APPENDIX A FIGURES

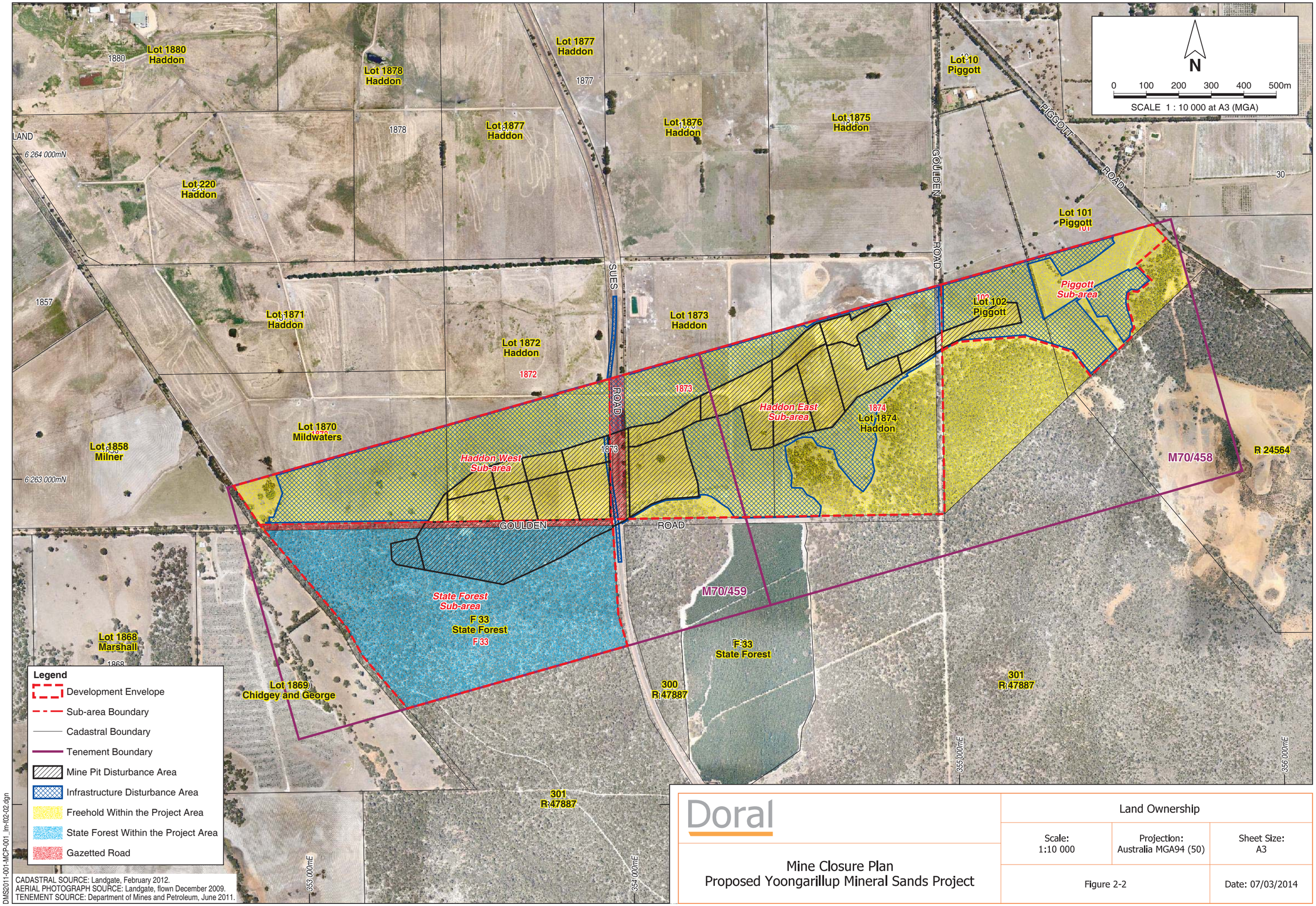
This page left blank intentionally.

DMS2011-001-MCP-001_lm-f02-01.dgn

Doral

Mine Closure Plan
Proposed Yoongarillup Mineral Sands Project

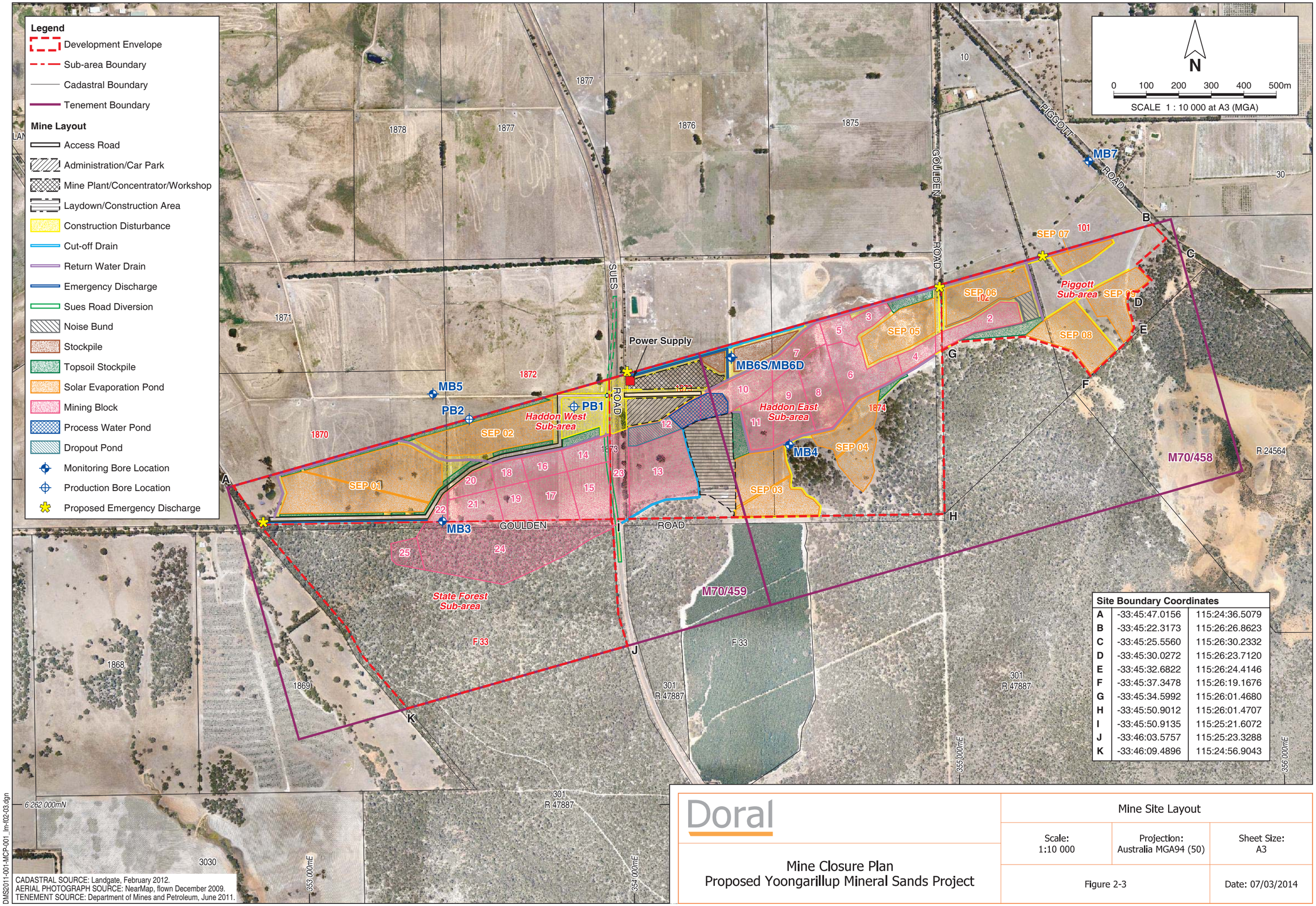
Regional Location		
Scale: 1:300 000	Projection: Australia MGA94 (50)	Sheet Size: A4
Figure 2-1		Date: 19/02/2014



Doral

Mine Closure Plan
Proposed Yoongarillup Mineral Sands Project

Land Ownership		
Scale: 1:10 000	Projection: Australia MGA94 (50)	Sheet Size: A3
Figure 2-2		Date: 07/03/2014



Site Boundary Coordinates

A	-33:45:47.0156	115:24:36.5079
B	-33:45:22.3173	115:26:26.8623
C	-33:45:25.5560	115:26:30.2332
D	-33:45:30.0272	115:26:23.7120
E	-33:45:32.6822	115:26:24.4146
F	-33:45:37.3478	115:26:19.1676
G	-33:45:34.5992	115:26:01.4680
H	-33:45:50.9012	115:26:01.4707
I	-33:45:50.9135	115:25:21.6072
J	-33:46:03.5757	115:25:23.3288
K	-33:46:09.4896	115:24:56.9043

Doral

Mine Closure Plan
Proposed Yoongarillup Mineral Sands Project

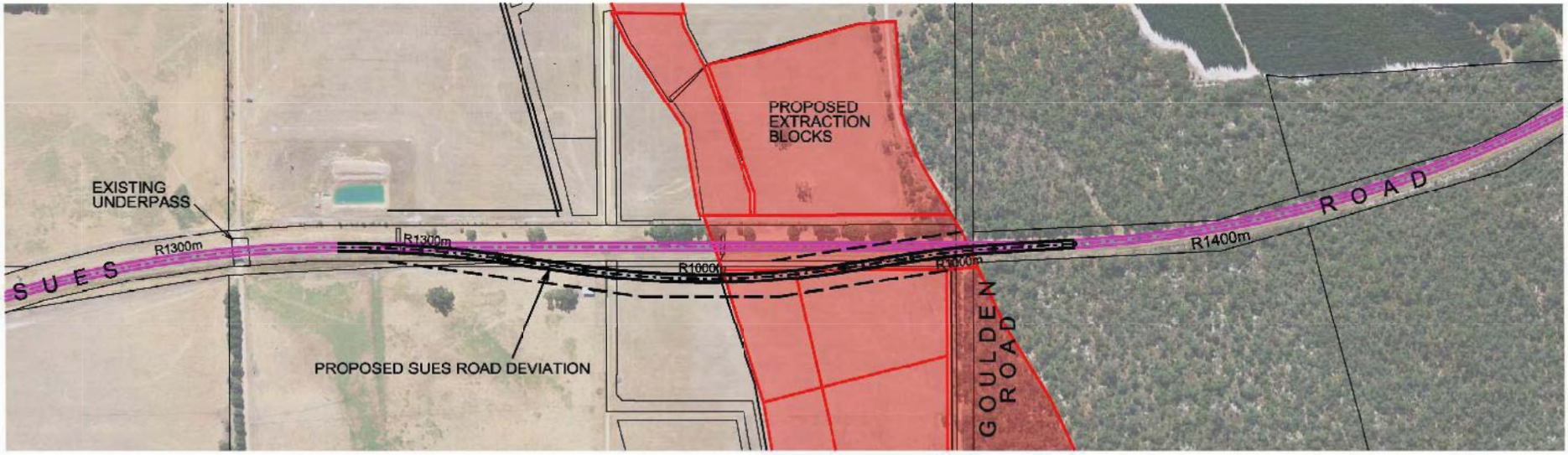
Mine Site Layout

Scale:	Projection:	Sheet Size:
1:10 000	Australia MGA94 (50)	A3

Figure 2-3

Date: 07/03/2014

DMS2011-001-MCP-001_lm-f02-04.dgn



COATES CIVIL CONSULTING

N

0 50 100 150 200 250m

SCALE 1 : 7 000 at A4 (MGA)

SOURCE: Caotes Civil Consulting, Dwg No. DON001-C01, December 2013.

Doral

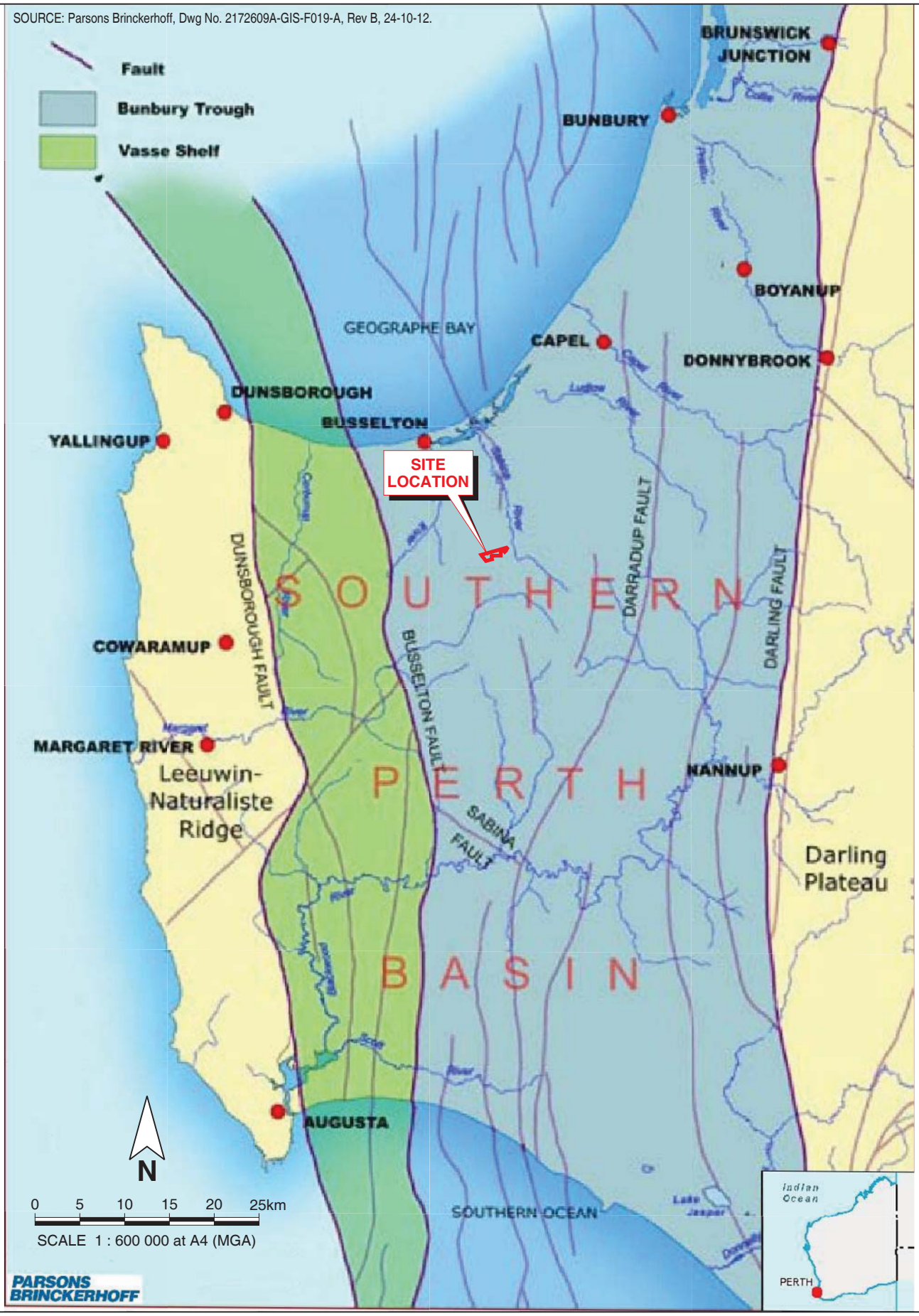
Mine Closure Plan
Proposed Yoongarillup Mineral Sands Project

Proposed Sues Road Deviation
Preliminary Concept Alignment

Scale: 1:7 000	Projection: Australia MGA94 (50)	Sheet Size: A4
Figure 2-4		Date: 19/02/2014

1

Doral Mineral Sands Yoongarillup Rehab Schedule 2014 - Remedial works ongoing	Date:5/02/2014	MGA94	Figure 2-5



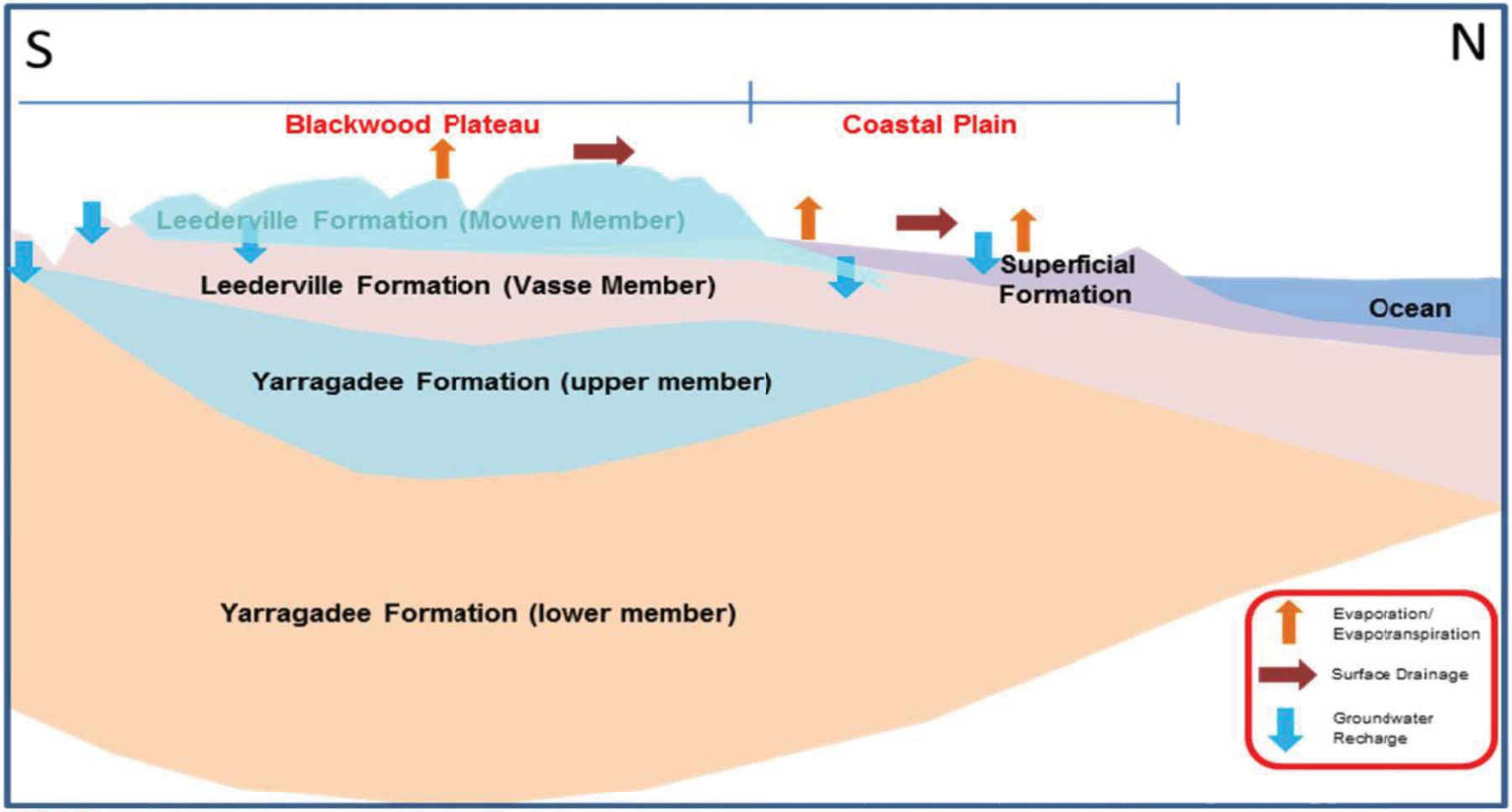
DMS2011-001-MCP-001_lm-f04-01.dgn

Doral

Mine Closure Plan
Proposed Yoongarillup Mineral Sands Project

Structural Geology		
Scale: 1:600 000	Projection: Australia MGA94 (50)	Sheet Size: A4
Figure 4-1		Date: 19/02/2014

DMS2011-001-MCP-001_lm-f04-02.dgn



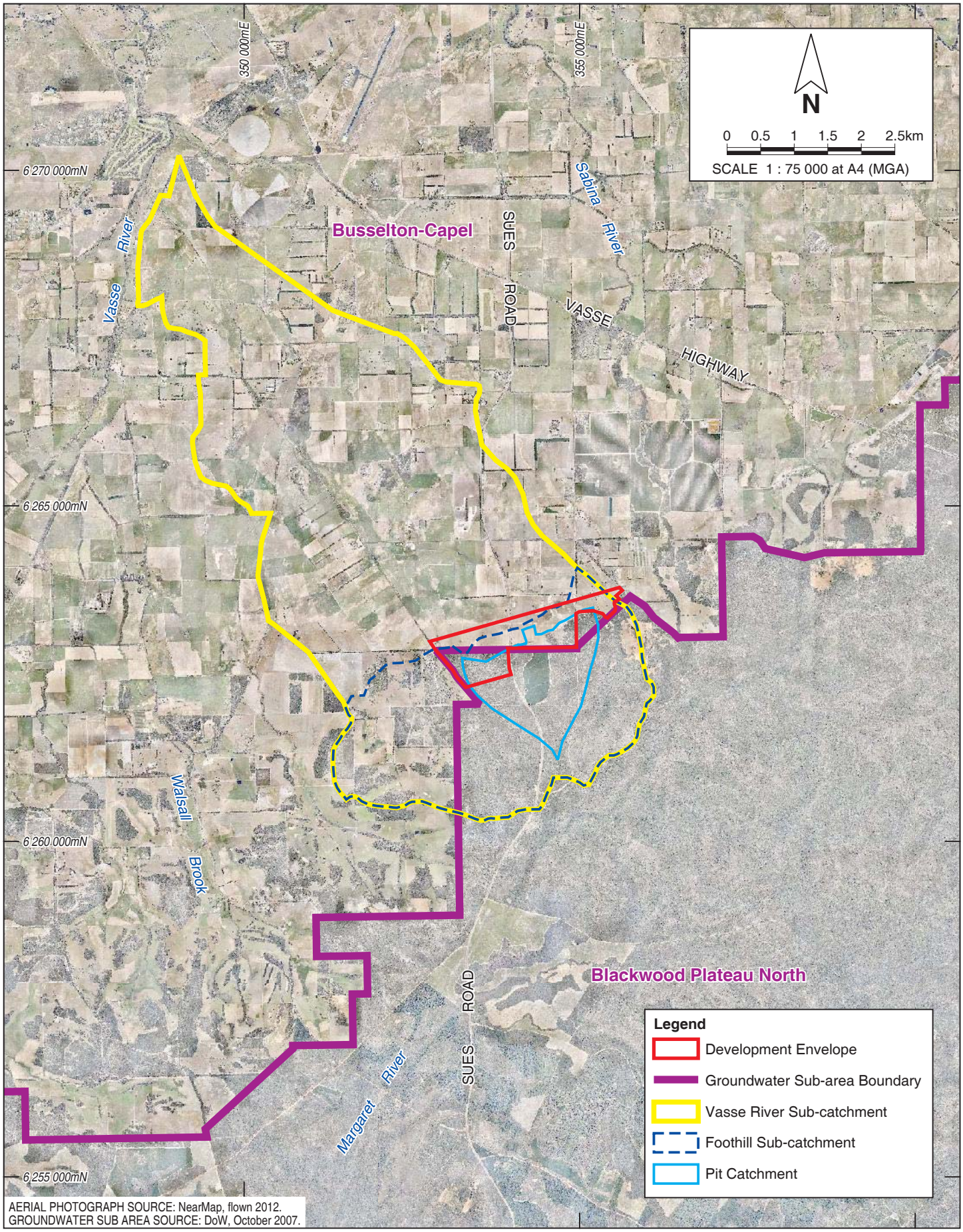
PARSONS BRINCKERHOFF

SOURCE: Parsons Brinckerhoff, Figure 2-4.

Doral

Mine Closure Plan
Proposed Yoongarillup Mineral Sands Project

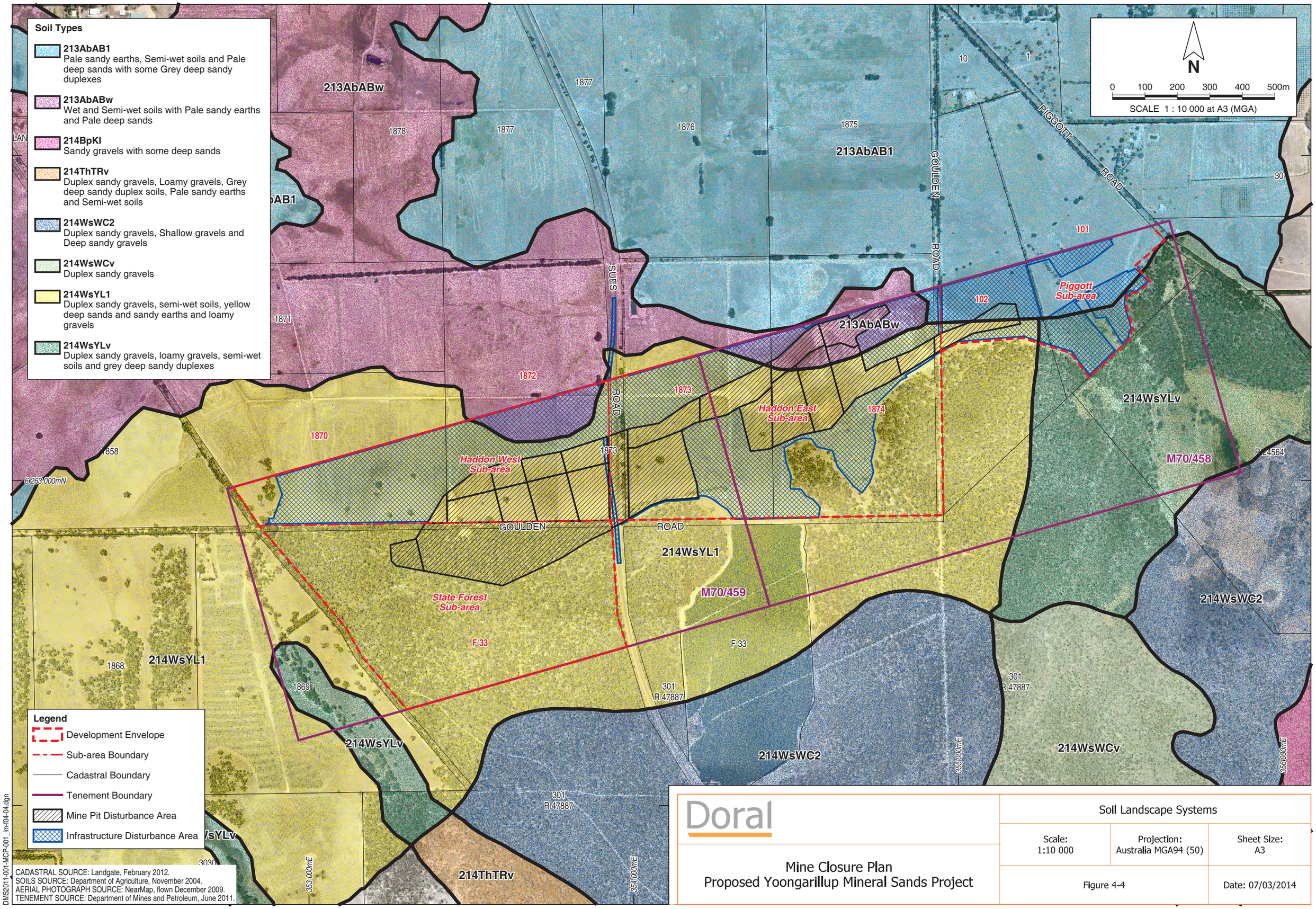
Hydrogeological Cross Section		
Scale: NTS	Projection: Australia MGA94 (50)	Sheet Size: A4
Figure 4-2		Date: 19/02/2014



Doral

Mine Closure Plan
Proposed Yoongarillup Mineral Sands Project

Water Management Areas		
Scale: 1:75 000	Projection: Australia MGA94 (50)	Sheet Size: A4
Figure 4-3		Date: 19/02/2014



Doral

Mine Closure Plan
Proposed Yoongarillup Mineral Sands Project

Soil Landscape Systems		
Scale: 1:10 000	Projection: Australia MGA94 (50)	Sheet Size: A3
Figure 4-4		Date: 07/03/2014

DMS2011-001-MCP-001_lm-f04-05.dgn

Landloch

N

0 100 200 300 400 500m

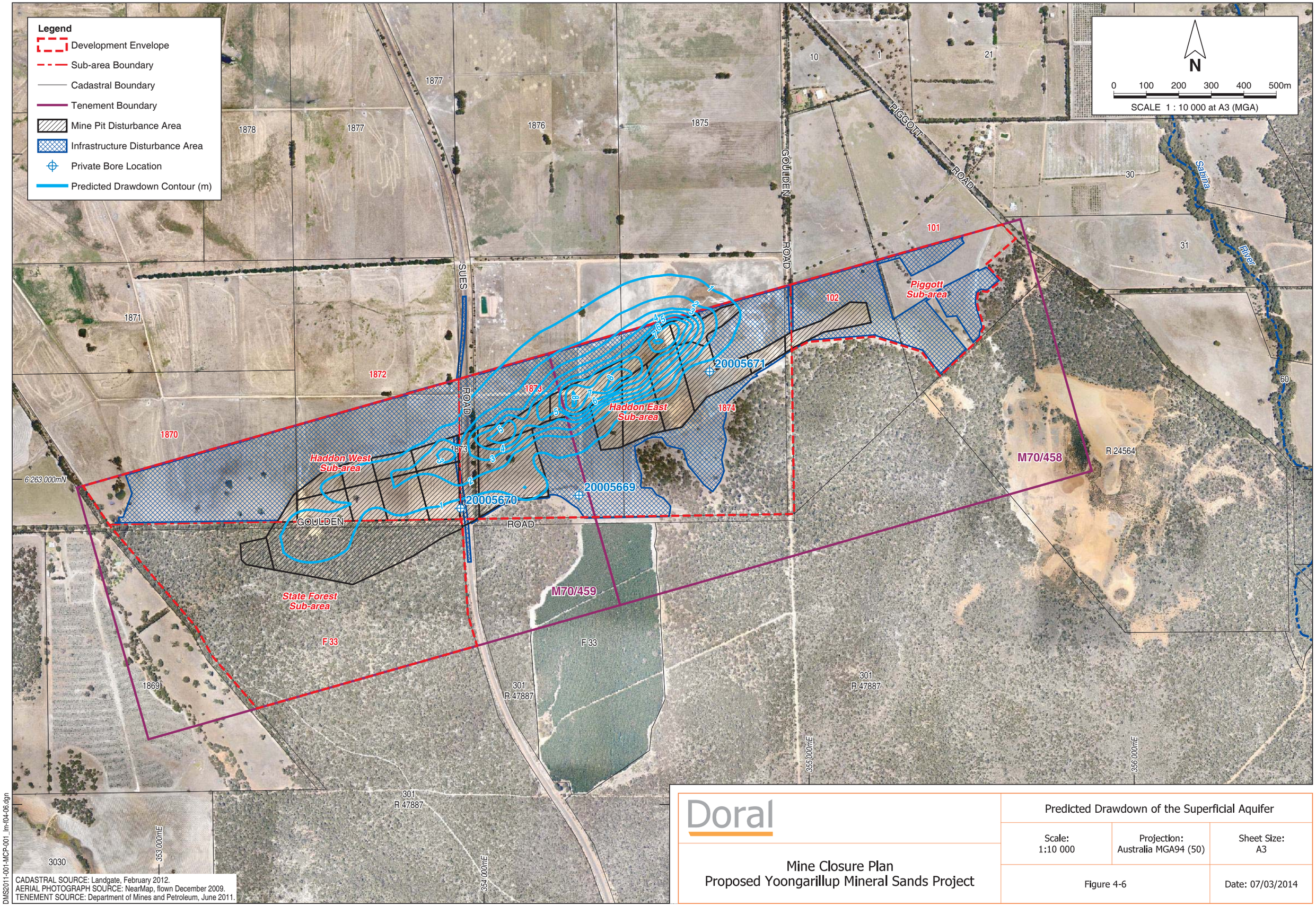
SCALE 1 : 15 000 at A4 (MGA)

SOURCE: Landloch, Figure 6.

Doral

Mine Closure Plan
Proposed Yoongarillup Mineral Sands Project

Soil Mapping of the Proposal Area		
Scale: 1:15 000	Projection: Australia MGA94 (50)	Sheet Size: A4
Figure 4-5		Date: 19/02/2014



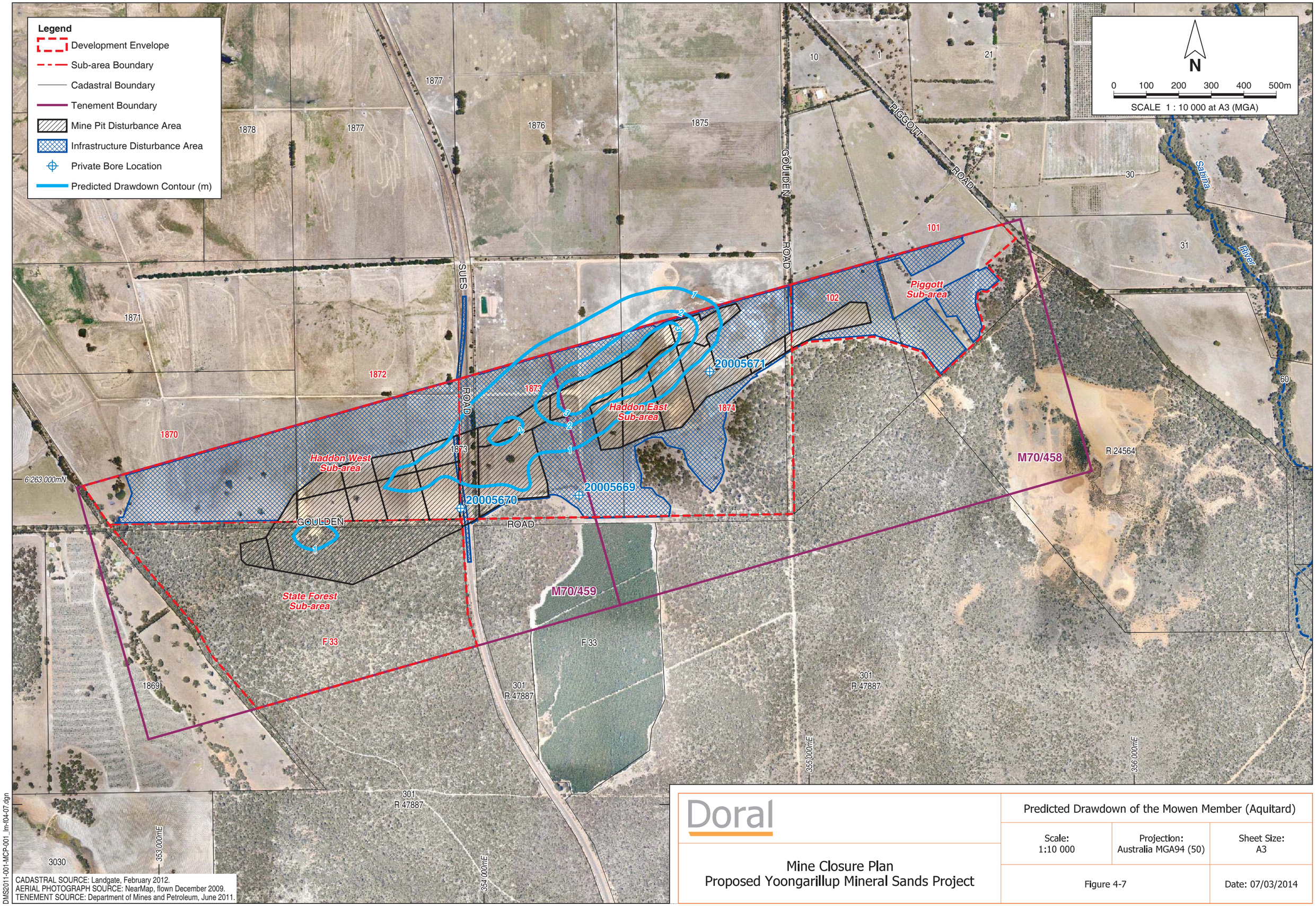
CADASTRAL SOURCE: Landgate, February 2012.
AERIAL PHOTOGRAPH SOURCE: NearMap, flown December 2009.
TENEMENT SOURCE: Department of Mines and Petroleum, June 2011.

DMS2011-001-MCP-001_lm-f04-06.dgn

Doral

Mine Closure Plan
Proposed Yoongarillup Mineral Sands Project

Predicted Drawdown of the Superficial Aquifer		
Scale: 1:10 000	Projection: Australia MGA94 (50)	Sheet Size: A3
Figure 4-6		Date: 07/03/2014



CADASTRAL SOURCE: Landgate, February 2012.
AERIAL PHOTOGRAPH SOURCE: NearMap, flown December 2009.
TENEMENT SOURCE: Department of Mines and Petroleum, June 2011.

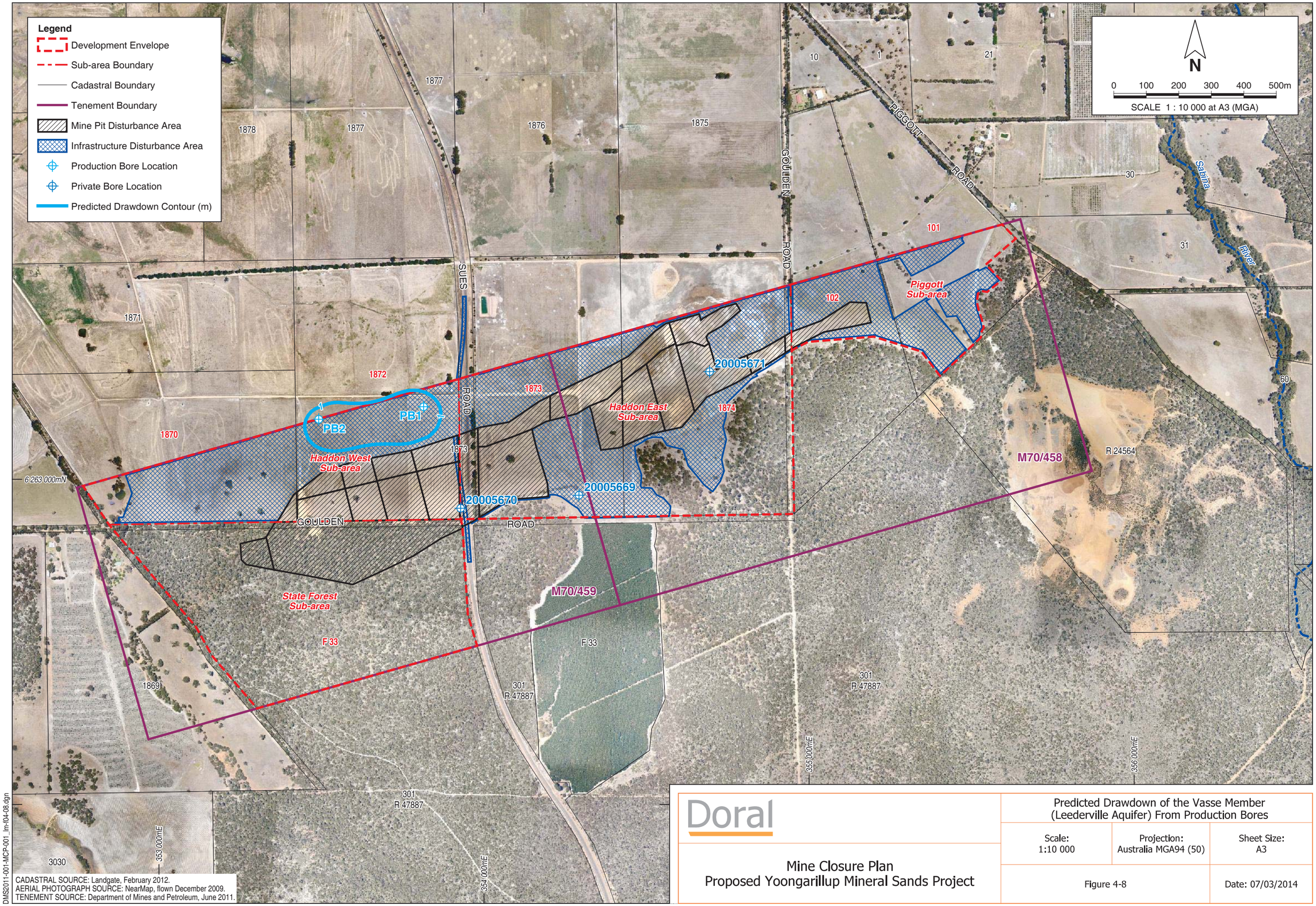
DMS2011-001-MCP-001_lm-f04-07.dgn

Doral

Mine Closure Plan
Proposed Yoongarillup Mineral Sands Project

Predicted Drawdown of the Mowen Member (Aquitard)

Scale: 1:10 000	Projection: Australia MGA94 (50)	Sheet Size: A3
Figure 4-7		Date: 07/03/2014



CADASTRAL SOURCE: Landgate, February 2012.
AERIAL PHOTOGRAPH SOURCE: NearMap, flown December 2009.
TENEMENT SOURCE: Department of Mines and Petroleum, June 2011.

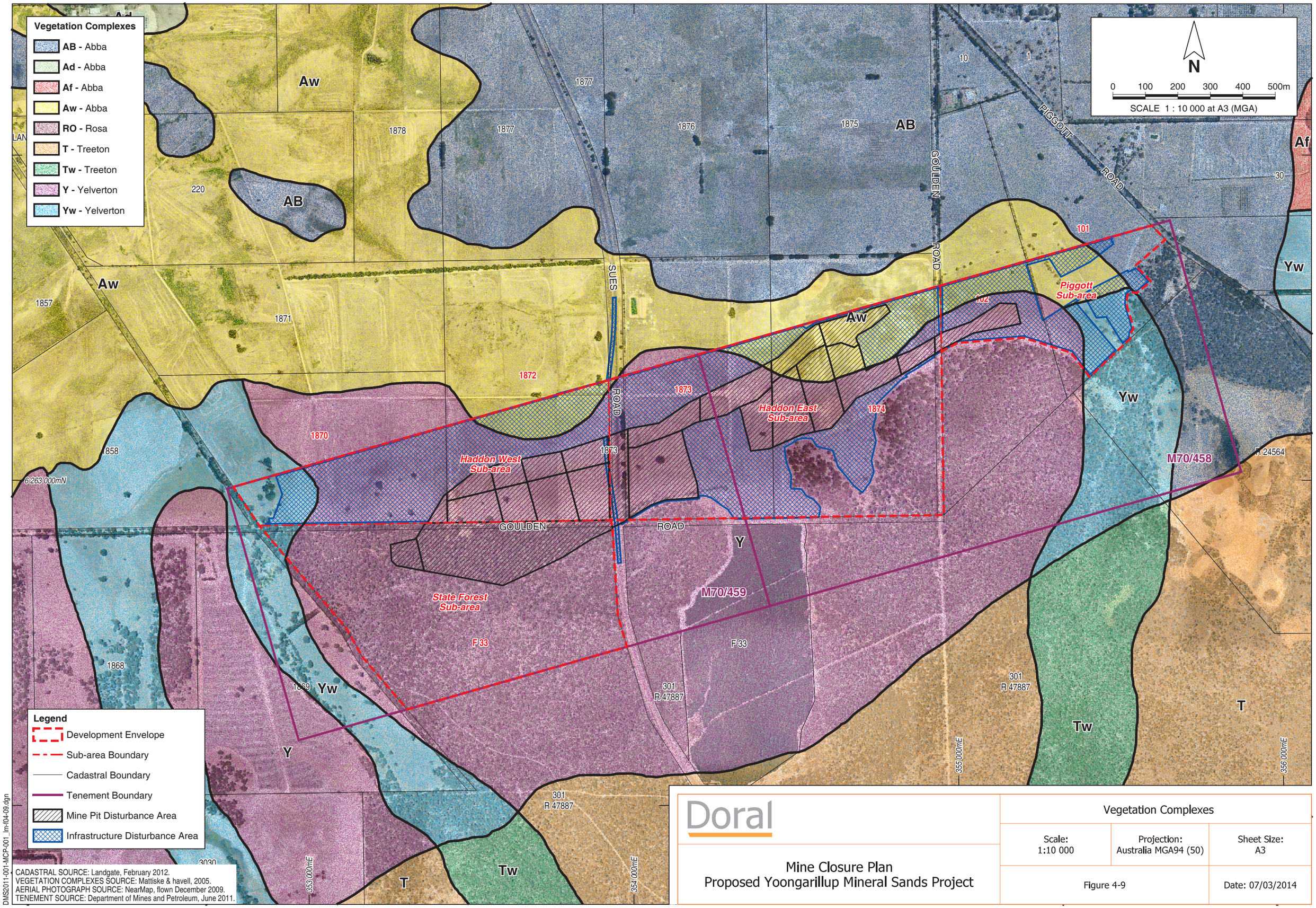
DMS2011-001-MCP-001_lm-f04-08.dgn

Doral

Mine Closure Plan
Proposed Yoongarillup Mineral Sands Project

Predicted Drawdown of the Vasse Member (Leederville Aquifer) From Production Bores

Scale: 1:10 000	Projection: Australia MGA94 (50)	Sheet Size: A3
Figure 4-8		Date: 07/03/2014



Doral

Mine Closure Plan
Proposed Yoongarillup Mineral Sands Project

Vegetation Complexes		
Scale: 1:10 000	Projection: Australia MGA94 (50)	Sheet Size: A3
Figure 4-9		Date: 07/03/2014

Vegetation Types

Mattiske Consulting (2012a)

- **W1** Open Woodland of *Eucalyptus marginata - Corymbia calophylla - Corymbia haematoxylon - Allocasuarina fraseriana* over introduced herbs and grasses on disturbed flats and lower slopes with leached or brown sandy-loams and sandy-gravels.
- **F1** Open Forest of *Eucalyptus marginata Corymbia calophylla Banksia grandis - Corymbia haematoxylon Xylomelum occidentale* over *Xanthorrhoea preissii, Podocarpus drouynianus, Hakea amplexicaulis, Hakea ruscifolia, Hibbertia hypericoides, Dasypogon hookeri, Dasypogon bromeliifolius* and *Kingia australis* over low herbs and grasses on lower and mid slopes with leached grey/brown sandy to sandy-loam soils.
- **F2** Open Forest of *Eucalyptus marginata - Corymbia calophylla - Banksia grandis - Corymbia haematoxylon - Xylomelum occidentale* over *Xanthorrhoea preissii, Podocarpus drouynianus, Hakea amplexicaulis, Hakea ruscifolia, Hibbertia hypericoides, Dasypogon hooke.*
- **F3** Open Forest of *Corymbia calophylla - Eucalyptus marginata Banksia grandis - Allocasuarina fraseriana* over *Hibbertia hypericoides, Xanthorrhoea preissii, Xanthorrhoea graciliis, Dasypogon hookeri, Dasypogon bromeliifolius, Kunzea recurva* and *Podocarpus drouynianus* on flats with leached grey and brown sands and sandy loams.
- **CL** Cleared

Ecoedge Environmental (2014)

- **A** Open forest or woodland of *Eucalyptus marginata* and *Corymbia calophylla* on grey-brown, yellow or yellow-brown ('orange') loamy sand.
- **B** Woodland of *Eucalyptus marginata*, with admixtures of *Corymbia calophylla* and *C. haematoxylon*, occuring mainly on grey-brown loamy sand to light grey sand.
- **C** Open forest of *Eucalyptus marginata* and *Corymbia calophylla* on gravelly sand or grey brown loamy sand.
- **D** Open forest of *Eucalyptus marginata, Corymbia haematoxylon* and *Allocasuarina fraseriana* on grey-brown or yellow-brown loamy sand and sandy clay loam.

DPaW Priority Ecological Communities

- Priority Ecological Community FCT A1
- Priority Ecological Community FCT C1

N

0 100 200 300 400 500m

SCALE 1 : 10 000 at A3 (MGA)

Piggott Sub-area

Haddon East Sub-area

Haddon West Sub-area

State Forest Sub-area

M70/458

M70/459

PIGGOTT ROAD

GOULDEN ROAD

SUES ROAD

GOULDEN ROAD

Legend

- Development Envelope
- Sub-area Boundary
- Cadastral Boundary
- Tenement Boundary
- Mine Pit Disturbance Area
- Infrastructure Disturbance Area

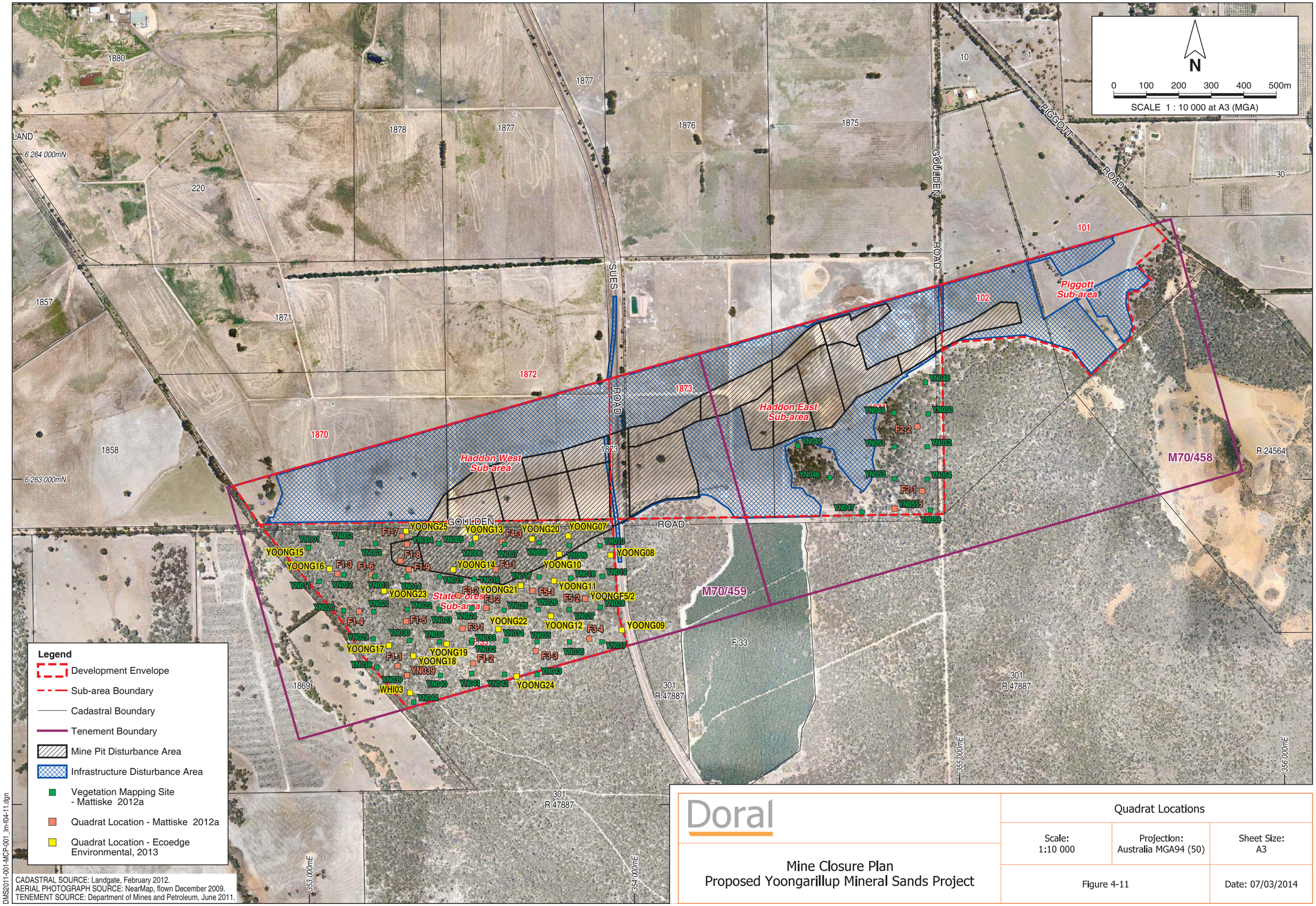
CADASTRAL SOURCE: Landgate, February 2012.
AERIAL PHOTOGRAPH SOURCE: NearMap, flown December 2009.
TENEMENT SOURCE: Department of Mines and Petroleum, June 2011.

DMS2011-001-PER-003_db-106-02.dgn

Doral

Mine Closure Plan
Proposed Yoongarillup Mineral Sands Project

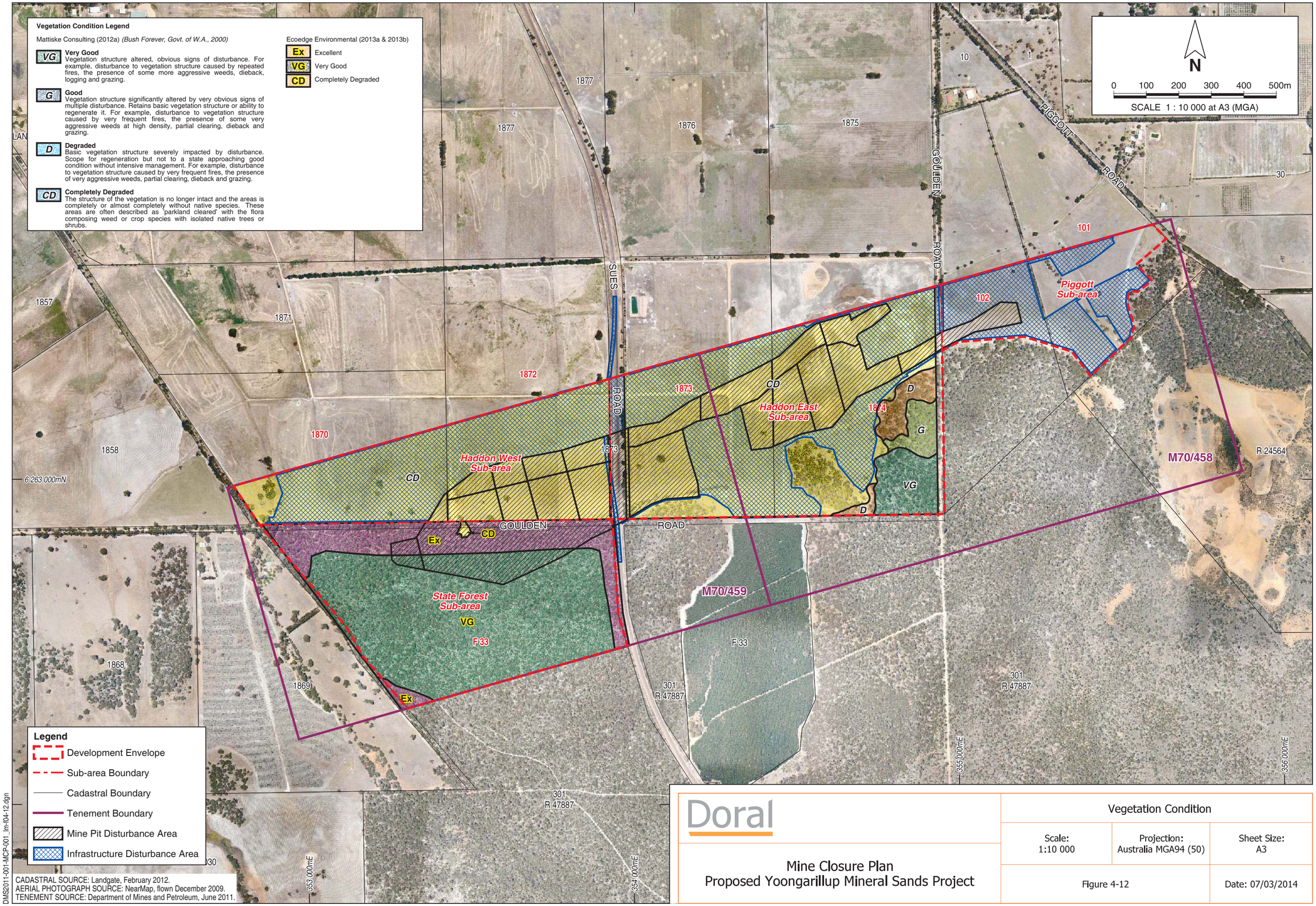
Vegetation Communities		
Scale: 1:10 000	Projection: Australia MGA94 (50)	Sheet Size: A3
Figure 4-10		Date: 09/09/2014



Doral

Mine Closure Plan
Proposed Yoongarillup Mineral Sands Project

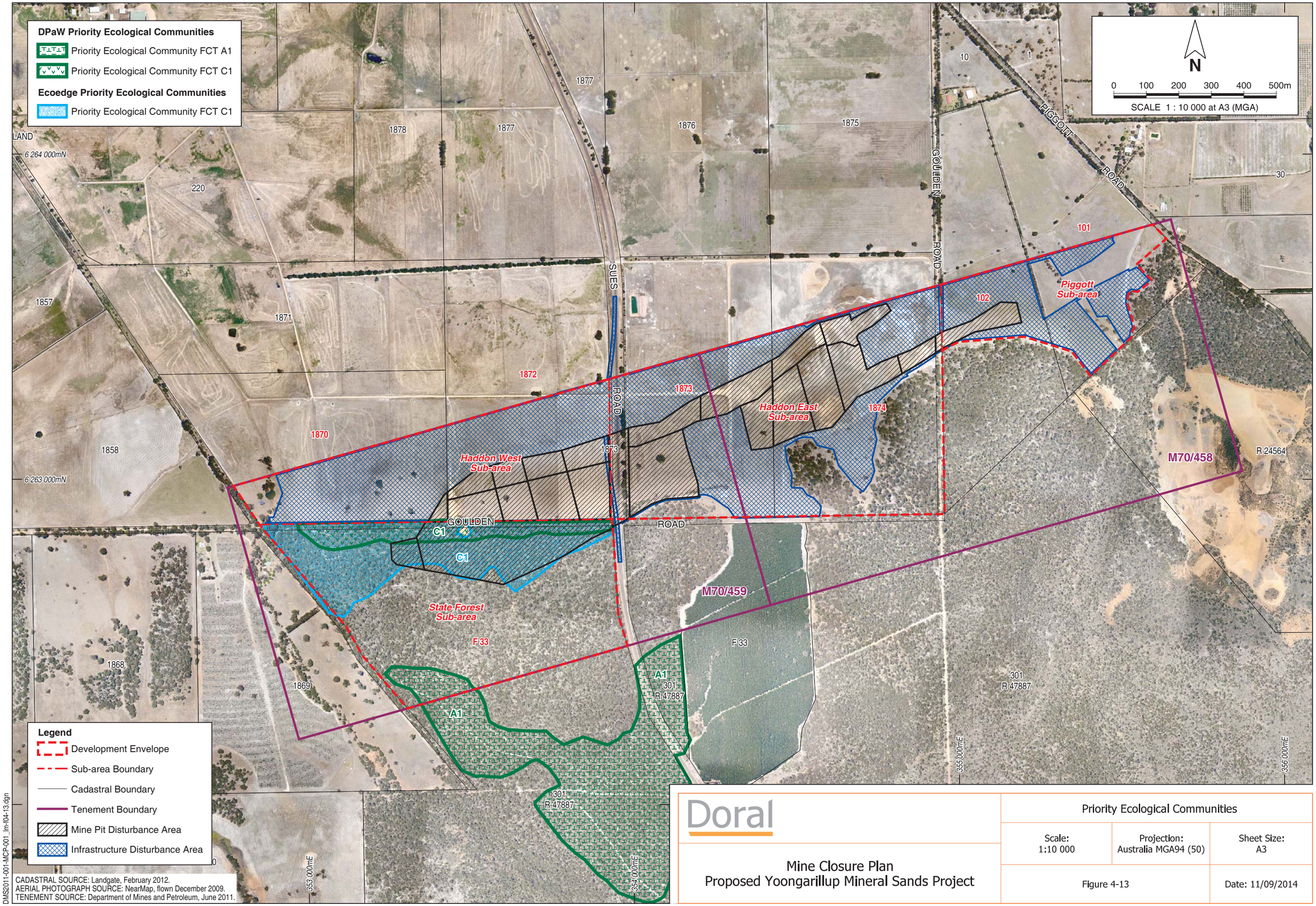
Quadrat Locations		
Scale: 1:10 000	Projection: Australia MGA94 (50)	Sheet Size: A3
Figure 4-11		Date: 07/03/2014



Doral

Mine Closure Plan
Proposed Yoongarillup Mineral Sands Project

Vegetation Condition		
Scale: 1:10 000	Projection: Australia MGA94 (50)	Sheet Size: A3
Figure 4-12		Date: 07/03/2014



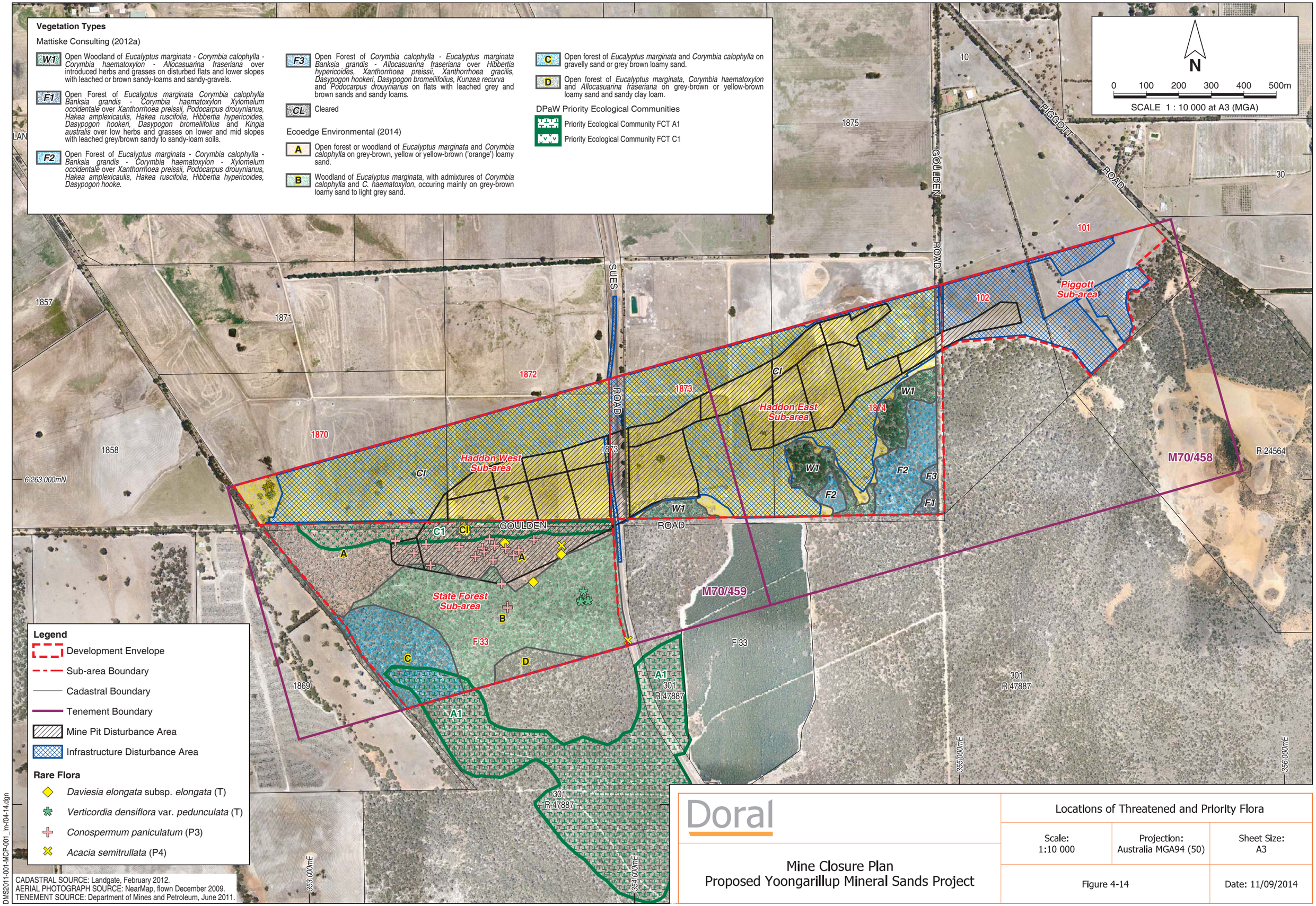
CADASTRAL SOURCE: Landgate, February 2012.
AERIAL PHOTOGRAPH SOURCE: NearMap, flown December 2009.
TENEMENT SOURCE: Department of Mines and Petroleum, June 2011.

DMS2011-001-MCP-001_lm-f04-13.dgn

Doral

Mine Closure Plan
Proposed Yoongarillup Mineral Sands Project

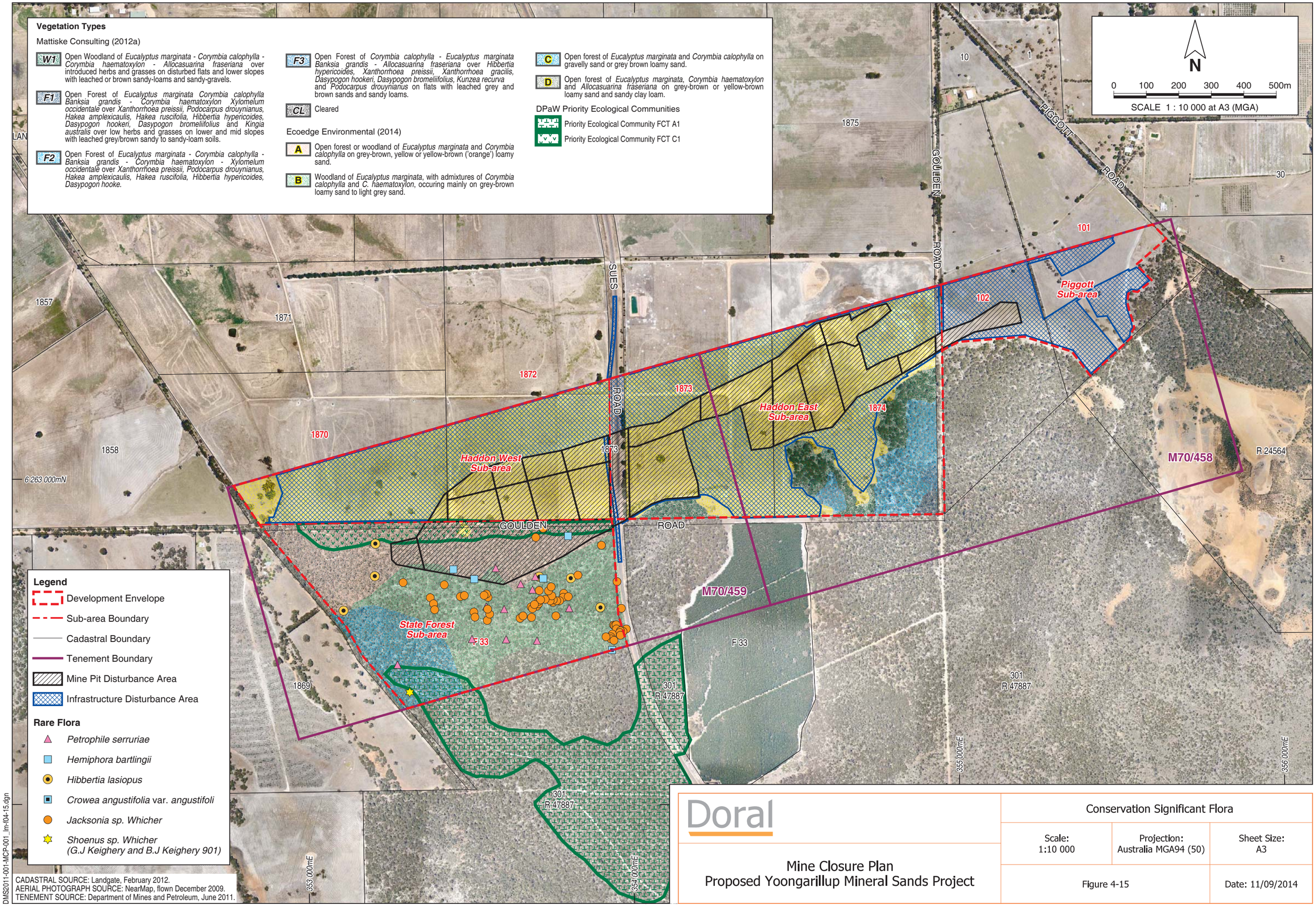
Priority Ecological Communities		
Scale: 1:10 000	Projection: Australia MGA94 (50)	Sheet Size: A3
Figure 4-13		Date: 11/09/2014



Doral

Mine Closure Plan
Proposed Yoongarillup Mineral Sands Project

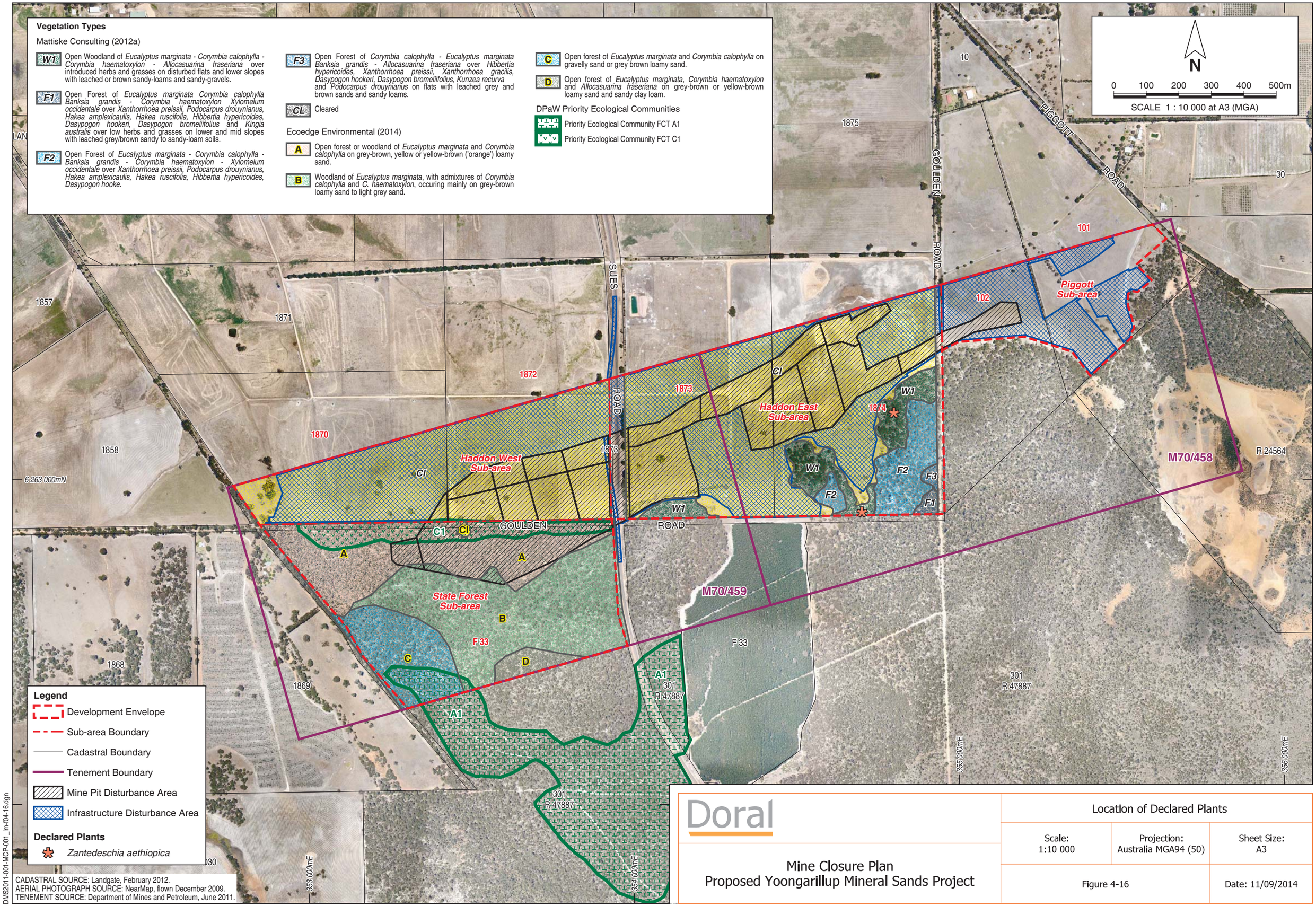
Locations of Threatened and Priority Flora		
Scale: 1:10 000	Projection: Australia MGA94 (50)	Sheet Size: A3
Figure 4-14		Date: 11/09/2014



Doral

Mine Closure Plan
Proposed Yoongarillup Mineral Sands Project

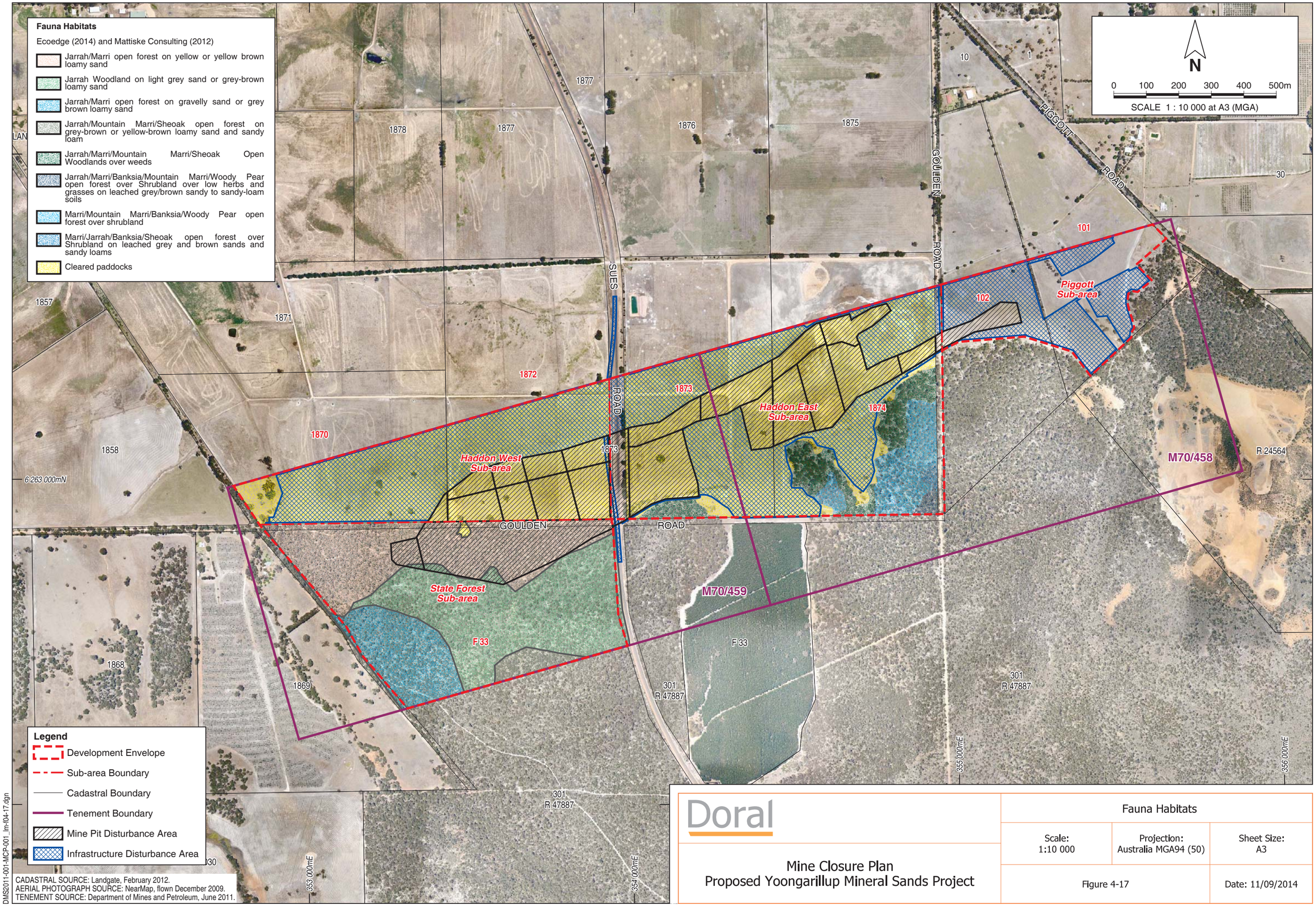
Conservation Significant Flora		
Scale: 1:10 000	Projection: Australia MGA94 (50)	Sheet Size: A3
Figure 4-15		Date: 11/09/2014



Doral

Mine Closure Plan
Proposed Yoongarillup Mineral Sands Project

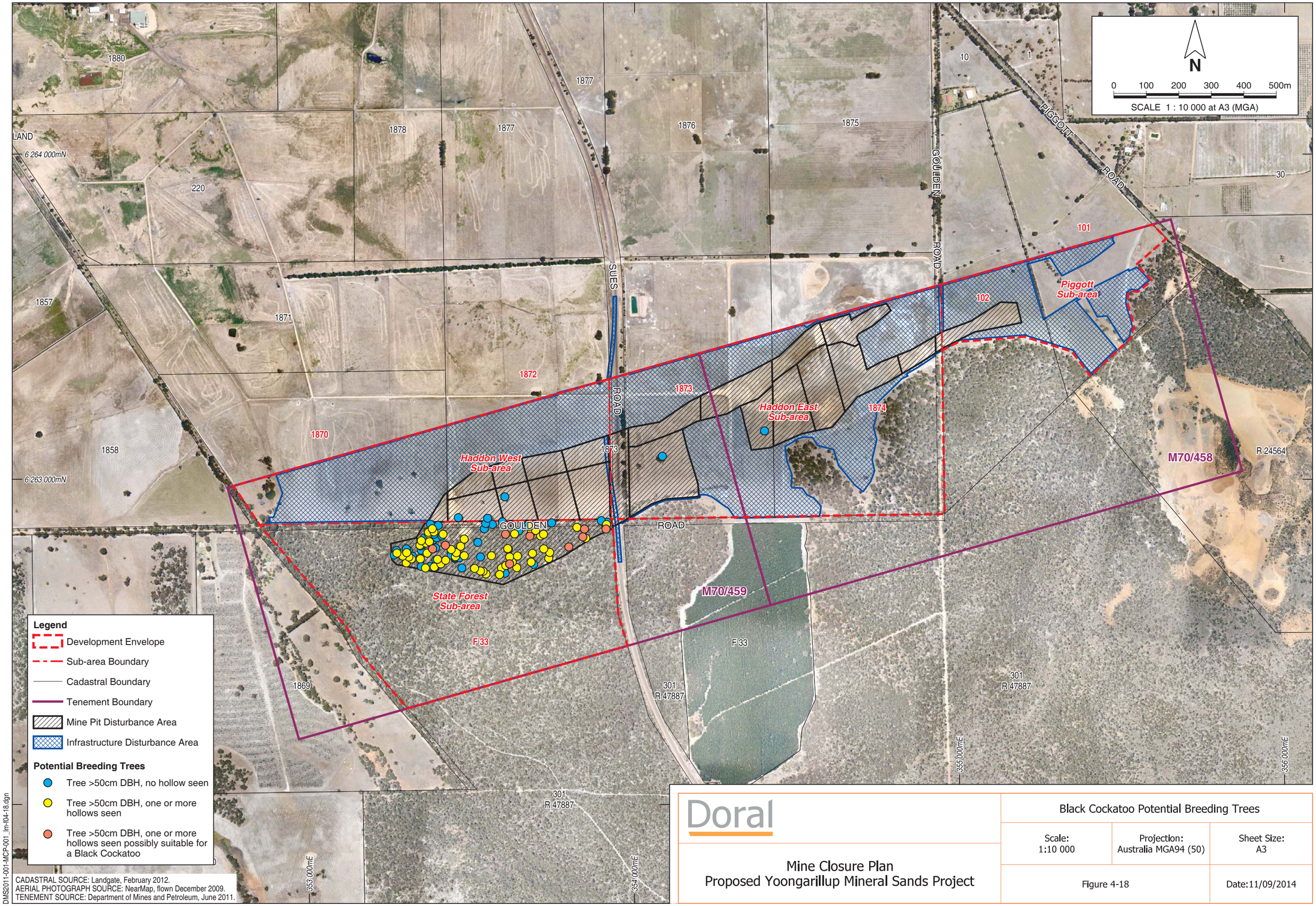
Location of Declared Plants		
Scale: 1:10 000	Projection: Australia MGA94 (50)	Sheet Size: A3
Figure 4-16		Date: 11/09/2014



Doral

Mine Closure Plan
Proposed Yoongarillup Mineral Sands Project

Fauna Habitats		
Scale: 1:10 000	Projection: Australia MGA94 (50)	Sheet Size: A3
Figure 4-17		Date: 11/09/2014



CADASTRAL SOURCE: Landgate, February 2012.
AERIAL PHOTOGRAPH SOURCE: NearMap, flown December 2009.
TENEMENT SOURCE: Department of Mines and Petroleum, June 2011.

DMS2011-001-MCP-001_lm-f04-18.dgn

Doral

Mine Closure Plan
Proposed Yoongarillup Mineral Sands Project

Black Cockatoo Potential Breeding Trees

Scale: 1:10 000	Projection: Australia MGA94 (50)	Sheet Size: A3
Figure 4-18		Date:11/09/2014