

Core Services – Site Communications

Scope of Works

2019 – Mesa J HEWS Tower Demolition

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Document Owner: Utilities – Maintenance Engineering

Version History				
Version	Description of Changes	Custodian	Approved	Date
1	First Draft	John Cox	JC	11 th January 2019

Contract Number	
Project Number	MO# 26970309
Document Number	
File Name	
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Project Manager	John Cox

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1.1 Safety

The Company requires the performance of all contract Works to be undertaken safely and in compliance with all applicable legislation, company policies and procedures including the HSEQ system.

In order to complement the Company's policies and procedures, and without limiting the requirements set out in the General Conditions or any other company policy or procedure relating to safety, the following requirements will apply to works performed under this Scope of Works:

- All travel itineraries involving travel in the Pilbara for Contractor Personnel employed in the performance of the works should be made in accordance with the RTIO Fatigue Management Work Practice. All such itineraries are to be made available for inspection by the Company Representative upon request. Particular attention is required in relation to travel by Contractor Personnel travelling / driving after twelve (12) hours from their point of departure on the day of travel and / or where travel involves driving at dawn or dusk. The Contractor's Health, Safety and Environment Management Plan must also demonstrate how the Contractor proposes to manage the safe travel of its Personnel in relation to fatigue and travel at times of increased risk.
- Vehicles operated by Contractor Personnel must contain a vehicle specific risk assessment showing details of the risks associated with the driving of that particular vehicle or type of vehicle.
- All crane and lifting activities will need to comply with the RTIO C6 standard (Cranes and Lifting).
- The contractor will be required to participate in a level 2 risk assessment prior to mobilisation. This will be held at MESA A HEWS.
- All staff accessing the tower will need to comply with the RTIO WWH work practice and also the RTIO Communications Structure Access guidelines (see appendix 1).
- Personnel on site must have appropriate level of first aid training taking into account the work to be undertaken, work site location and location of nearest medical aid. In addition a suitably equipped first Aid kit should be available on site.

In complying with the requirements set out above, the Contractor's attention is drawn to the requirements of HSEQ and the RTIO "Vehicle and Driving Work Practice" and the "Fatigue Management Work Practice".

Section 2 - General

2.1 Iron Ore Operations in the Pilbara and the Company

All Iron Ore Operations in the Pilbara, including Pilbara Iron, Hamersley Iron, Robe River Mining, Hamersley HMS and Hope Downs Iron Ore Venture function under the Rio Tinto (RT) banner, a world-class asset manager that operates and maintains mining, rail and export facilities in the northwest of Western Australia.

The Company under the Contract is as defined in the Key Terms. Wherever Rio Tinto (RT) is referenced in this Scope of Works, this must be taken to be the Company.

2.2 Description of Works

The scope of Works comprises of the demolition of the communications tower located on MESA J Heavy Equipment Workshop (HEWs). The contractor will also be responsible for removing all waste from site and disposing of correctly which includes all tower RF feeds to the communications room. The tower has been condemned and **cannot** be climbed as part of the demolition work.

The contractor shall complete the works in accordance with the Scope of Works document to enable successful demolition of the communications tower.

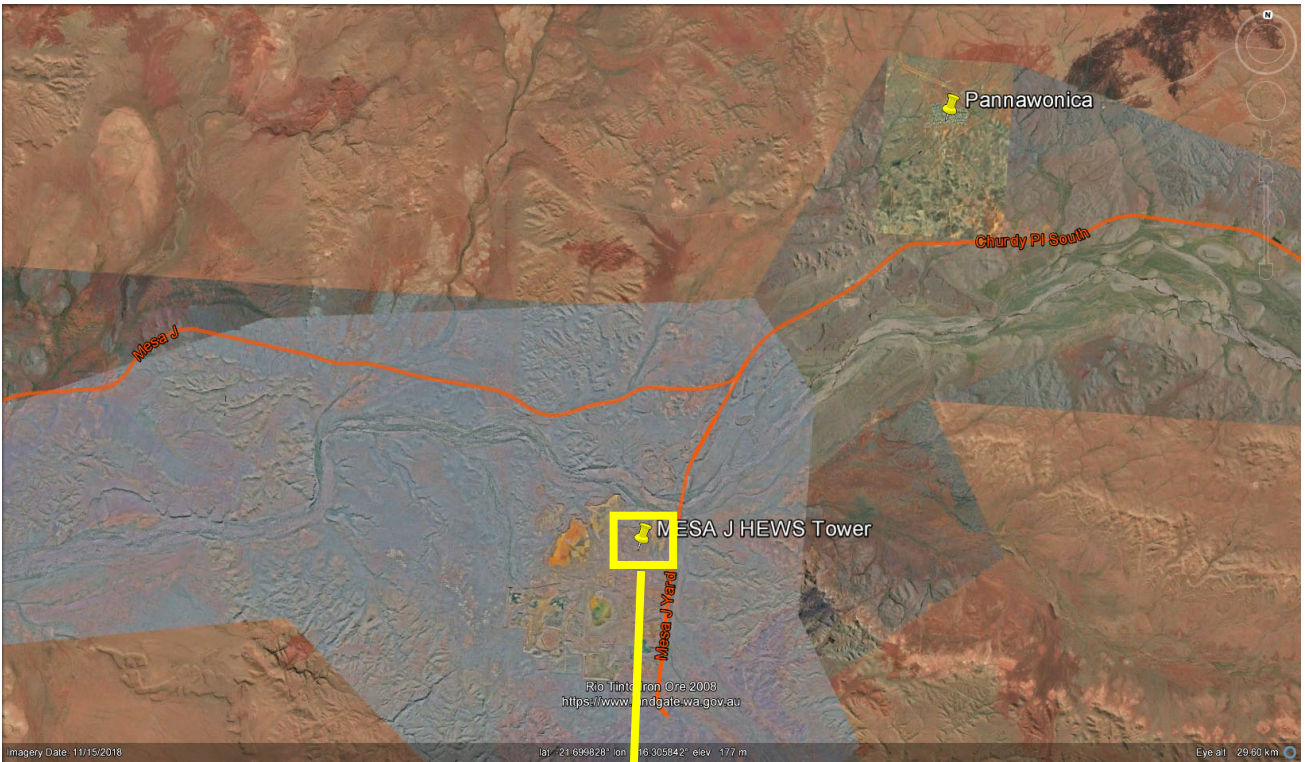
Location	Mine Site	Detail	
Pannawonica	MESA J – Heavy Equipment Workshop	Status:	Redundant
		Product:	Communications Tower
		Asset Age:	30+ years
		Height (metres)	31.5m (from top of roof)

2.3 Location

The works are to be completed at the MESA J Heavy Equipment Workshop.

- Site Latitude: -21.743635°
- Site Longitude: 116.253983°





Section 3 - On-Site

3.1 Contractor Requirements

The Contractor must comply with the Company's Contractor Management System (CMS), which promotes uniform contractor safety, health and environmental performance, ensures compliance with the Company Health Safety and Environmental policies, standards and statutory obligations and ensures contractor management by company employees meet accepted business practices.

3.1.1 General

The CMS consists of strategies to create fluent working relationships between the Company and Contractors, including:

- Requirements for Contractor to submit pre mobilisation a Project Safety, Health and Environmental Management Plans and commitment to safety training. The PSHEMP can be verified by using Project SHEMP Review Checklist [RTIO-HSE-0024970] from the RT CMS Website.
- Formalised performance reviews of both contractor and client at the end of the project.

The set of risk management tools are:

- Take five tool can be either be completed by the Contractors or RTIO.
- Critical Risk Management (CRM).
- Job Hazard Analysis.
- Safe Work Procedures will be the Contractors.
- Level 2 Risk assessment as per RTIO HSEQ Element 3 Hazard ID & Risk Management. This will be conducted on site prior to tower demolition – separate trip required by contractor.

It provides support systems to enable the safe and effective utilisation of contract labour throughout all stages of project development.

3.1.2 Health and Safety

Without limiting its obligations under the General Conditions, the Contractor must comply with the Company's requirements set out in HSEQ Management System Elements 1 to 17 and CMS Steps 1 to 7.

The Contractor shall supply a Project Supervisor for each job site for the duration of the Works. The Project Supervisor shall act as a point of contact between the RTIO Company Rep and the Contractor.

The contractor will participate in a RTIO Level 2 Risk Assessment prior to mobilisation and as a part of CMS Step 5a Conduct a HSE & Planning pre job conference.

The Project Supervisor shall have experience in the industry and be competent in all facets of the works. The Project Supervisor shall be contactable at all times of the working day for the duration of the Works. One individual shall oversee the work on each site from inception through to Practical Completion and shall be responsible for:

- Company's CMS, HSEQ and Site specific requirements
- All relevant local government and statutory health and safety Acts, Regulations, Codes of Practice and Guidelines.
- Participation in safety meetings as specified in the Environmental, Health and Safety Plan, including attendance at Site Safety Meetings as required and the circulation and posting of Safety Bulletins and notices.
- Preparation of JHAs and Site Work Procedure for each task in each work location. All JHAs shall be reviewed by the Company Representative prior to commencing any Works. The JHAs shall be signed or resigned by each person working under the JHA at the start of each and every shift. The JHA and Work Procedure will be deemed a high priority during the planning of Works.
- All relevant area inductions must be obtained and procedures adhered to by the Contractor and its Personnel, including Sub-contractors. Inductions and training to be undertaken (as required) by all Personnel before mobilisation including but are not limited to:
 - Rio Tinto Iron Ore Essentials Induction.
 - Isolation training – RTIO Isolation Regulations 2.2
 - Job specific training (i.e. confined space training, RTIO working at heights gap training, RTIO Hot work).
 - Inductions to be undertaken on Site and before commencement of Works include but are not limited to:
 - Site Induction.
 - Area and Project Specific Induction as deemed by the contractor.

The Contractor shall also provide the following:

- Safety Adviser or Safety Representative on Site during the progress of the Site activities as deemed by the Company Rep during the Level 2 Risk Assessment.
- All Contractor Personnel are required to complete a Contractor Hire form to allow personal details to be entered in the Company SAP system for safety purposes if not already done.
- Contractor to supply Training details as required to for specific High Risk Tasks and a VOC deceleration for all plant. RTIO CMS Website Step 5 Supporting Material: Element 10 - Competency Declaration for Person Working on a Project Form [RTIO-HSE-0024985]
- All work will be undertaken under the control of the Company's Work Permit system, with subsidiary permits required for Excavations (Permit to Dig),

Hazardous Work (Hot), Entry into a Confined Space, and Electrical Work (Isolations). The Company's Representative will arrange permits and isolations for these areas. The Contractor shall advise the Company a minimum of 1 shift (24 hours) prior to the time the Contractor requires a Work Permit. The Contractor shall be responsible for training all Personnel to ensure compliance with these procedures.

- All chemicals to be used on Site shall be approved by the Company Rep via Chemalet prior to being brought to Site. Material Safety Data Sheets shall be retained by the Contractor and readily available.
- Contractor vehicles must be clearly identified with the Contractor's company name. A pre-start check must be undertaken and documented for all machinery including vehicles. Site approval shall be gained before bringing any machinery to Site C3 - Mobile Equipment & Vehicles Checklist [RTIO-HSE-0024996] & C3 - Plant Machinery & Vehicle Access Authorisation [RTIO-HSE-0052640].
- The Contractor shall ensure that the work site is secured at the end of each day and that no tools, equipment or debris becomes a hazard at the Site. It is mandatory that the Site be barricaded off with appropriate signage displayed and to the satisfaction of the Company Representative. Any equipment lost or misplaced is the responsibility of the contractor.
- The Contractor must have a valid Class 1 Demolition licence.

3.1.3 On-Site Planning

The Contractor shall prepare and submit the documents listed below, and receive their approval by the Company Representative prior to commencement of any Works:

- Detailed Environmental Health and Safety Plan (SMP).
- Project Risk Assessment.
- Demolition Methodology.
- Works Timetable.
- Quality Plan.

3.1.4 Environment

As a minimum requirement, the Contractor must comply with the environmental policy and guidelines of the Company.

Any environmental damage that results from the Contractor failing to comply with the Company's environmental policies and guidelines will be repaired at the Contractor's expense.

3.1.5 Flora

No Contractor shall cut down, dig out, burn or in any way disturb trees, shrubs or saplings on the site unless under the direction of the Company Representative as part of a contract specifying the nature and means of disturbance and clearing of vegetation.

No Contractor must disturb the formation of protective bunds, watercourses, etc. unless directed so to do by the Company Representative.

No Contractor must excavate, dig, or otherwise disturb the natural soil surface at the site except in the manner and to extent as specified or directed by the Company Representative. Where the contract specifies disturbances to the soil surface and earthworks, it will also specify the nature of remedial re-vegetation and stabilisation of the reformed soil surface at the conclusion of the works.

No Contractor must disturb the formation, re-vegetation, or other stabilisation of reformed soil surface unless directed by the Company Representative as part of the contract specifying such re-disturbance. This must include passage of vehicles and machinery over reformed surfaces, which have been re-vegetated or otherwise, treated, and must include unauthorised movement across the formation of protective down slope of totally cleared area.

The Company Representative may require topsoil to be taken separately, stockpiled and used for rehabilitation.

3.1.6 Smoking and Fires

No Contractor must smoke cigarettes (unless in a designated area) or light a fire in the open within the Site unless specifically directed to do so by the Company Representative. There are no exceptions.

No waste materials must be disposed of by fire in any part of the Site unless approved in writing by the Company Representative.

3.2 Variations and Site Instructions

Any works which the Contractor deems to be out of scope must be presented to the RTIO Project Manager with the following information:

- Written justification for the variation.
- Total cost impact to Project.
- Total time impact to Project.
- Within 1 day of the variation being identified, if such information is not provided in the allowed time frame the Company reserves the right to reject such a claim.

3.3 Workmanship

All Works shall be carried out by competent supervisors, tradesmen and labourers experienced in this type of work.

Any material used in the Works and standard of workmanship shall be to the provisions of the Specifications or, in the absence of any such provision, shall be of a kind which is suitable for its intended purpose and consistent with the nature and character of the Works. This includes that the workmanship or materials meet the manufacturer's recommendations for application or installation, workmanship or materials abides by the Warranty requirements, and that the Warranties are supplied to the Company.

3.4 Co-operation and Co-ordination with Others

The Contractor shall co-operate where necessary with other contractors and with the Company's site personnel to ensure continuity of work and a safe working environment.

3.5 Contractor to Inform Themselves

The Contractor shall make allowances to inspect the work area to ensure that they have adequate information to supplement that given in the Scope of Works to enable them to correctly tender this project. No changes in the contract sum will be allowed for items not included by the Contractor, but which are nominated in the Scope of Works.

3.6 Sequence of Work

3.6.1 Works Timetable

Without limiting the obligations of the Contractor under the General Conditions in relation to the Works Timetable, the Contractor must submit a Works Timetable within seven (7) days of the Commencement Date and the Works cannot commence until the Company Project Manager has approved the Works Timetable. The Works Timetable will be updated daily if required and any changes to the Works Timetable clearly stated to the Company Project Manager.

The Contractor will identify in the Timetable any activity that requires the 'shutdown' or isolation of any Company plant and/or any disturbances to any services being supplied to the public.

Works must be completed in the time frames detailed by the Company Project Manager.

3.6.2 Proposed Sequence

The Works Timetable shall be of sufficient detail to enable an assessment to be made of the proposed sequence of operation, duration of the activities, completion dates and the progress of the Works.

3.7 Execution of Works

3.7.1 Load Restrictions

The Contractor must seek approval from the Company prior to:

- Bringing any heavy and oversize vehicles onto the Site (where such vehicles are deemed to be larger than a light or "utility" vehicle).
- Delivery of goods and equipment to Site.
- Undertaking any heavy crane lifts which will require a lifting plan presented to and approved by the Company. The Contractor should be aware an Elevated Work Platform (EWP) may be required when assembling any crane counterweights due to RTIO's working at heights policy.

3.7.2 Access

As the Site will still be within fully operating mining operations domains, the contractor must ensure that all considerations are taken to minimise disruption to the operations of the site.

The Contractor must have inductions to meet access requirements into the Site including but not limited to RTIO Iron Ore Essentials Induction, RTIO General Site Induction and any area specific inductions.

The Contractor must advise the Company what areas will be accessed to allow the Company to confirm right to access and any additional requirements.

Work in and around the areas will need to take into consideration the hazards posed by rail operations vehicle movements. A traffic and access management plan for the work area shall be prepared by the Contractor and approved prior to commencement of work in this area.

The Contractor will have non-exclusive possession of the work areas. The Contractor shall suitably demarcate the work and lay down areas under their direct control. The traffic and access management plan must address these issues.

3.7.3 Interruptions and Shut Downs

The Contractor must advise the Company Representative of expected events and periods of interruptions, shutdowns, etc, during the Contract period. The Contractor must provide written advice seven (7) days before the event and provide advice and assistance in ensuring that all services are maintained to public areas.

3.7.4 Inspection of Work by the Company Representative

The Company Representative inspection refers to the duty of the Company Representative to examine the Contractor's work during construction and at completion for the purposes of determining whether such work has been conducted and completed in substantial conformity with the Drawings and the Scope of Work Specification. The Company Representative will also examine the Contractor's work to determine whether the quality of materials is as specified and will witness such tests as are specified and as the Company Representative considers necessary to confirm that materials, plant and equipment installed under this Contract complies with and performs according to the Specification.

- Inspection of the work of the Contractor by the Company Representative, shall not absolve the Contractor of his responsibilities under the Contract, notwithstanding that the Company Representative may have indicated his acceptance of the installation in general terms by way of notice in writing.
- When the Contractor is of the opinion that the works are practically complete and given 7 days' notice to the Company Representative that the works are complete, a joint inspection with the Contractor and Company Representative will be held.
- The Contractor must supply all necessary labour and equipment for the inspection.
- Upon completion of the inspection, the Company Representative will prepare a list of items and the Contractor must rectify and complete these within 7 working days of issue.

The works must be considered practically complete when:

- Demolition is completed.
- Final Inspection has been held.
- Waste removed from site.
- All details are completed to the satisfaction of the Company Representative.

3.7.5 Obvious Work

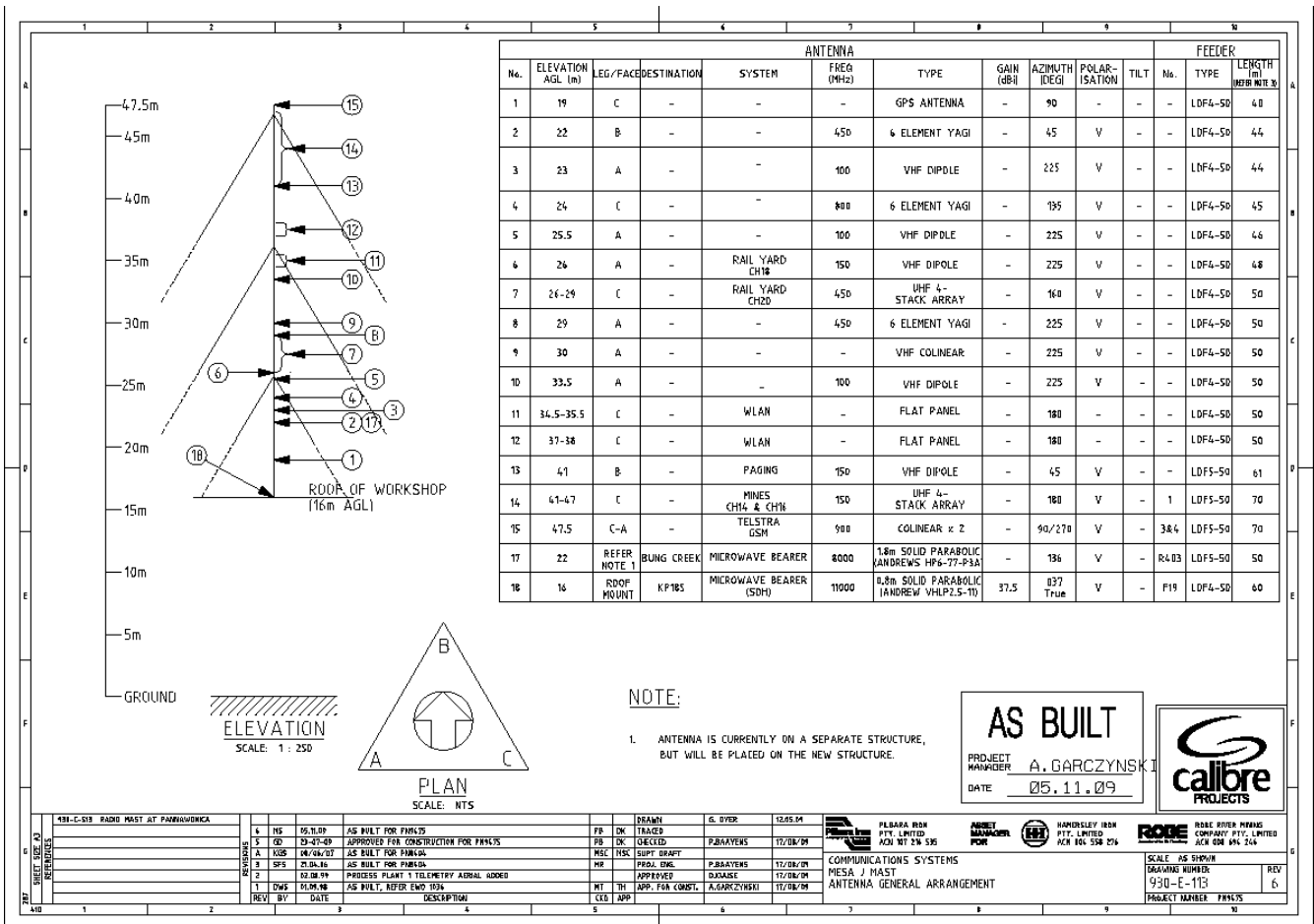
If neither the Specification nor the Drawings contain any particulars of minor parts, which nevertheless are clearly necessary for the completion of the work under the Contract, all such parts must be supplied and executed without additional charge to the Contract. Appendix

3.8 Appendix 1 – Supporting Documentation

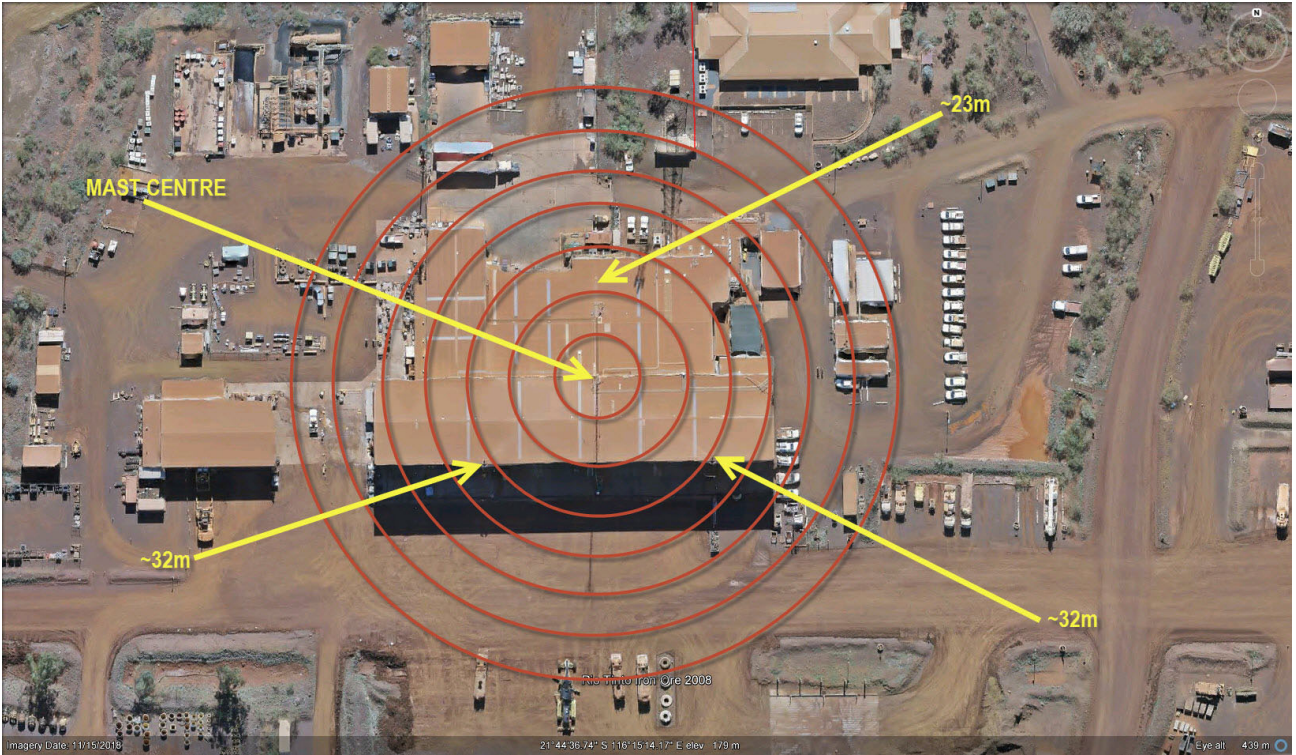


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3.9 Appendix 2 – MESA J HEWS Tower - GA

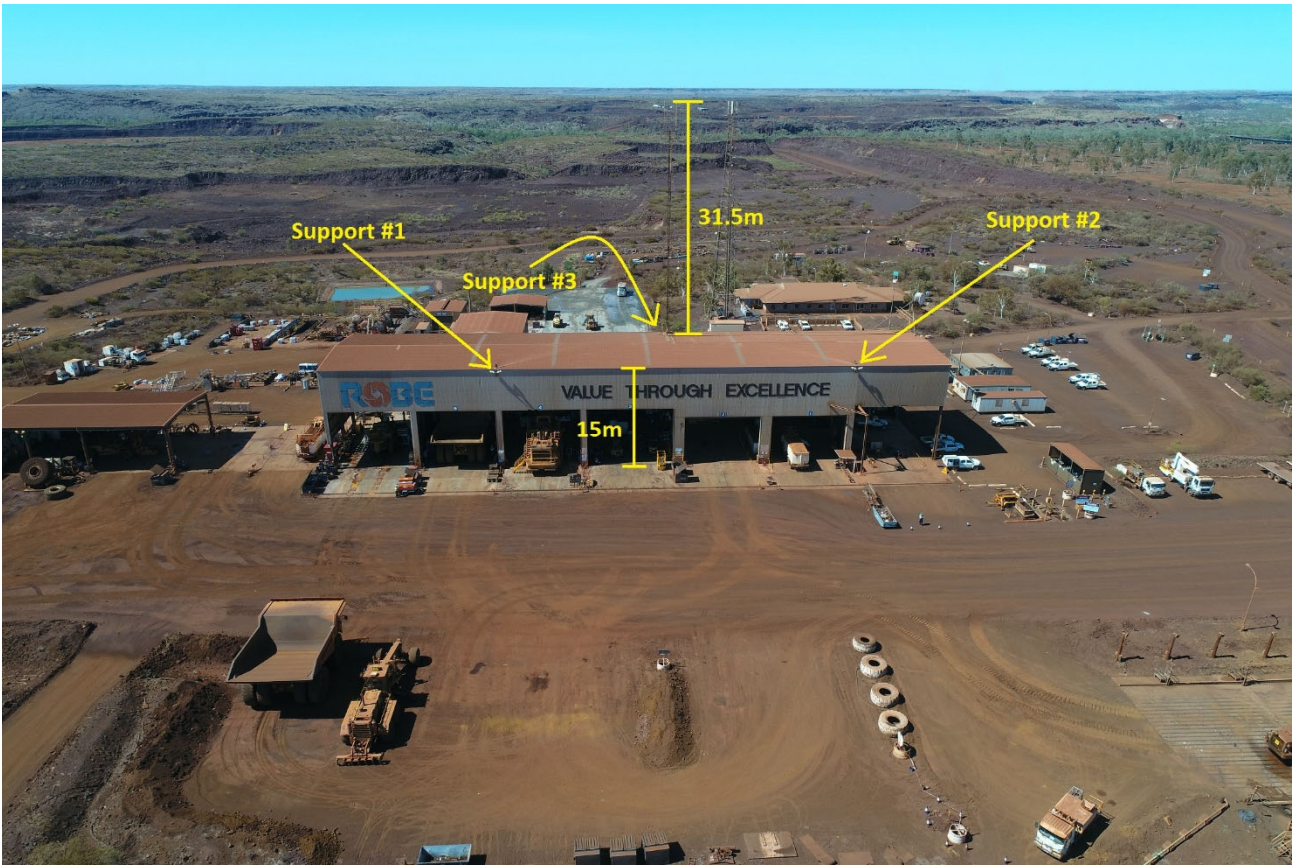


3.10 Appendix 3 – Estimated 10m radius markers around Tower

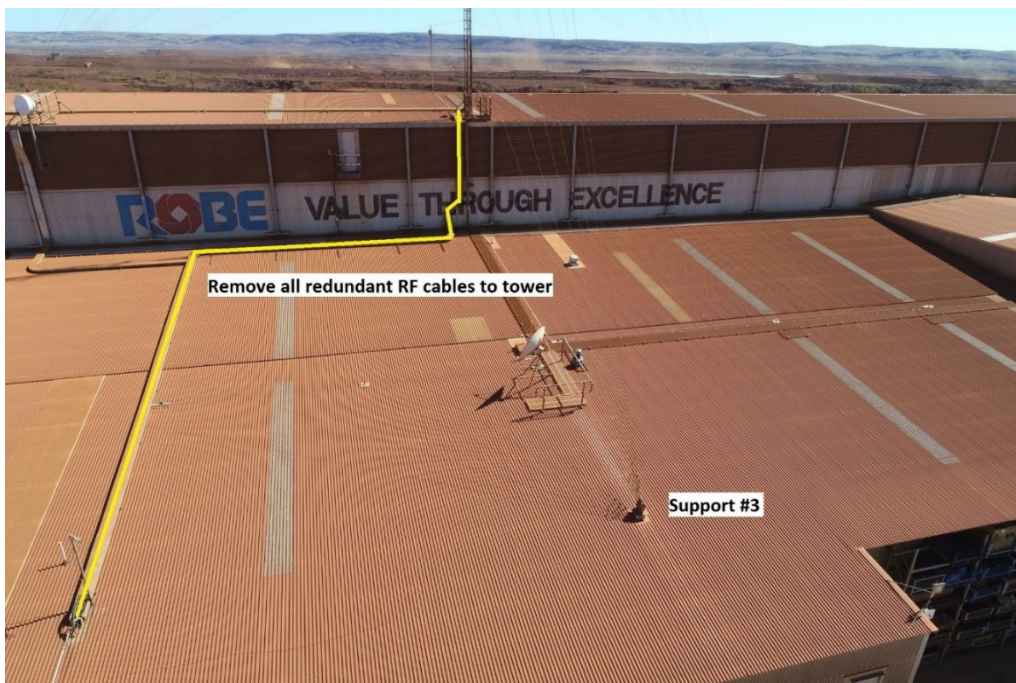


3.11 Appendix 4 – HEWs Height Restrictions





3.12 Appendix 5 – RF Cable Removal



RF cables are to be removed from the roof to the equipment below. It is estimated there is no more than 20m of cables run in past the roof entry point which is accessible. Once cables are removed from roof the contractor is to reseal (water tight) the hole left by removed cables. Photos of sealed entry point to be taken on completion.

3.13 Appendix 6 – Tower Base

