.641	PIN

A	Rev.	31/03/23 Date	ISSUED FOR CONSTRUCTION Description	LV Des.	BM Verif. Appd.



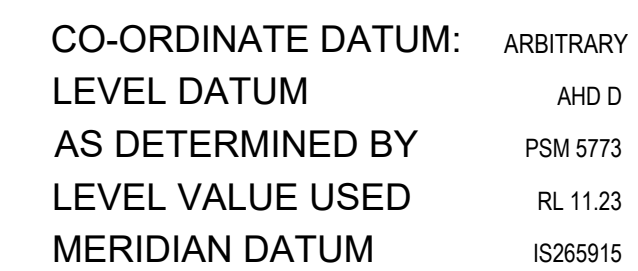
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Approved	24432
BM	31/03/23

Client	NUTRIEN AG SOLUTIONS
Project	STORMWATER SUMP DESIGN AYR SITE
Title	EXISTING FEATURES SHEET 1 OF 2

Status				FOR CONSTRUCTION			
DATUM		DATE		Scale		Size	
AHD		25/01/2023		AS SHOWN		A1	
Drawing Number						Revision	
304500701-CI-03						A	



SURVEY CONTROL TABULATION				
No.	EASTING	NORTHING	ELEVATION	TYPE
Z100	427.555	575.074	11.230	PSM 5773
T3	303.830	175.061	11.938	PIN
T104	352.929	167.875	11.600	GI NAIL
T200	383.254	282.137	11.357	GI NAIL
T201	331.211	226.432	11.641	PIN

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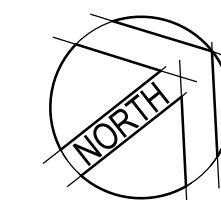


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Approved	24432
BM	31/03/23

Client	NUTRIEN AG SOLUTIONS
Project	STORMWATER SUMP DESIGN AYR SITE
Title	EXISTING FEATURES SHEET 2 OF 2

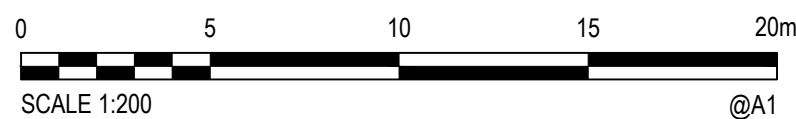
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FOR CONSTRUCTION			
DATUM	DATE	Scale	Size
AHD	25/01/2023	AS SHOWN	A1
Drawing Number			Revision
304500701-CI-04			A





JOINS DRAWING 304E00701 C1 04

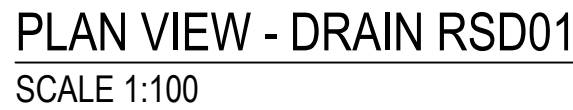
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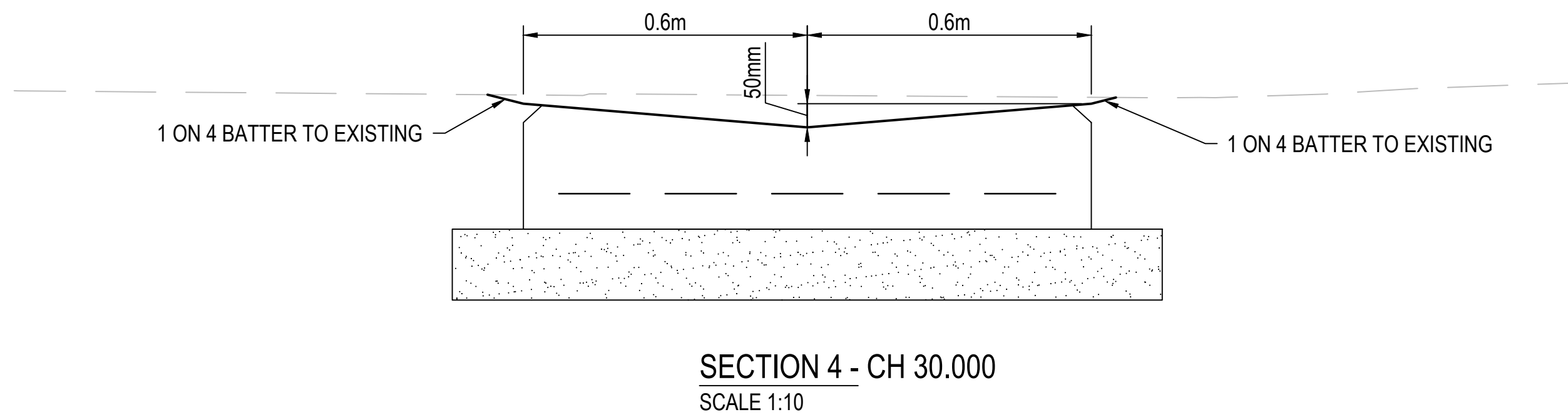
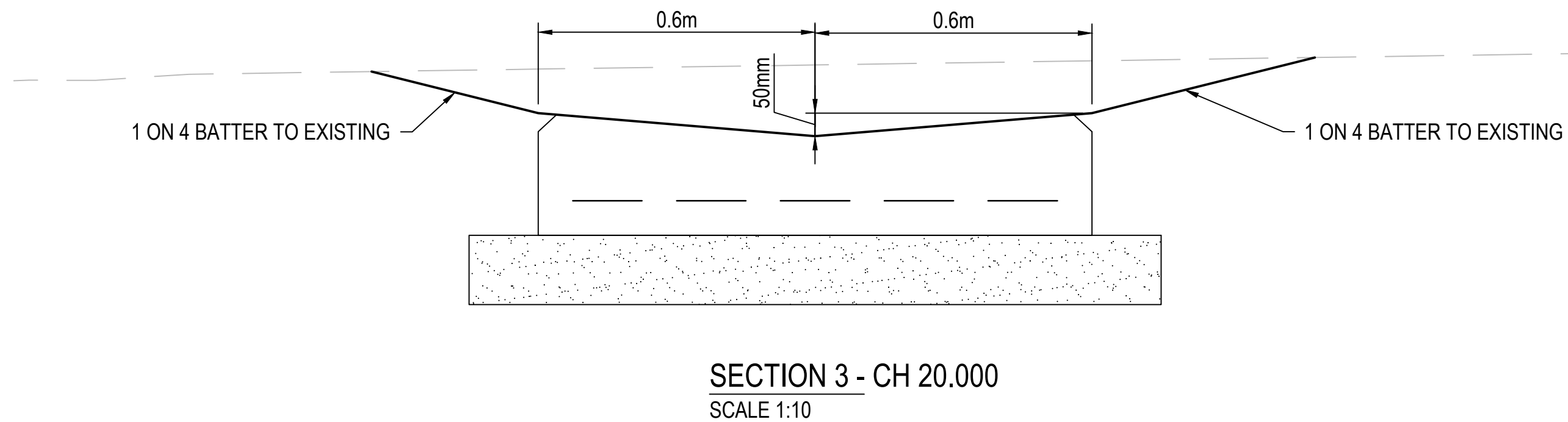
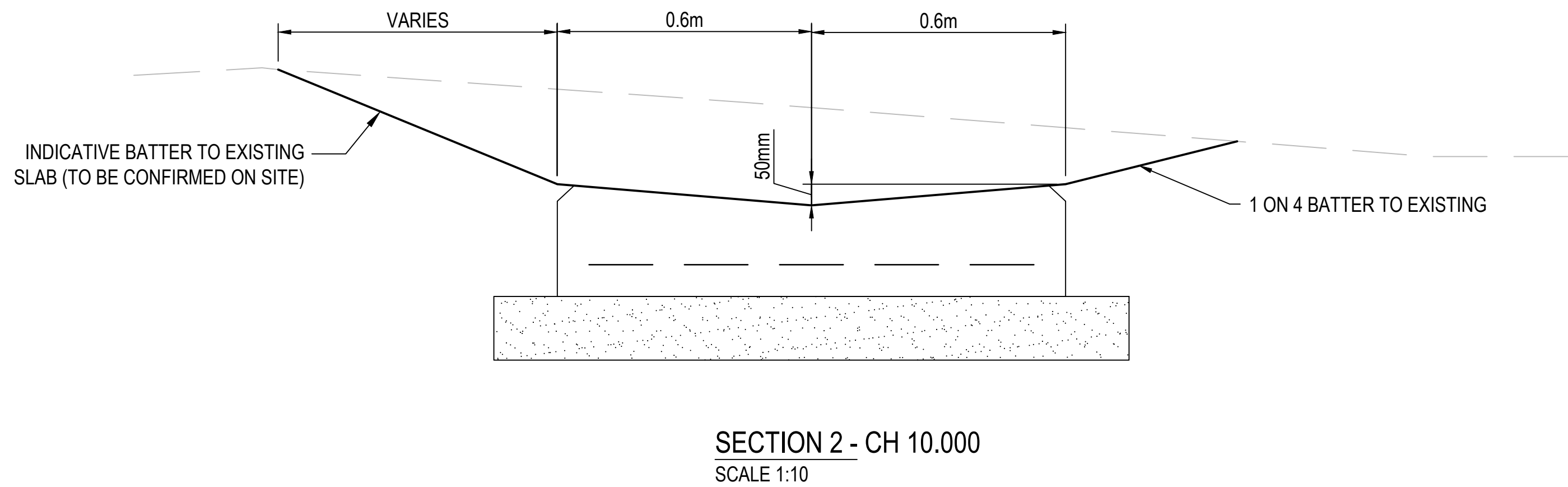
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Designed LV	Date 31/03/23							
Verified BM	Date 31/03/23	Title	FINAL SITE LAYOUT		DATUM	DATE	Scale	Size
Approved	24432				AHD	27/03/2023	AS SHOWN	A1
BM	31/03/23	Drawing Number					Revision	
		304500701-CI-05					A	




C ALIGN DRAIN->RSD01 HORIZONTAL POINTS								
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	334.142	198.141	11.803	130°32'41.65"			
TC	19.877	349.246	185.220	11.485	130°32'41.65"			
IP 2	23.914	353.217	181.823	11.420		R = -5.000	8.075	92°31'59.35"
CT	27.952	356.436	185.940	11.355	38°00'42.30"			
IP 3	35.703	361.209	192.047	11.231	38°00'42.30"			

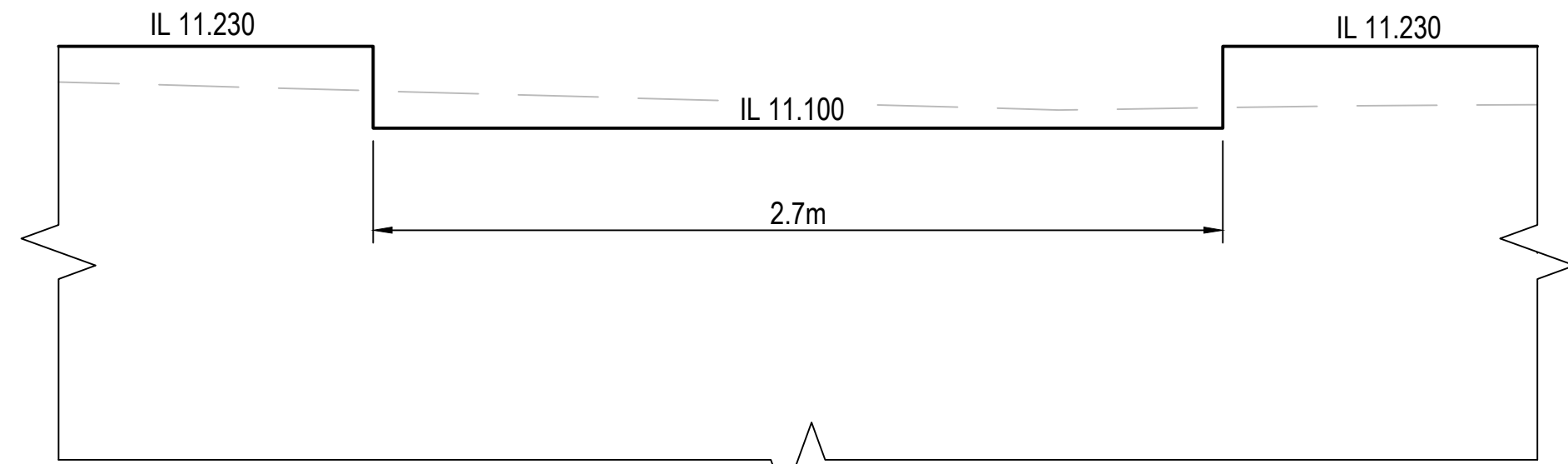
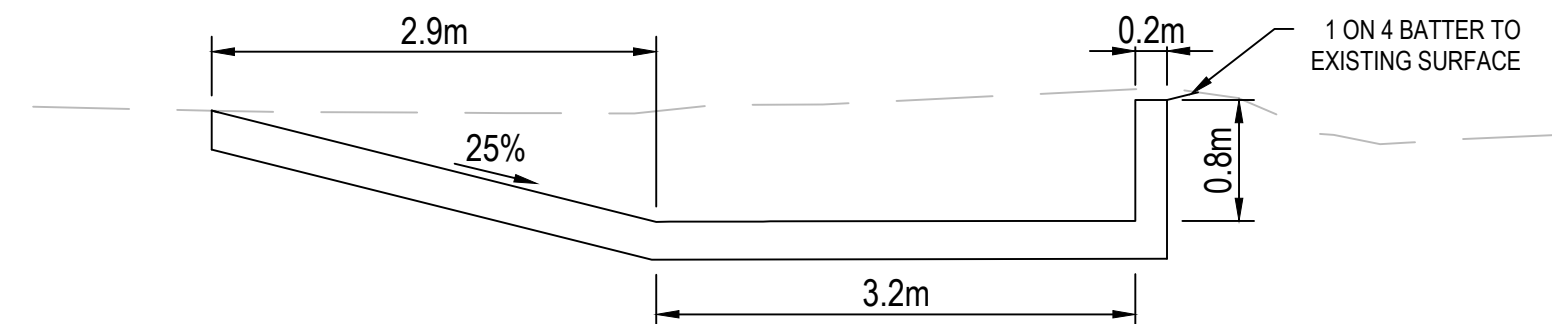
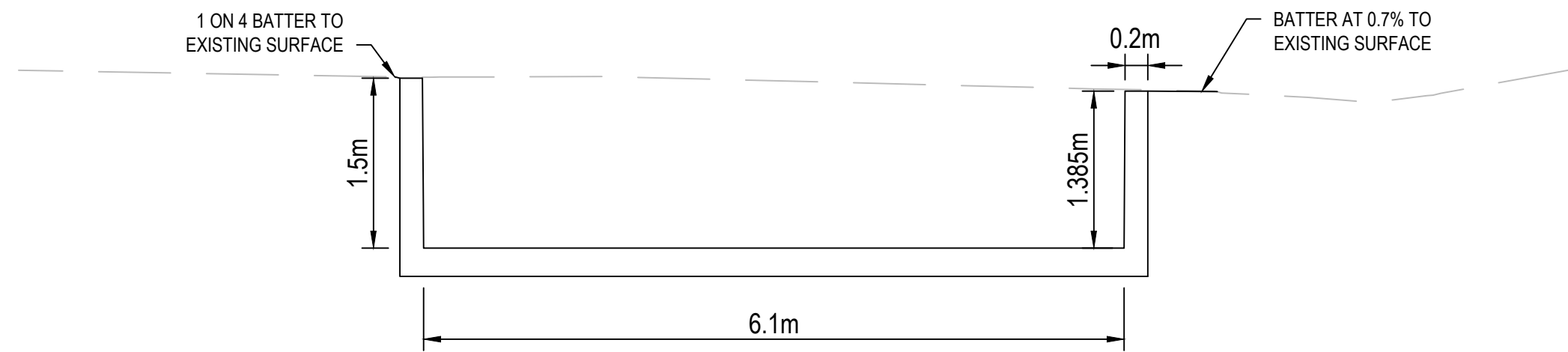
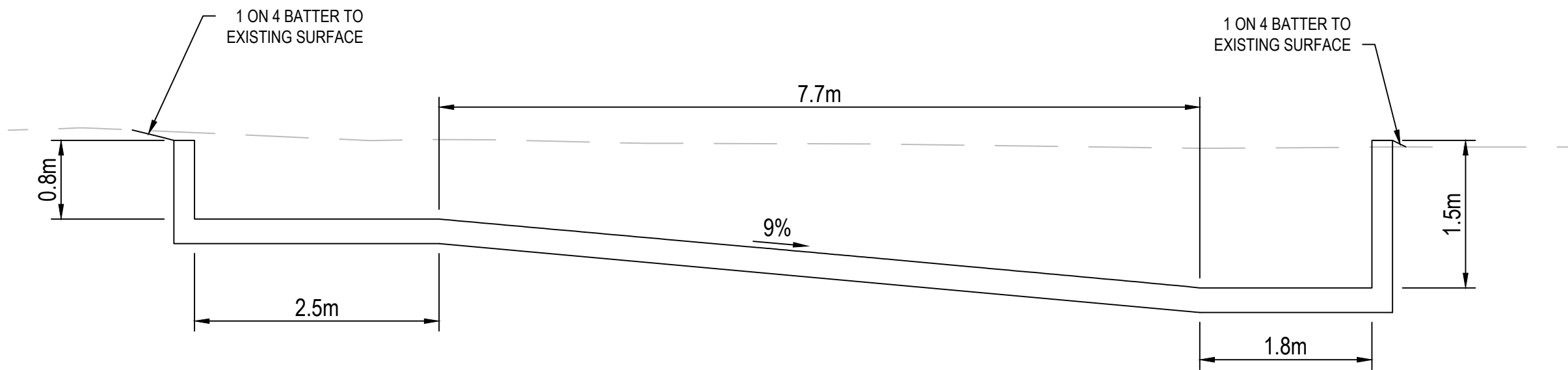
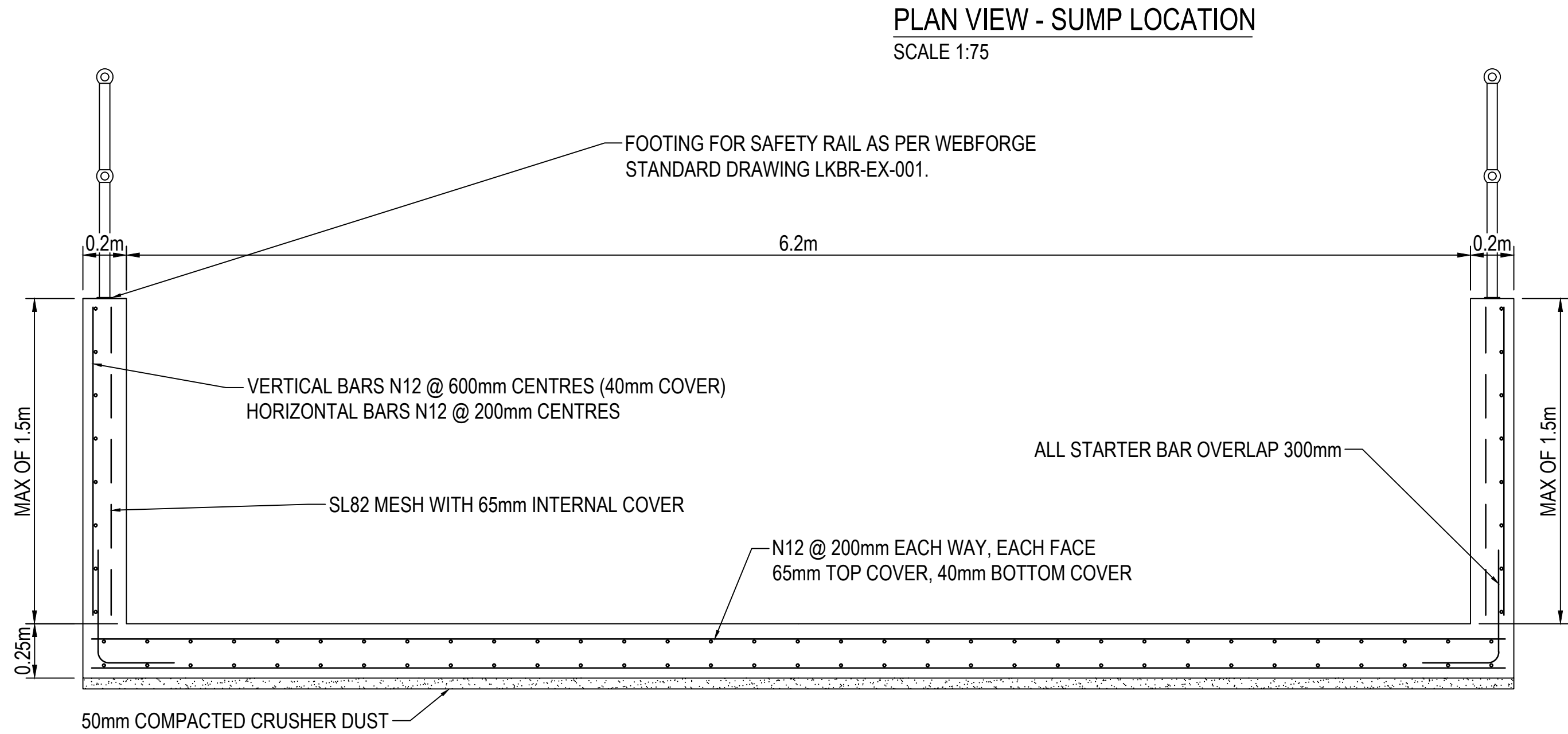
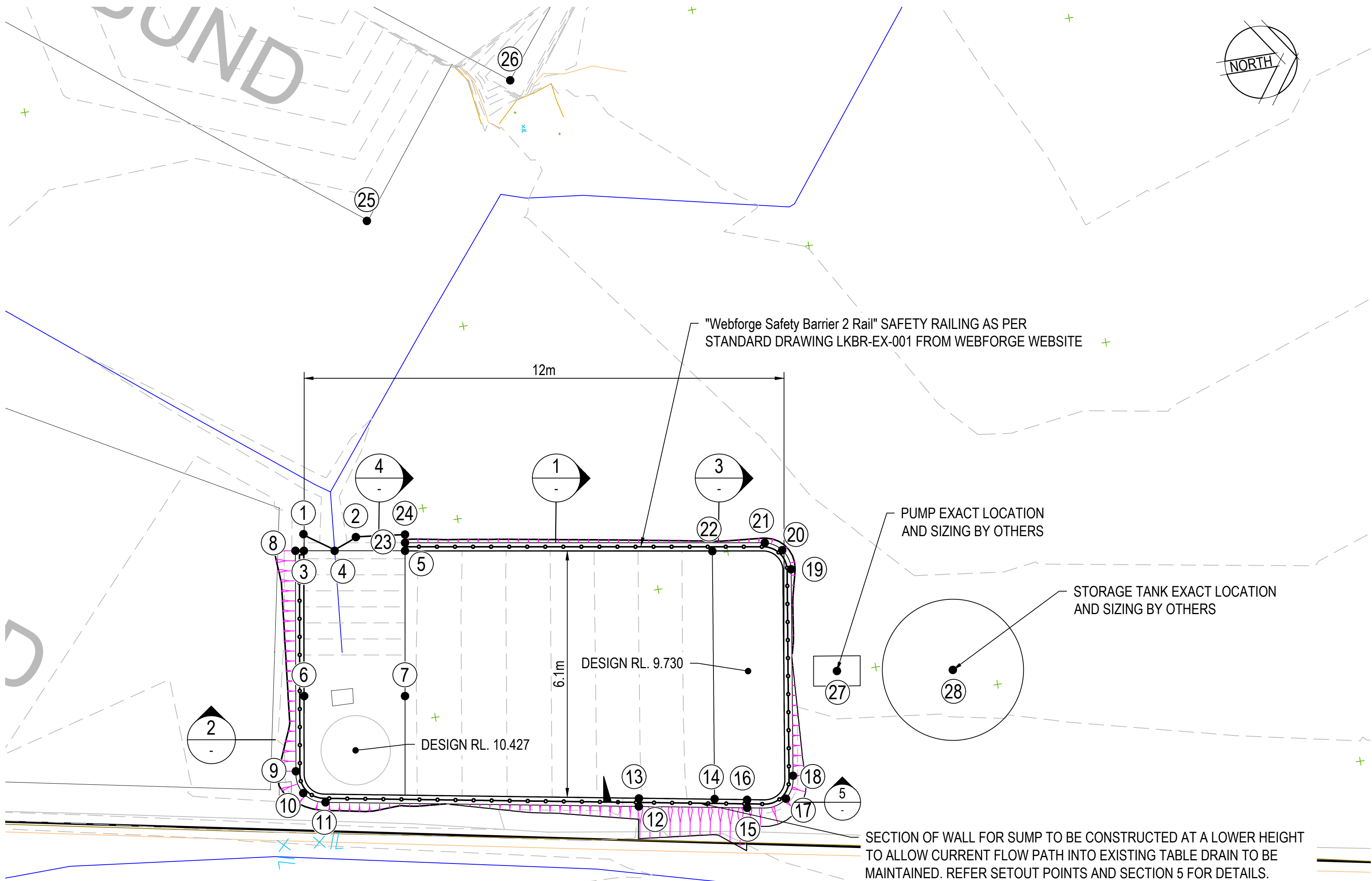
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Verified BM	Date 31/03/23	Title DRAINAGE DESIGN PLAN		DATUM		
Approved	24432			AHD		DATE 25/01/2023
 BM 31/03/23		Drawing Number 304500701-CI-10			Revision A	





SETOUT POINTS			
PT No.	EASTING	NORTHING	RL.
1	371.847	203.519	11.253
2	372.128	204.797	11.235
3	372.257	203.463	11.150
4	372.379	204.222	11.150
5	372.660	205.953	11.230
6	375.836	202.892	10.430
7	376.238	205.374	10.425
8	372.224	203.255	11.230
9	377.655	202.389	11.230
10	378.222	202.481	11.230

SETOUT POINTS			
PT No.	EASTING	NORTHING	RL.
11	378.538	202.994	11.230
12	379.886	210.690	11.100
13	379.689	210.724	11.100
14	380.004	212.584	9.739
15	380.352	213.350	11.100
16	380.154	213.381	11.100
17	380.281	214.341	11.230
18	379.743	214.607	11.230
19	374.653	215.383	11.230
20	374.147	215.238	11.230

SETOUT POINTS			
PT No.	EASTING	NORTHING	RL.
21	373.896	214.840	11.230
22	373.893	213.516	9.731
23	372.462	205.985	11.230
24	372.261	206.017	11.251
25	364.386	206.327	11.266
26	361.496	210.415	11.862
27	377.339	216.104	11.230
28	377.775	218.962	11.231

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Verified	BM	Date	31/03/23
Approved	BM	Date	24/4/23

Client	NUTRIEN AG SOLUTIONS
Project	STORMWATER SUMP DESIGN
Ayr SITE	
Title	SUMP DESIGN PLAN

Status				FOR CONSTRUCTION	
DATUM		DATE	Scale	Size	
AHD		25/01/2023	AS SHOWN		A1
Drawing Number				Revision	
304500701-CI-11					A

# **Hazardous Assessment Report**

**Ayr - 39-57 Home Hill Road, Ayr, QLD 4807**

**Prepared and Submitted by:** Nutrien Ag Solutions Limited

**Date:** May 16, 2023

**Persons involved:**

Chris Price

Lisa Henningsen

Ryan Cranitch



Assessor(s)	Signature	Date
Chris Price		
Lisa Henningsen		

Site Operator	Signature	Date
Ryan Cranitch		

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Appendix A – Site Manifest
Appendix B – Site Based Management Plan
Appendix C – Dangerous Goods Register
Appendix D – Safety Data Sheets
Appendix E – Site Emergency Response Plan

# 1. Introduction

Nutrien Ag Solutions Limited (Nutrien) is a manufacturer, distributor and seller of fertilisers. A recent audit of the existing Ayr site by Nutrien, has identified that the Ayr site, located at 39-57 Home Hill Road, Ayr, QLD 4807 is classified as a hazardous chemical facility as per the *Planning Regulation 2017*. A hazardous chemical facility means the use of premises for a facility at which a prescribed hazardous chemical is present or likely to be present in a quantity that exceeds 10% of the chemical's threshold quantity under the *Work Health and Safety Regulation*, Schedule 15.

The Schedule 15 chemicals which are being stored at >10% of the threshold quantity include:

- Methomyl 225g/L at 11.3%
- Chlorpyrifos 500g/L at 10%
- Paraquat 360g/L at 27%

The other Schedule 15 chemicals which are being stored at <10% of the threshold quantity include:

- Liquefied Petroleum Gas (LPG) at 0.4%
- Dimethoate 400g/L at 0.4%
- Abamectin 36g/L at 0%
- Aluminium Phosphide 330g/kg at 0.1%
- Chlorfenvinphos 200g/L at 0.2%
- Chlorothalonil 720g/L at 1.8%
- Chlorothalonil 900g/kg at 6.8%
- Diquat 200g/L at 0.2%
- Paraquat 250g/L at 3.8%
- Paraquat 330g/L at 5.0%
- Paraquat 135g/L
- Diquat 115g/L at 0.1%
- Oxamyl 240g/L at 0.6%

As the Ayr site is classified as a hazardous chemical facility and an application for a Material Change of Use is required, Nutrien has prepared this Hazardous Assessment Summary. Nutrien also operate under a dangerous goods site licence (licence no. POIK-10712) and have advised that no incidents have occurred at the site.

## 1.1. Purpose

The purpose of this Hazard Assessment is to detail the findings (including risk and mitigation measures) of the hazardous assessment undertaken for the Ayr site.

## 1.2. Summary of Major Findings

The risks from this existing dangerous goods storage or handling system have been minimised to as low as reasonably practicable to people, property, and the environment. The risk assessment identified:

- 0 extreme risks
- 12 high risks
- 6 medium risk
- 0 low risk.

After the implementation of the mitigation measures detailed in Section 6.2, the residual risk assessment identified:

- 0 extreme risks
- 0 high risks
- 13 medium risk

- 5 low risk.

The following limitation, assumptions and uncertainties were identified during the hazard assessment:

- Report is not based on modelling.

### **1.3. Report Structure**

This Hazardous Summary Assessment includes:

- A Title Page.
- Table of Contents.
- Introduction, including purpose and summary of major findings (Section 1).
- Site Description, including cadstral details, operational activities and environmental characteristics (Section 2).
- Location (Section 3)
- Hazardous Chemicals (Section 4).
- Process (Section 5).
- Hazard Identification Methods and Hazard Analysis (Section 6).
- Code Compliance Statements (Section 7).
- Site Manifest (Appendix A).
- A Site Based Management Plan which details how the potential impacts from the project and how these potential environmental impacts will be managed/avoided (Appendix B).
- Dangerous goods register, this is included in the site's Hazardous Products Register which is provided as Appendix C.
- Safety data sheet/s (SDS) All SDS are available in Nutrien's electronic system. There are more than 300 products stored and handled on site and it is impractical to provide hard copies of all SDS, however the SDS for the Schedule 15 chemicals are provided in Appendix D.
- Site Emergency Response Plan (Appendix E).

### **1.4. Applicable Standards and Codes of Practice**

The following standards and codes of practice are applicable for the Ayr site:

- *AS/NZS 1596:2014 The storage and handling of LP Gas*
- *AS/NZS 3833: The storage and handling of mixed classes of dangerous goods in packages and intermediate bulk containers*
- *Code of practice: The storage and handling of dangerous goods.*
- *Code of practice 2021: Managing risks of hazardous chemicals in the workplace.*

## 2. Site Description

### 2.1. Location

The Ayr site is located approximately 3.2km south west of the centre of Ayr, the zoning, land use and land tenure of the site is detailed in Table 2-1. Residential properties are located to the east of the site, commercial properties located immediately south and rural properties are located south west, further south and west of the site (refer to Figure 1 and Figure 7). The population of Ayr is 8,097 (2021).

**Table 2-1 Zoning, Land Use and Land Tenure**

<b>Property Description</b>	Lot 1 on RP718903
<b>Zoning</b>	Medium Impact Industry
<b>Land Use</b>	Commercial – Chemical Manufacturing, Distributing and Selling
<b>Land Tenure</b>	Freehold

### 2.2. Cadastral Details

The Ayr site is described as Lot 1 on RP 718903, and located at 39 – 57 Home Hill Road, Ayr (refer to Figure 1). The local government area is the Burdekin Shire. The site area is 12,140m<sup>2</sup> and is secured by a 2.1m high fence with barbed wire on top, with the site also having an integrated security system.



**Figure 1 Site Layout Plan**

### 2.3. Operational Activities

The Ayr site's primary operational activity is the sale and distribution of fertilisers, with the main activity undertaken being chemical manufacturing (or fertiliser blending) (refer to Section 5 for further details).

#### 2.3.1. Site Infrastructure

The infrastructure associated for the Ayr site is shown on Figure 1 and incorporates:



- A large solid fertiliser blending / storage shed (Warehouse 3), which is present within the centre of the site. Warehouse 3 is a fully enclosed shed.
- A solid fertiliser unloading area, which is located to the north of Warehouse 3.
- An existing spoon drain, which is located to the northeast of Warehouse 3.
- A solid fertiliser bagging area, which is located to the southwest of Warehouse 3.
- Liquid fertiliser tanks, located in the southwest of the site.
- Yard storage of 864 L of LPG (site ref. PS5).
- 12.5 kL of DG 3 in a purpose-built flammable storage shed (PS1).
- 40 kg of DG 4.3 in a metal box locked in caged area (PS2).
- 12.65 kL of DG 6.1 toxic substances in packages and IBCs in storage warehouses (PS1 & PS2).
- 72.5 kL of DG 8 corrosive substances in packages and IBCs in storage warehouses (PS2, PS7 & PS8).
- 60 kL of combustible liquids in packages and IBCs in storage warehouses (PS1 & PS2).
- All dangerous goods storages are static storage.

Currently the solid fertiliser blending / storage shed, and surrounding catchment drain towards a small 3000 L subsurface sump (Figure 1). Upgrades are proposed to improve the drainage and capture system in accordance with the concept design in Figure 1. An additional spoon drain will be constructed which will service the fertiliser bagging/unloading area and the receiving sump will be significantly expanded in order to capture a “first flush (15mm) from the catchment (catchment outlined in broken red line). The sump will be 6m x 12m x 1m (deep) and capable of capturing 72m<sup>3</sup> of water before it overflows.

The site also contains an additional four large buildings / storage sheds which are located to the south and east of the site (Figure 1). A small shop is attached to the larger shed, which is located near the site entrance. The sheds are generally used for storing animal feed, general products and small packaged fertilisers. The small, packaged fertiliser products are generally stored on pallets on the concrete floor of the storage areas.

Several areas used for rubbish and storage of empty drums and pallets are located within the southwestern corner and north portion of the site (Figure 1). Diesel fuel storage is located in front of the Warehouse Store 3.

The site also contains various equipment associated with the blending, transport and bagging of mixed fertilisers. The blending activity is addressed further in Section 4 with the equipment detailed in Section 2.3.2.

### **2.3.2. Site Plant and Equipment**

The Ayr site operate using mainly the following plant and equipment:

- Truck (semi-trailer).
- Site vehicles (uts)
- Forklift.
- Hand tools.
- Tubeveyors (enclosed).
- Skid street endloader.

### **2.3.3. Site Operating Hours**

The site operations are dependent on the time of the year, however, are generally:

- June to December: 6:00am to 6:00pm.
- January to May: 6:00am to 12:00pm.

Site set up works are undertaken during the hours of 6:00am and 7:00am, with full site operations occurring from 7:00am onwards. The maximum number of employees, at any given time, for the Ayr site is 25.

### 2.3.4. Solid Granular Fertiliser Handling Area Stormwater Capture System

Currently the solid granular fertiliser storage shed and surrounding catchment drain towards a small 3000 L subsurface sump refer to Figure 2). Upgrades are proposed to improve the drainage and capture system in accordance with the concept design in Figure 2. An additional spoon drain will be constructed which will service the fertiliser bagging/unloading area and the receiving sump will be significant expanded in order to capture a “first flush (15mm)” from the catchment (catchment outlined in broken red line). The sump will be 6m x 12m x 1m (deep) and capable of capturing 72m<sup>3</sup> of water before it overflows.

The sump will be regularly pumped out into storage tanks, from which a local farmer will collect the water to irrigate their pasture/crops in accordance with the Ed of Waste Code for fertilizer wash water and slurry (ENEW07278417).

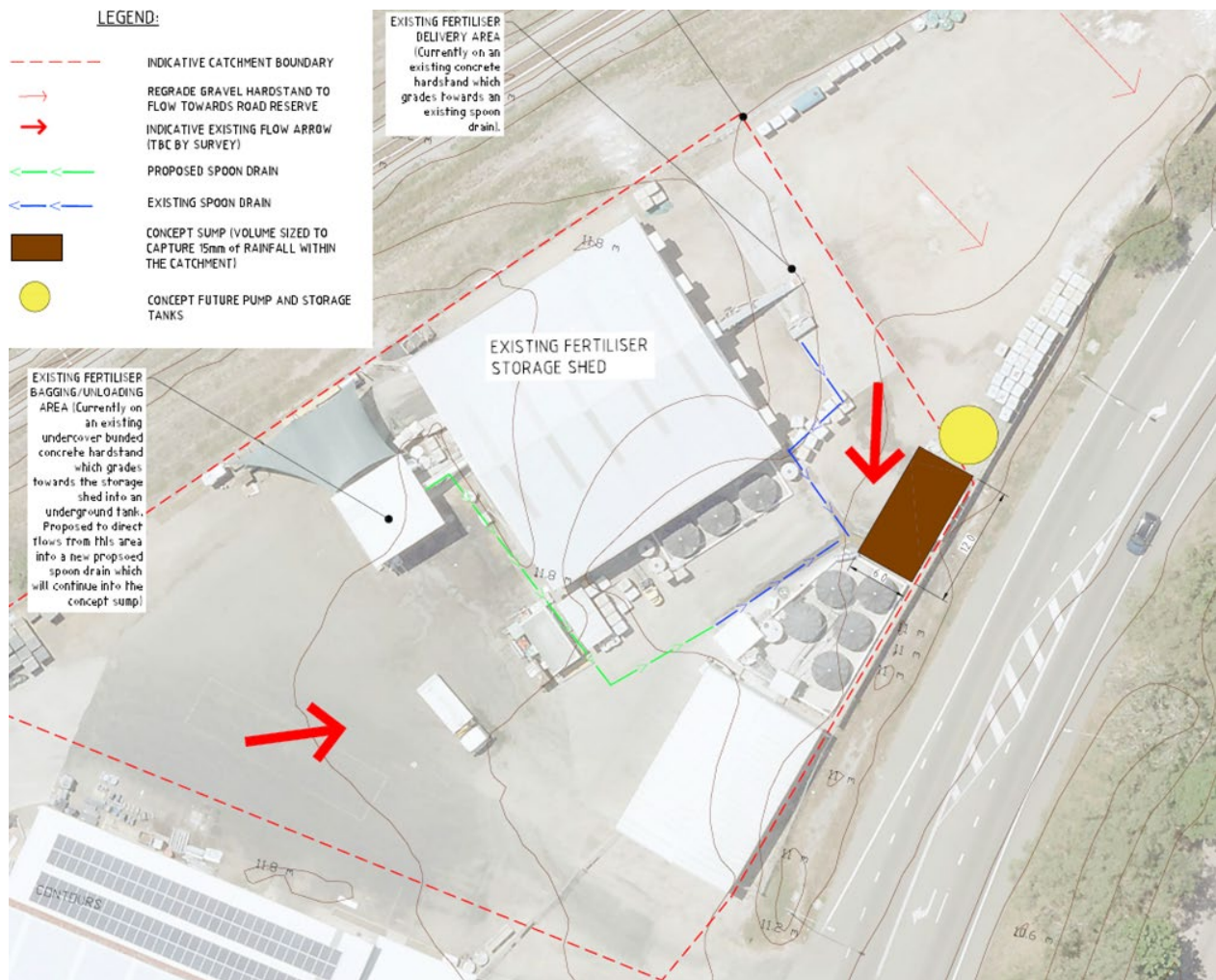


Figure 2 Fertiliser Handling Area Stormwater Capture System

### 2.4. Climate

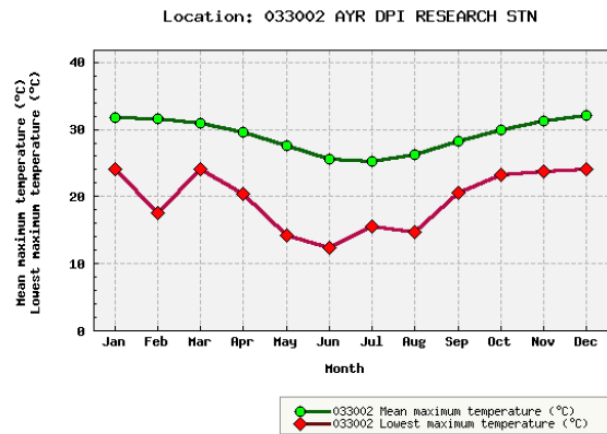
The climate zone, as defined by the Bureau of Meteorology (BOM), for the site locality is a typical tropical climate characterised by hot humid summers.

Climate data collected from the Ayr DPI Research STN weather station (033002) from 1951 to 2022 provided some indicative weather patterns. The Ayr DPI Research STN weather station (033002) is approximately 2.9km south west of the site. The mean maximum temperatures ranged from 32.1°C in December to 25.3°C in July (BOM, 2022) (refer to Figure 3). The mean minimum temperatures from 1951 to 2022 ranged from 24.1°C in December to 12.4°C in June (BOM, 2022) (refer to Figure 3).

Average annual rainfall from the weather station 033002 is 937mm, with the wet season extending over

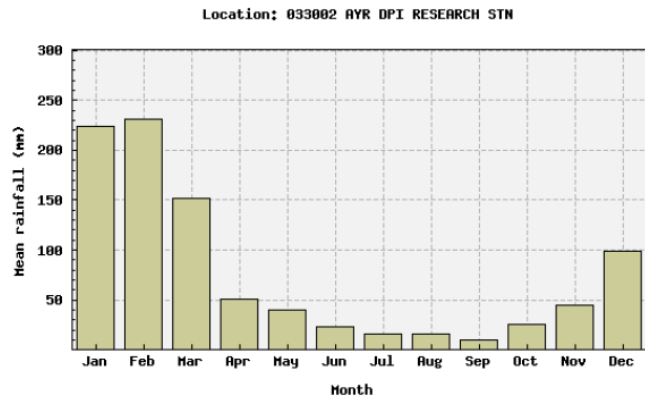
the summer months (BOM, 2022). The highest mean monthly rainfall recorded is in February (231.2mm) and the lowest mean monthly rainfall recorded is in September (9.6mm) (BOM, 2022) (refer to Figure 4).

Wind conditions in January are predominantly north easterly with predominant wind speeds of  $\geq 10$  to  $< 20$ km/hr in the morning and are south westerly with predominant wind speeds of  $\geq 10$  to  $< 20$ km/hr in the afternoon (refer to Figure 5). Winter winds (July) are predominantly north to north westerly with predominant speeds of  $\geq 0$  to  $< 20$ km/hr in the morning and range from westerly to south westerly with predominant speeds of  $\geq 0$  to  $< 10$ km/hr in the afternoon (refer to Figure 5).



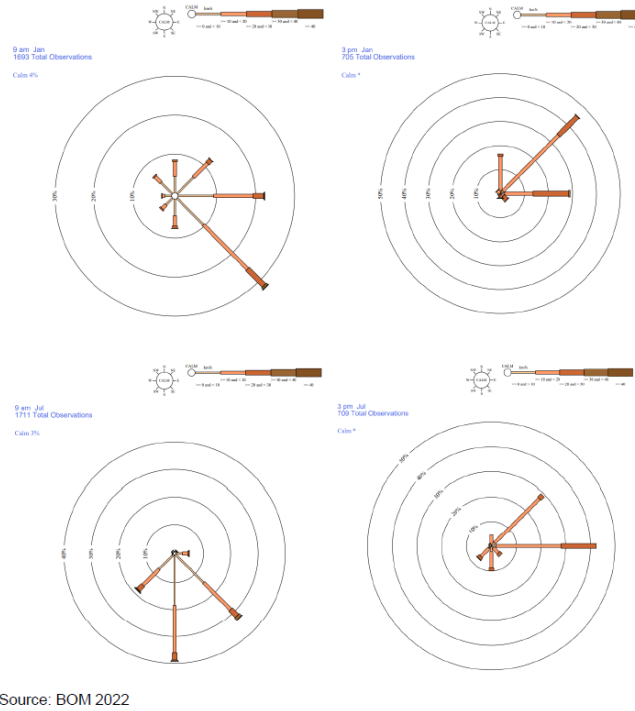
Source: BOM 2022

Figure 3 Mean Maximum and Minimum Temperature – Ayre DPI Research STN Weather Station (033002)



Source: BOM 2022

Figure 4 Mean Rainfall – Ayre DPI Research STN Weather Station (033002)



**Figure 5 Wind Roses – Summer (January 9am and 3pm) and Winter (July 9am and 3pm) Averages at the Ayr DPI Research STN Weather Station**

## 2.5. Topography, Geology and Soils

### 2.5.1. Topography

The site is relatively flat in topography and low lying ranging from 12m Australian Height Datum (m AHD) to 13m AHD (Figure 7). Given that site is <20m AHD, it is mapped within the Burdekin Shire Council Acid Sulfate Soil Overlay, however as per Section 2.5.3 the likelihood of acid sulfate soils occurring is low.

The majority of the site is concrete hardstand and buildings, with the entrance at the south-western corner, southern boundary and the northern portions of the site having exposed surfaces of sand / clay fill material.

### 2.5.2. Geology

A review of QLD Globe's detailed 1:100k Geological Map indicated the site's regional surface geology is quaternary alluvium (Qa-QLD) as detailed in Table 12-2

**Table 2-2 Surface Geology**

Surface	Dominant Rock	Rock Type	Lithological Summary	Age
Qa-QLD	Alluvium	Stratified unit (including volcanic and metamorphic)	Clay, silt, sand and gravel; flood-plain alluvium	Quaternary

### 2.5.3. Soils

A review of the Australian Soil Resource Information System (ASRIS) revealed that the Australian Soil Classification for the site is Tenosols to the south and Dermosols to the north of the site. These are soil types with minimal texture contrast and are not highly prone to issues such as sodicity/dispersion. ASRIS also indicated that there is extremely low probability of acid sulfate soils.

## 2.6. Surrounding Surface and Groundwater



Local topography and drainage are presented below in Figure 6. The site is relatively flat in topography and low lying and approximately 10 m AHD. The site drains gently in a west to east direction towards the Bruce Highway. Runoff from the site exits into the table drain on the western side of the Bruce Highway. From here the table drain flows southwards into what appears to be drainage line approximately 90 m south of the site. The drainage line would rarely experience flow and appears to eventually terminate into a pond. It is assumed that following substantial rainfall events/flooding the pond would overtop and then eventually flow into Plantation Creek.

A review of QLD Globe's registered water bores layer indicated that there are seventeen (17) registered groundwater bores within a 500 m radius from the site. The closest registered groundwater bore (RN 175936) is located approximately 90m southwest of the site, the standing water level at this bore is 10.10m below ground level (mgl) and indicates that the water quality is potable. The depth of the groundwater well is 30m bgl.



**Figure 6 Topography and Drainage**

### 2.6.1. Environmental Values and Water Quality Objectives

The Site is located within the Haughton drainage basin, the Barratta Creek drainage sub-basin and the Lower Burdekin Catchment (QLD Globe).

As described above site runoff eventually flows into a drain approximately 90m south of the site. The drain terminates in a pond. It is assumed when the pond overflows it would make its way towards Plantation Creek which forms part of the Burdekin River within the Haughton drainage basin.

There are currently no specific water quality objectives for the Haughton drainage basin as they are currently under development, however Draft environmental values and water quality guidelines: Burdekin Basin fresh and estuarine waters (DES, 2017) contain draft environmental values and water quality objectives for this catchment. According to Figure 9 in the DES 2017 Draft guidelines, the site is located within lowland fresh waters. The Environmental Values for the site are as per the below:

- Aquatic ecosystems.
- Irrigation.
- Farm supply.
- Stock water.
- Aquaculture.
- Human consumption.
- Primary recreation.
- Secondary recreation.
- Visual recreation.
- Industrial use.
- Cultural and spiritual values.

The Water Quality guidelines (80th percentile assuming a moderately disturbed system) suggested to protect the above Draft Environmental Values of the Lower Burdekin River are listed as follows:

- Ammonium (N) <20 µg/L.
- Oxidised nitrogen <55 µg/L.
- Total nitrogen: <650 µg/L.
- Filterable reactive phosphorus <20 µg/L.
- Total phosphorus <60 µg/L.
- Chlorophyll a: <4 µg/L.
- Dissolved oxygen: 85 – 110% saturation.
- Turbidity: <100 NTU.
- Suspended solids: <40 mg/L.
- pH 6.5 – 8.5.
- Conductivity: <300 µS/cm.
- Sulfate: 37 mg/L as SO<sub>4</sub><sup>2-</sup>.

Given that the lower Burdekin catchment is a major contributor of water and contaminants to the Great Barrier Reef, it is critical that the fertilisers (and their associated nutrients) on site are managed carefully.

## **2.7. Surrounding Land Uses and Zones**

The surrounding land uses and zones located adjacent of near the site are as follows:

- The several isolated onsite trees and the potential fauna they may use these trees for habitat or foraging.
- The onsite workers.
- The low-density residential dwellings located approximately 42m east of the site, with the closest residential dwelling approximately 58m from where the ERA 7 activities would occur.
- The rural properties to the north/west, approximately 24m, with the closest dwelling approximately 305m from the site.
- The rural properties to the southeast, approximately 75m, with the closest dwelling approximately 115m from the site.
- The residential village located approximately 80m north of the site.
- The unmapped watercourse / wetland line approximately 95m south of the site.
- These surrounding land uses and zones are shown in Figure 7.



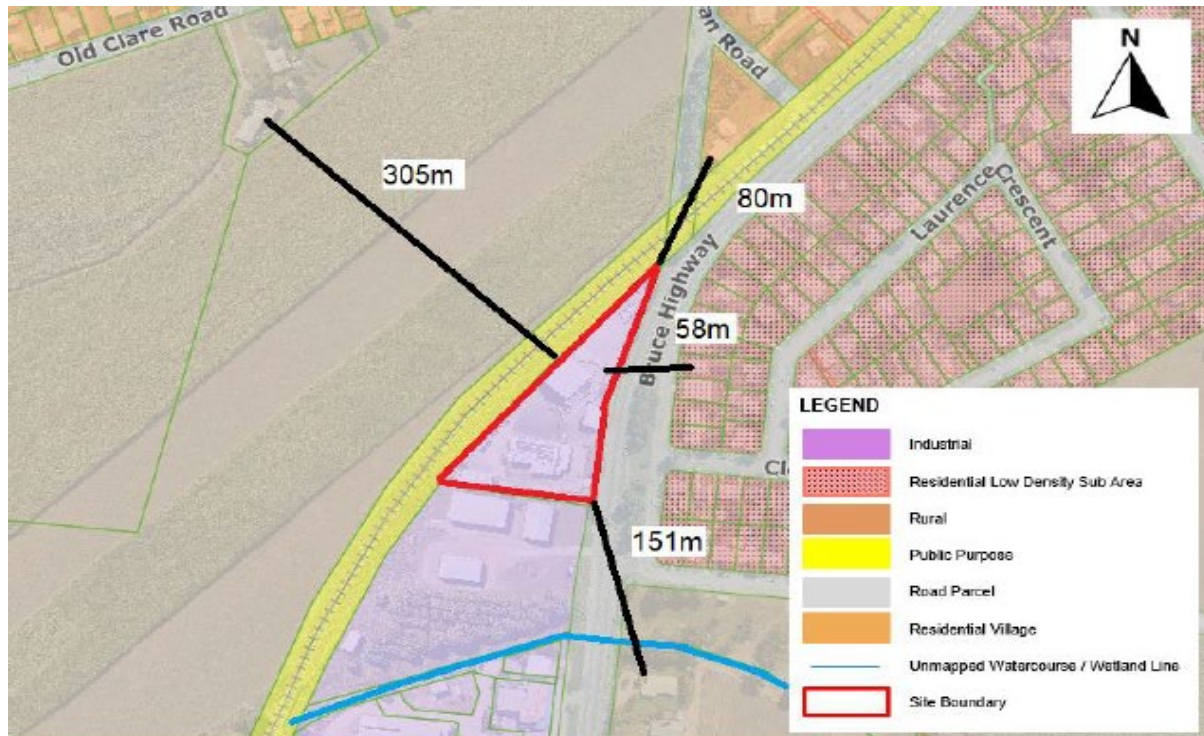


Figure 7 Proximity to Sensitive Receptors

## 2.8. Flora and Fauna

A review of the QLD Globe layers, undertaken on 10 May 2022, identified:

The site is mapped as Category X (non-remnant) vegetation under the Vegetation Management Act 1999. During a site visit a few isolated trees were identified, with the remainder of the site predominantly hardstand or cleared.

The site is mapped within the following biosecurity zones:

- State grape phylloxera risk zone.
- Sugar cane biosecurity zone 2.
- Cattle tick infested area.

The site is not mapped as containing:

- Essential habitats.
- Protected plants.
- Wetlands of high or general ecological significance.
- Waterways for waterway barrier works.
- Fish Habitats.

## 2.9. Natural Hazards

A review of Shire of Burdekin Planning Scheme maps indicates the following:

- The site is mapped within a Low Bushfire Hazard area as per the Natural Features or Resources Overlays Burdekin Shire Natural Features Map 9.

Searches on Queensland Globe reveal the following:

- The site is not mapped within a flood hazard area as per the Qld Globe overlay maps or the Burdekin Shire Council Flood Hazard Overlay Map.
- Of note is that the general surrounding area is subject to flooding, with Plantation Creek to the north, and the Burdekin River to the south both being mapped in the extreme flood hazard area.

- The site is not mapped as being within a bushfire prone area under the current State Planning Policy mapping.

### 3. Hazardous Chemicals

The hazardous chemicals for the Ayr site are detailed within Table 3-1, with a breakdown provided in Table 3-2 (refer to Appendix D for SDS).

**Table 3-1 Hazardous Chemicals Details**

UN No.	Class or Division	Sub risk	Packing Group	Name of dangerous good	Quantity
1075	2.1			LP Gas	864 L
	3		II	Flammable Liquids	10.5 kL
	3		III	Flammable Liquids	2 kL
1397	4.3		I	Aluminium Phosphide	40 kg
1486	5.1		II	Oxidising Solids	3,700 kg
	5.1		III	Oxidising Solids	48,000 kg
	6.1		II	Toxic Substances	500 L
	6.1		III	Toxic Substances	12.15 kL
	8		II	Corrosive Substances	6.5 kL
	8		III	Corrosive Substances	66 kL
				C1 Combustible Liquid	60 kL

**Table 3-2 Hazardous Chemicals Details**

Product	Active Constituent	Physical State	Physical Characteristics (appearance, odour, etc.)	UN No.	GHS Classification	Class or Division	Sub Risk	WHS Regulation Chemical	Packing Group	Quantity (units)	Largest Container Size
LPG	Petroleum Gases, Liquefied	Gas	Colourless gas and slight odour.	UN1075	<ul style="list-style-type: none"> <li>Flammable Gases: Category 1A</li> <li>Gases Under Pressure: Liquefied gas</li> </ul>	2.1	-	Yes	None allocated	864 L	9.6kg
Agricultural Products (Various <sup>1</sup> )	Abamectin 36g/L at 0%	Liquid	Clear amber coloured liquid, Distinctive sweet odour, and Emulsifiable	UN2902	<ul style="list-style-type: none"> <li>Combustible liquid – (Category 4), H227</li> <li>Acute toxicity, Oral - (Category 3), H301</li> <li>Skin Irritation (Category 2), H315</li> <li>Eye irritation - (Category 2B), H320</li> <li>Acute toxicity, Inhalation - (Category 3), H331</li> <li>Specific target organ toxicity - (Category 3), Respiratory system, H335</li> </ul>	6.1	-	-	III	350L	10L

Product	Active Constituent	Physical State	Physical Characteristics (appearance, odour, etc.)	UN No.	GHS Classification	Class or Division	Sub Risk	WHS Regulation Chemical	Packing Group	Quantity (units)	Largest Container Size
					<ul style="list-style-type: none"> <li>Reproductive Toxicity – (Category 1), H360</li> <li>Specific Target Organ Toxicity (Repeated Exposure) – (Category 1), H373</li> <li>Chronic aquatic hazard - (Category 3), H410</li> </ul>						
	Chlorfenvinphos 200g/L at 0.2%	Liquid	Amber	UN3017	<ul style="list-style-type: none"> <li>Flammable Liquid – (Category 3), H226</li> <li>Acute toxicity, Oral - (Category 3), H301</li> <li>Acute Toxicity – Dermal (Category 4), H311</li> <li>Toxicity Inhalation – (Category 2), H330</li> <li>Skin Corrosion/ Irritation - (Category 2), H315</li> <li>Serious Eye Damage/ Irritation - (Category 1), H318</li> <li>Skin sensitization - (Category 1), H317</li> <li>Specific target organ toxicity - (Category 2), Nervous system, H371</li> <li>Specific target organ toxicity - (Category 3), nervous system, adrenal gland, and/or digestive system, H373</li> </ul>	6.1	3	-	III	200L	10L
	Oxamyl 240g/L at 0.6%	Liquid	Dark Green, Aromatic, and Miscible	UN2991	<ul style="list-style-type: none"> <li>Flammable Liquid – (Category 3), H226</li> <li>Acute toxicity, Oral - (Category 2), H300</li> <li>Toxicity Inhalation – (Category 2), H330</li> <li>Serious Eye Damage/ Irritation (Category 2A), H319</li> <li>Short term/ Chronic aquatic hazard - (Category 2), H410</li> </ul>	6.1	-	-	II	400L	20L
	Chlorpyrifos - 500g/L at 10%	Liquid	Straw colour and characteristic hydrocarbon odour	UN3018	<ul style="list-style-type: none"> <li>Acute Toxicity – Oral (Category 3), H301</li> <li>Aquatic Acute Hazard - (Category 1), H400</li> </ul>	6.1 Toxic substances	-	-	III	1600L	20L

Product	Active Constituent	Physical State	Physical Characteristics (appearance, odour, etc.)	UN No.	GHS Classification	Class or Division	Sub Risk	WHS Regulation Chemical	Packing Group	Quantity (units)	Largest Container Size
					<ul style="list-style-type: none"> <li>Flammable Liquid (Category 4), H227</li> </ul>						
	Paraquat - 360g/L at 27%	Liquid	Green. characteristic odour, soluble in water	UN2922	<ul style="list-style-type: none"> <li>Acute toxicity, Oral - (Category 3), H301</li> <li>Skin Irritation - (Category 3), H311</li> <li>Toxicity Inhalation – (Category 2), H330</li> <li>Organ toxicity – repeated exposure (Category 1), H372</li> <li>Corrosive to metals – (Category 1), H290</li> <li>Acute aquatic hazard – (Category 1), H400</li> <li>Chronic aquatic hazard - (Category 1), H410</li> <li>Skin Corrosion/ Irritation (Category 2), H315</li> <li>Serious Eye Damage/ Irritation (Category 2A), H319</li> <li>Specific target organ toxicity - (Category 3), Respiratory system, H335</li> </ul>	6.1	-	Yes	III	13800	1000L
	Paraquat - 330g/L at 5.0%	Liquid	Dark green-brown/ blue, obnoxious pyridine odour, and Completely soluble in water	UN2922	<ul style="list-style-type: none"> <li>Acute toxicity, Oral - (Category 3), H301</li> <li>Skin Irritation - (Category 3), H311</li> <li>Skin Corrosion/ Irritation (Category 2), H315</li> <li>Serious eye damage/eye irritation – (Category 2B), H320</li> <li>Toxicity Inhalation – (Category 1/2), H330</li> <li>Specific target organ toxicity - (Category 3), Respiratory system, H335</li> <li>Organ toxicity – repeated exposure (Category 1), H372</li> <li>Short term/ Chronic aquatic hazard - (Category 1), H410</li> </ul>	6.1	-	-	II	20L	45800L

Product	Active Constituent	Physical State	Physical Characteristics (appearance, odour, etc.)	UN No.	GHS Classification	Class or Division	Sub Risk	WHS Regulation Chemical	Packing Group	Quantity (units)	Largest Container Size
	Paraquat - 250g/L at 3.8%	Liquid	Dark Blue, Obnoxious odour, Not Flammable, Completely Soluble	UN3016	<ul style="list-style-type: none"> <li>Toxicity Inhalation – (Category 2), H330</li> <li>Organ toxicity – repeated exposure (Category 1), H372</li> <li>Acute aquatic hazard – (Category 1), H400</li> <li>Chronic aquatic hazard - (Category 3), H410</li> <li>Acute Toxicity – Oral (Category 4), H302</li> <li>Acute Toxicity – Dermal (Category 4), H312</li> <li>Skin Corrosion/ Irritation (Category 2A), H315</li> <li>Serious Eye Damage/ Irritation (Category 2A), H319</li> <li>Specific target organ toxicity - (Category 3), Respiratory system, H335</li> </ul>	6.1 Toxic substances	-	Yes	III	4550L	110L
	Paraquat - 135g/L	Liquid	Clear dark blue liquid, Unpleasant odour	UN3016	<ul style="list-style-type: none"> <li>Acute toxicity, Oral - (Category 2), H300</li> <li>Toxicity, Dermal – (Category 1), H310</li> <li>Skin Corrosion/ Irritation (Category 2A), H315</li> <li>Skin sensitization - (Category 1), H317</li> <li>Serious eye damage/eye irritation - (Category 1), H318</li> <li>Toxicity Inhalation – (Category 1/2), H330</li> <li>Specific target organ toxicity - (Category 3), Respiratory system, H335</li> <li>Chronic aquatic hazard - (Category 1), H410</li> </ul>	6.1	-	-	III	800L	110L
	Methomyl - 225g/L at 11.3%	Liquid	Blue, Sulfur like odour	UN2758	<ul style="list-style-type: none"> <li>Highly flammable liquid and Vapor – (Category 2), H225</li> <li>Acute toxicity, Oral - (Category 2), H300</li> <li>Skin Irritation - (Category 3), H311</li> <li>Acute toxicity, Inhalation - (Category 3), H331</li> </ul>	6.1	-	Yes	II	4000L	20L



Product	Active Constituent	Physical State	Physical Characteristics (appearance, odour, etc.)	UN No.	GHS Classification	Class or Division	Sub Risk	WHS Regulation Chemical	Packing Group	Quantity (units)	Largest Container Size
					<ul style="list-style-type: none"> <li>Specific Target Organ Toxicity (Single Exposure) – (Category 3), H370</li> <li>Chronic aquatic hazard - (Category 3), H410</li> </ul>						
	Diquat – 115g/L at 0.1%	Liquid	Clear dark blue liquid, Unpleasant odour, soluble in water, not flammable.	UN3016	<ul style="list-style-type: none"> <li>Acute toxicity, Oral - (Category 2), H300</li> <li>Toxicity, Dermal – (Category 1), H310</li> <li>Skin Corrosion/ Irritation (Category 2), H315</li> <li>Skin sensitization - (Category 1), H317</li> <li>Serious eye damage/eye irritation - (Category 1), H318</li> <li>Toxicity Inhalation – (Category 1/2), H330</li> <li>Specific target organ toxicity - (Category 3), Respiratory system, H335</li> <li>Chronic aquatic hazard - (Category 1), H410</li> </ul>	6.1 Toxic substances	-	-	III	1600L	20L
	Diquat 200g/L at 0.2%	Liquid	Clear dark red to brown coloured liquid, soluble in water, not flammable. Obnoxious odour	UN3016	<ul style="list-style-type: none"> <li>Acute toxicity, Inhalation - (Category 3), H331</li> <li>Organ toxicity – repeated exposure (Category 1), H372</li> <li>Skin Corrosion/ Irritation (Category 2A), H315</li> <li>Chronic aquatic hazard - (Category 3), H411</li> <li>Serious Eye Damage/ Irritation (Category 2A), H319</li> <li>Skin sensitization - (Category 1), H317</li> <li>Specific target organ toxicity - (Category 3), Respiratory system, H335</li> <li>Acute Aquatic Toxicity (Category 2), H401</li> </ul>	6.1 Toxic substances	-	Yes	III	800L	20L
	Dimethoate - 400g/L at 0.4%	Liquid	Peach coloured liquid with mercaptan/ketone odour. DG 3	UN1993	<ul style="list-style-type: none"> <li>Acute toxicity, Oral - (Category 3), H301</li> <li>Potential Toxicity Inhalation/ oral – (Category 4), H304</li> </ul>	3 Flammable liquids	-	Yes	III	2000L	10L

Product	Active Constituent	Physical State	Physical Characteristics (appearance, odour, etc.)	UN No.	GHS Classification	Class or Division	Sub Risk	WHS Regulation Chemical	Packing Group	Quantity (units)	Largest Container Size
					<ul style="list-style-type: none"> <li>• Skin Irritation - (Category 3), H311</li> <li>• Skin sensitization - (Category 1), H317</li> <li>• Eye irritation - (Category 1), H320</li> <li>• Toxicity Inhalation – (Category 4), H332</li> <li>• Specific Target Organ Toxicity (Repeated Exposure) – (Category 1), H373</li> <li>• Chronic aquatic hazard - (Category 3), H411</li> </ul>						
	Chlorothalonil - 900g/kg at 6.8%	Solid	Granules light brown, slightly pungent	UN3077	<ul style="list-style-type: none"> <li>• Toxicity Inhalation – (Category 2), H330</li> <li>• Specific target organ toxicity - (Category 3), Respiratory system, H335</li> <li>• Serious eye damage/eye irritation - (Category 1), H318</li> <li>• Skin sensitization - (Category 1), H317</li> <li>• Suspected Carcinogenicity – (Category 2), H351</li> <li>• Chronic aquatic hazard - (Category 3), H410</li> </ul>	9	-	-	III	1800kg	10kg
	Chlorothalonil - 720g/L at 1.8%	Liquid	Smooth creamy light grey liquid suspension. Slightly pungent. S6	UN3089	<ul style="list-style-type: none"> <li>• Skin sensitization - (Category 1, 1A, 1B), H317</li> <li>• Toxicity Inhalation – (Category 2), H330</li> <li>• Serious eye damage/eye irritation - (Category 1), H318</li> <li>• Specific target organ toxicity - (Category 3), Respiratory system, H335</li> <li>• Suspected Carcinogenicity – (Category 2), H351</li> <li>• Acute aquatic hazard – (Category 1), H400</li> </ul>	9 Miscellaneous Dangerous Goods	-	-	III	1800L	10L
	Aluminium Phosphide - 330g/kg at 0.1%	Solid	Greenish-grey. Strong characteristic odour (garlic, carbide or decaying fish).	UN1397	<ul style="list-style-type: none"> <li>• Acute toxicity, Oral - (Category 2), H300</li> <li>• Serious eye damage/eye irritation - (Category 1), H318</li> <li>• Toxicity Inhalation – (Category 1), H330</li> </ul>	4.3	6.1	-	I	5.4kg	5kg

Product	Active Constituent	Physical State	Physical Characteristics (appearance, odour, etc.)	UN No.	GHS Classification	Class or Division	Sub Risk	WHS Regulation Chemical	Packing Group	Quantity (units)	Largest Container Size
					<ul style="list-style-type: none"> <li>Acute aquatic hazard – (Category 1), H400</li> </ul>						
	MCPA	Liquid	Brown liquid with phenolic odour. Can be aqueous salt soln. or esters in hydrocarbons	-	<ul style="list-style-type: none"> <li>Toxicity Inhalation – (Category 4), H332</li> <li>Acute toxicity, Oral - (Category 4), H302</li> <li>Serious eye damage/eye irritation - (Category 1), H318</li> <li>Chronic aquatic hazard - (Category 2), H410</li> <li>Skin sensitization -(Category 1), H315</li> <li>Skin Corrosion/Irritation - (Category 2), H312</li> </ul>	-	-	-	-	8550L	1000L
	2,4 D (2,4-Dichlorophenoxyacetic acid)	Liquid	Brown liquid with phenolic odour. Can be aqueous salt soln. or esters in hydrocarbons	3077	<ul style="list-style-type: none"> <li>Acute toxicity, Oral (Category 4), H302</li> <li>Serious eye damage/eye irritation - (Category 1), H318</li> <li>Skin sensitization (Category 1), H317</li> <li>Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335</li> <li>Short-term (acute) aquatic hazard (Category 1), H400</li> </ul>	-	-	-	III	8550L	1000L
	Metham	Liquid	Amber to yellow green liquid. Pungent odour. DG 8	3267	<ul style="list-style-type: none"> <li>Acute Toxicity Oral – (Category 4), H302</li> <li>Skin Corrosion – (Category 1b), H314</li> <li>Skin Sensitisation – (Category 1), H317</li> <li>Acute Toxicity Inhalation – (Category 4), H332</li> <li>Hazardous to Aquatic Environment Short Term/Chronic (Category 1), H410</li> </ul>	8 Corrosive Substances		No	II	36000L	1000L

<sup>1</sup> Various including Nutrien, Loveland, Nufarm, Sipcam, Syngenta, Crop Care, BASF, Sinochem, etc.

## **4. Process**

### **4.1. Solid Fertilizer Blending**

The Ayr site receives and stores bulk granular fertiliser. Some of the fertiliser products are blended to produce mixed products. The blending process is as follows:

1. Individual solid fertiliser pellets products are received by truck delivery at the unloading area (orange location in Figure 1).
2. Trucks are unloaded using a multiveyor to transfer the solid fertiliser pellets into storage bunkers within warehouse 3 (yellow shed in Figure 1).
3. The multiveyor transfers the fertiliser pellets from storage bunkers to weigher and blender.
4. A coarse screen over the final multiveyor to remove lumps of solid fertiliser pellets. The residue may be collected and sold separately.
5. The fertiliser pellets are mixed in the blender. The blender has a vent for the minor traces of dust discharged in the process.
6. Blended pellets are transferred to the bagging unit by the multiveyor (purple area in Figure 1) and then packed into 1 tonne bags. A small amount is sold in bulk.
7. Blended pellets in 1 tonne bags are stored on concrete slab for same day collection.

In order to prevent fertiliser runoff into watercourses the above operations are to take part on a sealed concrete surface which drains into a site collection system, including a sump and storage tanks. The current drain and sump system can be seen in Figure 2 however upgrades are proposed to this system and are described in Section 2.2.4 and Figure 2.

### **4.2. Liquid Fertiliser Blending**

The Ayr site receives and stores liquid fertiliser in silos within a bunded area. The blending of the fertilisers all takes place within the bunded area and consists of the following process:

1. Liquid fertiliser products are received via trucks and pumped into their respective silo's.
2. As requests for blends arise the liquid fertiliser from each silo is pumped into a mixing tank. Sometimes trace element granular fertiliser is also added into the mix.
3. The blended product is then pumped into a bulk transport tank or intermediate bulk containers (IBC's) for delivery to customers.

### **4.3. Waste Activities**

The following types of waste are generated on site:

- Sump and washdown water (discussed in Section 2.3.4).
- Solid Granular fertiliser sweepings.
- Cardboard.
- Waste Oil stored on site; and
- General waste unrelated to site operations.

Solid granular fertiliser sweepings are taken by a local farmer on a regular basis. Cardboard is emptied four (4) times a year in a dedicated cardboard recycling skip bin. Two (2) wheelie bins are located on site for general waste which are emptied on a regular basis, taken to a landfill facility near the site.

### **4.4. Secondary Chemicals**

Secondary chemicals are stored on site. These consist of various Dangerous Goods including pesticides, herbicides, poisons, etc. which are stored in small containers which are sold "off the shelf" to customers. These chemicals are stored in the clearly defined chemical storage locations (refer to Figure 1 and Section 2.2).

## 5. Hazard Identification Methods and Hazard Analysis

### 5.1. Methodology

In order to manage risk and comply with the relevant legislation, it is important to identify the potential hazards associated with the operational activities, assess the risks involved, and develop controls to eliminate, or minimise, residual risk. In accordance with Australia Standards/New Zealand Standards (AS/NZS) International Organization for Standardization (ISO) 31000:2009 *Risk Management – Principles and Guidelines*, a hazard identification and risk assessment process has been undertaken in order to assess and adequately manage the risks posed by the operational activities.

The results of this risk assessment process are shown in Section 5.2, in which unmitigated hazards were assessed. In undertaking this risk assessment, likelihood levels, consequence levels and risk criteria based on the requirements of AS/NZS ISO 31000:2009, as shown in Table 5-1 to Table 5-3, were used to assess the risk rating for each identified hazard. The resultant risk rating of identified hazards is presented in Table 5-4. Note that in cases where the likelihood and consequence of risks relating to one hazard varied, the most conservative figure was used.

Nutrien also undertook a review of the hazardous chemicals safety data sheets when undertaking the risk assessment analysis.

**Table 5-1 Risk Assessment Criteria Matrix**

Level	Descriptor	Qualitative Description
<b>A</b>	Almost certain	The event is expected to occur; event will occur on an annual (or more frequent) basis.
<b>B</b>	Likely	Probable that it will occur; event has occurred several times before at similar developments.
<b>C</b>	Possible	May or may not occur; event may occur once during the development.
<b>D</b>	Unlikely	The event may occur at some time but is unlikely; heard of happening from time to time at similar developments.
<b>E</b>	Rare	The event may occur in exceptional circumstances; not heard of at similar developments.

**Table 5-2 Consequence Levels**

Level	Descriptor	Qualitative Description
<b>1</b>	Insignificant	<b>Environment:</b> No damage detected. <b>People:</b> Event does not result in injury (i.e. no medical treatment required). <b>Property:</b> No damage to property. <b>Amenity:</b> No detectable impact on amenity.
<b>2</b>	Minor	<b>Environment:</b> Minor impact of short duration or short term damage. <b>People:</b> Reversible injury or illness. <b>Property:</b> Minor damage to property (<\$5,000 to repair). <b>Amenity:</b> Minor, localised and short term amenity impacts, no complaints.
<b>3</b>	Moderate	<b>Environment:</b> Short term damage, localised impact. <b>People:</b> Irreversible disability or impairment (30%) to one or more persons. <b>Property:</b> Moderate damage to property (<\$50,000 to repair). <b>Amenity:</b> One or two complaints, impacts extending to several properties and/or lasting for several days.
<b>4</b>	Major	<b>Environment:</b> Significant impact locally and potential for offsite impacts. <b>People:</b> Severe injuries or impairment (60%) to one or more persons, single fatality. <b>Property:</b> Major damage to property (<\$500,000 to repair). <b>Amenity:</b> Many complaints, impacts extensive and/or lasting for many days, up to 5 properties rendered uninhabitable for more than one day.

Level	Descriptor	Qualitative Description
5	Catastrophic	<b>Environment:</b> Significant impacts to regional ecosystems and threatened species, potential for widespread offsite impacts. <b>People:</b> Multiple fatalities, or irreversible injuries/impairment (>60%). <b>Property:</b> Significant loss to property (>\$1,000,000 to repair). <b>Amenity:</b> Multiple dwellings rendered uninhabitable for >1 day.

**Table 5-3 Risk Assessment Matrix**

		Consequences				
		1 (Insignificant)	2 (Minor)	3 (Moderate)	4 (Major)	5 (Catastrophic)
Likelihood	A (Almost certain)	Low	Medium	High	Extreme	Extreme
	B (Likely)	Low	Medium	Medium	High	Extreme
	C (Possible)	Low	Low	Medium	High	High
	D (Unlikely)	Low	Low	Medium	Medium	High
	E (Rare)	Low	Low	Low	Medium	Medium

## 5.2. Risk Assessment Register

The risk ratings presented in Table 5-4 are to be interpreted as follows:

**Low:** Risk can be adequately managed by routine procedures and work practices.

**Medium:** Control measures other than administrative controls are needed.

**High:** Significant risk control measures need to be implemented before works commence and must be maintained.

**Extreme:** Operations are not to be undertaken without extensive risk control and mitigation measures in place prior to the commencement of works and such measures must be maintained for the duration of the project.



**Table 5-4 Risk Assessment Register**

Ref. no.	Hazard [List the activity, procedure, plant, process or situation that could give rise to a dangerous goods incident]	Impact of a hazardous event happening [How big is the risk?]			Proposed risk control measures	Have the risk control measures been implemented? [If "No", document this in Section 1.2]	Residual risk after implementation of the risk control measures			Is the residual risk as low as reasonably practicable (ALARP)?
		L	C	R			L	C	R	
1	Impact of stored chemicals	C	4	H	<ul style="list-style-type: none"> <li>Agricultural products in packages stored in pallet racking.</li> <li>IBCs are stored in racking or blocked stacked no more than 2 high if dangerous goods.</li> <li>Only the Nutrien Ag Solutions forklift enters the warehouses. Forklift drivers are trained, experienced and licensed.</li> <li>The LPG is stored in a cage.</li> </ul>	Yes	D	2	L	Yes
2	Chemical spills due to inappropriate transport, storage or handling.	C	3	M	<ul style="list-style-type: none"> <li>Procedure for spills at gate to property.</li> <li>Store substances in accordance with the relevant Australian Standards, including <i>AS/NZS 1596:2014 The storage and handling of LP Gas</i> and <i>AS/NZS 3833: The storage and handling of mixed classes of dangerous goods in packages and intermediate bulk containers</i> and Code of Practices, including <i>Code of practice: The storage and handling of dangerous goods</i> and <i>Code of practice 2021: Managing risks of hazardous chemicals in the workplace</i>.</li> <li>Dangerous goods or hazardous substances stored in drums shall be located on hardstand containment areas, banded where the capacity of the bund can hold at least 25% of the maximum design storage volume, preferably undercover.</li> <li>Loading and unloading areas involving tankers should be</li> </ul>	Yes	D	2	L	Yes

Ref. no.	Hazard [List the activity, procedure, plant, process or situation that could give rise to a dangerous goods incident]	Impact of a hazardous event happening [How big is the risk?]			Proposed risk control measures	Have the risk control measures been implemented? [If "No", document this in Section 1.2]	Residual risk after implementation of the risk control measures			Is the residual risk as low as reasonably practicable (ALARP)?
		L	C	R			L	C	R	
					<p>located on impervious hardstand and bunded, where the bund is able to contain 100% of the largest compartment of the tanker on site.</p> <ul style="list-style-type: none"> <li>Smaller amounts of hazardous chemicals shall be stored in fireproof and bunded cabinets above hardstand surfaces.</li> <li>Stormwater diversion systems shall be in place to prevent stormwater intrusion to other areas storing hazardous chemicals.</li> <li>Chemicals that need to be used on site are to be used in designated areas only, above hardstand and within bunded areas.</li> <li>Permanently bunded areas should have a collection sump to facilitate the removal of liquids, with the bunded areas flooring graded towards the sump.</li> <li>Handling hazardous chemicals should require appropriate PPE as defined by the respective chemical safety data sheet.</li> <li>Readily available spill kits and HAZMAT boxes should be accessible at all locations where chemical spills may occur, and shall be restocked after each use.</li> <li>All cleaning of equipment and machinery should be undertaken within designated</li> </ul>					

Ref. no.	Hazard [List the activity, procedure, plant, process or situation that could give rise to a dangerous goods incident]	Impact of a hazardous event happening [How big is the risk?]			Proposed risk control measures	Have the risk control measures been implemented? [If "No", document this in Section 1.2]	Residual risk after implementation of the risk control measures			Is the residual risk as low as reasonably practicable (ALARP)?
		L	C	R			L	C	R	
					areas that are located on hardstand and bundled. <ul style="list-style-type: none"> <li>Defects found with any bundled areas, plant equipment, storage tanks or storage drums needs to be repaired as soon as practicable.</li> </ul>					
3	Incidents caused by inappropriate separation distances	C	4	H	<ul style="list-style-type: none"> <li>Separation distance From AS 3833:               <ul style="list-style-type: none"> <li>The required separation to any property boundary is 3m.</li> <li>PS1 is more than 5m from the nearest boundary.</li> <li>PS2 is more than 12m to the nearest boundary.</li> <li>The gas stand is 3m from the nearest boundary.</li> <li>For PG I products the minimum separation distance required to an off-site protected place required is 5m.</li> <li>PS1 is &gt;20m from the protected place on the neighbouring property to the south.</li> <li>For 145,000 litres of product (PG III and C1), the required separation to an off-site protected place is 10m.</li> <li>PS2 is &gt;20m from the protected place on the neighbouring property to the south.</li> <li>PS6 &amp; PS8 is &gt;10m from the protected place on the neighbouring property to the south.</li> </ul> </li> </ul>	Yes	D	4	M	Yes

Ref. no.	Hazard [List the activity, procedure, plant, process or situation that could give rise to a dangerous goods incident]	Impact of a hazardous event happening [How big is the risk?]			Proposed risk control measures	Have the risk control measures been implemented? [If "No", document this in Section 1.2]	Residual risk after implementation of the risk control measures			Is the residual risk as low as reasonably practicable (ALARP)?
		L	C	R			L	C	R	
					<ul style="list-style-type: none"> <li>From AS 1596, the required separation to an off-site protected place is 8m.</li> <li>The gas stand is &gt;20 m from the protected place on the</li> <li>Neighbouring property to the south.</li> <li>From table 6.1, the required separation to an off-site protected place for products including some PG II product is 5m.</li> <li>The flammable liquids storage is &gt; 5m from the protected place on the neighboring property to the south.</li> <li>For the PG I product in the DG 4.3 cabinet the required separation to onsite protected places is 5m.</li> <li>The cabinet is more than 5m from the office when measured around the intervening wall.</li> <li>The cabinet is more than 20m from warehouse 2.</li> <li>The cabinet is more than 25m from the flammable liquids shed.</li> <li>The cabinet is more than 50m from the gas stand.</li> <li>For warehouse 2, the required separation to onsite protected places for 100,000 litres of PG III and C1 product is 10m.</li> </ul>					

Ref. no.	Hazard [List the activity, procedure, plant, process or situation that could give rise to a dangerous goods incident]	Impact of a hazardous event happening [How big is the risk?]			Proposed risk control measures	Have the risk control measures been implemented? [If “No”, document this in Section 1.2]	Residual risk after implementation of the risk control measures			Is the residual risk as low as reasonably practicable (ALARP)?
		L	C	R			L	C	R	
					<ul style="list-style-type: none"><li>▪ The office is &gt;20m from warehouse 2.</li><li>▪ The DG 4.3 cabinet is more than 20m from warehouse 2. The gas stand is more than 30m from warehouse 2.</li><li>▪ For the gas stand, the required separation to onsite protected places is 8m (AS 1596)</li><li>▪ Warehouse 1, warehouse 2 and the flammable liquids container are more than 20m from the gas stand</li><li>▪ From AS 1940, for the flammable liquids container, the required separation is 5m.</li><li>▪ Warehouse 1 and warehouse 2 are 7m from the flammable liquids container.</li><li>▪ The gas stand is more than 20m from the flammable liquids container.</li></ul>					
4	Fires due to combustible materials or bushfires/ ignition sources in hazardous areas	C	4	H	<ul style="list-style-type: none"><li>▪ The flammable liquids storage shed (PS1) is fully bunded and the volume is adequate for the products stored.</li><li>▪ Hazardous areas are identified and managed.</li><li>▪ Install ventilation systems to control vapours of normal and abnormal conditions.<ul style="list-style-type: none"><li>▪ PS2 has low-level wall vents and roof vents.</li></ul></li></ul>	Yes	D	4	M	Yes

Ref. no.	Hazard [List the activity, procedure, plant, process or situation that could give rise to a dangerous goods incident]	Impact of a hazardous event happening [How big is the risk?]			Proposed risk control measures	Have the risk control measures been implemented? [If "No", document this in Section 1.2]	Residual risk after implementation of the risk control measures			Is the residual risk as low as reasonably practicable (ALARP)?
		L	C	R			L	C	R	
					<ul style="list-style-type: none"> <li>Flammable liquids shed PS1 has high and low wall vents in opposite walls.</li> <li>The aluminium phosphide stored in PS2 is stored within compliant container.</li> <li>Eliminate ignition sources in hazardous areas.</li> <li>Employ the use of intrinsically safe or flame proof equipment.</li> <li>Substitute flammable materials.</li> <li>Reduce the amount of flammable materials kept on site.</li> <li>Ensure toxic chemicals are separated from flammable and combustible materials.</li> <li>Ensure that equipment used to manage flammable or explosive material are maintained and up to date in accordance with manufacturer specifications.</li> <li>Adopt good housekeeping practices to minimise the accumulation of flammable dust.</li> <li>Conduct "hot work", defined as grinding, welding, brazing, oxy cutting, heat treatment or any other similar process that generates heat or continuous streams of sparks, outside of areas within hazardous atmospheres.</li> <li>Ensure firefighting equipment is easily accessible and readily available. This includes the provision of a suitable fire extinguisher (dry chemical</li> </ul>					



Ref. no.	Hazard [List the activity, procedure, plant, process or situation that could give rise to a dangerous goods incident]	Impact of a hazardous event happening [How big is the risk?]			Proposed risk control measures	Have the risk control measures been implemented? [If "No", document this in Section 1.2]	Residual risk after implementation of the risk control measures			Is the residual risk as low as reasonably practicable (ALARP)?
		L	C	R			L	C	R	
					<p>powder) within the solid granular fertiliser storage shed, with a further ten dry chemical powder extinguishers provided throughout the rest of the site. A further two carbon dioxide extinguishers, one foam extinguisher and four fire hose reels are also provided across the site.</p> <ul style="list-style-type: none"> <li>Ensure flammable storage areas have fire detection and suppression measures.</li> <li>There is no hazardous zone associated with C1 combustible liquids in storage warehouse.</li> <li>There are no fixed ignition sources within 3m of the warehouses, flammable liquids storage shed or gas storage.</li> </ul>					
5	Information for the occupier of site adjacent to the dangerous goods site is uninformed of potential dangers of an emergency	C	4	H	<ul style="list-style-type: none"> <li>The adjacent property has been notified.</li> </ul>	Yes	D	2	L	Yes
6	Security Breaches	C	3	M	<ul style="list-style-type: none"> <li>Site is fenced. The warehouses are securely locked when the site is unattended.</li> </ul>	Yes	D	2	L	Yes
7	Incident due to untrained staff	C	3	M	<ul style="list-style-type: none"> <li>Staff on site should be suitably trained in their duties, including in emergency response, in how to use spill kits and HAZAMAT boxes.</li> </ul>	Yes	D	3	M	Yes
8	Inappropriate storage of hazardous materials causing incident	C	4	H	<ul style="list-style-type: none"> <li>Ensure measures in Line 1 are implemented.</li> <li>Maintenance of a chemical register specific to the site for all hazardous materials, which should be available onsite at all times.</li> </ul>	Yes	D	4	M	Yes

Ref. no.	Hazard [List the activity, procedure, plant, process or situation that could give rise to a dangerous goods incident]	Impact of a hazardous event happening [How big is the risk?]			Proposed risk control measures	Have the risk control measures been implemented? [If "No", document this in Section 1.2]	Residual risk after implementation of the risk control measures			Is the residual risk as low as reasonably practicable (ALARP)?
		L	C	R			L	C	R	
					<ul style="list-style-type: none"> <li>Chemical register is to include an emergency contact list.</li> <li>Applicable safety data sheets for each hazardous chemical on site should be available at all times.</li> <li>The LPG is stored in the yard and is well separated from other dangerous goods.</li> <li>Flammable liquids are stored in dedicated flammable liquids shed.</li> <li>DG 4.3 aluminium phosphide products are stored in a metal box inside a locked caged area in PS2.</li> <li>Combustible liquids, toxic substances and corrosive toxic substances are stored in Warehouse PS2, PS7 and PS8. A 3m separation is maintained between the classes.</li> <li>Agricultural products are static storage in packages and IBCs. Stocks are seasonal and only stocked when required.</li> <li>Stocks are minimized by frequent deliveries to site and prompt dispatch to customers when possible. The LPG is in cylinders and it is static storage</li> <li>Refer to the AS 3833 risk assessments.</li> </ul>					
9	Release of hazardous chemicals into the drainage line	C	3	M	<ul style="list-style-type: none"> <li>Ensure measures in Line 1 are implemented.</li> <li>Notify the Department of Environment and Science.</li> <li>Investigate cause, including potentially sampling, and review onsite controls.</li> </ul>	Yes	D	3	M	Yes

Ref. no.	Hazard [List the activity, procedure, plant, process or situation that could give rise to a dangerous goods incident]	Impact of a hazardous event happening [How big is the risk?]			Proposed risk control measures	Have the risk control measures been implemented? [If "No", document this in Section 1.2]	Residual risk after implementation of the risk control measures			Is the residual risk as low as reasonably practicable (ALARP)?
		L	C	R			L	C	R	
					<ul style="list-style-type: none"> <li>Site drainage is towards the sump. If hazardous chemicals enter sump, the water is to be cleaned up or pumped out and disposed of via an appropriately licenced waters disposal contractor. This must not be discharged to land at an offsite location or via stormwater discharge points.</li> </ul>					
10	Human exposure to hazardous chemicals	C	4	H	<ul style="list-style-type: none"> <li>Handling hazardous chemicals should require appropriate PPE as defined by the respective chemical safety data sheet.</li> <li>Ensure staff use the emergency shower and eye wash facilities within the solid granular fertiliser storage shed. A first aid kit is to be provided within the lunch room.</li> </ul>	Yes	D	4	M	Yes
11	Incident due to natural disaster, i.e. flooding, etc.	D	3	M	<ul style="list-style-type: none"> <li>Hazardous materials are stored in self-bunded pallets or within a bunded container within the Site (outside of the flood hazard area).</li> <li>Immediately after flooding, perform a site audit of all facilities to confirm the extent of any stormwater damage or potential contamination.</li> </ul>	Yes	D	3	M	Yes
12	LPG is a flammable gas under pressure. It can be an asphyxiant. Direct contact with the liquefied material or escaping compressed gas may cause frostbite injury.	C	3	M	<ul style="list-style-type: none"> <li>If the cylinder is leaking, evacuate area of personnel. Inform manufacturer/supplier of leak. Use Personal Protective Equipment (PPE) as detailed in Section 8 of the SDS. Ventilate area where possible and eliminate ignition sources.</li> <li>Stop the flow of material, if this is without risk. If the leak is</li> </ul>	Yes	D	3	M	Yes

Ref. no.	Hazard [List the activity, procedure, plant, process or situation that could give rise to a dangerous goods incident]	Impact of a hazardous event happening [How big is the risk?]			Proposed risk control measures	Have the risk control measures been implemented? [If "No", document this in Section 1.2]	Residual risk after implementation of the risk control measures			Is the residual risk as low as reasonably practicable (ALARP)?
		L	C	R			L	C	R	
					irreparable, move the cylinder to a safe and well-ventilated area, and allow to discharge. Keep area evacuated and free from ignition sources until any leaked or spilled liquid has evaporate. <ul style="list-style-type: none"> <li>Cylinders should be stored: upright, prevented from falling, in a secure area; below 45°C, in a dry, well-ventilated area constructed of non-combustible material with firm level floor (preferably concrete), away from areas of heavy traffic and emergency exits.</li> </ul>					
13	Paraquat is a DG 6.1 Toxic and Schedule 7 Dangerous Poison. Stable at normal conditions. Avoid strong oxidizing agents. Toxic in contact with skin or swallowed. Risk of serious eye damage.	C	4	H	<ul style="list-style-type: none"> <li>Handling the hazardous chemical requires appropriate PPE as defined by the respective chemical safety data sheet.</li> <li>Is to be stored locked up in a cool, dry and well-ventilated area. Kept in original container, tightly closed when not in use. Protected from direct sunlight and kept away from strong oxidising agents.</li> <li>Eyewash fountains and safety showers are in close proximity to points of potential exposure.</li> <li>Contaminated clothing and other protective equipment are required to be washed before storage or re-use.</li> </ul>	Yes	D	4	M	Yes
14	Gramoxone is a DG 8 SR 6.1 Schedule 7 Dangerous Poison. Toxic in contact with skin and if swallowed. Avoid aluminium, iron, steel. Risk of serious eye	C	4	H	<ul style="list-style-type: none"> <li>Stored in closed, original container in a dry, cool, well-ventilated locked room or place away from children, animals,</li> </ul>	Yes	D	3	M	Yes

Ref. no.	Hazard [List the activity, procedure, plant, process or situation that could give rise to a dangerous goods incident]	Impact of a hazardous event happening [How big is the risk?]			Proposed risk control measures	Have the risk control measures been implemented? [If "No", document this in Section 1.2]	Residual risk after implementation of the risk control measures			Is the residual risk as low as reasonably practicable (ALARP)?
		L	C	R			L	C	R	
	damage.				food, feedstuffs, seed and fertilisers. <ul style="list-style-type: none"> <li>▪ Appropriate PPE will be provided including but not limited to: Overalls, face shield, elbow length impervious gloves, splash aprons and rubber boots.</li> <li>▪ Organic vapour respirator meeting the requirements of Standards Australia will be available.</li> <li>▪ Ensure firefighting equipment is easily accessible and readily available. Such as appropriate firefighting PPE; full protective clothing and self-contained breathing apparatus. This includes the provision of a suitable fire extinguisher water spray, alcohol-resistant foam, dry chemical or carbon dioxide.</li> </ul>					
15	Chlorpyrifos is a C1 combustible liquid, Schedule 6 poison. May be fatal if swallowed. Cholinesterase inhibitor.	C	4	H	<ul style="list-style-type: none"> <li>▪ Suitable firefighting measures as defined by the respective safety data sheet made available.</li> <li>▪ Handling the hazardous chemical requires appropriate PPE as defined by the respective chemical safety data sheet.</li> <li>▪ Spill kits provided and readily available during the movement and use of the product.</li> <li>▪ Store in a cool, dry and well-ventilated area, in original container tightly closed when not in use.</li> <li>▪ Protect from heat, sparks, open flames, hot surfaces and direct</li> </ul>	Yes	D	4	M	Yes

Ref. no.	Hazard [List the activity, procedure, plant, process or situation that could give rise to a dangerous goods incident]	Impact of a hazardous event happening [How big is the risk?]			Proposed risk control measures	Have the risk control measures been implemented? [If "No", document this in Section 1.2]	Residual risk after implementation of the risk control measures			Is the residual risk as low as reasonably practicable (ALARP)?
		L	C	R			L	C	R	
					sunlight. Keep away from strong oxidising agents, strong acids and strong bases.					
16	Dimethoate is a DG 3 flammable liquid. Vapours are heavier than air. May be fatal if swallowed. Avoid oxidizing agents, strong acids and strong bases. Combustion produces toxic fumes	C	4	H	<ul style="list-style-type: none"> <li>Exposure to the product will be kept to a minimum, along with the quantities kept in work areas. Ventilation systems to control vapours of normal and abnormal conditions.</li> <li>Contact or contamination of product with incompatible materials will be avoided.</li> <li>Ensure firefighting equipment is easily accessible and readily available. Such as appropriate firefighting PPE; full protective clothing and self-contained breathing apparatus. This includes the provision of a suitable fire extinguisher, alcohol-resistant foam, dry chemical or carbon dioxide, water fog.</li> </ul>	Yes	D	3	M	Yes
17	Metham is a DG 8 Corrosive Substance. Causes severe skin burns and serious eye damage. Very toxic to aquatic life. Harmful if swallowed. Keep away from acids and oxidizing agents	C	4	H	<ul style="list-style-type: none"> <li>Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours.</li> <li>Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.</li> <li>Store in a cool, dry and well-ventilated area out of direct sunlight. Keep in original container, tightly closed when not in use. Keep away from</li> </ul>	Yes	D	2	L	Yes



Ref. no.	Hazard [List the activity, procedure, plant, process or situation that could give rise to a dangerous goods incident]	Impact of a hazardous event happening [How big is the risk?]			Proposed risk control measures	Have the risk control measures been implemented? [If "No", document this in Section 1.2]	Residual risk after implementation of the risk control measures			Is the residual risk as low as reasonably practicable (ALARP)?
		L	C	R			L	C	R	
					acids, oxidising agents, zinc, tin, aluminium and their alloys and salts of heavy metals. <ul style="list-style-type: none"> <li>If there is an accidental spill Wear appropriate respiratory protection and protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation.</li> <li>Use fire extinguishing methods suitable to surrounding conditions. Water fog or foam are the preferred media for large fires.</li> <li>The product is non-flammable. However, contact with acids liberates toxic gas and contact with metals may form flammable hydrogen gas.</li> </ul>					
18	Methomyl is a DG 3 SR 6.1 and Schedule 7 Dangerous Poison. Highly flammable liquid and vapour. Fatal if swallowed. Toxic in contact with skin. Very toxic to aquatic life	C	4	H	<ul style="list-style-type: none"> <li>Handling the hazardous chemical requires appropriate PPE as defined by the respective chemical safety data sheet.</li> <li>Suitable firefighting measures as defined by the respective safety data sheet made available.</li> <li>Use only permitted outdoors or in a well-ventilated area.</li> <li>Eyewash fountains and safety showers in close proximity to points of potential exposure.</li> <li>Store in a cool, dry and well-ventilated area. Keep in original container tightly closed when not in use.</li> </ul>	Yes	D	4	M	Yes

Ref. no.	Hazard [List the activity, procedure, plant, process or situation that could give rise to a dangerous goods incident]	Impact of a hazardous event happening [How big is the risk?]			Proposed risk control measures	Have the risk control measures been implemented? [If "No", document this in Section 1.2]	Residual risk after implementation of the risk control measures			Is the residual risk as low as reasonably practicable (ALARP)?
		L	C	R			L	C	R	
					<ul style="list-style-type: none"> <li>Protect from direct sunlight, heat, sparks, open flames and other sources of ignition.</li> <li>Keep away from strong bases and alkaline materials. Do not store with seed, fertilisers or food.</li> <li>Spill kits provided and readily available during the movement and use of the product.</li> <li>Use of only non-sparking tools. Neutralise spill area and tools and equipment with a bleach or caustic/soda ash solution.</li> </ul>					

*L = likelihood*

*C = consequence*

*R = risk rating*

*Note: Reference to Resources Safety's code of practice for storage and handling of dangerous goods, appendix 4 (example of system for ranking risks)*

## 6. Code Compliance Statements

Table 6-1 details the response to State Development and Assessment Provisions – State Code 21: Hazardous Chemical Facilities.

**Table 6-1 Table 21.1: Material change of use**

Performance outcomes	Response
<b>Off-site impacts- vulnerable land use or land zoned for a vulnerable land use</b>	
PO1 The hazardous chemical facility does not create a dangerous dose to human health.	The site is managed in accordance with an SBMP, the SBMP included measures to mitigate impacts associated with spills/ discharges. Section 7 of the SBMP demonstrates compliance with PO1.
<b>Off-site impacts—sensitive land use or land zoned for a sensitive land use</b>	
PO2 The hazardous chemical facility does not create a dangerous dose to human health.	The site is managed in accordance with an SBMP, the SBMP included measures to mitigate impacts associated with spills/ discharges. Section 7 of the SBMP demonstrates compliance with PO2.
<b>Off-site impacts—commercial or community activity land use or land zoned for a commercial or community activity land use</b>	
PO3 The hazardous chemical facility does not create a dangerous dose to human health.	The site is managed in accordance with an SBMP, the SBMP included measures to mitigate impacts associated with spills/ discharges. Section 7 of the SBMP demonstrates compliance with PO3.
<b>Off-site impacts—open space land use or land zoned for an open space land use</b>	
PO4 The hazardous chemical facility, does not create: a. a dangerous dose to human health; or b. where (a) cannot be achieved, an individual fatality risk level of $10 \times 10^{-6}$ /year and the societal risk criteria in figure 21.1.	The site is managed in accordance with an SBMP, the SBMP included measures to mitigate impacts associated with spills/ discharges. Section 7 of the SBMP demonstrates compliance with PO4.
<b>Off-site impacts—industrial land use or land zoned for an industrial land use</b>	
PO5 The hazardous chemical facility, does not create either of the following: a. a dangerous dose to the built environment; and b. an individual fatality risk level of $50 \times 10^{-6}$ /year	The site is managed in accordance with an SBMP, the SBMP included measures to mitigate impacts associated with spills/ discharges. Section 7 of the SBMP demonstrates compliance with PO5.
<b>Storage and handling areas</b>	
PO6 Storage and handling areas for fire risk hazardous chemicals are provided with a 24-hour monitored fire detection system that has the ability to detect a fire in its early stages and notify an emergency responder at all times	There is a fire detection system located within the main shed.
PO7 Storage and handling areas for packages of liquid or solid fire risk hazardous chemicals are provided with a spill containment system with a working volume capable of containing a minimum of 100 percent of all packages (prescribed hazardous chemicals and/or non-hazardous chemicals) within the area plus the output of any fixed firefighting system provided for the area over a minimum of 90 minutes.	The flammable liquids storage shed (PS1) is fully bunded and the volume is adequate for the products stored. The largest quantity of hazardous chemicals stored in PS1 is 12,600 L. PS1 comprises of a bunded capacity to hold 7000 L. The bund drains to underground sumps which have capacity to store another 7000 L. Therefore, maintaining an overall 14,000 L capacity. Further the site runs on mains water supply and will therefore be able to achieve a minimum of 90 minutes for any bulk tank within the spill compound.

Performance outcomes	Response
<p>PO8 Storage and handling areas for liquid or solid fire risk hazardous chemicals in tanks are provided with a spill containment system with a working volume capable of containing a minimum of:</p> <p>a. 110 percent of the largest tank within a spill compound or 25 percent of the aggregate where multiple tanks are located within a spill compound, whichever is the greater; and</p> <p>b. the output of any fixed firefighting system provided for any bulk tank within a spill compound over a minimum of 90 minutes.</p>	<p>The flammable liquids storage shed (PS1) is fully bunded and the volume is adequate for the products stored. The overall 14,000 L capacity achieves the target of containing a minimum of 110% of the largest tank within the spill compound. Further the site runs on mains water supply and will therefore be able to achieve a minimum of 90 minutes for any bulk tank within the spill compound.</p>
<p>PO9 Storage and handling areas for prescribed hazardous chemicals that, if in contact with each other, may react to produce a fire, explosion or other harmful reaction, or a flammable, toxic or corrosive vapour are designed to prevent contact between the prescribed hazardous chemicals.</p>	<p>The storage and handling requirements of prescribed hazardous chemicals that have the potential to react are adequately met in accordance with PO9. DG 4.3 aluminium phosphide products are stored in a metal box inside a locked caged area in PS2. Combustible liquids, toxic substances and corrosive toxic substances are stored in Warehouse PS2, PS7 and PS8. A 3m separation is maintained between the classes.</p>
<p>PO10 Development is designed and sited to mitigate impacts on storage and handling areas from natural hazard including, but not limited to:</p> <p>a. flood;</p> <p>b. bushfire;</p> <p>c. erosion;</p> <p>d. storm tide inundation;</p> <p>e. landslide;</p> <p>f. earthquake;</p> <p>g. wind action.</p>	<p>a. The site is not mapped within flooding hazard areas as per QLD Globe overlays or Burdekin Shire Council flood hazard overlay map. Measures are included within Section 5.2.</p> <p>b. The site is not mapped within a bushfire prone area under the State Planning policy mapping. However, the site is within a Low Bushfire Hazard area as per the Natural Features or Resources Overlays Burdekin Shire Natural Features Map 9. Hazardous chemicals are stored in fireproof and bunded cabinets above hardstand surfaces as per 7.5 of the SBMP. Additional fire measures are included within Section 5.2.</p> <p>c. The site is relatively flat in topography. Mitigation measures are provided in Section 7 of the SBMP and Section 5.2.</p> <p>d. As per item a.</p> <p>e. Not applicable for this location.</p> <p>f. Not applicable for this location.</p> <p>g. Loading and unloading is avoided in high wind conditions</p>
<b>All development</b>	
<p>PO11 Development is designed and sited to mitigate the risks from hazard scenarios occurring at existing hazardous chemical facilities.</p>	<p>Section 5.2 details the mitigation measures in place for the Site. These include separation distances, segregation requirements and measures for the storage, handling and transportation of hazardous chemicals.</p>

## **Appendix A – Site Manifest**

## **Appendix B – Site Based Management Plan**

## **Appendix C – Dangerous Goods Register**



## **Appendix D – Safety Data Sheets**

## **Appendix E – Site Emergency Response Plan**