

Meeting	Community Consultative Committee	No.	25
Project	Lynwood Quarry	Date	Thursday 15 May 2021
Venue	Onsite at Lynwood Quarry	Time	12.00pm – 1.15pm
Chaired by	Brendan Blakeley	Recorded by	Jacinta Spies
Purpose	To provide an update on the Holcim Lynwood Quarry project.		

Attendees

Peter Hewson	Holcim	David Humphries	Marulan Region Chamber of Commerce
Rebecca MacLean	Holcim	John Nicastrri	Marulan Progress Association
Fred Adams	Holcim	Susan Pearson	Towrang Valley Progress Group
Lee Attard	Holcim	Peter Simpson	Site neighbour
Brendan Blakeley	Elton Consulting	Rosemary Turner	Marulan and District Historical Society
Jacinta Spies	Elton Consulting		

Apologies

Clr Alfie Walker	Councillor, Goulburn Mulwaree Council	Warwick Bennett	General Manager, Goulburn Mulwaree Council
Dennis Isbister	Cookbundoon Preservation Society		

Discussion points

1 Welcome and introduction

Brendan Blakeley welcomed CCC members and acknowledged the traditional custodians of the land Lynwood is located upon.

Apologies were noted including Dennis Isbister’s resignation from the CCC due to moving away from the area.

The meeting's agenda was briefly outlined.

Brendan took the group through the actions from the last CCC meeting:

- Holcim to outline the vegetation to be planted on the amenity bund at the next CCC meeting.
 - Rebecca presented a map of the site layout highlighting the amenity bund and emplacement area to receive new vegetation. This included a list of plant species to be used for the vegetation in both the areas. See Appendix B and C.

David Humphries referenced notes from the previous minutes stating Holcim would advertise new activities for re-appraisal for those who wanted different jobs.

- Rebecca said no activity or major tenders have been advertised as nothing has been reviewed as yet.
- David Humphries asked if anyone accepted the donation of surplus materials from Johnnyfields Quarry?*
- Rebecca said no one took it up.
 - David Humphries suggested that there was a need for gravel to be placed in the driveway in front of the church.
 - Holcim noted they would be open to review an application to making material available.

Actions

- None noted.
-

2 Site operations update

Peter Hewson updated the committee on site operations (see presentation attached). The main points discussed were as follows:

- Changes to the internal staff including Declan Close and Richard Gray leaving Lynwood Quarry and new positions including Lee Attard, Peter Hewson and Fred Adams. There is ongoing advertising to fill remaining gaps.
- COVID-19 impacts resulted in a fluctuating construction market. However, going forward Holcim expect steady sales.
- Re-evaluation of contractor engagement to preserve local resources.
- Since the CCC meeting in October last year, there was one reportable incident with a broken leg. There were major learnings from the incident resulting in changes to management and supervision practices with a renewed vigour to examine safety and contractors on site.
- The next six months will be more of the same work as the first half of the year.

Dust Management Improvement Plan

- Lynwood continues to see outstanding improvements from the dust controls put in place last year including a second foaming unit. This second foaming unit reduces the in-building dust significantly, resulting in lower dust emissions externally.
- Due to the dust reduction, site personnel are now permitted to enter an operational building with the plant still running for up to half of their shift.
- Dust reduction correlates to the significant rain events and breaking of the drought resulting in improved greenery, but also from the improvements Lynwood has made.
- *John Nicastrì mentioned there is a lot of westerly wind. If there is no rain, the dust will show.*
 - Peter said Holcim is using the water carts and sealing exposed areas. Dust monitoring continues with evidence of no exceedances.
- *Peter Simpson said he has noticed an improvement to the dust present on his table outside, noting the heavier rainfall this year.*

Actions

- None noted.
-

3 Granite pit update

Peter Hewson noted the following points about the granite pit:

- The five-year mine plant is progressing as per the development consent.
- The amenity bund construction is progressing with vegetation planting planned for Spring.
- Peter presented a 2021 pit plan, explaining the need for larger blasts was lessened with help from Mother Nature.
- *Susan Pearson asked what was meant by help from Mother Nature?*
 - Peter explained they could take advantage of the existing fractures in the rock seams and the direction these travel in.
- *David Humphries said he heard on the news that Australia has invented a process for lower noise explosions. Could Holcim use this technique?*
 - Peter noted this was an interesting innovation but was suited to small scale operations.

Actions

- None noted.
-

4 Community update

Rebecca Maclean gave an update on Holcim's community engagement program (see presentation attached). The main points discussed were as follows:

Community Investment Fund (CIF)

- Due to the COVID-19 pandemic, Lynwood had to delay the CIF roll out in 2020. There was one application received, which will be placed into the 2021 rounds.
- Lynwood Quarry will continue to support local businesses and the community.
- As there have been no additional community investment since the last meeting, the overall community investment funding figure remains the same.
- *Peter Simpson asked when is it likely for new community investment to open?*
 - Rebecca said Holcim will advertise this in Discover Marulan and on their website. The CCC members will also be notified.
- *David Humphries extended his thanks to Holcim. As the Kite Festival was cancelled last year, there was a street Christmas event in its place later in the year. This included face painting, stalls etc. Holcim thankfully transferred what was meant for the Kite Festival to the Christmas event instead.*
 - Rebecca said that event funding came out of the community engagement program.

Community Engagement

- Holcim continues to support community initiatives, with a list provided on slide 13. To date, Lynwood Quarry has funded hundreds of thousands of dollars through the Community Engagement Program and Community Investment Fund.
- *John Nicastrì also thanked Holcim for their input for the Christmas event.*
- *Rosemary Turner asked to share this information in the Discover Marulan newsletter.*
 - Rebecca will liaise with Rosemary to provide a simplified version to present in the newsletter once it has been through Holcim's communication review.

Engagement of local businesses

- Holcim continues to engage local businesses wherever possible. A full list was provided on slide 15.
- Peter Hewson noted the extractive industry generally was invigorating the town.
- *David Humphries noted the primary economic driver in Marulan is the quarry industry.*

Complaints

- Since October, five complaints were received including, one air complaint, two blasting complaints and two transport complaints – one while driving in the area, and one out of the area.
- *David Humphries asked if trucks have GPS monitoring?*
 - Fred confirmed trucks have GPS monitoring. If a complaint is raised, we can track the specifics of where and when. Holcim also monitors speed, corners, braking and acceleration of all trucks.
 - Rebecca noted all trucks have cameras.
- *David Humphries mentioned that the proposal for the waste incinerator on Jerrara Rd states upgrades to the overpass will be needed. Is Holcim aware of this?*
 - Peter clarified Jerrara Road is an RMS asset and Holcim are not aware of any proposed upgrade to the Jerrara Road overpass.
- *Susan Pearson said she saw more lights on last night at Lynwood Quarry, when there is usually only one. They appear to be on the conveyor.*
 - Rebecca will liaise with Susan to investigate the sources of this additional light.
 - Susan tabled the letter noting Holcim's commitments about managing light within the quarry. See Appendix D.
 - Peter thanked Susan for raising her concern and noted that these commitments are part of the development consent.

Actions

-
- Rebecca to liaise with Rosemary Turner on presenting an overview of Holcim's community engagement initiatives and figures in the Discover Marulan newsletter.
 - Rebecca to liaise with Susan Pearson to resolve the new source of light.

5 Environmental update

Rebecca MacLean presented an update on Holcim's environmental compliance, monitoring and management plans (see presentation attached). The main points discussed were as follows:

Compliance

- Holcim has demonstrated compliance with blasting, dust deposition, PM10, noise, ground water and surface water requirements.
- Holcim upgraded the Hi-Volume sampler to a BAM Exactus monitor. It runs on solar energy and provides live data.
- Holcim hopes to upgrade the second Hi-Volume sampler located on Brayton Road to assist in real-time updates in that area.

Monitoring

- Rebecca presented a map of the dust monitoring locations as seen on slide 19.
- Rebecca presented a graph of the depositional dust monitoring results showing a decline.

Environmental audits

- The Independent Environmental Audit was released in December 2020 showing only 11 non-complaint consent conditions, down from 24 items in the 2018 audit.
- The Annual Aboriginal Heritage Site Audit took place in November 2020 showing no negative impacts.

Management plans

- The Water Management Plan and Air Quality Management Plans were approved and are now available on the Lynwood Quarry website.
- There were four Management Plans recently reviewed. Refer to slide 22 for the list.
- The Aboriginal Heritage Management Plan is about to commence a review.
 - Two Aboriginal parties have formally removed their interest.
 - Some of the compliant sites will be moved from annual monitoring to triennial monitoring.
- *David Humphries asked what was the update with the Aboriginal Keeping Place?*
 - Rebecca said the Aboriginal Keeping Place is still being progressed.

Actions

- None noted.
-

6 Next six months

Rebecca gave an overview of Holcim's planned activities for the next six months. Activities listed were as follows:

- Ongoing dust improvement trails
- Management Plan reviews and submission to DPIE
- Granite pit works and ongoing Amenity bund work
- Annual Aboriginal Heritage Site Monitoring in November
- Upgrade the second Hi-Vol unit to a BAM unit
- Preparation for Summer weather including reviewing bushfire plans and water storage for excessive rain events
- The "Keeping Place" project progression and the Aboriginal Culture centre building to be in front of the gate. Once the works are in progress it will be shared with the community. At the moment it is in the planning stage and Holcim are yet to submit a DA.
- Marulan Town sign is still awaiting progress.
- *Peter Simpson asked for an update on the EPA review.*
 - Rebecca said an independent health assessment was undertaken by the EPA and released to the

public late last year. Holcim do not have input to the report, and the EPA is looking to consult with the community before it is finalised.

- Peter Simpson said he received a letter to discuss the findings from the report. He believes only one test was undertaken and more should be carried out.
- Rebecca clarified Holcim had had general conversations with EPA about dust management at the quarry but had no input to the findings.
- Peter Hewson encouraged Peter Simpson to speak with EPA and discuss the findings with them directly.

Actions

- None noted.
-

7 Other matters

Brendan Blakeley asked the group if there were any other matters to discuss:

- *Rosemary Turner said the Kite Festival this year will instead be named Spring on Meridian to be held on 18 September. It would be appreciated if Holcim could provide input. Rosemary will send a letter to organise this assistance.*
- *Rosemary said the Marulan and District Historical Society would also like material from the Jonnyfields Quarry if it is still available.*
 - Peter Hewson encouraged Rosemary to send a formal request to Rebecca for the, adding Holcim would be happy to help where possible.
- *John Nicastrì mentioned a few years ago a BBQ was held at the Quarry with an organised bus bringing the community from Marulan. Will this be organised again within the next two years?*
 - Peter Hewson said the first event was when Lynwood Quarry was not yet fully operation. Today the event would be a high-risk operation. If people are interested in a site tour they can request and receive a tour.
 - Rosemary suggested once the Keeping Place is built, an open day could be incorporated with Holcim to involve the community.
 - Peter Hewson agreed with this suggestion as it is outside the mining area and requires less risk management now that the quarry is fully operational.
- *Peter Simpson referred to a letter from the Progress Association about upgrading the skate park.*
 - Rebecca said Holcim responded to the letter. They are unable to provide funding as the request was received from a different working group and not sent from council.
 - David Humphries clarified that Rosemary, John and himself are part of the working group for this project which is funded by Council. The skate park upgrade is needed as the park could be safer than it currently is.

Actions

- None noted.
-

10 Close

It was agreed the next meeting will be tentatively scheduled for the end of October 2021 dependent on Peter and Fred's availability.

Brendan reminded the group there are only two CCC meetings a year, but if there are urgent matters, to raise them with Rebecca as soon as possible or Brendan can be contacted to arrange an extra meeting.

Brendan thanked the group for their attendance and the meeting was closed.

Actions

- None noted

Appendices

- A PowerPoint presentation
- B Amenity bund construction plan
- C Amenity bund vegetation information
- D Letter of Holcim's commitments

A **PowerPoint Presentation**



Strength. Performance. Passion.

Community Consultation Committee Meeting: May 2021



Agenda

- 1. Operations Update - Peter Hewson**
- 2. Granite Pit Update - Peter Hewson**
- 3. Community Update - Rebecca MacLean**
- 4. Environmental Update - Rebecca MacLean**

1. Operations Update



1. Operations Update

Internal Staff Changes

- Declan Close & Richard Gray have left the business.
- Lee Attard has undertaken the role of Interim Quarry Manager.
- Peter Hewson has expanded his role of the NSW/ACT Area Manager to encompass Lynwood Quarry and other quarries in the Southern NSW region.
- Fred Adams has undertaken the role of NSW/ACT Aggregate General Manager.
- Zeb Dubokovich has undertaken the role in Acting Maintenance Manager.
- Quarry Manager interviews are underway.

1. Operations Update cont.

- COVID-19 impacts since October 2020
 - Yield
 - Sales figures
- Reevaluation of contractor engagement
 - Review of resources to suit quarry output
 - Strengthened key local suppliers
 - Job preservation for full time Holcim employees
- One reportable incident
- Outlook for the next 6 months



1. Operations Update cont.

Ongoing Dust Improvement

Lynwood continues to see outstanding improvements from the dust controls put in place last year.

The second foaming unit has continued to perform, reducing the in-building dust significantly, resulting in lower dust emissions externally.

Due to these improvements in dust reduction, site personnel are now permitted to enter an operational building (for up to half of their shift time) with the plant still running. Previous to this, personnel were not permitted to enter an operational building whilst running.

This outcome was commended by the Mines Department and a positive way forward for Lynwood.



2. Granite Pit Update



Photo taken April
2021

1. Granit Pit Update

Current Pit Development

- Progressing as per the development consent and 5 Year Mine plan.
- Overburden removal is steady and forecast as per our production demands.
- Amenity bund construction progressing in conjunction with the Divall's Earthmoving stripping contract. We have had some setbacks with the rain, but progressing toward vegetation planting in Spring.



1. Granit Pit Update cont.

2021 Pit Plan



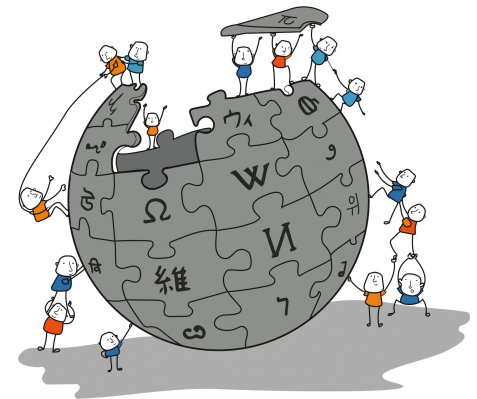
3. Community Update



3. Community Update

Community Investment Fund

- Due to the COVID-19 pandemic and pending global issues, Lynwood had unfortunately had to delay in the CIF role out in 2020. All applications received in 2021 will be placed into the 2021 rounds as they are released.
- Lynwood Quarry will continue to support the local community and local business as much as possible through this difficult time by utilising the services of local people and business as much as possible.



3. Community Update cont.

Community Investment Fund - Funding to Date

PROJECT NAME	PROGRESS	TOTAL APPROVED
Bungonia: Sustaining the present through the past	Complete	\$ 8,000
Marulan Community Hall Upgrade	Complete	\$ 2,500
Marulan School Projects Room	Complete	\$ 15,000
Restoration of historical culvert	Complete	\$ 12,010
Computer hardware for archiving and cataloguing	Complete	\$ 2,500
Meridian mosaic installation	Complete	\$ 2,000
Tallong Memorial Hall Refurbishment	Complete	\$ 13,318
Marulan Road Safety	Complete	\$ 1,770
Towrang Hall Floor Refurbishment	Complete	\$ 14,230
Extension to GMC Road Safety Day	Complete	\$ 2,000
Insectivorous Bat Flight Centre	Complete	\$ 15,912
Increase in funds for GMC project - Road Safety	Complete	\$ 2,000
Thermal Imaging Camera	Complete	\$ 1,890
Tallong Community Memorial Walk	Complete	\$ 8,323
Tallong Hall project	Complete	\$ 5,133
Toilet Block for RFS	Complete	\$ 15,790
Sign at Towrang	Complete	\$ 11,923
Local Schools Co creating a sustainable future	Update pending	\$ 4,000
Bungonia Community Engagement Program	Update pending	\$ 4,500
Marulan Highway Signage	DA to be submitted	\$ 8,190
Promotions for Australia Day Committee	Complete	\$ 2,613
Muulii Murra (beautiful place)	Complete	\$ 2,800
MHS Archive & Research Facility	Complete	\$ 15,862
Marulan Public School Playground Upgrade	In Progress	\$ 15,000
Tallong Public School Playground Upgrade	In Progress	\$ 15,000
Marulan RFS - Training Room Extension	In Progress	\$ 10,000
Big Hill RFS - Thermal Imaging Camera	In Progress	\$ 2,403
Tallong Community Focus Group - Defibrillator	In Progress	\$ 2,572
	TOTAL	\$ 217,239

3. Community Update cont.

Community Engagement Program

Since October 2020, Holcim have supported the below community initiatives:

- Marulan Christmas event (\$4,000)
- Tony Onion's Park seating
- Marulan Kids School Holiday Trip (\$660)
- Goulburn Mulwaree Council Australia Day BBQ (\$500)
- Gunning Campdraft (\$500)
- Marulan Football Club (\$3,500)
- Goulburn & District Showjumping Comp. (\$1,000)
- Goulburn Agricultural, Pastoral & Horticultural Society (\$2,000)
- Towrang Valley Progress Association Australia Day BBQ (\$500)



3. Community Update cont.

2021 CEP Budget

ACTIVITY	Cost Description	TOTAL
Marulan Kite Festival Sponsorship	Sponsorship / Attendance	\$3,000
Marulan Pony Club	Sponsorship	\$1,500
Goulburn & District Show Jumping	Major Sponsor	\$1,000
Tallong Apple Festival	Sponsor Rock Wall	\$2,000
Chamber of Commerce	Joining fee and Newsletters	\$575
Marulan Christmas Carols	Plants, stickers, sponsorship	\$3,500
Goulburn District Hockey	Sponsorship	\$3,000
Goulburn Cricket	Sponsorship	\$3,000
Marulan Soccer Club	Sponsorship	\$3,500
Goulburn Rugby	Sponsorship	\$3,000
Mayoral Golf Day	Major Sponsor / Attendance	\$5,000
Goulburn Australia Day BBQ	Sponsorship / Attendance	\$500
Towrang Australia Day BBQ	Sponsorship / Attendance	\$500
Tallong PS Father's Day BBQ	Sponsorship	\$600
Promotional Items/ Additional requests	Sponsorship	\$5,000
Lions Club BBQ December	Sponsorship	\$500
Gunning Campdraft	Sponsorship	\$500
	Total	\$36,175

3. Community Update cont.

Engagement of Local Businesses

- Pirtek (Hydraulic repairs)
- Southern Cross Surveying
- Divalls (equipment/operator hire & civil construction)
- Neville Skelly (grounds maintenance)
- Marima Medical Clinic
- The Marulan Cafe (catering)
- Marulan Butcher (catering)
- Marulan Bakery (catering)
- Marulan Rural Supplies (grounds materials)
- EMMS (Electrical Maintenance & Operator)
- Mechanika Motors Goulburn
- Orica
- Southern Explosives
- Truck Stop 31
- Gary Breeze (potable water)
- Subway Marulan (catering)
- The Posthouse (accommodation)
- KFC Marulan (catering)
- Marulan Post Office (small items)
- Marulan IGA (general groceries)
- Domino's Goulburn (catering)
- The Green Grocer
- Roses Cafe
- Concrete 4 Goulburn
- Days Industrial (small tools/PPE)
- Queanbeyan Industrial Supplies (PPE/small items)
- CREW (Mechanical maintenance)
- Hollingworth's Cranes
- A1 Septic
- Pejar LALC

3. Community Update cont.

Complaints

Since October 2020, Lynwood has received 5 community complaints:

- 1 x Air Complaint - White dust on vehicle
- 2 x Blasting Complaints - Over-pressure at Marulan residence
- 2 x Road Transport Complaints - highway calls regarding driving



4. Environmental Update



4. Environmental Update

EXACTUS BAM

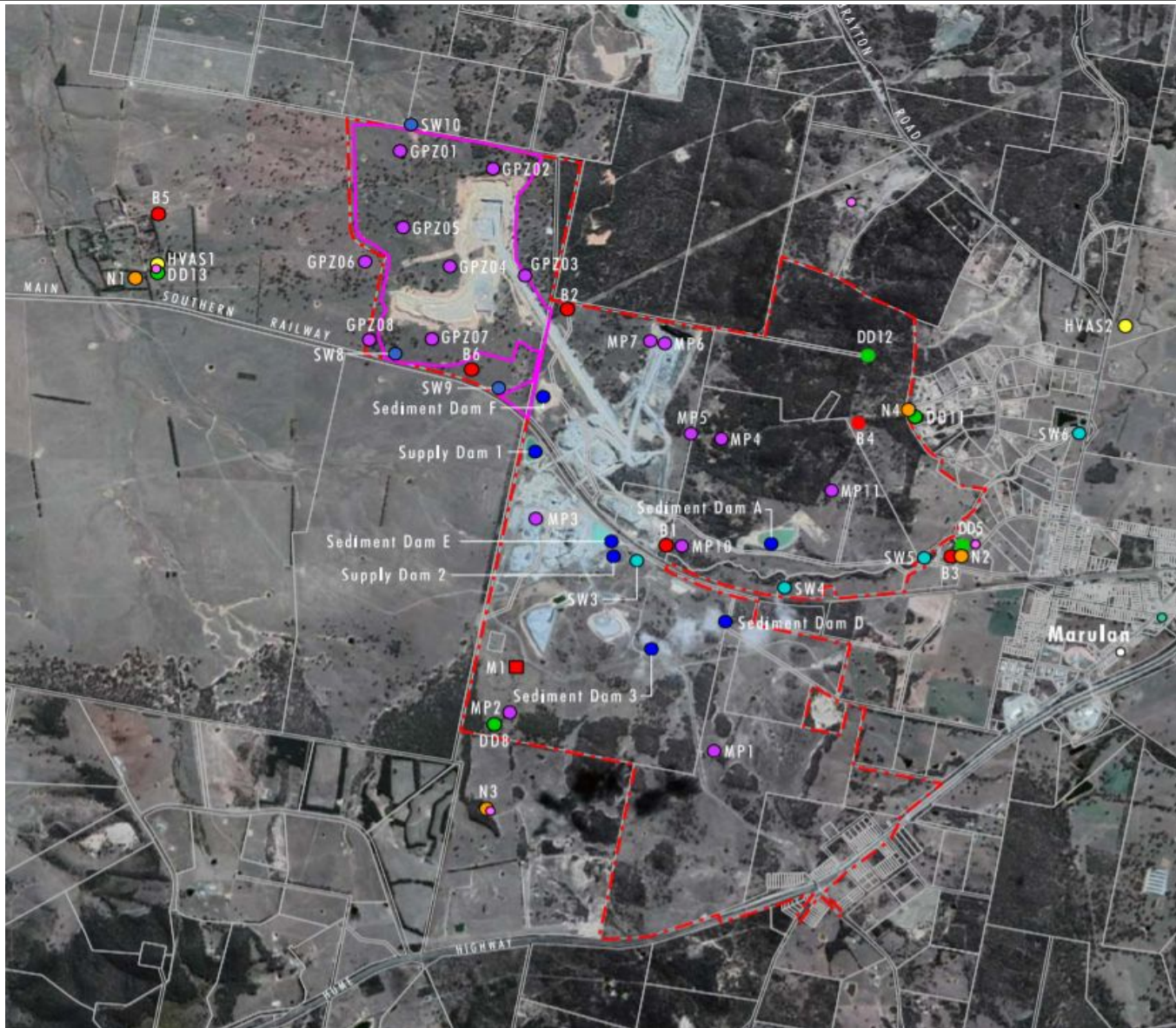
Compliance

- Blasting - Compliant
- Dust Deposition - Complaint
- PM10 - Compliant
- Noise - Compliant
- Ground Water - Compliant
- Surface Water - Compliant

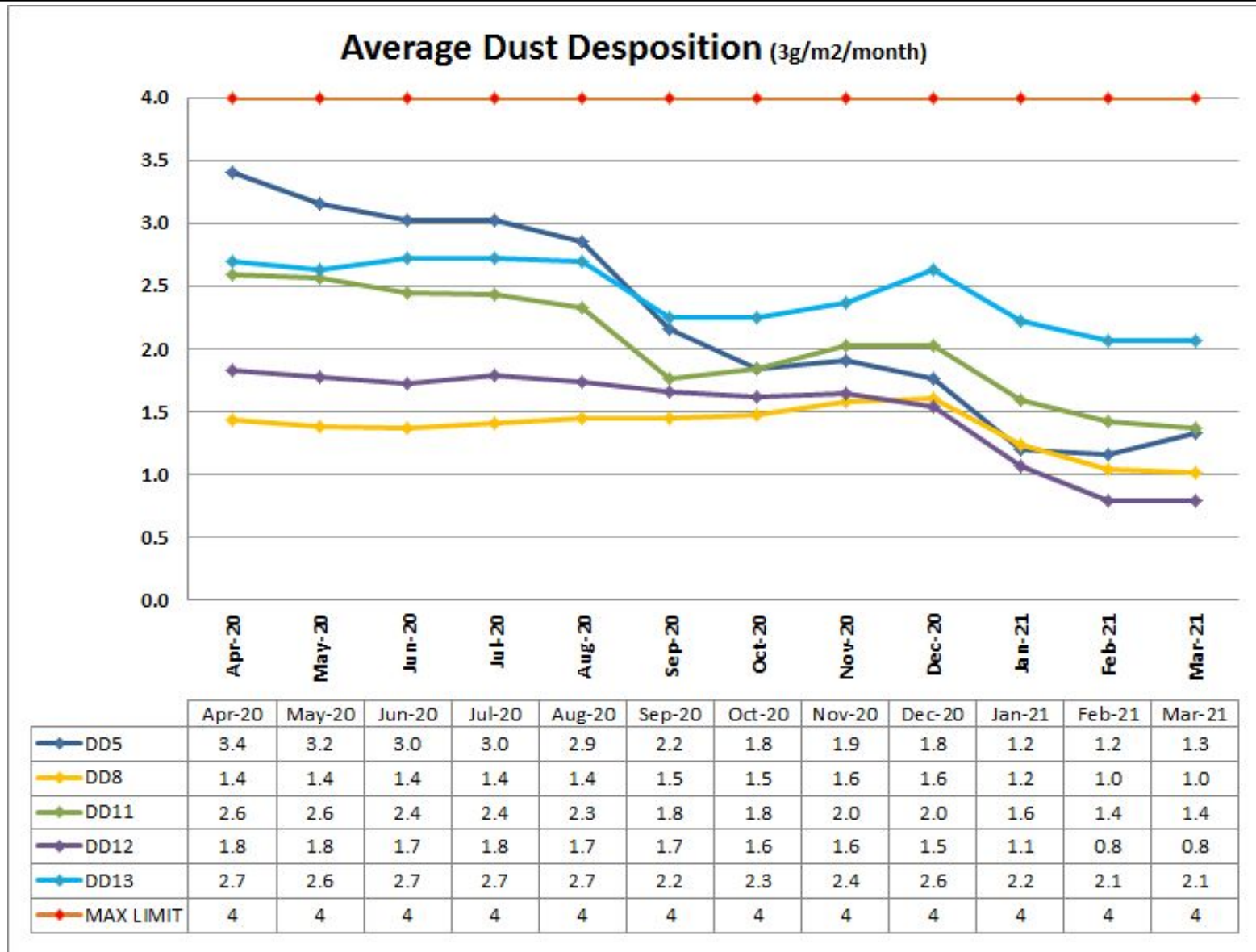
- Upgrade to the Hi-Volume samplers progressing - 1 of 2 now commissioned



Map of Dust Monitor Locations



Depositional Dust Monitoring Results



4. Environmental Update cont.

Environmental Audits

- Independent Environmental Audit report released in December 2020 - now available on the Lynwood Quarry website.
 - From 500 consent conditions audited, only 11 were non-compliant. This is a reduction from non-compliant 24 items in the 2018 audit.

- The Annual Aboriginal Heritage Site Audit was undertaken in November 2020.
 - No impacts from quarrying activities identified
 - Ground cover increase limited visibility of artefacts
 - 19 sites and 5 pads were audited with 16 sites and 3 pads found fully compliant
 - Increase in compliance from previous years audits

4. Environmental Update cont.

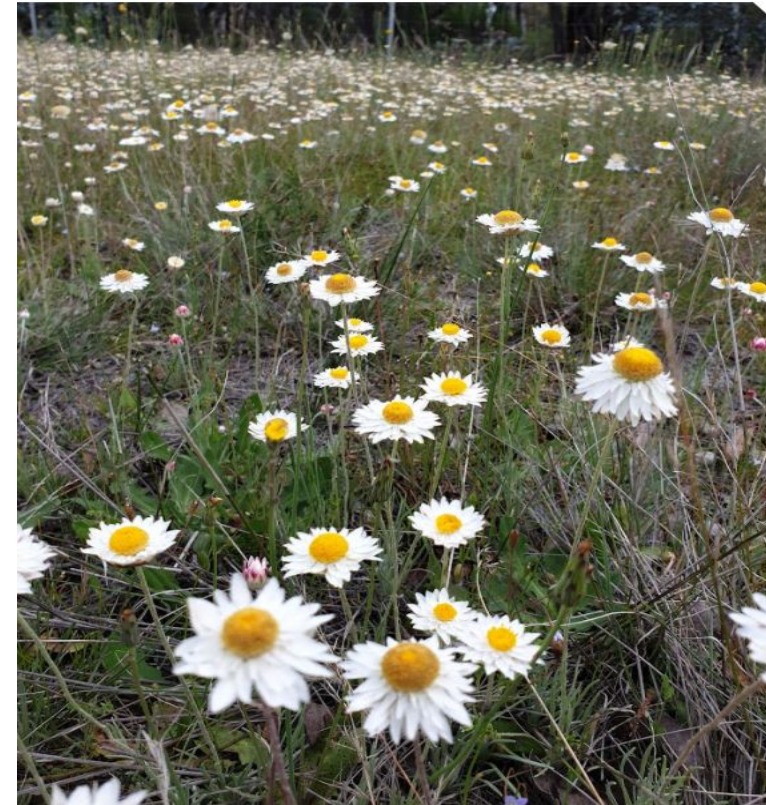
Management Plans

- Minimal updates made to the Water Management Plan and Air Quality Management Plans with submission to DPIE in 2020. These have now approved and available on the Lynwood Quarry website.

- Management Plans recently reviewed, with submission to the DPIE for review by end of May:
 - Marulan Creek Riparian Management Plan
 - Lockyersleigh Creek Riparian Management Plan
 - Joarimin Creek Riparian Management Plan
 - Box Gum Woodland Management Plan

4. Environmental Update cont.

- The Aboriginal Heritage Management Plan is about to commence a review. Key changes to include:
 - Updated heritage site compliance
 - Removal of inclusion of two previously registered Aboriginal parties who have formally removed their interest
 - Update to monitoring timing for some site that are now compliant. They will be monitored during the triennial monitoring rather than annually. This has been approved by the Aboriginal Heritage Management Committee

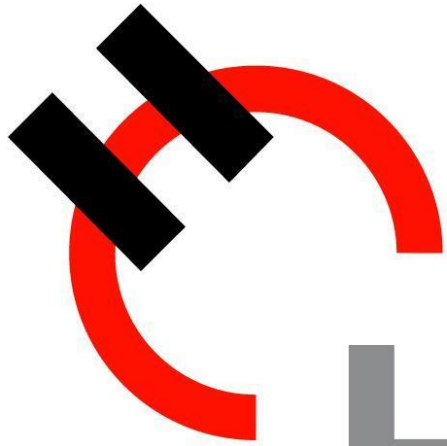


Hoary Sunray (*Leucochrysum albicans* var. *tricolor*) Endangered

Next 6 months

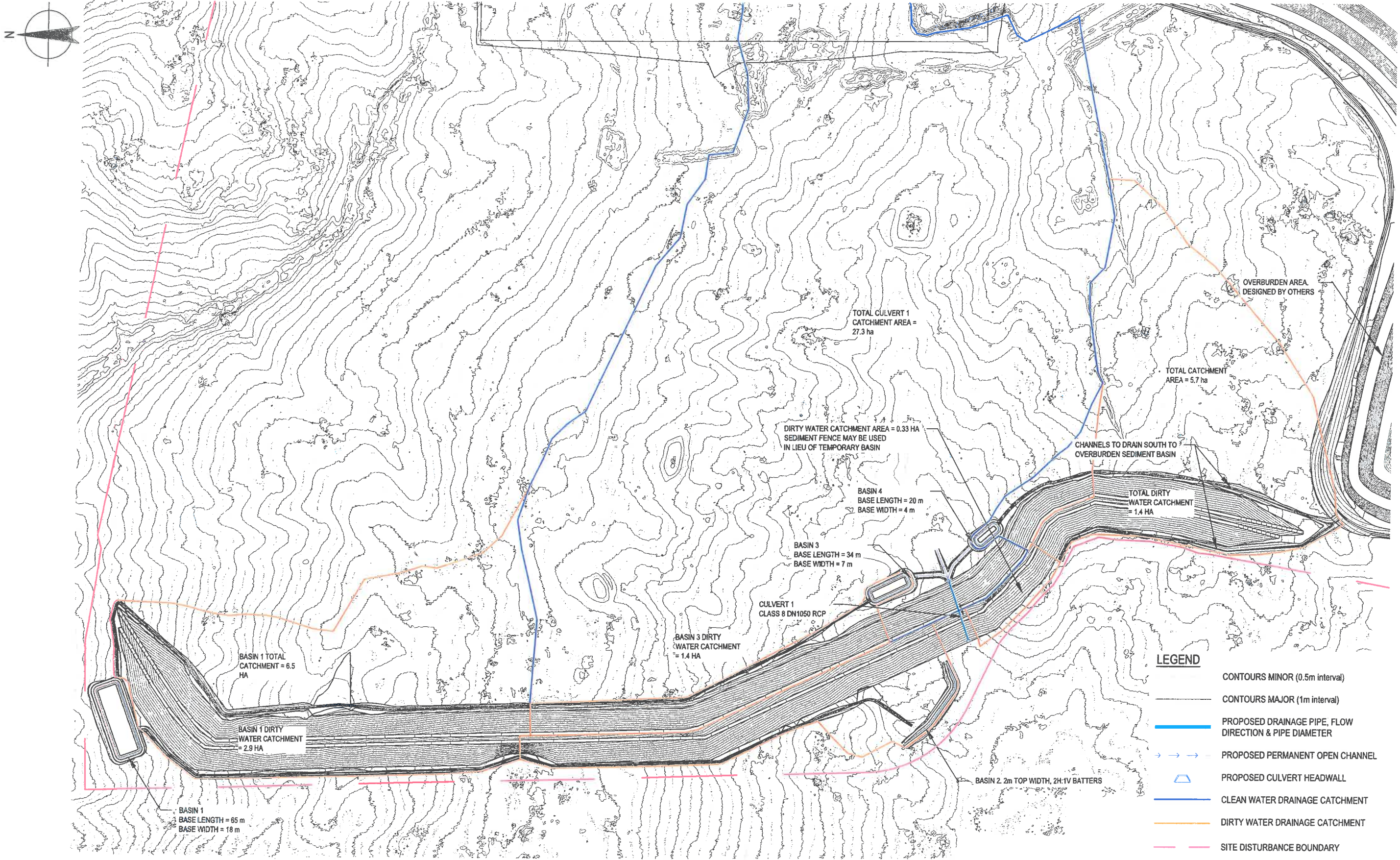
- Ongoing dust improvement trails
- Management Plan reviews - submission to DPIE
- Granite pit works - Ongoing Amenity bund work
- Annual Aboriginal Heritage Site Monitoring November
- Upgrade the second Hi-Vol unit to a BAM unit
- Preparation for Summer weather - review bushfire plans and water storage for excessive rain events
- The “Keeping Place” project progression
- Marulan town sign - DA submission





Holcim

B Amenity bund construction plan



DIAL BEFORE YOU DIG
UTILITY INFORMATION SHOWN ON THESE PLANS DOES NOT DEPICT ANY SERVICE TO-AV THE PRESENCE OF A SERVICE, BASED ON AVAILABLE DOCUMENTARY EVIDENCE, THE PRESENCE OF A UTILITY SERVICE, ITS SIZE AND LOCATION SHOULD BE CONFIRMED BY FIELD INSPECTION, PRIOR TO THE COMMENCEMENT OF ROADWORKS AND THE RELEVANT UTILITY PLANS OBTAINED BY DIALING DIAL BEFORE YOU DIG "100". CAUTION SHOULD BE EXERCISED WHEN WORKING IN THE VICINITY OF ALL UTILITY SERVICES.

NOTE: AMENITY BUND DESIGN HAS BEEN PROVIDED BY HOLCIM



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Drafting Check	G.JONES	Design Check	M.DOWNES
Approved (Project Director)	R.FROST		
Date	19/01/2019		
Scale	1 : 3500		

Client **HOLCIM PTY LTD**
Project **LYNWOOD QUARRY - DRAINAGE AND ERSED**
Title **DRAINAGE CATCHMENTS PLAN**

Original Size **A3** Drawing No: **23-16237-C004**

Rev: 0

0	ISSUED FOR CONSTRUCTION	RK	A.R.	R.F.	19/01/19	
No	Revision	Note: * indicates signatures on original issue of drawing or last revision: of drawing	Drawn	Job Manager	Project Director	Date

C Amenity bund vegetation information

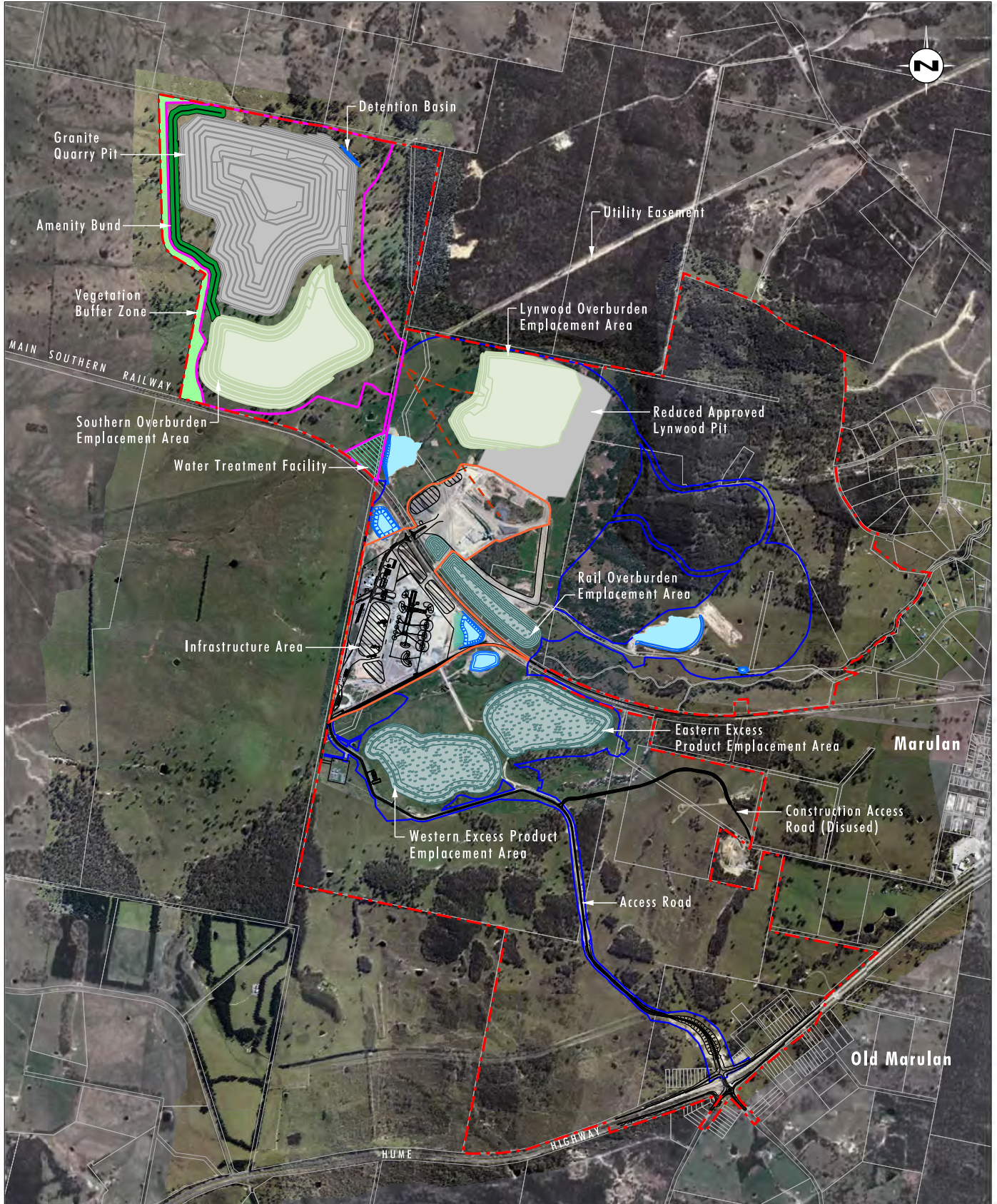


Image Source: Google Earth (2012), Holcim (2012, 2014)
 Data Source: LPI (2014), Holcim Australia (2015)

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Legend

- | | | |
|-----------------------------------|------------------------|-----------------------------|
| Approved Project Area | Emplacement Area | Water Treatment Facility |
| Lynwood Infrastructure Area | Dam | Overburden Emplacement Area |
| Approved Disturbance Footprint | Vegetation Buffer Zone | Amenity Bund |
| Granite Pit Disturbance Footprint | Amenity Bund | Haul Road |
| Lynwood Infrastructure Layout | | |
| Quarry Pit | | |

FIGURE 3.3

**Extraction Area Modification Project
 Conceptual Stage 6 (Life of Project)**

The progressive rehabilitation of the emplacement areas is shown on **Figures 3.1 to 3.3** with the conceptual final Year 30 rehabilitation progress shown on **Figure 3.4**. The conceptual final land use for the majority of the Lynwood Quarry is to provide areas of native vegetation and native fauna habitat. The rehabilitated area will be suitable for managed low intensity grazing; however, the area will be managed predominantly for its habitat values, particularly the area north of the Main Southern Railway.

The quarry pit itself will be rehabilitated through the establishment of trees on the final quarry benches. Rehabilitation of the Ignimbrite Pit will also be progressed, with each of the benches treated and seeded with native trees as discussed in **Section 3.2.2**.

3.3.2 Emplacement Area and Amenity Bund Rehabilitation

Overburden and Excess Product Emplacement Areas

Once bulk dumping and reshaping has occurred, the surface of the all overburden and excess product emplacement areas will be shaped to allow for rehabilitation.

As a priority, recently stripped topsoil will be used and the areas will be seeded with native species listed in **Appendix 2** to achieve a woodland/open forest vegetation community. The excess product emplacement areas to the south of the Main Southern Railway are expected to be seeded with species from the Tableland Low Woodland vegetation community while the overburden emplacement areas to the north of the Main Southern Railway are expected to be seeded with a mixture of Tableland Grassy Box-Gum Woodland and Western Tablelands Dry Forest vegetation communities (refer to **Appendix 2**). Locally sourced seed will be used wherever practicable for rehabilitation works.

The overburden emplacement areas will typically be constructed in 2 m lifts by emplacement of material by truck and spreading and track rolling by dozer. A 5 to 10 m high outer shell will be maintained on the western, southern and northern edge of the Southern Overburden Emplacement Area during its construction to reduce potential noise impacts and to reduce the duration of visibility of working equipment as the dump nears its maximum height.

The completion of timely rehabilitation, particularly on the western face of the amenity bund, and the western, southern and northern faces of the southern overburden emplacement area are a key part of the visual impact mitigation strategy. The face of each 'lift' of the southern overburden emplacement area will be constructed and then rehabilitated as the first priority. This will allow rehabilitation to progress whilst the remainder of that lift is being emplaced (refer to **Figure 1.1**). This will also reduce the total extent of disturbed area and the visual impact of the quarry operations.

Rehabilitation of the Southern Overburden Emplacement Area is provided conceptually on **Figure 3.4**. Rehabilitation of this area will aim to establish PCT1330 Yellow Box – Blakely's Red gum grassy woodland on the tablelands, South Eastern Bioregion which aligns with a plant community type (PCT) that occurs naturally in the locality. The species mix that will be considered as part of this conceptual rehabilitation approach will aim to include the characteristic species outlined for PCT1330 in OEH's Vegetation Information System (VIS) (OEH 2018). If a Year 30 closure occurs, the remaining sections of emplacement areas not yet rehabilitated will be revegetated. Vegetated corridors will be established to connect these areas to rehabilitated infrastructure areas and surrounding remnant vegetation. Native woodland vegetation with a primarily native grass groundcover will be established on the rehabilitated emplacement areas and decommissioned infrastructure areas.

Amenity Bund

Adjacent to the western boundary and along the northern boundary of the granite pit a 12 m high amenity bund will be constructed (see **Figure 1.1**). The northern section will terminate before it intersects with the tributary flowing from the northern extent of Lynwood Quarry. At spot locations the bund may be extended to 14 m in height if required.

Rehabilitation of the amenity bund is provided conceptually on **Figure 3.4**. Rehabilitation of this area will aim to establish PCT1330 Yellow Box – Blakely’s Red gum grassy woodland on the tablelands, South Eastern Bioregion which aligns with a plant community type (PCT) that occurs naturally in the locality. The species mix that will be considered as part of this conceptual rehabilitation approach will aim to include the characteristic species outlined for PCT1330 in OEH’s Vegetation Information System (VIS) (OEH 2018).

Species selection will ensure a thick, evergreen, robust screen can be achieved. These species have been identified and are included in **Appendix 3**. All bund vegetation will be appropriately maintained, watered, fertilized and where required, replaced or replanted from time to time to ensure the objective of the bund and vegetation is achieved.

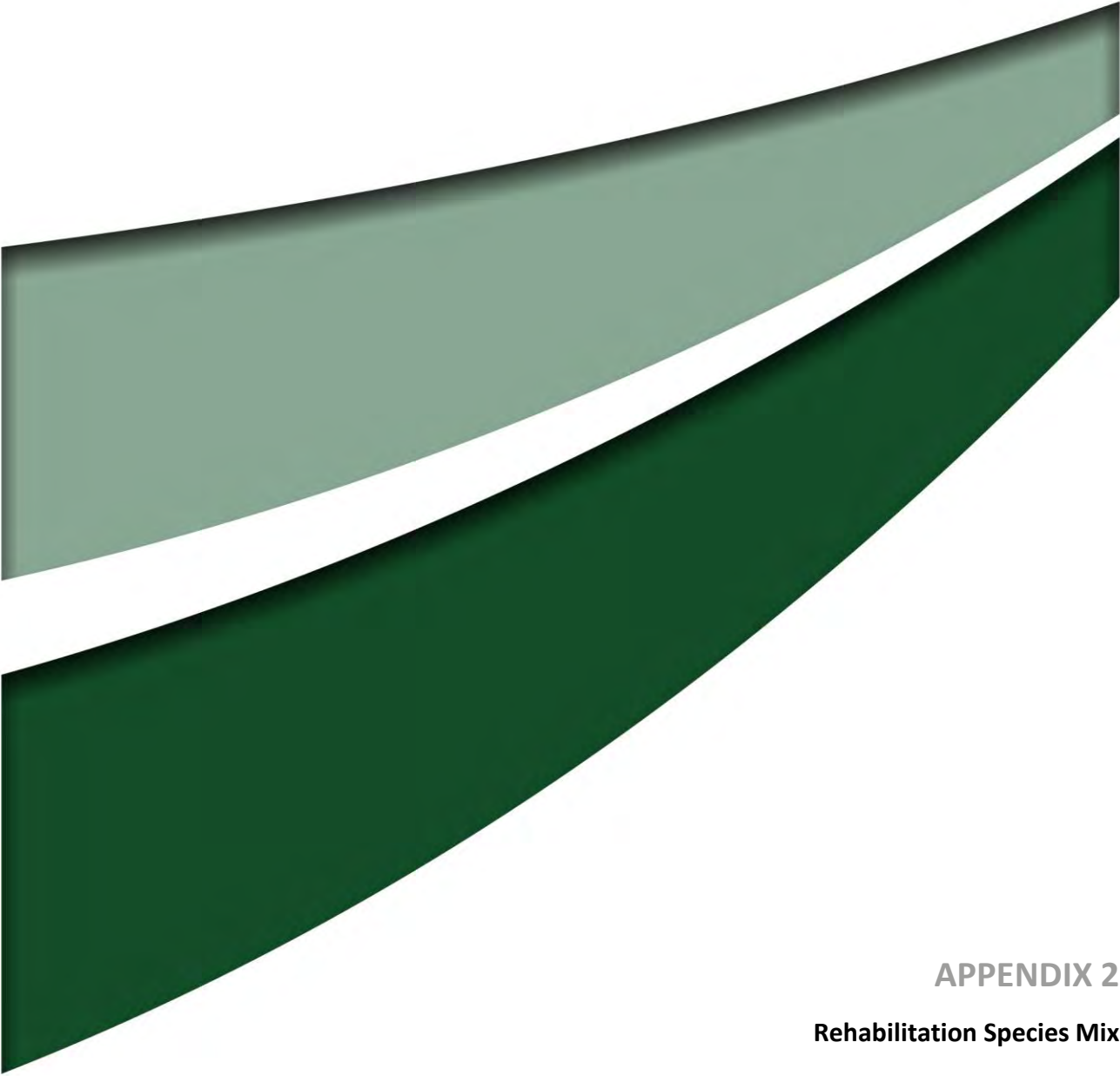
3.3.3 Topsoil Management

Topsoil will be stripped in all areas to be disturbed for infrastructure and quarry activities. Topsoil stripping will be managed to ensure maximum recovery of topsoil, protect its quality and enhance rehabilitation outcomes. Where possible, as the granite pit development occurs, topsoil will be in demand for the amenity bund, ignimbrite and Southern Overburden Emplacement Area. It is intended that works will be coordinated to ensure stripping will coincide directly with topsoil emplacement in these areas. This will reduce the deterioration of the topsoil by reducing movement. Quick successive and progressive rehabilitation will be a part of the works program.

Initial topsoil derived from the first stages of granite pit and haul road development will need to be stored for a period of time as rehabilitation activities will have not yet begun.

All topsoil stockpiles will be shaped and grassed immediately, have a 3:1 slope and be no taller than 3 m. All stockpiles will be signposted to ensure they are clearly identified. All topsoil managed through windrows, shaped areas and haul roads will be grassed within 6 weeks of being established. Across all topsoil areas noxious weeds will be managed. Appropriate erosion controls will be installed at the base of stockpiles to prevent sedimentation issues in the receiving environment. Erosion controls may include construction of earthen banks upslope of stockpiles to divert water around the stockpile and the utilisation of sediment fencing down slope of the stockpile. Temporary stockpiles can be protected from erosion via the use of geofabric with longer term stockpiles to be revegetated with a cover crop.

A topsoil stripping plan will be implemented for each individual package of construction works for the site. Following stripping of topsoil, soil characterisation will take place to determine the topsoils suitability for its use in rehabilitation. To enable topsoil to be utilised within rehabilitation works, Holcim may import local topsoil or a topsoil alternative to assist with the rehabilitation at Lynwood Quarry. Thorough soil testing in accordance with legislative requirements will be undertaken prior to any foreign soil material being imported to site. In addition, a weed free certificate will be provided.



APPENDIX 2

Rehabilitation Species Mix

Family/Subfamily	Scientific Name	Common Name	Tableland Grassy Box-Gum Woodland	Tableland Low Woodland	Western Tablelands Dry Forest	Riparian Gum-Box-Apple Woodland	Camden Woollybutt Low Open Woodland
JUNCEAE	<i>Juncus usitatus</i>	a rush				X	
LOMANDRACEAE	<i>Lomandra longifolia</i>	spiny-headed mat-rush				X	
LOMANDRACEAE	<i>Lomandra obliqua</i>	twisted mat-rush	X				
POACEAE	<i>Aristida ramosa</i>	wire grass	X	X	X	X	X
POACEAE	<i>Austrodanthonia laevis (syn. Danthonia laevis)</i>	a wallaby grass	X	X	X	X	X
POACEAE	<i>Austrodanthonia racemosa var. racemosa (syn. Danthonia racemosa var. racemosa)</i>	white top	X	X	X	X	X
POACEAE	<i>Austrodanthonia tenuior (syn. Danthonia tenuior)</i>	a wallaby grass	X	X	X	X	X
POACEAE	<i>Austrostipa scabra subsp. falcata (syn. Stipa scabra ssp. falcata)</i>	speargrass	X	X	X	X	X
POACEAE	<i>Austrostipa scabra subsp. scabra (syn. Stipa scabra ssp. Scabra)</i>	corkscrew grass	X	X	X	X	X
POACEAE	<i>Cynodon dactylon</i>	couch	X	X	X	X	X
POACEAE	<i>Dichelachne micrantha</i>	shorthair plumegrass	X	X	X	X	X
POACEAE	<i>Echinopogon caespitosus var. caespitosus</i>	tufted hedgehog grass	X	X	X	X	X
POACEAE	<i>Elymus scaber</i>	wheatgrass	X	X	X	X	X
POACEAE	<i>Entolasia marginata</i>	bordered panic		X			
POACEAE	<i>Eragrostis brownii</i>	Brown's lovegrass	X	X	X	X	X
POACEAE	<i>Microlaena stipoides var. stipoides</i>	weeping grass	X	X	X	X	X
POACEAE	<i>Poa sieberiana</i>	snow grass	X	X	X	X	X
POACEAE	<i>Themeda australis</i>	kangaroo grass	X	X	X	X	X
XANTHORRHOEACEAE	<i>Xanthorrhoea glauca subsp. angustifolia</i>			X			
Magnoliopsida (Flowering Plants) – Magnoliidae (Dicots)							

Family/Subfamily	Scientific Name	Common Name	Tableland Grassy Box-Gum Woodland	Tableland Low Woodland	Western Tablelands Dry Forest	Riparian Gum-Box-Apple Woodland	Camden Woolly-butt Low Open Woodland
ASTERACEAE	<i>Olearia viscidula</i>	wallaby weed	X	X	X		
CASUARINACEAE	<i>Allocasuarina littoralis</i>	black sheoak	X	X	X		
CHENOPODIACEAE	<i>Einadia trigonos</i>	fishweed	X	X	X	X	X
DILLENACEAE	<i>Hibbertia obtusifolia</i> complex	hoary guinea flower	X	X	X		
EPACRIDACEAE	<i>Leucopogon muticus</i>	blunt beard-heath	X	X	X		
EPACRIDACEAE	<i>Lissanthe strigosa</i>	peach heath	X	X	X		
EPACRIDACEAE	<i>Melichrus erubescens</i>	ruby urn heath	X	X	X		
EUPHORBIACEAE	<i>Phyllanthus virgatus</i>	a spurge	X	X	X	X	X
FABACEAE - FABOIDEAE	<i>Hardenbergia violacea</i>	false sarsaparilla	X	X	X	X	X
FABACEAE - MIMOSOIDEAE	<i>Acacia brownii</i>	prickly Moses	X	X	X	X	X
FABACEAE - MIMOSOIDEAE	<i>Acacia decurrens</i>	black wattle	X	X	X	X	X
FABACEAE - MIMOSOIDEAE	<i>Acacia dealbata</i>	Silver / blue wattle	X	X	X	X	X
FABACEAE - MIMOSOIDEAE	<i>Acacia mearnsii</i>	black wattle	X	X	X	X	X
FABACEAE - MIMOSOIDEAE	<i>Acacia obtusata</i>			X			
FABACEAE - MIMOSOIDEAE	<i>Acacia stricta</i>	straight wattle			X		
GERANIACEAE	<i>Geranium solanderi</i> var. <i>solanderi</i>	native geranium	X	X	X	X	X
GOODENIACEAE	<i>Goodenia hederacea</i> subsp. <i>hederacea</i>	ivy goodenia	X	X	X	X	X
MYRTACEAE	<i>Eucalyptus agglomerata</i>	blue-leaved stringybark	X	X	X	X	
MYRTACEAE	<i>Eucalyptus amplifolia</i> subsp. <i>amplifolia</i>	cabbage gum				X	
MYRTACEAE	<i>Eucalyptus blakelyi</i>	Blakely's red gum	X				

Family/Subfamily	Scientific Name	Common Name	Tableland Grassy Box-Gum Woodland	Tableland Low Woodland	Western Tablelands Dry Forest	Riparian Gum-Box-Apple Woodland	Camden Woollybutt Low Open Woodland
MYRTACEAE	<i>Eucalyptus bridgesiana</i>	apple box				X	
MYRTACEAE	<i>Eucalyptus cinerea</i>	Argyle apple		X		X	
MYRTACEAE	<i>Eucalyptus dives</i>	broad-leaved peppermint					X
MYRTACEAE	<i>Eucalyptus eugenioides</i>	thin-leaved stringybark			X		
MYRTACEAE	<i>Eucalyptus globoidea - eugenioides</i>				X		
MYRTACEAE	<i>Eucalyptus goniacalyx</i>	bundy	X	X	X		
MYRTACEAE	<i>Eucalyptus macarthurii</i>	Camden woollybutt					X
MYRTACEAE	<i>Eucalyptus macrorhyncha</i>	red stringybark	X	X	X	X	X
MYRTACEAE	<i>Eucalyptus mannifera</i> subsp. <i>mannifera</i>	brittle gum		X			
MYRTACEAE	<i>Eucalyptus melliodora</i>	yellow box	X			X	
MYRTACEAE	<i>Eucalyptus moluccana</i>	grey box				X	
MYRTACEAE	<i>Eucalyptus ovata</i>	swamp gum				X	
MYRTACEAE	<i>Eucalyptus radiata</i>	narrow-leaved peppermint				X	
MYRTACEAE	<i>Eucalyptus rossii</i>	inland scribbly gum				X	
MYRTACEAE	<i>Kunzea parvifolia</i>		X	X	X		
MYRTACEAE	<i>Leptospermum polygalifolium</i>	yellow tea tree				X	
MYRTACEAE	<i>Leptospermum trinervium</i>	flaky-barked tea tree	X	X	X	X	
PITTOSPORACEAE	<i>Bursaria spinosa</i> subsp. <i>spinosa</i> (syn. <i>B. spinosa</i> var. <i>spinosa</i>)	blackthorn	X	X	X	X	
PROTEACEAE	<i>Persoonia linearis</i>	narrow-leaved geebung	X	X	X		
ROSACEAE	<i>Acaena novae-zelandiae</i>	bidgee-widgee	X	X	X	X	X
SANTALACEAE	<i>Exocarpos cupressiformis</i>	native cherry	X	X	X	X	
SCROPHULARIACEAE	<i>Veronica plebeia</i>	trailing speedwell	X	X	X	X	X



APPENDIX 3

Species to be utilised in Amenity Bund Landscaping

Appendix 3 – Amenity bund rehabilitation species list

Family/Subfamily	Scientific Name	Common Name
Myrtaceae	<i>Eucalyptus melliodora</i>	Yellow Box
Myrtaceae	<i>Eucalyptus bridgesiana</i>	Apple Box
Myrtaceae	<i>Eucalyptus blakelyi</i>	Blakely's Red Gum
Myrtaceae	<i>Eucalyptus dives</i>	Broad-leaved Peppermint
Myrtaceae	<i>Eucalyptus macrorhyncha</i>	Red Stringybark
Myrtaceae	<i>Eucalyptus rubida</i> subsp. <i>rubida</i>	Candlebark
Myrtaceae	<i>Eucalyptus pauciflora</i>	Snow Gum
Myrtaceae	<i>Eucalyptus mannifera</i>	Brittle Gum
Myrtaceae	<i>Eucalyptus viminalis</i>	Ribbon Gum, Manna Gum
Ericaceae	<i>Lissanthe strigosa</i>	Peach Heath
Ericaceae	<i>Melichrus urceolatus</i>	Um-Heath
Haloragaceae	<i>Gonocarpus tetragynus</i>	N/A
Goodeniaceae	<i>Goodenia hederacea</i>	forest goodenia, ivy goodenia
Araliaceae	<i>Hydrocotyle laxiflora</i>	Stinking Pennywort
Lomandraceae	<i>Lomandra filiformis</i> subsp. <i>coriacea</i>	N/A
Poaceae	<i>Microlaena stipoides</i> var. <i>stipoides</i>	Weeping grass
Poaceae	<i>Themeda australis</i>	Kangaroo Grass
Poaceae	<i>Bothriochloa macra</i>	Red Grass, Red-leg Grass

D Letter of Holcim's commitments



October 30, 2015

Dear Towrang Community Members,

Holcim Australia Pty Ltd (Holcim) operates the Lynwood Quarry. Holcim is proposing to modify the Lynwood development consent through Modification 4 and open a new granite pit on Holcim owned land. The granite pit will replace the ignimbrite material currently being extracted. The granite material is better suited to providing consistent aggregate products for the life of the quarry. Throughout the assessment process Holcim has actively engaged with the surrounding communities to present the proposed changes contained in Modification 4 and listened to community feedback and concerns.

In response to concerns raised by members of the Towrang community regarding aspects of the operations at the Lynwood Quarry and potential impacts from the Modification 4, Holcim has developed a set of objectives and commitments which we believe will minimise potential impacts to the Towrang community. Holcim recognize that it is up to Holcim to develop the systems to achieve the objectives

Holcim propose the following;

Proposed Granite Pit

Objectives

Holcim will do everything practicable to ensure operational elements for the proposed granite quarry pit and associated works, including haul roads, trucks, plant and machinery are fully screened from sight from all existing residences in the Towrang Valley and surrounds.

Holcim will do everything practicable to ensure operational elements of the proposed granite quarry pit and associated works, including haul road traffic, plant and machinery do not impact the existing residences in the Towrang Valley and surrounds as far as is practicable in relation to noise, dust and vibration.

It is understood that the building of the bunds, haul roads, and overburden mounds will be visible during construction and maintaining vegetation, however Holcim will undertake these activities in a way to limit the offsite visual, noise and dust impacts.

Holcim's Commitments

Holcim proposes to achieve the objectives through commitments included in our Environmental Assessment and project description lodgment to the State Government.

These commitments include:



- A 12 metre high amenity bund will be constructed adjacent to the western boundary of the proposed granite pit. A 12 metre high amenity bund connecting with the western amenity bund will be constructed adjacent the northern boundary of the proposed granite pit. The northern amenity bund will extend from the western boundary and will terminate before it intersects with the tributary which flows from the northern extent of the project area toward Lockyersleigh Creek. At spot locations the bund may be extended to 14 metres in height if required.
- Holcim will re-vegetate the granite pit eastern overburden bench as soon as practicable.
- Holcim will plant suitable native species to thickly vegetate the western and northern faces of the amenity bunds to grow to a height of 2-3 metres above the bund height.
- Holcim will engage a suitably qualified botanist/horticulturalist to ensure appropriate plants are chosen to ensure a thick, evergreen, robust screen can be achieved.
- In addition to the amenity bund, where required, Holcim propose to use semi-permanent visual screens to shield the overburden removal activities. The screens will be of sufficient height to obscure vision of mobile plant undertaking top soil and overburden removal activities. The screens will be repositioned as the overburden removal activities progress through the development stages.
- Holcim will construct bunding along the western and southern faces of the haul road to screen vehicle movements leaving the pit and traveling to the established primary crusher. The proposed bunding will be of a height of 5 metres where required to screen vehicle movements, entering and leaving the pit and travelling to and from quarry processing facilities.
- Holcim will ensure that noise escaping from the granite pit operation will be minimised as far as practicable and will undertake noise attenuation measures as required, including, if necessary, the use of rubberised liners in the truck bodies.
- All crushing of material from the granite pit will be conducted at the existing crushing facilities. Holcim will only use machinery required to undertake extraction as per our development conditions, including drilling, blasting, loading, hauling, dust suppression, overburden removal and activities related to these operations.
- Overburden will only be removed during daylight hours.



Required Maintenance:

- Holcim will ensure that the amenity bund is properly maintained to ensure its efficacy for the duration of the quarry license.
- Holcim will ensure all bund vegetation is appropriately maintained, watered, fertilized and where required replaced or replanted from time to time to ensure the objective of the bund and vegetation is continually achieved.
- When from time to time during the quarry license period improved technical innovations emerge that would deliver an improved outcome to the above objective Holcim will promptly adopt those innovations where practicable.
- Trucks will be maintained to ensure noise reduction measures do not diminish over time.

Off Site Lighting Impacts

Objective

Holcim will do everything practicable to prevent and or minimise any off site lighting impacts from the Lynwood Quarry to all existing residences in the the Towrang Valley and surrounds.

Holcim's Commitments

- Holcim will build a light proof fence with a minimum height of 9 metres along the full length of the western boundary of the car park access road and car park, shielding from view all road lighting and car park lighting fittings.
- Holcim will reduce the height of all light fittings used to illuminate the car park access road and car park to a height no greater than 8.5 metres above ground level. Holcim will cut off the surplus length of all light poles along the car park access road and in the car park just above the light fittings at 8.5 metres and ensure the light fitting cannot be moved to a greater height.
- All conveyor lights above the lighting screens are to be by default turned off and only illuminate when required maintenance or repair. When such maintenance or repair has been completed the conveyor lights will be turned off again.
- All conveyor lights above the lighting screen will be fitted with appropriate screens or light shades to reduce as far as is practicable any off site lighting impacts
- Holcim has committed to re-examine the Webb lighting report and to review the lights on the upper sections of the conveyor system. If additional screening is possible and practicable Holcim will modify accordingly.



- The list of recommendations made by Webb, presented and discussed at meeting 24 April 2015, includes a number of activities including adjusting light angles, reducing some 400w luminaires with 150w luminaires etc. Holcim will update the list of adjustments and attached to the Statement of Commitments with agreement that these light reduction modifications not be diminished or reduced, but they can be, by agreement, improved upon when the opportunity arises.

Maintenance:

- Holcim will maintain and repair when necessary the light proof fence so that for the duration of the licence period, and during any renewed licence period, the fence will achieve the stated objective.
- Holcim will ensure that at no time light fittings are mounted at a height greater than that of the light proof fence, with the exception of the current conveyor lights which exist above the lighting screen. Holcim have committed to installing switches controlling the upper half of the conveyor lights which exist above the lighting screens. Holcim commit to only using the lights to undertake emergency maintenance at night time as required.
- When from time to time during the quarry license period improved technical innovations emerge that would deliver an improved outcome to the above objective Holcim will promptly adopt those innovations where practicable.

I believe the objectives Holcim are committing to will be achieved by the means we are proposing.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'MGC' followed by a stylized name.