

Burrendong Wind Farm Amendment Report

APPENDIX H.2

Intersection Strategic Designs



BURRENDONG - WIND FARM

2D STRATEGIC DESIGN - GOOLMA ROAD AND TWELVE MILE ROAD, GOOLMA.

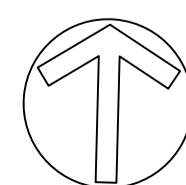


TfNSW STRATEGIC DESIGN REQUIREMENTS 2D		
DESIGN INCLUSIONS	YES	NO
North point	X	
Road names	X	
Proposed edge of pavement	X	
New pavement shown as shaded	X	
Proposed line and pavement markings	X	
Proposed medians including type (raised or painted)	X	
Proposed footpaths and/or cycle ways	X	
Proposed safety barriers	X	
Property boundaries (from mapping program)	X	N/A
Sight distance checks	X	
Proposed regulatory signage (e.g. parking restrictions, speed zone changes)	X	
Vegetation- tree trunks and foliage, including proposed trees removal to enable works	X	
Hazard free zone (clear zone)	X	N/A
Dimension all proposed design elements (incl. line marking)	X	
Typical section/s	X	
Turning paths of design vehicle at 15km/h	X	

OVERALL SITE PLAN
NTS.

SHEET INDEX		
SHEET No	DESCRIPTION	REV
EMM - C00	COVER SHEET AND SHEET INDEX	-
EMM - C01	EXISTING LAYOUT PLAN	-
EMM - C02	BAR LAYOUT PLAN	-
EMM - C03	SWEPT PATH PLAN - 26m B-DOUBLE	-
EMM - C04	SISD PLAN	-
EMM - C05	SWEPT PATH PLAN - OSOM	-
EMM - C06	CONSTRUCTION PLAN - OSOM	-

REV	DATE	COMMENT	DRAWN	REVIEWED	REV	DATE	COMMENT	DRAWN	REVIEWED
-	23/10/25	STRATEGIC DESIGN	C.J.	A.U.					



PROJECT:
BURRENDONG WIND FARM
2D STRATEGIC DESIGN - GOOLMA
ROAD AND TWELVE MILE ROAD,
GOOLMA.

DRAWING TITLE:
STRATEGIC DESIGN
COVER SHEET AND SHEET INDEX

CLIENT: ARK ENERGY
DRG. #: EMM - C00
PROJECT #: E251001
SCALE: AS SHOWN

REV: -



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LEGEND

 EXISTING SIGN

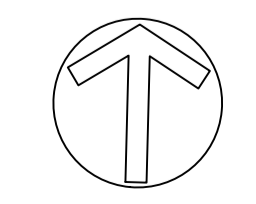
PLAN
SCALE 1:250

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REV	DATE	COMMENT	DRAWN	REVIEWED	REV	DATE	COMMENT	DRAWN	REVIEWED
-	23/10/25	STRATEGIC DESIGN	C.J.	A.U.					

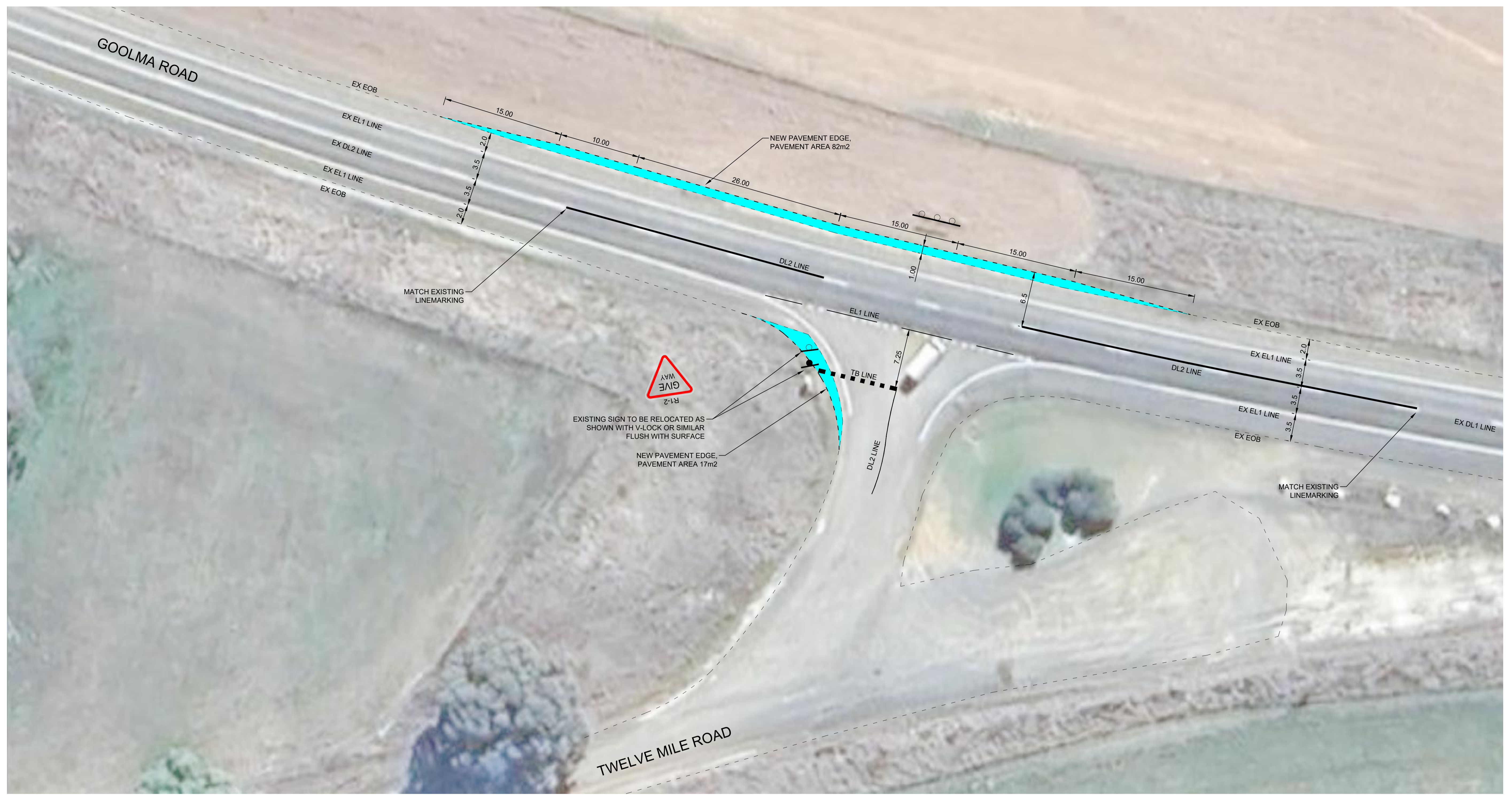


PROJECT:
**BUNRENDONG WIND FARM
 2D STRATEGIC DESIGN - GOOLMA
 ROAD AND TWELVE MILE ROAD,
 GOOLMA.**

DRAWING TITLE:
**STRATEGIC DESIGN
 EXISTING LAYOUT PLAN**

CLIENT: ARK ENERGY
 DRG. #: EMM - C01
 PROJECT #: E251001
 SCALE: AS SHOWN



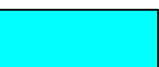
REV: -



PLAN
SCALE 1:250

- NOTES:
1. The BAR Treatment has been designed based on and in accordance with Austroads guides to traffic engineering practice.
 2. Posted speed 100km/h, design speed is 110km/h.
 3. A = The taper length based on the formula and was calculated at 15m. Where design speed, V=110kmh and F = formation widening required, calculated at 1.0m.
 4. S = Storage for design vehicle 26.0m B-Double.
 5. C = Road width from centre line of road to edge of pavement 6.5m.

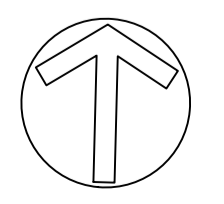
LEGEND

-  EXISTING SIGN
-  PROPOSED SIGN
-  NEW PAVEMENT WORKS 99m2 TO TINSW SPECIFICATIONS

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REV	DATE	COMMENT	DRAWN	REVIEWED	REV	DATE	COMMENT	DRAWN	REVIEWED
-	23/10/25	STRATEGIC DESIGN	C.J.	A.U.					



PROJECT:
BURRENDONG WIND FARM
2D STRATEGIC DESIGN - GOOLMA
ROAD AND TWELVE MILE ROAD,
GOOLMA.

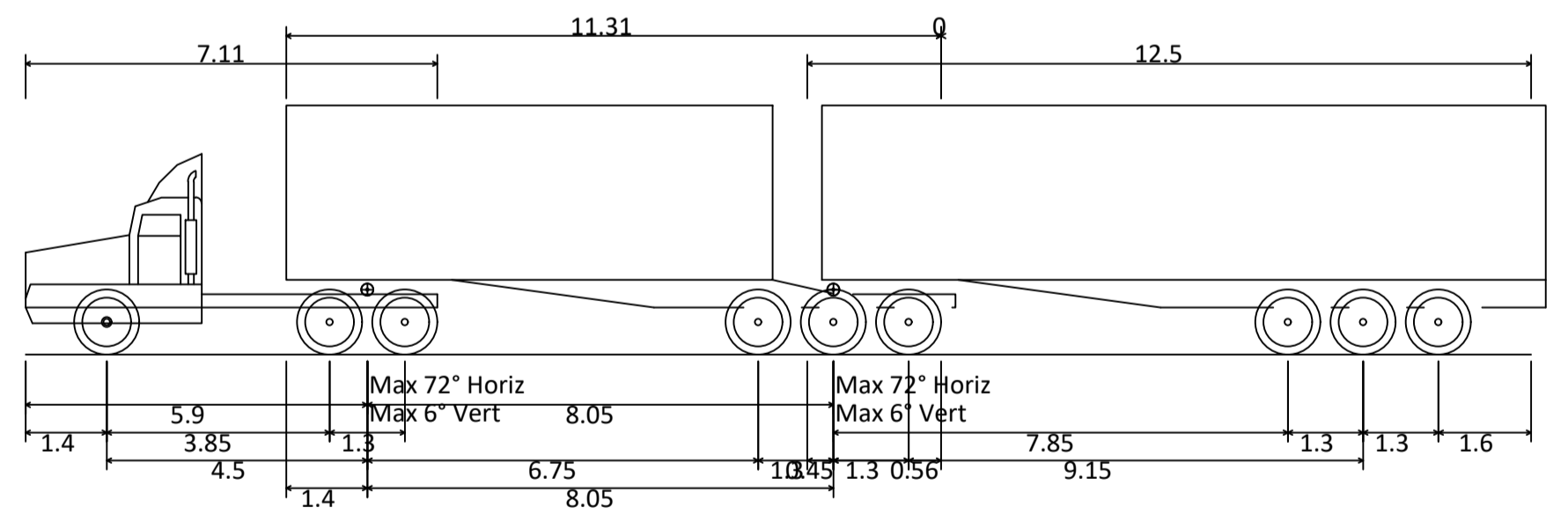
DRAWING TITLE:
STRATEGIC DESIGN
BAR LAYOUT PLAN

CLIENT: ARK ENERGY
DRG. #: EMM - C02
PROJECT #: E251001
SCALE: AS SHOWN

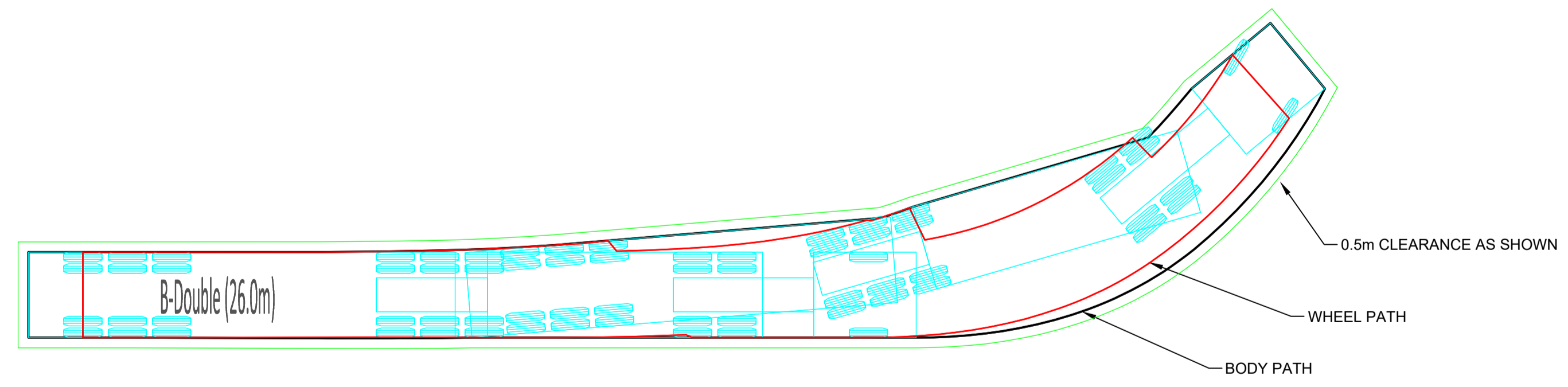
REV: -



PLAN
SCALE 1:250



B-Double (26.0m)
 Overall Length 26.000m
 Overall Width 2.500m
 Overall Body Height 4.300m
 Min Body Ground Clearance 0.540m
 Track Width 2.500m
 Lock-to-lock time 6.00s
 Curb to Curb Turning Radius 15.000m

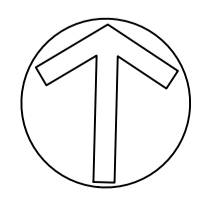


- The design speed used for the swept paths is **15kmh** and no initial lock, lock to lock or turn on spot has been utilised to produce the swept paths shown.
- The turning paths illustrated in this drawing have been prepared using the AutoCAD Vehicle tracking modelling software in conjunction with AutoCAD Civil3D.
- The vehicle model was prepared by Vehicle Tracking based upon vehicle data provided by Austroads.
- While this modelling represents a conservative assessment of the vehicles ability, it is not possible to account for all vehicle types/characteristics or driver ability.

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-	23/10/25	STRATEGIC DESIGN	C.J.	A.U.					



PROJECT:
**BURRENDONG WIND FARM
 2D STRATEGIC DESIGN - GOOLMA
 ROAD AND TWELVE MILE ROAD,
 GOOLMA.**

DRAWING TITLE:
**STRATEGIC DESIGN
 SWEEP PATH PLAN - 26m B-DOUBLE**

CLIENT: ARK ENERGY
 DRG. #: EMM - C03
 PROJECT #: E251001
 SCALE: AS SHOWN

REV: -



PLAN
SCALE 1:250

LEGEND

--- SIGHT LINE SID 300m

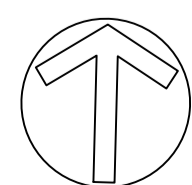
- NOTES:
1. SID calculated in accordance Austroads guides to traffic engineering practice
 2. Posted speed 100km/h, design speed is 110km/h and through lanes typically 3.5m wide.
 3. Driver reaction time of 2.5sec.

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-	23/10/25	STRATEGIC DESIGN	C.J.	A.U.					



PROJECT:
**BURRENDONG WIND FARM
 2D STRATEGIC DESIGN - GOOLMA
 ROAD AND TWELVE MILE ROAD,
 GOOLMA.**

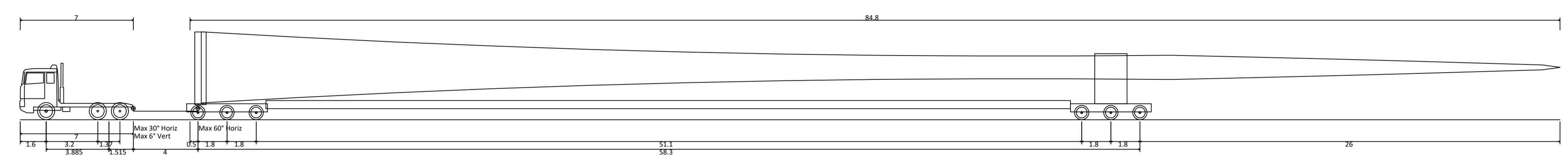
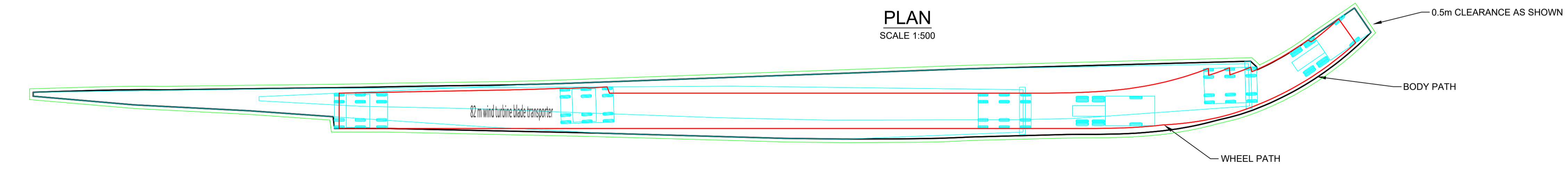
DRAWING TITLE:
**STRATEGIC DESIGN
 SID PLAN**

CLIENT: ARK ENERGY
 DRG. #: EMM - C04
 PROJECT #: E251001
 SCALE: AS SHOWN

REV: -



PLAN
SCALE 1:500



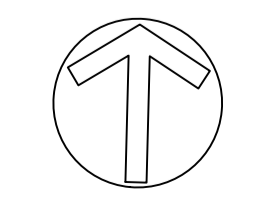
82 m wind turbine blade transporter	95.300m
Overall Length	4.500m
Overall Width	5.442m
Overall Body Height	0.424m
Min Body Ground Clearance	3.000m
Max Track Width	6.00s
Lock-to-lock time	27.349m
Wall to Wall Turning Radius	

- The design speed used for the swept paths is **15kmh** and no initial lock, lock to lock or turn on spot has been utilised to produce the swept paths shown.
- The turning paths illustrated in this drawing have been prepared using the AutoCAD Vehicle tracking modelling software in conjunction with AutoCAD Civil3D.
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-	23/10/25	STRATEGIC DESIGN	C.J.	A.U.					



PROJECT:
**BURRENDONG WIND FARM
2D STRATEGIC DESIGN - GOOLMA
ROAD AND TWELVE MILE ROAD,
GOOLMA.**

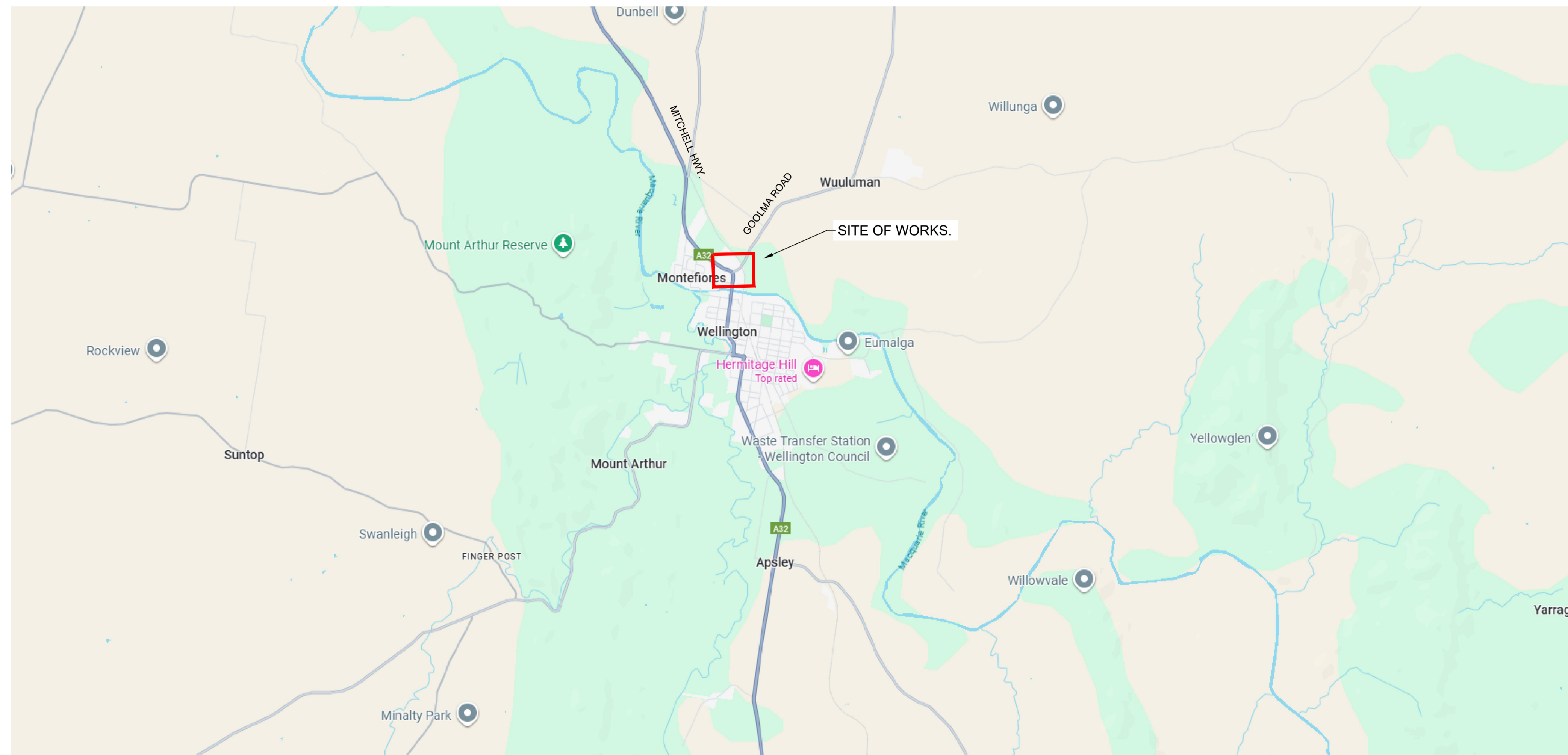
DRAWING TITLE:
**STRATEGIC DESIGN
SWEPT PATH PLAN - OSOM VEHICLE**

CLIENT: ARK ENERGY
DRG. #: EMM - C05
PROJECT #: E251001
SCALE: AS SHOWN

REV: -

BURRENDONG - WIND FARM

2D STRATEGIC DESIGN - MITCHELL HWY AND GOOLMA ROAD, WELLINGTON.

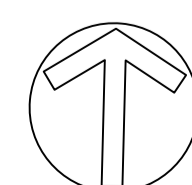


OVERALL SITE PLAN
NTS.

TfNSW STRATEGIC DESIGN REQUIREMENTS 2D		
DESIGN INCLUSIONS	YES	NO
North point	X	
Road names	X	
Proposed edge of pavement	X	
New pavement shown as shaded	X	
Proposed line and pavement markings	X	
Proposed medians including type (raised or painted)	X	
Proposed footpaths and/or cycle ways	X	
Proposed safety barriers	X	
Property boundaries (from mapping program)	X	N/A
Sight distance checks	X	N/A
Proposed regulatory signage (e.g. parking restrictions, speed zone changes)	X	
Vegetation- tree trunks and foliage, including proposed trees removal to enable works	X	
Hazard free zone (clear zone)	X	N/A
Dimension all proposed design elements (incl. line marking)	X	
Typical section/s	X	
Turning paths of design vehicle at 15km/h	X	

SHEET INDEX		
SHEET No	DESCRIPTION	REV
EMM - C00	COVER SHEET AND SHEET INDEX	A
EMM - C01	EXISTING LAYOUT PLAN	A
EMM - C02	BAR LAYOUT PLAN	A
EMM - C03	SWEPT PATH PLAN - 26m B-DOUBLE	A
EMM - C04	SWEPT PATH PLAN - OSOM	A
EMM - C05	HARDSTAND AREA REQUIRED FOR OSOM VEHICLES FOR BURRENDONG WIND FARM	A
EMM - C06	HARDSTAND AREAS REQUIRED FOR UUNGULA WIND FARM PROJECT	A

REV	DATE	COMMENT	DRAWN	REVIEWED	REV	DATE	COMMENT	DRAWN	REVIEWED
A	11/2/26	UUNGULA WIND FARM PAVEMENT WORKS	C.J.	A.U.					
-	23/10/25	STRATEGIC DESIGN	C.J.	A.U.					



PROJECT:
BURRENDONG WIND FARM
2D STRATEGIC DESIGN - MITCHELL
HWY AND GOOLMA ROAD,
WELLINGTON.

DRAWING TITLE:
STRATEGIC DESIGN
COVER SHEET AND SHEET INDEX

CLIENT: ARK ENERGY

DRG. #: EMM - C00

PROJECT #: E251001



SCALE: AS SHOWN

REV: A



PLAN
SCALE 1:250

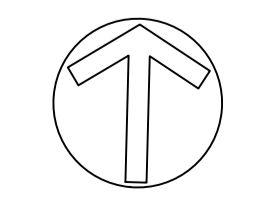
LEGEND

-  EXISTING SIGN
-  POWER/LIGHT POLE

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A	11/2/26	UJUNGULA WIND FARM PAVEMENT WORKS	C.J.	A.U.					
-	23/10/25	STRATEGIC DESIGN	C.J.	A.U.					



PROJECT:
**BURRENDONG WIND FARM
 2D STRATEGIC DESIGN - MITCHELL
 HWY AND GOOLMA ROAD,
 WELLINGTON.**

DRAWING TITLE:
**STRATEGIC DESIGN
 EXISTING LAYOUT PLAN**


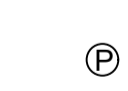
CLIENT: ARK ENERGY
 DRG. #: EMM - C01
 PROJECT #: E251001
 SCALE: AS SHOWN

REV: A



PLAN
SCALE 1:250

LEGEND

-  EXISTING SIGN
-  POWER/LIGHT POLE

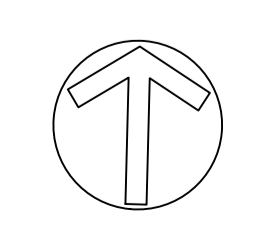
- NOTES:
1. The BAL Treatment has been designed based on and in accordance with Austroads guides to traffic engineering practice.
 2. Posted speed 60km/h, design speed is 70km/h.
 3. P = Minimum length of parallel widening derived from AUSTRROADS GUIDE TO ROAD DESIGN part 4A Table 8.1 at 10m.
 4. A = The taper length based on the formula and was calculated at 10m. Where design speed, V=70kmh and F = formation widening required, calculated at 1m.

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A	11/2/26	UJUNGULA WIND FARM PAVEMENT WORKS	C.J.	A.U.					
-	23/10/25	STRATEGIC DESIGN	C.J.	A.U.					



PROJECT:
**BURRENDONG WIND FARM
 2D STRATEGIC DESIGN - MITCHELL
 HWY AND GOOLMA ROAD,
 WELLINGTON.**

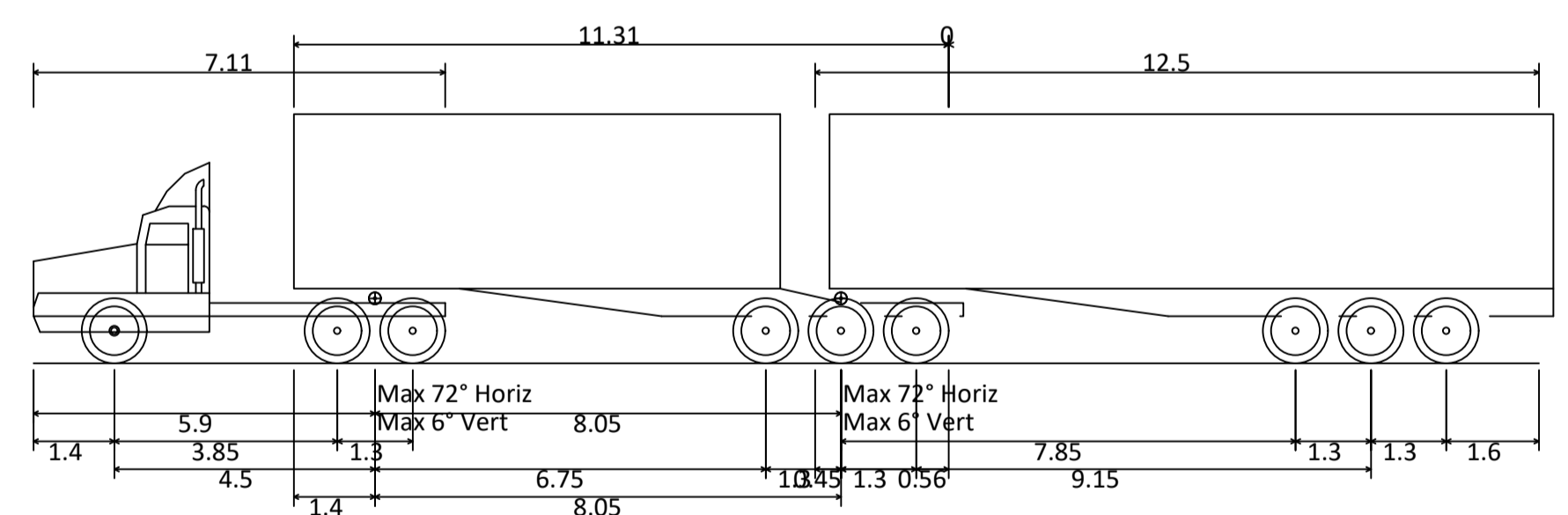
DRAWING TITLE:
**STRATEGIC DESIGN
 BAL OVERLAY PLAN**

CLIENT: ARK ENERGY
 DRG. #: EMM - C02
 PROJECT #: E251001
 SCALE: AS SHOWN

REV: A

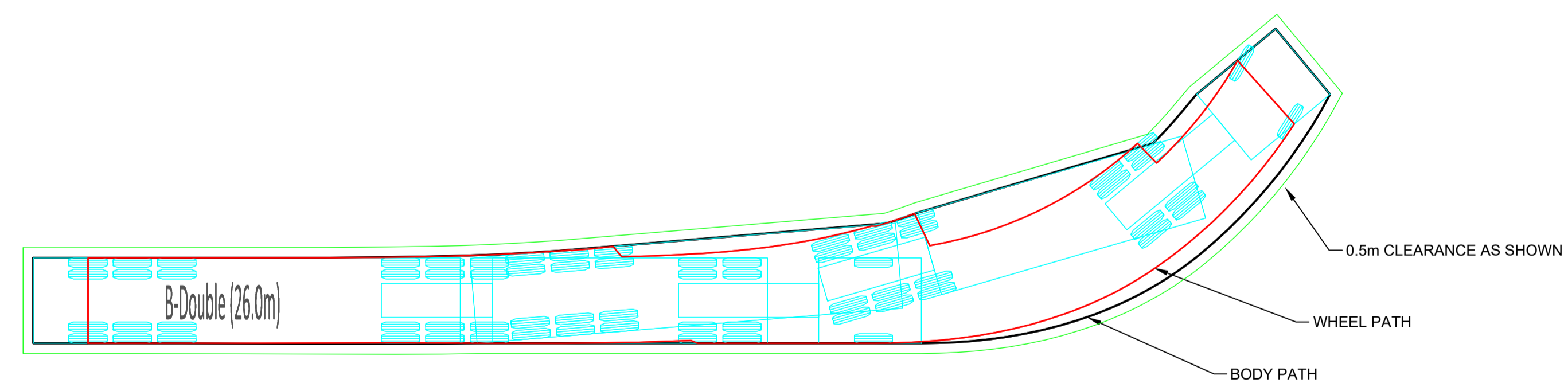


PLAN
SCALE 1:250



B-Double (26.0m)
 Overall Length 26.000m
 Overall Width 2.500m
 Overall Body Height 4.300m
 Min Body Ground Clearance 0.540m
 Track Width 2.500m
 Lock-to-lock time 6.00s
 Curb to Curb Turning Radius 15.000m

PLAN
SCALE 1:250

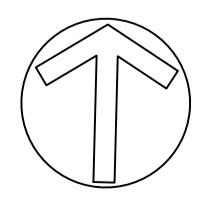


- The design speed used for the swept paths is **15kmh** and no initial lock, lock to lock or turn on spot has been utilised to produce the swept paths shown.
- The turning paths illustrated in this drawing have been prepared using the AutoCAD Vehicle tracking modelling software in conjunction with AutoCAD Civil3D.
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REV	DATE	COMMENT	DRAWN	REVIEWED	REV	DATE	COMMENT	DRAWN	REVIEWED
A	11/2/26	UJUNGULA WIND FARM PAVEMENT WORKS	C.J.	A.U.					
-	23/10/25	STRATEGIC DESIGN	C.J.	A.U.					



PROJECT:
**BURRENDONG WIND FARM
 2D STRATEGIC DESIGN - MITCHELL
 HWY AND GOOLMA ROAD,
 WELLINGTON.**

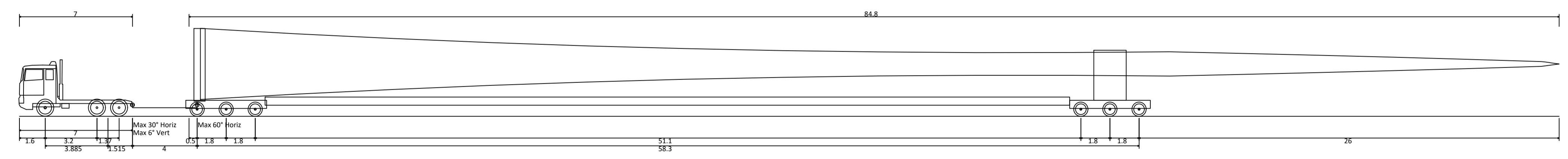
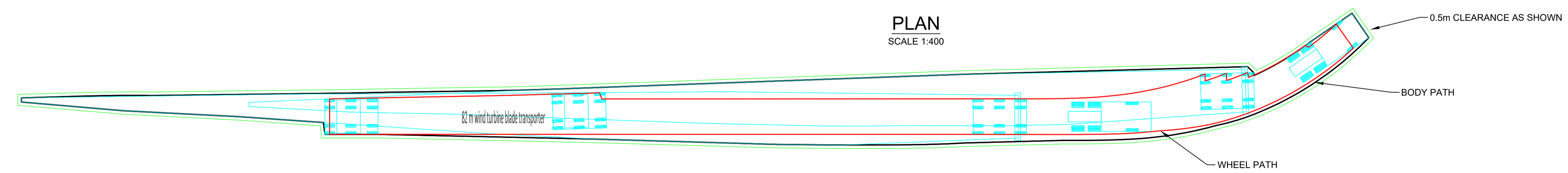
DRAWING TITLE:
**STRATEGIC DESIGN
 SWEEP PATH PLAN - 26m B-DOUBLE**

CLIENT: ARK ENERGY
 DRG. #: EMM - C03
 PROJECT #: E251001
 SCALE: AS SHOWN

REV: A



PLAN
SCALE 1:400



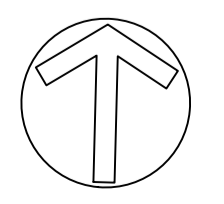
82 m wind turbine blade transporter
 Overall Length 95.300m
 Overall Width 4.500m
 Overall Body Height 5.442m
 Min Body Ground Clearance 0.424m
 Max Track Width 3.000m
 Lock-to-lock time 6.00s
 Wall to Wall Turning Radius 27.349m

- The design speed used for the swept paths is **15kmh** and no initial lock, lock to lock or turn on spot has been utilised to produce the swept paths shown.
- The turning paths illustrated in this drawing have been prepared using the AutoCAD Vehicle tracking modelling software in conjunction with AutoCAD Civil3D.
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A	11/2/26	UJUNGULA WIND FARM PAVEMENT WORKS	C.J.	A.U.					
-	23/10/25	STRATEGIC DESIGN	C.J.	A.U.					

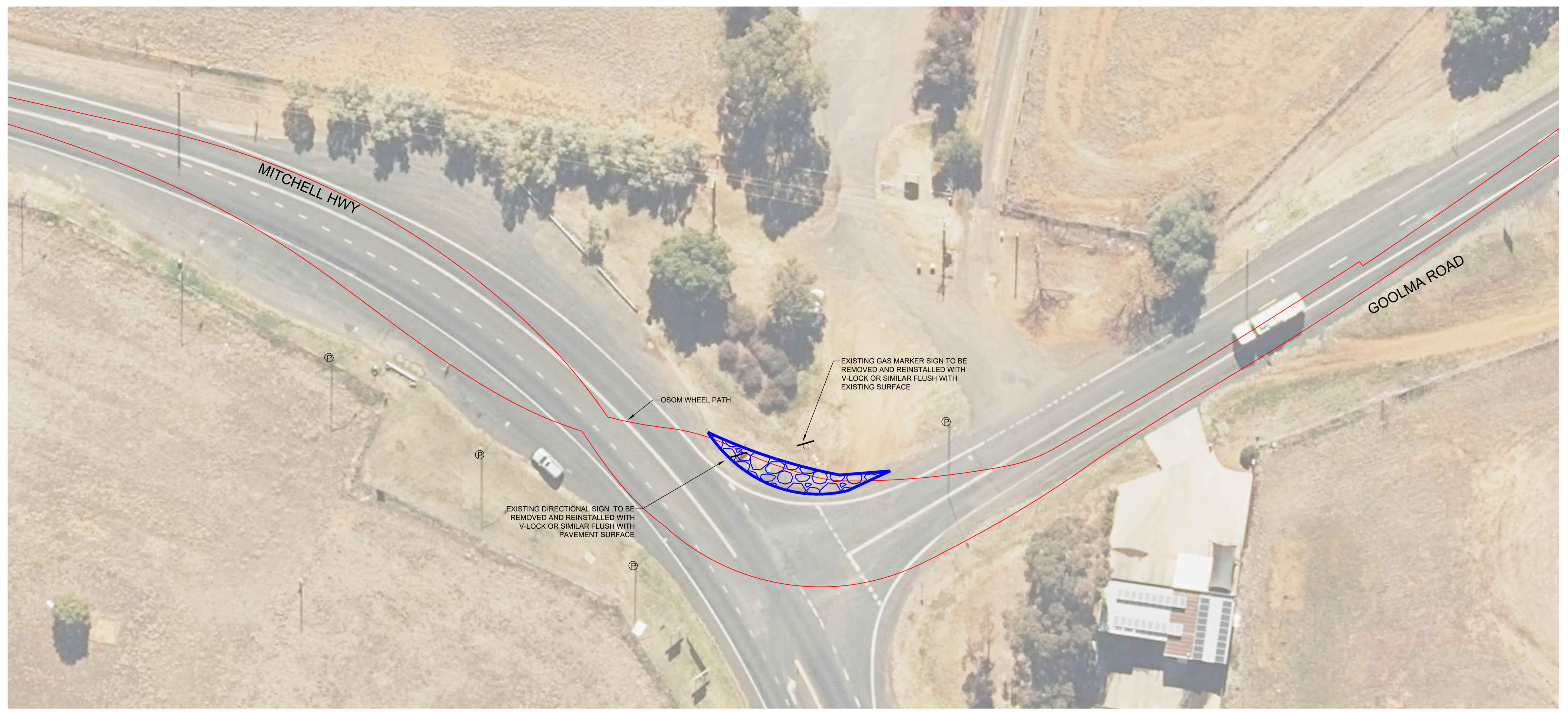


PROJECT:
**BURRENDONG WIND FARM
 2D STRATEGIC DESIGN - MITCHELL
 HWY AND GOOLMA ROAD,
 WELLINGTON.**

DRAWING TITLE:
**STRATEGIC DESIGN
 SWEPT PATH PLAN - OSOM VEHICLE**

CLIENT: ARK ENERGY
 DRG. #: EMM - C04
 PROJECT #: E251001
 SCALE: AS SHOWN

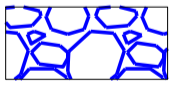

REV: A



CONSTRUCTION PLAN
SCALE 1:300

NOTE: The requirement for the hardstand area is to be discussed with TfNSW as sufficient hardstand areas will be provided as part of the OSOM movements for Ungula Wind Farm project. (refer to next sheet)

LEGEND

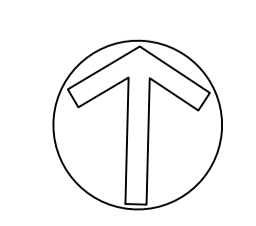
-  REQUIRED HARD STAND AREA (72m2) TO ACCOMMODATE THE OSOM VEHICLES.
-  WHEEL PATH OSOM
-  EXISTING SIGN
-  POWER/LIGHT POLE

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REV	DATE	COMMENT	DRAWN	REVIEWED	REV	DATE	COMMENT	DRAWN	REVIEWED
A	11/2/26	UUNGULA WIND FARM PAVEMENT WORKS	C.J.	A.U.					
-	23/10/25	STRATEGIC DESIGN	C.J.	A.U.					



PROJECT:
**BURRENDONG WIND FARM
 2D STRATEGIC DESIGN - MITCHELL
 HWY AND GOOLMA ROAD,
 WELLINGTON.**

DRAWING TITLE:
**STRATEGIC DESIGN
 HARDSTAND AREA REQUIRED FOR OSOM
 VEHICLES FOR BURRENDONG WIND FARM**

CLIENT: ARK ENERGY
 DRG. #: EMM - C05
 PROJECT #: E251001
 SCALE: AS SHOWN

REV: A







APPROVED UUNGULA WIND FARM (SSD-6687-Mod-3) HARDSTAND, ANTICIPATED CONSTRUCTION IN 2026

SCALE 1:300

NOTE:Based on the hardstand areas that will be provided by Uungula Wind Farm Project, no additional hardstand area is required for the OSOM movements by Burrendong Wind Farm.

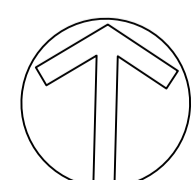
LEGEND

-  PAVEMENT WORK AS PART OF THE UUNGULA WIND FARM PROCT
-  WHEEL PATH OSOM
-  EXISTING SIGN
-  POWER/LIGHT POLE

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A	11/2/26	UUNGULA WIND FARM PAVEMENT WORKS	C.J.	A.U.					
-	23/10/25	STRATEGIC DESIGN	C.J.	A.U.					



PROJECT:
BURRENDONG WIND FARM
2D STRATEGIC DESIGN - MITCHELL
HWY AND GOOLMA ROAD,
WELLINGTON.

DRAWING TITLE:
APPROVED UUNGULA WIND FARM
(SSD-6687-Mod-3) HARDSTAND,
ANTICIPATED CONSTRUCTION IN
2026

CLIENT: ARK ENERGY
DRG. #: EMM - C06
PROJECT #: E251001
SCALE: AS SHOWN

REV: A