PUBLIC NOTIFICATION

Approval Sought:	Development Permit for a Material Change of Use
Proposed Development:	High Impact Industry and Environmentally Relevant Activity
Where:	59793 Bruce Highway, Midgee
Lot Description:	Lot 2 on RP888747
Application Reference:	D/83-2019

Make a submission from:

06 March 2020 to 27 March 2020

You may make a submission to Rockhampton Regional Council

PO BOX 1860, Rockhampton QLD 4700
Email: enquiries@rrc.qld.gov.au
Phone: 07 4932 9000 or 1300 22 55 77

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COLAS Queensland Pty Ltd
Stormwater Management Plan
Midgee Asphalt Manufacturing Plant

STEER
ENVIRONMENTAL CONSULTING

COLAS Queensland Pty Ltd – Stormwater Management Plan (SWMP) – Asphalt Manufacturing Plant – 59793 Bruce Highway, Midgee 4702

Applicant Name: COLAS Queensland Pty Ltd
AR #:
Project #:
EA Application #:
Existing EA Permit #:

Report Prepared by: STEER Environmental Consulting

April 2019

Document Status

Report Type: Stormwater Management Plan (SWMP)

Project: Asphalt Manufacturing Plant Environmentally Relevant Activity, 59793 Bruce Highway, Midgee 4702

Client: COLAS Queensland Pty Ltd

Document Version	Date	Author	Checked	Approved
Final	**30.04.2019**	**Glenn Druery**	**Phil Steer**	**Phil Steer**
Signed				

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2 Abbreviations

- DA - Development Approval
- DES - Department of Environment and Science
- DSDMIP - Department of State Development, Manufacturing, Infrastructure and Planning
- EA - Environmental Authority
- EP Act - *Environmental Protection Act 1994*
- ERA - Environmentally Relevant Activity
- KECSWMP - Knobel Engineers Conceptual Stormwater Management Plan
- Knobel - Knobel Engineers
- Planning Act - *Planning Act 2016*
- QUDM - Queensland Urban Drainage Manual
- RPEQ - Registered Professional Engineer of Queensland
- RRC - Rockhampton Regional Council
- RRPS - Rockhampton Region Planning Scheme 2015
- SWMP - Stormwater Management Plan
- STEER EC - STEER Environmental Consulting

3 Executive Summary

COLAS Queensland Pty Ltd intends to establish an asphalt manufacturing plant at 59793 Bruce Highway, Midgee 4702. The activity is described as an environmentally relevant activity (ERA) under the provisions of the *Environmental Protection Act 1994* (EP Act), and requires an environmental authority (EA) from the Department of Environment and Science (DES) to operate. The proposed activity is assessable development under the provisions of the *Planning Act 2016* and requires a development approval (DA) from local government (Rockhampton Regional Council (RRC)) and the State (Department of State Development, Manufacturing, Infrastructure and Planning (DSDMIP)) to operate. Both the DA and the EA will require that the activity is operated in such a manner so that stormwater that falls on disturbed areas of the asphalt manufacturing activity is appropriately managed to prevent impact on land and waters in the receiving environment. Appropriate engineered stormwater management controls must be in place for activities that require approval for assessable development.

STEER Environmental Consulting (STEER EC) has been commissioned by COLAS Queensland Pty Ltd to prepare a "Stormwater Management Plan" (SWMP) for the proposed asphalt manufacturing activity. The SWMP discusses the proposed site for the asphalt manufacturing activity, the surrounding area, and the receiving environment in terms of potential impact from the activity. The subject land is also the licensed location for an extractive and screening ERA. STEER EC has worked cooperatively with Knobel Engineers (Knobel) to develop this SWMP for the asphalt manufacturing activity. The SWMP details the engineered design of the operational area, and the stormwater management infrastructure that will be implemented to mitigate potential impact on the receiving environment from stormwater that has been in contact with the footprint of the site. Other mitigation measures include diverting stormwater around the footprint of the asphalt manufacturing plant.

4 Background

4.1 Proponent

COLAS Queensland Pty Ltd is part of the COLAS Group, a leader in the construction and maintenance of transport infrastructure across Australia. The COLAS Group is involved in every aspect of construction and maintenance for roads and other types of transport infrastructure including air, rail and marine transport, as well as projects involving urban development and recreational facilities. The main operational branch of the COLAS Group is focused on the core business of constructing and maintaining roads, but also undertakes specialised activities in related sectors including railways, sales of refined products, road safety and signalling, and pipelines. COLAS Queensland Pty Ltd is based at Dundowran near Hervey Bay, and is part of the decentralised network of local companies under the COLAS Group. COLAS Queensland Pty Ltd is focused purely on road construction and maintenance, and already operates bitumen spray crews around central Queensland from its base in Gracemere. COLAS Queensland Pty Ltd has identified an opportunity to manufacture asphalt to supply the local market in central Queensland.

4.2 Site Location and Surrounding Area

The subject land is located at 59793 Bruce Highway, Midgee 4702 in the RRC local government area (Figure 1). The real property description for the subject land is Lot 2 on Plan RP888747. The site is located on the western side of the Bruce Highway approximately 14 km south of Rockhampton. There is presently no asphalt manufacturing plant on site, however the intention is the utilise one of the cleared areas on the subject land to construct an asphalt manufacturing plant. The presence of the hard rock quarry on the subject land has been a major factor in the decision to establish the proposed asphalt manufacturing plant on site. Material won from the existing hard rock quarry will be crushed on site under an existing environmental authority (EA) and used in the asphalt manufacturing plant as feedstock for manufacturing asphalt. The land parcel is zoned as rural in the Rockhampton Region Planning Scheme 2015 (RRPS), however Hopeman Pty Ltd operates the hard rock quarry under a development approval (DA) administered by Rockhampton Regional Council (RRC) and an EA administered by the Department of Environment and Science (DES). The land parcel covers a surface area of approximately 85 ha, and large areas of the surface of the subject land have been developed for the purpose of conducting the existing extraction and screening activities (Figure 2).

The surrounding area is rural, and is zoned as such in the RRPS. Between the subject land and the Bruce Highway is nestled an 8 ha parcel of land on which the Kangaroo Country Caravan Park is situated. The caravan park occupies the southern portion of the lot. Both land parcels to the north and south are undeveloped, and owned by the Hopkins family, who also own and operate the extractive and screening environmentally relevant activities (ERAs) on the subject land. The land parcel to the west is freehold, undeveloped and used for grazing cattle.

Figure 1. Location of the subject land at 59793 Bruce Highway, Midgee in relation to Rockhampton and surrounding population centres.

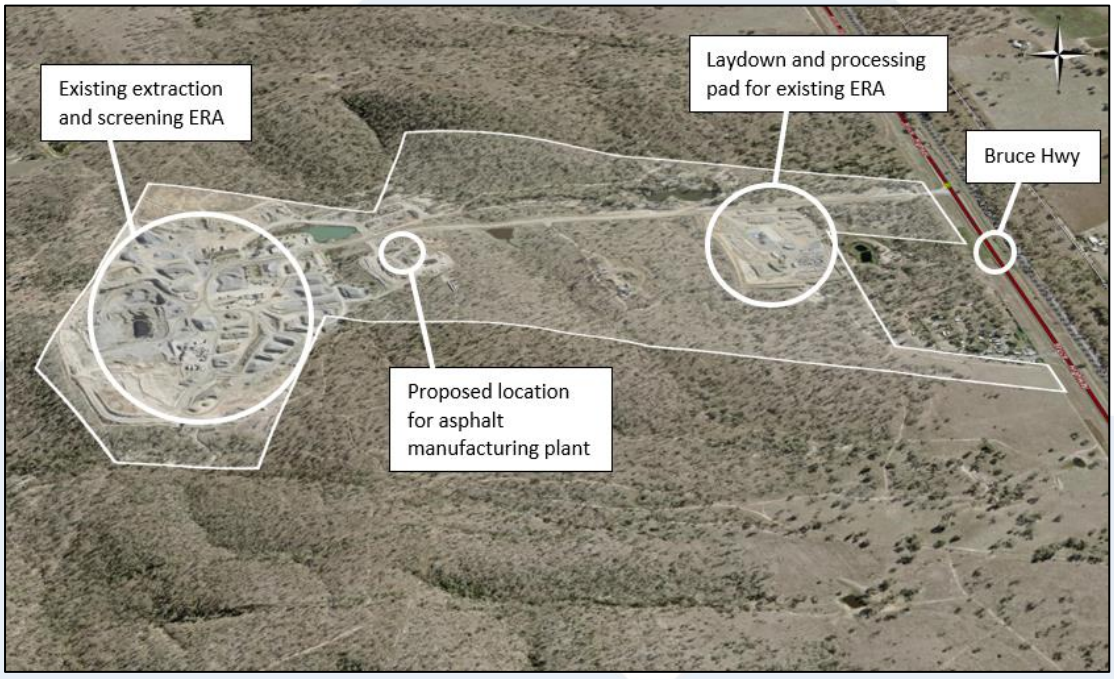

Figure 2. Lot 2 on Plan RP888747 at 59793 Bruce Highway, Midgee showing the proposed location for the asphalt manufacturing plant to the east of the main area of extraction licensed under the Hopeman Pty Ltd environmental authority.

Figure 3. Subject land shown in darker yellow/green, surrounded entirely by rural zone land (lighter yellow/green). Source: RRPS mapping.

4.3 Site History

The subject land is the location of a large hard rock quarry owned and operated by Hopeman Pty Ltd. The quarry has been operated continually for many decades at the location, and the footprint of that activity occupies a significant area of the subject land. Hopeman Pty Ltd operates the extractive and screening ERA under the provisions of an EA issued by DES. Quarrying involves making hard rock accessible by blasting as necessary, before won material is processed into a range of products including road base, aggregates, crusher dust, filter rock and railway ballast. This is achieved through the use of crushing and screening plant permanently positioned on the subject land (Figure 4). Hopeman Pty Ltd are also involved in civil construction projects and have used cleared areas on the subject land for storage of various materials such as used railway sleepers, and redundant or decommissioned plant. The proposed location for the asphalt manufacturing plant was cleared many years ago and has been used as a laydown area for storing material from a range of projects.

Figure 4. Processing plant in use at the extractive and screening ERA on the subject land.

4.4 Regional Context

The subject land is located in the Fitzroy River Catchment, which makes up part of the Brigalow Belt Bioregion of central Queensland. The land is separated from the Fitzroy River floodplain by the Bruce Highway and northern rail line. Vegetation in the surrounding area consists predominantly of open woodland to the north, west and south which is mapped primarily as non-remnant vegetation.

4.5 Climate

The climate for the region is classified as warm and temperate. The average rainfall is 773 mm with the majority falling between October and March (Figure 5). Average temperature ranges from 26.7 ^{o}C in January to 15.8 ^{o}C in July (Figure 5).

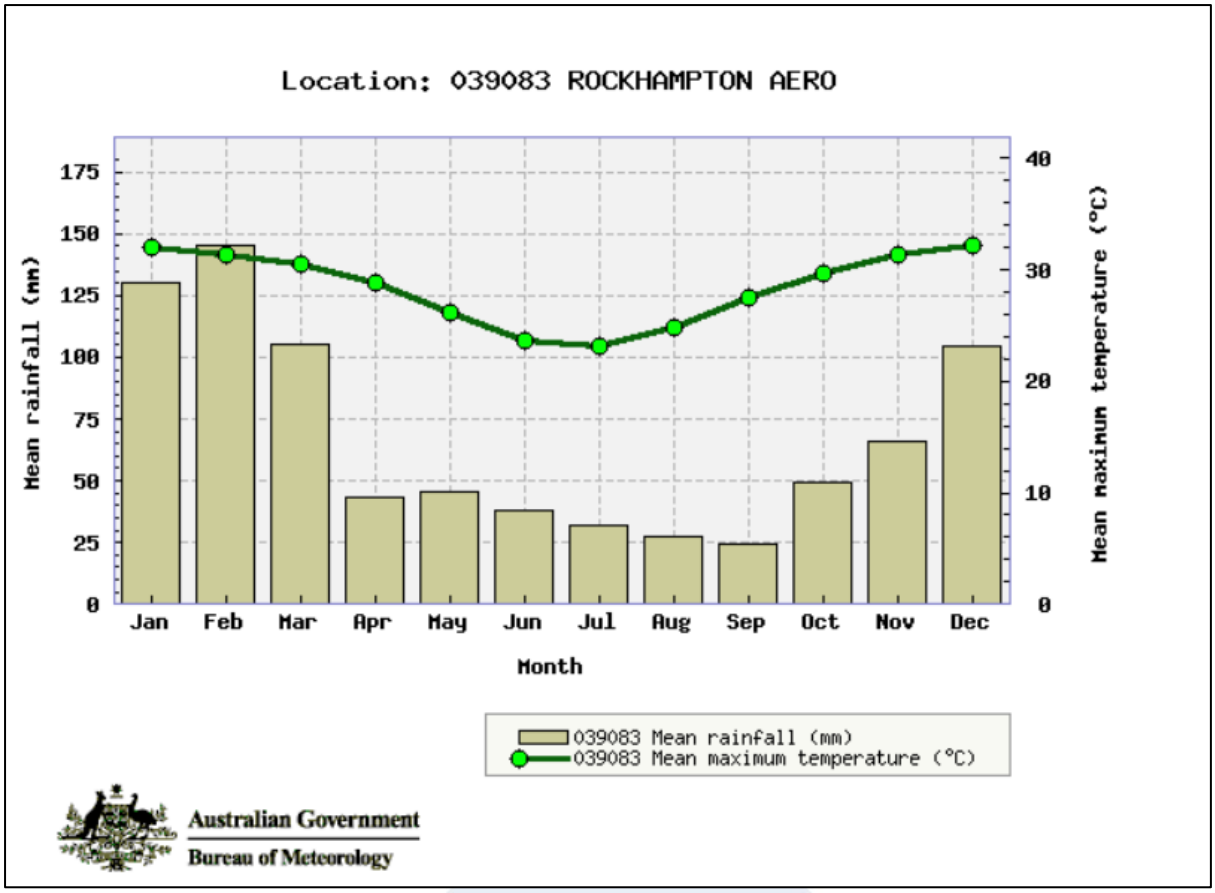

Figure 5. Mean monthly rainfall and maximum temperature for Rockhampton Aero, located at the Bureau of Meteorology at the Rockhhampton Airport.

5 Stormwater Management Plan

5.1 Stormwater Management Plan Context

In the absence of appropriate built controls, stormwater that falls or flows onto the footprint of the asphalt manufacturing plant facility during rainfall events is likely to liberate sediment, which is a prescribed water contaminant in the *Environmental Protection Act 1994*. Sediment-laden stormwater released from the asphalt manufacturing plant has the potential to impact on waters in the receiving environment, potentially resulting in environmental harm. This Stormwater Management Plan (SWMP) describes the management approach and mitigation measures to manage and capture surface stormwater generated on the site during rainfall events. The document describes mitigation measures that will be employed during both the construction and operational phases of the activity. The SWMP has been designed to minimise sediment mobilisation and erosion on the site, and any potential release of sediment from the site.

The SWMP has been developed in consultation with Knobel Engineers (Knobel), Registered Professional Engineers of Queensland (RPEQ). Knobel has undertaken the necessary calculations in accordance with DES guidelines, which will see stormwater runoff for all rainfall events up to and including a 1 in 5 year 24-hour duration rainfall event captured and retained onsite. The detailed calculations based on site hydrology and hydraulics can be viewed in the Knobel Engineers Conceptual Stormwater Management Plan (KECSWMP) which contributes to this SWMP as Appendix A.

5.2 Receiving Environment

A constructed dam is located downstream of the surface area of the proposed asphalt manufacturing plant footprint. This is a legacy farm dam used to water stock for many years prior to the operation of the existing quarry on the subject land. Stormwater that falls on the catchment of the proposed asphalt manufacturing plant and on the small catchment above the proposed site footprint reports to this dam. The dam then overtops and discharges through a culvert beneath the main access road which runs east-west through site and to the existing hard rock quarry, to the unmapped drainage line on the subject land (Figure 6).

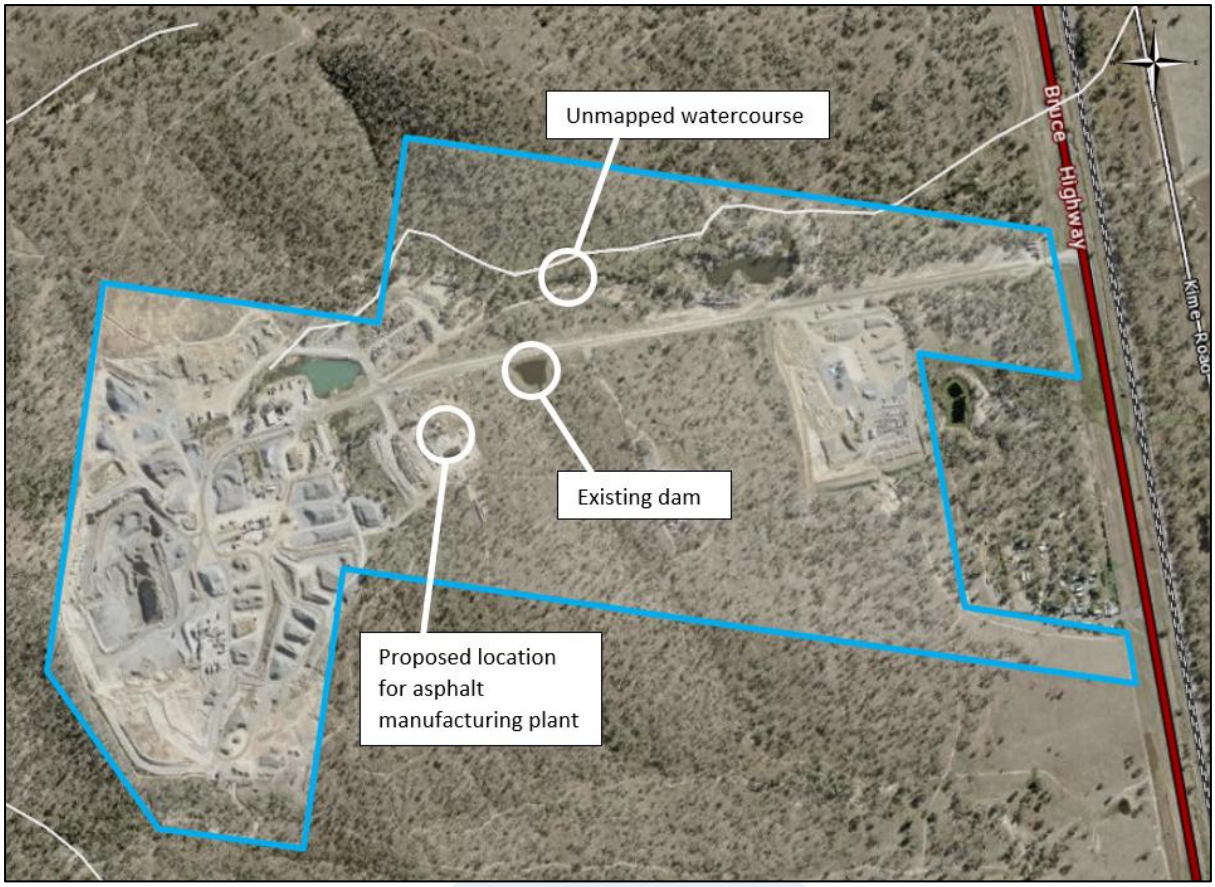

Figure 6. Location of unmapped watercourse (grey line approximately marking location) that stormwater from the dam reports to. Source: Queensland Globe.

5.3 General SMWP Design Principles

The SWMP has been designed predominantly as a 'catchment perimeter control' plan. The proposed site for the asphalt manufacturing plant is located on a sloping section of land, positioned to one side of a slight ridge on an elevated portion of Lot 2 Plan RP888747. The surface contours shown in the KECSWMP demonstrate that the site area commences approximately 10 m upgradient of, and south of the main access road for the existing extractive and screening ERA on the subject land at approximately 43 m AHD. The site slopes north toward the main access road, and the proposed footprint for the asphalt manufacturing plant extends to immediately upgradient of this road, terminating at an elevation of approximately 34 m. The site therefore has an approximate fall of 9 m from the southern upslope boundary to the northern boundary adjacent to the main access road. The natural topography of the site generally directs stormwater from the southernmost portion, down the natural slope toward the northeast. The surface area of the site proposed for the asphalt manufacturing plant is 1.559 ha (Refer to Knobel *Stormwater Catchment Plan*, Ref K4717/P001/A contained within Appendix A). The proposed location for the asphalt manufacturing plant only has a small catchment of 0.285 ha, located directly upgradient to the south (Plan Ref K4717/P001/A contained within Appendix A).

The SWMP has been designed to work in unison with the natural topography and hydraulic characteristics of stormwater flows across the proposed site for the asphalt manufacturing plant. The site was carefully selected with the intention of ensuring that stormwater management strategies can be engineer-designed to use the natural slope of the site to the system's advantage, allowing for implementation of minimal standard stormwater management controls to guide stormwater flows from the single small catchment area into the proposed retention basin (Refer to Knobel *Stormwater Management Plan*, Ref K4717/P002/B contained within Appendix A). Stormwater will be captured and allowed to settle within the retention basin, thus retaining sediment liberated in stormwater flows on the licensed place. Only during extreme rainfall events will stormwater be discharged from the retention basin into the receiving environment.

The SWMP is comprised of the following stormwater management infrastructure which will be discussed in detail in sections below:

- Sediment fencing
- Earthen perimeter bund
- Diversion drains
- Vegetated swales
- Rock-lined swales
- Stabilised entry/exit point
- Retention basin with rock-lined overflow weir

5.3.1 Construction phase

Stormwater management for the proposed asphalt manufacturing activity will be separated into two distinct phases as follows:

1. The construction phase, and
2. The operational phase.

This section describes how stormwater will be managed through the construction phase.

The construction of the asphalt manufacturing plant will require sufficient time to build necessary infrastructure such as office buildings, ablution blocks, material stockpiling areas, and siting the asphalt manufacturing plant where it will be eventually operated. This phase will also involve preparing the hardstand area, which will involve laying down asphalt or bitumen in some trafficable areas.

Additionally, the construction phase will involve building the stormwater management infrastructure in accordance with the RPEQ-designed plans in the KECSWMP. Once the site is set out, a sediment fence will be installed along the western, northern and eastern boundaries of the proposed asphalt manufacturing plant area in accordance with the Knobel *Sediment and Erosion Control Plan and Details*, Ref: K4717/P003/B in Appendix A.

Once the asphalt manufacturing plant and the permanent stormwater management infrastructure has been constructed, the sediment fence will be permanently removed for the operational phase of the activity.

5.3.2 Exclusion of external stormwater flows

Overland flow of stormwater from upgradient of the proposed development site can impact unnecessarily on the internal stormwater management system which is only engineered to manage water that falls directly on the disturbed area of the activity. Wherever possible, stormwater flowing from catchment located upgradient of the proposed development site should be diverted around the site. Equally as important as implementing appropriate internal stormwater and sediment and erosion control measures is establishing effective ways of preventing clean stormwater from entering the footprint of the proposed site. Stormwater that falls upgradient of the proposed development site is considered uncontaminated water, however once it enters the site and comes in contact with disturbed areas it must be managed as potentially contaminated stormwater. Therefore, ingress of stormwater that originates upgradient of the site can significantly increase the volume of water that must be managed through stormwater management and holding infrastructure. The upgradient catchment is poorly grassed, and has large areas of naturally bare ground which invariably results in the liberation of sediment from this area during significant rain events. However, since this is the natural undisturbed ground surface, this water is considered uncontaminated stormwater for the purpose of this SWMP.

The upgradient overland flow can only originate from within the small catchment above the proposed site for the asphalt manufacturing plant. The site for the asphalt manufacturing plant was specifically chosen because of its location having only minimal catchment above the proposed area for the plant. The external catchment of 0.285 ha located upgradient of the proposed asphalt manufacturing plant area is labelled 'EXT A' in the Knobel *Stormwater Catchment Plan*, Ref: K4717/P001/A contained within Appendix A. Rain falling on areas to the west and east of the proposed area for the asphalt manufacturing plant will flow away from the site due to the natural gradient of the land.

A diversion drain and vegetated swale will be constructed at the interface between the upgradient external catchment (EXT A) to prevent, or at least minimise to the greatest extend possible, stormwater from entering the site of the asphalt manufacturing plant.

The small catchment size upgradient of the proposed asphalt manufacturing plant, and the control measures in place to divert water away from the disturbed area of the plant will ensure that the internal stormwater management system will not be challenged with additional potentially contaminated stormwater.

Additional built infrastructure to ensure potentially contaminated stormwater generated from rainfall directly onto the distrubed area of the asphalt manufacturing plant site will be retained on this area by installing a 200 mm high earthen perimeter bund (Knobel *Stormwater Management Plan*, Ref:K4717/P002/B ontained within Appendix A). This bund will prevent sheet flow over the disturbed area from escaping site, and instead will ensure this water reports directly to the rock-lined swales located along the northern and eastern boundaries of the asphalt manufacturing plant area.

5.3.3 Control of surface water flows within the footprint of the activity

Stormwater flows generated from rain falling directly on the disturbed area of the proposed asphalt manufacturing plant must be managed in a manner that minimises the potential for erosion and sediment liberation within the site. This will be achieved by installing rock-lined swales that will act to significantly slow the velocity of flowing stormwater on site. These structures function as a primary treatment system by removing gross pollutants such as plastic and other rubbish that may be accidentally liberated in stormwater during significant rain events. The rock-lined swales will reduce the likelihood of stormwater scouring the ground on the disturbed area of the proposed activity, liberating sediment in the process and prematurely filling the retention basin. There will be two rock-lined swales constructed within the footprint of the proposed asphalt manufacturing plant area. One will be located close to the northern boundary of the site, running parallel with the main access road and will direct water in an easterly direction to the retention basin in the northeast corner. The second rock-lined swale will be constructed along the eastern boundary of the site, and will channel water northward, also into the retention basin. The location of the proposed rock-lined swales can be seen in the Knobel *Stormwater Management Plan*, Ref: K4717/P002/B and the Knobel *Sediment and Erosion Control Plan and Details*, Ref: K4717/P003/B, both presented in Appendix A.

5.3.4 Retention basin design capacity

The footprint of the asphalt manufacturing plant has only a single catchment (Catchment A in Knobel *Stormwater Catchment Plan*, Ref: K4717/P001/A in Appendix A). Initially, rainwater will travel as sheet flow across the surface of the asphalt manufacturing plant, before concentrating in the two rock-lined swales along the northern and eastern boundaries of the site and flowing into the single retention basin. The intention of the engineer-designed retention basin will be to capture and hold stormwater runoff from all rainfall events up to and including a 1 in 5 year 24-hour duration rainfall event. The retention basin will be constructed in the northeast corner of the disturbed area of the asphalt manufacturing plant, which is downgradient of both the northern and eastern rock-lined swales, which will channel stormwater that falls on site into the basin. The retention basin will be constructed with a 1 in 2 batter around its perimeter, and each stormwater delivery point where stormwater will enter the basin at the termination of the two rock-lined swales will have rock armouring to minimise the risk of erosion. Design of the retention basin will provide a sediment settling zone, which will allow a minimum settling volume of 2210 m^3.

The retention basin will have a reinforced spillway built into the eastern end, which will allow settled stormwater to discharge once the basin is at capacity. The spillway will be 0.5 m lower than the top of the bank, and will be 5 m wide once constructed (Knobel *Permanent Sediment and Erosion Control Details*, Ref: K4717/P004/B). Immediately downgradient of the spillway will be rock armouring to ensure discharges from the retention basin do not result in erosion of the grass-lined swale between the retention basin and the dam to the east.

5.3.5 Discharge of stormwater

Captured and settled stormwater will be discharged into the receiving environment via the constructed weir at the eastern end of the retention basin. Settled stormwater will discharge across the reinforced spillway, and flow over the rock armouring before entering the existing dam to the east

(Figure 6). After filling the dam, water will discharge in a northerly direction, under the road through a culvert and enter the existing unmapped watercourse that flows west to east on the subject land. The unmapped watercourse ultimately discharges toward Serpentine Creek, which is situated approximately mid-estuary on the southern bank of the Fitzroy River.

5.4 SWMP Maintenance

Routine maintenance of the key infrastructure of the stormwater management system is vital to the ongoing effectiveness of the SWMP. Routine maintenance will entail the following:

- Regular inspections of the integrity of the sediment fence during the construction phase.
- Regular inspections of permanent stormwater management infrastructure once constructed to ensure continued integrity of the following:
    - perimeter bund,
    - grassed swales/drains outside of the footprint of the plant,
    - rock-lined swales within the footprint of the plant,
    - water storage infrastructure (retention basins).
- Regular maintenance/servicing of rock-lined and grassed swales, the retention basin and the reinforced spillway to remove any accumulated debris. Unattended accumulation of debris may significantly compromise the effectiveness of stormwater management system infrastructure.
- Regular inspection and servicing of swales, retention basins and weirs to remove any accumulated sediment/silt. This material should be removed and stockpiled for future rehabilitation works or other alternate purposes.
- Inspection of stormwater management system infrastructure following significant rainfall events to confirm the integrity of all infrastructure and identify any areas where repairs may be necessary.
- Repair of any damage to stormwater management infrastructure.
- Continual on-site use of water captured within the retention basin to maintain maximum freeboard and potential capacity of infrastructure. Removing water from the retention basin will also simplify the process of intermittently removing accumulated sediment from the basin.

5.5 Use of Captured Water

To maintain the maximum available freeboard, and therefore maintain the maximum potential holding capacity of the stormwater management infrastructure, water captured within retention basin will be removed regularly. While water should be removed regularly to maximise freeboard at all times, special attention should be made to maximising freeboard immediately prior to the recognised wetter months of the year, being October to March (Figure 5). Water removed from the retention basin will be used on-site to control dust potentially generated at the asphalt manufacturing plant or on the main access road shared by the asphalt plant and the existing hard rock quarry. Water from the retention basin will not be used in a manner that is likely to result in this water escaping to the receiving environment.

6 Implementation of SWMP

The SWMP is being implemented into a site that has previously been cleared and used as a laydown area, however has not been developed for any particular use. Therefore, there is no existing stormwater management infrastructure at the proposed location for the asphalt manufacturing plant.

The SWMP will be implemented from scratch, beginning with establishment of the construction phase infrastructure and the western diversion drain/grassed swale that will separate the small external catchment (EXT A) from the footprint of the asphalt manufacturing plant. The difference between this and a greenfield site is that the site proposed for the asphalt manufacturing plant has already been cleared and compacted over time from use as a laydown area by the land owners. Therefore, no extensive clearing of vegetation is necessary. Commencement of the minor reshaping that will be necessary to install the infrastructure described in the SWMP will occur during the drier months of the year so as to minimise the potential for significant rain events to liberate sediment during the construction phase. The retention basin will be constructed first to ensure that in the event of significant rain, sediment liberated in stormwater that traverses the disturbed area of the site will be captured. Construction of all stormwater management infrastructure will be completed prior to the establishment of the asphalt manufacturing plant infrastructure.

7 Appendices

Appendix A – Knobel Engineers - Conceptual Stormwater Management Plan

CONCEPTUAL STORMWATER MANAGEMENT PLAN

PROPOSED ASPHALT MANUFACTURING PLANT

59793 Bruce Highway

MIDGEE

7 March 2019

File No: K4717-0002

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KNOBEL ENGINEERS

DOCUMENT CONTROL SHEET

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Document No:	K4717-0002
Original Date of Issue:	7 March 2019
Project Manager:	Aaron Pianta
Author:	Andrew Pilkington
Client:	Colas Queensland Pty Ltd
Client Contact:	Phil Steer – Steer Environmental Consulting
Client Reference:	59793 Bruce Highway, Midgee
Synopsis:	This Conceptual Stormwater Management Plan describes the existing site characteristics, proposed development of the site and corresponding stormwater quantity and quality management controls to be implemented during both the construction and operational phases of the development.

Reviewed by RPEQ	Reg. No.	Signed	Date
Aaron Pianta	10423		7 March 2019

Revision/Checking History			
Revision No	**Date**	**Checked By**	**Issued By**
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Recipient	**No of Copies**	**Method**
Phil Steer – Steer Environmental Consulting	1	PDF

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APPENDICES

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Appendix B Knobel Engineers, *Stormwater Management Plan* (Ref: K4717/P002/B)
Appendix C Knobel Engineers, *Sediment and Erosion Control Plan and Details* (Ref: K4717/P003/B)
Appendix D Knobel Engineers, *Permanent Sediment Basin Plan and Details* (Ref: K4717/P004/B

1.0 INTRODUCTION

1.1 Background

Knobel Engineers has been commissioned by Colas Queensland Pty Ltd to prepare a Conceptual Stormwater Management Plan (CSWMP) for the Proposed Asphalt Manufacturing Plant at 59793 Bruce Highway, Midgee.

The subject site will make up a portion of the subject lot which is described in Table 1 and has a total area of 85.15 ha. The subject site has a total area of 1.559 ha.

Table 1: Site Description

Developer	Lot and Property Description	Street Address
Colas Queensland Pty Ltd	Lot 2 RP888747	59793 Bruce Highway, Midgee

In preparing the CSWMP Knobel Engineers has considered the applicable requirements for the management of the stormwater quantity and quality measures appropriate for the subject site and proposed development.

1.2 Scope

This CSWMP details the conceptual planning, layout and design of the stormwater management infrastructure for both the construction and operational phases of this development.

This CSWMP aims to:

- Establish the required performance criteria for the proposed stormwater quality management systems;
- Provide a conceptual design of stormwater infrastructure including stormwater quality management controls where required;
- Provide guidelines for stormwater quality during construction and operational phase;
- Ensure stormwater runoff is conveyed through the site to a lawful point of discharge in accordance with Queensland Urban Drainage Manual (QUDM) and Capricorn Municipal Development Guidelines (CMDG); and
- Provide reporting and monitoring mechanisms whereby the performance of this system can be measured enabling identification of corrective actions/alterations required to ensure the above mentioned objectives are maintained.

This CSWMP has been prepared in accordance with the IEAust, (National Committee on Water Engineering), *Australian Runoff Quality (Draft), CMDG* and QUDM.

2.0 DESCRIPTION OF SUBJECT SITE

2.1 Location

The subject site is located on 59793 Bruce Highway, Midgee indicated in Figure 1.

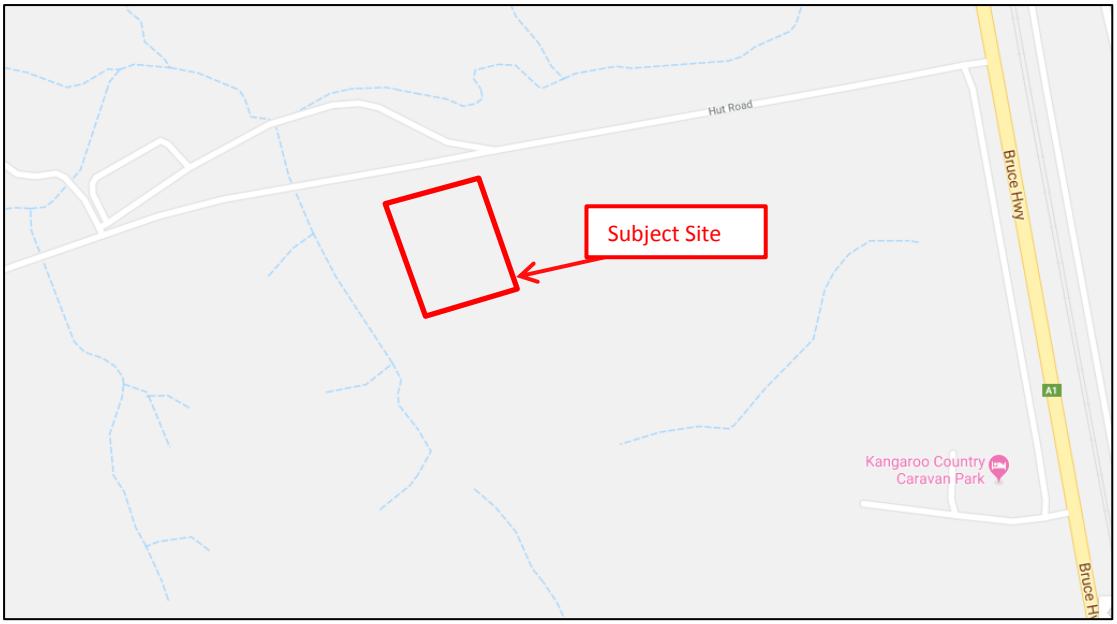


Figure 1: ***Subject Site - Locality Plan (modified from maps.google.com.au)***

2.1.1 Site Topography

The site grades west with the highest point located on the south western boundary of the site at 44.5m AHD and the lowest point located in the north eastern corner at 33m AHD.

2.1.2 Vegetation and Land Use

The subject site currently consists of a cleared section of land to the east of an existing licensed hard rock quarry. The subject site is proposed to be used for the manufacturing of asphalt and will utilise material won from the quarry for use as feedstock for manufacturing asphalt. The subject site is completely independent of the quarrying activity. An aerial photograph is illustrated in Figure 2.

Figure 2: ***Aerial Photograph (modified from google maps.google.com.au)***

2.1.3 Proposed Development

The site is to be utilised as a Proposed Asphalt Manufacturing Plant.

3.0 SITE HYDROLOGY AND HYDRAULICS

3.1 Background

In order to estimate the contributing peak discharge for a range of ARI events the Rational Method has been applied to define flow rates at and through the subject site. In accordance with Department of Environment and Science (DES) Guidelines, stormwater runoff for all rainfall events up to a 1 in 5 year 24 hour duration rainfall event should be captured and held onsite. The following sections define the parameters of the sites hydraulics and provide sizing volumes for the proposed retention basin. The Rational Method (Section 4.03 of the Queensland Urban Drainage Manual - QUDM 2008) is flexible in its data requirements and is able to produce satisfactory estimates of peak site discharges based on the following data input:

- specific intensity frequency duration (IFD) data;
- length/type of flowpath;
- contributing catchment areas; and
- coefficient of discharge.

3.2 Development Flows

3.2.1 Catchment Definition and Existing Point of Discharge

The subject site will contain a single catchment, Catchment A. Catchment A discharges stormwater to the north and north eastern boundary of the site; this will represent the Lawful Point of Discharge (LPOD) for Catchment A.

The Catchment is shown on Knobel Engineers, *Stormwater Catchment Plan* (Ref: K4717/P001/A) included as Appendix A.

3.2.2 Coefficient of Runoff

The coefficient of runoff (C year) was determined based on fraction impervious (f_i) method as specified in QUDM.

The site is assumed to be made up of 50% impervious area with the remainder gravel/roadbase. For this reason Catchment A will be 75% impervious, this equates to a fraction impervious of 0.75. Using a one hour, ten year rainfall intensity ($^1I_{10}$) of 64 mm/hr, a C_{10} value of 0.85 has been adopted for the Catchment A.

With reference to QUDM Table 4.5.2, applying the frequency factors for the standard storms of 2, 5, 10 and 100 years results in the following pre development coefficients of runoff as shown in Table 2.

Table 2: Development Coefficient of Runoff

Catchment ID	C_2	C_5	C_{10}	C_{100}
Catchment A	0.72	0.81	0.85	1.00

3.2.3 Time of Concentration

The time of concentration has been calculated in accordance with QUDM section 4.6.6 – Overland Flow. Friend's Equation ($t = (107n\ L^{0.333})/S^{0.2}$) has been used to calculate the initial travel time as sheet flow with the remaining distance calculated as concentrated flow. From review of the site, Catchment A stormwater will sheet flow across the site before concentrating in constructed swales on the north and east boundaries. Swales will direct flows towards the north eastern boundary. Refer to Table 3 for the calculated time of concentration.

Table 3: Calculated Time of Concentration

Catchment	Catchment Area (ha)	Catchment Properties	Time of concentration		
			Overland flow Friend's Equation	Concentrated flow QUDM Figure 4.09	Total t_c
A	1.559	Bare soil surface	Horton's (n) = 0275 L = 91 m Slope = 5.40 % t = 9.4 min	Length of flow = 135m Fall of channel = 7 Δ = 2 t = 2 min	12 min

3.2.4 Design Flow Rates

Design storm flow rates have been calculated for standard storms with an ARI of 2, 5, 10 and 100 years using design rainfall intensities from The Bureau of Meteorology, *Australian Rainfall and Runoff 2016*. The Rational Method ($Q = 2.78 \times 10^{-3}$ CIA) has been used to calculate the required design flow rates for the subject site.

The calculated peak flows for this subject site are presented in Table 4.

Table 4: Development Catchment Flow Rates

Annual Exceedance Probability	AEP	39% (1 in 2 yr)	18% (1 in 5 yr)	10% (1 in 10 yr)	1% (1 in 100 yr)
Coefficient of Runoff	C	0.72	0.81	0.85	1.00
Area of Catchment (ha)	A	1.559	1.559	1.559	1.559
Average Rainfall Intensity (mm/h)	I	110	134	153	231
Peak Flow Rate (m3/s)	**Q**	**0.344**	**0.468**	**0.565**	**0.999**

3.3 Downstream Flow Characteristics

An investigation of the downstream flow characteristics was undertaken to determine if stormwater flows from the site resulting from storm events in excess of the 1 in 5 yr 24 hour ARI (18% AEP) do not interact with the water quality test points for the existing extraction and screening ERA on the site.

The outcome of this investigation determined that flows from the site will not enter this area and instead follow an existing flow path directing flows east towards an existing dam. See Knobel Engineers, *Stormwater Management Plan* (Ref: K4717/P002/B) included as Appendix B for further details.

3.4 External Catchments

3.4.1 Catchment Definition and Existing Point of Discharge

The site has a single external catchment (EXT A) which discharges flows across the southern boundary of the site and moves in a north west direction. EXT A has an area of approximately 2,851 m^2. The external catchment consists of poor grassed areas and select trees. The Catchment is shown on Knobel Engineers, *Stormwater Catchment Plan* (Ref: K4717/P001/A).

3.4.2 Coefficient of Runoff

The coefficient of runoff (C year) was determined based on fraction impervious (f_i) method as specified in QUDM. A fraction impervious of 0.00 has been adopted for the external catchment. Using a one hour, ten year rainfall intensity ($^1I_{10}$) of 64 mm/hr a C_{10} value of 0.70 has been adopted for the external catchment.

With reference to QUDM Table 4.5.2, applying the frequency factors for the standard storms of 2, 5, 10 and 100 years results in the following pre development coefficients of runoff as shown in Table 5.

Table 5: Development Coefficient of Runoff

Catchment ID	C_2	C_5	C_{10}	C_{100}
External Catchment A	0.60	0.67	0.70	0.84

3.4.3 Time of Concentration

The time of concentration has been calculated in accordance with QUDM section 4.6.6 – Overland Flow. Friend's Equation ($t = (107n\ L^{0.333})/S^{0.2}$) has been used to calculate the initial travel time as sheet flow with the remaining distance calculated as concentrated flow. From review of the site, EXT A stormwater will sheet flow before concentrating in natural channels and will flow across the southern boundary of the site. It is proposed to redirect flows to the east around the subject site through the use of a diversion drain and a bund along the southern boundary. Refer to Table 6 for the calculated time of concentration.

Table 6: Calculated Time of Concentration

Catchment	Catchment Area (ha)	Catchment Properties	Time of concentration		
			Overland flow Friend's Equation	Concentrated flow QUDM Figure 4.09	Total t_c
A	2.851	Poorly Grassed Surface	Horton's (n) = 035 L = 71 m Slope = 6.8 % t = 10.6 min	Length of flow = 46m Fall of channel = 3 Δ = 3 t = 3 min	14 min

3.4.4 Design Flow Rates

Design storm flow rates have been calculated for standard storms with an ARI of 2, 5, 10 and 100 years using design rainfall intensities from The Bureau of Meteorology, *Australian Rainfall and Runoff 2016*. The Rational Method ($Q = 2.78 \times 10^{-3}$ CIA) has been used to calculate the required design flow rates for the subject site.

The calculated peak flows for this subject site are presented in Table 7.

Table 7: External Catchment Flow Rates

Annual Exceedance Probability	AEP	39% (1 in 2 yr)	18% (1 in 5 yr)	10% (1 in 10 yr)	1% (1 in 100 yr)
Coefficient of Runoff	C	0.60	0.67	0.70	0.84
Area of Catchment (ha)	A	0.285	0.285	0.285	0.285
Average Rainfall Intensity (mm/h)	I	103	126	144	217
Peak Flow Rate (m3/s)	**Q**	**0.049**	**0.066**	**0.080**	**0.144**

4.0 WATER QUALITY ASSESSMENT

4.1 Background

Disturbance to the existing ground has the potential to significantly increase sediment loads entering downstream drainage systems and watercourses. The following section outlines proposed sediment and erosion controls to be implemented during the construction and operational phase of the development.

4.2 Key Pollutants

During the construction phase a number of key pollutants have been identified for this development.

Table 8 illustrates the key pollutants that have been identified.

Table 8: Key Pollutants, Construction Phase

Pollutant	Sources
Litter	Paper, construction packaging, food packaging, cement bags, material off cuts.
Sediment	Exposed soils and stockpiles during earthworks and building works.
Hydrocarbons	Fuel and oil spills, leaks from construction equipment and temporary car park areas.
Toxic Materials	Cement slurry, asphalt primer, solvents, cleaning agents, and wash waters
Acids or Alkaline substances	Acid sulphate soil, cement slurry and wash waters.

4.3 Sediment and Erosion Controls

4.3.1 Context

Stormwater that falls or flows onto the proposed plant area during rainfall events is likely to release sediment in disturbed areas. Sediment laden stormwater that is released from the site has the potential to cause unreasonable harm to waterways. This section outlines methods to manage and capture surface stormwater generated on the site during rainfall events and is designed to minimise sediment erosion mobilisation and erosion on the site, and any potential release of sediment from the site.

4.3.2 General Design Principles

Sediment and Erosion Controls have been designed predominantly as a 'catchment perimeter control' plan. The proposed plant area is structured around the existing areas. The topography of the site has been designed to direct stormwater through a retention basin before discharging stormwater via an overflow weir to the overland flow path to the east of the site. Rock swales have been proposed around the perimeter of the operational area and will capture runoff, remove sediment and discharge flows to the retention basin. See Knobel Engineers, *Stormwater Management Plan* (Ref: K4717/P002/B) for further details.

4.3.3 Control of Surface Water Flows

Stormwater flows on the site must be managed in a manner that minimises potential erosion within the site and to minimise potential release of any contaminated surface flows from the site through the use of rock swales and a retention basin.

4.3.4 Retention Basin

The retention basin will be designed to completely retain a Q_5 24 hour rainfall event. This will ensure any contaminants from the site can be removed prior to leaving the site. The basin will utilise a single overflow spillway, with the invert of the weir at the Q_5 water level of RL 33.0 m, this will allow rainfall events above the 5 year ARI to be discharged from the site and maintain the existing flow regime that was evident in the pre development scenario. For further details see Knobel Engineers, *Permanent Sediment Basin Plan and Details* (Ref: K4717/P004/B) included as Appendix D. Stormwater from the basin will be utilised onsite for dust suppression and other activities during the asphalt manufacturing process.

5 Year 24hr Rainfall Intensity

= 6.95 mm/h

= 0.00695 m/h

24h Rainfall Depth

= 0.00695 x 24

= 0.1668m

Catchment Areas

1.559ha

24hr Rainfall Volume

C5 = 0.81

a) = 0.81 x 15586 x 0.1668

= 2106 m^3

4.3.5 Swales

The rock swales will serve two functions, firstly will look to convey runoff from portions of the operational area to the retention basin and secondly to treat stormwater runoff by removing gross pollutants from runoff. To ensure stormwater from site is utilizing the existing point of discharge for all storm events up to and including the 1% AEP (100 yr ARI), sizing for swales is provided below for the Q_{100} event.

Peak Flow rate for Swale Calculations

Assume TC = 20min $^{20}I_5$ = 106 mm/h

= (0.81 x 106 x 1.559) / 360

= 0.372 m^3/s

Assume flow is split between inflow locations with 70% of flow directed to the northern swale and the remainder is collected by the eastern swale.

North Swale:

a) Q_{100} = 0.372m^3/s x 0.70

= 0.260m^3/s

4.4 Operational Phase Maintenance Requirements

The proposed stormwater management devices will require maintenance and monitoring to ensure that they function as designed. The following section provides an outline of the necessary maintenance tasks for the proposed devices.

4.4.1 Retention Basin Maintenance

The retention basin will need to be monitored to ensure the basin is working as intended. Sediments accumulated at the inlets to the basin need to be monitored. Should excessive sediment build-up it will impact flow path and may result in flows not reaching the basin. The proposed Stormwater Quality Improvement Devices (SQIDs) will require regular maintenance and monitoring to ensure that they function as designed.

Maintenance is primarily concerned with:

- Maintenance of flow to and through the retention basin;
- Maintaining structure and lining of retention basin;
- Preventing undesired overgrowth vegetation from taking over the retention basin;
- Removal of accumulated sediments;
- Litter and debris removal; and
- Ensure weir functionality is maintained through removal of debris and sediment deposits.

4.4.2 Rock Swale Maintenance

The rock swales will need to be monitored ensure build-up of sediments does not occur.

Maintenance is primarily concerned with:

- Maintenance of flow through the swale;
- Preventing undesired overgrowth vegetation from taking over the swale;
- Removal of accumulated sediments; and
- Litter and debris removal.

5.0 CONCLUSIONS

Knobel Engineers has been commissioned by Colas Queensland Pty Ltd to prepare a Conceptual Stormwater Management Plan (CSWMP) for a proposed Asphalt Manufacturing Plant at 59793 Bruce Highway, Midgee.

This CSWMP details the conceptual planning, layout and design of the stormwater management infrastructure for both the construction and operational phases of this development.

A sediment and erosion control plan is provided for the construction and operational phase of the development and shall be implemented by the contractor and developer. A 1590 m^2 retention basin with a storage volume of 2210m^3 storage is proposed for the operational phase of the development to treat stormwater runoff up to and including the 24 hour 5% AEP (1 in 5 yr) storm event. Rock swales have been provided to collect flows from site and direct to the retention basin and ensure flows up to and including the 1% AEP (100 yr ARI) storm event are discharge through the LPOD for the site.

APPENDIX

A

Knobel Engineers

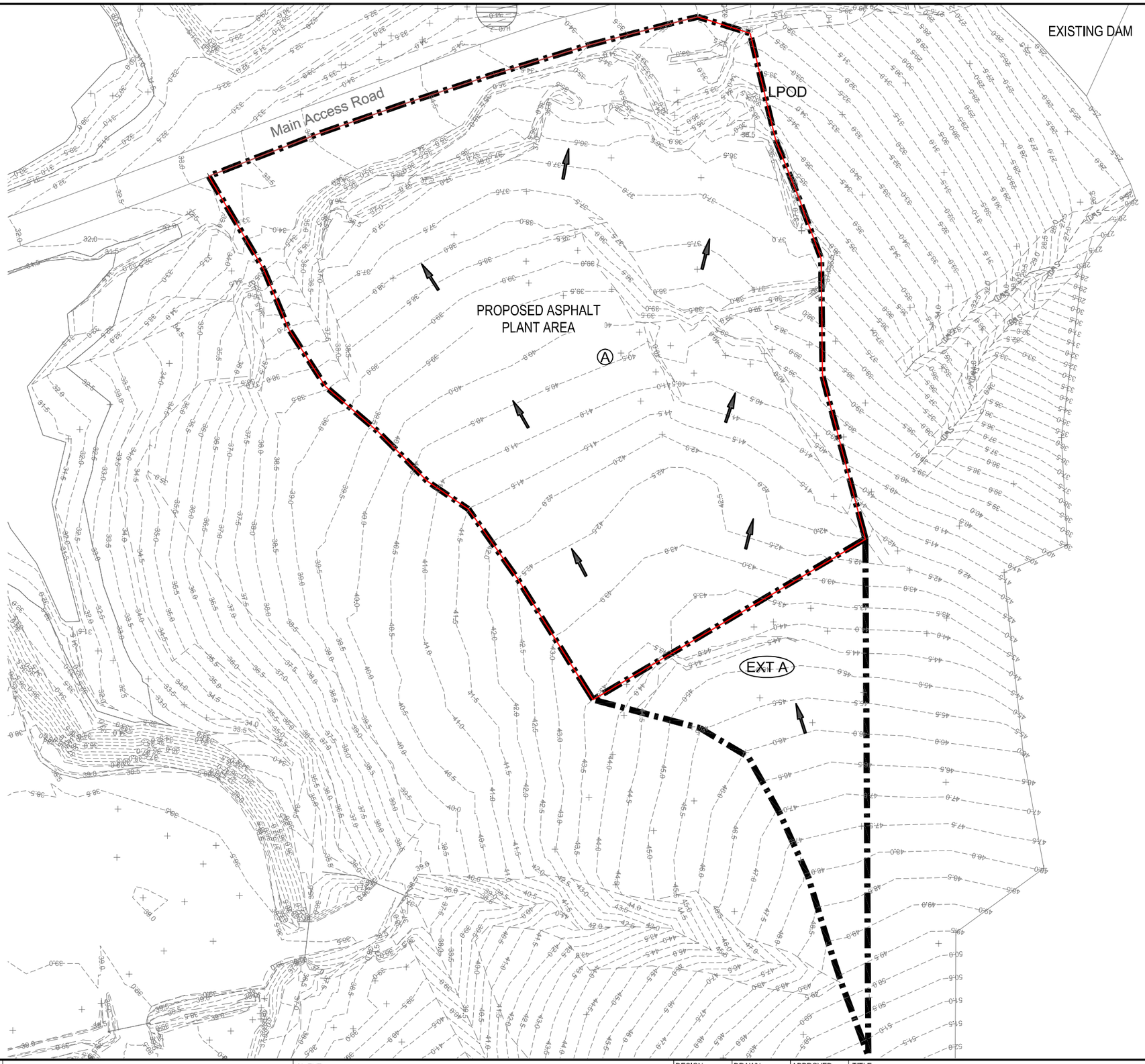
Stormwater Catchment Plan

(Ref: K4717/P001/A)

LEGEND

- SITE BOUNDARY
- STORMWATER CATCHMENT BOUNDARY
- 31 — EXISTING SURFACE CONTOURS
- (A) — STORMWATER CATCHMENT I.D.
- LPOD — LAWFUL POINT OF DISCHARGE
- → FLOW DIRECTION

STORMWATER CATCHMENT TABLE	
STORMWATER CATCHMENT I.D.	AREA (ha)
A	1.559
EXT A	0.285



CONTRACTOR TO DETERMINE AND LOCATE ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF WORKS

REPORT ISSUE
NOT FOR CONSTRUCTION

ISSUE No.	DATE	AMENDMENT
A	21-02-19	ISSUED FOR REPORT

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CLIENT: COLAS QUEENSLAND PTY LTD

PROJECT: MIDGEE QUARRY ASPHALT PLANT
59793 BRUCE HIGHWAY
MIDGEE QLD 4702

DESIGN	DRAWN	APPROVED
AJP	EG	

TITLE: STORMWATER CATCHMENT PLAN

SCALE: 1:500 AT A1, 1:1000 AT A3 (0 10 20 30 40 50m)

PROJECT NO.: K4717

DWG NO.: P001

ISSUE: A

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APPENDIX

B

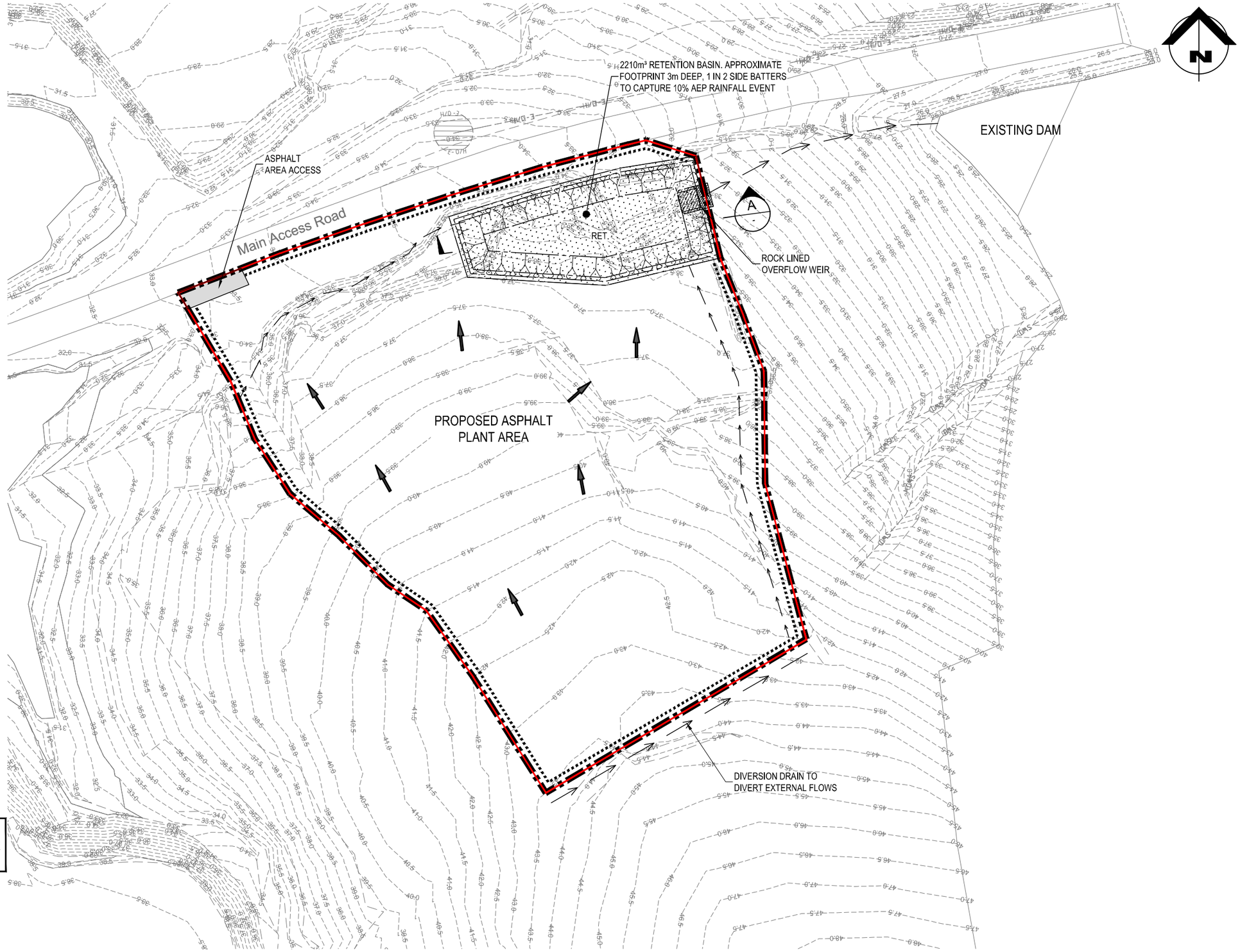
Knobel Engineers

Stormwater Management Plan

(Ref: K4717/P002/B)

LEGEND

- SITE BOUNDARY
- RET. — PROPOSED RETENTION BASIN
- PROPOSED FLOW DIRECTION
- GRASSED SWALE
- ROCK LINED SWALE
- 31 — EXISTING SURFACE CONTOURS
- STORMWATER CATCHMENT BOUNDARY
- 200mm HIGH BUND



CONTRACTOR TO DETERMINE AND LOCATE ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF WORKS

REPORT ISSUE
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ISSUE No.	DATE	AMENDMENT
B	07-03-19	ISSUED FOR REPORT
A	21-02-19	ISSUED FOR REPORT

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CLIENT	DESIGN	DRAWN	APPROVED
COLAS QUEENSLAND PTY LTD	AJP	EG	

PROJECT
MIDGEE QUARRY ASPHALT PLANT
59793 BRUCE HIGHWAY
MIDGEE QLD 4702

TITLE
STORMWATER MANAGEMENT PLAN

SCALE 1:500 AT A1, 1:1000 AT A3 (0 10 20 30 40 50m)

PROJECT NO. K4717
DWG NO. P002
ISSUE B

APPENDIX

C

Knobel Engineers

Sediment and Erosion Control Plan and Details

(Ref: K4717/P003/B)

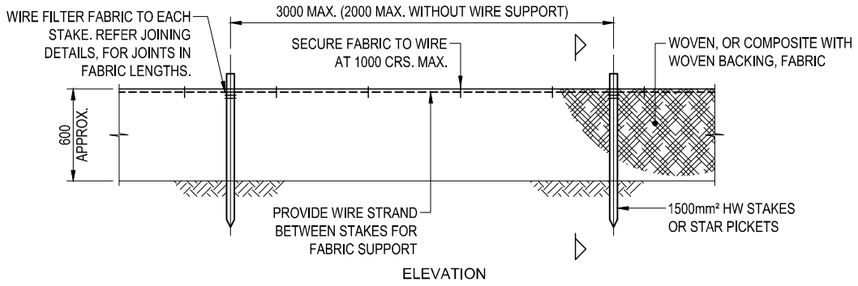
LEGEND

SF — SEDIMENT FENCE

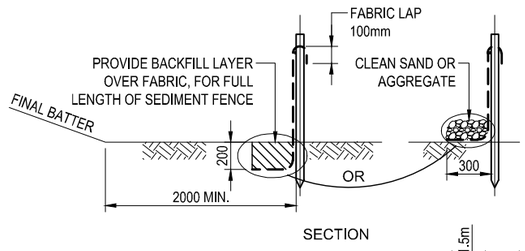
S.E.P. — STABILISED ENTRY/EXIT POINT

EXISTING SURFACE CONTOURS

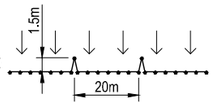
31



ELEVATION



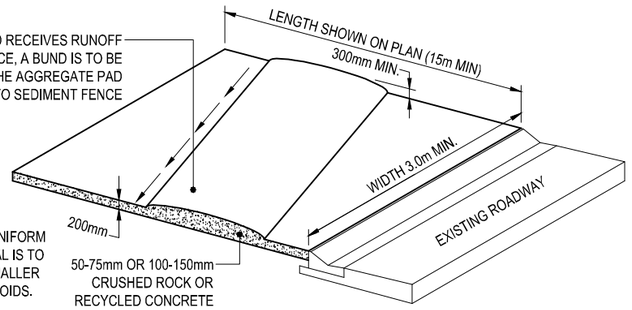
SECTION



NOTE: INSTALL 1.5m (MIN.) DEEP 'RETURNS' AT 20m SPACING (MAX.) ON UPSLOPE SIDE OF FENCELINE (5-10m MAX SPACING IF FENCE ALIGNED AT ANGLE TO CONTOUR). EG:

SEDIMENT FENCE DETAILS

N.T.S. SF — DENOTES SEDIMENT FENCE. REFER PLAN FOR LOCATION AND EXTENTS.

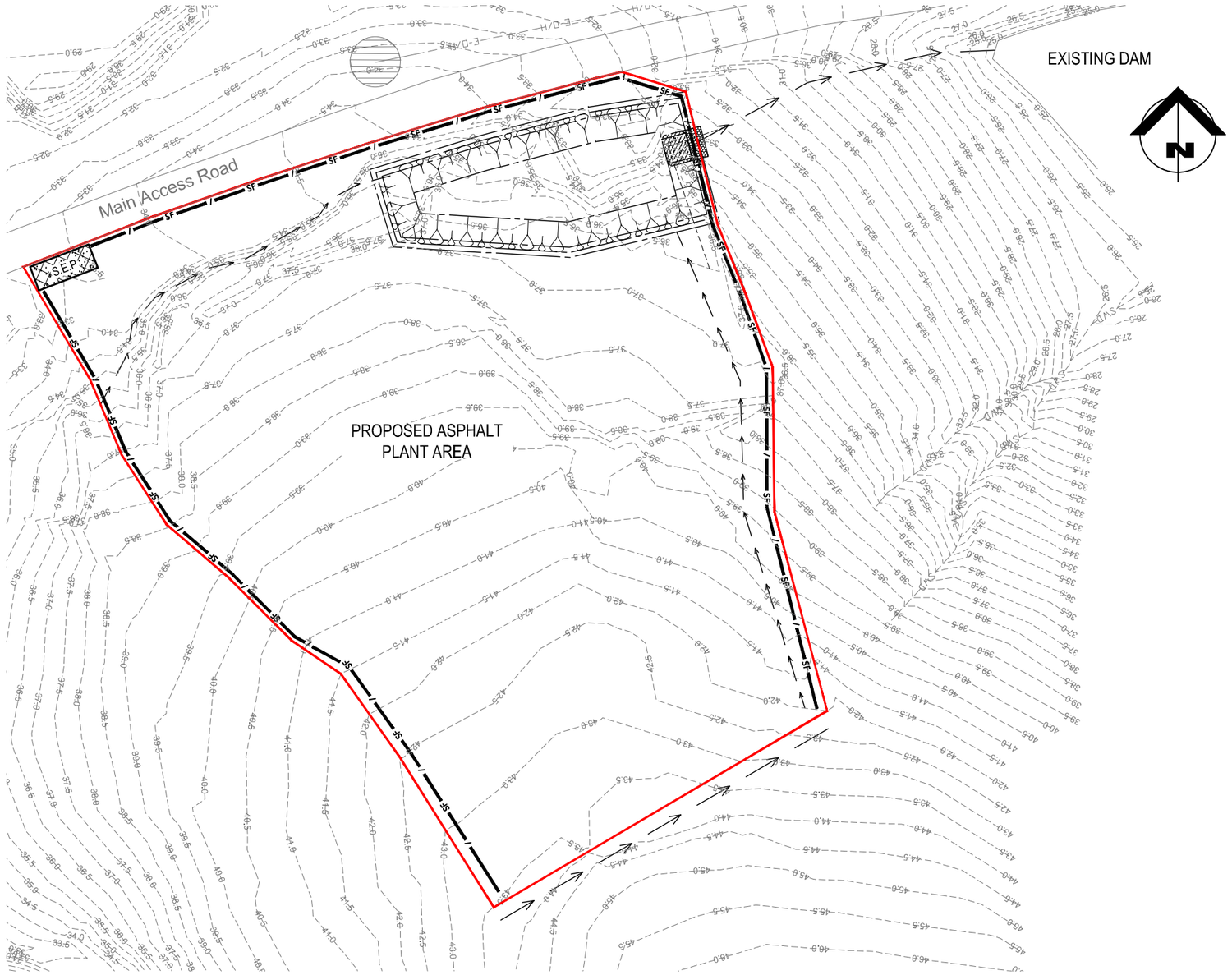


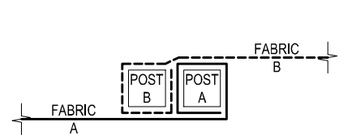
NOTE:
ROCK IS TO BE UNIFORM SIZE. IE. MATERIAL IS TO NOT CONTAIN SMALLER ROCKS FILLING VOIDS.

STABILISED ENTRY/EXIT POINT

N.T.S. OR APPROVED EQUIVALENT

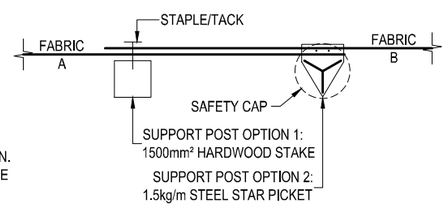
S.E.P. — DENOTES STABILISED ENTRY/EXIT POINT, REFER PLAN FOR LOCATIONS.





FABRIC TO FOLD AROUND EACH STAKE ONE FULL TURN. STAKE B TO BE DRIVEN TIGHTLY AGAINST STAKE A. THE TOPS OF BOTH STAKES TO BE SECURED WITH WIRE.

METHOD 1



METHOD 2

SEDIMENT FENCE FABRIC JOINING DETAILS

N.T.S.

REPORT ISSUE
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CONTRACTOR TO DETERMINE AND LOCATE ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF WORKS

ISSUE No.	DATE	AMENDMENT
B	07-03-19	ISSUED FOR REPORT
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CLIENT: COLAS QUEENSLAND PTY LTD

PROJECT: MIDGEE QUARRY ASPHALT PLANT
59793 BRUCE HIGHWAY
MIDGEE QLD 4702

DESIGN	DRAWN	APPROVED
AJP	MGD/DKC	

TITLE: SEDIMENT AND EROSION CONTROL PLAN AND DETAILS

SCALE: 1:500 AT A1, 1:1000 AT A3 (0 10 20 30 40 50m)

PROJECT NO. K4717

DWG NO. P003

ISSUE B

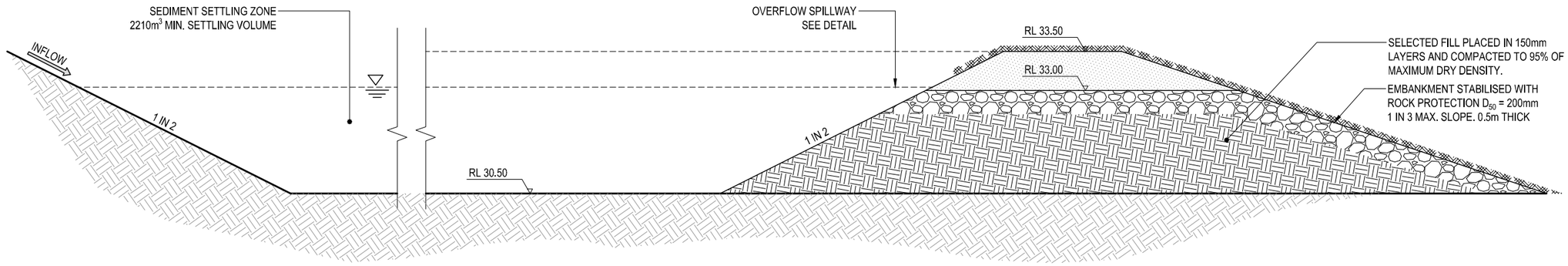
APPENDIX

D

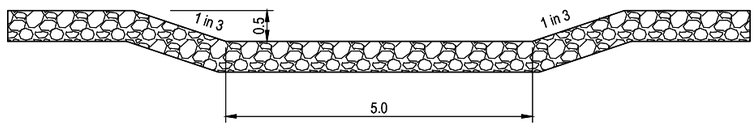
Knobel Engineers

Permanent Sediment and Erosion Control Details

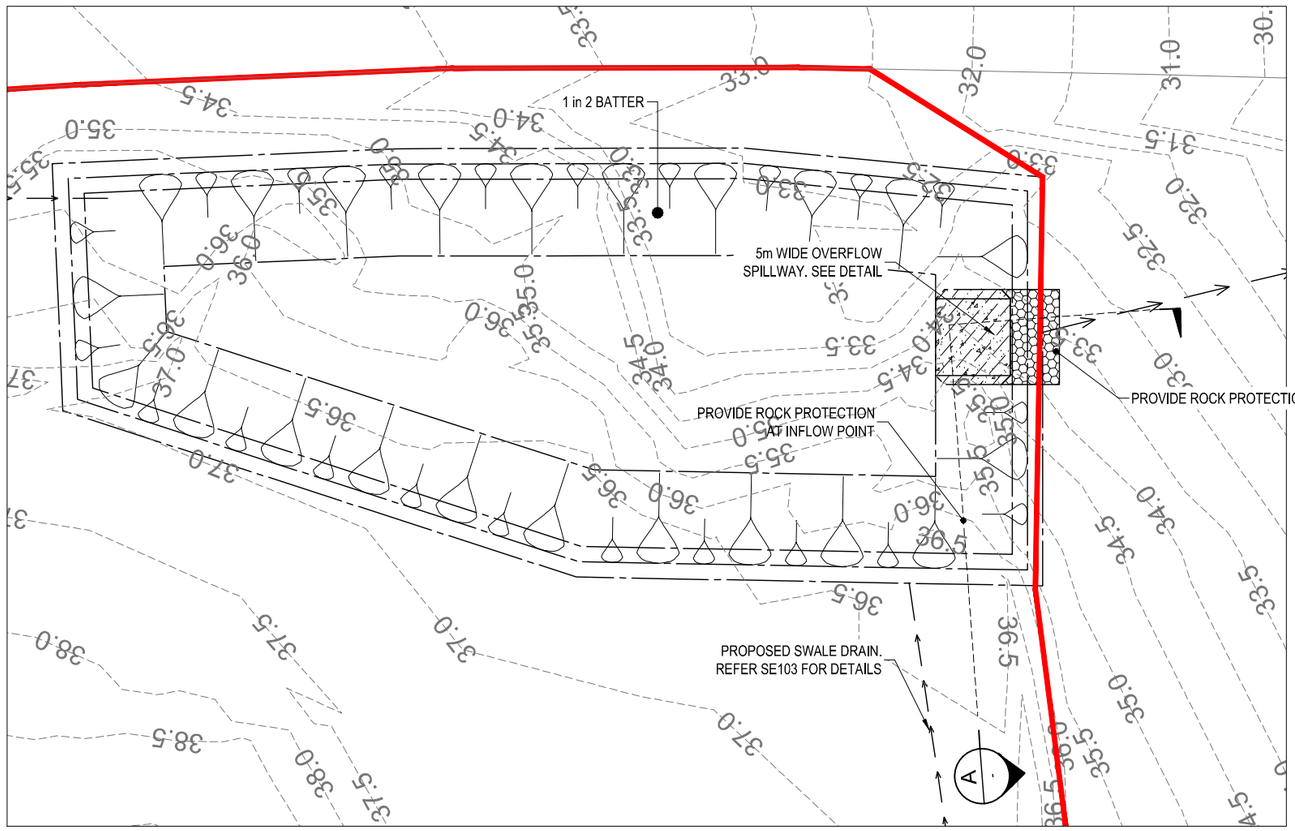
(Ref: K4717/P004/B)



SECTION A
RETENTION BASIN OUTLET DETAIL
N.T.S



SPILLWAY DETAIL
SCALE 1:50 AT A1



INSET A
SCALE 1:200 AT A1

CONTRACTOR TO DETERMINE AND LOCATE ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF WORKS

REPORT ISSUE
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ISSUE No.	DATE	AMENDMENT
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GOLD COAST | BRISBANE | BALLINA | ROCKHAMPTON

CLIENT: COLAS QUEENSLAND PTY LTD

PROJECT: MIDGEE QUARRY ASPHALT PLANT
59793 BRUCE HIGHWAY
MIDGEE QLD 4702

DESIGN	DRAWN	APPROVED
AJP	MGD/DKC	

TITLE: SEDIMENT AND EROSION CONTROL DETAILS

SCALE: 1:200 AT A1, 1:400 AT A3 (0 5 10 15 20m)

PROJECT NO. K4717

DWG NO. P004

ISSUE B

Confirmation Notice

PLANNING ACT 2016, SECTION 2 OF THE DEVELOPMENT ASSESSMENT RULES

Application number:	**D/83-2019**	*For further information regarding this notice, please contact:*	Brandon Diplock
Date application received**:**	**29 August 2019**	Phone:	1300 22 55 77

1. APPLICANT DETAILS

Name:	**COLAS Queensland Pty Ltd**
Postal address:	**C/- Urban Planet Town Planning Consultants** **PO BOX 232** **HERVEY BAY QLD 4655**
Phone no:	(07) 4128 2888 Mobile no: 0427 282 088 Email: ward@urbanplanet.com.au

2. PROPERTY DESCRIPTION

Street address:	59793 Bruce Highway, Midgee
Real property description:	Lot 2 on RP888747, Parish of Plews

3. OWNER DETAILS

Name:	Hopkins Brothers Group Pty Ltd Tte
Postal address:	380 Alexandra Street PARKHURST QLD 4702

4. DEVELOPMENT APPROVAL SOUGHT

Development Application for a Material Change of Use for a High Impact Industry and Environmentally Relevant Activity

5. APPLICATION TYPE

	Development Permit	Preliminary Approval
Development assessable under the planning scheme, a temporary local planning instrument, a master plan or a preliminary approval which includes a variation approval	☒	☐

	Planning Regulation 2017 reference	Development Permit	Preliminary Approval
Making a material change of use of premises for an environmentally relevant activity	Schedule 10, part 5, division 2	☒	☐

6. REFERRAL AGENCIES

Based on the information accompanying the lodged application, in accordance with the *Planning Regulation 2017,* referral to the following Referral Agencies is required.

For an application involving	Name of agency	Status	Address
STATE TRANSPORT INFRASTRUCTURE (Generally)			
Schedule 10, Part 9, Division 4, Subdivision 1, Table 1 – Aspect of development stated in schedule 20			
Development application for an aspect of development stated in schedule 20 that is assessable development under a local categorising instrument or section 21, if— (a) the development is for a purpose stated in schedule 20, column 1 for the aspect; and (b) the development meets or exceeds the threshold— (i) for development in local government area 1—stated in schedule 20, column 2 for the purpose; or (ii) for development in local government area 2—stated in schedule 20, column 3 for the purpose; and (c) for development in local government area 1—the development is not for an accommodation activity or an office at premises wholly or partly in the excluded area However, if the development is for a combination of purposes stated in the same item of schedule 20, the threshold is for the combination of purposes and not for each individual purpose.	Department of Transport and Main Roads	Concurrence	Department of State Development, Manufacturing, Infrastructure and Planning Online: www.dilgp.qld.gov.au/MyDAS2 Postal: PO Box 113 Rockhampton Qld 4700
STATE TRANSPORT INFRASTRUCTURE (State transport corridors and future State transport corridors)			
Schedule 10, Part 9, Division 4, Subdivision 2, Table 4 – Material change of use of premises near a State transport corridor or that is a future State transport corridor			
Development application for a material change of use, other than an excluded material change of use, that is assessable development under a local categorising instrument, if all or part of the premises— (a) are within 25m of a State transport corridor; or (b) are a future State transport corridor; or (c) are— (i) adjacent to a road that intersects with a State-controlled road; and (ii) within 100m of the intersection	Department of Transport and Main Roads	Concurrence	Department of State Development, Manufacturing, Infrastructure and Planning Online: www.dilgp.qld.gov.au/MyDAS2 Postal: PO Box 113 Rockhampton Qld 4700

It is the responsibility of the applicant to give within 10 business days each referral agency a copy of -

- the application (including application form and supporting material);
- this confirmation notice; and
- any applicable concurrence agency application fee (refer to the *Planning Regulation* to confirm the applicable referral agencies).

The applicant must provide written advice to Council (as the Assessment Manager) of the day on which this action was completed.

7. IMPACT ASSESSMENT

Will Impact Assessment be required?	**YES**
The whole of the application must be publicly notified under the provisions of part 4 of the Development Assessment Rules by:	
- Publishing a notice at least once in a newspaper circulating generally in the locality of the land - Placing a notice on the land in the way prescribed under the Development Assessment Rules - Giving a notice to the owners of all land adjoining the land.	

8. PUBLIC NOTIFICATION DETAILS

The notice must be in the approved form and maintained on the land for a minimum of FIFTEEN (15) Business Days in accordance with section 53 (4) of the *Planning Act 2016.*

9. INFORMATION REQUEST

A further information request may be made by the assessment manager. Regardless of this advice, any concurrence agency for the application may make an information request.

You are further advised that the truth and accuracy of the information provided in the application form and accompanying information is relied on when assessing and deciding this application. If you find an INACCURACY in any of the information provided above or have a query or seek clarification about any of these details, please contact Council's Development Assessment Unit.

10. ASSESSMENT MANAGER

Name: **Brandon Diplock** Signature: Date: 11 September 2019

PLANNING OFFICER

Rockhampton Office
232 Bolsover St, Rockhampton
Gracemere Office
1 Ranger St, Gracemere
Mount Morgan Office
32 Hall St, Mount Morgan

25 September 2019

Our reference: D/83-2019
Enquiries to: Brandon Diplock
Telephone: 1300 22 55 77

Colas Queensland Pty Ltd
C/- Urban Planet Town Planning Consultants
PO BOX 232
HERVEY BAY QLD 4655

Dear Sir/Madam

INFORMATION REQUEST – DEVELOPMENT APPLICATION D/83-2019 FOR A MATERIAL CHANGE OF USE FOR HIGH IMPACT INDUSTRY AND ENVIRONMENTALLY RELEVANT ACTIVITY – SITUATED AT 59793 BRUCE HIGHWAY, MIDGEE – DESCRIBED AS LOT 2 ON RP888747, PARISH OF PLEWS

Council refers to your application received by Council on 29 August 2019.

Council officers have undertaken a detailed assessment of the development application and require you to provide further information to address the following issues:

1.0 Planning

1.1 Please provide a Site Plan showing the proposed use area (ashphalt manufacturing) within the entire site and including existing operations on site, access and set down areas etc.

1.2 It is noted that the site is located within the 'very high' bushfire hazard area. As per the requirements of the *Rockhampton Region Planning Scheme 2015*, please provide an assessment against the Bushfire Hazard Overlay Code.

2.0 Stormwater

2.1 Please provide hydraulic and design details of the rock swales including slope, dimension, Q100 depth etc.

2.2 Please confirm that calculations of the Q100 flow rate for the swale have utilised the 100 year 20min rainfall intensity.

Under section 13 of the Development Assessment Rules, the Applicant has three (3) options available in response to this information request. The Applicant must give the Assessment Manager:

1. all of the information requested; or
2. part of the information requested, together with a notice requiring the Assessment Manager and each referral agency to proceed with the assessment of the application; or
3. a notice:
   i. stating the Applicant does not intend to supply any of the information requested; and
   ii. requiring the Assessment Manager and each referral agency to proceed with the assessment of the application.

Response to this further information request should be forwarded to:

Development Assessment Section
Rockhampton Regional Council
PO Box 1860
ROCKHAMPTON QLD 4700

A response needs to be received within a period of three (3) months from the date of this letter, In accordance with section 68 (1) of the *Planning Act 2016* and sections 12 and 13 of the Development Assessment Rules. Please forward your response to this information request to Council at your earliest convenience, in order for the assessment of your application to progress further.

Should you have any queries regarding the above information request, please contact the undersigned on 1300 22 55 77.

Yours faithfully

Brandon Diplock
Planning Officer
Planning and Regulatory Services

Information Request Response Form
(to be returned to the Assessment Manager with the response)

I _____ choose to respond to the Assessment Manager's Information Request:

□ in full;

OR

□ in part, with this notice requiring the Assessment Manager and each referral agency to proceed with the assessment of the application;

OR

□ stating that I do not intend to supply any of the information requested; and requiring the Assessment Manager and each referral agency to proceed with the assessment of the application.

A copy of the response to the Assessment Manager's information request has been provided to all Referral Agencies nominated on the Confirmation Notice.

I understand the requirements of this Information Request as listed above.

Signed : _____ Date : _____

Position : _____