

## **ATTACHMENTS**

## **ORDINARY MEETING AGENDA**

THURSDAY, 25 MARCH 2021

## ~ REFERENCE TO ATTACHMENTS ~

Action/Information	<u>Page Number</u>
Clause 3 – Notice of Motion	55
Clause 5 – Meeting Minutes	56-62
Clause 10 - Rates Reconciliation Report as at 28 February 2021	63-64
Clause 15 - Expenditure for Roads Network	65-71
Clause 17 – Preliminary Regional Issues Assessment – Western Gas	72-77
Clause 18 – Cobar Landfill Operations	78-127

## Cobar Economic Resiliency Project

At the time of preparing this report Cobar is facing a Wicked problem. A wicked problem is a social or cultural problem that's difficult or impossible to solve—normally because of its complex and interconnected nature.<sup>1</sup> This study aims to unravel the complex issues facing Cobar and to provide a pathway to resolving those issues. This will be a challenging process and it will take the collective effort of Cobar Shire Council, the business community, Schools and the mining operators to embrace these strategies and implement them.

The evidence is clear that the change to a 7 day/12-hour roster has had an impact on the residents and the social make up of Cobar. The change in roster allowed the opportunity for workers to Fly In and Fly Out or Drive In and Drive out of Cobar for work. This also expanded the reach of the mines to employ staff that were not residents. Consulting with mine Managers indicated that they have a definite preference to have their workforce living in town. It was also clear from the FIFO/DIDO survey that many believe that Cobar wouldn't be able to support their family's needs. They cited things like lack of services, lack of employment opportunities for their spouses, and the education quality as reasons Cobar couldn't meet their needs.

However, the FIFO/DIDO work arrangement will not change and Cobar Shire Council and the Cobar community need to realise this fact and embrace it if the town is to survive and thrive.

Two rounds of consultations and the survey highlighted the lack of services. This included healthcare, childcare, and water security as the headline "liveability" issues facing Cobar.

Schools appear to be a pinch point with a lot of families in the region. In particular there were many comments during our consultation about Cobar High School. We heard on a number of occasions that parents made choices to leave Cobar at the end of year 6 to take their child to a different High School with better educational outcomes and more choice of subjects.

The business community revealed to us that the relationship they had with Council was very poor. They were not aware of any economic development or support that Council offered and that often it was impossible to do business in Cobar. Council has a significant role to play in the overall success of Cobar. In many other regional and rural towns of similar size, investments have been made in Economic Development and working with the business community to help the towns prosper.

Six Strategies have been developed for Cobar and they link directly to the opportunities that have been identified in this research and aims to address some key regional risks. It is assumed that all participants in the consultations will be a party in some way to the outcome of each strategy. Principally Cobar Shire Council will be responsible for the implementation and coordination of the Strategies. The Strategies are:

STRATEGY ONE – CREATE A THRIVING AND ENGAGED COMMUNITY STRATEGY TWO – RETAIN THE 10-YEAR-OLD CHILD STRATEGY THREE – EMBRACE FIFO AND DIDO WORKERS STRATEGY FOUR – SECURE THE REGIONS WATER RELIABILITY STRATEGY FIVE – GROW REGIONAL TOURISM STRATEGY SIX - SUPPORT COBAR'S BUSINESS COMMUNITY

55

Interaction Design Foundation

# MINUTES OF THE RURAL ROADS ADVISORY COMMITTEE MEETING HELD AT MOUNT HOPE COMMUNITY HALL ON TUESDAY 09 FEBRUARY 2021 COMMENCING AT 11.10AM

### PRESENT

Cr Peter Abott (Cobar Shire Council), Cr Julie Payne (Cobar Shire Council), Cr Peter Maxwell (Cobar Shire Council), George Millear, Scott Casey (Director of Infrastructure Services, Cobar Shire Council) Kane Kreeck (Road Works Manager, Cobar Shire Council), Kelly Buerckner (Cobar Shire Council)

## **APOLOGIES**

Cr Bob Sinclair (Cobar Shire Council), Adrian Milne, Adrian Hudson, Pauline & Barry Oliver, Joanna & Caleb Deadman, Bonnie Vagg, Andrew Bryant, Ian Fraser, Andrew Paul, Justin McClure.

**RECOMMENDATION:** That the apologies received be accepted.

Peter Maxwell/Julie Payne

CARRIED

#### ITEM 1 – CONFIRMATION OF MINUTES

**FILE: R5-36** 

Author: Director of Infrastructure Services, Scott Casey

**Business Arising from Previous Minutes** 

Stock truck wash needs funding to proceed.

RECOMMENDATION: That the Committee adopt the Minutes of the Rural Roads Advisory Committee Meeting held on 26 November 2020 as a true and accurate reflection of the proceedings of that Meeting.

Peter Maxwell/Julie Payne

CARRIED

## ITEM 2 – RURAL ROADS ADVISORY COMMITTEE – STATUS REPORT

FILE: R5-36

AUTHOR: Director of Infrastructure Services, Scott Casey

#### Item 78

- Tipping Way bend realignment remove grid and test audible alarms on bend.
- Peter Maxwell follow up with Smalls property owner regarding grid removal
- Need to select 2 test sites and commence trials of audible alarms.
- Potential to invest funds to culverts if audible alarms prove successful and grids can be replaced.
- Run trial then replace grids that require, move slowly don't rush to remove all single grids.
- Technology is constantly improving avoid installing new steel grids.
- Weld solar panel to sensor and create one unit.

RECOMMENDATION: That the Committee receive and note the information contained in the Status Report.

Peter Abott/George Millear

CARRIED

### ITEM 3 - EXPENDITURE REPORT

**FILE: R5-36** 

AUTHOR: Director of Infrastructure Services, Scott Casev

- R2R unallocated funds freshen up Euabalong & Nymagee town streets
- MR407 work has commenced
- Pullpulla work will commence next week, possible deferred due to REF, bring in contractor to assist.
- Funds transferred from SR31Moolah Rd to SR13 Bedooba Rd due to road condition
- Lachlan Shire council considering sealing lower section of road, seeking support from Cobar Shire council. Would assist with load limit on Booberoi creek bridge.
- No funding available for Booberoi Creek bridge due to not being a timber structure.
- Cart gravel to Louth Rd, 52Mile road, Wool track, SR31 and expend funds by April Regional roads
- Crater in SR 32, Andrew Paul reported needs remediation works.
- Shire roads possible reseals to spend funds
- SR20 Grain road ramps removed, and refill sections are savage in trucks with raised bumps.
- Flood damage money all expended.

**RECOMMENDATION:** That the Committee receive and note the information contained in the Expenditure Report.

Julie Payne/George Millear

CARRIED

## ITEM 4 – GENERAL BUSINESS

## Email from George Millear -

- Signage for Acres Billabong to warn of dip for non-regular users of road. Chris Starr has ordered signs and awaiting installation.
- Chris Starr commenced with Roads department during light duties.
- Cobar signs need replacing on Bourke Rd into Cobar.
- FVMS installed on highways to warn of unsealed roads in network, investigate funding options
- Closing of roads during wet weather events, new automated system using text messages from land holders advising of rainfall.

THERE BEING NO FURTHER BUSINESS THE MEETING CLOSED AT 12.35PM

ITEM 2 – RURAL ROADS ADVISORY COMMITTEE – STATUS REPORT

FILE: RS-36

Author: Director of Infrastructure Services, Scott Casey

COMINI	COMMITTEE RESOLUTIONS SAUCUST 2015	
75	Julie McClure has requested that Council investigate any funding comportunities for the upgrade of the Tripa Weir campgrounds.	Julie McClure to provide Economic Development Manager with written plan and community ideas for upgrading of Tilpa Weir. Once Council receives this potential funding can be sought.  No information received from Julie McClure to date.  Ongoing - August 2020
COMINI	COMMITTEE RESOLUTIONS 26 NO VENEBER 2015	
78	Councillor Bob Sinclair has requested that Council approach the Government to obtain funding for the upgrade or removal of grids due to dangerous conditions that they cause road users	Grid audit is complete. Council will seek support from FNWJO to chase funds for grids. Grid Audit will not be publicly released as it is not Councils asset. Landholders are encouraged to contact Council regarding grids. Grids maintenance is the responsibility of the landholder however if a grid is seemed to be unsafe Council will take action to repair or remove.

Council to borrow \$1.25 million in both 2020/2021 and 2021/2022 financial years to invest in grids/culverts.	Grids/culverts will be reassessed, and works will be scheduled and prioritised using a risk assessment-based approach.	Council will have to amend current policy, to be decided at Council Meeting.	Justin McClure requested that there is engagement and consultation with landowners.	Council is trialing use of nonphysical stock barriers, have purchased eight. If trial successful, liability from landowner will cease and will tidy up grid program.	Nonphysical stock barriers are \$800 each with Council to decide who is responsible for payment. Eight barriers will cover two grids. Total of \$3,200 per grid. Barriers to arrive in approximately 3 weeks for trial to commence.
Council to borrow \$1.25 2020/2021 and 2021/2022 to invest in grids/culverts.	Grids/culverts works will be using a risk asse	Council will hav	Justin McClure engagement a landowners.	Council is trialin barriers, have successful, liabi	Nonphysical sto with Council to for payment. Eiggrids. Total of \$ arrive in approxiconmence.

		Currently landowners are responsible for
		maintaining grids; Council to take
		responsibility of these.
		Ongoing – November 2020
COMIN	OMINITERERRESOLUTIONS DE ATUGUESTE 2017	
84	Council, in conjunction with landholders, seal the approaches of DES or declarationals on a program basis.	Recommendation made to Council. Council is waiting on final audit of our
		grids in order to formulate a works
		program. No juriner action required. Mean placed on Council status report. Committee
	是我们,我们就是一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个	has requested item remain on Rural Roads
·		status report.
<b>D.S. D. D. S. S.</b>		Noted – February 2020
COMM	COMMITERIBERRISOIEUHIONS7/HUBBRUKW20118	
06	That it he recommended to Council that it make RR/15188 from DES	Application has been made to RMS for
) \	Acres Billabong to Sand Hills a priority when allocating future	REPAIR program funding to seal this
·	<b>Supunu</b>	section of road. 2018-19 application was
		not successful. Application for 2019-20 was successful. Project schedule to be
***************************************	(2) 大大型、大型、大型、大型、大型、大型、大型、大型、大型、大型、大型、大型、大型、	delivered by end of financial year pending
		on resources.

		Works programmed for this year.
		Justin McClure requested that culverts be checked.
		Ongoing – August 2020
91	An inspection of all culiverts to be carried out and a register created to enable Council to determine priorities and budget for	Current workload has restricted resources available to be allocated to this project.
	the whole shire.	Culverts being completed this financial year.
		Ongoing – August 2020
COMME	<u>GOMIVITEIRIBIRIRISOLIGITUONS 227 NOVIEMIBIRIR 20118</u>	
96	Christ ehmann raised that it has been around twelve months since	Council to follow up and email Rural Roads
-	the additive trial had been undertaken on SR27. He requested that	Advisory Committee.
	a follow up, inspection and companson to complete the trial.	Ongoing - 5 August 2020
**XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		Update – 24 August 2020
		The additive trial as a concept, proved very
	等,就是是一个人,我们就是一个人,我们就是一个人,我们也是一个人,我们也是一个人,我们就是一个人,我们就是一个人,我们也是一个人,我们也不是一个人,我们也不是一个人,我们也不是一个人,我们就是一个人,	successful; but Council are still coming to
••••		terms with the financial impact.
COMME	I COMMITTERERES <u>O IEUTHONS 28 IN OWENTBER 72019</u>	
66	That Council investigate the use of nonphysical stock barriers for	A trial of the non-physical barrier units to
		of califor out. Location of the arm to the

		negotiated with landholder by the
		committee.
	,就是我们的一个人,我们就是我们的一个人,我们就是我们的一个人,我们就是我们的一个人,我们就是我们的一个人,我们就是我们的一个人,我们就是我们的一个人,我们就是我们的一个人,我们就是我们的一个人,我们	To consider incorporating into review of
		grids.
		Ongoing - August 2020
COMME	COMMITTEE RESOLUTIONS SAUGUST 2020	
100	That Council investigate and action raising sections of the Fifty	Council to consider undertaking extra
	Two Wille Road that isolated the Tilpa from the end of February	works of raising road as part of the current
	through to July after rain event	sealing program.
		Noted - August 2020
101	That (Council strongly consider securing funding to strategically)	Council to consider and follow up if
1 ) (	sink bores to be utilised for road works as soon as possible.	funding opportunity becomes available.
10P 803 FL		Noted – August 2020

<sup>\*</sup>GM = General Manager

 $<sup>*</sup>DES = Director \ of Engineering Services$ 

<sup>\*</sup>RDM = Roads Development Manager

<sup>\*</sup> RWM = Roads Works Manager

<sup>\*</sup> RMS = Roads and Maritime Service

<sup>\*</sup>EDM = Economic Development Manager

■2018-2019 D2017-2018 ■2019-2020 D2016-2017 ■ Pre-2016 NOC MAY Rate Arrears 2020 - 2021 General Rates, Water Access, Sewer, Domestic Waste, Interest & Legal Costs APR MAR FEB JAN DEC NOV OCT SEP AUG JUL Jun-20 0.00 400000.00 100000.00 900000000 700000.00 6000000.00 500000.00 300000.00 200000.00 800000000

Balance Outstanding 2020-2021 General Rates, Water Access, Water Usage, Sewer Access, Domestic Waste, Legal NOC MAY APR MAR FEB ATTACHMENTS **Total Rates Outstanding** JAN Costs, Interest DEC NOV OCT SEP AUG JUL 1-Jul ... 0000006 4000000 0 2000000 1000000 8000000 7000000 0000009 5000000 3000000

Shire Roads Maintenance as at 28 February 2021.	Actual 2019/2020	Α	ctual MTD	Actual YTD	3	Commitment	Comments	Total Road Length (km)
Road Inspections Shire Roads	\$ 82,9	21.27 \$	1,708.49	\$ 49,933.59	59 \$			
SR1 Buckanbe Road/Budda Road - Gravelling	Ş	73.60 \$	1	٠,	Ş	1		24.607
SR1 Buckanbe Road/Budda Road - Maintenance Grading	\$ 15,0	15,045.21 \$	1		\$	1		
SR1 - Vegetation Maintenance		٠ -	1	·	-ζ>-	ı		
SR2 Seventy Eight Mile Road - Gravelling	· 4/5-	٠ -	1	\$ 4,072.1	17 \$	1		60.896
SR2 Seventy Eight Mile Road - Maintenance Grading	\$ 167,641	11.23 \$	1	· -	٠ <b>٠</b> ٠	1		
SR2 - Vegetation Maintenance	·s.	ر درک:	1	₹>-	٠ <u>٠</u>	r.		
SR3 Nelyambo Bridge Road - General Maintenance	·S-	٠ د	Е	٠ -	-⟨γ-:	1		63.014
SR3 Nelyambo Bridge Road - Maintenance Grading	ふ	٠ -	r	٠	-⟨ς>;	1		
SR3 - Vegetation Maintenance	·s.	٠	1	٠	·S	1		
.SR4 - Gravelling	<b>ب</b>	·	1	· .	\$			32.366
SR4 Gidgee Road - Maintenance Grading	\$ 32,208	38.34 \$	31	\$ 2,445.07	\$ 40	1		
SR4 - Vegetation Maintenance	٠ <i>٢</i> ٠	ر. ا	1	٠ ٠,	₩;	ī		1
SR5 - General Maintenance	\$	ري. د	1	\$	·~:	1		8.509;
:SR5 - Maintenance Grading	₩.	٠.	•	٠ -	<b>ب</b>	ı		
SR5 - Vegetation Maintenance	<b>∙</b> ∽:	٠ د	r	٠.	٠ <b>٠</b> :	1		
.SR6 - Gravelling	₩;	٠ ج	11	٠ ٠	∽.	1		43.430
SR6 Pulpulla Road - Maintenance Grading	\$ 67,240.	10.78 \$	3,017.50	\$ 3,171.04	34 \$	1		
.SR6 - Vegetation Maintenance	\$	· S>	1	٠.	\$	ı		
SR6 - Pulpulla Road - General Maintenance	·5-	٠ دۍ	r	٠ ٠	s,	1		1
SR7 Mount Gap Road - Gravelling	₩;	٠ ٠	E	٠ ٠	₩:	1		49.758
SR7 Mount Gap Road - Maintenance Grading	\$ 29,912.	12.41 \$	1	\$ 29,489.42	45 \$	1	Contractor hire	
:SR7 - Vegetation Maintenance	\$	٠	3	, ,	S.	1		
SR7 - Mount Gap Road - General Maintenance	\$	۱-	1	\$ 675.88	\$ 88	ī.		79 671
SR8 - General Maintenance	ψ.	· <b>V</b> )	ī	٠ ٠	S:	0		4/0.07
·SR8 Coomeratta Road - Maintenance Grading		8,495.90 \$	1	٠	<b>∽</b> !+	1		
SR8 - Vegetation Maintenance	<b>∵</b>	·S-;	f:	رب. ا	ις.  -	9		70 833
SR9 - Gravelling		· √>-i	1	٠ ٠	S.	1		10.007
SR9 Neckarbo Road - Maintenance Grading	\$ 53,7	53,759.86 \$	2,117.46	\$ 2,117.	\$ 5	1		
SR9 - Vegetation Maintenance		ر. دک:	1	٠ ٠	<b>∽</b> ;-	1		E0 107
SR10 - Gravelling	\$ 3,2	3,272.73 \$	1	· .	٠٠٠.	1		30.102
SR10 Belarabon Road - Maintenance Grading	\$ 118,239.	39.34 \$	r	\$ 6,771.	74 \$	45,455.00	Contractor hire	
SR10 - Vegetation Maintenance	\$ 1,676.9	76.92 \$	T	٠ ٠	s:∙	1		
SR10 - General Maintenance	ς,	٠	1	\$	S-i-	1		21 70U.
SR11 - General Maintenance	₩.	ر. جې.	1	۱ ۲۰	<i>ن</i> ۍ.۰	6		3T.200.
SR11 Bloomfield Road - Maintenance Grading	\$ 6,496.3	96.30 \$	E	٠ - -	⟨ <b>⟩</b> -	1		
SR11 - Vegetation Maintenance	₩.	٠ ١	a	٠ ٠٠.٠	U7 -(	ı		102,712:
SR12 Yathong Road - Gravelling		ر. د	1	S-1	ۍ,٠ •	, 0,0		11
SR12 Yathong Road - Maintenance Grading	\$ 32,698.	38.41 \$	1,499.84	5 49,922.14	7. Y	4,019.00	scraper nire	
:SR12 - Vegetation Maintenance	››:	<i>ب</i>	ı	7,704.	٠ د	ı		

Shire Roads Maintenance as at 28 February 2021	Actual 2019/2020	Actual MTD	Actual YTD C	Commitment Comments	Total Road Length (km)
SR13 - Gravelling	0	٠٠.	\$		129,926
SR13 Bedooba Road - Maintenance Grading		S	\$ 49,832.25 \$	58,690.00 Contractor hire	
SR13 Lerida Road - Vegetation Maintenance	\$ 1,114.01	,	\$ 1,944.55 \$	ř	
:SR13 Lerida Road - Maintenance Sealed Length		· ·	\$ 12,874.23 \$	•	1
SR14 Manuka Road - General Maintenance	· \$	٠ >	٠¢٠. ۱	1	25.258
SR14 Manuka Road - Maintenance Grading	ر د	· .	\$ 3,259.44 \$		
SR14 Manuka Road - Vegetation Maintenance	í	٠.	٠.	,	1
SR15 Shuttleton Road - General Maintenance	1	· ·	٠ ٠	i	13.510
:SR15 Shuttleton Road - Maintenance Grading	\$ 25,765.08	,	\$	ï	
SR15 Shuttleton Road - Vegetation Maintenance	1		· \$	,	
SR16 - General Maintenance	,	. • • •	1	,	9.662
SR16 Sandy Creek Road - Maintenance Grading	ī	,	\$		
SR16 - Vegetation Maintenance	t	1	\$	,	
SR17 - Gravelling	٠	١.	\$ ·		47.868
SR17 Merri Road - Maintenance Grading	100,280.48	١	\$ 57,676.73 \$	1,200.00 Carting gravel	
SR17 - Vegetation Maintenance	\$	·	\$ 2,152.24 \$		
SR18 - Gravelling	1		\$ 128.75 \$		27.850
٥.				Contractor hire - Graded entire length of road and	
:SR18 Bruce Cullenward Road - Maintenance Grading	\$ 14,393.89	\$ 35.45	\$ 160,858.44 \$	22,827.00 gravel patching across approximately 2km	
:SR18 - Vegetation Maintenance	٠,	· ·	· \$		
SR19 Burthong Road - Gravelling	\$ 300.00	; *S-	\$		53.986
SR19 Burthong Road - Maintenance Grading	\$ 41,184.06	\$ 306.28	\$ 3,566.92 \$		
SR19 - Vegetation Maintenance	٠ ٠	1	\$ 1,704.55 \$		,
·SR20 - Gravelling	· ·		٠ - - -		3T.6UZ
SR20 Grain Road - Maintenance Grading	\$ 48,700.74	\$ 9,128.86	\$ 79,266.01 \$	12,727.00	
SR20 Grain Road - Vegetation Maintenance		٠.	\$ 1,704.55 \$		
SR20 Grain Road - Maintenance Sealed Length	\$ 645.50	١.	\$ 15,975.23 \$	- Labour hire for grader operations	75 367
SR21 - General Maintenance		· ·	\$	r	/67.64
SR21 Tallebung Road - Maintenance Grading	67,236.58	57,401.10	w	ř	
SR21 - Vegetation Maintenance	1	· ·	\$ 1,704.55 \$		1717 30
SR22 - Gravelling	ı	1		1	/T/:00
SR22 Round Hill Road - Maintenance Grading	\$ 8,344.03	\$ 658.55	\$ 3,607.15 \$	ī	
SR22 - Vegetation Maintenance	1	ı \$	\$ .	·	
SR22 - General Maintenance	٠ ٠	· ·	٠		:612 16
SR23 Booberoi Road - General Maintenance	\$ 2,740.15		\$ 23,139.82 \$	1,675.00	74*/ 173:
SR23 Booberoi Road - Maintenance Grading	\$ 52,468.98	\$ 952.80	\$ 8,673.41 \$	•	
:SR23 - Vegetation Maintenance	\$ 549.28	· .	·γ.	ì	35 220
SR24 Mount Grace Road - Gravelling		ι	S		011.00
SR24 Mount Grace Road - Maintenance Grading	\$ 58,889.40	5 174.21	7,046.87	•	
SR24 - Vegetation Maintenance	· ·	1	<u>ጉ</u>	1	

	Actual					Total Road
Shire Roads Maintenance as at 28 February 2021	2019/2020	Actual MILD	Actual YID	a meminimuos	Comments	finolong in a
SR24 - General Maintenance	٠ •	٠	٠ - -	1		
SR25 Wilgaroon Road - General Maintenance	\$ 814.84	٠ ٠٠-	· \$	1		44.477
SR25 Wilgaroon Road - Maintenance Grading		· ·	٠ ٠	1		
SR25 - Vegetation Maintenance	٠ -	٠.	\$ - ·	ı		
SR26 - Gravelling	٠ ٠	۱. ډ٠	٠ - - -	ř		42.493;
SR26 Wilga Downs Road - Maintenance Grading	\$ 53,104.86	· • • • • • • • • • • • • • • • • • • •	٠٠.	i		
SR26 - Vegetation Maintenance	·	٠ ٠	٠ - -	1		
SR27 Cooneybar Road - Gravelling	· •	· \$\sigma\$	· \$\dagger{\sigma} \cdot \dagger{\sigma} \	1		49.352
SR27 Cooneybar Road - Maintenance Grading	\$ 85,240.34	٠,	\$ 204.72 \$	1		
SR27 - Vegetation Maintenance	1	· .	· \$	1		
SR28 - General Maintenance	· \$5	٠ ٠	· <b>⟨ ⟨ ⟨ ⟨ ⟨ ⟨ ⟨ ⟨ ⟨ ⟨</b>	ī		16.723
SR28 Yimkin Road - Maintenance Grading	31,	·	\$.	ı		
SR28 - Vegetation Maintenance	ا د	- <b>√</b> ->-	٠ - -	ı		i c
.SR29 - Gravelling	·	٠ ٠		ı		47.59
SR29 Booroomugga Road - Maintenance Grading	\$ 54,627.76	٠ ٠	\$ 38,595.00 \$	≥;	Maintenance grading	
SR29 Booroomugga Road - Vegetation Maintenance	\$ 8,122.67	1 <b>-</b> √}-	٠ - - -	1		0
SR30 - Gravelling		٠ ج	·\$-	ī		7.900
SR30 Canbelego Road - Maintenance Grading	\$ 8,244.11	· .	\$	ı		
SR30 - Vegetation Maintenance	٠.	٠ ٠	رب. ا	1		
SR30 - General Maintenance		٠	\$ 251.32 \$	1		1
SR31 - Gravelling	\$ 10,247.73	·	٠٠.	i		74.153
SR31 Moolah Road - Maintenance Grading		\$ 600.57	\$ 194.52 \$	54,545.00 Co	Contractor hire	
SR31 - Vegetation Maintenance		٠ -	\$. -	1		010
SR32 - Gravelling		· \$	٠ - -	ī		,60,359,
SR32 Developmental Road - Maintenance Grading	\$ 16,314.41	ر. د	· \$	1		
SR32 - Vegetation Maintenance		٠ ٠	· γ.	ì		,001
SR33 - General Maintenance		۱ ۲۰:	·	1		TOTON
SR33 Nymagee Station Road - Maintenance Grading	\$ 39,824.99	ι •^-	\$ 38.68 \$	20,455.00		
SR33 - Vegetation Maintenance	·	1 - S.	S.	1		11 608
SR34 - General Maintenance	· -{\rangle}:	٠ ٠	رب. ا	1		TTOO
:SR34 Wallacevale Road - Maintenance Grading	ا ا	ς,	· γ	ı		
SR34 - Vegetation Maintenance	٠	√γ.	›.·	1		16 011
:SR35 - General Maintenance	٠ ١	٠ -	·γ.	1		10.01
SR35 Osterly Downs Road - Maintenance Grading	·	٠ ٠	· · ·	ı		
SR35 - Vegetation Maintenance	٠.	· ∽¦	·γ.:	1		3.4 080
SR36 - General Maintenance		- - -	<b>‹</b> ኦ;			0000110
SR36 Palesthan Road - Maintenance Grading	\$ 60,421.83	\$ 305.16	\$ 233,673.14 \$	14,987.00 M	Maintenance grading and contractor nire	
SR36 - Vegetation Maintenance		·	ν»: •	Ē		7 719
:SR37 - General Maintenance		٠	\$ 1,722.70 \$	1		
SR37 Bimbella Road - Maintenance Grading	\$ 2,844.70	\$ 482.65	\$ 4,001.69 \$	ī		

COC TOTAL DE COMPANY DE COCATA DE CO	Actual	TM length	OTV IEII VTD	2	nmitment Comments	Total Road Length (km)
SR37 - Vegetation Maintenance	\$	⟨ .	-√-	-ζ>-	1	
SR38 - General Maintenance	٠٠	· •	···	₩.	i	4.15
SR38 CSA Access Road - Grader Maintenance		\$	٠٠٠	Υ.	ı	
SR38 - Vegetation Maintenance	٠.	٠٠٠	, -V>-	₩.	ı	
SR38 - Sealed Maintenance	1 -V3-	ر. د		₩:	ï	
SR39 - General Maintenance	٠	· •	٠,	₩;	ı	77.7.
SR39 Coombie Road - Maintenance Grading	\$ 4,332.8	- \$ 6	√.	\$	r	
SR39 - Vegetation Maintenance	· ◆ ^ -	٠,	, -<>>-	<b>₩</b>	i	
SR40 Filtration Plant Road - General Maintenance		٠٠	√>:	₩.	ı	60.359
SR40 Filtration Plant Road - Grader Maintenance	· ••	٠,	√.	٠s-;	1	
SR40 - Vegetation Maintenance	٠ ٠	√.	٠ ٠	-⟨γ-:	1	
SR40 - Sealed Maintenance	<b>-</b> √^:	ν.	٠, ٧٠,	₹,	ı	4
SR41 - General Maintenance	√>:	٠	٠ ٠	S	ĩ	1.00
SR41 Tilpa Weir Road - Maintenance Grading	· • • • • • • • • • • • • • • • • • • •	٠ ٠		-⟨ς}-	1	
SR41 - Vegetation Maintenance	٠,	· •>	٠ ٠	S.		
SR42 Endeavor Mine Road - General Maintenance	٠.	Ψ.	\$ 186.93	33 \$	1	13.588
SR42 Endeavor Mine Road - Grader Maintenance	\$ 289.7	\$.	٠ -	-⟨Λ⟩-	1	
SR42 Endeavor Mine Road - Vegetation Maintenance	٠٠٠-	-⟨γ-⟩	٠	₹\$;	t	
SR42 Endeavor Mine Road - Sealed Maintenance	\$ 2,105.2	5 \$	\$	<b>~</b> >:	I	
SR43 - General Maintenance	-vn-:	\$.	\$	\$	ti	1.40
SR43 Sewerage Works Road - Maintenance Grading	√ <b>&gt;</b>	\$.	٠ ٠	<b>∽</b> :	E	
SR43 - Vegetation Maintenance	·	ν.	\$	٠٠; ا	ı	
SR44 - General Maintenance	٠,		ر جہ:	₩.	1	7.100
SR44 Old Reservoir Road - Maintenance Grading	ı -√}-	ν.	\$ 2,424.	. 5 . 5	ı	
SR44 - Vegetation Maintenance	ı -√>-	٠	٠,٠	₩.	E	
SR45 - General Maintenance	₹5-	\$	\$	ψ.	E	0.300
SR45 - Grader Maintenance	· ~~	\$	\$	↔	1	
SR45 - Vegetation Maintenance	· ~	٠ ٠	٠	-⟨γ-	,	
SR45 - Sealed Maintenance	-0>-	ς.	\$ 475.16	\$ 91		
- SR46 - Gravel and Seal	٠.	\$	\$ 924.63	53 \$		65.980
SR46 Rosevale Road - Maintenance Grading	\$ 35,535.53	3.	\$ 54,238.76	\$ 9,	13,636.00 Contractor hire	
SR46 - Vegetation Maintenance	-√>-	٠	٠ جہ:	∽,	)i	
SR48 Euabalong Tip Road - Maintenance Grading	\$ 109.12	\$	\$ 545	\$	1	
TOTALS	\$ 1,547,174.95	5 \$ 78,388.92	\$ 1,010,944	.32 \$	250,216.00	

1,261,160.32 1,650,000.00 388,839.68

		Actual					Total Road
Regional Roads Maintenance as at 28 February 2021	20	2019/2020	Actual MTD	Actual YTD	Commitment	Comments	Length (km)
Road Inspections Regional Roads	÷S÷	14,524.00	1	\$ 8,044.55	· \$		
Survey Equipment for Regional Roads (CAP EX)	·S-	129,559.00		·	· ·		
Traffic Facilities	Ş	8,366.10	1	\$ 1,793.33	5		
MR 228 - General Maintenance	S	1	,	٠ \$	ı 		11.078
MR 228 Whitbarrow Way - Pavement Mtnce	S	11,799.75	1	\$ 2,658.76	· ·		
MR 228 Whitbarrow Way - Vegetation Maintenance	45	1	ť.	· ·	- \$		
MR 228 Whitbarrow Way - Maintenance Grading	45	1	1	· \$	- -		
Regional Road Signage	·~	1	1	· \$	· ·		
MR 407 Mulya Road - General Maintenance	s	64,376.18	3,239.69	\$ 21,519.49	·,		102,464
MR 407 Mulya Road - Pavement Maintenance	₹\$-	9,884.45	1	\$ 1,028.10	\$		
MR 407 Mulya Road - Gravel Resheeting	٠٠	3,272.73 \$	1		· ·		
MR 407 Mulya Road - Vegetation Maintenance	-ς>-	6,307.36	,	- \$	·		
MR 407 Mulya Road - Maintenance Grading	ş	\$ 127,899.13	39,810.89	\$ 132,040.50	- - - -	Grading complete	
MR 407 Mulya Road - Sealing	₩.	2,281.99 \$	1	- \$	· .		
MR 411 Tipping Way - General Maintenance	₩.	12,338.91	i	٠	· ·		66.475
MR 411 Tipping Way - Pavement Maintenance	Ś	18,333.31 \$	1,348.48	\$ 23,141.04	- \$		
MR 411 Tipping Way - Gravel Resheeting	₹S-	1	1	٠٠٠- ١	· ·		
MR 411 Tipping Way - Vegetation Maintenance	↔	605.75 \$	ı	- \$	ι 		
MR 411 Tipping Way - Maintenance Grading	·S	534.74 \$	1	\$ 1,057.66	· ·		
MR 411 Tipping Way - Sealing	·s>	1	ı	٠ \$	٠ ٠		
MR 416 The Wool Track - General Maintenance	÷	3,946.04 \$	r	\$ 10,139.64	- -		92.170
MR 416 The Wool Track - Pavement Maintenance	⟨\$	17,409.52 \$	30.81	\$ 1,884.37	· ·		
MR 416 The Wool Track - Gravel Resheeting	٠٠	1,513.29 \$	ı	\$ 169,115.02	- \$		
MR 416 The Wool Track - Vegetation Maintenance	.4∿	6,524.74 \$	t	->-	· · · · · · · · · · · · · · · · · · ·		
MR 416 The Wool Track - Maintenance Grading	\$	163,157.81 \$	742.68	\$ 46,166.20	- \$		
MR 416 The Wool Track - Sealing	₩.	1	ı	- \$	1		
MR 419 Glenwood Road - General Maintenance	·s>	1	1	- \$			46.980
MR 419 Glenwood Road - Gravel Resheeting	-Ω-	1	1	٠ \$	\$		
MR 419 Glenwood Road - Vegetation Maintenance	-⟨>-	1	ī	٠,	٠ ٠		
MR 419 Glenwood Road - Maintenance Grading	,⊀∧-	61,321.17 \$	1		÷.		
MR 423 Lachlan Valley Way - General Maintenance	₩.	4,293.28 \$	ı	٠ -	ر چې		15.190
MR 423 Lachlan Valley Way - Pavement Maintenance	ş	5,978.31 \$	981.75	\$ 11,185.46	· ·	Pothole repairs	27
MR461 Priory Tank/Balowra Road - General Maintenance	-Ω-	7,718.47 \$	1	\$ 10,608.76	- \$		.05T.85
MR461 Priory Tank/Balowra Road - Pavement Mntnce	·s	30,634.16 \$	1	\$ 3,369.95	· ·		
MR461 Priory Tank/Balowra Road - Vegetaion Maintenance	·s>	5,263.86 \$	1	٠ ج	5		
MR461 Priory Tank/Balowra Road - General Maintenance	٠٠٠	57,905.28 \$	ľ	\$ 232.14	\$		1
:MR7518 Fifty Two Mile Road - General Maintenance	₩.	6,047.04	i	\$ 6,983.23	٠. ١		95.800
MR7518 Fifty Two Mile Road - Pavement Maintenance	₩.	5,845.15 \$	í	\$ 2,320.75	\$ 1,675.00	0	
MR7518 Fifty Two Mile Road - Gravel Resheeting	₹\$-	3,272.73 \$	t	\$ 8,800.00	\$ 21,444.00	21,444.00 Stabiliser hire	
MR7518 Fifty Two Mile Road - Vegetation Maintenance		6,016.26 \$	t	١.	\$		
MR7518 Fifty Two Mile Road - Maintenance Grading	٠S-,	239,457.54 \$	1	\$ 147,486.73	\$ 7,506.00	7,506.00 Scraper works	
MR7518 Fifty Two Mile Road - Sealing	₩.	1	i	\$ 179,741.55	\$		.000 00
MR7521 Kiacatoo Road - General Maintenance	↔.	9,026.10 \$	242.78	\$ 738.86	· ·		32.830

		Actual						Total Road
Regional Roads Maintenance as at 28 February 2021	20	2019/2020	Actual MTD	ITD	Actual YTD	Commitment Comments	Comments	Length (km)
MR7521 Kiacatoo Road - Pavement Maintenance	₹\$-	7,175.14	\$ 1,49	1,496.63 \$	11,622.06	٠ -	Pothole repairs	
MR7521 Kiacatoo Road - Gravel Resheeting	₩.	ı	ς.	1		- - \$		
MR7521 Kiacatoo Road - Vegetation Maintenance	ζ\$.	2,134.12	\$	1	1	٠ ٠		
: MR7521 Kiacatoo Road - Maintenance Grading	·S.	1	-S-	1	1	,		
WR7522 The Wool Track - General Maintenance	Ş	554.56	\$ 40,6	40,637.40 \$	40,637.40	Ş	Contractor hire	64.450
MR7522 The Wool Track - Gravel Resheeting	-ζ>-	1	\$ 67	676.00 \$	102,843.49	÷		
MR7522 The Wool Track - Vegetation Maintenance	\$	1	<b>.</b>	-0}-	1	ş		
MR7522 The Wool Track - Maintenance Grading	S	34,610.80	٠ <b>٠</b> -	1	1	· ->		
MR 61 - Vegetation Maintenance	Ś	1	ς.	1	i.	\$		58.268
MR 61 - Resealing	÷	ı	₹ <b>&gt;</b> -	1	1	÷		
· MR 68 Curranyalpa Road - General Maintenance	\$	1	₩.	1	86,799.98	- \$		30.394
MR 68 - Gravel Resheeting	₩.	ī	٠ <u>٠</u>	-0}	10	Ş		
MR 68 - Vegetation Maintenance	₩.	ı	<b>ئ</b>	1	T.	- \$		
MR 68 Curranyalpa Road - Maintenance Grading	ş	1	Ş	1	1	· ·		
MR 7524 Frederick St - Highway to Louth Rd	ς>-	1	\$	-07-	1			0.400
TOTALS	\$ 1,	\$ 1,089,888.77	\$ 89,20	89,207.11 \$	953,959.02	\$ 30,625.00		

984,584.02	1,412,540.00	427,955.98
\$	· 45	**
Total Including Commitments	Budget for 2020/2021	Balance

Microbial Company Statistics   Actual May State		Actual					
x 266,556.76 \$ - \$ 246,830.00 \$ - \$ 71,632.05 \$ - \$ 50,000.00 \$ - \$ 194,580.46 \$ - \$ 50,000.00 \$ 5 194,580.41 \$ 5,568,000.00 \$ 5,5051.13 \$ 106,508.11 \$ 863,164.00 \$ \$ 210,467.73 \$ - \$ 50,000.00 \$ 5,5051.13 \$ 106,508.11 \$ 863,164.00 \$ \$ 210,467.73 \$ - \$ 50,000.00 \$ 5 155,051.13 \$ 106,508.11 \$ 863,164.00 \$ \$ 210,467.73 \$ - \$ 5,000.00 \$ \$ - \$ 5,005.13 \$ 5 148,50 \$ \$ 155,382.22 \$ - \$ 5 140,627.46 \$ 155,382.22 \$ - \$ 5 140,627.46 \$ 5 140,627.46 \$ 5 140,627.46 \$ 5 140,627.46 \$ 5 140,600.00 \$ 5 11,564.25 \$ 66,500.00 \$ 5 11,564.25 \$ 66,500.00 \$ 5 11,564.25 \$ 66,500.00 \$ 5 11,564.25 \$ 66,500.00 \$ 5 11,564.25 \$ 66,500.00 \$ 5 11,564.25 \$ 66,500.00 \$ 5 11,564.25 \$ 100,000.00 \$ 10,564.25 \$ 100,000.00 \$ 10,564.25	Roads Capital as at 28 February 2021	2019/2020	1202/0202	Actual MTD	Actual YTD	Commitment	Comments
m) \$ 194,580,46 \$ - \$ 50,000,00 \$ - \$ 3,148,50 \$ - \$ 3,148,50 \$ - \$ 5,000,00 \$ \$ - \$ 3,148,50 \$ - \$ 3,148,50 \$ - \$ 3,148,50 \$ - \$ 5,000,00 \$ \$ \$ 5,000,00 \$ \$ \$ 5,000,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00 \$ \$ 5,000,00	MR7518 - Barnato-Tilpa Rd Acres Billabong - Stg 1	\$ 266,556.76	1	1	\$ 71,632.05	1	Project finalised - Expenses from guard rail and retention payment
m) \$ 194,580.44 \$ - \$ 5,000.00 \$ - \$ 3,148.50 \$ - \$ 3,148.50 \$ - \$ \$ 3,148.50 \$ - \$ \$ 3,148.50 \$ - \$ \$ \$ 3,148.50 \$ - \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	MR407 - Mulya Rd - Gravel Resheeting	٠	\$ 246,830.00	1	\$ 161,749.46	٠,	
(30km) \$ 199,580.44 \$ .	SR7 - Mt Gap - Causeway Stabilisation - Design only	√.	\$ 50,000.00	1	\$ 3,148.50	-	Design complete - No further expenditure
(Jackin) \$ 5,568,000.00 \$ 55,051.13 \$ 106,598.11 \$ 863,164.00  monly \$ 208,077.78 \$ -	, MR407 - Mulya Road - Reseal	\$ 194,580.44		1	- \$	,	
## Standard	SR6 - Pulpulla Rd - Construction and Initial Seal (30km)	\$	\$ 5,568,000.00	55,051.13	\$ 106,508.11	\$ 863,164.00	
\$ 208,077.78 \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ \$ - \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ - \$ \$ - \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ \$ - \$ -	MR411 - Tipping Way - Bend Alignment - Design only	· ·	\$ 50,000.00		\$ 3,148.50	,	Design complete - No further expenditure
\$ 210,467.73 \$ \$ . \$ . \$ . \$ . \$ . \$ . \$ . \$ .	WR411 - Tipping Way - Reseal	\$ 208,077.78	- \$	1	- \$	· ·	
\$ 155,382.32 \$	MR416 - The Wool Track - Reseal	\$ 210,467.73	· ·	1	,		
\$ \frac{155.382.32}{93.673.89} \\$ \frac{155.382.32}{93.673.89} \\$ \frac{155.382.32}{93.673.89} \\$ \frac{155.382.32}{93.673.89} \\$ \frac{155.382.32}{93.673.89} \\$ \frac{155.000}{93.673.89} \\$ \frac{150.000.00}{93.673.89} \\$ \frac{150.000.00}{93.673.89} \\$ \frac{150.000.00}{93.673.89} \\$ \frac{150.000.00}{93.673.89} \\$ \frac{115.64.45}{93.600.00} \\$ \frac{116.000.00}{93.600.00} \\$ 1	WR416 - The Wool Track - Seal Extension	٠,	\$ 800,000.00	1	\$ 698,524.54	\$ 33,743.00	Seal extension complete - Line marking to still be completed
\$ 392,150.36 \$ 407,850.00 \$ 5 428,112.94 \$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	MR461 - Priory Tank Rd - Reseal	\$ 155,382.32	· · ·	1	٠.	ر د	
\$ 93,673.89 \$ \$ 150,000.00 \$ \$ 149,627.46 \$ \$ \$ 141,606.18 \$ .	MR7518 - Fifty Two Mile Road - Seal Extension	\$ 392,150.36	\$ 407,850.00	1	\$ 428,112.94	·	Project finalised
tt \$ 150,000.00 \$ . \$ 149,627.46 \$ \$ 149,627.00 \$ . \$ 149,627.00 \$ . \$ 140,627.00 \$ . \$ 140,627.00 \$ . \$ 140,627.00 \$ . \$ 140,627.00 \$ . \$ 140,627.00 \$ . \$ 133,500.00 \$ . \$ 133,500.00 \$ . \$ 133,500.00 \$ . \$ 133,500.00 \$ . \$ 114,062.49 \$ 460,000.00 \$ . \$ 114,062.49 \$ 460,000.00 \$ . \$ 114,062.49 \$ 110,000.00 \$ . \$ 110,000.00	SR10 - Belarabon Rd - Reseal	\$ 93,673.89	1	1	٠ ٠	· ·	
\$ 141,606.18 \$ - \$ - \$ - \$ - \$ 5 3,142.12 \$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	SR10 - Belarabon Rd - Gravel Resheeting	· · · · ·	\$ 150,000.00	1	\$ 149,627.46	· .	Project finalised
\$ 141,006.18 \$ - \$ - \$ 3,142.12 \$ - \$ 241.63 \$ - \$ 5 3,142.12 \$ - \$ 5 2,133,786.91 \$ - \$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	SR31 - Moolah Rd - Resheet	٠,	- \$	3	١.	5	**
\$ 2,393,786,91 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	SR19 - Burthong Road	\$ 141,606.18	1	3	\$ 3,142.12	,	Project finalised 2020/2021 - Majority of works completed 2019/2020
tt \$ 2,393,786,91 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	'SR20 - Grain Rd - R2R - Gravel Resheeting	\$ 241.63	1	ii.	٠.		
s \$ 39,640.94 \$ \$ . \$ . \$ . \$ . \$ . \$ . \$ . \$ .	SR20 - Grain Road - 12km Seal Extension Project	\$ 2,393,786.91	1	3	٠ \$		
d Build Up \$ 133,500,22 \$ 66,500,000 \$ - \$ 63,497,95 \$ - \$ 11,564.45 \$ - \$ 5 220,713.12 \$ - \$ 5 114,062.49 \$ 460,000.00 \$ - \$ 5 220,713.12 \$ - \$ 5 100,000.00 \$ - \$ 5 220,713.12 \$ - \$ 5 100,000.00 \$ - \$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	SR24 - Mt Grace Rd - Sealing Bridge Approaches	\$ 39,640.94	1	1	٠ \$	٠. د	
d Build Up \$ 11,564.45 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	SR36 - Palesthan Road - Gravel Resheeting	\$ 133,500.22	\$ 66,500.00		\$ 63,497.95	- \$	Project finalised
d Build Up \$ 114,062.49 \$ 460,000.00 \$ - \$ 220,713.12 \$ - \$ 300,000.00 \$ - \$ 5.20,713.12 \$ - \$ 114,062.49 \$ 460,000.00 \$ - \$ 5	SR45 - Garbage Tip Road - Reseal	\$ 11,564.45	1		٠	٠ ٠	
14,062,49 \$ 460,000,00 \$ - \$ - \$ - \$ - \$ - \$   \$   \$   \$   \$	SR13 - Bedooba Road - Gravel Resheeting/Road Build Up	· ·	\$ 327,000.00	1	\$ 220,713.12	\$. '	Project finalised
ild Up \$ - \$ 300,000.00 \$ - \$ - \$ - \$ - \$ - \$   \$   \$   \$   \$	Town and Rural Reseals (R2R)	\$ 114,062.49	\$ 460,000.00	1	٠.	- \$	
ild Up \$ - \$ 100,000.00 \$ - \$ - \$ - \$ - \$ - \$ - \$   \$ - \$   \$	Rural Roads Capital Works - SR31 Gravelling	٠,	\$ 300,000.00 \$	0	- \$	- \$	
\$ 44,992.50 \$ 100,000.00 \$ - \$ 65,677.00 \$ 59,825.00 \$ \$ 416.58 \$ - \$ 5 5.50.00 \$ \$ \$ 5 5.50.00 \$ \$ 5 5.50.00 \$ \$ 5 5.50.00 \$ \$ 5 5.50.00 \$ \$ 5 5.50.00 \$ \$ 5 5.50.00 \$ \$ 5 5.50.00 \$ \$ 5 5.50.00 \$ \$ 5 5.50.00 \$ \$ \$ 5 5.50.00 \$ \$ 5 5.50.00 \$ \$ 5 5.50.00 \$ \$ 5 5.50.00 \$ \$ 5 5.50.00 \$ \$ 5 5.50.00 \$ \$ 5 5.50.00 \$ \$ 5 5.50.00 \$ \$ 5 5.50.00 \$ \$ \$ 5 5.50.00 \$ \$ \$ 5 5.50.00 \$ \$ \$ 5 5.50.00 \$ \$ \$ 5 5.50.00 \$ \$ \$ 5 5.50.00 \$ \$ \$ 5 5.50.00 \$ \$ \$ 5 5.50.00 \$ \$ \$ 5 5.50.00 \$ \$ \$ \$ 5 5.50.00 \$ \$ \$ 5 5.50.00 \$ \$ \$ 5 5.50.00 \$ \$ \$ 5 5.50.00 \$ \$ \$ 5 5.50.00 \$ \$ \$ \$ 5 5.50.00 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Shire Roads Gravel Resheeting - SR37 Road Build Up	ر د	\$ 100,000.00	r.	٠ ٠	٠. ٠.	
\$ 44,992.50 \$ 100,000.00 \$ - \$ 65,677.00 \$ 59,825.00 \$ \$ 416.58 \$ - \$ 5 5,677.00 \$ 59,825.00 \$ \$ 5 5,677.00 \$ 5 5,677.00 \$ 5 5,677.00 \$ 5 5,677.00 \$ 5 5,677.00 \$ 5 5,677.00	Resealing of other locations on a priority basis	- -	\$ 100,000.00	ı	,	- \$	
\$ 416.58 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	Industrial Area - Design and Construct	\$ 44,992.50	\$ 100,000.00	í.	\$ 65,677.00	\$ 59,825.00	Service location to be completed
\$ - \$ 1,250,000.00 \$ - \$ - \$	Euabalong/E. West Reseals	\$ 416.58	· ·	•	٠,	\$	
	Grids and Culverts - Various locations	₹>	\$ 1,250,000.00	1	- *	- \$	Investigations for preparation of tender documents underway

Total Including Commitments \$ 2,932,213.75

Budget for 2020/2021 \$ 9,976,180.00

T,043,966.25

## Preliminary Regional Issues Assessment

## Bancannia, Pondie Range, Neckarboo, and Yathong-Ivanhoe Troughs, Western NSW

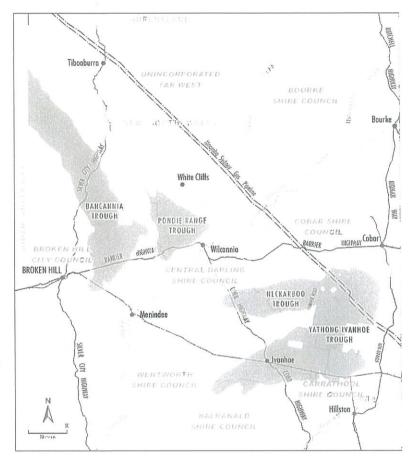
The NSW Department of Planning, Industry and Environment is continuing to seek feedback from the community to help inform its Preliminary Regional Issues Assessment for potential gas exploration.

The purpose of this assessment is to identify any social, environmental and economic matters associated with releasing the Bancannia, Pondie Range, Neckarboo, and Yathong-Ivanhoe Troughs for exploration of conventional and unconventional gas resources.

The assessment is a standard part of the NSW Government's process when considering whether to release areas for exploration.

The Preliminary Regional Issues Assessment will be considered by the Advisory Body for Strategic Release, which will make recommendations to the Minister for Regional NSW as to whether the areas should or should not be released for gas exploration.

The Preliminary Regional Issues Assessment does not pre-empt the assessment of



any potential future gas production projects and does not guarantee that any future approvals will be granted by the NSW Government.

Community consultation is a vital part of the process, and the Department is welcoming feedback from the community and other stakeholders until **Friday 9 April 2021**.

To provide your feedback visit <a href="www.planning.nsw.gov.au/pria-consult">www.planning.nsw.gov.au/pria-consult</a> where you can complete an online form or request a call from the Department.

If you cannot access the forms online, you can provide feedback by calling 02 9274 6164.

## **Preliminary Regional Issues Assessment** Bancannia, Pondie Range, Neckarboo and Yathong-Ivanhoe



Information Paper

## Overview

The NSW Government's Strategic Release Framework for Coal and Petroleum Exploration allows for controlled strategic release and competitive allocation of resource exploration titles in NSW. The Strategic Release Framework is designed to provide greater clarity and transparency in decisions about where resource exploration activities may take place. The Strategic Release Framework also introduces a competitive process for determining who may undertake the exploration activities.

An initial assessment of resource potential undertaken by the Geological Survey of NSW in the Department of Regional NSW has identified four areas in Western NSW which have moderate to high potential for gas resources. Based on this information, the NSW Government's Advisory Body for Strategic Release has asked for a Preliminary Regional Issues Assessment to be prepared by the NSW Department of Planning, Industry and Environment to consider the risks and whether there are constraints to the release of the areas for resource exploration.

## Potential Release Areas

## Bancannia Trough

Location: 75 km east of Broken Hill

Area: 40 km by 230 km

Access: Relatively close to the Moomba to Sydney gas pipeline, the Barrier and Silver City Highways, and the Orange-Broken Hill railway.

Resource findings: Potential gas resources. No potential for coal seam gas.

#### Neckarboo Trough

Location: 80 km north of Ivanhoe and 150

km south-west of Cobar Area: 30 km by 125 km

Access: Relatively close to the Moomba to Sydney gas pipeline, the Barrier and Cobb Highways, and the Orange-Broken Hill

railway.

Resource findings: Potential gas resources. No potential for coal seam gas.

## Pondie Range Trough

Location: 5 km north-west of Wilcannia

Area: 80 km by 40 km

Access: Relatively close to the Moomba to Sydney gas pipeline, the Barrier Highway, and

the Orange-Broken Hill railway.

Resource findings: Potential gas resources. No

potential for coal seam gas.

#### Yathong-Ivanhoe Trough

Location: 50 km south of Cobar to Ivanhoe

Area: 170 km by 210 km

Access: The Moomba to Sydney gas pipeline, Cobb Highway, and Orange-Broken Hill railway run through parts of the trough.

Resource findings: Potential gas resources. No

potential for coal seam gas.

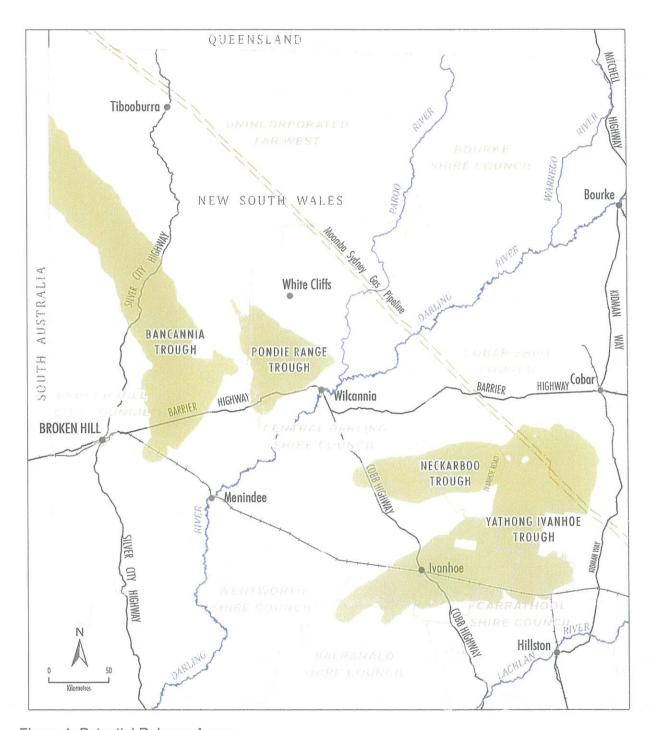


Figure 1: Potential Release Areas

## Preliminary Regional Issues Assessment

The Preliminary Regional Issues Assessment involves engaging with interested and potentially impacted stakeholders and consideration of social, environmental and economic matters relating to the potential release areas.

The NSW Department of Planning, Industry and Environment is responsible for undertaking the Preliminary Regional Issues Assessment, which will summarise the key issues, opportunities and constraints associated with releasing the areas for resource exploration. The assessment will focus on:

- collecting relevant data to identify key social, economic and environmental considerations in the areas;
- engaging with the community to gain knowledge on local matters of interest and concern;
- examining potential risks and constraints to the release of the areas for gas exploration (e.g. significant environmental concerns, potential land use conflicts, impacts on existing infrastructure and services); and
- examining the issues to inform the decision makers on whether or not to release the areas for exploration and the terms of any release.

The Advisory Body for Strategic Release will consider the Preliminary Regional Issues Assessment in recommending to the Minister for Regional NSW whether the areas should be released (either wholly or in part) for resource exploration.

The assessment is an issues identification process, and will not pre-empt the assessment or determination of any potential future development applications to develop the resources.

# Previous Assessment of Bancannia and Pondie Range Troughs

In 2018, the Department commenced preparation of a Preliminary Regional Issues Assessment for the potential release of conventional gas resources within the Bancannia and Pondie Range troughs, which was placed on hold prior to finalisation.

As part of this Preliminary Regional Issues Assessment, the Department is updating the 2018 assessment and expanding its scope to identify any new issues associated with the consideration of both conventional gas and tight-gas exploration of the Bancannia and Pondie Range troughs, as well as the Neckarboo trough and Yathong-Ivanhoe trough.

## Landholder Rights

Landholders in NSW own the surface land of their properties. Resources that exist below the earth's surface (such as gas) belong to the State. If these resources are extracted, the royalties which are paid to the State are used to benefit the local community and State, in addition to the economic benefits of jobs and economic growth.

The NSW Government wants farmers and landholders to be partners in the resource development process. Government legislation mandates that landholders are entitled to receive compensation for resource exploration and production.

A company that holds an exploration licence must have a written access arrangement with a landholder before any activities may commence on that land. The licence holder must talk to the landholder about the location of exploration drilling, must provide a map and description of the land it wishes to access and describe the exploration methods it intends to use.

In NSW, thousands of access arrangements have been successfully negotiated between titleholders and landholders for their mutual benefit. There are instances where parties can't reach agreement through private negotiations, and in this situation the NSW legislative framework sets out the pathway to help landholders and titleholders agree on the terms and conditions for access to land.

## Strategic Release Framework

The Strategic Release Framework provides a transparent and strengthened selection process for issuing exploration licences through the consideration of geological, social, environmental and economic factors, and operator suitability and capability. More information about the Strategic Release Framework is available at: www.planning.nsw.gov.au/regionalissuesassessment.

The key steps and responsible authorities in the Strategic Release Framework process are shown in Figure 2 and Table 1.

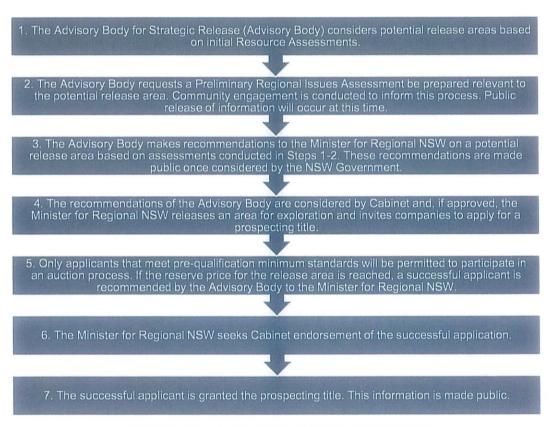


Figure 2: Steps in the Strategic Release Framework

Table 1: Strategic Release Framework Authorities

Authority	Role
Advisory Body for Strategic Release	Reviews reports and recommends assessment of the release of an area for resource exploration.
Department of Planning, Industry and Environment – Planning and Assessment	Undertakes the Preliminary Regional Issues Assessment to inform the Advisory Body about environmental, economic and social issues.
Department of Regional NSW – Mining, Exploration and Geoscience	Oversees the granting of exploration licences and the Strategic Release Framework consideration for resource exploration.
Minister for Regional NSW	Determines areas for consideration based on the advice of the Advisory Body for Strategic Release.
Cabinet	Endorses Ministerial recommendations for granting of exploration licences.

## Register Your Interest

The Preliminary Regional Issues Assessment is a key step in the Strategic Release Framework process. There will be further opportunities for landholder and community input if the areas are released for exploration and if exploration indicates that a viable, economic resource is present.

If this assessment is of interest please register by emailing pria@planning.nsw.gov.au or by calling 02 9274 6164 prior to Wednesday 17<sup>th</sup> February 2021.

The Department will communicate directly with stakeholders who have registered to obtain their feedback on potential opportunities and constraints relevant to the Preliminary Regional Issues Assessment.

#### To find out more

- Visit: www.planning.nsw.gov.au/regionalissuesassessment
- Email: pria@planning.nsw.gov.au
- Call: 02 9274 6164
- Strategic Release Framework: www.resourcesandgeoscience.nsw.gov.au/miners-andexplorers/programs-and-initiatives/strategic-release-framework-for-coal-and-petroleumexploration
- Mining and Energy in NSW for Landholders and Community; commonground.nsw.gov.au

If English isn't your first language, please call 131 450. Ask for an interpreter in your language and then request to be connected to the NSW Department of Planning, Industry and Environment on 02 9274 6164.

## Cobar Shire Council



# Cobar Waste Facility Long Term Plan of Management

Robert Bailey Consulting Unit 408 12-24 William Street Port Macquarie, NSW 2444 Phone 0448737383



September 2020

1

## Table of Contents

## Contents

Table	of Contents	2
1.0	Overview	3
2.0	Background	4
3.0	Purpose	5
4.0	Operations	5
5.0	Landform Concept Design	8
6.0	Acts and Policies Associated with the Project	9
7.0	Delivery,	9
Pr	ocurement Management	16
8.0 A	Appendix 1- Notes to Accompany Design Drawings	17
Appe	endix 2 – Guide to Site Capacity	23
Appe	endix 3 - Site Contour Plan	24
Appe	endix 4 – Design Principles and Design Concepts	26
Appe	endix 5 - Risk Management	36
Appe	endix 6 - Community Engagement Plan	43
Appe	endix 7 - Protection of the Environment Operations (Waste) Regulation 2014	48
Appe	endix 8 - Site Master Plan	48
Appe	endix 9 - Plant Hire Calculations	50

### 1.0 Overview

The Cobar Waste Facility is located about 9 kilometres to the west of the town of Cobar on Mulya Road. It is currently not a supervised site however electronic entrance gates restrict entry to the facility only during nominates times, thus affording a measure of control. The facility is operated by staff of Cobar Shire Council however there is only limited site presence and this when waste materials are being pushed up, usually of an afternoon and for a duration of about 2 hours. A recent major fire at the landfill has highlighted the need for the site to be supervised during opening hours and it is proposed for Council staff to undertake this role as part of the implementation of this long term plan of management. Council will undertake community engagement and seek submissions on the intention to introduce tipping fees and to review the current spread of opening hours. It is proposed that tipping fees will be introduced and it will be part of the role of staff to assess loads, to collect fees and to provide instructions for the placement of waste materials to all facility users

The facility occupies a site area in excess of 200 hectares and has been operating since about 1995, receiving municipal solid waste from Cobar and the surrounding district, including the mining industry. The current landfill footprint is extensive and includes multiple activity areas. Consulting geotechnical (landfill) engineer Bob Amaral has provided concept designs whereby the landfill footprint can be regularised and landfilling undertaken progressively in accordance with his design concepts (Appendix 4)

The Cobar Waste Facility is operated under a number of legislative controls, including the Environment Protection Licence (EPL number 21084) as issued by the Environment Protection Authority (EPA under Section 55 of the Protection of the Environment Operations Act 1997), a Landfill Environmental Management Plan that was based on the EPA Environmental Guidelines: Solid Waste Landfills (1996) and the Pollution Incident Response Management Plan (PIRMP). All of these measures fall broadly under the Protection of the Environment Operations Act 1997 and Regulations made there under

The Facility is currently open to the public seven days a week between the hours of 7.00 and 8.00pm for the acceptance of municipal solid waste including commercial and bulk wastes and limited regulated wastes such as asbestos. Basic signage is provided in giving direction as to where materials should be deposited and relies on cooperation from facility users for waste to be placed in the correct locations. This is not always the outcome.

The Facility provides for local residents to dispose of self haul wastes and is the main receival point for all commercial and industrial wastes, all construction and demolition wastes and domestic kerbside collected general waste. The local mining industry is a major contributor to the waste stream and delivers materials to the waste facility that often require special treatment to ensure its effective disposal. Fees are not applied to domestic waste materials delivered to the site however all commercial and industrial wastes are subject to a fee structure which is applied through a contractor self regulating and reporting system. The effectiveness of this self regulating approach is questionable given the small amount of funds currently being received. Other materials to be accepted include green waste, concrete, tyres, deceased animals, clean fill, waste oil, asbestos and scrap steel. The quantity of waste received annually is approximately 3,770 tonnes with all non recoverable material being confined to the disposal areas and pushed up using a Caterpillar 928G Front

End Loader (FEL) with a removable trash rack. This item of plant cannot compact the waste materials and it is intended for a dedicated landfill compactor to be purchased for this purpose. The FEL can be used for stockpile management, placement of daily/intermediate cover and for pushing waste off the tipping platform to where the compactor will operate on the tipping face.

The landfill does not have a leachate management system and therefore relies on good practices to minimise the production of leachate. Such practices include keeping the active tipping face to minimum size, regular covering of waste, diverting surface water away from the tipping face, maintaining gradients on the covered areas to shed water, compacting waste and applying cover regularly. It is incumbent on Council to ensure these practices are undertaken effectively and it is the application of these practices where improvements can be made.

The facility has a number of waste disposal operational areas where the waste materials have not been compacted and where a proportion of these activity areas remain uncovered. The recent major fire and the use of soil to smother the fire has reduced the amount of exposed waste on the site. Reducing the number of these waste disposal sites and confining the size of the drop of areas should be a priority. However, it will also be important to have separate tipping areas for domestic waste and for commercial/industrial waste to reduce the risks of trucks interfacing with small vehicles and the Amaral concepts (see Appendix 4) provide for this separation. The notes accompanying the Amaral concepts highlight the opportunity to win soil from previously covered waste when implementing his filling/staging plans. This presents a significant saving opportunity for Council

Separate areas are provided for the stockpiling of green waste, used tyres and scrap metal. A site master plan has been developed as part of this long term plan of management (LTPoM) and proposes that such activities are concentrated near to the proposed gatehouse to afford a degree of supervision. The location of these stockpiles also sits outside of the final landform design footprint.

## 2.0 Background

Cobar Shire Council has determined to undertake a review of the operations of the Cobar Waste Facility in order to identify where improvements to current practices could be introduced and risks mitigated. The importance of undertaking such a review became evident when a major fire occurred at the facility in July 2020 that proved difficult and costly to extinguish. Officers from the NSW Environment Protection Authority attended the site during the fire and directed Council to implement measures to reduce the likelihood of a reoccurrence of a major fire within the facility.

Council has prepared a scope of works and engaged Robert Bailey Consulting and Robert Amaral Geotechnical (Landfill) Engineer to prepare a long term plan of management for the Cobar Waste Facility that will provide a final landform design, filling/staging plans, site master plan and procedures to improve operational performance and to mitigate risks.

## 3.0 Purpose

The purpose of this long term plan of management is to provide a process with the highest probability of achieving the defined aims that would address long term planning and future design of the Cobar Waste Facility. The Plan considers the final landform, activity area interrelationships, existing and future infrastructure, the application of fees and charges, complying with the Environment Protection Licence, valuing responsible environmental performance, improving existing landfill management practices and recognising resource recovery opportunities.

The primary aims of the project are:

- To put measures in place that will maximise the residual life of the landfill
- To identify improvements to existing practices that will translate into cost efficiencies and provide for the implementation of these opportunities.
- To develop plans for the coordinated development of the Facility over the longer term.
- To engage practices that will ensure responsible environmental performance is maintained
- To comply with the site Environment Protection Licence, relevant legislation, regulations and codes
- To adequately address risk
- To develop a financial model that will predict future incomes and expenditures and will provide for the managed development of the Facility over the longer term.

## 4.0 Operations

A site master plan has been prepared that shows the location of the proposed activity areas together with existing infrastructure. The master plan is included as Appendix 8 and it should be noted that the location of a future weighbridge has been added although this is unlikely to be constructed in the near term. When positioning the gatehouse it will be important to keep in mind the potential for a weighbridge to be constructed in the future. There are some general principles that should be observed for a weighbridge/gatehouse location and these are -

- Approaches to the weighbridge should be direct, have good line of sight and provide sufficient space for vehicles to wait without interfering with passing traffic
- There should be a clear line of sight to observe approaching vehicles from the gatehouse
- Have an un-tarping area at the ingress approach to the weighbridge so that loads can be inspected at the weighbridge
- The gatehouse should be located to allow the operator clear line of sight for approaching vehicles, to enable loads to be inspected (elevated CCTV and manually), to allow the operator to communicate effectively with customers and to enable the exchange of payments/receipts

- 4.1 Current operations of the domestic waste active tipping area domestic waste, including self haul and kerbside collected waste, is deposited on a dedicated tipping platform and is generally pushed up daily using a Caterpillar 928G Front End Loader (FEL). The tipping platform is expansive and the deposited waste material is not compacted and remains uncovered for an extended period of time. This poses a number of environmental risks including windblown litter, pests/vermin, leachate and odour.
- 4.2 Proposed improvements to the operation of the domestic waste tipping area Geotechnical engineer Robert Amaral (Amaral) has prepared concept designs for the future operation of the domestic waste tipping area. The tipping platform is to be confined to about 30 metres wide for the acceptance of waste materials. Figure 2 (Appendix 1) demonstrates how the waste material is to be placed and compacted in 1 metre lifts and covered progressively as the tipping face advances. The FEL will push the deposited wastes to the tipping face where a landfill compactor will compact the waste. The FEL will be used to apply the cover material progressively.
- 4.3 Current operations at the active tipping area for mining and bulky waste.- mining and bulky wastes are deposited in a dedicated area separate from the domestic waste disposal area. Some of these waste types are bulky, irregular in shape and can be difficult to manage at the tipping area. Before the fire in July, much of the deposited mining and bulky waste material remained dispersed unevenly throughout the tipping area and was uncovered. This type of operation is an inefficient use of landfill space.
- 4.4 Proposed improvements to the operation of the active tipping area for mining and bulky waste Amaral concept design figures 8 and 9 (Appendix 1) show the proposed location of the mining and bulky waste disposal area as stage 1. Soil containment bunds would be prepared with shallow waste lifts of about 1 metre to be undertaken. Figure 2 (Appendix 1) provides guidance as to how these lifts would be developed. Waste types considered difficult to handle and to compact will have fees applied reflective of the cost of disposal. Existing areas of exposed mining and bulky wastes should be flattened using an excavator or other suitable plant. A risk assessment should be completed before any work in undertaken on these exposed bulky waste areas
- 4.5 Existing landfill plant a Caterpillar 928G Front End Loader (FEL) is the only item of plant dedicated for use at the landfill. A FEL is not an ideal piece of equipment for use at a landfill as it cannot work effectively on slopes, cannot compact waste and is ineffective in wet conditions. However, a FEL can construct berms, load trucks, place daily cover, spread shredded green waste and push waste onto an active tipping face. Historically, the FEL has been the choice of plant at the Cobar landfill which has resulted in an accelerated consumption of void space because little or no compaction of the deposited waste material has taken place
- 4.6 Proposed improvement to landfill plant a landfill compactor will be purchased and will operate in conjunction with the existing FEL. The FEL will establish the starter berms as shown in Amaral figure 2 (Appendix 1) and push the deposited waste material from the tipping platform to the tipping face

- where the compactor with shape and compact the wastes. The FEL will place daily cover over the compacted waste as the tip face progresses.
- 4.7 Current site control and supervision the site is not a supervised however electronic entrance gates restrict entry to the facility only during nominates times, thus affording a measure of control. The facility is operated by staff of Cobar Shire Council however there is only limited site presence and this when waste materials are being pushed up, usually of an afternoon and for a duration of about 2 hours
- 4.8 Proposed improvement to site control and supervision it is proposed to have a depot attendant present on site during opening times to assess all incoming loads, apply fees, provide instructions and to supervise the various activity areas. The depot attendant will be stationed at a new gatehouse to be installed as part of the implementation of the long term plan of management. Community engagement will be undertaken in accordance with the community engagement plan that appears as Appendix 5 in order to determine suitable opening hours and a fee structure for the various waste types
- 4.9 Current Green Waste Management self haul green waste is stockpiled, pushed up regularly and shredded routinely as part of a region wide service contract. The shredded green waste is retained on site in windrows.
- 4.10 Proposed improvements to green waste management although no change is proposed to the manner in which green waste is stockpiled and shredded, it is intended that the existing windrows of seasoned shredded green waste and future shredded green waste be incorporated into on-site beneficial re-use. Such uses include placement over existing disturbed or covered surfaces to reduce dust and erosion, for sedimentation control, for the formation of internal berms and as a re-vegetation medium above intermediate cover and final capping
- 4.11 **Current scrap metal management** self haul scrap metal is stockpiled and on sold to a service contractor whereby the material is taken off site on a routine basis. The scrap metal stockpile is pushed up regularly using the Council FEL
- 4.12 Proposed scrap metal management it is proposed to have two scrap metal stockpile areas, one for self haul domestic scrap metal and the second for commercial/industrial brought to the site by contractors and businesses. The intention is to prevent interaction between the heavy vehicles and the domestic vehicles thereby mitigating risks to the facility users. Council may give consideration to separating lead acid batteries (LABs) to keep these out of landfill and to receive some income. It should be noted that LABs must be stored under cover and on bunded pallets or within bunds
- 4.13 **Waste concrete –** waste concrete will continue to be landfilled within the mining and bulky waste disposal area however it may be utilised to form internal berms where suitable
- 4.14 **Deceased animals and asbestos disposal-** asbestos is currently disposed of it in a dug out shallow hollow in advance of the waste leading face, covered it with soil to a depth of about 300mm and then buried with waste. This

practice is suitable however the depth of soil should be 1 metre as prescribed in the Waste Regulations (2014) (see Appendix 7) before overtopping with general waste. A key feature of the long term plan of management is to rationalise the number of waste disposal activity areas and to concentrate the operations of the waste facility rather than have them spread throughout the facility. Both deceased animals and asbestos can be placed at the toe of the advancing face of the general waste disposal area and covered with excavated natural material (ENM) then overtopped with general waste. The depth of soil cover for deceased animals is not prescribed in the Waste Regulations (2014) and therefore can be at a depth determined by the on-site plant operator or supervisor

## 5.0 Landform Concept Design

Final landform design and filling/staging plans have been prepared for the future development of the Cobar landfill and these appear as –

- Notes to Accompany Design Drawings in Appendix 1,
- Guide to Site Capacity in Appendix 2,
- Site Contour Plan in Appendix 3 and
- Design Principles and Design Concepts in Appendix 4.

This suite of documents provides information on the development of the landfill for future decades and offers guidance for the orderly progression of the landfilling operations. Each sub stage is essentially a building block that in total combination will deliver the final landform. It will be most important that the design is followed in order to deliver the desired outcomes. This may require periodical examination by an external party (surveyor, geotechnical engineer) to confirm the landfilling works are progressing in keeping with the adopted designs.

Council should also be aware that overtopping is construction work that requires skilled plant operators, correct plant, an understanding of grades, reduced levels, waste placement, surface water management, covering and compaction. Site personal and supervisors should be trained accordingly and be familiar with the designs and the principles supporting those designs

Given very little compaction of waste has occurred since the waste facility commenced operations in about 1995, the geotechnical engineer (Robert Amaral) has recommended that a landfill compactor be used to re-work the majority of the site to achieve a degree of compaction and this be extended to the mining waste area where an excavator be used to shape and compact the exposed mining wastes. The cost of such work has been included into the financial model assumptions appearing in Part 7.0 of this document

## 6.0 Acts and Policies Associated with the Project

- Protection of the Environment Operations Act 1997
- Protection of the Environment Operations (Waste) Regulation 2014
- EPA Environmental Guidelines: Solid Waste Landfills (2<sup>nd</sup> edition 2016)
- Environmental Planning and Assessment Act 1979
- Environmental Planning and Assessment Regulation 2000
- Infrastructure SEPP 2007
- EPA Licences (licence number 21084)
- Part 5.7A of the Protection of the Environment Operations Act 1997 (POEO Act) to prepare, keep, test and implement a pollution incident response management plan.

## 7.0 Delivery

#### Desired Outcomes -

- The Cobar Waste facility will be developed in a planned and co-ordinated manner.
- The project will deliver the stated aims
- Risk will be managed
- Stakeholder consultation results in broad support for the project.
- Regulatory agencies gain confidence in Council's management processes
- Succession planning is achieved
- Landfill void space will be maximised
- Residual life of the landfill will be optimised
- Long term planning prevents re-work
- Budgets can be developed for the capital works and programmed for delivery in a measured way and for optimum benefit

## Key Actions to deliver the desired outcomes

1. Community Engagement on the introduction of gate fees and in rationalising the opening hours at the Cobar Waste Facility

#### Tasks

• Prepare a community engagement plan

- Brief the Mayor, Councillors and Executive Group on the proposed engagement
- Develop the "tools" for the delivery of the Plan
- Undertake community engagement in keeping with the Community Engagement
   Plan (Appendix 6)
- Consider submissions received
- Provide a report to Council/Executive Group
- Make a determination of the application of gate fees and hours of operation

### 2. Procure Landfill Compactor

#### Tasks

- Undertake investigations as to the most suitable item of plant for use at the landfill
- Prepare a tender specification
- · Seek approval to go to tender
- Prepare a tender evaluation plan
- · Appoint a tender evaluation panel
- Call tenders
- Undertake tender evaluation
- Prepare a report to Council
- Implement Council resolution

#### 3. Procure and install/operate gatehouse

#### Tasks

- Enquire through Council's Planner if a DA/CC is required for the establishment of a gatehouse. (if required, prepare documentation, submit DA/CC, obtain consents)
- Undertake investigations as to the most appropriate building for use as a gatehouse
- Prepare RFQ (request for quotation) and seek prices
- Consider quotations and appoint a supplier
- Inspect the site and determine the best position to locate the gatehouse building
- Engage contractors/Council staff to provide services to the gatehouse (power, water, effluent disposal, communications, security)
- Arrange for electronic payment system (EFTPOS) for the acceptance of gate fees
- Arrange computer service for interface with Council system
- Arrange for CCTV and audio to monitor transactions with customers
- Develop schedule of gate fees and load measurement assessment guidance
- Develop cash handling procedures and cash collection system (safe, float, daily removal of takings, receipting)
- Provide a diary and complaints register
- Copy of EPL and PIRMP held on site
- Develop safety systems, including evacuation plan
- Establish an emergency assembly point and sign post
- Establish signage showing fees and charges, acceptable/prohibited wastes

- · Supply first aid kit and have staff trained as first aid officers
- Write position description for depot attendants and develop work roster
- Undertake employment processes for depot attendants
- Train staff in all procedures required to undertake the position description, including the PIRMP
- 4. Undertake landfilling in accordance with concept designs

#### Tasks

- Undertake risk assessments for all landfill operations and prepare SWMS (safe work method statements)
- · Train the plant operator in the use of the landfill compactor
- · Prepare pre-start checklist for use of the landfill compactor
- Train/familiarise the plant operator in the application of the concept design filling/staging plans. Commence works
- Undertake initial works where the landfill compactor and/or a contract excavator is used to compact and shape all previously filled areas of the site
- · Determine how cover material will be won from the "borrow" area
- Determine how cover material can be recovered from previously covered areas before overtopping is commenced
- Commence the winning/stockpiling of cover material
- Develop procedures for the use of the FEL and landfill compactor
- · Develop a traffic control plan, including signage
- Review and update the fire control plan
- 5. Determine the cost implications for the introduction of changed landfill practices

#### Tasks

- Undertake an assessment of the likely quantity of waste materials, the waste types and sources to be received at the waste facility
- Prepare a draft schedule of fees and charges that may be applied to waste receivals
- Determine the likely cost of a new landfill compactor and the hourly plant hire rate that would be applied
- Determine the cost of a gatehouse, including fit out and with all inclusions
- Determine labour costs based on a four day on, four day off rolling roster where the waste facility is open 7 days a week for 8 hours
- From information provided by Council. prepare a baseline financial model from future budgets and past year actual costs for the Waste Section. Input data to reflect the proposed changes to the landfill operations (adjusted financial model)

## **Assumptions**

- Hourly rate for depot attendant \$36 plus 58% (\$20.88) on costs
- Two person, rolling 4 day on, 4 day off roster, 8 hours paid work per day

- 4 weeks annual leave
- There are nine public holidays per year
- Overtime rate is time and a half for the first 2 hours after normal time on week days.
   Overtime rate is time and a half for the first 2 hours on Saturdays and double time thereafter and double time on Sundays. On costs do not apply to overtime
- Meal allowances \$10 per day on week-ends
- New landfill compactor purchase price is \$680,000
- Cost of gatehouse and gatehouse fit out \$120,000
- Cost of initial landfill footprint re-shaping using contract 30 tonne excavator 35 hours
   x \$160 /hour plus \$3,000 float to/from site = \$8,600
- Cost of initial landfill footprint compaction using Council landfill compactor 35 hours \$ \$126/hr = \$4,725
- Landfill compactor plant hire rate is \$126/hour and is used 15 hours per week (see Appendix 10)
- The cost to load, place and spread shredded green waste at a thickness of 300 400 mm will be \$2.00 per square metre and 2,000 sq m will be applied annually (\$4,000 pa)
- Win, transport, place daily (weekly) cover (150 mm ENM) @ \$2.50/m2 3,000 sq m will be applied annually = \$7,5.00 pa
- Win, transport, place and compact intermediate cover (300 mm ENM) @ \$2.50/m2.
   3,000 sq m will be applied annually = \$7,5,00 pa
- Win, transport, place and compact final capping (2 x 300 mm layers ENM) @ \$4,50/m2 and 3,000 sq m will be applied annually = \$13,500
- The shredding of green waste will be included into the site operating budget as is the current procedure
- Kerbside collected waste 1170 tpa
- · Commercial receivals 1600 tpa
- Self haul waste 1000 tpa
- Gate fee applied \$174/tonne
- Potential income from commercial waste and domestic self haul general waste is a combined 2600 tpa. This does not include kerbside collected domestic waste. An accurate assessment of current quantities of waste received at the waste facility is difficult to determine. The industry general guidance of one tonne of waste generated per head of population has been used. Therefore, 2600 tpa x \$174 = \$452,400

### **Staff Costs**

Mon – Fri wages 7.5 hours @normal time plus 0.5 hour @ time and a half  $(7.5 \otimes $56,88) + (0.75 \otimes $36) = $453.60$  per day

\$453.60 per day x 5 days x 52.2 weeks = \$118,389.60

Sat – Sun wages (Sat time and a half for the first two hours and double time thereafter – Sun double time – no "on cost" with overtime) \$36 x 31 hrs (Sat 15hrs, Sun 16 hrs equivalent)

= \$1085 per week-end x 52.2 weeks = \$56,637

Total annual =\$118,389 + \$56,637) = \$ 175,026 Weal allowance for week-ends = 104 days @\$10 (\$1040) Public holidays -9 days x 1 staff x 8 hours x \$36 = \$2,592

### Total annual = \$178,658

- There will be indirect costs associated with supervision
- An allowance should be made for call outs, additional overtime, extra weekend requirements and unexpected absenteeisms.

Plant hire (landfill compactor) The FEL cost is already included in the current budget \$126 per hour x 15 hours per week x 52.2 weeks = \$98,658 per annum

Additional plant operator 2 hours per day for 7 days - Mon to Sat time and a half, double time Sunday -22 hours equivalent @ \$36 = \$41,342 pa

		New Items New Items Amount Year	2019/20 Actual	12/0202	2021122	202202	2023/24	2024/25	2025/26	2026/27	2027/28	2028/20	00/6202	2030/31	2031/32
J5	Income Increase Expenditure % Increase			2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Operation 97002	Operational Income 97002 Waste Annual Charges		625,456	637,965	650,724	663,739	677,014	690.554	704,365	718,452	732,821	747,478	762,427	777,676	793.229
97003	Penstoner Abandonments Trade Waste Charges		-17,219 102,824	104,830	106,978	109,118	111,300	113.526	115,797	118,112	120,475	122,884	125.342	127,849	130,406
97010	Interest income		0 24	0 0	0 20	60.205	61 501	69 731	63 985	65,265	66.570	67,902	69.250	70,645	72.058
97011	Disposal Charges Landiii Sale of Scrap Metai		19,355	25.000	25,500	26,010	26,530	27,061	27,602	28,154	28,717	29,291	29,877	30,475	31,084
		Contract and was		0 0	0	0 984 448	470 677	0	489.692	449.486	509,476	519,665	530.059	540,660	551,473
	Cale inte	77/1707 . 005/75%		0	0	0	0	0	0	0	0	0	0	0	0 0
				0 :	0 0	00	00	00	00	00	0 0	0 0	00	0	0
				0 0	0 0	0 0	0 0	00	0	0	0	0 0	0	0	0
1	TOTAL OPERATIONAL INCOME		787,233	808,236	1,275,800	1,302,336	1,328,383	1,354,951	1,382,050	1,409,691	1,437,884	1,466,642	1,495,975	1,525,895	1,555,412
Operation	Operational Expenditure									1	1	1	4	4	797
40006	Disposal Abandoned Vehicles		366	373	381	338	396	404	\$4242	420	429 60,564	61,776	63,011	64,271	65,557
40007	Trade Weste Colections		120,13	143670	100,170	450 RAR	163 086	166.347	169.674	173,058	176,529	180,060	183,661	187,334	191,081
40008	Comestic Waste Collections Trade Waste Collections		315	321	328	334	341	348	355	362	369	376	384	392	399
40016	Public Health Charge		97,800	99,756	101,751	103,786	105,862	107.979	110,139	112,341	114,588	116,830	119,218	121,602	124,034
40021	Advertising		78	980 80	81	83	88	98	88	8	94	93	95	7.6	Q0 .
40010	Cobar Waste Depat		111,005	*13.225	115,490	117,799	120,155	122,558	125,010	127,510	130,060	132,661	535,314	138,021	140,701
40012	Village Waste Depoi		7,925	8.094	8,245	8,410	8,578	8,7±0 0	6,925	9, 103	0	0	0	0	0
The state of	and a form attandants	178 GER 2001/02		0.00	178,658	182,231	185,876	189,593	193,385	197,253	201,198	205,222	209,326	213,513	217,783
	Plant Hire			0	98,658	100,631	102,644	104,697	106,791	108,926	111,105	113,327	115,594	117,905	121.00
	Plant operator O/T			0 0	41,342	42,169	43,012	43,872	44,750	45,645	4,505				
	Apply shredded green waste	7,500 2021/22		0 0	7.500	7,650	7,803	7,959	8,118	8,281	8,446				
	Apply innfermediate cover			0	7,500	7,650	7,803	7,959	8,118	8,281	8,446				
	Apply final capping	13,500 2021/22		0 0	13,500	13,770	14,045	14,325	14,613	000	0	0	0	0	0
				C		0	0	0	0	0	0	0	0	0	0
	TOTAL OBEDATIONAL EXPENDITIBE	SCHOOL STREET,	420 428	428 939	788.675	804.449	820,538	836,949	853,688	870,761	888,177	821,119	837,541	854,292	871,378
10007	Administration Charges		33,333	34,000	34.680	35.373	35,081	36,802	37,538	38,289	39,055	39,836	40,633	41,445	42,274
40017	Governance Charge		55,020	56.120	57,243	20.00	000,000	4,002	7 443	7 286	7 432	7,580	7,732	7,887	8.044
99929	Depreciation - Waste Ops - Waste Depots		6,343	5.013	5.111	5.214	5,318	5,424	5,533	5,643	5,756	5.871	5,989	6.109	6,231
2255	Ochicaliul Wasie Otta - Dollicaliu Haza Otta		009 00	101.601	103,633	105,705	107,820	109,976	112,176	114,419	116,708	119,042	121,423	123,851	126,328
	TOTAL EVERNOTINE		520.137	530.540	892,309	910,155	928,358	946,925	965,863	985,181	1,004,884	940,161	958,964	978,143	997,706
	TOTAL EXPENDITURE						200 001	408026	A16 186	A74 510	433.000	525,481	537,011	547,751	558,706
	OPERATIONAL RESULT		267,096	277,696	384,492	392,182	400,025	406,025	410,100	Olic'h Sa			The second second		

		Cobar C	ouncil - W	aste Mana	gement Fi	nancial Me	Cobar Council - Waste Management Financial Model - adjusted	sted						
	New Items New Items Amount Year	2019/20 Actual	2020/21	2021122	2022/23	2023/24	2024/25	2028/20	2026/27	2027728	2028/20	2020/30	2030/31	2031/32
Capital Income		c.	0	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
TOTAL CAPITAL INCOME		,												
Capital Exponent  Candill control Carboure if out  Carboure bridge forth of Carboure if out  Commet bridge forthis forther taken control plant  Commet bridge forthis forther taken Council plant	680 000 - 2020/21 170.000 - 2020/21 8,600 - 2020/21 4,725 - 2020/21		630,000 120,000 4 725 6 725 6 0 0 0 0	0000000000	00000000000	0000000000	00000000000		000000000000		00000000000	00000000000	0,0,00000000	0000000000
TOTAL CAPITAL EXPENDITURE		0	813,325	0	0	٥	0	0	0	0	0	0	0	0
CAPITAL RESULT		0	-513,325	D	0	0	0	0	0	0	0	0	0	0
Cash Batance of Reserve 1 July Transfer to Reserve - Operating Result Add Sacci New Cash Deprecation		267.096 11,256	277,895 71,481	384,492	322,182	400,025	408.026 12,428	416,185	424,510	433.000	526,481	537,011	547,751 13,995 0	558,706
Transfer from Reserve - Capital Expenditure Novements in the year	11	278.352	-524,148	396.202	404,127	412,209	420,453	428,862	3,803,497	446,188	4,789,619	550,732	5,902,097	8,475,079
Returne of Reserve 30 June		1,825,00c	1.000.000		200 000	-								

# Procurement Management

Item to be Procured	Procurement Method
Services of consultants, landfill engineers, surveyors	By negotiation and RFQ – scope of works to be priced by service providers
Gatehouse	By RFQ based on design specification
Gatehouse services and fit out	RFQ and based on scope of works
Landfill compactor	By tender and based on performance specification
Contract plant	By RFQ or existing service agreements
Civil works (internal roads, excavation at borrow area)	By RFQ or existing service agreements

### 8.0 Appendix 1- Notes to Accompany Design Drawings

### NOTES TO ACCOMPANY DESIGN DRAWINGS

### DESIGN PRINCPLKS

Under most circumstances involving the selection of a "greenfield" site for a landfill, the selected land area is sufficient to develop a landform allowing for the maximisation of the landfill capacity to last at least 50 years and occasionally in excess of 100 years.

The maximisation approach is taken so that it will not be necessary to go through the ardonus and time consuming process (often up to 10 years in recent times) of site selection, proving up its suitability and going through the necessary approval processes.

In view of this, the perimeter side batters are made as steep as practicable, that is ,3H:1V, which is the steepest slope on which a conventional tractor with a slasher attachment can safely operate to maintain a grassed surface.

These perimeter side batters are progressively raised to a height that will allow an upper londform area not smaller than about 40th wide to be developed to enable ready vehicle access and turning , waste dumping / spreading / compaction and the placement of a final cover.

The upper landform area should be developed / graded so as to slope uniformly towards its perimeter at not less than 7% to allow for inevitable scalement and to meet the NSW EPA Guidelines of malitializing a minimum 5% " post settlement " gradient.

The final cover in the Cobar environment which has a very favourable evaporation to rainfall ratio of at least S:1 should consist of a 600mm layer of lightly compacted clayey soil topped with 450mm of shredded green waste. The shredded green waste will break down to about a 150mm thick topsoil layer. The shredded green waste should be installed and seeded over all cover areas immediately following its staged placement as it will provide immediate protection against erosion.

No shrubs or trees should be allowed to grow on the final capping as they will interfere with periodic stashing of the grass and prevent ready visual inspection and remediation of any crossion guilles or depressed areas which may require filling over time.

As far as is practicable the perimeters batters and the upper landfill surface should have a convex shape and exclude valley, gully or concave features which encourage concentrated flows of surface water and , hence, erosion of the capping.

A schematic / conceptual plan and sections of a landfill landform which illustrates the above design principles are provided on Figure 1.

The purpose of these design features is to provide a compacted waste mass that is enclosed within a low permeability natural "geological" liner and a sloping, low permeability soil cover "umbrella" to effectively shed rainfall events off the landfill and tus limit leachate production.

Typically, a landfill site is progressively excavated in advance of watse filling to provide a balance of necessary soil cover for the completed landform.

### STAGED PULLING

Another fundamental design principle for landfill developments is to construct the landfill in stages and sub-stages such that the landform is raised to its final height progressively, rather than simultaneously over a wide area.

The obvious advantage of this approach is that as each stage is raised to its final height it can be capped, maintained and, if necessary repaired while the balance of the landfill is being developed.

Thus, an ever increasing percentage of the landform will be protected from rainfall ingress and teachate production.

Additionally, the cost of the final closure? capping will be spread over the life of the landfilling operation, thus negating the need for a large "sunset" hand to cover the cost of this closure. This approach allows the income from waste receipts (or annual fees ) to be used throughout the life of the landfill.

### WASTE ACCEPTANCE ISSUES

A large number of the smaller Western Plains Councils not a trench disposal landfilling system whereby a trench is dug of a variable size and depth and the excavated soil is stockpiled adjacent, ready for overtopping the reach when it has been filled with waste.

Once the trends is covered, a new trench is dug, filled and covered.

This, often unmanned approach requires the periodic use of an excavator to dig the trenches, the periodic use of a front end loader ( FEL ), dozer or equivalent to push the waste into the trench and place the soil cover.

Some Councils carry out some form of compaction by conventional tractor / excavalor type equipment to increase the capacity of the void space and , less commonly , use a purpose built compactor.

The use of a purpose built waste compactor has the obvious advantages of increasing the life of the landfill, improving traffickability over the waste, reducing litter, vernin and reducing the risk of fires.

Cobar Shire Council however accepts not only household? municipal waste from its residents but also Commercial and Industrial ( C&I ) waste and Construction and Demolition ( C&D ) waste as well as a considerable volume of Mine waste from local mining operations.

The Mine waste in particular includes a significant percentage of large ( often very heavy ) objects which cannot be readily handled ( spread and co-disposed ) with other finer , less bulky waste. The corrently available equipment on site is unsuited to handling this waste and hence it has been dumped over a large area and included extensive voids before being recently covered in a fire emergency using very large external earth moving equipment.

Similarly , the more recent disposal of C&D waste from the hospital demolition has created a similar problem in that the currently available equipment cannot properly handle its efficient  $\ell$  safe

disposal. Fortunately, the recent fire smothering exercise has allowed a very large piece of equipment ( D10 dozer ) to be used to dig a deep excuvation into which the bulky hospital demolition waste can be pushed. Even this will be a difficult exercise and no effective compaction can be arbitrared using the available equipment.

The best that can be done is to push soil and finer waste into and over the coarse waste to allow it to be trafficked as it is being pushed out into the pit.

Essentially, it will be necessary to continue with two separate operational filling areas:

Stage IA (D ) - a filling area for domestic (D) waste from commercial household compactor crucks , utes and other small vehicles

Stage 1A ( M/B ) - a filling area for all Mine wate ( M ) and all bulky ( B) waste from C&I or C&D sources using heavy vehicles

The Stage 1A (D ) filling area will use the upper , existing flatter areas using shallow waste lifts of 1m or so , 40m or so wide within soil bunded containment areas ( refer to Figure 8 )

The Stage 1A (M/B) filling area will use the deeper, northern area, use deeper waste lifts (2-3m, occasionally deeper) and no soil containment bunds but possibly bunds made from very large tyres or selected C&D waste. The Mine waste should be restricted to a maximum size of 1m3 for general, disposal, if greater than 1m3 in size, advance notice should be given so that it may be directed to a suitable deeper area at the base of a deep leading face or alternative.

Because of the very large area already covered with waste ( current landfill footprint ) it will likely take several decades to progressively raise the entire area to final height. It is therefore recommended that the landfill area be raised initially to an " intermediate" height so as to cover the site with an intermediate cover ( 300mm ) before overtopping the entire site , in Stages , to its " final " beight or level.

The existing "man proof" fence should be repaired and HAZARD signs attached to help protect Council from potential claims to the event of illegal access.

This site has several oversteep and irregular faces, gullies and the like. Signs advising that clubbren should not be allowed out of delivery vehicles using the site should also be prominently displayed.

### CHANGES TO LANDFILLING PROCEDURES

The maximisation of the capacity of a landfill by using 3H:1V perluterer batters and raising the landform to its maximum potential height using a 7% gradient is ununcessary for this very large available area and requires a variety of equipment and experienced operators.

The overall size of the site, a commitment to it becoming a manned landfill, the proposed purchase of a purpose built compactor and a restriction on the receipt of large, unwieldy / bulky objects will allow a simpler, less demanding design to be used which will achieve the same technically correct landfilling procedures to be used.

For the 1A ( D ) area, the perimeter batters have been designed at 5H:1V rather than 3H:1V which will allow the waste to be dumped, spread and compacted within low containment soil bunds as shown on Figure 2 and the waste extended to the perimeter at this flatter gradient before being

19

capped with 500mm of clayey soil and copped with 450mm of green waste mulch above the batter area.

Again the 1A ( D) filling should scort at the perimeter, be pushed into place by an FEL or dozer and compacted ready for incoming waste to be placed / dumped in the cleared area, ready to pushed up against the previously placed and compacted waste as shown on Figure 2. The placement of a second lift of waste is illustrated on Figure 3.

The IA ( D ) filling should occur within the area designated as such on Figures 7, 8 and 9.

For Mine and bulky ( M/B ) waste a signicantly deeper waste layer will be required to allow integration of finer waste and compaction.

To this end the Mine and bulky waste should be placed within the area designated as 1A ( M/B ) ( refer to Figures 7, 8 and 9 ) where pushing this waste over a higher leading face is feasible.

### FIGURE 1

This figure Illustrates the following design principles / concepts:

- \* 311:1V perimeter botters to maximise void space ( modified herein to 311:1V )
- \* 15H:1V ( 7% -/- ) top gradient to provide ready post settlement shedding of rain water ( modified herein to 20H:1V or 5% )
- \* a final capping to minimise rainfall intrusion
- \* an excevation of sufficient depth to provide cover for the completed landfill
- \* an unsaturated attenuation zone ( deeper than 2m ) to allow physical, chemical and biodegradation of leachate ( >> than 2m at this site )
- \* a summary of potential leachate losses from the base of a landfill with 1m, 10m and 100m of clayery soil having a permeability of 10-9, 10-9 and 10-7 m/s, respectively, which are equal, that is, 10-9At m3 (landfill base likely>10m at this site)

### PIGURE 2

Figure 2 illustrates the placement, pushing and compacting of Dwasie within low containment soil bunds.

### FIGURE 3

The placement and pushing of a second lift of Dwaste within containment bunds are illustrated on this figure.

### FIGURE 4

Figure 4 is a simplified site contour plan based on the August 2020 drawing provided by Langford and Rowe which is included in Appendix 1. All known stockpiles of soil or recycling material have been removed on this plan.

### MIGURE 5

This figure illustrates the landfill landform after having been raised to an " intermediate " level with SELTV parameter batters and an upper sturface gradient of 1.5%.

By raising the entire landfill footprint area to this initial lower level enables the existing irregular landfill area to be regularised, its lower perimeter batter to be finalised ( capped and maintained ) and a reasonable gradient to shed surface water to be repliced in a shorter time frame.

Once complete, it also provides an improved gently sloping surface upon which future overtopping can occur within compolled soil bunded areas.

### FIGURE 6

Figure S illustrates a potential "final" landfill landform with the perimeter batters extended to RL 255 (from RL 252) and an upper gradient of 5%.

Although this final upper surface gradient is less than the NSW EPA's recommended 5%, post settlement, it takes into account the fact that the "Intermediate" level will be built in advance and that the overtupping will be on top of an already largely settled waste mass.

Also, in an extremely favourable elimate (low rainfall with an evaporation to rainfall ratio of 5:1) additional infiltration into the 600mm of soil cover and 150mm topsoil layer will be a benefit to maintain a vegetative cover while still restricting rainfall from penetrating the cover.

As discussed below, this "final landform " will be capable of further extension, if required, by filling and amalgamating the area alone the recommended soil / rock borrow areas to the North and East.

### FIGURE 7

This figure shows the two separate  $1A(\mathbb{D})$  and 1A(M/B) waste filling areas as well as the recommended borrow areas and the likely location of product stackpile areas.

The soil / rink bornew areas are designed to capture rainfall runoff so that they can double as emergency fire water holding ponds.

### FIGURE 8

Figure 8 illustrates the Dwaste filling area raised to its "Intermediate" level, the M/Bwaste filling area raised to a "preparation" level and the northern borrow area excavated to its design level.

Depending on how the operational plans work out, they can be modified to suit the equipment available, the ability to occasionally ship in special equipment, the scarcity or otherwise of soil / muck cover and the experience of the operators.

### FIGURE 9

This rigure illustrates a suggested first sub-stage filling sequence for both the Dwaste and M/Ewaste filling areas.

### FIGURE 10

Figure 10 outlines a possible filling sequence to progressively raise the landfill in Stages to its "Intermediate" level.

Following the completion of the Stage 3 it would likely be the case that Stages 1A, 2 and 3 would then be raised to "Final" level before valsing Stage 4 to either "Intermediate" or "Final" level so as to preserve the current entrance area for its present uses.

This could also apply to the possible extension into Stages 5 and 6.

### **BORROW SOURCES**

The existing site contains several large stockpiles of suitable soil for use as daily, intermediate and final soil cover.

Prior to the recent landfill fire there were several soil stockpiles and other covered areas of potentially significant depth

During the smothering of the fire a large volume of soil was dug both within and outside the boundary lence to provide emergency soil cover.

Where excess soil cover has been provided to extinguish the fire, it remains a valuable source of future cover.

As shown on Figures 7 and 8 there is a potential soil cover borrow area at the northeast corner of the site which could provide approximately 60,000m3 of sultable cover material, sufficient, along with available on site stockpiles to provide cover to the end of the "Intermediate" landfill landform illustrated on Figure 5.

To preserve soil cover reserves as much as is practicable it is recommended that during the preparation of each sub-stage "containment cell the existing soil cover be pulled back down to the top of the waste and be used to develop the containment soil bunds.

This can best be carried out using an excavator with a gurnmy bucket ( a bucket with no teeth ).

Where the soil cover is deep ( greater than about 300mm) the FEL or a dozer can be used to blade off soil cover. These pieces of equipment cannot readily raise their buckers or blades to follow irregular waste / soil interfaces however and are best suited to significantly deeper soil profiles.

In any event, the removal of soil cover to expose waste before being overtopped with a new lift of waste is promoted by the NSW FPA in order to allow ready seepage of any leachate vertically into the waste mass and will provide additional valuable soil cover for the landfill's development.

# Appendix 2 - Guide to Site Capacity

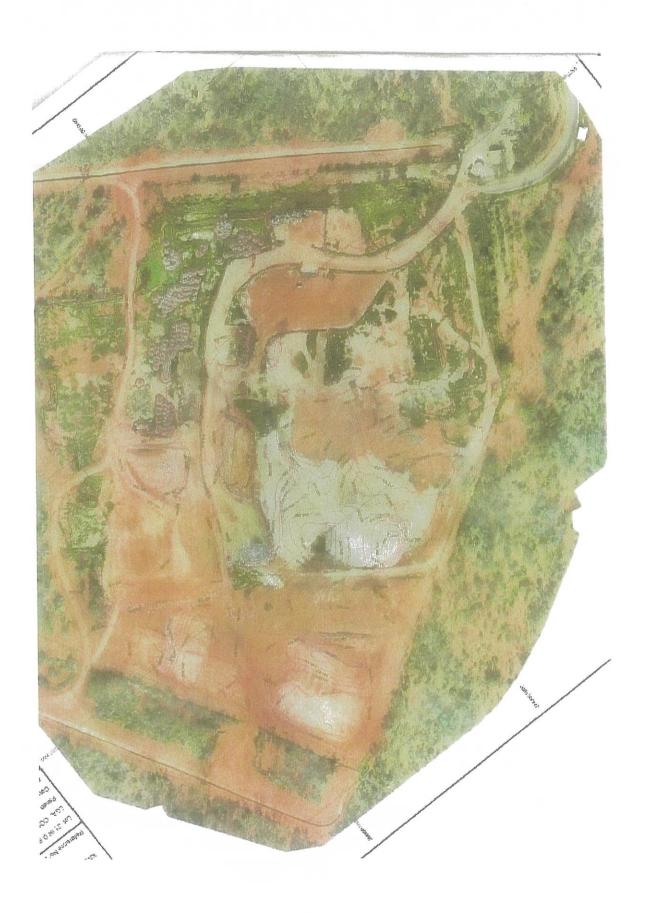
### GUIDE TO SITE CAPACITY

Area	Grosa Volume ( m3 )	Net Volume (m3)*
1A (M/B) " Preparation "	1,700	1,360
Sub-stage 1A1 (M/B)	4,200	3,360
Sub-stage 1A2 (M/B)	12,000	9,600
Sub-stage 1A3 (M/B)	19,060	15,260
Sub-stage 1A1 (D)	2,700	2,160
Sub-sange 1A2 (D)	2,625	2,100
Sub-stage 1A3 ( B )	1,500	1,200
Existing surface to " Intermediate " level	400,000	320,660
" Intermediate level to " Final " level	465,000	372,000

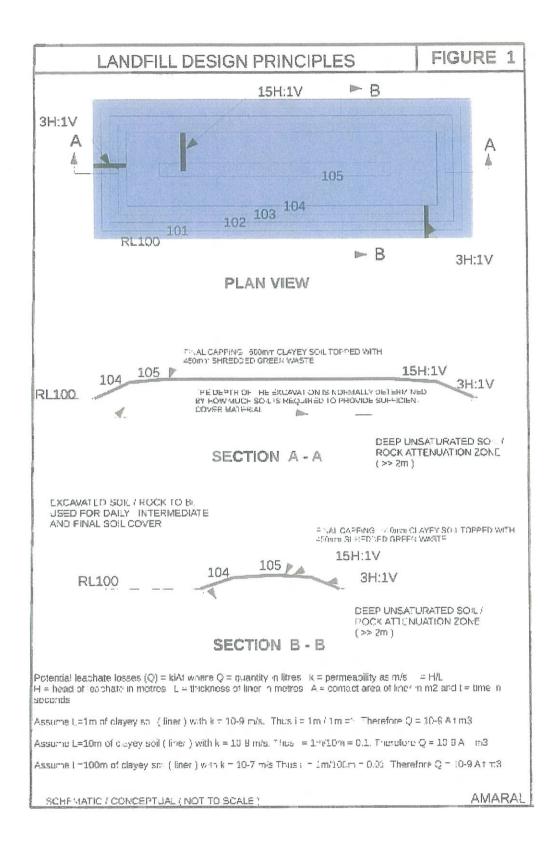
<sup>\* (</sup>bis assumes that the cover usage rate will be 20%

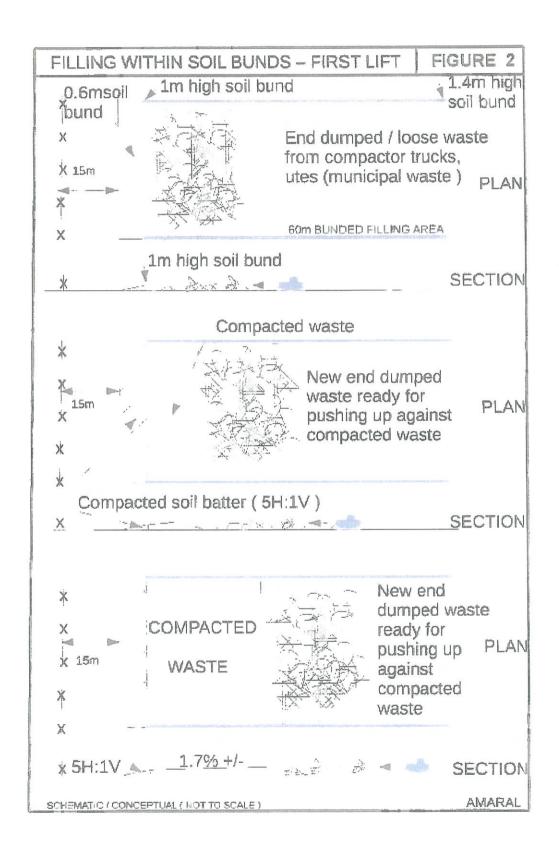
## Appendix 3 - Site Contour Plan

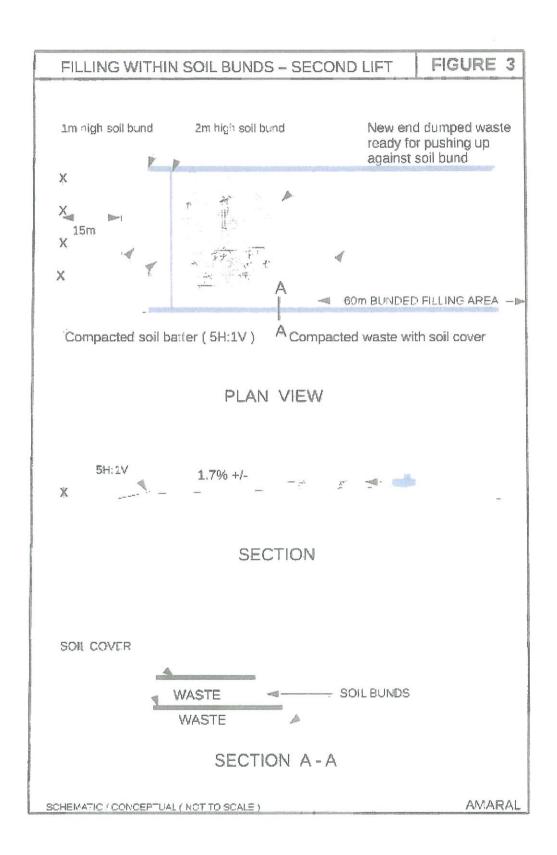
Site Contour Plan (August 2020)

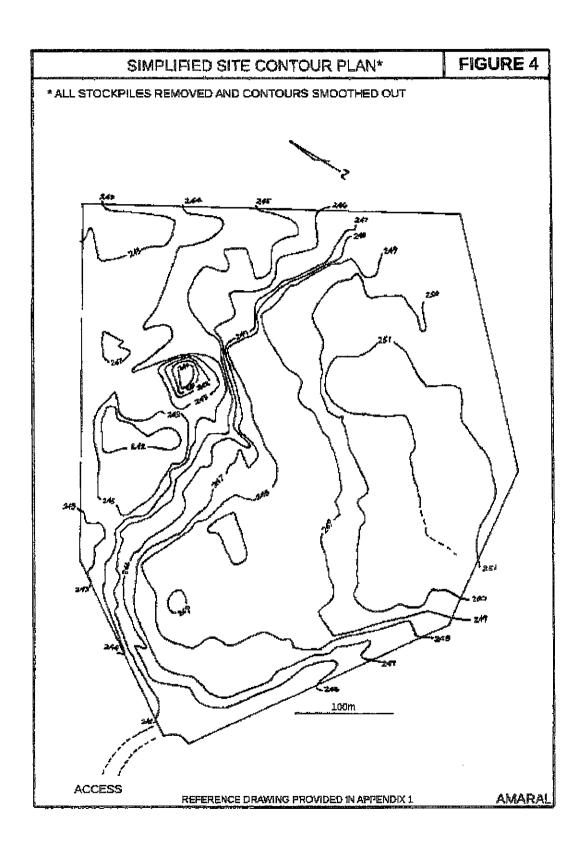


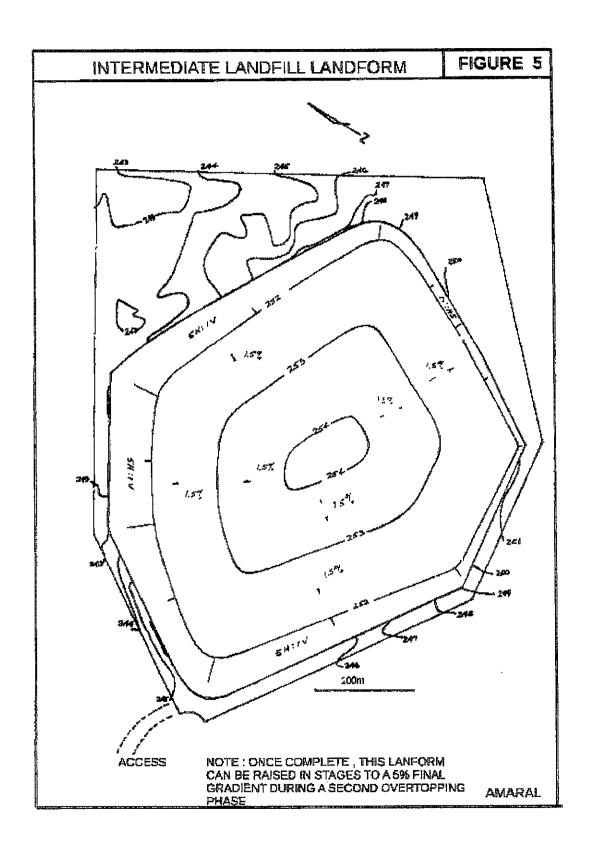
### Appendix 4 - Design Principles and Design Concepts

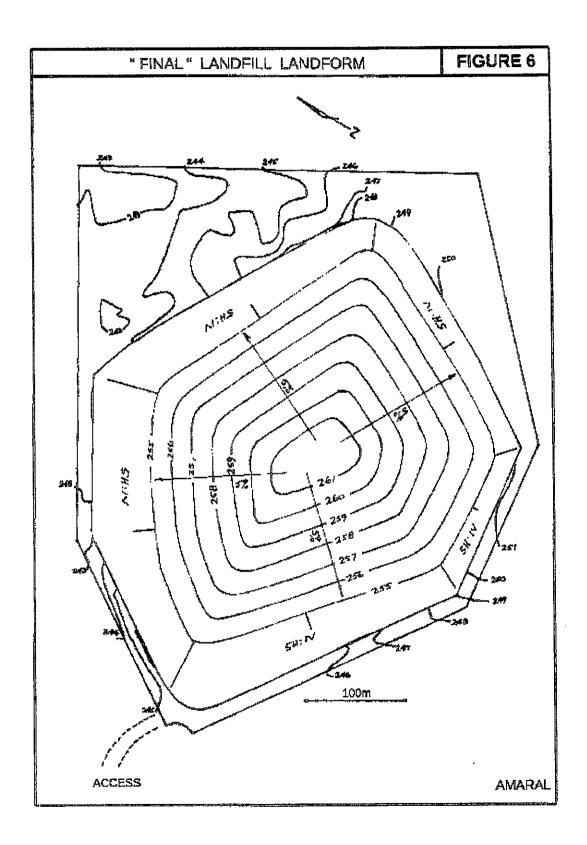


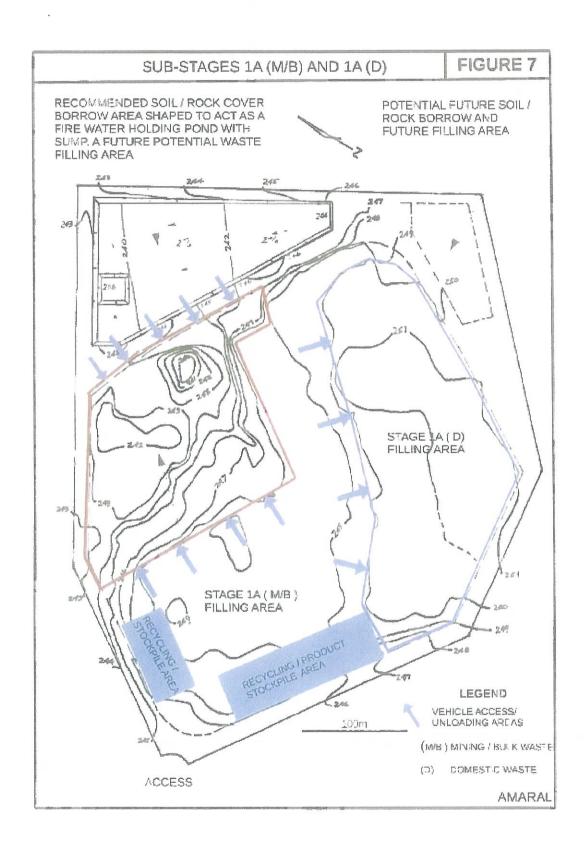


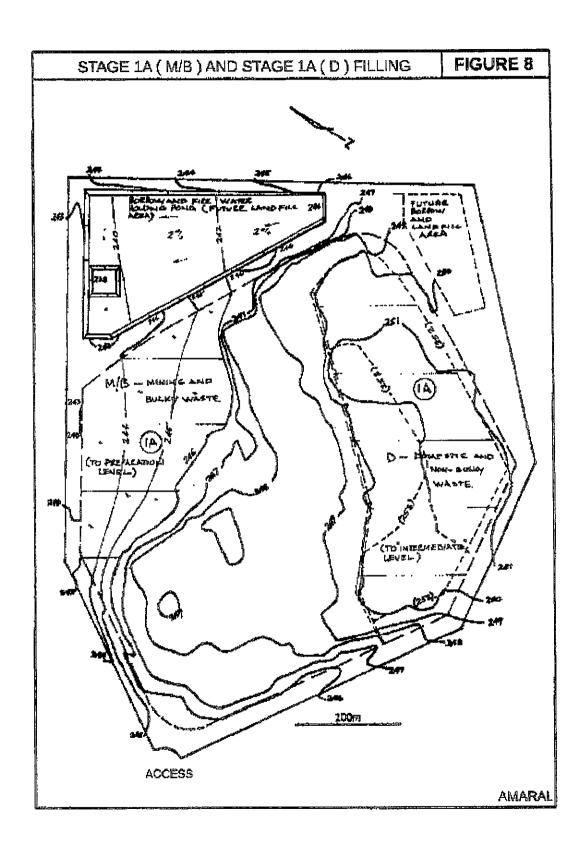


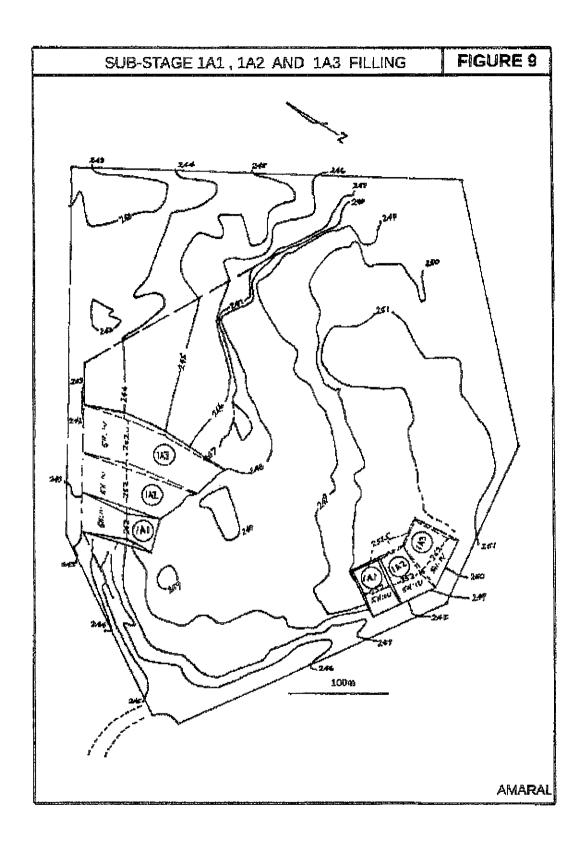


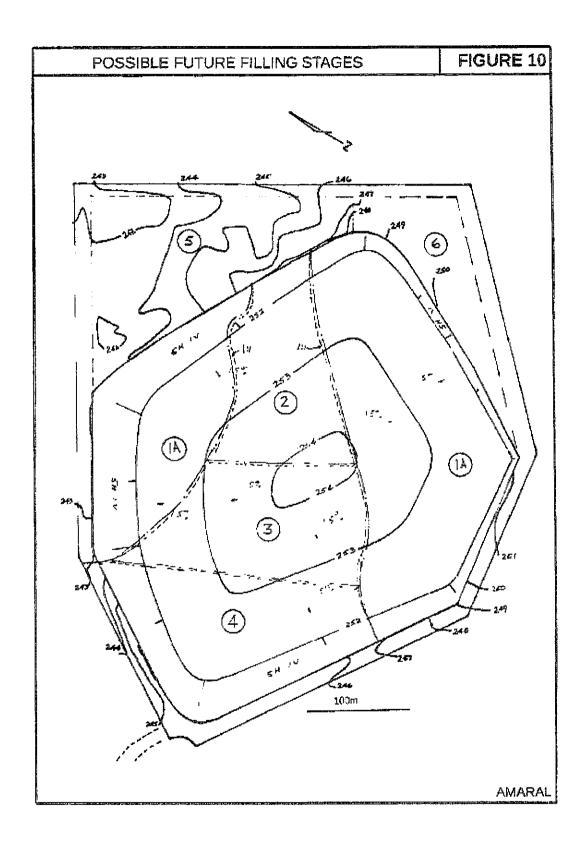












### Appendix 5 - Risk Management

Risk Management Systems and Processes

The Project Manager will control the Risk Management Plan. The Risk Management Plan and/or risk management matrix will be reviewed on a monthly basis and adjusted accordingly. Some risks may be eliminated and others may appear.

Management of Risk

The risks identified will be examined as to the **likelihood** and the **consequence** of their occurring. Extreme risks will be eliminated by change of scope or schedule. High risks will be managed. Moderate risks will be monitored. Low risks will be accepted.

For likelihood, "likely" would be once every year, "possible" would be once every five years, 'unlikely" would be once every twenty years and "rare" would be once every fifty years.

For **consequence**, "major" is the potential for a critical event which, with proper management, can be endured. "Moderate" is for a significant event which can be managed under normal circumstances. "Minor" is the potential for an event whose consequences can be absorbed, but management effort is required to minimize the impact. "Insignificant" is the potential for an event in which the impact can be readily absorbed through normal activity.

Risk treatment measures will be integrated into the Risk Management Plan

Risks to the Project

A risk assessment has been carried out as part of the project business case and the major risk categories are listed below.

- 1. Political
- 2. Timeframe

- 3. Scope definition
- 4. Resources
- 5. Communications
- 6. Processes
- 7. Contractual
- 8. Environmental
- 9. Financial

Risks have been identified within the above categories and measures determined to manage these risks. This information is presented in the table below and becomes the Risk Management Plan for the project.

the state of the s			Likelihood/			Likelihood/
Risk Category	Risk	Outcome	Consequence	Control Measures	Reference	Consequence post control
	Not commencing elements of the project in line with the adopted timeline	Elements of the LTPoM completion delayed beyond the agreed target	Unlikely/moderate	Address key milestones- solicit assistance through council's staff and EPA	LTPoM	Unlikely/minor
	Prolongation as a result of constraints in relation to financial capacity	Completion delayed	Unlikely/moderate	Examine incomes and expenditures where assumptions were made in the development of the 10 year financial model	Financial Model Plant hire rate spreadsheet	Unlikely/minor
3. Resources	Aggregation of projects across the Waste section exceeds capacity to deliver this project	Ineffective project management	Likely/major	Bevelop project priority scheduling within the Waste Section Appoint a project manager. Engage consultant for design and quality control	Manex to determine priority and appoint a project manager	Unlikely/minor

Risk Category	Risk	Outcome	Likelihood/ Cansequence	Control Measures	Reference	Likelihood/ Consequence post control
	Project under funded	Review gate fees and looad assessment protocols to ensure income aligns with expectations	Likeiy/major	<ul> <li>Consider project funding as part of the Waste section budgets, including fees structures</li> </ul>	Ten Year Financial model	Unlikely/minor
4. Communications	Poor communications with stakeholders	Confusion or wrong assumptions resulting in opposition to fees and rationalisation of hours of operation	Likely/major	Develop and implement a community engagement plan	Community engagement plan	Unlikely/minor
	Community engagement plan not implemented	Ineffective communications and ensuing issues	Likely/moderate	Include the implementation of the Plan into responsible officer's (project manager) role	LTPoM	Unlikely/minor
5. Processes	Correct process not followed	Failure to deliver elements of the LTPoM according to program	Unlikely/moderate	Include project delivery into Manex monthly meetings	LТРоМ	Unlikely/minor
	Final landform design and filling/staging plans not followed	Failure to meet the design objectives	Likely/major	Engage a surveyor or geotechnical engineer to monitor landfilling progress	LTPoM	Unlikely/minor

	1		Likelihood/			Likelihood/
Risk Category	Risk	Outcome	Consequence	Control Measures	Kererence	consequence post control
	Formal approvals not issued or delayed from consent authorities	Timeline not met. Unauthorized development and landfilling	Unlikely/moderate	LTPoM is followed and reported upon in line with Project report to Manex	Monthly major project reports to Manex	Unlikely/minor
6. Contractual	Poor contract documentation	Variations to contract resulting in cost escalation.	Unlikely/major	Appointment of experienced and competent person for development of specifications and quality control	consultant or staff appointee - scope of works	Unlikely/minor
	Poor contract management	Ineffective project delivery	Unlikely/moderate	Responsible staff experienced in contract management to oversee respective elements of RFT and RFQ.	Staff position descriptions and experience in contract management	Unlikely/minor
	Poor contract control	Unsatisfactory process delivery	Unlikely/high	Responsible staff experienced in contract management to oversee respective elements of RFT and RFQ	Staff position descriptions and experience in contract management	Unlikely/minor
	Contractor poor performance	Unsatisfactory project delivery	Unlikely/moderate	Preparation of detailed specifications. Implementation of quality control plan	Tender specification Quality control plan	Unlikely/minor

						fikelihood/
Risk Category	Risk	Outcome	rikelinood/	Control Measures	Reference	Consequence
			Consequence			post control
7. Environmental	Fire within the waste facility	Environmental damage (air quality)	Likely/major	Review and update the facility fire management plan	LTPoM	
		EPA PIN Unplanned major expense		"Borrow" area developed as a water reservoir		Unlikely/major
		Political damage (reputation)				
	Leachate seepage from landfill operations into water table or waterways	Leachate migration and possible contamination of water table or waterways EPA cautionary letter, PIN, prosecution	Possible/major (Significant)	Implement control measures as demonstrated in the LTPoM	ЕтРоМ	Rare/Major
8. Financial	Insufficient budget to complete the works	Works not completed	Likely/major	Preparation of a financial plan and inclusion into the LTPoM	Ten year financial model	Unlikely/minor
	Inadequate gate fees applied by Council	Council suffers financial loss	Unlikely/major	Annual review of gate fees and load assessment protocols	Public exhibition	Unlikely/minor

Appendix 6 - Community Engagement Plan

# Community Engagement Plan

# Introduction of Gate Fees and Rationalisation of Opening Hours at the Cobar Waste Facility

Statement of Decision to be Made	Who is the Decision Maker and	Who are the Stakeholders and who	Risk Factors
Introduction of gate fees at the	what will be the impact of the	has overall management	Ineffective engagement
Cobar Waste Facility that will be	decision (based on the number of	responsibility for stakeholder	Poor messaging
reflective of the cost of providing	residents to be affected and the	participation	Resident's and mining company
waste disposal services	consequence)	Residents currently using the Cobar	representatives may be vocal in their
Opening hours are rationalised to	Council will make the decision	Waste Facility	opposition to the introduction of
achieve cost efficiencies and to meet	following a report to the OM	Local mining companies	gate fees and changed opening
facility user needs		Mining contractors transporting	hours
	Impact will be major - the local	waste materials to the landfill	Cost of providing the improved
	mining companies are currently not	Councillors	landfilling service s are
	paying tipping fees nor are residents	Council staff	underestimated and the fee structure
	with self haul loads	Broader community	later increased
	The current spread of opening times		Councillors may not be supportive of
	is expansive	The Acting Manager Planning and	the introduction of gate fees or
		Environment is responsible officer	changed opening times
Process Statement	Communication Objectives	What will constitute success	Performance Indicators
In planning for the introduction of	To ensure stakeholders are well	(success factors)	Stakeholder feedback is

	mormed at all stades /// tile ///	Engagement is completed before a	commensurate with the likely impact
times how are in frince	nfamina for the	docision is made	of the decision to be made
umes, now can we (aims)	aut iof fullilling	decision is made	
Improve efficiencies and	The introduction of gate fees and	A determination is made on the	A summary of stakeholder feedback
performance	rationalisation of opening times	introduction of gate fees and the	is included as an attachment to the
Achieve best value	To encourage input/comment from	rationalisation of opening times that	report to Council that recommends a
Value stakeholder input	affected parties	considered stakeholder input and has	certain course of action and scale of
Deliver sustainable service standards	To disseminate relevant information	broad stakeholder support	fees
Meet accented environmental	to stakeholders explaining options	Stakeholders are seen to have	Post decision objections from
standards	and implications of any proposed	engaged in the process	stakeholders are minimal and can be
Manage risk	actions		countered effectively
Balance ambition with available	To use a range of communication		
resources and achieve community	methods to connect with all		
support	stakeholders		
	Create a positive image for Council		
	Build trust with the community		
What is Important to Stakeholders	What are Stakeholder's Issues	Key Communication Messages	Key means of Communication
The cost to dispose of waste material	Cost of disposing of waste	A recent major fire at the landfill has	Councillor workshops
should be within resident's ability to	The spread of opening hours meets	exposed operational failings and	Stakeholder meetings
pay (affordable)	facility user needs	remedial measures need to be	Council reports
A variety of mining waste will be	Will most waste types be accepted	introduced	Media releases
accepted at the Waste Facility and		The Environment Protection	Newsletters/information posted on
the disposal fees are commensurate		Authority expects improvements to	Council's website
with the nature of the waste		be introduced	Direct mailing of newsletters to key
materials		There is an operational cost	stakeholders (progress associations,
Opening times generally alian with		associated with site supervision and	chamber of commerce, mining
the needs of most stakeholders		improved practices and these cost	companies)
		need to be offset through gate fees	Interaction with established focus
		Council and the community have an	groups
		obligation to act environmentally	
		responsibly	Evaluation Criteria

	Y		What will each key means of
			communication cost and are there
			adequate resources
			Who has the expertise to undertake
			the implementation and how will
			they be assigned
•			What internal staff will be required
			and will cooperation from other
			Sections in the organisation be
			required
			Is there sufficient time for
			implementation
			Is there a history of success in similar
			implementation for other projects
			What resources will the stakeholders
			need in order to participate
Level of Engagement	Engagement Goal	What Council Commits to	Risk Mitigation Measures
(inform, consult, involve,	To identify all affected stakeholders	Keeping the stakeholders informed,	Prepare and implement a community
collaborate, empower)	and work with them during the	listen to and acknowledge their	engagement plan that is fit for
	planning for the introduction of gate	concerns/needs and provide	purpose and addresses all of the
Inform (provide information to, and	fees and the rationalisation of	feedback on how their input	identified issues
obtain feedback from stakeholders	opening times and –	influenced the changes to current	Consider all options
on the process, implications, options	To ensure stakeholders concerns and	practices	Provide progressive feedback to
and decisions)	issues are understood by Councils		stakeholders
	staff and –		Engage with Councillors at all phases
	To ensure stakeholder's knowledge		of the process
	in the benefits, costs and service		
	standards of any changes in the		
	delivery of services are clearly		

	La company of a series		
	Concensus is achieved on the		
	Consensus is acineved oil the		
	preferred models and –		
	To engage broadly, define the issues,		
	and receive stakeholder input that		
	will support the decisions to be made		
Decision Steps	Objective of each decision step	Stage Specific Tools	Ongoing Tools
Define the issue and scope the	To provide the affected stakeholders	Connect directly with	Council reports
decision –	with balanced and objective	Facility users	Media releases
Failure to supervise and control the	information to help them understand	Broad invitation to receive	Newsletters/information posted on
waste facility resulted in a major fire	Council's objectives in the delivery of	information and to provide feedback	Council's website
and highlighted the operational	improved operations at the waste	Dialogue with mining companies,	Direct mailing of newsletters to key
shortcomings.	facility	mining contractors and community	stakeholders (mining companies,
The facility requires supervision		groups	progress associations, chamber of
during opening hours, purchase and	To have interested stakeholders		commerce)
utilisation of suitable plant and the	provide input and comment		*
introduction of filling plans/final			
landform design.			
Gate fees will need to be introduced			
and opening times rationalised in			
order to meet the anticipate cost of			
these changes			
Gather data –	To provide the affected stakeholders	Prepare and distribute information	Invite feedback as part of the various
	with information on the planning for	ana seek Jeeapack	
Analysis foodback	the juture gate jees and opening		
Analyse stanctioner Jeeubaen.	would be affected by the various		
	options.		
	To seek feedback		
	ין פוניא לינימימייי		

Establish decision criteria How the identified issues will be	To define the sphere of influence of the respective stakeholders and	Financial modelling on fees and charges, plant amortisation, plant	Stakeholder meetings – if determined to be appropriate
addressed in achieving the objectives (including aims in the Process	establish what is not negotiable.	usage, site supervision, remedial works	(by invitation only). Do not conduct meetings where attendances would
Statement)	To ensure stakeholders concerns and needs are understood		be poor
	To achieve the project objectives and aims		
Develop options -	To ensure all feasible options are	Evaluation matrix that defines the	
Consider different spreads of	considered and reduce the risk of	benefits and detractions of each ontion	
Develop gate fees as cost plus and	opposition to a preference obtain		
cost neutral			
Adjust the schedule of non accepted			
wastes			
Evaluate options and select the			
preferred option -	Explore each option and select a preferred option	Decision based on feedback and   supporting evidence	
Make recommendation	To provide stakeholder feedback on	Connect directly with those who	Website
Prepare a schedule of	how their input influenced the future	have provided feedback, comment	Direct correspondence
comments/feedback resulting from	provision of waste services.	and recommendations	
the stakeholder engagement and			
provide this schedule to Council as			
part of the report recommending			
actions for the future operations of			
the waste facility			

# Appendix 7 - Protection of the Environment Operations (Waste) Regulation 2014

# 80 Disposal of asbestos waste (cf clause 42(4) of 2005 Reg)

- (1) (Repealed)
- (2) When a person delivers asbestos waste to a landfill site, the person must inform the occupier of the landfill site that the waste contains asbestos.
- (3) The following persons must ensure that when a person unloads or disposes of asbestos waste at a landfill site (regardless of whether the site is subject to an environment protection licence) no dust is generated from the waste—
- (a) the person unloading or disposing of the asbestos waste,
- (b) the occupier of the landfill site.
- (4) Subject to any alternative cover conditions provided in an environment protection licence held by the occupier or approved in writing by the EPA, the occupier of a landfill site must ensure that asbestos waste disposed of at the site is covered with virgin excavated natural material—
- (a) initially (at the time of disposal), to a depth of at least 0.15 metre, and
- (b) at the end of each day's operation, to a depth of at least 0.5 metre, and
- (c) finally, to a depth of at least 1 metre (in the case of bonded asbestos material or asbestos-contaminated soils) or 3 metres (in the case of friable asbestos material) beneath the final land surface of the landfill site.
- (5) In this clause, *landfill site* means a landfill site that can lawfully receive asbestos waste.

Ę (

Appendix 8 -Site Master Plan



Appendix 9 - Plant Hire Calculations

Landfill Compactor - Cobar Council	Council									
•	20/21	21122	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30
Purchase Price	680,000	693,600	707,472	721,621	736,054	750,775	765,790	781,106	796,728	812,663
Residual Value	100,000	102,000	104,040	106,121	108,243	110,408	112,616	114,869	117,166	119,509
Depreciable Value	580,000	591,600	603,432	615,501	627,811	640,367	653,174	666,238	679,562	693,154
Hours operated per week	15									
Hours operated per year	780									
Servicing & Repairs per hour	7.00									
Diesel per hour	23	Litres								
Fuel Cost	1.20	Per litre								
CPI	1.02									
	20/21	21122	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30
Depreciation (straight line)	58.000	58.000	58.000	58,000	58,000	58,000	58,000	58,000	58,000	58,000
In the second se	21.528	21.959	22,398	22,846	23,303	23,769	24,244	24,729	25,223	25,728
Servicing & Maintenance	5,460	5.569	5,681	5,794	5,910	6,028	6,149	6,272	6,397	6,525
Total Costs	84,988	85,528	86,078	86,640	87,213	87,797	88,393	89,001	89,621	90,253

59,785 235,726

113,154 988,665

11,315

11,315 100,936 98,866

988,665

98,866

98,866

126.75

101,569

11,315 100,316 126.75

11,315

11,315

Cost of New Machine in addition to

depreciation Total Costs

126.75 98,866

99,112 126.75 98,866

98,866

98,866

98,866

Total Income collected Hire rate per hour

11,315 98,528 126.75

11,315 97,955 126.75

97,394 126.75 98,866

11,315 96,843 126.75

11,315

11,315 96,303 98,866

Total 580,000

	988,665	875,511	113,154	0
Check	Total Income	Less Total Costs	New Machine less Depreciation	