

DATE OF ISSUE	12.07.24								
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ELECTRICAL

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DESIGN DOCUMENTS

DISTRIBUTION

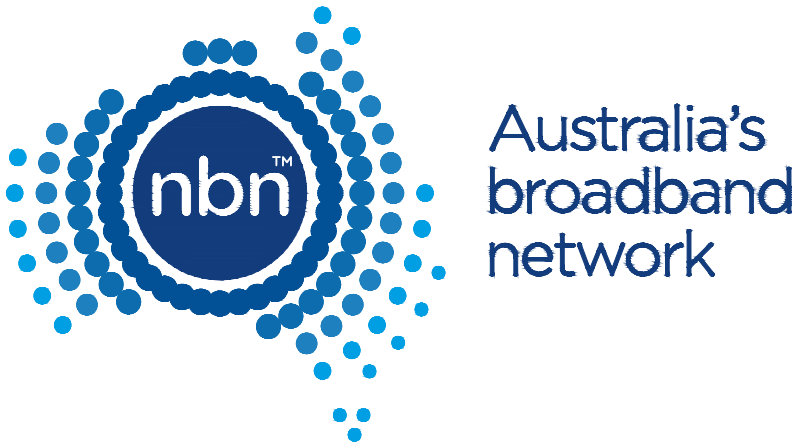
NBN	STUART MELVILLE	E							
VENTIA	BRADLEY HALL	E							

LEGEND> E (EMAIL); F (Fax); M (Mail); H (Hand); C (Courier)

SITE No: 2GUL-51-13-HARG
HARGRAVES

3326 HILL END ROAD
HARGRAVES NSW 2850

RFNSA No: TBC



PROJECT SUMMARY

- PROPOSED NBN 35m MONOPOLE WITH CIRCULAR HEADFRAME
PROPOSED NBN OUTDOOR CABINET ON CONCRETE SLAB
NBN INSTALLATION (NBN-2DBZ-2GUL-5113)
- INSTALL 35m MONOPOLE WITH CIRCULAR HEADFRAME
- INSTALL NBN OUTDOOR CABINET (3-OFF) ON NEW CONCRETE SLAB
WITHIN THE NBN COMPOUND
- INSTALL RF 2.3GHz, 26GHz & 3.4HGz
- INSTALL NEW TRANSMISSION ANTENNA

Client:

Client:

Client:

Project:

NATIONAL BROADBAND NETWORK
SITE No: 2GUL-51-13-HARG
HARGRAVES
3326 HILL END ROAD
HARGRAVES NSW 2850

PRELIMINARY

0112.07.24PRELIMINARYMRB

RevDateRevision DetailsCAD

VISIONSTREAM AUSTRALIA PTY LTD
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Heatherton, VIC 3202
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DESIGNER:MRB

CHECKED:BH

APPROVED:SM

Drawing Title:
COVER SHEET

Drawing No.
2GUL-51-13-HARG-T1

Revision
01

CAD File: D:\Swathin\Production\NBN\2024\VENTIA\JULY2024\07-12\Hargraves - NBN-2DBZ-2GUL-5113\Redlines\2024_07_12\2GUL-51-13-HARG_Rev 01.DWG
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SITE CO-ORDINATES	
LATTICE TOWER LOCATION	
DATUM: MGA(GDA 94)	ZONE: 55
EASTING	731758.20
NORTHING	6370255.67
LATITUDE	-32.781222°
LONGITUDE	149.474520°

PUBLIC UTILITIES LEGEND

_____ TELCO _____ TELECOMMUNICATIONS

— UE — UE — NBN U/G POWER LINE
 — E — UNDERGROUND SUB MAIN CABLE
 ○ ○ ○ EXISTING FENCE
 — \ — \ — NBN COMPOUND SECURITY FENCE

1. ALL UNDERGROUND SERVICES SHOWN INDICATIVE ONLY.
2. NBN POWER ROUTE SHOWN INDICATIVELY ONLY.

PROPOSED NBN U/G SUB MAINS CABLE
ROUTE. (INDICATIVE ONLY - APPROX 300m
CABLE RUN) CABLE SIZE : $2 \times (4 \times 1C) + E \ 150mm^2$
XLPE/Al + $50mm^2 \ E$
CONDUIT SIZE : 100mm ORANGE HD CONDUIT

EXIST
GATE

PROPOSED NBN
COMPOUND

HILL END RD

HILL END RD

SCALE 1:1500



Project:

**NATIONAL BROADBAND
NETWORK**

**SITE No: 2GUL-51-13-HARG
HARGRAVES**

**3326 HILL END ROAD
HARGRAVES NSW 2850**

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APPROVED: SM

OVERALL SITE PLAN

Drawing No.	Revision
2GUL-51-13-HARG-C2	01



OUTDOOR CABINET E6150 (1-OFF)
(DIMENSION 1900H x 800W x 700D) REFER TO
NBN-STD-0016 SHT4 FOR DETAILS

COMPOUND ENCLOSED BY SECURITY
FENCE (REFER TO NBN-STD-0012)

3000 WIDE DOUBLE VEHICULAR ACCESS GATES
(REFER TO SITE SPECIFIC DRAWINGS FOR
PLACEMENT)

PROPOSED NEW 10m LONG ACCESS TRACK
PROPOSE NEW 3m WIDE ACCESS GATE WITH
NBN LOCK INSTALLED IN EXISTING FENCE

LOCKING TUBES ENCASEMENT
(REFER TO NBN-STD-0012)

PARKING AREA FOR EMERGENCY
TEMPORARY GENERATOR LOCATION
(3.5m x 2m APPROX.)

CABLE LADDER FIXING TO ODC.
(REFER NBN-STD-0013 FOR DETAILS)

CABLE LADDER WITH DOUBLE POSTS
(300mm MAXIMUM FROM VERTICAL LADDER)

CABLE LADDER SUPPORT POST (REFER
TO NBN-STD-0014)

PROPOSED NBN 35m MONOPOLE

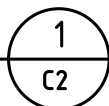
ACCESS HATCH

OUTLINE OF TOWER FOUNDATION
(INDICATIVE ONLY, PAD TYPE SHOWN)

COMPOUND ENCLOSED BY SECURITY
FENCE INSTALLED ON TOP OF
RETAINING WALL. (REFER TO
NBN-STD-0012)

75mm THICK SINGLE SIZED GRAVEL OVER
WEED MAT. ON LEVEL SITES. USE LOCAL
GRAVEL AS APPROVED

DETAIL
SCALE 1:100



NOTES:

- REFER TO SITE DRAWINGS FOR COMPOUND DIMENSIONS. NBN DESIGN CONSULTANT SHALL ENSURE THAT TOWER FOUNDATIONS ARE WITHIN THE NBN LEASE AREA.
- REFER TO STANDARD DRAWING NBN-STD-0001 FOR ADDITIONAL NOTES.
- NO PART OF THE INSTALLATION, INCLUDING FOUNDATION AND HEADFRAME (INCLUDING ANTENNAS) SHALL EXTEND BEYOND LEASE AREA BOUNDARY.
- SEPARATE PDB SHALL BE USED IN CONJUNCTION WITH NBN-STD-0017.

UNDERGROUND POWER FROM POINT OF SUPPLY.
(REFER SITE SPECIFIC DRAWINGS)

METER BOX (REFER TO NBN-STD-0022)

OUTDOOR CABINET SLAB. REFER TO
NBN-STD-0034-SHT 4 FOR DETAILS

NBN OUTDOOR CABINET (B158) (2-OFF)
DIMENSION 2000H x 753W x 849D. REFER
TO NBN-STD-0016 SHT4 FOR DETAILS

NBN Ø1200 TRANSMISSION ANTENNA
(TO TANNABAR)

CABLE LADDER SUPPORTED AT
SHELTER (REFER TO NBN-STD-0032)

TOWER ACCESS LADDER WITH
LAD-SAF

CABLE LADDER ROUTE FOR TOWERS
WITH CENTRAL CABLE RISER

NBN RF ANTENNA (9 OFF).
REFER SHEET A1 & A2

TOWER WITH HEADFRAME (REFER
TO NBN-STD-0008)

EXISTING TIMBER FENCE



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Project:

NATIONAL BROADBAND
NETWORK
SITE No: 2GUL-51-13-HARG
HARGRAVES
3326 HILL END ROAD
HARGRAVES NSW 2850

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CHECKED: BH

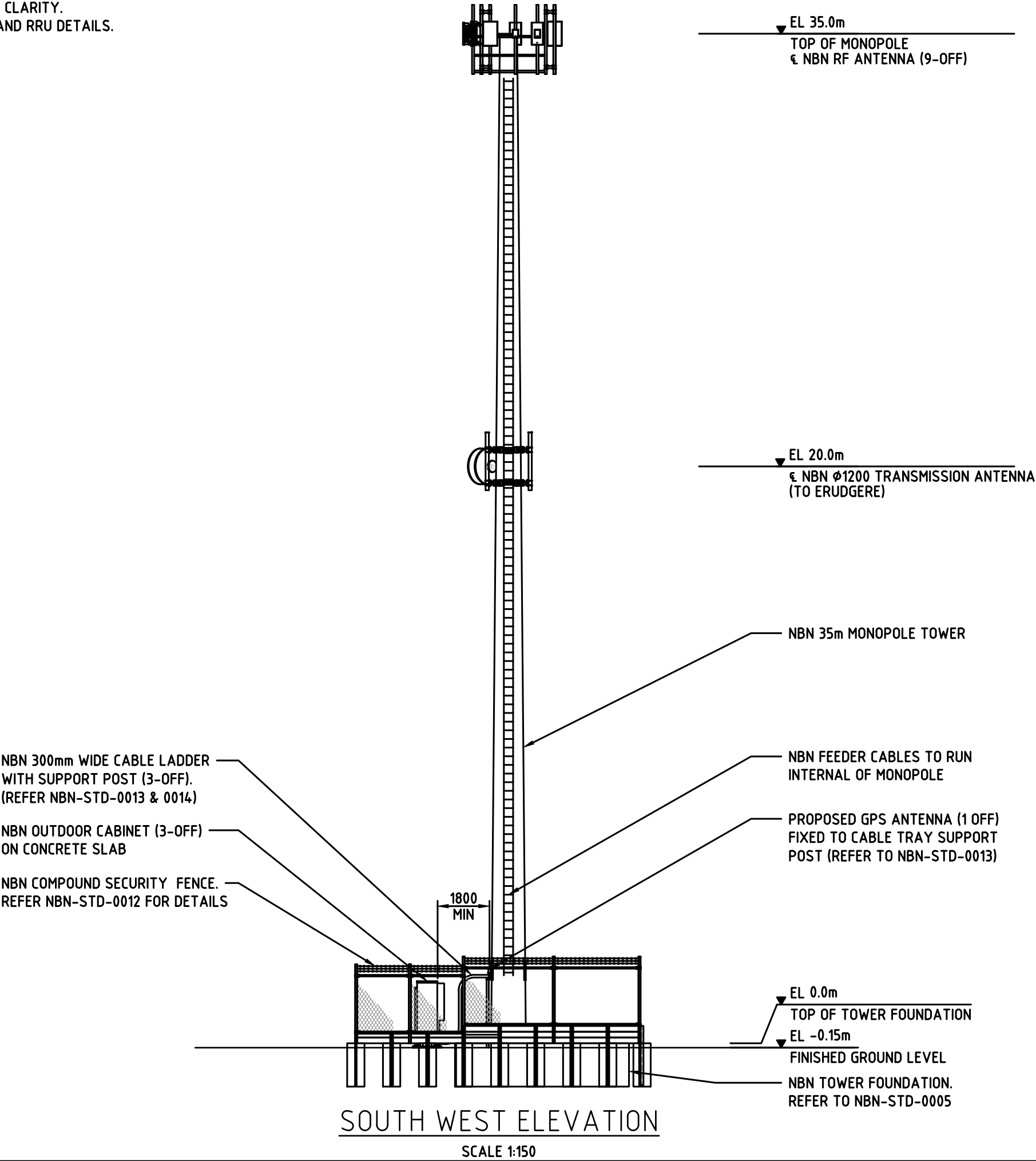
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Drawing Title:
**SITE SETOUT
PLAN**

Drawing No.
2GUL-51-13-HARG-C3

Revision
01

- NOTES:
- 1. EXISTING VEGETATION NOT SHOWN FOR CLARITY.
 - 2. REFER TO DFG. A1 & A2 FOR ANTENNA AND RRU DETAILS.



Client:

Client:

Client:

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NATIONAL BROADBAND NETWORK
SITE No: 2GUL-51-13-HARG
HARGRAVES
3326 HILL END ROAD
HARGRAVES NSW 2850

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Drawing Title:

SITE ELEVATION AND DETAILS

Drawing No.

2GUL-51-13-HARG-C4

Revision

01

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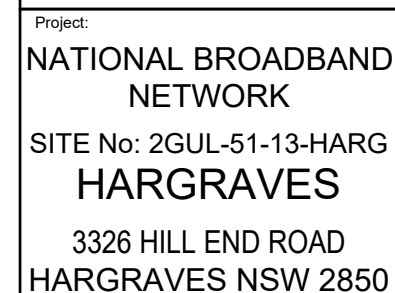
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NBN RF ANTENNA CONFIGURATION - 2300MHz/3400MHz																						Client: 		
PANEL ANTENNA DETAILS									MAIN FEEDER DETAILS					RRU DETAILS						RF TAIL DETAILS	RET CABLE DETAILS			
SECTOR	TYPE	DIMENSIONS HxWxD	€ HEIGHT	AZIMUTH (TN)	E-TILT		MECH TILT	ANTENNA ACTION REQUIRED	TYPE	OVERALL LENGTH	CANISTER HEIGHT	CANISTER TO RRU LENGTH	FEEDER ACTION REQ	TYPE	LOCATION	€ HEIGHT	RRU PORT	ACTION	FREQUENCY	ANTENNA TO RRU LENGTH	LENGTH			
					PORTS	°																		
S1	AIR 6419 B40	852x506x208	35.0m	330°	1 & 2	2°	0°	INSTALL	H&S HYBRID 9/18 MKII Ø39.5mm	50.0m	35.0m	3.0m	INSTALL											
					3 & 4	2°																		
B1	AIR 3219 B42	776x408x199			5 & 6	2°			H&S HYBRID 9/18 MKII Ø39.5mm			3.0m	INSTALL											
					7 & 8	2°																		
S2	AIR 6419 B40	852x506x208	35.0m	90°	1 & 2	2°	0°	INSTALL	H&S HYBRID 9/18 MKII Ø39.5mm	50.0m	35.0m	3.0m	INSTALL											
					3 & 4	2°																		
B2	AIR 3219 B42	776x408x199			5 & 6	2°			H&S HYBRID 9/18 MKII Ø39.5mm			3.0m	INSTALL											
					7 & 8	2°																		
S3	AIR 6419 B40	852x506x208	35.0m	210°	1 & 2	2°	0°	INSTALL	H&S HYBRID 9/18 MKII Ø39.5mm	50.0m	35.0m	3.0m	INSTALL											
					3 & 4	2°																		
B3	AIR 3219 B42	776x408x199			5 & 6	2°			H&S HYBRID 9/18 MKII Ø39.5mm			3.0m	INSTALL											
					7 & 8	2°																		
NBN RF ANTENNA CONFIGURATION - 26GHz																						Client:		
PANEL ANTENNA DETAILS									MAIN FEEDER DETAILS					RRU DETAILS						RF TAIL DETAILS	RET CABLE DETAILS			
SECTOR	TYPE	DIMENSIONS HxWxD	€ HEIGHT	AZIMUTH (TN)	E-TILT		MECH TILT	ANTENNA ACTION REQUIRED	TYPE	OVERALL LENGTH	CANISTER HEIGHT	CANISTER TO RRU LENGTH	FEEDER ACTION REQ	TYPE	LOCATION	€ HEIGHT	RRU PORT	ACTION	FREQUENCY	ANTENNA TO RRU LENGTH	LENGTH			
					°																			
K1	AIR 5322 n257	279x200x136	35.0m	330°	0°		5.5°	INSTALL	H&S HYBRID 9/18 MKII Ø39.5mm	50.0m	35.0m	3.0m	INSTALL											
K2	AIR 5322 n257	279x200x136	35.0m	90°	0°		5.5°	INSTALL	H&S HYBRID 9/18 MKII Ø39.5mm	50.0m	35.0m	3.0m	INSTALL											
K3	AIR 5322 n257	279x200x136	35.0m	210°	0°		5.5°	INSTALL	H&S HYBRID 9/18 MKII Ø39.5mm	50.0m	35.0m	3.0m	INSTALL											
NBN GPS AND TRANSMISSION CONFIGURATION																						Project: NATIONAL BROADBAND NETWORK SITE No: 2GUL-51-13-HARG HARGRAVES 3326 HILL END ROAD HARGRAVES NSW 2850		
ANTENNA	ANTENNA DETAILS						MAIN FEEDER DETAILS				RRU DETAILS				Tx SPLITTER DETAILS									
	TYPE	DIMENSION	€ HEIGHT	AZIMUTH (TN)	DESTINATION	ANTENNA ACTION REQUIRED	TYPE	OVERALL LENGTH	FEEDER ACTION REQUIRED	COUNT	TYPE	RAU ACTION REQUIRED	COUNT	ACTION										
A	ANT3 A 1.2 10/11 HPX	Ø1200	20.0m	0.93°	ERUDGERE	INSTALL	1 x LDF1-50	37.0m	INSTALL	2	MINI-LINK 6365	INSTALL												
GPS	KRE 101 2082/1	Ø77x74	2.5m	N/A		INSTALL	1 x LDF1-50	5.0m	INSTALL															
																						0112.07.24PRELIMINARYMRB RevDateRevision DetailsCAD VISIONSTREAM AUSTRALIA PTY LTD 20 Corporate Drive Heatherton, VIC 3202 Website: https://www.visionstream.com/ AU phone number: 1300 VENTIA (836 842) NZ phone number: 0508 VENTIA (836 842) DESIGNER:MRB CHECKED:BH APPROVED:SM Drawing Title: NBN ANTENNA CONFIGURATION Drawing No. 2GUL-51-13-HARG-A1Revision 01		
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DESIGNER: MRB

CHECKED: BH

APPROVED: SM

Drawing Title:
**NBN ANTENNA
SETOUT PLAN**

Drawing No.	Revision
2GUL-51-13-HARG-A2	01