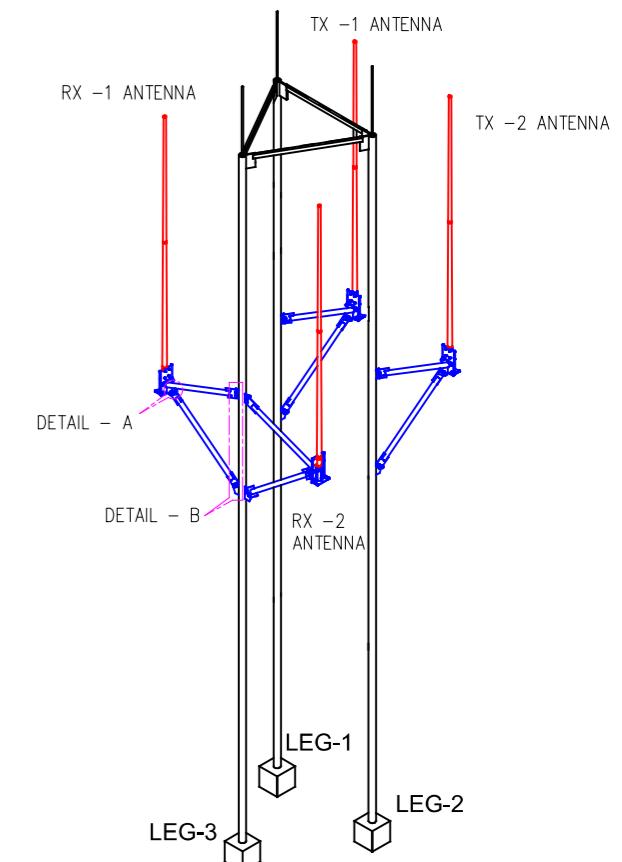
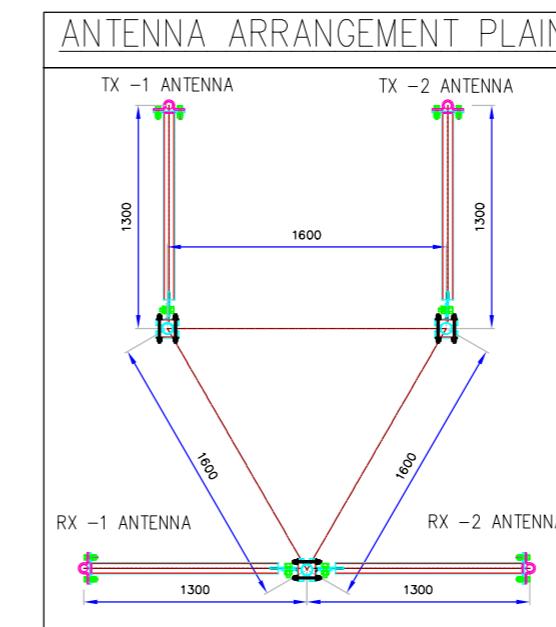
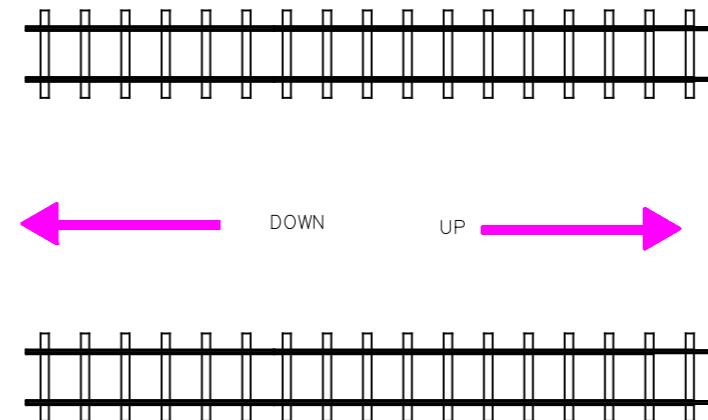
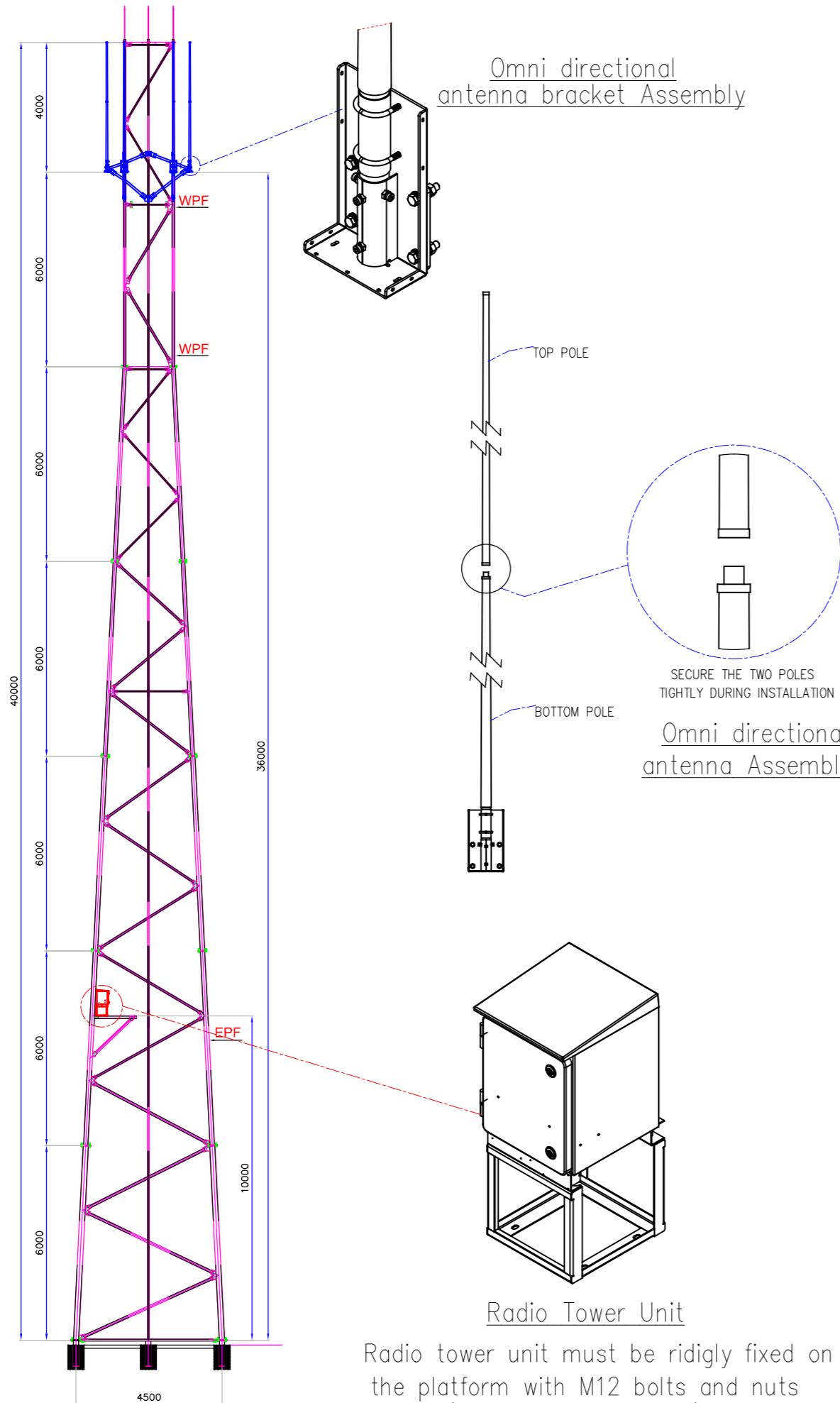


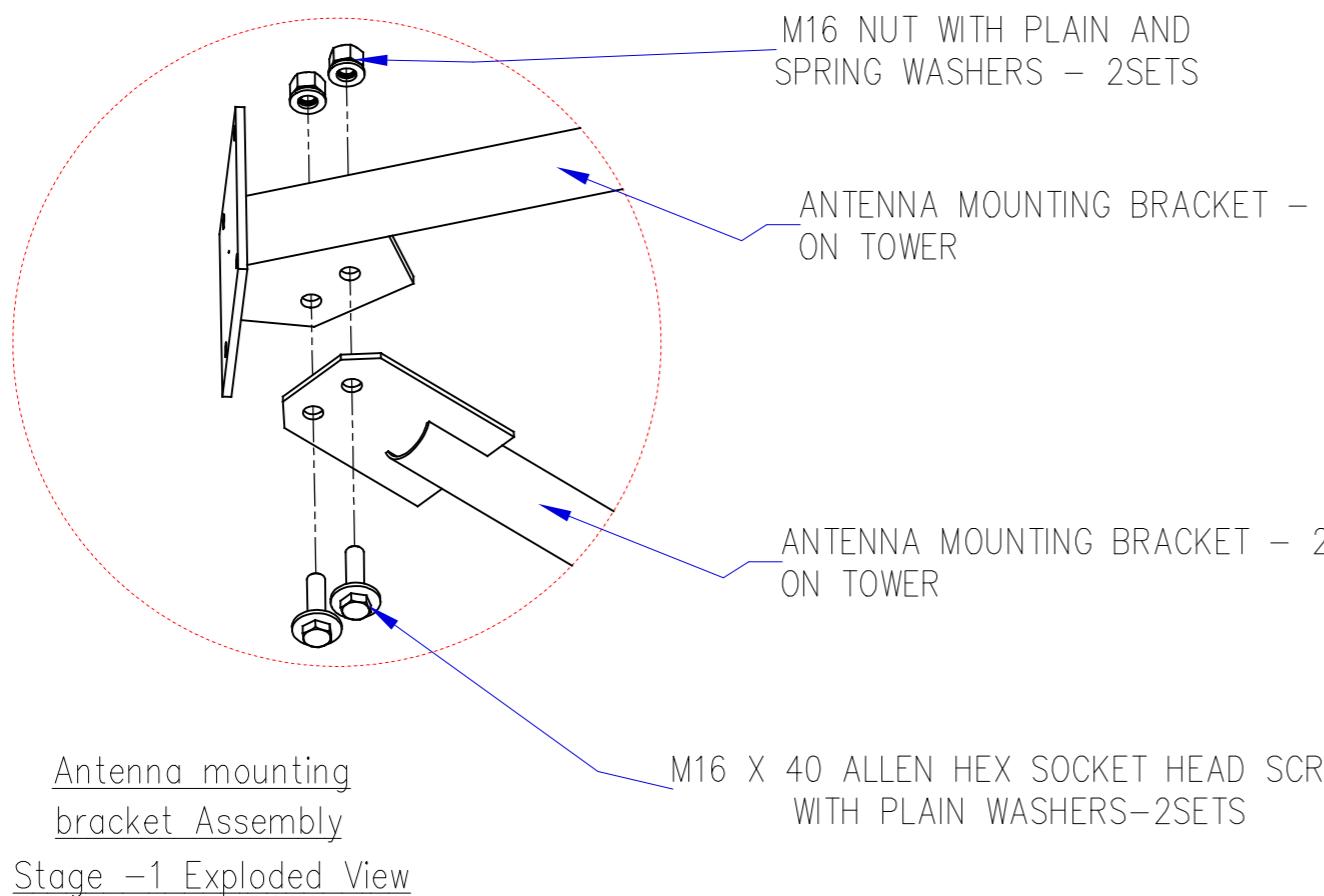
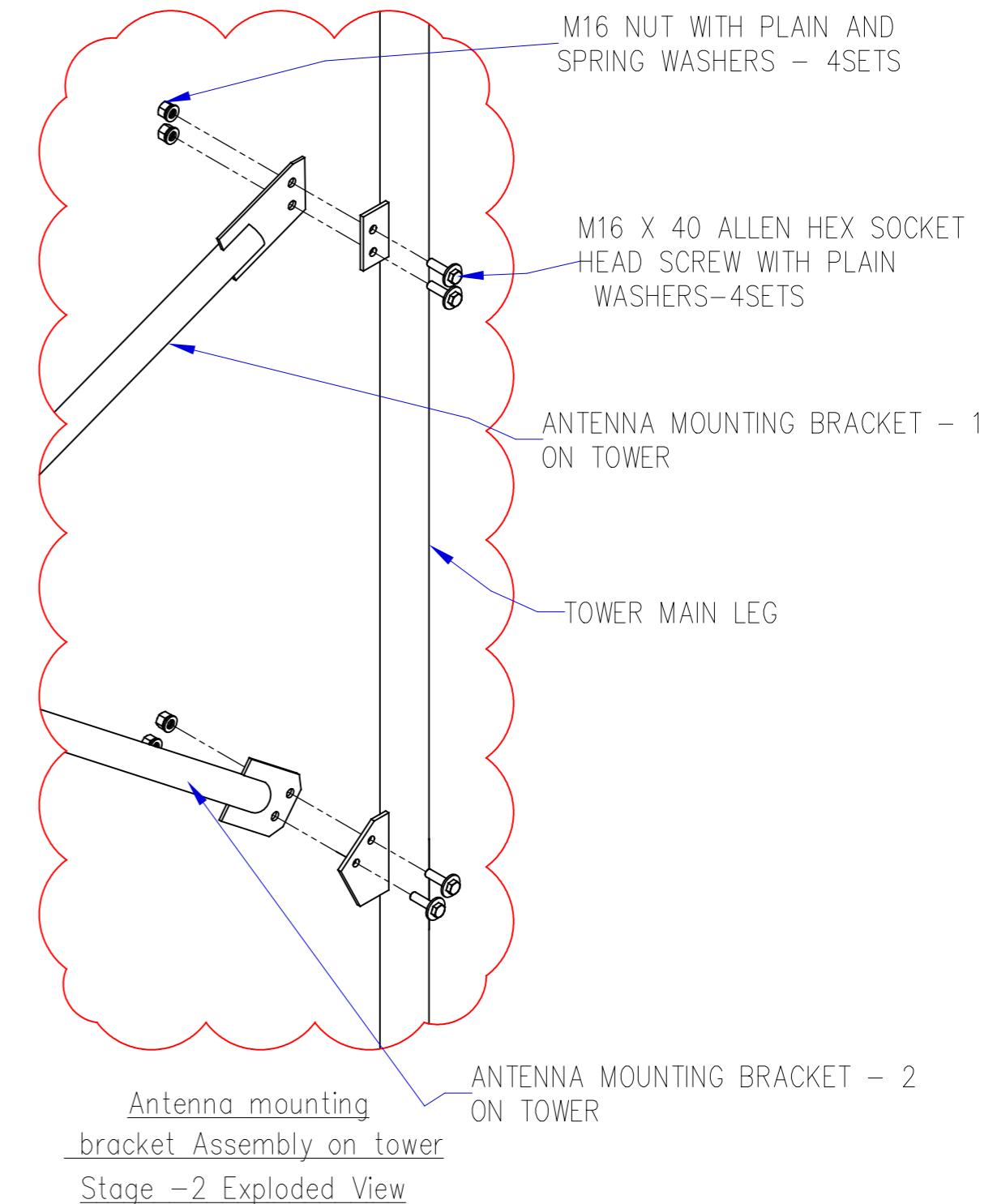
REV.	CHANGE DETAILS	DATE	PREPARED	APPD.
1.1	Updated Antenna mounting structure	20.09.25	SIVAJI	YS



## Notes:

1. Antennas must be installed at the height indicated in the drawing  
(Top of the antenna must be below the lightning arrester)
  2. Orientation of Tx & Rx antennas must be maintained as shown  
in this drawing without fail.
  3. Weather – Proofing must be done for all RF cable joints

PROJECT: KAVACH		<b>HBL</b> <b>HBL Engineering Ltd.</b>			NAME	DESIGNATION	SIGN. <u>Ch.Sivaji Ganesh</u> CH.Sivaji Ganesh (Sep 20, 2019 14:06:34 GMT+5:30)
ASSEMBLY: STATIONARY KAVACH				DESIGN	CH SIVAJI GANESH	Sr. ENGINEER	
				CHECKED	J V V PRASAD	Sr. MANAGER	
				APPROVED	Y SUBRAHMANYAM	GENERAL MANAGER (ENGINEERING)	
SCALE: NTS	SIZE: A3	TITLE: Installation arrangement for 10.2dBi omni – directional antennas & Radio Tower Unit			DRAWING NO.	5 16 67 0983	REV.
	SHEET: 1 OF 3				PART NO.		
EFFECTIVE FROM:  ALL DIMENSIONS ARE IN mm			TOLERANCE NOT SPECIFIED SHALL BE AS PER IS : 2102 – 1993.  THIS DRAWING IS THE PROPERTY OF HBL POWER SYSTEMS LIMITED AND MUST NOT BE COPIED, REPRODUCED, TRANSMITTED OR DISCLOSED TO ANY THIRD PARTY WITHOUT THE WRITTEN CONSENT OF THE COMPANY.				

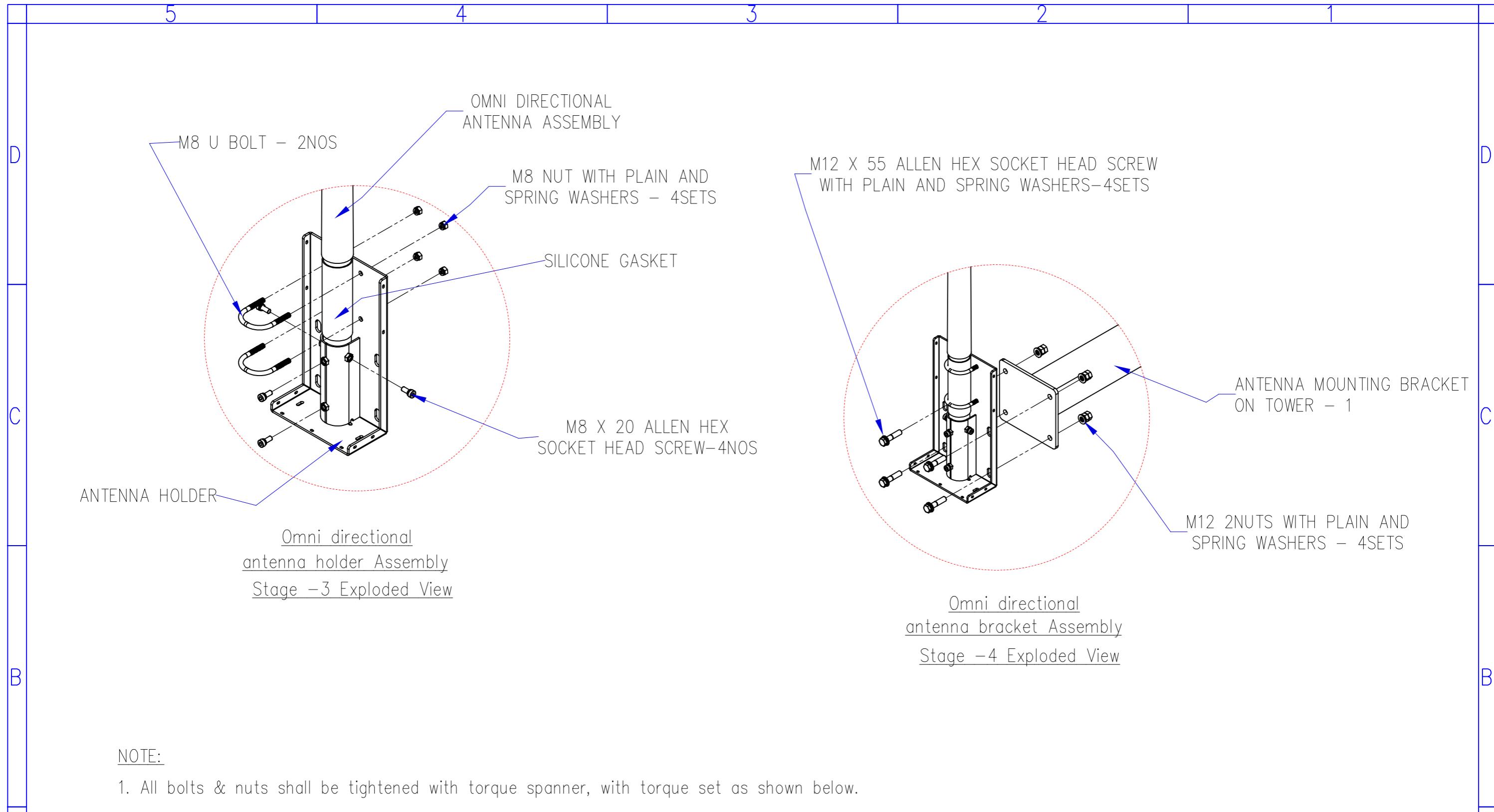
DETAIL - ADETAIL - BNOTE:

1. All bolts & nuts shall be tightened with torque spanner, with torque set as shown below.

Torque (Nm)	
Size	Torque(Nm)
M8	25
M10	50
M12	85

2. Paint mark shall be applied on nuts after torque tightening.

PROJECT: KAVACH	<b>HBL</b> <b>HBL Engineering Ltd.</b>		NAME	DESIGNATION	SIGN.	
ASSEMBLY: STATIONARY KAVACH			CH SIVAJI GANESH	Sr. ENGINEER	Ch.Sivajiganeesh Ch.Sivajiganeesh (Sep 20, 2020 14:06:34 GMT+1:53)	
SCALE: NTS			CHECKED	J V V PRASAD	Sr. MANAGER	JVVPrasad JVVPrasad (Sep 20, 2020 14:42:21 GMT+1:53)
SIZE: A3			APPROVED	Y SUBRAHMANYAM	GENERAL MANAGER (ENGINEERING)	Subrahmanyam Y Subrahmanyam Y (Sep 20, 2020 14:21:59 GMT+1:53)
SHEET: 2 OF 3	TITLE: Installation arrangement for 10.2dBi omni – directional antennas & Radio Tower Unit			DRAWING NO. 5 16 67 0983	REV.	
EFFECTIVE FROM:  ALL DIMENSIONS ARE IN mm			TOLERANCE NOT SPECIFIED SHALL BE AS PER IS : 2102 – 1993.  THIS DRAWING IS THE PROPERTY OF HBL POWER SYSTEMS LIMITED AND MUST NOT BE COPIED, REPRODUCED, TRANSMITTED OR DISCLOSED TO ANY THIRD PARTY WITHOUT THE WRITTEN CONSENT OF THE COMPANY.			

NOTE:

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PROJECT: KAVACH		<b>HBL</b> <b>HBL Engineering Ltd.</b>		NAME	DESIGNATION	SIGN.
DESIGN	CH SIVAJI GANESH			Sr. ENGINEER	Ch.Sivajiganeesh Ch.Sivajiganeesh (Sep 20, 2025 14:06:34 GMT+5:30)	
CHECKED	J V V PRASAD	Sr. MANAGER	JVVP JVVP (Sep 20, 2025 14:21:39 GMT+5:30)			
APPROVED	Y SUBRAHMANYAM	GENERAL MANAGER (ENGINEERING)	Subrahmanyam Y Subrahmanyam Y (Sep 20, 2025 14:21:39 GMT+5:30)			
SCALE: NTS	SIZE: A3	TITLE: Installation arrangement for 10.2dBi omni - directional antennas & Radio Tower Unit			DRAWING NO. 5 16 67 0983	REV.
	SHEET: 3 OF 3				PART NO.	1.0
EFFECTIVE FROM: ALL DIMENSIONS ARE IN mm				TOLERANCE NOT SPECIFIED SHALL BE AS PER IS : 2102 - 1993. THIS DRAWING IS THE PROPERTY OF HBL POWER SYSTEMS LIMITED AND MUST NOT BE COPIED, REPRODUCED, TRANSMITTED OR DISCLOSED TO ANY THIRD PARTY WITHOUT THE WRITTEN CONSENT OF THE COMPANY.		

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C.H.Sivajiganesh (Sep 20, 2025 14:06:34 GMT+5.5)  
**Email:** sivajiganesh.chennuboyina@hbl.in  
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**Signature:** JVSNV Prasad  
JVSNV Prasad (Sep 20, 2025 14:10:20 GMT+5.5)  
**Email:** prasad.jagatha@hbl.in  
**Title:** Sr.Manager

**Signature:** Subrahmanyam Y  
Subrahmanyam Y (Sep 20, 2025 14:21:39 GMT+5.5)  
**Email:** subrahmanyam.yadavalli@hbl.in  
**Title:** GM - Engineering