

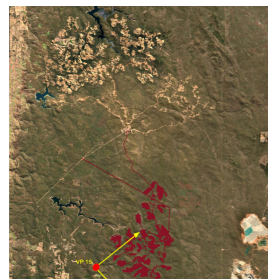
EXISTING VIEW



PROPOSED DESIGN



KEY PLAN



View Direction: 53° - 133°
 Horizontal Field Of View: 80°
 Camera Height: 1.6 m
 Camera Type: Canon EOS 6D
 Lens Size: 50 mm
 Photograph Time & Date: 9:00 am,
 16th December 2020

Location: Pinjarra Williams Road,
 Dwellingup, Western Australia
 Coordinates: 416268, 6377313
 (GDA 1994 MGA Zone 50)
 Viewpoint Elevation: 194 m
 Date of Photomontage: 21th August 2021
 Issue: v01

Alcoa Huntly Expansion Environmental Approval
Alcoa of Australia Limited

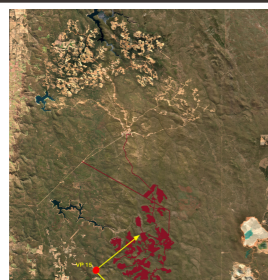
Viewpoint 15 : Pinjarra Williams Road

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 Level 8, 180 Lonsdale Street
 Melbourne VIC 3000
 T 61 3 8687 8000 E melmail@ghd.com.au W www.ghd.com

PROPOSED
DESIGN OVERLAY



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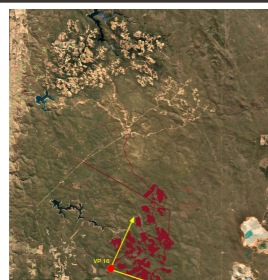
EXISTING VIEW



PROPOSED DESIGN



KEY PLAN



View Direction: 28° - 108°
Horizontal Field Of View: 80°
Camera Height: 1.6 m
Camera Type: Canon EOS 6D
Lens Size: 50 mm
Photograph Time & Date: 8:33 am,
 17th December 2020

Location: Etmilyn Station, Dwellingup,
 Western Australia
Coordinates: 419343, 6377393
 (GDA 1994 MGA Zone 50)
Viewpoint Elevation: 216 m
Date of Photomontage: 21st August 2021
Issue: v01

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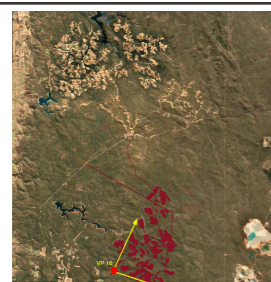
Viewpoint 16 : Etmilyn Station

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Viewpoint 16 : Etmilyn Station



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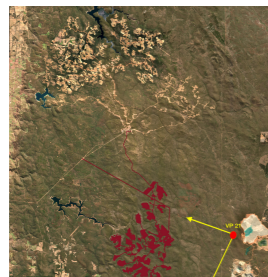
EXISTING VIEW



PROPOSED DESIGN



KEY PLAN



View Direction: 214° - 294°
Horizontal Field Of View: 80°
Camera Height: 1.6 m
Camera Type: Canon EOS 6D
Lens Size: 50 mm
Photograph Time & Date: 6:03 pm,
 22nd August 2022

Location: Mount Wells, Dwellingup
 State Forest, W.A.
Coordinates: 437633, 6381948
 (GDA 1994 MGA Zone 50)
Viewpoint Elevation: 540 m
Date of Photomontage: 21th August 2021
Issue: v01

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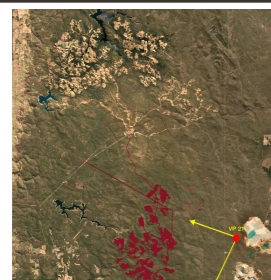
Viewpoint 21 : Mount Wells Campground

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PROPOSED
DESIGN OVERLAY



KEY PLAN



View Direction:	214° - 294°
Horizontal Field Of View:	80°
Camera Height:	1.6 m
Camera Type:	Canon EOS 6D
Lens Size:	50 mm
Photograph Time & Date:	6:03 pm, 22 nd August 2022

Location:	Mount Wells, Dwellingup State Forest, W.A.
Coordinates:	437633, 6381948 (GDA 1994 MGA Zone 50)
Viewpoint Elevation:	540 m
Date of Photomontage:	21 th August 2021
Issue:	v01

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Viewpoint 21 : Mount Wells Campground

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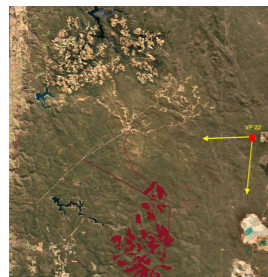
EXISTING VIEW



PROPOSED DESIGN



KEY PLAN



View Direction: 183° - 263°
Horizontal Field Of View: 80°
Camera Height: 1.6 m
Camera Type: Canon EOS 6D
Lens Size: 50 mm
Photograph Time & Date: 4:10 pm, 23rd August 2022

Location: Boonering Hill, Dwellingup State Forest, W.A
Coordinates: 440686, 6395869 (GDA 1994 MGA Zone 50)
Viewpoint Elevation: 517 m
Date of Photomontage: 21th August 2021
Issue: v01

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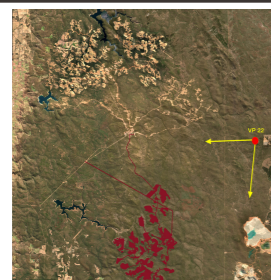
Viewpoint 22 : Boonering Hill

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PROPOSED
DESIGN OVERLAY



KEY PLAN



View Direction: 183° - 263°
Horizontal Field Of View: 80°
Camera Height: 1.6 m
Camera Type: Canon EOS 6D
Lens Size: 50 mm
Photograph Time & Date: 4:10 pm,
 23rd August 2022

Location: Boonering Hill, Dwellingup
 State Forest, W.A
Coordinates: 440686, 6395869
 (GDA 1994 MGA Zone 50)
Viewpoint Elevation: 517 m
Date of Photomontage: 21th August 2021
Issue: v01

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Viewpoint 22 : Boonering Hill

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Appendix B

Preliminary Visual Screening Field Survey

Technical Memorandum

Transect No.	1
Location	Marshall 7 (open pit with stockpiles), 415630 E, 6409870 S
Transect length (approximate)	200 m
Vegetation types	T – 0-165 m, TS – 165-200 m
Forest age	Immature (21-70 years) – harvested 1970-79
Average slope	20% downslope from pit
View of vegetation from pit Predominantly open understorey, minimal mid storey vegetation, typical of T vegetation type	
25m Mine pit stockpiles visible	

75m



125m

Mine pit stockpiles not visible due to 20% downslope / topographic shielding



150m

Presence of TS vegetation type (e.g. *Banksia grandis*)





175m



200m

Effective visual screening –
sky is barely visible



Transect No.	2
Location	Lloyd 3 (3-4 year rehabilitation), 417615 E, 6408600 N
Transect length (approximate)	150 m
Vegetation types	PS – 0-40 m, S – 40-150 m
Forest age	Immature (21-70 years) – harvested 1970-79
Average slope	6% downslope from pit
View of vegetation from pit Initial open understorey, then presence of mid-storey vegetation typical of P and S vegetation types	
25m Mine pit rehabilitation visible	

50m



75m

Mine pit rehabilitation obscured by understorey, and downslope position



125m

Presence of *B. grandis* mid-storey



150m

Effective visual screening by
mid-storey and understorey



Transect No.	3
Location	Lloyd 4 haul road, 417765 E, 6408655 N
Transect length (approximate)	175 m
Vegetation types	S – 0-75 m, PS – 75-175 m
Forest age	Immature (21-70 years) – harvested 1970-79
Average slope	4% upslope from haul road
View of vegetation from pit Initial open understorey, then presence of dense Jarrah saplings, then mid-storey vegetation typical of P and S vegetation types	
25m	

50m



75m



100 m

Dense Jarrah saplings
provide partial visual
screening



125m





150m

Effective visual screening,
haul road barely visible



175m



Transect No.	4
Location	Lloyd 3 (3-4 year rehabilitation), 417695 E, 6408445 N
Transect length (approximate)	125 m
Vegetation types	PS
Forest age	Immature (21-70 years) – harvested 1970-79
Average slope	6% downslope from mine pit
View of vegetation from pit Open understorey, minimal mid storey vegetation	
25m	

50m



75m

Understorey shrubs provide partial screening





100m



125m

Presence of mid-storey
Effective visual screening



Transect No.	5
Location	Kisler 2 rehab (<1 year complete), 421420 E, 6408090 N
Transect length (approximate)	225 m
Vegetation types	TS 0-210 m, S 210-225 m
Forest age	Immature (21-70 years) – harvested 1960-69
Average slope	11% downslope from pit for 190 , then flat
View of vegetation from pit Dense Jarrah saplings mid-storey of sapling regrowth	
25m Rehabilitation not visible due to 11% downslope position topographic shielding	

50m



75m



100m



125m

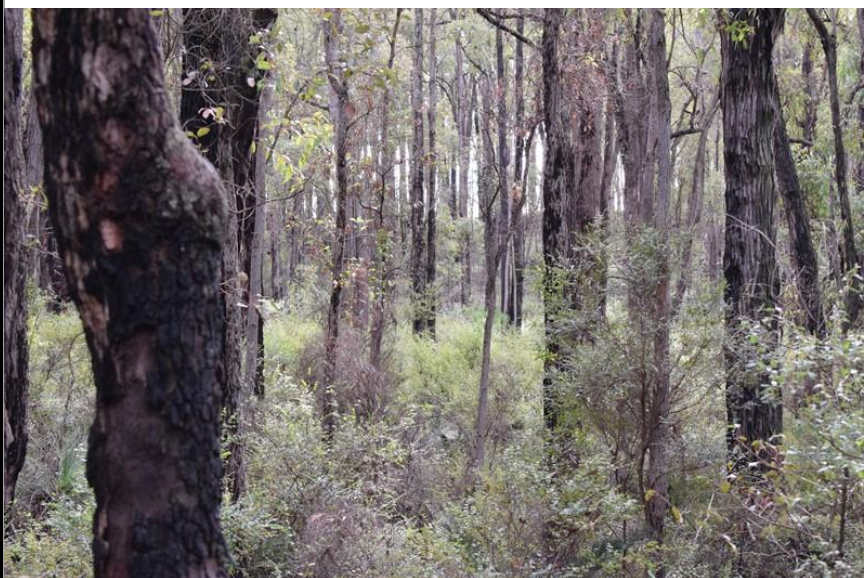
Substantial screening by dense understorey and Jarrah saplings



150m



175m





200m



225m

Effective visual screening –
sky no longer visible within
canopy



Transect No.	6
Location	Kisler Road three stage sump, 421965 E, 6407645 N
Transect length (approximate)	100 m
Vegetation types	W 0-40 m, PW 40-60 m, CW 60-100 m
Forest age	Immature (21-70 years) – harvested 1960-69
Average slope	4% downslope from sump
View of vegetation from pit Initial open vegetation then thick understorey	
25m Understorey provides partial screening	

50m



75m

Thick understorey screens foreground/lower elevation, mid-ground/higher elevation views remains visible





100m

Transect terminated during presence of stream/access not practical

Haul road visible over the understorey in the mid-ground/higher elevation



Transect No.	7
Location	Big Brook haul road sump, 421580 E, 6406650 N
Transect length (approximate)	125 m
Vegetation types	W 0-55 m, TS 55-125 m
Forest age	Immature (21-70 years) – harvested 1960-69
Average slope	16% upslope from sump
View of vegetation from pit Dense understorey and mid-storey vegetation	
25m	

50m



75m

Partial screening by dense understorey (*Xanthorrhoea*) and mid-storey (*B. grandis*)



100m

Effective visual screening, haul road sump barely visible



125m

Haul road sump not visible



Transect No.	8
Location	Downes 4 (open pit), 419115 E, 6406080 N
Transect length (approximate)	100 m
Vegetation types	S 0-35 m, W 35-100 m
Forest age	Juvenile-Establishment (21-70 years) – harvested 2000-09
Average slope	1% downslope from pit
View of vegetation from pit Dense Jarrah saplings, regrowth from recent timber harvesting	
25m Partial screening due to dense Jarrah saplings	

50m



75m



100m

Thick understorey screens foreground/lower elevation, mid-ground/higher elevation views remains visible





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