

DATE OF ISSUE	14.02.24								
DRAWING PACKAGE VERSION	1								

**GENERAL**

2WIP-51-01-WILC-T1	COVER SHEET	01							
2WIP-51-01-WILC-C2	OVERALL SITE PLAN	01							
2WIP-51-01-WILC-C3	SITE SETOUT PLAN	01							
2WIP-51-01-WILC-C4	SITE ELEVATION AND DETAILS	01							

**ELECTRICAL**


**RF AND TX CONFIGURATIONS**

2WIP-51-01-WILC-A1	NBN ANTENNA CONFIGURATION	01							
2WIP-51-01-WILC-A2	NBN ANTENNA SETOUT PLAN	01							

**DESIGN DOCUMENTS**

LEBLANC CERTIFICATE	STRUCTURAL ASSESSMENT CERTIFICATE	-							
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**NBN STANDARD DOCUMENTS**

NBN-STD-0001	STANDARD CONSTRUCTION NOTES	G							
NBN-STD-0012	STANDARD COMPOUND FENCING DETAILS	F							
NBN-STD-0013	STANDARD CABLE LADDER WATERFALL DETAILS	G							
NBN-STD-0014	STANDARD ELEVATED CABLE LADDER SUPPORT POST DETAILS	F							
NBN-STD-0016-SHT 4	ENCLOSURE E6150 ODC BASE FRAME DETAILS	B							
NBN-STD-0016-SHT 5	B158 ODC BASE FRAME DETAILS	B							
NBN-STD-0021-SHT 1	STANDARD EARTH BAR DETAILS	D							
NBN-STD-0021-SHT 2	SEB ALLOCATION TABLE - SHEET 1	C							
NBN-STD-0022	STANDARD METERBOX H-FRAME DETAILS	F							
NBN-STD-0025-SHT 1	STANDARD SIGNAGE DETAILS SHEET 1	D							
NBN-STD-0025-SHT 2	STANDARD SIGNAGE DETAILS SHEET 2	B							
NBN-STD-0026	LOCAL NETWORK PIT / BOUNDARY PIT	D							
NBN-STD-0028	STANDARD ACCESS TRACK DETAILS	C							
NBN-STD-0030-SHT 7	STANDARD NBN ANTENNA EME PATTERNS MS-MBA-4.4-SH2-SH2	B							
NBN-STD-0030-SHT 8	STANDARD NBN ANTENNA EME PATTERNS AW3843	A							
NBN-STD-0030-SHT 15	STANDARD NBN ANTENNA EME PATTERNS AIR5322 N257 (BROADCAST ENVELOPE)	A							
NBN-STD-0030-SHT 16	STANDARD NBN ANTENNA EME PATTERNS AIR5322 N257 (TRAFFIC ENVELOPE)	A							
NBN-STD-0031	STANDARD MONOPOLE EARTH BAR & GANTRY FIXING DETAILS	C							
NBN-STD-0034-SHT 4	STANDARD ODC SLAB - 3.6m x 1.0m	A							

**REFERENCE DOCUMENTS**

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**DISTRIBUTION**

NBN	STUART MELVILLE	E							
VENTIA	MILORAD DRAGAS	E							

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

**SITE No: 2WIP-51-01-WILC**

**WILCANNIA**

**30-40 JAMES STREET**

**WILCANNIA**

**NSW 2836**

**RFNSA No: TBC**



Australia's  
broadband  
network



Client:

Client:

Project:  
NATIONAL BROADBAND NETWORK  
SITE No: 2WIP-51-01-WILC  
**WILCANNIA**  
30-40 JAMES STREET  
WILCANNIA  
NSW 2836

**PRELIMINARY**

01	14.02.24	PRELIMINARY	BB
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NZ phone number: 0508 VENTIA (836 842)

DESIGNER: MD  
CHECKED: ML  
APPROVED: SM

Drawing Title:  
**COVER SHEET**

Drawing No. 2WIP-51-01-WILC-T1  
Revision 01

1. SITE ADDRESS

30-40 JAMES STREET, WILCANNIA, NSW 2836.  
SITE COORDINATES ATTITUDE: -31.555360°, LONGITUDE: 143.376247°.

2. GENERAL

THE CONTRACTOR SHALL COMPLY WITH ALL RELEVANT NBN CONSTRUCTION STANDARDS, CURRENT AUSTRALIAN STANDARDS AND SPECIFICATIONS.

3. SITE ACCESS

SITE IS LOCATED WITHIN ONE SINGLE PROPERTY.  
PROPOSED NBN SITE ACCESS IS VIA NEW GATE IN EXISTING FENCE AND NEW PROPOSED 3m, SINGLE SLOPE ACCESS TRACK APPROX. 12m.

4. EQUIPMENT

PROPOSED NEW NBN OUTDOOR CABINET E6150 (1 OFF) AND BATTERY CABINET B158 (2 OFF) TO BE INSTALLED ON CONCRETE SLAB WITHIN NBN LEASE AREA.

5. STRUCTURE

NBN 40m MONOPOLE, GROUND HEIGHT (AHD): 84m.

6. ANTENNA ACCESS

ANTENNA ACCESS VIA MONOPOLE CLIMB OR EWP (BY QUALIFIED RIGGER PERSONNEL ONLY).

7. EXISTING SERVICES

THE CONTRACTOR SHALL IDENTIFY AND CONFIRM THE LOCATION OF ALL RELEVANT EXISTING SERVICES AS REQUIRED PRIOR TO THE COMMENCEMENT OF WORKS.

8. SITE HAZARDS

THE FOLLOWING HAZARDS ARE PRESENT ON THIS SITE:

- ELECTRICAL CABLING AND/OR TRIP HAZARDS:
- MANUAL HANDLING
- WORKING AT HEIGHT
- O/H POWERLINE

9. ELECTRICAL SUPPLY

REFER TO DRAWINGS C2 & C3 FOR ELECTRICAL DETAILS.

10. TRANSMISSION LINK & RF CONFIGURATION

REFER TO ANTENNA CONFIGURATION ON DRAWING A1 & A2 FOR DETAILS.

11. SITE SPECIFIC INFORMATION

NBN CONTRACTORS TO:

- CONDUCT U/G SERVICE SEARCH PRIOR TO EXCAVATION
- SUPPLY AND INSTALL U/G POWER ROUTE TO NBN CABINET
- SUPPLY AND INSTALL U/G FIBRE CONNECTION TO NBN CABINET
- ALL TRENCHING DUE TO NBN U/G POWER ARE TO BE REINSTATED AND MAKE GOOD
- SUPPLY AND INSTALL NBN CABLE TRAY
- SUPPLY AND INSTALL EQUIPMENT AND STRUCTURE EARTHING
- SUPPLY AND INSTALL NBN PDB AND EQUIPMENT CABINETS
- SUPPLY AND INSTALL NBN SECURITY FENCING AROUND COMPOUND
- SUPPLY AND INSTALL ACCESS TRACK TO NBN COMPOUND
- PERFORM FILL AND BATTERING OF GROUND AS REQUIRED TO SUITE CONTOUR OF SITE.

12. MONOPOLE WIND LOAD PARAMETERS

SITE TOPOGRAPHICAL DATA		
REGION	TERRAIN CATEGORY	TOPOGRAPHIC MULTIPLIER
A0	1.0	1.0

13. SITE SIGNAGE REQUIREMENTS:

THE CONTRACTOR TO SUPPLY AND INSTALL;

- MERCS-1, 1500mm AGL, REFER TO NBN-STD-0025.
- MERCS-2, AFFIX TO SITE ACCESS GATE, REFER TO NBN-STD-0025.
- CLIMBING FALL ARREST DEVICE SIGN, REFER TO NBN RAN INSTALLATION DESIGN/CONSTRUCTION SPECIFICATION.
- HAZARDOUS VOLTAGE SIGN, REFER TO ERICSSON NBN RAN INSTALLATION DESIGN/CONSTRUCTION SPECIFICATION.

14. SCOPE OF WORKS:

THE CONTRACTOR TO SUPPLY AND INSTALL:

- INSTALL PANEL ANTENNA (2-OFF) AND RRU (2-OFF) ON NEW MOUNTS.
- INSTALL MINI-LENS ANTENNA (1-OFF), RRU (4-OFF) AND DIPLEXER (4-OFF) ON NEW MOUNTS.
- INSTALL AIR ANTENNA (2-OFF) ON NEW MOUNT.
- INSTALL H&S HYBRID 9/18 MKII CABLE (2-OFF) ON CENTRAL FEEDER BRACKETS.
- INSTALL GPS ANTENNA (1-OFF) AND FEEDER CABLE (1-OFF).

Client:



Client:

Client:

Project:

**NATIONAL BROADBAND NETWORK**  
 SITE No: 2WIP-51-01-WILC  
**WILCANNIA**  
 30-40 JAMES STREET  
 WILCANNIA  
 NSW 2836

**PRELIMINARY**

<b>01</b>	<b>14.02.24</b>	<b>PRELIMINARY</b>	<b>BB</b>
Rev	Date	Revision Details	CAD

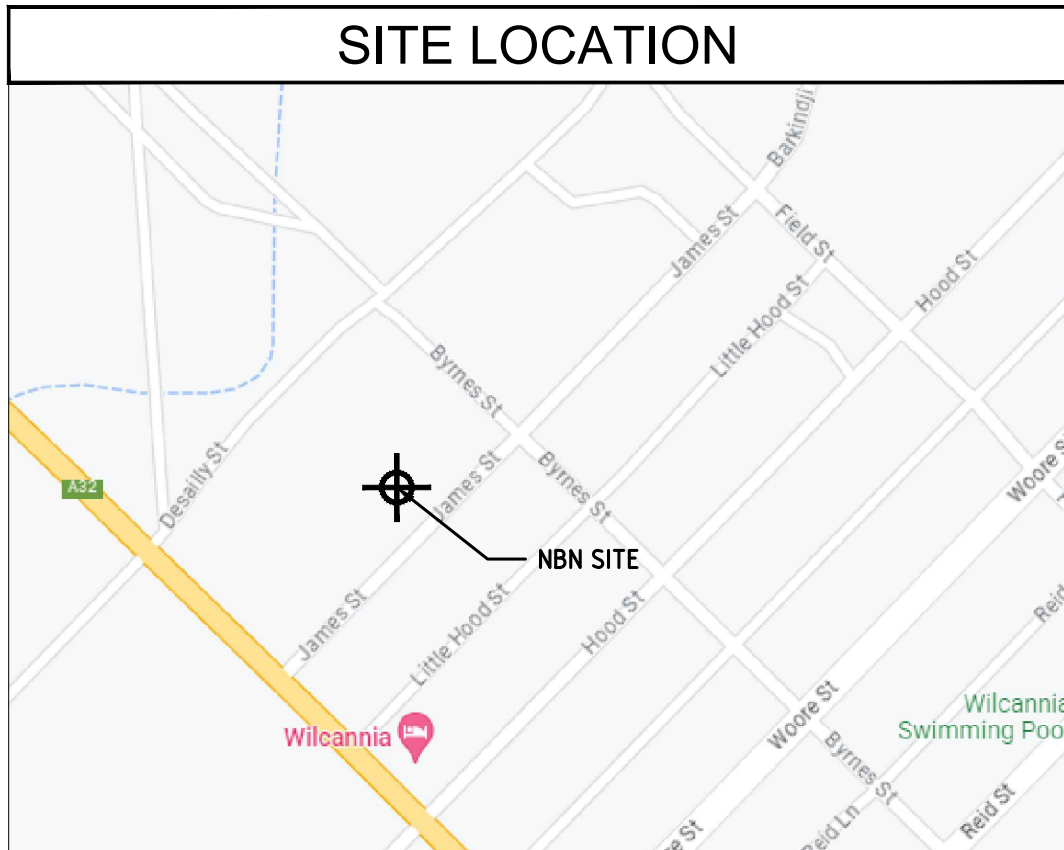
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 NZ phone number: 0508 VENTIA (836 842)

DESIGNER: MD  
 CHECKED: ML  
 APPROVED: SM

Drawing Title:  
**SITE SPECIFIC NOTES**

Drawing No.	Revision
2WIP-51-01-WILC-C1	01

# SITE LOCATION



REPRODUCED WITH PERMISSION FROM GOOGLE EARTH PRO

## SITE CO-ORDINATES

### LATTICE TOWER LOCATION

DATUM: MGA(GDA 94)	ZONE: 54J
EASTING	72555.08
NORTHING	6506398.99
LATITUDE	-31.555360°
LONGITUDE	143.376247°

DBYD Job No. 35180109  
 Enquiry Date: 04/10/2023  
 CONTRACTOR TO REVALIDATE  
 AT TIME OF CONSTRUCTION!

### PUBLIC UTILITIES LEGEND

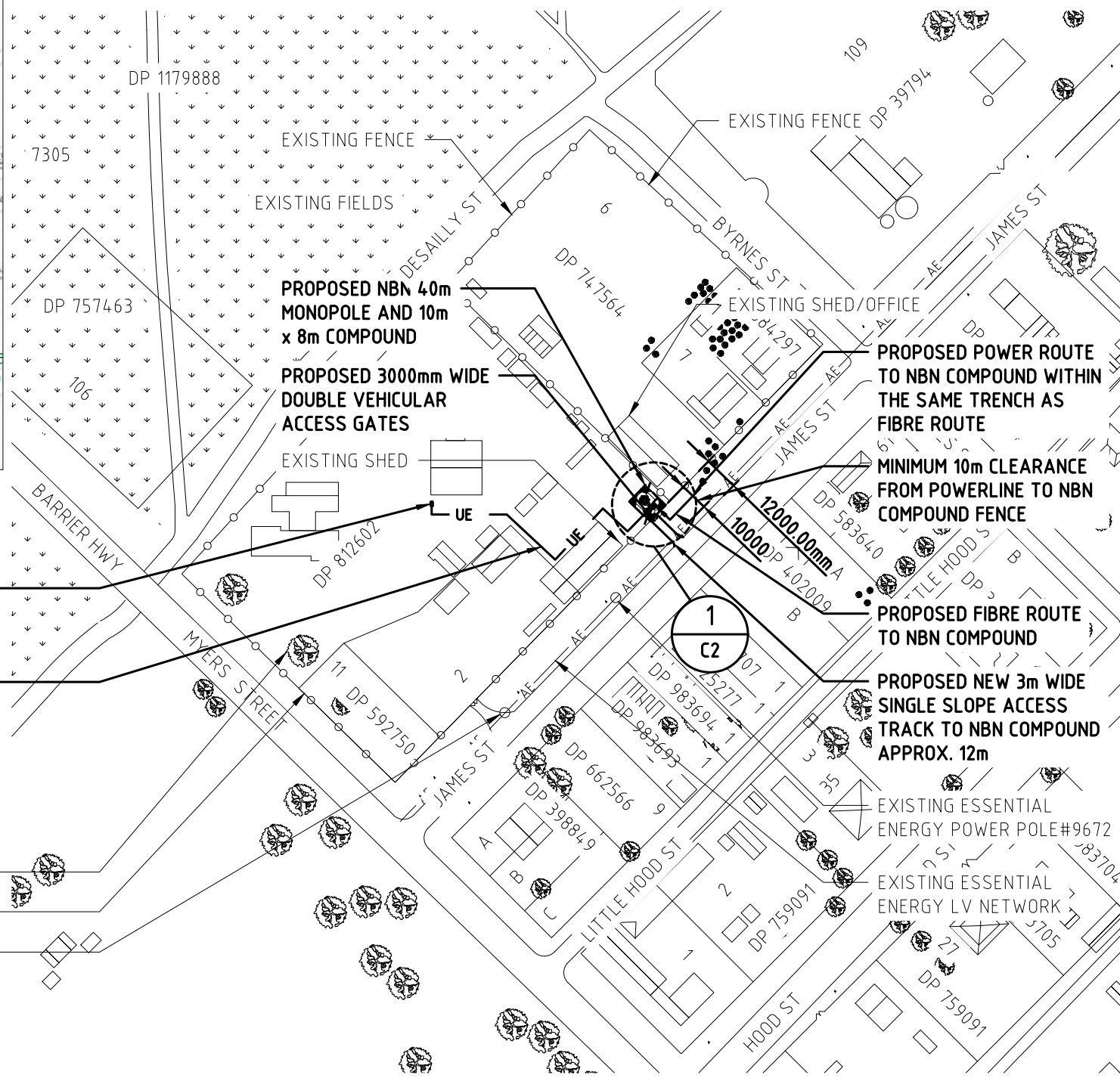
TELCO TELECOMMUNICATIONS

### LEGEND

NUE	NBN U/G POWER LINE
NUF	NBN U/G FIBER LINE
UE	UNDERGROUND ELECTRICAL
AE	AERIAL ELECTRICAL

### NOTES:

- ALL UNDERGROUND SERVICES SHOWN INDICATIVE ONLY.
- NBN POWER ROUTE SHOWN INDICATIVELY ONLY.



## OVERALL SITE PLAN

SCALE 1:2000



Client:

Client:

Project:  
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DESIGNER: MD  
 CHECKED: ML  
 APPROVED: SM

## OVERALL SITE PLAN

Drawing No. 2WIP-51-01-WILC-C2  
 Revision 01



Client:

Client:

Project:  
**NATIONAL BROADBAND NETWORK**  
 SITE No: 2WIP-51-01-WILC  
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 WILCANNIA  
 NSW 2836

**PRELIMINARY**

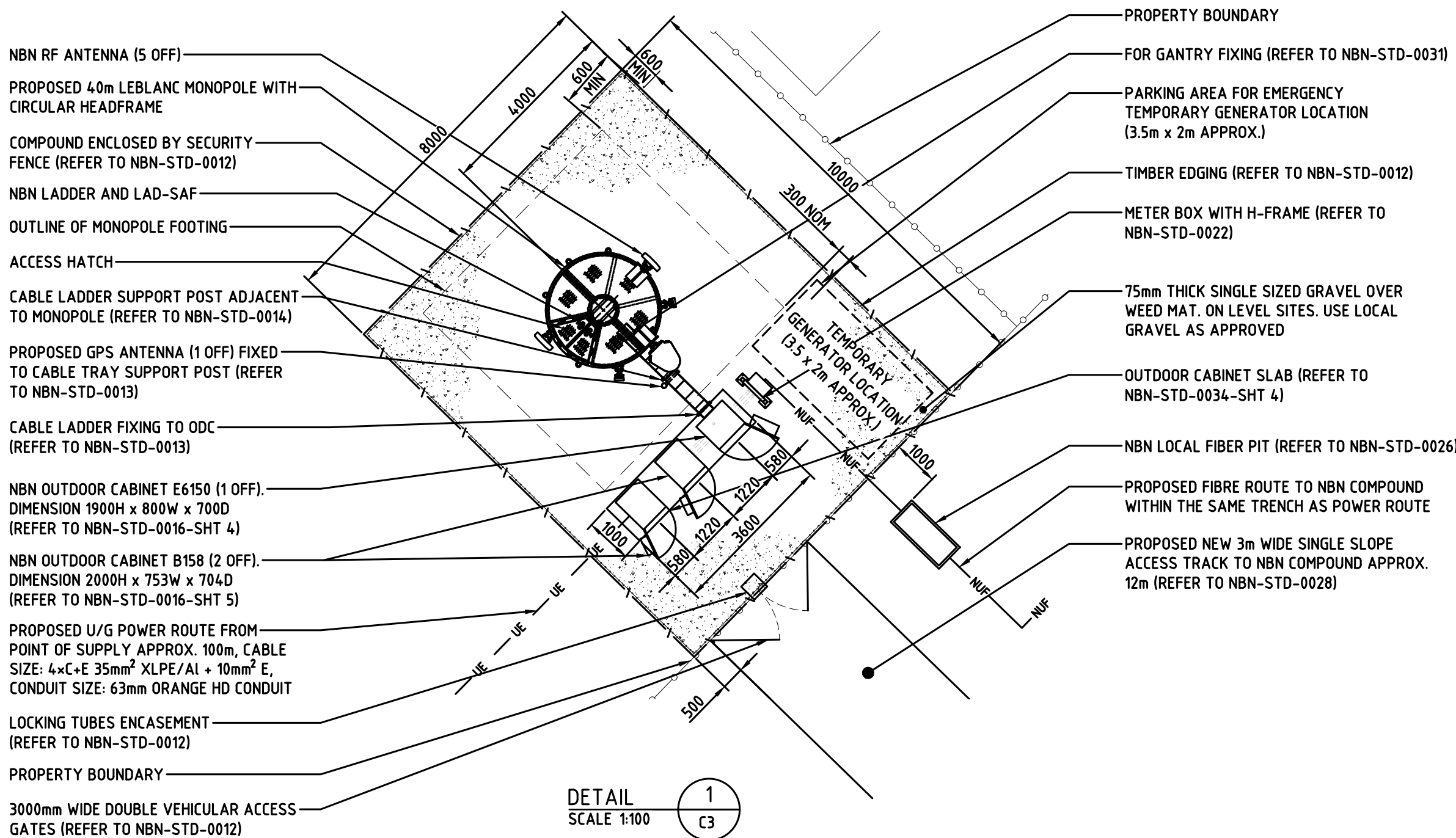
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DESIGNER: MD  
 CHECKED: ML  
 APPROVED: SM

Drawing Title:  
**SITE SETOUT PLAN**

Drawing No. 2WIP-51-01-WILC-C3  
 Revision 01

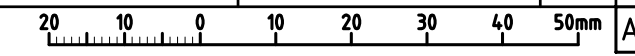


DETAIL  
 SCALE 1:100  
 1  
 C3

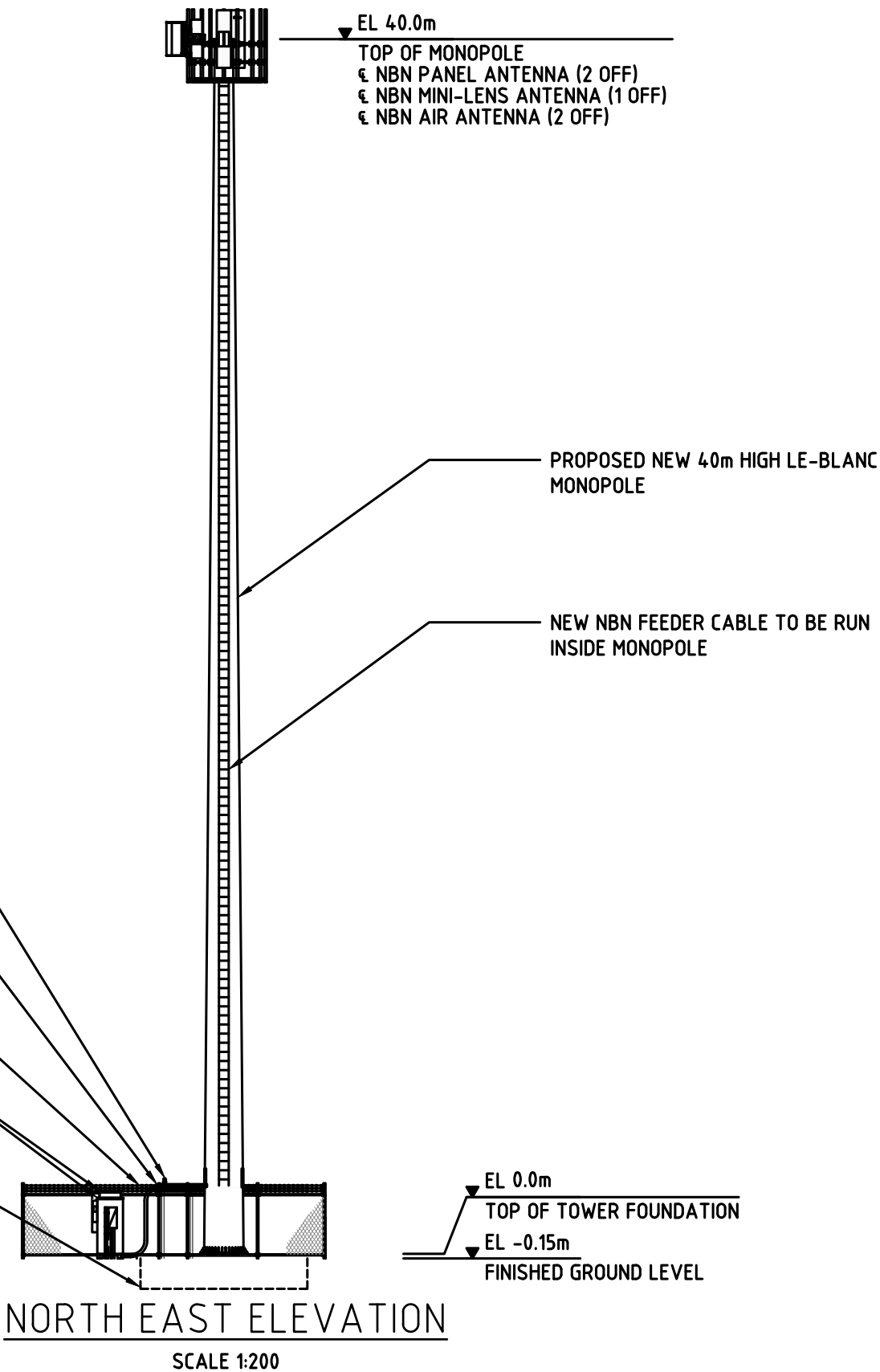
**LEGEND**

— UE — UE —	UNDERGROUND ELECTRICAL
—○—○—○—	TIMBER FENCE
—\—\—\—	NBN COMPOUND SECURITY FENCE
—NUF—NUF—	NBN U/G FIBRE LINE

- NOTES:**
- EXISTING VEGETATION NOT SHOWN FOR CLARITY.
  - REFER TO DGW. A1 & A2 FOR ANTENNA AND RRU DETAILS.



LEBLANCE - MONOPOLE							
STRUCTURE	CABLE WINDOW HEIGHTS (EL)						
20m	2.5m	9m	13.5m	16.5m	18.5m		
25m	2.5m	4m	9m	18.5m	21.5m	23.5m	
30m	2.5m	9m	18m	23.5m	26.5m	28.5	
35m	2.5m	4m	9m	18m	28.5m	31.5m	33.5
40m	2.5m	9m	18m	27m	33.5m	36.5m	38.5



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 CHECKED: ML  
 APPROVED: SM

Drawing Title:  
**SITE ELEVATION AND DETAILS**

Drawing No.	Revision
2WIP-51-01-WILC-C4	01

NBN RF ANTENNA CONFIGURATION - 2300MHz/3400MHz



PANEL ANTENNA DETAILS								MAIN FEEDER DETAILS					RRU DETAILS				FREQUENCY	RF TAIL DETAILS		RET CABLE DETAILS									
SECTOR	TYPE	DIMENSIONS HxWxD	€ HEIGHT	AZIMUTH (TN)	E-TILT		MECH TILT	ACTION	TYPE	OVERALL LENGTH	CANISTER HEIGHT	CANISTER TO RRU LENGTH	ACTION	TYPE	LOCATION	€ HEIGHT		RRU PORT	ACTION	ANTENNA TO RRU LENGTH	LENGTH								
S1 B1	ALPHA WIRELESS AW3843	1898x470x115	40.0m	45°	1 & 2	4°	0°	INSTALL	H&S HYBRID 9/18 MKII ø39.5mm	50.0m	38.0m	3.0m	INSTALL	RRU8863 (R-01)	BEHIND ANTENNA	40.0m	A+B	INSTALL	2.3GHz	1.5m	2.0m								
					3 & 4	4°																							
					5 & 6	4°																							
					7 & 8	4°																							
S3 B3	ALPHA WIRELESS AW3843	1898x470x115	40.0m	225°	1 & 2	4°	0°	INSTALL	H&S HYBRID 9/18 MKII ø39.5mm	50.0m	38.0m	3.0m	INSTALL	RRU8863 (R-01)	ADJACENT MOUNT	40.0m	E+F	INSTALL	2.3GHz	5m	5.0m								
					3 & 4	4°																							
					5 & 6	4°																							
					7 & 8	4°																							

NBN LENS ANTENNA CONFIGURATION - 2300MHz/3400MHz

DUAL BAND LENS/MINI-LENS 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	RRU TO CANISTER LENGTH	FEEDER ACTION REQ	TYPE	LOCATION	€ HEIGHT	RRU/ DIPLEXER PORT	ACTION	FREQUENCY	MQ4 TO MQ4 RF TAIL	MQ4 TO NEXT10 RF TAIL	LENGTH									
S2	MATSING LENS MS-MBAMBA-4.44.4-SH 2SH2-SH2SH2-4545MM (MINI-LENS HP-MQ4)	1100x610x710	40.0m	135°	1 & 2	4°	0°	INSTALL	H&S HYBRID 9/18 MKII ø39.5mm	50.0m	38.0m	5.0m	INSTALL	RRU8863 (R-03)	BEHIND ANTENNA	40.4m	A+B - M-01	INSTALL	2.3GHz	1.5m	1.5m	2.0m									
					3 & 4	4°																									
					5 & 6	4°																									
					7 & 8	4°																									
					9 & 10	4°																									
					11 & 12	4°																									
					13 & 14	4°																									
					15 & 16	4°																									
					B2									1 & 2	4°			H&S HYBRID 9/18 MKII ø39.5mm			5.0m	INSTALL	RRU8863 (R-05)	BEHIND ANTENNA	39.6m	A+B - M-01	INSTALL	3.4GHz		1.5m	2.0m
														3 & 4	4°																
5 & 6	4°																														
7 & 8	4°																														
9 & 10	4°																														
11 & 12	4°																														

NBN RF ANTENNA CONFIGURATION - 26GHz

PANEL ANTENNA DETAILS								MAIN FEEDER DETAILS					RRU DETAILS				FREQUENCY	RF TAIL DETAILS		RET CABLE DETAILS	
SECTOR	TYPE	DIMENSIONS HxWxD	€ HEIGHT	AZIMUTH (TN)	E-TILT		MECH TILT	ACTION	TYPE	OVERALL LENGTH	CANISTER HEIGHT	CANISTER TO RRU LENGTH	ACTION	TYPE	LOCATION	€ HEIGHT		RRU PORT	ACTION	ANTENNA TO RRU LENGTH	LENGTH
K1	AIR 5322	290x200x136	40.0m	80°	0°		5.5°	INSTALL	H&S HYBRID 9/18 MKII ø39.5mm	50.0m	38.0m	3.0m	INSTALL								
K2	AIR 5322	290x200x136	40.0m	180°	0°		5.5°	INSTALL	H&S HYBRID 9/18 MKII ø39.5mm	50.0m	38.0m	3.0m	INSTALL								

NBN GPS AND TRANSMISSION CONFIGURATION

ANTENNA	ANTENNA DETAILS					MAIN FEEDER DETAILS			RAU DETAILS			TX SPLITTER		
	TYPE	DIMENSION	€ HEIGHT	AZIMUTH (TN)	DESTINATION	ANTENNA ACTION REQUIRED	TYPE	OVERALL LENGTH	FEEDER ACTION REQUIRED	COUNT	TYPE	ACTION	QTY RAU	TX SPLITTER ACTION REQ
GPS	KRE 101 2395/2	ø77X74	2.5m	N/A		INSTALL	1x LDF1-50	20.0m	INSTALL					

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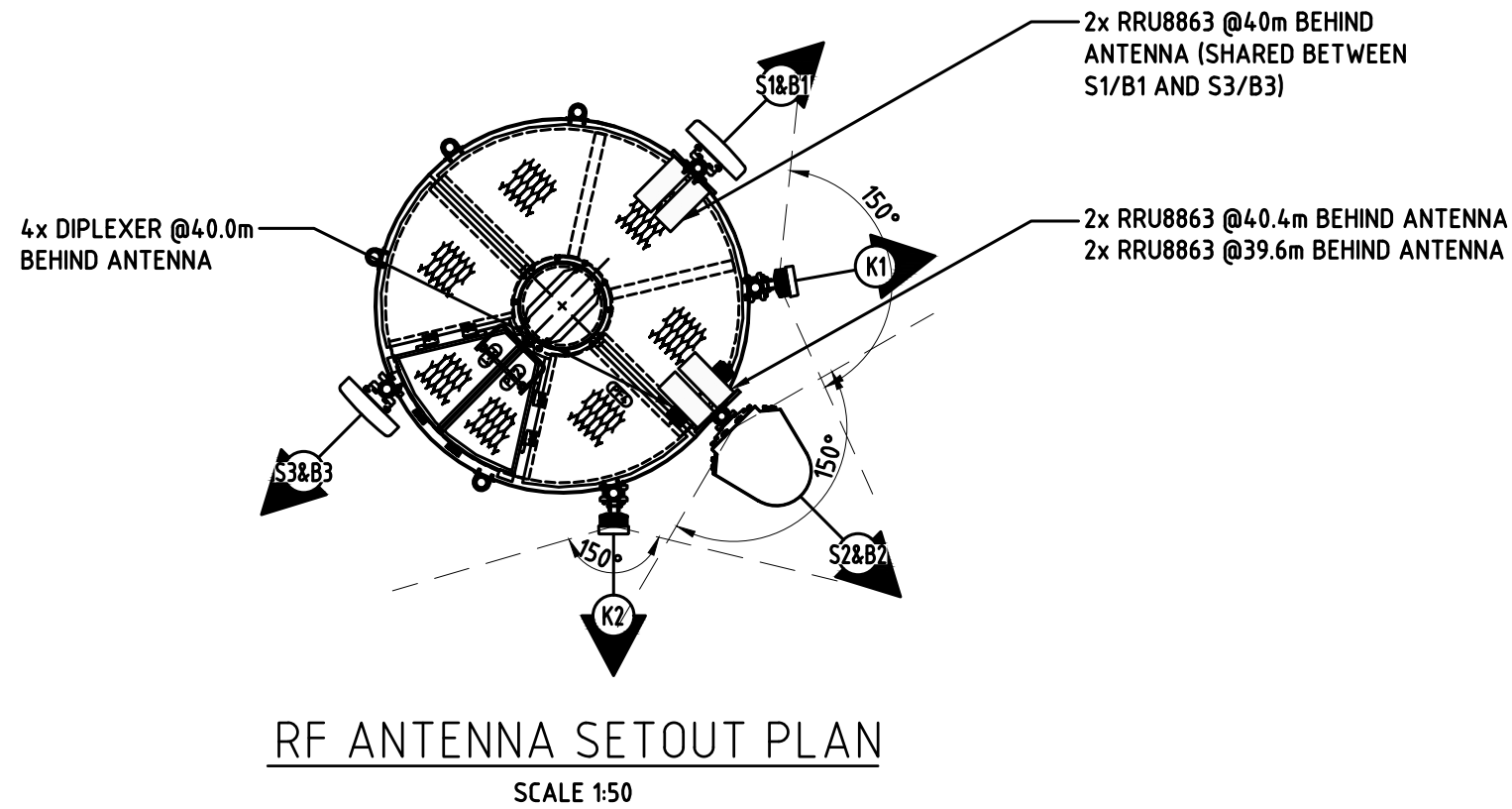
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 CHECKED: ML  
 APPROVED: SM

Drawing Title:  
**NBN ANTENNA CONFIGURATION**

Drawing No. 2WIP-51-01-WILC-A1  
 Revision 01

**NOTES:**

1. LENGTH OF RF JUMPER CABLE FROM RRU TO ANTENNA SHOULD NOT EXCEED 5m.



Client:



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Drawing Title:  
**NBN ANTENNA SETOUT PLAN**

Drawing No.	Revision
2WIP-51-01-WILC-A2	01