

**Legend**

Rail Station	Creekline Grassy Woodland	Plains Grassy Woodland
VicTrack Reserve boundary	Lignum Swamp	Plains Woodland
Secondary Construction Area (SCA)	Plains Grassland	Tall Marsh
Project Area	Plains Grassy Wetland	Impacted Tree
Impacted Vegetation within SCA		Watercourse

Map 25 of 49



Data Sources:  
 BLU Reference Design: May 2017  
 EHP Ecology data: 25/01/2017  
 Vicmap 2016  
 VicTrack 2017  
 Aerial photo: DELWP 2016

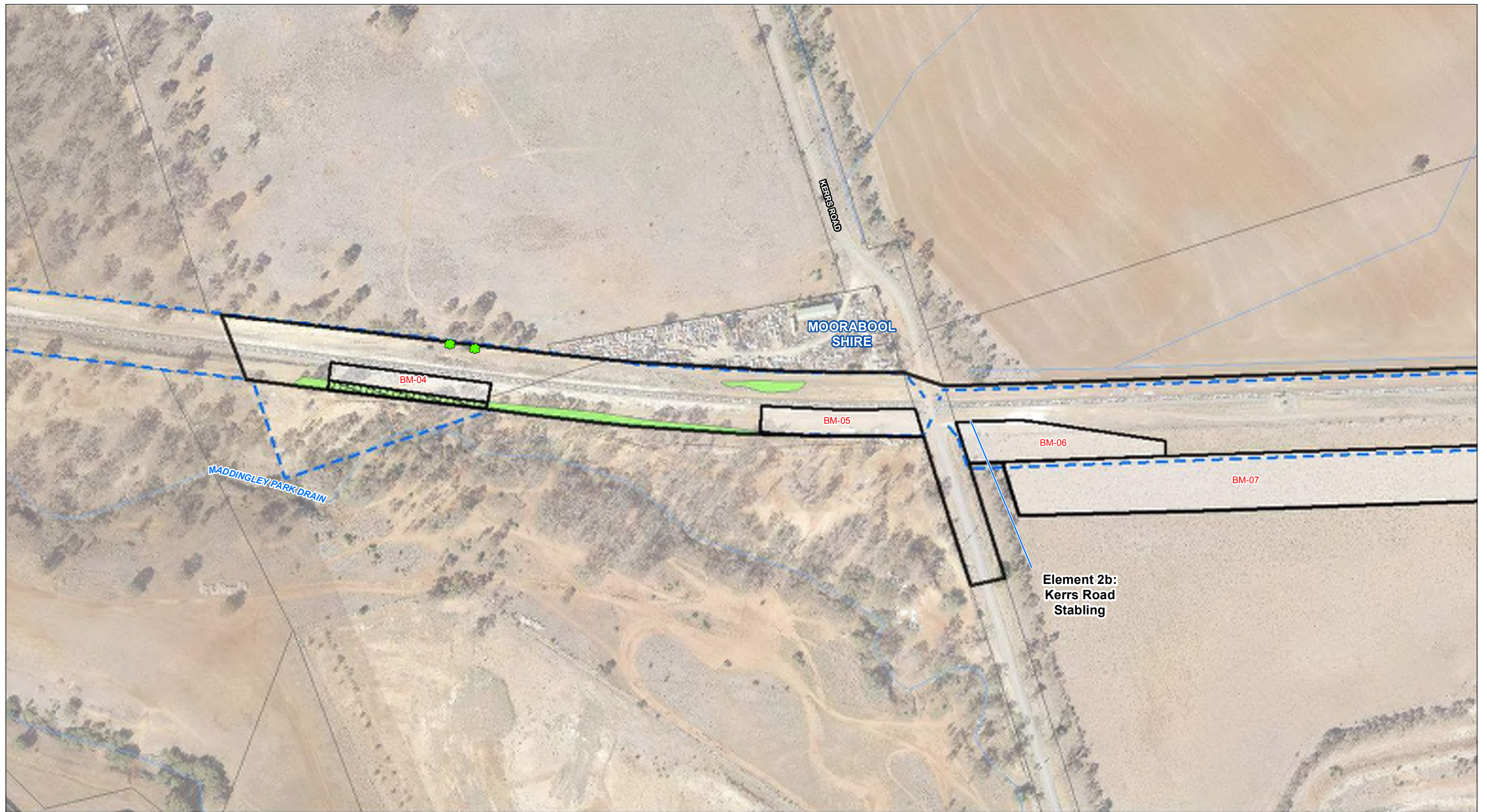
**Ballarat Line Upgrade Project**

Native Vegetation Mapping

Drawing Number: BLU-AJM-PWAA-MP-NF-600058	Revision: P1.1		
Drawn By: A. Berman	Approved By: A. Michael	Date: 5/07/2017	Map Size: A3

0 50 100  
Metres  
Coordinate System: GDA 1994 MGA Zone 55





**Legend**

- VicTrack Reserve boundary
- Secondary Construction Area (SCA)
- Project Area
- Impacted Vegetation within SCA
- Creekline Grassy Woodland
- Lignum Swamp
- Plains Grassland
- Plains Grassy Wetland
- Plains Grassy Woodland
- Plains Woodland
- Tall Marsh
- Scattered Tree
- Watercourse

Map 26 of 49



Data Sources:  
 BLU Reference Design: May 2017  
 EHP Ecology data: 25/01/2017  
 Vicmap 2016  
 VicTrack 2017  
 Aerial photo: DELWP 2016

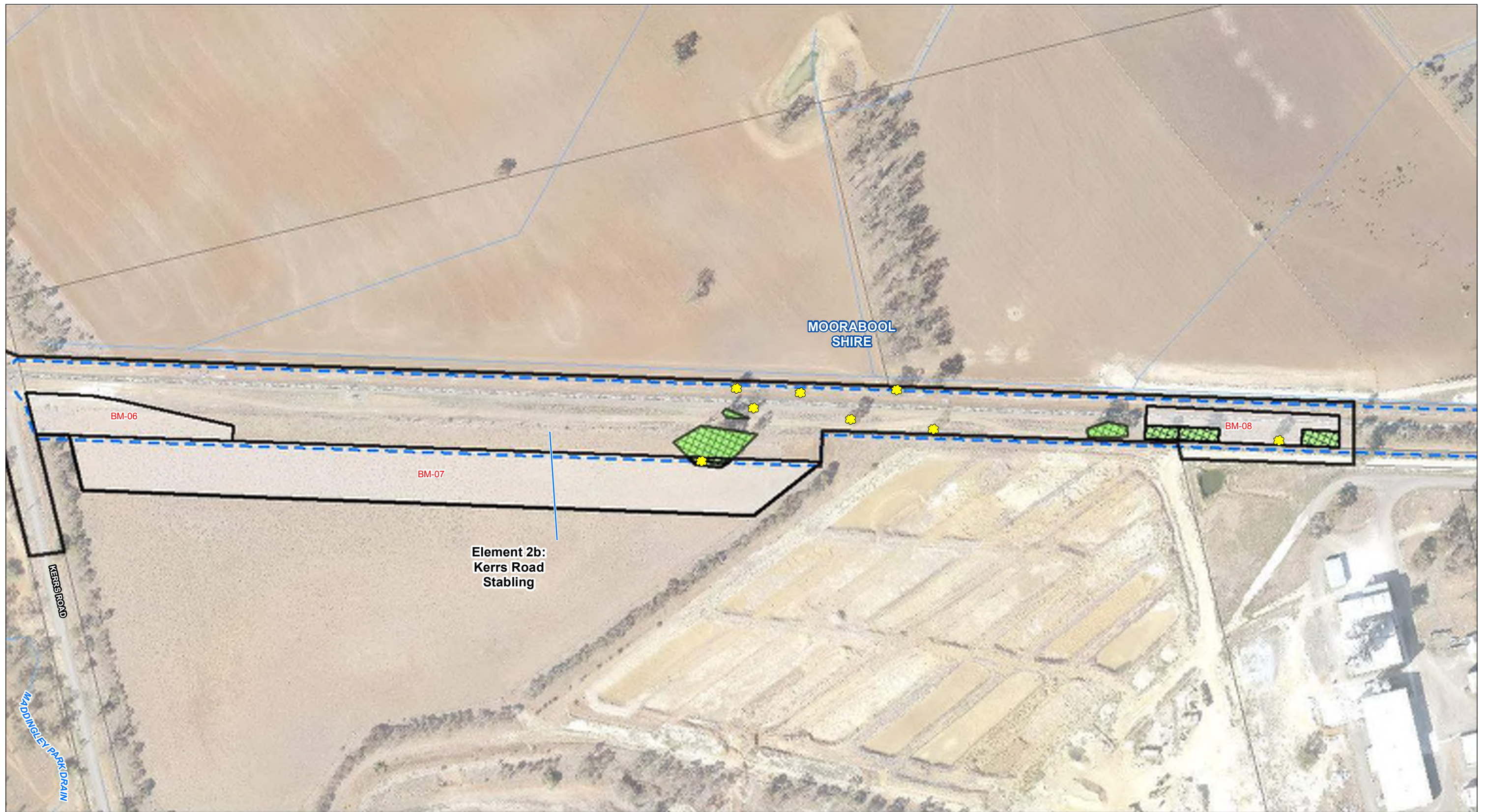
**Ballarat Line Upgrade Project**

Native Vegetation Mapping

Drawing Number: BLU-AJM-PWAA-MP-NF-600058	Revision: P1.1
Drawn By: A. Berman	Approved By: A. Michael
Date: 5/07/2017	Map Size: A3

0 50 100  
Metres  
Coordinate System: GDA 1994 MGA Zone 55

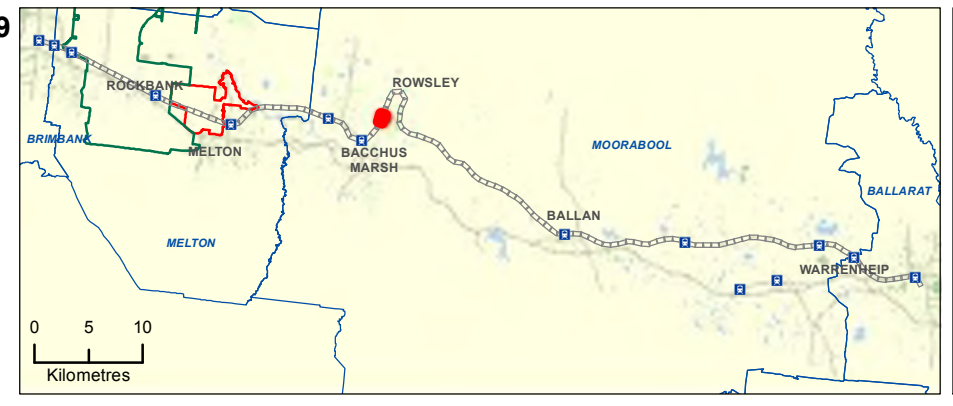




**Legend**

- VicTrack Reserve boundary
- Secondary Construction Area (SCA)
- Project Area
- Impacted Vegetation within SCA
- Impacted Vegetation
- Creekline Grassy Woodland
- Lignum Swamp
- Plains Grassland
- Plains Grassy Wetland
- Plains Grassy Woodland
- Plains Woodland
- Tall Marsh
- Impacted Tree
- Watercourse

Map 27 of 49



Data Sources:  
 BLU Reference Design: May 2017  
 EHP Ecology data: 25/01/2017  
 Vicmap 2016  
 VicTrack 2017  
 Aerial photo: DELWP 2016

**Ballarat Line Upgrade Project**

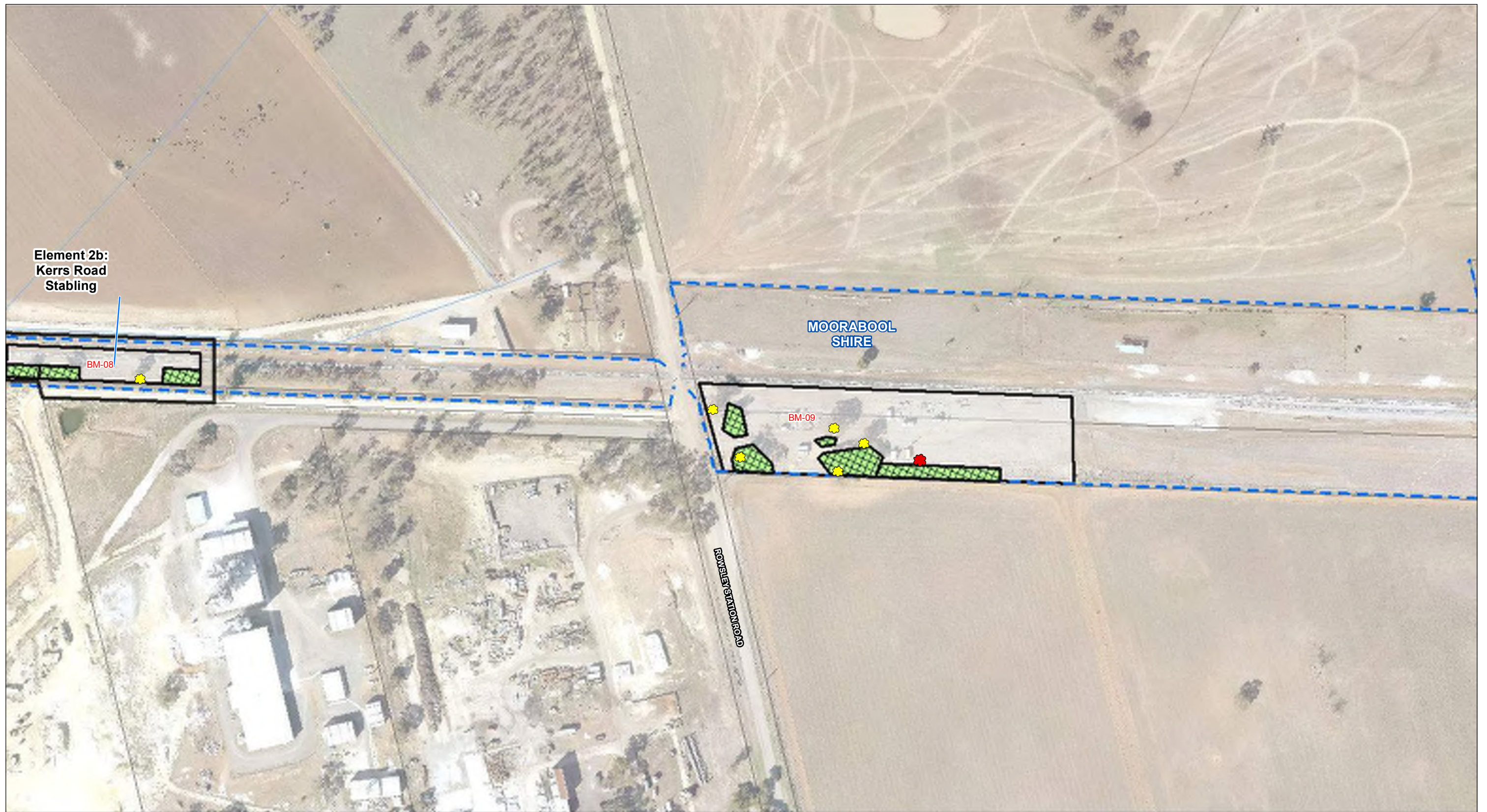
Native Vegetation Mapping

Drawing Number: BLU-AJM-PWAA-MP-NF-600058  
 Revision: P1.1

Drawn By: A. Berman  
 Approved By: A. Michael  
 Date: 5/07/2017  
 Map Size: A3

0 50 100  
 Metres  
 Coordinate System: GDA 1994 MGA Zone 55





**Legend**

- VicTrack Reserve boundary
- Secondary Construction Area (SCA)
- Project Area
- Impacted Vegetation within SCA
- Creekline Grassy Woodland
- Lignum Swamp
- Plains Grassland
- Plains Grassy Wetland
- Plains Grassy Woodland
- Plains Woodland
- Tall Marsh
- Impacted Tree
- Matted flax-lily
- Watercourse

Map 28 of 49



Data Sources:  
 BLU Reference Design: May 2017  
 EHP Ecology data: 25/01/2017  
 Vicmap 2016  
 VicTrack 2017  
 Aerial photo: DELWP 2016

MELBOURNE METRO RAIL AUTHORITY

aurecon JACOBS

AJM MOTT MACDONALD  
Joint Venture

**Ballarat Line Upgrade Project**

Native Vegetation Mapping

Drawing Number: BLU-AJM-PWAA-MP-NF-600058

Revision: P1.1

Drawn By: A. Berman	Approved By: A. Michael	Date: 5/07/2017	Map Size: A3
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0 50 100  
Metres

Coordinate System: GDA 1994 MGA Zone 55





**Legend**

- VicTrack Reserve boundary
- Secondary Construction Area (SCA)
- ▭ Project Area
- ▨ Impacted Vegetation within SCA
- Creepline Grassy Woodland
- Lignum Swamp
- Plains Grassland
- Plains Grassy Wetland
- Plains Grassy Woodland
- Plains Woodland
- Tall Marsh
- Scattered Tree
- Watercourse

Map 29 of 49



Data Sources:  
 BLU Reference Design: May 2017  
 EHP Ecology data: 25/01/2017  
 Vicmap 2016  
 VicTrack 2017  
 Aerial photo: DELWP 2016

**Ballarat Line Upgrade Project**

Native Vegetation Mapping

Drawing Number: BLU-AJM-PWAA-MP-NF-600058

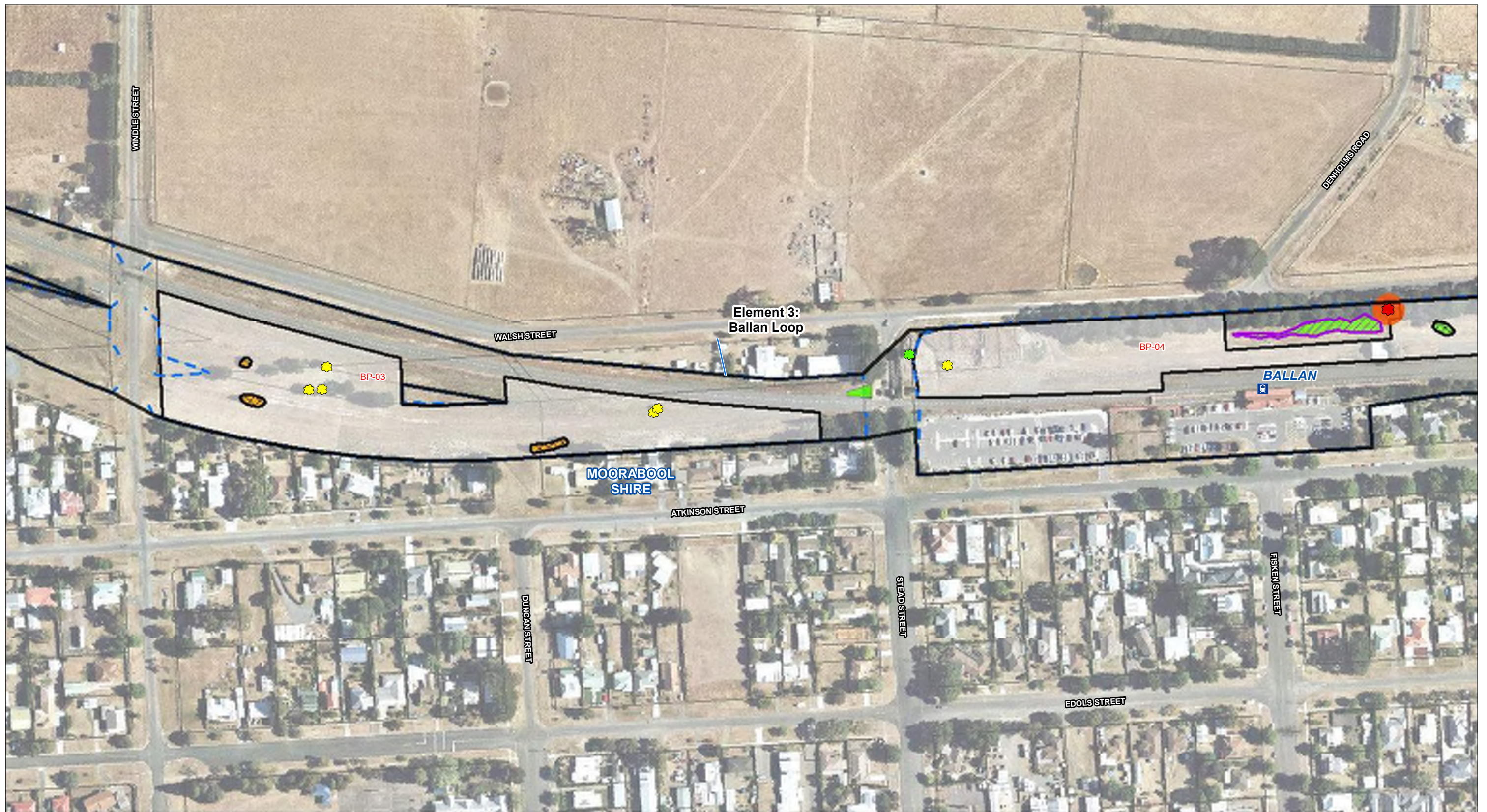
Revision: P1.1

Drawn By: A. Berman	Approved By: A. Michael	Date: 5/07/2017	Map Size: A3
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0 50 100 Metres

Coordinate System: GDA 1994 MGA Zone 55





**Legend**

- Rail Station
- VicTrack Reserve boundary
- Secondary Construction Area (SCA)
- Project Area
- Impacted Vegetation within SCA
- Impacted Vegetation
- Matted Flax-lily Exclusion Zone
- Natural Temperate Grassland of the Victorian Volcanic Plain
- Creekline Grassy Woodland
- Lignum Swamp
- Plains Grassland
- Plains Grassy Wetland
- Plains Grassy Woodland
- Plains Woodland
- Tall Marsh

**Significant Species**

- Matted Flax-lily
- Impacted Tree
- Scattered Tree

Map 30 of 49



**Ballarat Line Upgrade Project**

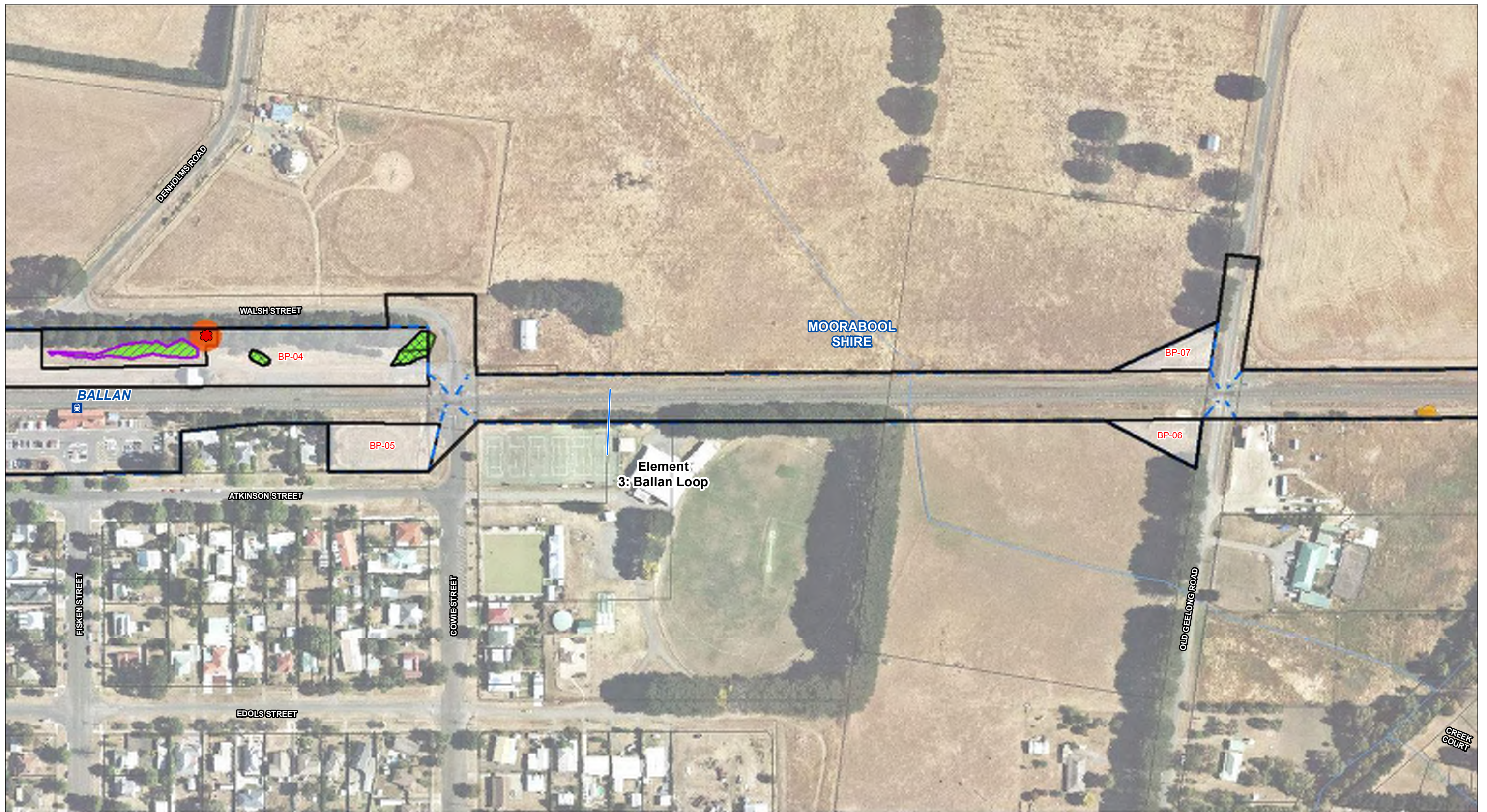
Native Vegetation Mapping

Drawing Number: BLU-AJM-PWAA-MP-NF-600058  
Revision: P1.1

Drawn By: A. Berman  
Approved By: A. Michael  
Date: 5/07/2017  
Map Size: A3

0 50 100 Metres  
Coordinate System: GDA 1994 MGA Zone 55





**Legend**

- Rail Station
- VicTrack Reserve boundary
- Secondary Construction Area (SCA)
- Project Area
- Impacted Vegetation within SCA
- Impacted Vegetation
- Matted Flax-lily Exclusion Zone
- Natural Temperate Grassland of the Victorian Volcanic Plain
- Creekline Grassy Woodland
- Lignum Swamp
- Plains Grassland
- Plains Grassy Wetland
- Plains Grassy Woodland
- Plains Woodland
- Tall Marsh
- Matted Flax-lily
- Watercourse

Map 31 of 49



Data Sources:  
 BLU Reference Design: May 2017  
 EHP Ecology data: 25/01/2017  
 Vicmap 2016  
 VicTrack 2017  
 Aerial photo: DELWP 2016

**Ballarat Line Upgrade Project**

Native Vegetation Mapping

Drawing Number: BLU-AJM-PWAA-MP-NF-600058  
 Revision: P1.1

Drawn By: A. Berman  
 Approved By: A. Michael  
 Date: 5/07/2017  
 Map Size: A3

0 50 100  
 Metres  
 Coordinate System: GDA 1994 MGA Zone 55





**Legend**

- VicTrack Reserve boundary
- Secondary Construction Area (SCA)
- Project Area
- Impacted Vegetation within SCA
- Impacted Vegetation
- Creepline Grassy Woodland
- Lignum Swamp
- Plains Grassland
- Plains Grassy Wetland
- Plains Grassy Woodland
- Plains Woodland
- Tall Marsh
- Watercourse

Map 32 of 49



Data Sources:  
 BLU Reference Design: May 2017  
 EHP Ecology data: 25/01/2017  
 Vicmap 2016  
 VicTrack 2017  
 Aerial photo: DELWP 2016

**Ballarat Line Upgrade Project**

Native Vegetation Mapping

Drawing Number: BLU-AJM-PWAA-MP-NF-600058  
 Revision: P1.1

Drawn By: A. Berman  
 Approved By: A. Michael  
 Date: 5/07/2017  
 Map Size: A3

0 50 100  
 Metres  
 Coordinate System: GDA 1994 MGA Zone 55





### Legend

- VicTrack Reserve boundary
- Secondary Construction Area (SCA)
- Project Area
- Impacted Vegetation within SCA
- Impacted Vegetation
- Matted Flax-lily Exclusion Zone

- Creekline Grassy Woodland
- Lignum Swamp
- Plains Grassland
- Plains Grassy Wetland

- Plains Grassy Woodland
- Plains Woodland
- Tall Marsh
- Matted Flax-lily
- Watercourse

**Map 33 of 49**

**Ballarat Line Upgrade Project**

Native Vegetation Mapping

Drawing Number: BLU-AJM-PWAA-MP-NF-600058

Revision: P1.1

Drawn By: A. Berman	Approved By: A. Michael	Date: 5/07/2017	Map Size: A3
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Coordinate System: GDA 1994 MGA Zone 55





**Legend**

VicTrack Reserve boundary	Creeklane Grassy Woodland	Plains Grassy Woodland
Project Area	Lignum Swamp	Plains Woodland
Impacted Vegetation	Plains Grassland	Tall Marsh
	Plains Grassy Wetland	Watercourse

Map 34 of 49



Data Sources:  
 BLU Reference Design: May 2017  
 EHP Ecology data: 25/01/2017  
 Vicmap 2016  
 VicTrack 2017  
 Aerial photo: DELWP 2016



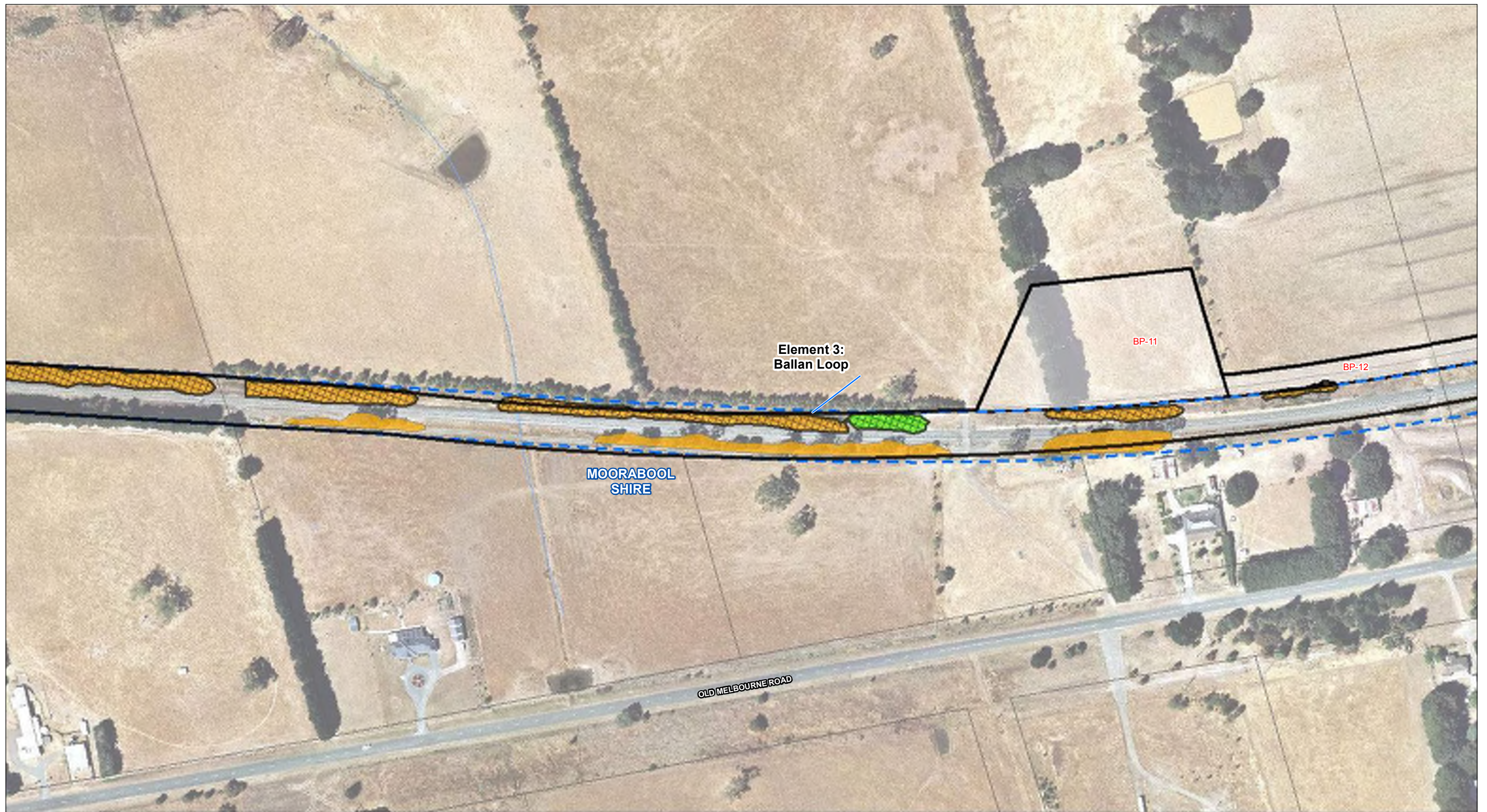
**Ballarat Line Upgrade Project**

Native Vegetation Mapping

Drawing Number: BLU-AJM-PWAA-MP-NF-600058	Revision: P1.1		
Drawn By: A. Berman	Approved By: A. Michael	Date: 5/07/2017	Map Size: A3

0 50 100  
Metres  
Coordinate System: GDA 1994 MGA Zone 55





**Legend**

- VicTrack Reserve boundary
- Secondary Construction Area (SCA)
- Project Area
- Impacted Vegetation within SCA
- Impacted Vegetation
- Creekline Grassy Woodland
- Lignum Swamp
- Plains Grassland
- Plains Grassy Wetland
- Plains Grassy Woodland
- Plains Woodland
- Tall Marsh
- Watercourse

Map 35 of 49



Data Sources:  
 BLU Reference Design: May 2017  
 EHP Ecology data: 25/01/2017  
 Vicmap 2016  
 VicTrack 2017  
 Aerial photo: DELWP 2016

**Ballarat Line Upgrade Project**

Native Vegetation Mapping

Drawing Number: BLU-AJM-PWAA-MP-NF-600058  
 Revision: P1.1

Drawn By: A. Berman	Approved By: A. Michael	Date: 5/07/2017	Map Size: A3
------------------------	----------------------------	--------------------	-----------------

0 50 100  
 Metres  
 Coordinate System: GDA 1994 MGA Zone 55





**Legend**

- VicTrack Reserve boundary
- Secondary Construction Area (SCA)
- Project Area
- Impacted Vegetation within SCA
- Impacted Vegetation
- Creekline Grassy Woodland
- Lignum Swamp
- Plains Grassland
- Plains Grassy Wetland
- Plains Grassy Woodland
- Plains Woodland
- Tall Marsh
- Watercourse

Map 36 of 49



Data Sources:  
 BLU Reference Design: May 2017  
 EHP Ecology data: 25/01/2017  
 Vicmap 2016  
 VicTrack 2017  
 Aerial photo: DELWP 2016

**Ballarat Line Upgrade Project**

Native Vegetation Mapping

Drawing Number: BLU-AJM-PWAA-MP-NF-600058	Revision: P1.1
Drawn By: A. Berman	Approved By: A. Michael
Date: 5/07/2017	Map Size: A3

0 50 100  
Metres  
Coordinate System: GDA 1994 MGA Zone 55





**Legend**

VicTrack Reserve boundary	Creekline Grassy Woodland	Plains Grassy Woodland
Project Area	Lignum Swamp	Plains Woodland
Impacted Vegetation	Plains Grassland	Tall Marsh
	Plains Grassy Wetland	Watercourse

Map 37 of 49



Data Sources:  
 BLU Reference Design: May 2017  
 EHP Ecology data: 25/01/2017  
 Vicmap 2016  
 VicTrack 2017  
 Aerial photo: DELWP 2016



**Ballarat Line Upgrade Project**

Native Vegetation Mapping

Drawing Number: BLU-AJM-PWAA-MP-NF-600058	Revision: P1.1		
Drawn By: A. Berman	Approved By: A. Michael	Date: 5/07/2017	Map Size: A3

0 50 100  
Metres  
Coordinate System: GDA 1994 MGA Zone 55





**Legend**

- VicTrack Reserve boundary
- Secondary Construction Area (SCA)
- Project Area
- Creekline Grassy Woodland
- Lignum Swamp
- Plains Grassland
- Plains Grassy Wetland
- Plains Grassy Woodland
- Plains Woodland
- Tall Marsh
- Impacted Tree
- Watercourse

Map 38 of 49



Data Sources:  
 BLU Reference Design: May 2017  
 EHP Ecology data: 25/01/2017  
 Vicmap 2016  
 VicTrack 2017  
 Aerial photo: DELWP 2016

**Ballarat Line Upgrade Project**

Native Vegetation Mapping

Drawing Number:	BLU-AJM-PWAA-MP-NF-600058	Revision:	P1.1
Drawn By:	A. Berman	Approved By:	A. Michael
Date:	5/07/2017	Map Size:	A3

0 50 100  
Metres  
Coordinate System: GDA 1994 MGA Zone 55





**Legend**

- VicTrack Reserve boundary
- Project Area
- Impacted Vegetation
- Creekline Grassy Woodland
- Lignum Swamp
- Plains Grassland
- Plains Grassy Wetland
- Plains Grassy Woodland
- Plains Woodland
- Tall Marsh
- ★ Impacted Tree

**Map 39 of 49**

0 5 10  
Kilometres

**Ballarat Line Upgrade Project**

Native Vegetation Mapping

Drawing Number:		Revision:	
BLU-AJM-PWAA-MP-NF-600058		P1.1	
Drawn By:	Approved By:	Date:	Map Size:
A. Berman	A. Michael	5/07/2017	A3

0 50 100  
Metres

Coordinate System: GDA 1994 MGA Zone 55

Data Sources:  
 BLU Reference Design: May 2017  
 EHP Ecology data: 25/01/2017  
 Vicmap 2016  
 VicTrack 2017  
 Aerial photo: DELWP 2016





- Legend**
- VicTrack Reserve boundary
  - Secondary Construction Area (SCA)
  - Project Area
  - Creekline Grassy Woodland
  - Lignum Swamp
  - Plains Grassland
  - Plains Grassy Wetland
  - Plains Grassy Woodland
  - Plains Woodland
  - Tall Marsh
  - Watercourse

Map 40 of 49



Data Sources:  
 BLU Reference Design: May 2017  
 EHP Ecology data: 25/01/2017  
 Vicmap 2016  
 VicTrack 2017  
 Aerial photo: DELWP 2016



**Ballarat Line Upgrade Project**

Native Vegetation Mapping

Drawing Number:	BLU-AJM-PWAA-MP-NF-600058	Revision:	P1.1
Drawn By:	A. Berman	Approved By:	A. Michael
Date:	5/07/2017	Map Size:	A3

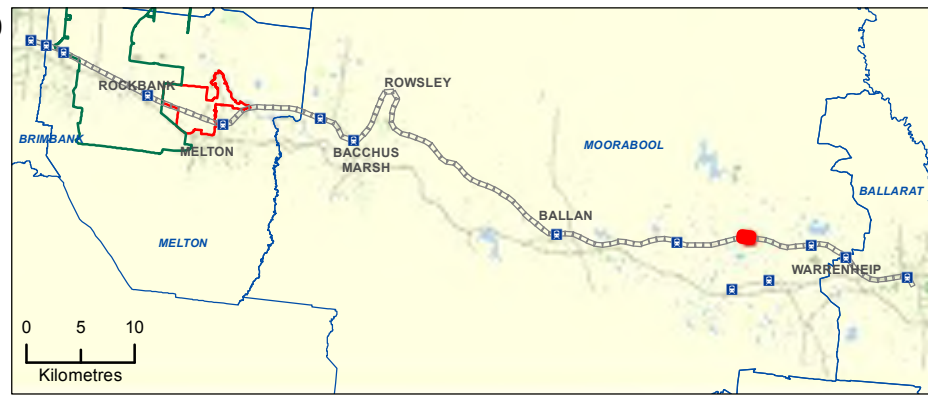
0 50 100 Metres  
 Coordinate System: GDA 1994 MGA Zone 55





- Legend**
- VicTrack Reserve boundary
  - Secondary Construction Area (SCA)
  - Project Area
  - Creekline Grassy Woodland
  - Lignum Swamp
  - Plains Grassland
  - Plains Grassy Wetland
  - Plains Grassy Woodland
  - Plains Woodland
  - Tall Marsh
  - Watercourse

Map 41 of 49



Data Sources:  
 BLU Reference Design: May 2017  
 EHP Ecology data: 25/01/2017  
 Vicmap 2016  
 VicTrack 2017  
 Aerial photo: DELWP 2016



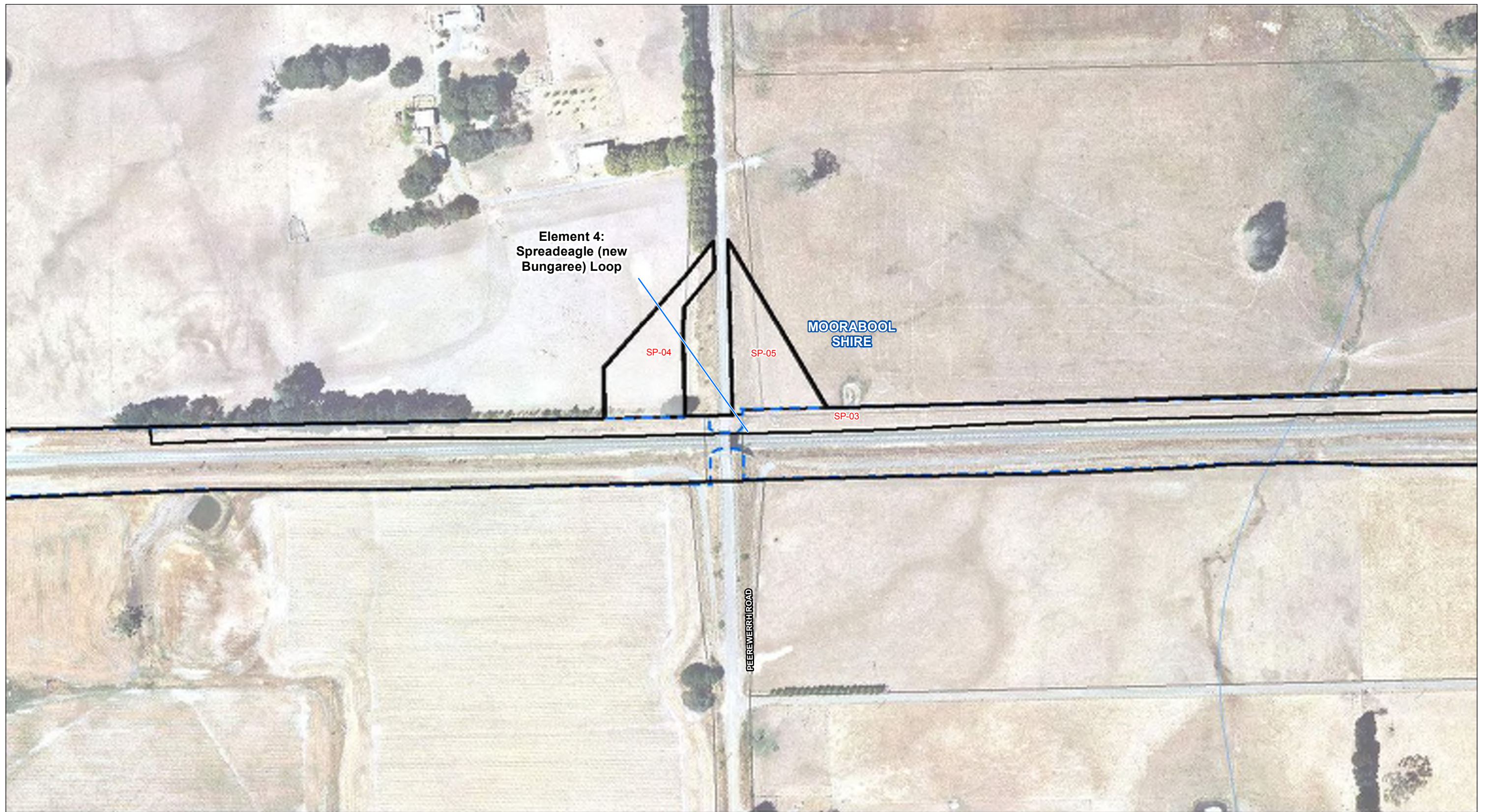
**Ballarat Line Upgrade Project**

Native Vegetation Mapping

Drawing Number: BLU-AJM-PWAA-MP-NF-600058		Revision: P1.1	
Drawn By: A. Berman	Approved By: A. Michael	Date: 5/07/2017	Map Size: A3

0 50 100  
Metres  
Coordinate System: GDA 1994 MGA Zone 55





- Legend**
- - - VicTrack Reserve boundary
  - Secondary Construction Area (SCA)
  - Project Area
  - Creekline Grassy Woodland
  - Lignum Swamp
  - Plains Grassy Wetland
  - Plains Grassy Woodland
  - Plains Woodland
  - Tall Marsh
  - Watercourse

Map 42 of 49



Data Sources:  
 BLU Reference Design: May 2017  
 EHP Ecology data: 25/01/2017  
 Vicmap 2016  
 VicTrack 2017  
 Aerial photo: DELWP 2016



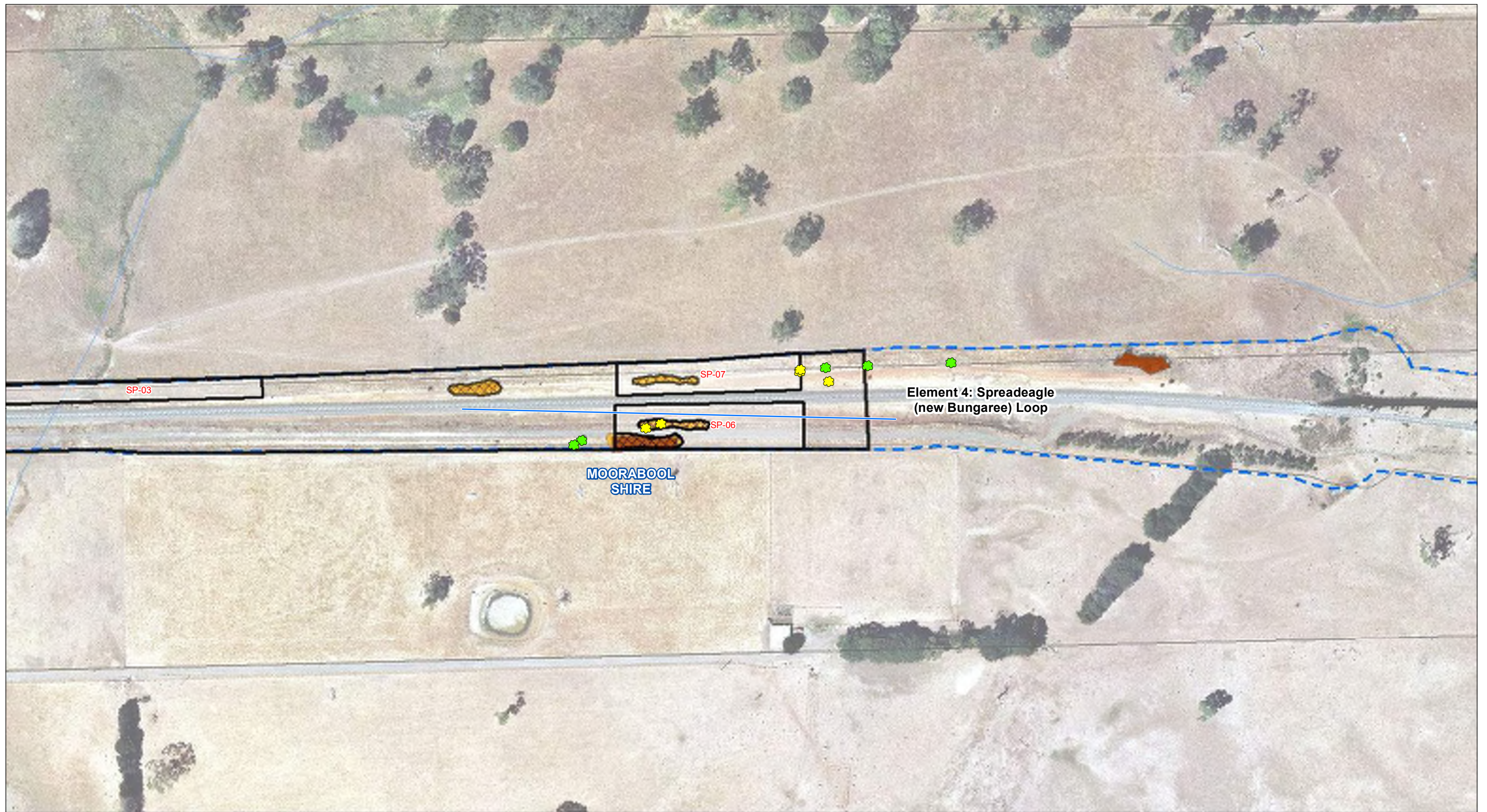
**Ballarat Line Upgrade Project**

Native Vegetation Mapping

Drawing Number:	Revision:		
BLU-AJM-PWAA-MP-NF-600058	P1.1		
Drawn By:	Approved By:	Date:	Map Size:
A. Berman	A. Michael	5/07/2017	A3

0 50 100  
Metres  
Coordinate System: GDA 1994 MGA Zone 55





**Legend**

- VicTrack Reserve boundary
- Secondary Construction Area (SCA)
- Project Area
- Impacted Vegetation within SCA
- Impacted Vegetation
- Creekline Grassy Woodland
- Lignum Swamp
- Plains Grassland
- Plains Grassy Wetland
- Plains Grassy Woodland
- Plains Woodland
- Tall Marsh
- Impacted Tree
- Impacted Tree
- Scattered Tree
- Watercourse

Map 43 of 49



Data Sources:  
 BLU Reference Design: May 2017  
 EHP Ecology data: 25/01/2017  
 Vicmap 2016  
 VicTrack 2017  
 Aerial photo: DELWP 2016

**Ballarat Line Upgrade Project**

Native Vegetation Mapping

Drawing Number: BLU-AJM-PWAA-MP-NF-600058	Revision: P1.1
Drawn By: A. Berman	Approved By: A. Michael
Date: 5/07/2017	Map Size: A3

0 50 100  
Metres  
Coordinate System: GDA 1994 MGA Zone 55





**Legend**

- VicTrack Reserve boundary
- Secondary Construction Area (SCA)
- Project Area
- Impacted Vegetation within SCA
- Impacted Vegetation
- Creekline Grassy Woodland
- Lignum Swamp
- Plains Grassland
- Plains Grassy Wetland
- Plains Grassy Woodland
- Plains Woodland
- Tall Marsh
- Watercourse

Map 44 of 49



Data Sources:  
 BLU Reference Design: May 2017  
 EHP Ecology data: 25/01/2017  
 Vicmap 2016  
 VicTrack 2017  
 Aerial photo: DELWP 2016

**Ballarat Line Upgrade Project**

Native Vegetation Mapping

Drawing Number: BLU-AJM-PWAA-MP-NF-600058  
 Revision: P1.1

Drawn By: A. Berman  
 Approved By: A. Michael  
 Date: 5/07/2017  
 Map Size: A3

0 50 100  
 Metres  
 Coordinate System: GDA 1994 MGA Zone 55





WD-03

**Legend**

- VicTrack Reserve boundary
- Secondary Construction Area
- Project Area
- Impacted Vegetation within SCA
- Impacted Vegetation

**Map 45 of 49**

<span style="display: inline-block; width: 15px; height: 10px; background-color: #008080;"></span> Creekline Grassy Woodland	<span style="display: inline-block; width: 15px; height: 10px; background-color: #FF8C00;"></span> Plains Grassy Woodland
<span style="display: inline-block; width: 15px; height: 10px; background-color: #FFFF00;"></span> Lignum Swamp	<span style="display: inline-block; width: 15px; height: 10px; background-color: #90EE90;"></span> Plains Woodland
<span style="display: inline-block; width: 15px; height: 10px; background-color: #32CD32;"></span> Plains Grassland	<span style="display: inline-block; width: 15px; height: 10px; background-color: #8B4513;"></span> Tall Marsh
<span style="display: inline-block; width: 15px; height: 10px; background-color: #ADD8E6;"></span> Plains Grassy Wetland	<span style="border-bottom: 1px solid blue; width: 20px; display: inline-block;"></span> Watercourse

Data Sources:  
BLU Reference Design: May 2017  
EHP Ecology data: 25/01/2017  
Vicmap 2016  
VicTrack 2017  
Aerial photo: DELWP 2016

**Ballarat Line Upgrade Project**

Native Vegetation Mapping

Drawing Number: BLU-AJM-PWAA-MP-NF-600058

Revision: P1.1

Drawn By: A. Berman	Approved By: A. Michael	Date: 5/07/2017	Map Size: A3
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Coordinate System: GDA 1994 MGA Zone 55

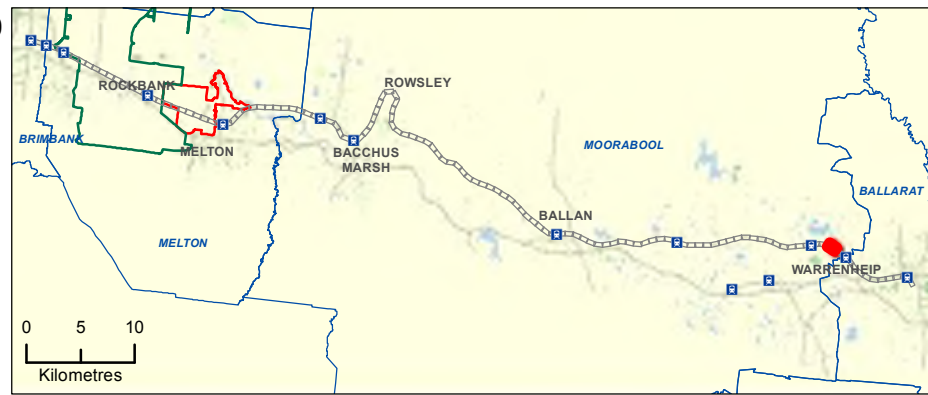




**Legend**

- VicTrack Reserve boundary
- Secondary Construction Area
- Project Area
- Creekline Grassy Woodland
- Lignum Swamp
- Plains Grassland
- Plains Grassy Wetland
- Plains Grassy Woodland
- Plains Woodland
- Tall Marsh
- Watercourse

Map 46 of 49



Data Sources:  
 BLU Reference Design: May 2017  
 EHP Ecology data: 25/01/2017  
 Vicmap 2016  
 VicTrack 2017  
 Aerial photo: DELWP 2016

**Ballarat Line Upgrade Project**

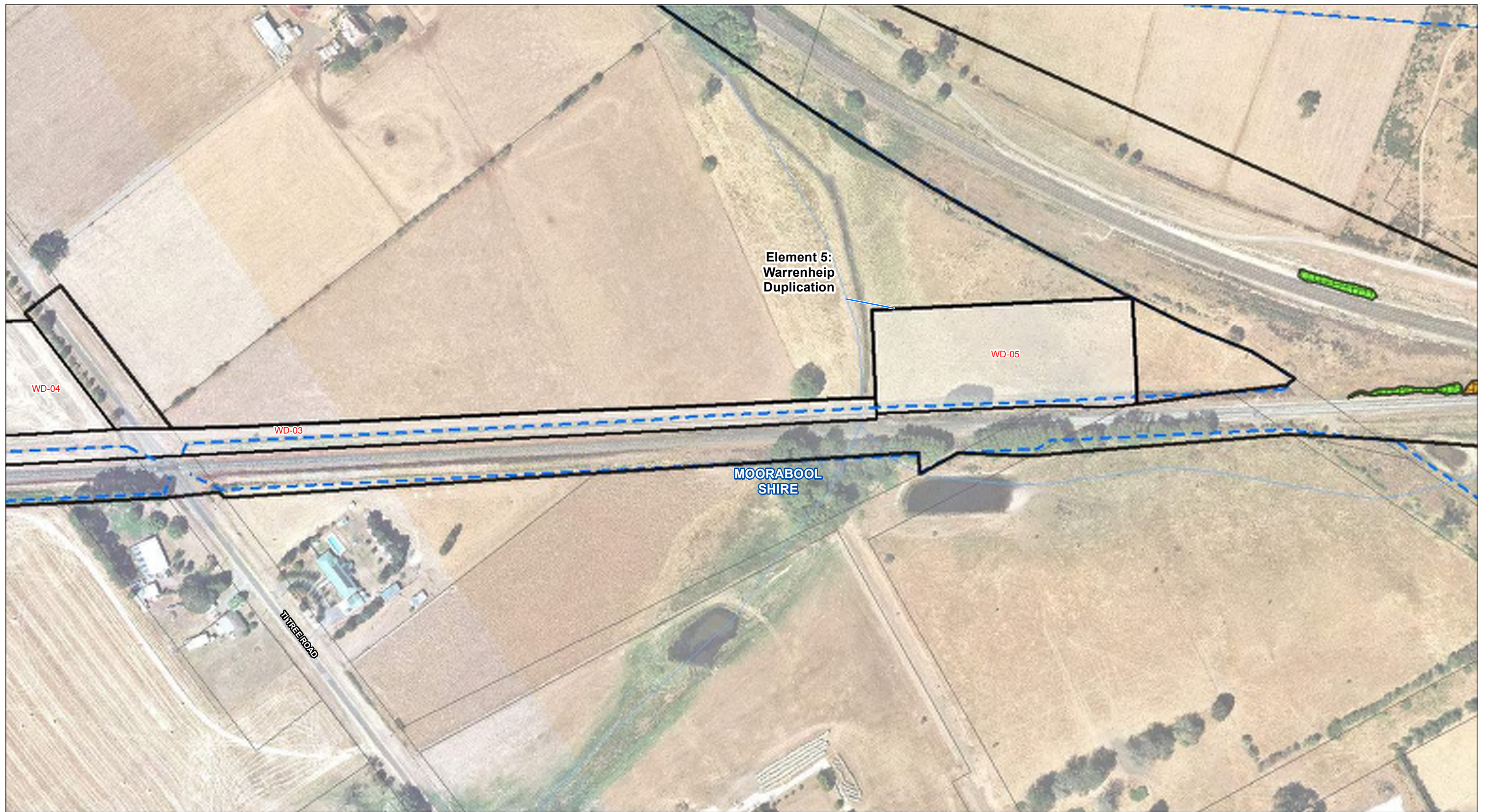
Native Vegetation Mapping

Drawing Number: BLU-AJM-PWAA-MP-NF-600058  
 Revision: P1.1

Drawn By: A. Berman	Approved By: A. Michael	Date: 5/07/2017	Map Size: A3
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0 50 100  
 Metres  
 Coordinate System: GDA 1994 MGA Zone 55





- Legend**
- - - VicTrack Reserve boundary
  - Secondary Construction Area (SCA)
  - Project Area
  - Impacted Vegetation
  - Creekline Grassy Woodland
  - Lignum Swamp
  - Plains Grassland
  - Plains Grassy Wetland
  - Plains Grassy Woodland
  - Plains Woodland
  - Tall Marsh
  - Watercourse

Map 47 of 49



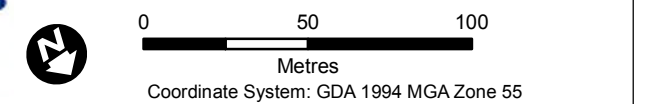
Data Sources:  
 BLU Reference Design: May 2017  
 EHP Ecology data: 25/01/2017  
 Vicmap 2016  
 VicTrack 2017  
 Aerial photo: DELWP 2016



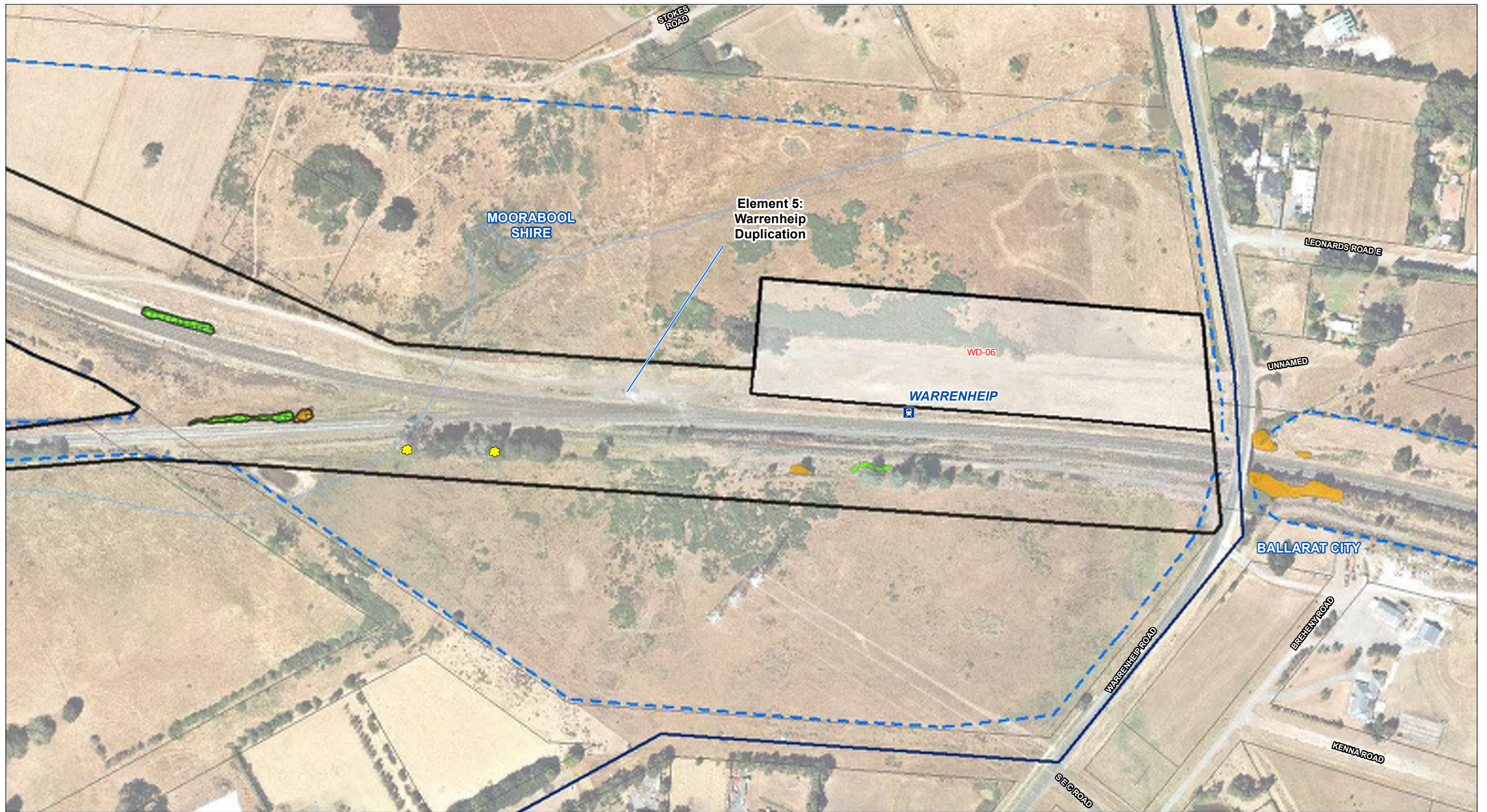
**Ballarat Line Upgrade Project**

Native Vegetation Mapping

Drawing Number:	BLU-AJM-PWAA-MP-NF-600058	Revision:	P1.1
Drawn By:	A. Berman	Approved By:	A. Michael
Date:	5/07/2017	Map Size:	A3







- Legend**
- Rail Station
  - VicTrack Reserve boundary
  - Secondary Construction Area (SCA)
  - Project Area
  - Impacted Vegetation
  - Creekline Grassy Woodland
  - Lignum Swamp
  - Plains Grassy Woodland
  - Plains Grassland
  - Plains Grassy Wetland
  - Plains Woodland
  - Tall Marsh
  - Impacted Tree
  - Watercourse

Map 48 of 49



Data Sources:  
 BLU Reference Design: May 2017  
 EHP Ecology data: 25/01/2017  
 Vicmap 2016  
 VicTrack 2017  
 Aerial photo: DELWP 2016



**Ballarat Line Upgrade Project**

Native Vegetation Mapping

Drawing Number:	Revision:		
BLU-AJM-PWAA-MP-NF-600058	P1.1		
Drawn By:	Approved By:	Date:	Map Size:
A. Berman	A. Michael	5/07/2017	A3

0 50 100 Metres  
 Coordinate System: GDA 1994 MGA Zone 55





**Legend**

- VicTrack Reserve boundary
- Secondary Construction Area (SCA)
- Project Area
- Impacted Vegetation
- Creekline Grassy Woodland
- Lignum Swamp
- Plains Grassland
- Plains Grassy Wetland
- Plains Grassy Woodland
- Plains Woodland
- Tall Marsh
- Watercourse

Map 49 of 49



Data Sources:  
 BLU Reference Design: May 2017  
 EHP Ecology data: 25/01/2017  
 Vicmap 2016  
 VicTrack 2017  
 Aerial photo: DELWP 2016

**Ballarat Line Upgrade Project**

Native Vegetation Mapping

Drawing Number: BLU-AJM-PWAA-MP-NF-600058      Revision: P1.1

Drawn By: A. Berman	Approved By: A. Michael	Date: 5/07/2017	Map Size: A3
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0      50      100  
 Metres  
 Coordinate System: GDA 1994 MGA Zone 55