

# Ministers North Works Approval

**Application for a Works Approval  
Supporting Documentation (Including Information  
relating to Attachments 1 to 11)**

**February 2026**



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## 1. Introduction

### 1.1. Background

BHP Iron Ore Pty Ltd (BHP) currently operates a number of Iron Ore mines and associated rail and port infrastructure within the Pilbara region of Western Australia (WA). Current mining operations include the:

- Newman Operations consisting of the:
  - Whaleback hub located approximately two kilometres (km) west of Newman Township and consists of Mount Whaleback, and Orebodies (OB) 29, 30, 35 and Western Ridge); and
  - Eastern Ridge hub located approximately 5 km east of Newman Township and consists of Orebodies 23, 24, 25 and 32;
- Mining Area C / Southern Flank located approximately 90 km north west of Newman Township;
- Jumblebar Operations consisting of Wheelarra Hill (Jumblebar) Mine, Orebody 18 and Orebody 31 are located approximately 35 km east of Newman Township;
- Yandi Mine located approximately 100 km north west of Newman Township; and
- Ministers North located approximately 90 km north west of Newman Township.

Ore from the Newman Operations, Mining Area C, Jumblebar Operations and Yandi mining operations is transported to Port Hedland via the BHP Newman to Port Hedland Mainline (and associated spur lines). Ore is then shipped out through Port Hedland at the BHP facilities at Nelson Point and Finucane Island.

### 1.2. Purpose of this Document

BHP referred the Ministers North Mining Operations to the EPA on 17 of October 2025 as a Derived Proposal under Ministerial Statement 1105 (Pilbara Expansion Strategic Proposal) (**Attachment 5A**).

BHP is seeking a Works Approval to allow for the construction, commissioning and time limited operations (TLO) of the following infrastructure associated with the Ministers North Mining Operations (**Attachment 2A**):

#### Category 5:

- Eastern Front End:
  - 20 mtpa Primary Crushing Facility and discharge conveyor to Scalping Facility;
  - Scalping Screening Facility, conveyors and transfer stations;
  - Secondary Crushing Facility;
  - Two connection points onto existing OLC (CV527) for transfer to Yandi Ore Handling Plant 3 (OHP 3) Coarse Ore Stockpile (COS);
- Minor upgrades to OHP 3 including
  - Dust collector system upgrades;
  - Chute liners assessment and upgrades; and
  - Reclaimer liner upgrade and balancing checks.

#### Category 12:

- 100,000 tpa mobile crushing and screening plant.

#### Other Infrastructure:

- The following infrastructure will also be constructed but does not trigger a Category in Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regs):
  - Biomax C100 WWTP (18,000 L/day);
  - Chemical Storage:
    - Chemical Storage facility (5 kL);
    - Fuel storage (600 kL);
    - Other hydrocarbon storage (60kL);
  - Concrete Batching Plants (all material to be used onsite); and
  - Oily water separator(s) (constructed to achieve a permeability of  $1 \times 10^{-9}$  m/s).

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### 1.3. Premises

The Application Area is on the following tenements:

- Mining Lease 266SA (M266SA)
- Mining Lease 270SA (M270SA)
- Miscellaneous Licence 47/1169 (L47/1169) – pending
- Miscellaneous Licence 47/1228 (L47/1228) – pending

#### 1.3.1. *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*

The proposed works approval application area falls within the boundary of BHP's Commonwealth Strategic Environmental Assessment (SEA). A Validation Notice has been prepared under the Federal SEA and is expected to be in effect by the end of July 2026.

#### 1.3.2. *Environmental Protection Act 1986 (EP Act)*

BHP referred the Ministers North Mining Operations to the EPA on 17 of October 2025 as a Derived Proposal under Ministerial Statement 1105 (Pilbara Expansion Strategic Proposal).

The Application Area overlaps the existing Yandi Mining Operations Ministerial Statements 679 and 1039 and the Yandi Hub Environmental Licence L6168/1991/11 (**Attachment 5B**). Following execution of the works approval an application will be submitted to combine the operational requirements of the Ministers North Works Approval and its associated boundary to the Yandi Hub Environmental Licence L6168/1991/11.

### 1.4. Local Government

The Project is located within the Shire of Ashburton and the Shire of East Pilbara.

### 1.5. Sensitive Receptors

The closest sensitive receptors are (**Attachment 2A**):

- Marillana Creek which runs west to east across the Application Area approximately 700 m south of the Eastern Front End Project Area; and
- Jugari Gorge which is located approximately 1 km east of the Application Area.

Other sensitive receptors include:

- Rio Tinto Yandi Camp approximately 13 km north east of the Application Area.
- Marillana Homestead located approximately 35 km east north east of the Application Area
- Great Northern Highway located approximately 26 km west of the Application Area

### 1.6. Proponent

This Works Approval Application has been submitted by BHP as the manager for BHP Iron Ore (Jimblebar) Pty Ltd (100%) and the Yandi Joint Venture. The split between the partners are:

- BHP Iron Ore (Jimblebar) Pty Ltd 100%
- Yandi Joint Venture:
  - BHP Minerals Pty Ltd 85%
  - Itochu Minerals and Energy Australia Pty Ltd 8%
  - Mitsui Iron Ore Corporation Pty Ltd 7%

## 2. Project Timeframes

The indicative construction, commissioning and TLO timeframes for the Ministers North Project are outlined in Table 1

**Table 1: Project Timeframes**

Category	Infrastructure	Construction Commences	Commissioning Commences <sup>1</sup>	Commissioning Completed	Time Limited Operations Commences
5	New Primary and Secondary Crusher	October 2026	November 2027	February 2028	April 2028
	OHP 3 Upgrades	October 2026	November 2027	February 2028	April 2028
12	Mobile crushing and screening plant for road base	November 2026	N/A	N/A	November 2026

<sup>1</sup> Note that a high level Commissioning Management Plan provided in Attachment 3A is very high level. A more detailed plan is currently being prepared and will be provided to DWER once it is available.

### 3. Existing Environment

#### 3.1. Climate

Newman Aero meteorological site (007176) is the closest Bureau of Meteorology (BoM) station to the Application Area. Average annual rainfall at Newman Aero is 326.8 mm (BOM, 2026a). This is mainly derived from tropical storms and cyclones during summer, producing sporadic, heavy rains over the area. Mean monthly rainfall varies from 45.4 mm in September to 70.2 mm in February (BoM, 2026a). Daily rainfall is highly variable; the highest maximum daily rainfall ranges from 34.8 mm in October, to 305.6 mm in February (BoM, 2026a). The mean maximum temperature in summer months (October to March) is 35.3°C to 39.4°C, and mean maximum temperature in winter (April to September) is between 23.1°C and 32.1°C (BoM, 2026a).

Wittenoom meteorological site (005026) is the closest station to the Application Area that records daily evaporation. Wittenoom is located approximately 120 km north west of the Amendment Application Area. Mean daily evaporation at Wittenoom throughout the year is 8.6 mm/day (BoM, 2023b), which equates to 3.1 metres per year. Evaporation greatly exceeds rainfall in the region throughout the year and on a month-by-month basis (BoM, 2026b).

#### 3.2. Soils and Landform

The Application Area is located in the following land systems, as mapped by van Vreeswyk et al. (2004).

Boolgeeda: “Stony lower slopes, level stony plains and narrow sub-parallel drainage floors, relief up to 20 m. A common system in shallow valleys below hill systems such as Newman and Rocklea.”

McKay: Hills, ridges, plateaux remnants and minor breakaways of sedimentary and meta sedimentary rocks, relief up to 100 m.”

Newman: “Rugged high mountains, ridges and plateaux with near vertical escarpments of jaspilite, chert and shale, the second largest system in the survey area and prominent in southern parts (e.g. Ophthalmia Range, Hamersley Range), relief up to 450 m.”

Robe: “Conspicuous chains of limonite mesas and buttes with steep breakaway faces, source of iron ore as pisolitic limonite, relief up to 50 m.”

Soils of the Pilbara region have been defined and mapped at a scale of 1:2,000,000 by Bettenay et al. (1967). The following soil unit occurs within the Application Area, based on mapping by Bettenay et al. (1967):

Fa13: “Ranges of banded jaspilite and chert along with shales, dolomites, and iron ore formations; some areas of ferruginous duricrust as well as occasional narrow winding valley plains and steeply dissected pediments. This unit is largely associated with the Hamersley and Ophthalmia Ranges. The soils are frequently stony and shallow and there are extensive areas without soil cover: chief soils are shallow stony earthy loams (Um5.51) along with some (Uc5.11) soils on the steeper slopes. Associated are (Dr2.33, Dr2.32) soils on the limited areas of dissected pediments, while (Um5.52) and (Uf6.71) soils occur on the valley plains.”

There is no known risk of acid sulphate soils within the Application Area.

#### 3.3. Surface Water

The Application Area is located in the Pilbara Surface Water Area, proclaimed under the *Rights in Water and Irrigation Act 1914* (RIWI Act) (DoW, 2009a).

One main non-perennial water course, Marillana Creek, and multiple minor non-perennial watercourse cross the Application Area.

#### 3.4. Groundwater

The Application Area is located in the Pilbara Groundwater Area proclaimed under the RIWI Act (DoW, 2009a).

There is one main aquifer within the Application Area, the Hamersley – Fractured Rock Aquifer:

“The Precambrian rocks of the Hamersley Basin are principally volcanics, shales and iron formations. Groundwater is contained within fractures within these rocks. The groundwater level may be deep below the surface, and is generally fresh. The main use of this aquifer is for mining and mine dewatering from iron ore mines. Bores have also been drilled for road and railway construction. There will be increasing dewatering from the fractured rocks around iron ore mines as the pits become deeper” (DoW, 2015a).

### 3.5. Flora and Vegetation

No significant flora species listed under the EPBC Act or the *Biodiversity Conservation Act, 2016* (BC Act) have been identified within the Application Area. Seven Department of Biodiversity Conservation and Attractions (DBCA) Priority listed flora species have been recorded within the Application Area:

- *Acacia bromilowiana* (Priority 4)
- *Aristida lazaridis* (Priority 2)
- *Eremophila naaykensis* (Priority 3)
- *Indigofera gilesii* (Priority 3)
- *Ipomoea racemigera* (Priority 2)
- *Rostellularia adscendens* var. *latifolia* (Priority 3)
- *Sida* sp. Barlee Range (S. van Leeuwen 1642) (Priority 4)

Eighteen Broad Floristic Communities and 46 vegetation associations have been identified within the Application Area (Biologic 2017 and Onshore Environment 2020) (Table 2).

**Table 2: Vegetation associations of the Amendment Application Area**

Broad Floristic Community	Vegetation Association	
Acacia High Shrubland	MA AtpApypAse Ecr ThmbTtCyp	High Shrubland of <i>Acacia tumida</i> var. <i>pilbarensis</i> , <i>Acacia pyrifolia</i> var. <i>pyrifolia</i> and <i>Acacia sericophylla</i> with Scattered Trees of <i>Eucalyptus camaldulensis</i> subsp. <i>refulgens</i> over Open Tussock Grassland of <i>Themeda</i> sp. Mt Barricade (M.E. Trudgen 2471), <i>Themeda triandra</i> and <i>Cymbopogon procerus</i> on brown loam and gravels on major drainage channels.
Acacia Low Open Forest	MA AaAciApr CcTtChf EvEcr	Low Open Forest of <i>Acacia aptaneura</i> , <i>Acacia citrinovirdis</i> and <i>Acacia pruinocarpa</i> very Open Tussock Grassland of * <i>Cenchrus ciliaris</i> , <i>Themeda triandra</i> and <i>Chrysopogon fallax</i> with Open Woodland of <i>Eucalyptus victrix</i> and <i>Eucalyptus camaldulensis</i> subsp. <i>refulgens</i> on brown loamy sand on major drainage lines with broad and deeply incised drainage channels.
	SA Aa TpTwTb CcChf	Low Open Forest of <i>Acacia aptaneura</i> over Open Hummock Grassland of <i>Triodia pungens</i> , <i>Triodia wiseana</i> and <i>Triodia basedowii</i> over Open Tussock Grassland of * <i>Cenchrus ciliaris</i> and <i>Chrysopogon fallax</i> on red brown sandy loam on sandy plains and undulating low hills.
	SP AaApr TmTwTp TtChfAri	Low Open Forest of <i>Acacia aptaneura</i> and <i>Acacia pruinocarpa</i> over Open Hummock Grassland of <i>Triodia melvillei</i> , <i>Triodia wiseana</i> and <i>Triodia pungens</i> over Tussock Grassland of <i>Themeda triandra</i> , <i>Chrysopogon fallax</i> and <i>Aristida inaequiglumis</i> on red brown loam on stony plains.
Acacia Low Woodland	MA AciAcpAthe Tp EteEnl	Low Woodland of <i>Acacia citrinovirdis</i> , <i>Acacia coriacea</i> subsp. <i>pendens</i> and <i>Atalaya hemiglauca</i> with Open Hummock Grassland of <i>Triodia pungens</i> and Open Tussock Grassland of <i>Eriachne tenuiculmis</i> and <i>Enneapogon lindleyanus</i> on brown loam on raised levee banks.
Acacia Open Scrub	GG AtpGrwhGor o ErmuTt Ch	Open scrub of <i>Acacia tumida</i> var. <i>pilbarensis</i> , <i>Grevillea wickhamii</i> subsp. <i>hispidula</i> , <i>Gossypium robinsonii</i> over very open tussock grassland of <i>Eriachne mucronata</i> , <i>Themeda triandra</i> with very open hummock grassland of <i>Triodia pungens</i> and scattered low trees.
	MI AtpPIAm TpTs ChEll	Open Scrub of <i>Acacia tumida</i> var. <i>pilbarensis</i> , <i>Petalostylis labicheoides</i> and <i>Acacia monticola</i> over Open Hummock Grassland of <i>Triodia pungens</i> and <i>Triodia</i> sp. Shovelanna Hill (S.van Leeuwen 3835) with Low Open Woodland of <i>Corymbia hamerselyana</i> and <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> on red brown sandy loam on minor drainage lines.
Acacia Shrubland	MI AbAdAma Tp TtPamuEua	Shrubland of <i>Acacia bivenosa</i> , <i>Acacia dictyophleba</i> and <i>Acacia maitlandii</i> over Open Hummock Grassland of <i>Triodia pungens</i> over Open Tussock Grassland of <i>Themeda triandra</i> , <i>Paraneurachne muelleri</i> and <i>Eulalia aurea</i> on brown sandy loam on minor drainage lines.

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Broad Floristic Community	Vegetation Association	
Corymbia Low Woodland	GG CFell AtpAnl TtErmuCya	Low Woodland of <i>Corymbia ferritcola</i> and <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> over High Open Shrubland of <i>Acacia tumida</i> var. <i>pilbarensis</i> and <i>Androcalva luteiflora</i> over Open Tussock Grassland of <i>Themeda triandra</i> , <i>Eriachne mucronata</i> and <i>Cymbopogon ambiguus</i> on brown silty loam in gorges.
	GG CFellFib AhDovmAsh a CyaErmuTh mb	Low Woodland of <i>Corymbia ferritcola</i> , <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> and <i>Ficus brachypoda</i> over Open Shrubland of <i>Acacia hamersleyensis</i> , <i>Dodonaea viscosa</i> subsp. <i>mucronata</i> and <i>Astrotricha hamptonii</i> over Open Tussock Grassland of <i>Cymbopogon ambiguus</i> , <i>Eriachne mucronata</i> and <i>Themeda</i> sp. Mt Barricade on red brown loam along cliffines and gorge walls
Eriachne Open Tussock Grassland	HC ErmuCyaTt CFell Tw	Open Tussock Grassland of <i>Eriachne mucronata</i> , <i>Cymbopogon ambiguus</i> and <i>Themeda triandra</i> with Low Open Woodland of <i>Corymbia ferritcola</i> and <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> and Very Open Hummock Grassland of <i>Triodia wiseana</i> on brown sandy loam on cliffines.
Eucalyptus Low Open Forest	MA EcrEvEx AypAtpGoro TtEuaCyp	Low Open Forest of <i>Eucalyptus camaldulensis</i> subsp. <i>refulgens</i> , <i>Eucalyptus victrix</i> and <i>Eucalyptus xerothermica</i> over High Shrubland of <i>Acacia pyrifolia</i> var. <i>pyrifolia</i> , <i>Acacia tumida</i> var. <i>pilbarensis</i> and <i>Gossypium robinsonii</i> over Open Tussock Grassland of <i>Themeda triandra</i> , <i>Eulalia aurea</i> and <i>Cymbopogon procerus</i> on red brown clay loam on major drainage lines
Eucalyptus Low Woodland	MA Ev TefcCocrApy TtSoplCya	Low Woodland of <i>Eucalyptus victrix</i> over Low Shrubland of <i>Tephrosia rosea</i> var. <i>Fortescue</i> creeks (M.I.H. Brooker 2186), <i>Corchorus crozophorifolius</i> and <i>Acacia pyrifolia</i> over Open Tussock Grassland of <i>Themeda triandra</i> , <i>Sorghum plumosum</i> and <i>Cymbopogon ambiguus</i> on brown sand on major drainage lines.
Eucalyptus mid open woodland	MA Eco EuaTtSogl AtpGoroCule	Mid open woodland (to mid woodland) of <i>Eucalyptus camaldulensis</i> subsp. <i>obtusa</i> (with occasional <i>Melaleuca argentea</i> ) over high to mid open tussock grassland of <i>Eulalia aurea</i> , <i>Themeda triandra</i> and <i>Sorghum plumosum</i> with high sparse shrubland of <i>Acacia tumida</i> .
Eucalyptus mid to low open woodland	MA EvEcoAcp Mg PldClvPhm	Mid to low open woodland of <i>Eucalyptus victrix</i> , <i>Eucalyptus camaldulensis</i> subsp. <i>obtusa</i> and <i>Acacia coriacea</i> subsp. <i>pendens</i> over high open shrubland of <i>Melaleuca glomerata</i> over low sparse herbland of <i>Pluchea dentex</i> , <i>Cleome viscosa</i> and <i>Phyllanthus maderaspatensis</i> on red/ brown clay loam on major drainage lines.
	MA EcrEv AclAypMg CcEuaTt	Woodland of <i>Eucalyptus camaldulensis</i> subsp. <i>refulgens</i> and <i>Eucalyptus victrix</i> over High Open Shrubland of <i>Acacia citrinoviridis</i> , <i>Acacia pyrifolia</i> var. <i>pyrifolia</i> and <i>Melaleuca glomerata</i> over Tussock Grassland of <i>Cenchrus ciliaris</i> , <i>Eulalia aurea</i> and <i>Themeda triandra</i> on brown clay loam on banks of major drainage lines
	MA EcrEv AcpAtheEv TpTl	Woodland to Open Woodland of <i>Eucalyptus camaldulensis</i> and <i>Eucalyptus victrix</i> over Low Woodland of <i>Acacia coriacea</i> subsp. <i>pendens</i> , <i>Atalaya hemiglauc</i> and <i>Eucalyptus victrix</i> over Open Hummock Grassland of <i>Triodia pungens</i> and <i>Triodia longiceps</i> on brown sand.
Eucalyptus Woodland	MA EvAciEcr TercCocrApy p CcEuaTt	Woodland of <i>Eucalyptus victrix</i> , <i>Acacia citrinoviridis</i> and <i>Eucalyptus camaldulensis</i> subsp. <i>refulgens</i> over Low Open Shrubland of <i>Tephrosia rosea</i> var. <i>clementii</i> , <i>Corchorus crozophorifolius</i> and <i>Acacia pyrifolia</i> var. <i>pyrifolia</i> over Very Open Tussock Grassland.
	FP EuaTtErmu AtpCuleGoro Tefc	Mid tussock grassland of <i>Eulalia aurea</i> , <i>Themeda Triandra</i> and <i>Eriachne mucronata</i> ( <i>Cenchrus ciliaris</i> ) with mid to high shrubland (to open shrubland) of <i>Acacia tumida</i> var. <i>pilbarensis</i> , <i>Cullen leucanthum</i> and <i>Gossypium robinsonii</i> over low scattered shrubs of <i>Tephrosia rosea</i> var. <i>Fortescue</i> Creeks (M.I.H. Brooker 2186) on red/ brown sandy clay loam on drainage area/ floodplains.
Melaleuca High Open Forest	MA MaEcrEv MgAcpAtr Cyv	High Open Forest of <i>Melaleuca argentea</i> , <i>Eucalyptus camaldulensis</i> var. <i>refulgens</i> and <i>Eucalyptus victrix</i> over High Open Shrubland of <i>Melaleuca glomerata</i> , <i>Acacia coriacea</i> subsp. <i>pendens</i> and <i>Acacia trachycarpa</i> over Very Open Sedges of <i>Cyperus vaginatus</i> on alluvial gravelly soils on major drainage channels with seasonal pools.

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Broad Floristic Community	Vegetation Association	
Themeda Open Tussock Grassland	ME TtAriCya ChEil AmPIAnI	Open Tussock Grassland of <i>Themeda triandra</i> , <i>Aristida inaequiglumis</i> and <i>Cymbopogon ambiguus</i> with Low Open Woodland of <i>Corymbia hamersleyana</i> and <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> over Open Shrubland of <i>Acacia monticola</i> , <i>Petalostylis labicheoides</i> and <i>Androcalva luteiflora</i> on red brown alluvium on minor and medium drainage lines
	ME TtCyaEnI Cyv AcpEvCh	Open Tussock Grassland of <i>Themeda triandra</i> , <i>Cymbopogon ambiguus</i> and <i>Enneapogon lindleyanus</i> with Open Sedges of <i>Cyperus vaginatus</i> with Low Open Woodland of <i>Acacia coriacea</i> subsp. <i>pendens</i> , <i>Eucalyptus victrix</i> and <i>Corymbia hamersleyana</i> on brown silty loam on medium drainage lines.
Themeda tussock grassland	GG TtErmuThmb EilChCf AtpGoroPI	Tussock Grassland of <i>Themeda triandra</i> , <i>Eriachne mucronata</i> and <i>Themeda</i> sp. Mt Barricade with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Corymbia hamersleyana</i> and <i>Corymbia ferriticola</i> over High Shrubland of <i>Acacia tumida</i> var. <i>pilbarens</i> , <i>Gossypium robinsonii</i> and <i>Petalostylis labicheoides</i> on red brown sandy loam in narrowly incised rocky drainage lines.
	ME TtEuaEte AypAtpPI EvCh	Tussock Grassland of <i>Themeda triandra</i> , <i>Eriachne tenuiculmis</i> and <i>Cymbopogon ambiguus</i> with High Shrubland of <i>Acacia monticola</i> , <i>Androcalva luteiflora</i> and <i>Santalum lanceolatum</i> and Low Open Woodland of <i>Eucalyptus victrix</i> , <i>Corymbia hamersleyana</i> and <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> in minor drainage lines.
Triodia Hummock Grassland	FP Tp ChHallEv TefcApy	Open Hummock Grassland of <i>Triodia pungens</i> with Low Open Woodland of <i>Corymbia hamersleyana</i> , <i>Hakea lorea</i> subsp. <i>lorea</i> and <i>Eucalyptus victrix</i> over Low Open Shrubland of <i>Tephrosia rosea</i> var. <i>Fortescue</i> creeks (M.I.H. Brooker 2186) and <i>Acacia pyrifolia</i> on brown sandy loam on floodplains and drainage lines.
	FS Ts CdHc AancAiGrwh	Hummock Grassland of <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835) with Low Open Woodland of <i>Corymbia deserticola</i> subsp. <i>deserticola</i> and <i>Hakea chordophylla</i> over Open Shrubland of <i>Acacia ancistrocarpa</i> , <i>Acacia inaequilatera</i> and <i>Grevillea wickhamii</i> subsp. <i>hispidula</i> on red brown sandy loam on footslopes and stony plains
	FS TsTpTw Eil AbApaAanc	Hummock Grassland of <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835), <i>Triodia pungens</i> and <i>Triodia wiseana</i> with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> and Open Shrubland of <i>Acacia bivenosa</i> , <i>Acacia pachyachra</i> and <i>Acacia ancistrocarpa</i> on red brown loam on footslopes and low undulating hills
	FS Tv CdHc AancAiGrwh	Hummock Grassland of <i>Triodia vanleeuwenii</i> with Low Open Woodland of <i>Corymbia deserticola</i> subsp. <i>deserticola</i> and <i>Hakea chordophylla</i> over Open Shrubland of <i>Acacia ancistrocarpa</i> , <i>Acacia inaequilatera</i> and <i>Grevillea wickhamii</i> subsp. <i>hispidula</i>
	FS TvTpTw Eil AbApaAanc	Hummock Grassland of <i>Triodia vanleeuwenii</i> , <i>Triodia pungens</i> and <i>Triodia wiseana</i> with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> and Open Shrubland of <i>Acacia bivenosa</i> , <i>Acacia pachyachra</i> and <i>Acacia ancistrocarpa</i> .
	FS Tw Eil	Hummock Grassland of <i>Triodia wiseana</i> with Scattered Low Trees of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> on red silty clay on hill slopes and footslopes
	HC TsTw Eil Grwh	Hummock Grassland of <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835) and <i>Triodia wiseana</i> with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> and High Open Shrubland of <i>Grevillea wickhamii</i> subsp. <i>hispidula</i> on brown sandy loam on hillcrests.
	HC Tw AiAb InrSeao	Hummock Grassland of <i>Triodia wiseana</i> with High Open Shrubland of <i>Acacia inaequilatera</i> and <i>Acacia bivenosa</i> over Low Open Shrubland of <i>Indigofera rugosa</i> and <i>Senna artemisioides</i> subsp. <i>oligophylla</i> on red silty loam on dolerite hill crests
	HC TwTbrTp EilCh AmaGrwhAb	Hummock Grassland of <i>Triodia wiseana</i> , <i>Triodia brizoides</i> and <i>Triodia pungens</i> with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> and <i>Corymbia hamersleyana</i> over High Open Shrubland of <i>Acacia maltandii</i> , <i>Grevillea wickhamii</i> subsp. <i>hispidula</i> and <i>Acacia bivenosa</i> on red brown sandy loam on hill crests and upper hill slopes

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Broad Floristic Community	Vegetation Association	
	HC TwTsTp EIICh Ah	Hummock Grassland of <i>Triodia wiseana</i> , <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835) and <i>Triodia pungens</i> with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> and <i>Corymbia hamersleyana</i> over Open Shrubland of <i>Acacia hamersleyensis</i> on red brown clay loam on hill crests and upper hill slopes
	HS TeTw Ch AIAan	Hummock Grassland of <i>Triodia epactia</i> and <i>Triodia wiseana</i> with Low Open Woodland of <i>Corymbia hamersleyana</i> over High Open Shrubland of <i>Acacia inaequilatera</i> and <i>Acacia ancistrocarpa</i> on red brown sandy loam on granite and quartz hill slopes and footslopes.
	HS TsTwTp EIICh AhiAaa	Hummock Grassland of <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835), <i>Triodia wiseana</i> and <i>Triodia pungens</i> with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> and <i>Corymbia hamersleyana</i> over Low Open Shrubland of <i>Acacia hilliana</i> and <i>Acacia adoxa</i> var. <i>adoxo</i> on red brown sandy loam on hill slopes
	HS Tv EIIcd AhiAaa	Hummock Grassland of <i>Triodia vanleeuwenii</i> (+/- <i>Triodia wiseana</i> ) with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> and <i>Corymbia deserticola</i> subsp. <i>deserticola</i> over Low Open Shrubland of <i>Acacia hilliana</i> and <i>Acacia adoxa</i> var. <i>adoxo</i> .
	HS TvTwTp EIICh AhiAaa	Hummock Grassland of <i>Triodia vanleeuwenii</i> , <i>Triodia wiseana</i> and <i>Triodia pungens</i> with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> and <i>Corymbia hamersleyana</i> over Low Open Shrubland of <i>Acacia hilliana</i> .
	HS TwTbr AI Inr	Hummock Grassland of <i>Triodia wiseana</i> and <i>Triodia brizoides</i> with High Open Shrubland of <i>Acacia inaequilatera</i> and Low Open Shrubland of <i>Indigofera rugosa</i> on brown sandy loam on dolerite hillslopes.
	HS TwTbrTs EIIExCh PtcPtasAhi	Hummock Grassland of <i>Triodia wiseana</i> , <i>Triodia brizoides</i> and <i>Triodia</i> sp. Shovelanna Hill with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Eucalyptus xerothermica</i> and <i>Corymbia hamersleyana</i> over Low Open Shrubland of <i>Ptilotus calostachyus</i> , <i>Ptilotus astrolasius</i> and <i>Acacia hilliana</i> on brown loam on hill crests and upper hill slopes
	HS TwTpTs EII AprAaAanc	Hummock Grassland of <i>Triodia wiseana</i> , <i>Triodia pungens</i> and <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835) with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> over Open Shrubland of <i>Acacia pruinocarpa</i> , <i>Acacia aptaneura</i> and <i>Acacia ancistrocarpa</i> on red brown loam on plains and low hills
	ME TpTlo ExAciCh PIApyGoro	Hummock Grassland of <i>Triodia pungens</i> and <i>Triodia longiceps</i> with Low Woodland of <i>Eucalyptus xerothermica</i> , <i>Acacia citrinoviridis</i> and <i>Corymbia hamersleyana</i> over High Shrubland of <i>Petalostylis labicheoides</i> , <i>Acacia pyrifolia</i> var. <i>pyrifolia</i> and <i>Gossypium robinsonii</i> on red brown clay loam on medium drainage lines and surrounding floodplains
	SP TbTp HIAancAi Ch	Hummock Grassland of <i>Triodia basedowii</i> and <i>Triodia pungens</i> with High Open Shrubland of <i>Hakea lorea</i> subsp. <i>lorea</i> , <i>Acacia ancistrocarpa</i> and <i>Acacia inaequilatera</i> and Scattered Low Trees of <i>Corymbia hamersleyana</i> on red brown loamy sand on stony plains.
Triodia Open Hummock Grassland	FS Ts EIICh Hc	Open hummock grassland of <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835) with low open woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Corymbia hamersleyana</i> over scattered tall shrubs of <i>Hakea chordophylla</i> over low open shrubland of <i>Acacia hilliana</i> on dark reddish brown sandy clay loam on footslopes.
	HS TsTw EII Ab	Open hummock grassland of <i>Triodia</i> sp. Shovelanna hill (S. van Leeuwen 3835), <i>T. wiseana</i> with low open woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> over open shrubland of <i>Acacia bivenosa</i> on dark reddish brown sandy clay loam on lower hill slopes.
	HS Tw EII Ab	Open hummock grassland of <i>Triodia wiseana</i> with scattered low trees of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> over scattered shrubs of <i>Acacia bivenosa</i> on dark reddish brown sandy clay loam on steep hill slopes.

None of these vegetation associations are representative or associated with a Threatened Ecological Community (TEC) listed under the EPBC Act or an Environmentally Sensitive Area under the EP Act or a Priority Ecological Community (PEC) listed by the DCBA. Vegetation condition ranges from Excellent to disturbed. Any vegetation disturbance will be undertaken in accordance with the Ministers North Derived Proposal under MS 1105 following approval by the Minister for the Environment.

### 3.6. Vertebrate Fauna

Astron (2023) Biologic (2017 and 2022) and GHD (2021) identified the following twelve fauna habitat types occur within the Amendment Application Area:

- **Boulders/ Rockpiles:** This habitat occurs where the surrounding material has eroded, exposing boulders. Boulder piles provide excellent crevices and cracks for fauna to inhabit. Vegetation is sparse through these areas due to the lack of soil availability. They are almost always surrounded by sand plains.
- **Breakaway / Cliff:** Breakaways/Climbs are rugged, incised rocky hills and ranges. They tend to contain large rock fragments and more rock outcropping than other fauna habitats. Significant habitat features such as caves were sometimes encountered in this habitat type. Vegetation can be dense and complex in areas of soil deposition or sparse and simple where erosion has occurred.
- **Drainage Area / Floodplain:** Lower lying plain often subjected to sheet flow following large rainfall events. Vegetation of this habitat was variable, often comprising scattered *Eucalyptus* over *Acacia* and/or *Grevillea* shrubs with an understory dominated by *Triodia* hummock grasses on alluvial substrates, often comprising heavy clays and gravel.
- **Gorge / Gully:** Gorges/ Gully habitat comprises rugged, sometimes steep-sided rocky valleys incised into the surrounding landscape forming shallow gullies and gorges. Gorges tend to be deeply incised, with vertical cliff faces, while gullies are shallower and more open. Caves and water bodies were most often encountered in this habitat type. Vegetation within this habitat is variable depending on position in landscape and can be dense and complex in areas of soil deposition or sparse and simple where erosion has occurred.
- **Hill Crest / Hill Slope:** This habitat comprises hills and undulating plains on the tops of ranges, supporting hard spinifex with a mantle of gravel and pebbles. Vegetation was dominated by a *Triodia* hummock grassland with scattered *Eucalyptus* trees and mallee and *Acacia* and *Grevillea* shrubs. The primary microhabitat is the spinifex hummocks. This habitat was differentiated from the remaining habitat types by limited rocky outcropping and vegetation diversity.
- **Major Drainage Line:** Major Drainage Lines comprise mature River Red Gums, Coolibahs and stands of Silver Cadjeput over river pools. Open, sandy or gravelly riverbeds characterise this habitat type. In ungrazed areas, the vegetation adjacent to the main channel or channels is denser, taller and more diverse than adjacent terrain and can include reedbeds around pools
- **Minor Drainage Line:** Minor Drainage Line comprises low lying or sloping topography, particularly in Hillcrest/ Hillslope landforms where water flowing from higher to lower elevation follows existing sloping topography. Vegetation is often variable and dependent on the occurrence of water within the drainage line. Vegetation often sparsely vegetated with scattered *Corymbia* and/or *Eucalyptus* over a mixed small or medium shrub understory and patchy cover of hummock and/or tussock grasses on stony or gravelly substrates.
- **Mulga woodland:** Low lying areas on heavy alluvial soils, often heavy clays. Vegetation very patchy, dominated by open Mulga patches with sparse to no understory of mixed small shrubs and tussock grasses. Mulga woodland of varying density, often associated with minor Drainage Area/ Floodplain landforms or minor drainage systems subject to sheet flow following rainfall.
- **Sand Plain:** Sand Plain habitat is characterised by relatively deep sandy soils supporting dense spinifex grasslands and sparse shrubs. This habitat transitions into patches of Mulga in places. This habitat often occurs as terraces along Major Drainage Lines
- **Sandy/Stony Plain:** These are predominantly stony plains with localised depositions of sand.
- **Stony Plain:** Stony Plain habitat comprises flat to low undulating areas with vegetation dominated by *Triodia* hummock grasses of various life stages and scattered patches of various small to medium shrub species on gravelly clay loam substrates. A Turkey's nest is located in this habitat.
- **Undulating Low Hills:** The Undulating Low Hills habitat comprises low hills and undulating stony plains of higher elevation than Stony Plain. The habitat supports hard spinifex with a mantle of gravel and larger rocks with occasional outcropping or minor breakaway. Vegetation is dominated by hard *Triodia* hummock grasslands with scattered *Eucalyptus* trees and *Acacia*, *Eremophila* and/or *Grevillea* shrubs.

Ten caves and 12 water features / waterholes have been identified within the Application Area. Potential impacts to these habitat features will be managed in accordance with the Ministers North Derived Proposal under MS 1105 following approval by the Minister for the Environment.

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Three significant fauna species have been recorded within the Application Area:

- Ghost Bat (*Macroderma gigas*) (EPBC Act and BC Act Vulnerable);
- Peregrine Falcon (*Falco peregrinus*) (BC Act Other Specially Protected Fauna); and
- Western Pebble-mound Mouse (*Pseudomys chapmani*) (Priority 4, DBCA).

Any potential impacts to these species will be undertaken in accordance with the Ministers North Derived Proposal under MS 1105 following approval by the Minister for the Environment.

### 3.7. Air Quality

Dust is expected to be generated during clearing / earthworks activities associated with the proposed infrastructure and the operation of the processing infrastructure. Dust emissions from clearing activities is typically associated with machinery movements and is generally not long term; however the resulting unsealed exposed surfaces may be subject to wind erosion.

The proposed new Eastern Front End crusher will replace the existing crusher at Yandi and tie into the existing OHP3 facility (**Attachment 2A**).

The Eastern Front End crusher is not expected to have any impacts to air quality given the dust mitigation measures to be installed at the Eastern Front end, the isolated nature of the Project and the lack of sensitive receptors.

The 100,000 tpa crushing and screening plant will operate along the length of the Works Approval Application Area, predominantly within or adjacent to the Project's borrow pits (**Attachment 2A**).

The mobile crushing and screening plant is not expected to have any impacts to air quality given the isolated nature of the Project, its short term nature and the lack of sensitive receptors.

BHP will manage dust emissions in accordance with the Ministers North Derived Proposal under MS 1105 following approval by the Minister for the Environment

### 3.8. Noise

The proposed new Eastern Front End crusher is located in an active mining area and will replace an existing crushing facility (**Attachment 2A**).

The 100,000 tpa crushing and screening plant will operate along the length of the Works Approval Application Area, predominantly within or adjacent to the Project's borrow pits (**Attachment 2A**).

Construction activities are expected to generate minor increases in noise, however these are not expected to elevate levels above those already experienced in the Region given the works will occur either in an active mining / processing area or in areas with no sensitive receptors along the new haul road to Ministers North.

### 3.9. Contaminated Sites

There are seven contaminated sites within the Application Area. They are all restricted to the northern end of the Application Area and are associated with hydrocarbon and Fire Training activities at the Yandi Mining Operations.

## 4. Environmental Management

### 4.1. Corporate Level Plans and Procedures

The management of the environmental aspects of BHP's operations for the Prescribed Premises are managed under the company's AS/NZS ISO 14001 certified Environmental Management System (EMS). The EMS describes the organisational structure, responsibilities, practices, processes and resources for implementing and maintaining environmental objectives at all BHP sites.

Additionally, operational controls for environmental management for the Prescribed Premises are guided by BHP's Charter values. The Charter Values outline a commitment to develop, implement and maintain management systems for sustainable development that drive continual improvement and set and achieve targets that promote efficient use of resources. In order to give effect to the Charter Values, a series of "Global Documents" have been developed.

BHP has also developed a Sustainable Development Policy for its Iron Ore operations. The Sustainable Development Policy outlines a commitment to setting objective and targets to achieve sustainable outcomes and to continually improve our performance.

To support these documents BHP has an internal Project Environmental and Aboriginal Heritage Review (PEAHR) system for its Iron Ore operations. The purpose of the system is to manage implementation of environmental, Aboriginal heritage, land tenure and legal commitments prior to and during land disturbance. All ground disturbance activities will meet the requirements of the PEAHR system.

## 5. Category 5 Infrastructure – Environmental Impact Assessment and Associated Management Strategies

BHP has assessed the potential emissions and discharges associated with the infrastructure associated with Category 5. The following Section outlines the following:

- Proposed infrastructure to be constructed;
- Potential discharges / emissions and associated potential impacts to sensitive receptors; and
- Management measures and associated residual risk ranking (in accordance with Guidance Statement: Risk Assessments (DER, 2016).

### 5.1. Category 5 Infrastructure to be Constructed

The new ore processing infrastructure (**Attachment 2A** and **Attachment 2B [Drawing 1200-M-15960\_E]**) will be capable of processing up to 20 mtpa of ore and will consist of the following infrastructure:

- Eastern Front End (**Attachment 2C [Drawing 1200-P-00195\_J]**):
  - 20 mtpa Primary Crushing Facility and discharge conveyor to Scalping Facility;
  - Scalping Screening Facility, conveyors and transfer stations;
  - Secondary Crushing Facility;
  - Two connection points onto existing OLC (CV527) for transfer to Yandi Ore Handling Plant 3 (OHP 3) Coarse Ore Stockpile (COS);
- Minor upgrades to OHP 3 including:
  - Dust collector system upgrades;
  - Chute liners assessment and upgrades; and
  - Reclaimer liner upgrade and balancing checks.

Despite the increase in Primary crusher size there will be no overall increase to the licenced production limit for the Yandi Prescribed Premises following completion of construction of the above facilities.

### 5.2. Eastern Front End

#### 5.2.1. 20 mtpa Primary Crushing Facility and discharge conveyor to Scalping Facility

The existing 15 mtpa primary crusher adjacent to OHP 3 (**Attachment 2A**) is currently designed to process channel iron deposit (CID) iron ore and needs to be replaced to enable the facility to process Brockman ore from Ministers North.

The replacement of the 15 mtpa primary crusher will involve the installation of the following new infrastructure (**Attachments 2C to 2E [Drawings 1200-P-00195\_J, 1200-M-15954\_B and 1200-M-15955\_B]**):

- A vibrating grizzly VS1000.
- A primary jaw crusher CR1000 (Metso C200) and associated equipment inclusive of cover/cage for containment of ejected material.
- A primary crusher rock breaker RB1000.
- A primary crusher discharge conveyor CV1001 with belt weigher BW1001, belt profile scanner CV1001-CBS001, material sizing scanner AR1001, magnet MA1001, metal detector MD1001 and 2-off bulk ore conditioning (BOC) spray stations OC1001A&B.
- CV1001 belt splicing and belt reeling facilities.
- New drive-in sump and sump pump PU1001 at the primary crusher

The following existing facilities will be reused:

- ROM bin BN511 and ROM bin deluge system OC511.
- Apron feeder AF511 (including spillage conveyor CV525).
- Sedimentation pond 6a east of CV527.

Feed ore for the 20 mtpa primary crusher will be transported from Ministers North via haul trucks, where it will be fed into the system from the existing ROM pad into ROM bin BN511. Ore will then be transported along Apron Feeder AF511 to the vibrating grizzly VS1000 and then the primary jaw crusher CR1000, with the primary rock breaker RB1000 used to break any oversize particles before material enters the primary jaw crusher. Crushed ore will then travel on primary crusher discharge conveyor CV1001 (fitted with belt weigher BW1001, belt profile scanner CV1001-CBS001, material sizing scanner AR1001, magnet MA1001, metal detector MD1001 and 2-off bulk ore conditioning (BOC) spray stations OC1001A&B) to the Crushed Ore Scalping Building (**Attachments 2C to 2E [Drawings 1200-P-00195\_J, 1200-M-15954\_B and 1200-M-15955\_B]**).

### 5.2.2. Scalping Screening Facility, conveyors and transfer stations

The Scalping Screening Facility, conveyors and transfer stations will involve the installation of the following new infrastructure (**Attachment 2C [Drawing 1200-P-00195\_J]**):

- Crushed ore vibrating scalping screen VS1002 in building BG1002, including oversize and undersize chutes.
- Scalping screen undersize conveyor CV1002 with one off BOC spray station OC1002.
- Scalping screen oversize conveyor CV1003.
- Transfer station TS1002 for transfer of undersize ore from CV1002 onto existing conveyor CV527 at a new tie-in point.
- Transfer station TS1003 for transfer of oversize ore from CV1003 onto secondary crusher bin feed conveyor CV1004.
- CV1002, CV1003 and CV1004 belt splicing and belt reeling facilities.
- Drive-in sumps and sump pumps PU1002, PU1002A and PU1003 at the scalping screen building BG1002, TS1002 and TS1003 respectively.
- A new sedimentation pond to the west of the facility.

Ore from the primary crusher discharge conveyor CV1001 will enter the Crushed Ore Scalping Facility (BG1002) and be fed into the crushed ore vibrating scalping screen VS1002, which will screen the ore into:

- oversize material requiring secondary crushing; and
- undersize material which can be feed to OHP 3.

Oversize material will be transported to the secondary crusher via Conveyor CV1003, through Transfer Station TS1003 and Conveyor CV1004.

Undersize material will be fed to OHP 3 via conveyor CV1002 to existing conveyor CV527.

To prevent sediment run off from the facilities three drive-in sumps (and associated pumps) will be installed at the scalping screen building BG1002, TS1002 and TS1003. A new slurry pond will also be established to the west (**Attachment 2B [Drawing 1200-M-15960\_E]**).

### 5.2.3. Secondary Crushing Facility

The Secondary Crushing Facility will involve the installation of the following new infrastructure (**Attachment 2C [Drawing 1200-P-00195\_J]**):

- Secondary crusher bin feed conveyor CV1004.
- Secondary crusher feed bin BN1005 complete with bin level sensors and isolation gate GA1005.
- Secondary crusher vibratory feeder VF1005.
- Secondary crusher feed conveyor CV1005 with metal detector MD1005.
- Secondary cone crusher (Metso HP900) CR1005 and associated equipment.
- CV1005 belt splicing and belt reeling facilities.
- Drive-in sump and sump pump PU10005.
- A new slurry pond (**Attachment 2B [Drawing 1200-M-15960\_E]**).

Oversize ore from the Scalping Screening facility will be transported to the Secondary Crusher via CV1004 and be fed the secondary crusher feed bin BN1005. Material will then through to the secondary crusher vibratory feeder VF1005, onto conveyor CV1005 and into the secondary cone crusher (Metso HP900) CR1005. Crushed ore will then be fed to existing conveyor CV527 (**Attachments 2F to 2G [Drawings 1200-M-15963\_B and 1200-M-15964\_B]**).

To prevent sediment run off from the facilities one drive-in sumps (and associated pump) will be installed at the Secondary Crusher building. A new slurry pond will also be established to the west (**Attachment 2B [Drawing 1200-M-15960\_E]**).

### 5.2.4. Existing OLC (CV527) Connection Points to OHP 3

The following works are required to integrate the new facilities to the existing conveyor system (**Attachment 2C [Drawing 1200-P-00195\_J]**):

- Modifications to CV527 at the new load points in TS1002 and BG1005, including replacement of loading modules complete with impact idlers, skirts and dust hoods.
- Replacement of the existing moisture analyser MN527 with a new moisture analyser MN527A downstream of BG1005 load point.

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- Six new bulk ore conditioning (BOC) spray stations OC527A to OC527F, two of them downstream of TS1002 load point, two downstream of moisture analyser MN527A and the remaining two further downstream on CV527.
- Two new belt weighers located immediately downstream of TS1002 load point (BW527A) and BG1005 load point (BW527B) (note that the existing low level conveyor module will be replaced with a belt weigher module).

Existing conveyor CV527 will receive crushed ore via transfer station TS1002 and the secondary crushing building BG1005.

### 5.3. Minor upgrades to OHP 3

#### 5.3.1. Dust collector system upgrades

The following minor modifications will be made the OHP 3 Chute liners downstream of CV527 (**Attachment 2H [Drawing 1200-P-00196\_H]**):

- Refurbishment of existing Dust Collectors DC580, DC590 and DC600.

#### 5.3.2. OHP 3 Chute liners assessment and upgrades

The following minor modifications will be made the OHP 3 Chute liners downstream of CV527 (**Attachment 2H [Drawing 1200-P-00196\_H]**):

- Impact plate change for:
  - Feed Conveyor CV530, CV531 and CV532 CV533
- Replacement of the head chute impact plate CV530
- New chute for Transfer Station CH533
- Screen deck changeout for Scalping Screen VS582 to VS584
- New billet liners for the:
  - Oversize chutes CH582D to CH584D and CH603D to CH606D
  - Middlings chute CH582E to CH584E
  - Crusher discharge chutes CH591C to CH595C
  - Transfer Station CH533
- New liners for:
  - Belt feeders BF591 to BF595
  - Head chutes CH591A to CH595A
- Changeout of crusher liner for Crushers CR591 to CR595
- Changeout of screen deck for Product Screens VS603 to VS606

#### 5.3.3. Reclaimer liner upgrade and balancing checks

The following minor modifications will be made the OHP 3 reclaimer (**Attachment 2H [Drawing 1200-P-00196\_H]**):

- New liners on impact plate and head chute for Fines Conveyor CV534.
- Liner upgrades for buckets, centre chute and slide chute for Reclaimer RC640.
- New impact plate for the Reclaim Yard Conveyor CV538.
- New chute liners for:
  - Transfer Station TS538 (CH539 and CH540)
  - Train loadout Stacker Conveyor CV539 and CV540

### 5.4. Potential Discharges / Emissions and Impacts Associated with the Category 5 Infrastructure

A review of the above infrastructure has been determined that the following potential impacts are relevant to this application:

- Increase in dust emissions (Construction, Commissioning and TLO).
- Increase in noise emissions (Construction, Commissioning and TLO).
- Runoff of hydrocarbon contaminated / sediment laden water (Commissioning and TLO).

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**Tables 3, 4 and 5** outline a description of each potential discharge/emission, the potential impacts, sensitive receptors, management measures, and residual risk ranking for each project phase (Construction, Commissioning and TLO / Operation).

The following other potential impacts associated with the construction of Category 5 infrastructure have been determined to have a Low Risk (Slight, Unlikely):

- Clearing of vegetation: Impacts associated with clearing of native vegetation have been assessed and recommended for approval under Ministerial Statement 1105 – Ministers North Derived Proposal; and
- Disturbance of significant fauna: Impacts on significant fauna have been assessed and recommended for approval under Ministerial Statement 1105 – Ministers North Derived Proposal.

**Table 3: Construction of the Eastern Front End and Minor Upgrades to Ore OHP 3 Infrastructure Environmental Impact Assessment and Associated Management Strategies**

Risk Event					Management Measures	Residual Risk Ranking (Consequence / Likelihood)	
Sources / Activities	Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts			
<b>Category 5</b> Processing or beneficiation of metallic or non-metallic ore	Construction of the ore processing facilities	Dust	Rio Tinto Yandi Camp approximately 13 km north east. Marillana Homestead located approximately 35 km east north east Great Northern Highway located approximately 26 km west	Air / wind dispersion	Impact on amenity — visible dust leaving the Application Area.  Impact on air quality (PM <sub>10</sub> and PM <sub>2.5</sub> ) at Rio Tinto Yandi Camp and Marillana homestead	Localised dust is likely to be generated during site preparation to allow for the construction of the infrastructure associated with the Eastern Front End and OHP 3 upgrades. Dust will be managed by: <ul style="list-style-type: none"> <li>• Minimising the disturbance footprint; and</li> <li>• Using water carts to control dust from exposed areas.</li> </ul>	<b>Low (Minor, Rare)</b> The separation distances between the construction footprint and the potential sensitive receptors, combined with the proposed dust management measures and the relatively short term nature of the construction activities mean that it is very unlikely that dust generated during construction will impact on the regional airshed.
		Noise	Rio Tinto Yandi Camp approximately 13 km north east. Marillana Homestead located approximately 35 km east north east Great Northern Highway located approximately 26 km west	Air / wind dispersion	Impact on amenity at Rio Tinto Yandi Camp and Marillana homestead		

**Table 4: Commissioning of the Eastern Front End and Minor Upgrades to OHP 3 Ore Processing Infrastructure Environmental Impact Assessment and Associated Management Strategies**

Risk Event					Management Measures	Residual Risk Ranking (Consequence / Likelihood)	
Sources / Activities	Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts			
<b>Category 5</b> Processing or beneficiation of metallic or non-metallic ore	Commissioning of the ore processing facilities	Dust	Rio Tinto Yandi Camp approximately 13 km north east. Marillana Homestead located approximately 35 km east north east Great Northern Highway located approximately 26 km west	Air / wind dispersion	Impact on amenity — visible dust leaving the Application Area.  Impact on air quality (PM <sub>10</sub> and PM <sub>2.5</sub> ) at Rio Tinto Yandi Camp and Marillana homestead	The infrastructure to be constructed at the Eastern Front End and the associated minor upgrades at OHP 3 will not increase the overall site throughput and are instead a replacement / upgrade to allow for the processing of a different ore type (Brockman ore substituted for CID). <b>20 mtpa Primary and Secondary Crusher</b> The following dust suppression measures will be installed to minimise dust generation from the facility: <ul style="list-style-type: none"> <li>Deluge and BOC Sprays will be installed to condition ore and minimise dust generation through the processing circuit (<b>Attachment 2C [Drawing 1200-P-00195_J]</b>).</li> <li>Seals to contain dust and prevent spreading of dust to environment, i.e. seals on chute hatches, gaps in crushers.</li> </ul> <b>OHP 3 Upgrades</b> <ul style="list-style-type: none"> <li>Deluge and BOC Sprays will be recommissioned to condition ore and minimise dust generation through the processing circuit (<b>Attachment 2H [Drawing 1200-P-00196_H]</b>).</li> <li>Seals to contain dust and prevent spreading of dust to environment will be reinstated, i.e. seals on chute hatches, gaps in crushers and screens.</li> <li>Dust extraction systems will be recommissioned.</li> </ul> <b>Conveyor System, Transfer and Sample Stations</b> The following material handing designs implemented to mitigate noise impacts will also reduce dust emissions: <ul style="list-style-type: none"> <li>Enclosed transfer chutes.</li> <li>Narrow loading boots with dust shrouds to minimise air flow up and out a transfer point.</li> <li>Reduced height of transfer points and speed of falling ore (reducing concertina effect reduces dust).</li> </ul>	<b>Low (Slight, Possible)</b> The 13 km separation distance between the Rio Tinto Yandi Camp and the new Primary Crusher, combined with the proposed dust management measures mean that while it is possible for dust generated at the facility to impact on the regional airshed the overall impact will be slight.
		Noise	Rio Tinto Yandi Camp approximately 13 km north east. Marillana Homestead located approximately 35 km east north east Great Northern Highway located approximately 26 km west	Air / wind dispersion	Impact on amenity at Rio Tinto Yandi Camp, Marillana homestead and Great Northern Highway.	<b>20 mtpa Primary and Secondary Crusher, Conveyor System and Transfer Stations</b> The following sound material handing designs will be implemented to minimise noise from the facility: <ul style="list-style-type: none"> <li>Enclosed transfer chutes.</li> <li>Reduced height of transfer points and speed of falling ore (reducing impact force reduces noise).</li> </ul>	<b>Low (Slight, Unlikely)</b> The 13 km separation distance between the Rio Tinto Yandi Camp and the new Primary Crusher, combined with the proposed noise management measures mean that it is unlikely for noise generated at the facility to impact the potential sensitive receptors.
		Discharge to land/surfaces water from contaminated stormwater and material and hydrocarbon spills	Soil Vegetation Surface water Groundwater	Spills and/or stormwater containing sediments and/or hydrocarbons	Contamination of soil Impacts to vegetation health and viability.	The following measures will be implemented to manage the risk of hydrocarbons and sediment from entering the surrounding environment: <ol style="list-style-type: none"> <li>Four drive sumps constructed to achieve an impermeability of 1 x 10<sup>-9</sup> m/s will be installed at the following locations (<b>Attachment 2C [Drawing 1200-P-00195_J]</b>):                             <ul style="list-style-type: none"> <li>1x sump at the 20 mtpa crushing facility PU1001</li> <li>3 x sumps at the Scalping Screening Facility PU1002, PU1002A and PU1003</li> </ul> </li> <li>Wastewater will be discharged to the slurry pond, which will be constructed to achieve an impermeability of 1 x 10<sup>-9</sup> m/s (<b>Attachment 2B Reference drawing: 1200-M-15960_E.pdf</b>).</li> <li>Regular inspections and maintenance will be undertaken on the sumps and slurry ponds to ensure they are operating as designed.                             <ul style="list-style-type: none"> <li>Drip trays below any gearboxes, motors, hydraulic power units, lubrication skids, filters etc.</li> <li>Hydrocarbons present include hydraulic fluids, lubricants, greases and transformer oil (KNAN).</li> <li>The Primary Crusher Building is concrete bunded.</li> <li>All drainage from the earthworks pads will flow through sedimentation ponds, designed to slow the flow and encourage sediment to settle out.</li> </ul> </li> </ol>	<b>Low (Slight, Possible)</b> The proposed hydrocarbon and sedimentation / runoff management measures mean that these potential emissions should be contained on the site where they can be cleaned up.  Surface water drainage systems are separated from potential contaminants with the largest potential source of emission (the new primary crusher) located more than 700 m north of the Marillana Creek.  Depth to groundwater is more than 25 mbgl and is therefore unlikely to be impacted, even in the event of a discharge, given the management measures and groundwater depth.

**Table 5: Time Limited Operations / Operation of the Eastern Front End and Minor Upgrades to OHP 3 Ore Processing Infrastructure Environmental Impact Assessment and Associated Management Strategies**

Risk Event					Management Measures	Residual Risk Ranking (Consequence / Likelihood)	
Sources / Activities	Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts			
Category 5 Processing or beneficiation of metallic or non-metallic ore	Commissioning of the ore processing facilities	Dust	Rio Tinto Yandi Camp approximately 13 km north east. Marillana Homestead located approximately 35 km east north east Great Northern Highway located approximately 26 km west	Air / wind dispersion	Impact on amenity — visible dust leaving the Application Area.  Impact on air quality (PM <sub>10</sub> and PM <sub>2.5</sub> ) at Rio Tinto Yandi Camp and Marillana homestead	<p>The infrastructure to be constructed at the Eastern Front End and the associated minor upgrades at OHP 3 will not increase the overall site throughput and are instead a replacement / upgrade to allow for the processing of a different ore type (Brockman ore substituted for CID).</p> <p><b>20 mtpa Primary and Secondary Crusher</b></p> <p>The following dust suppression measures will be installed to minimise dust generation from the facility:</p> <ul style="list-style-type: none"> <li>Deluge and BOC Sprays will be installed to condition ore and minimise dust generation through the processing circuit (<b>Attachment 2C [Drawing 1200-P-00195_J]</b>).</li> <li>Seals to contain dust and prevent spreading of dust to environment, i.e. seals on chute hatches, gaps in crushers.</li> </ul> <p>In addition, the following material handling designs implemented to mitigate noise impacts will also reduce dust emissions:</p> <ul style="list-style-type: none"> <li>Enclosed transfer chutes.</li> <li>Narrow loading boots with dust shrouds to minimise air flow up and out a transfer point.</li> <li>Reduced height of transfer points and speed of falling ore (reducing impact force reduces dust).</li> </ul> <p><b>OHP 3 Upgrades</b></p> <ul style="list-style-type: none"> <li>Deluge and BOC Sprays will be recommissioned to condition ore and minimise dust generation through the processing circuit (<b>Attachment 2H [Drawing 1200-P-00196_H]</b>).</li> <li>Seals to contain dust and prevent spreading of dust to environment will be reinstated, i.e. seals on chute hatches, gaps in crushers and screens.</li> <li>Dust extraction systems will be recommissioned.</li> </ul> <p><b>Conveyor System and Transfer Stations</b></p> <p>The following material handling designs implemented to mitigate noise impacts will also reduce dust emissions:</p> <ul style="list-style-type: none"> <li>Enclosed transfer chutes.</li> <li>Narrow loading boots with dust shrouds to minimise air flow up and out a transfer point.</li> <li>Reduced height of transfer points and speed of falling ore (reducing impact force reduces dust).</li> </ul>	<p><b>Low (Slight, Possible)</b></p> <p>The 13 km separation distance between the Rio Tinto Yandi Camp and the new Primary Crusher, combined with the proposed dust management measures mean that while it is possible for dust generated at the facility to impact on the regional airshed the overall impact will be slight.</p>
		Noise	Rio Tinto Yandi Camp approximately 13 km north east. Marillana Homestead located approximately 35 km east north east Great Northern Highway located approximately 26 km west	Air / wind dispersion	Impact on amenity at Rio Tinto Yandi Camp, Marillana homestead and Great Northern Highway.	<p><b>20 mtpa Primary and Secondary Crusher, Conveyor System and Transfer Stations</b></p> <p>The following sound material handling designs will be implemented to minimise noise from the facility:</p> <ul style="list-style-type: none"> <li>Enclosed transfer chutes.</li> <li>Reduced height of transfer points and speed of falling ore (reducing impact force reduces noise).</li> </ul>	<p><b>Low (Slight, Unlikely)</b></p> <p>The 13 km separation distance between the Rio Tinto Yandi Camp and the new Primary Crusher, combined with the proposed noise management measures mean that it is unlikely for noise generated at the facility to impact the potential sensitive receptors.</p>
		Discharge to land/surfaces water from contaminated stormwater and material and hydrocarbon spills	Soil Vegetation Surface water Groundwater	Spills and/or stormwater containing sediments and/or hydrocarbons	Contamination of soil Impacts to vegetation health and viability.	<p>The following measures will be implemented to manage the risk of hydrocarbons and sediment from entering the surrounding environment:</p> <ol style="list-style-type: none"> <li>Four drive sumps constructed to achieve an impermeability of 1 x 10<sup>-9</sup> m/s will be installed at the following locations (<b>Attachment 2C [Drawing 1200-P-00195_J]</b>): <ul style="list-style-type: none"> <li>1x sump at the 20 mtpa crushing facility PU1001</li> <li>3 x sumps at the Scalping Screening Facility PU1002, PU1002A and PU1003</li> </ul> </li> <li>Wastewater will be discharged to the slurry pond, which will be constructed to achieve an impermeability of 1 x 10<sup>-9</sup> m/s (<b>Attachment 2B Reference drawing: 1200-M-15960_E.pdf</b>).</li> <li>Regular inspections and maintenance will be undertaken on the sumps and slurry ponds to ensure they are operating as designed. <ul style="list-style-type: none"> <li>Drip trays below any gearboxes, motors, hydraulic power units, lubrication skids, filters etc.</li> <li>Hydrocarbons present include hydraulic fluids, lubricants, greases and transformer oil (KNAN).</li> <li>The Primary Crusher Building is concrete bunded.</li> <li>All drainage from the earthworks pads will flow through sedimentation ponds, designed to slow the flow and encourage sediment to settle out.</li> </ul> </li> </ol>	<p><b>Low (Slight, Possible)</b></p> <p>The proposed hydrocarbon and sedimentation / runoff management measures mean that these potential emissions should be contained on the site where they can be cleaned up.</p> <p>Surface water drainage systems are separated from potential contaminants with the largest potential source of emission (the new primary crusher) located more than 700 m north of the Marillana Creek.</p> <p>Depth to groundwater is more than 25 mbgl and is therefore unlikely to be impacted, even in the event of a discharge, given the management measures and groundwater depth.</p>

## 6. Category 12 Infrastructure – Environmental Impact Assessment and Associated Management Strategies

BHP has assessed the potential emissions and discharges associated with the infrastructure associated with Category 12. The following Section outlines the following:

- Proposed infrastructure to be constructed;
- Potential discharges / emissions and associated potential impacts to sensitive receptors; and
- Management measures and associated residual risk ranking (in accordance with Guidance Statement: Risk Assessments (DER, 2016).

### 6.1. Category 12 Infrastructure to be Constructed

The construction of the haul road between Ministers North and Yandi will require the screening of borrow material to achieve the suitable grade for the haul road formation. BHP is proposing to use a 100,000 tpa mobile crushing and screening plant to process approximately 800,000 tonnes of borrow material between December 2026 and December 2029.

The plant will be used in or adjacent to the Project's borrow pits within the works approval boundary as required (**Attachment 2A**).

### 6.2. Potential Discharges / Emissions and Impacts Associated with the Category 12 Infrastructure

A review of the above infrastructure has been determined that the following potential impacts are relevant to this application:

- Increase in dust emissions (Construction and TLO).
- Increase in noise emissions (Construction and TLO).

**Tables 6 and 7** outline a description of each potential discharge/emission, the potential impacts, sensitive receptors, management measures, and residual risk ranking for each project phase (Construction and TLO / Operation). Note that given the nature of the plant no commissioning will be required.

The following other potential impacts associated with the construction of Category 12 infrastructure have been determined to have a Low Risk (Slight, Unlikely):

- Clearing of vegetation: Impacts associated with clearing of native vegetation have been assessed and recommended for approval under Ministerial Statement 1105 – Ministers North Derived Proposal; and
- Disturbance of significant fauna: Impacts on significant fauna have been assessed and recommended for approval under Ministerial Statement 1105 – Ministers North Derived Proposal.

**Table 6: Construction of the Mobile Crushing and Screening Facility Environmental Impact Assessment and Associated Management Strategies**

Sources / Activities		Risk Event				Management Measures	Residual Risk Ranking (Consequence / Likelihood)
		Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts		
Category 12 Screening etc. of material	Construction of the mobile crushing and screening plant	Dust	Rio Tinto Yandi Camp approximately 13 km north east. Marillana Homestead located approximately 35 km east north east Great Northern Highway located approximately 26 km west	Air / wind dispersion	Impact on amenity — visible dust leaving the Application Area.  Impact on air quality (PM <sub>10</sub> and PM <sub>2.5</sub> ) at Newman	Minor clearing is required to install the mobile crushing and screening plant and to establish the areas for raw and screened material. There is the potential for localised dust generation. Dust will be managed by: <ul style="list-style-type: none"> <li>Minimising the clearing footprint; and</li> <li>Using water carts to control dust from exposed areas.</li> </ul> Any dust generated during construction will be minor and localised in nature and unlikely to impact of any sensitive receptors given the separation distances.	<b>Low (Slight, Possible)</b> The proposed clearing and construction activities are not anticipated to significantly add to within the region and given the separation distance will therefore not significantly impact any sensitive receptors.
		Noise		Air / wind dispersion	Impact on amenity	There may be some minor noise during construction activities. Given the remote location and the time of works (daylight hours) specific mitigations are not required to manage noise beyond the monitoring of noise at the major noise sources avoid the occurrence of noise induced hearing loss.	<b>Low (Slight, Possible)</b> The proposed clearing and construction activities are not anticipated to significantly add to within the region and given the separation distance will therefore not significantly impact any sensitive receptors.

**Table 7: TLO / Operation of the Mobile Crushing and Screening Facility Environmental Impact Assessment and Associated Management Strategies**

Sources / Activities		Risk Event				Management Measures	Residual Risk Ranking (Consequence / Likelihood)
		Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts		
Category 12 Screening etc. of material	Construction of the mobile crushing and screening plant	Dust	Rio Tinto Yandi Camp approximately 13 km north east. Marillana Homestead located approximately 35 km east north east Great Northern Highway located approximately 26 km west	Air / wind dispersion	Impact on amenity — visible dust leaving the Application Area.  Impact on air quality (PM <sub>10</sub> and PM <sub>2.5</sub> ) at Newman	The operation of the mobile crushing and screening plant and associated movement of raw and processed material is likely to generate localised dust. Dust from roads and stockpiles will be managed via the use of water carts. The plant is only required for approximately three years and therefore any dust generated during operation will be minor, localised and short term in nature and unlikely to impact of any sensitive receptors given the separation distances.	<b>Low (Slight, Possible)</b> The proposed activities are not anticipated to significantly add to within the region and given the separation distance will therefore not significantly impact any sensitive receptors.
		Noise		Air / wind dispersion	Impact on amenity	The operation of the mobile crushing and screening plant and associated movement of raw and processed material is likely to generate some minor noise. Given the remote location specific mitigations are not required to manage noise beyond the monitoring of noise at the major noise sources avoid the occurrence of noise induced hearing loss.	<b>Low (Slight, Possible)</b> The proposed activities are not anticipated to significantly add to within the region and given the separation distance will therefore not significantly impact any sensitive receptors.

## 7. Other Infrastructure to be Constructed – Environmental Impact Assessment and Associated Management Strategies

The following infrastructure will also be constructed as part of the Project, but do not trigger a Category in Schedule 1 of the (EP Regs):

- Biomax C100 WWTP (18,000 L/day);
- Hydrocarbon Storage:
  - Chemical Storage (5 kL)
  - Fuel storage (42,705 kL)
  - Other hydrocarbon storage (60kL)
- Oily water separator(s) (constructed to achieve a permeability of  $1 \times 10^{-9}$  m/s); and
- Concrete Batching Plants (all material to be used onsite).

### 7.1. C100 Biomax

A C100 Biomax system and associated spray field (**Attachment 2I [Drawing number 1200-A-12753\_G]**) will be installed at the Non-Process Infrastructure (NPI) precinct within the northern end of the Ministers North mining area (**Attachment 2A**).

The facility will be capable of processing 18,000 L/day of treated wastewater, which will be discharged to a fenced 1,500 m<sup>2</sup> spray field, which has been designed to meet the requirements of *Water Quality Protection Note 22: Irrigation with nutrient rich wastewater* (DoW, 2008), resulting in an overall risk of the facility of Low (Slight, Possible):

### 7.2. Chemical and Hydrocarbon Storage

Chemical, fuel and hydrocarbon storage facilities will be installed at the NPI precinct within the northern end of the Ministers North mining area (**Attachment 2A**).

#### 7.2.1. Chemical Storage Facility

A 5kL chemical storage facility will be established at the Mobile Maintenance Workshop (**Attachment 2A**). All chemical containers to be stored in bunded containers with any dangerous goods containers to be vented. MSDS and suitable spill kits will be stored with chemicals

#### 7.2.2. Fuel Storage Facility

The Ministers North fuel facility will used for light and heavy vehicle refuelling at the NPI precinct within the northern end of the Ministers North mining area. The facility will be capable of storing up to 600 kL of diesel in three 200 kL fuel bullets (**Attachment 2A and Attachment 2J [Drawing number 1200-A-12755\_E]**).

The vehicle refuelling points will be located within a concrete bunded area. The facility will have an oily water separator (**Section 7.3**) to treat potentially hydrocarbon contaminated water from the facility.

Based on the proposed capacity (600 kL) this facility does not trigger the need for an approval under the EP Act. The relevant Dangerous Goods licences will be obtained prior to bringing the facilities on site. The risk of a significant spill from these facilities based on their design has been determined to have an overall risk of Low (Minor, Rare).

#### 7.2.3. Other hydrocarbon storage

A 5kL double bunded lube station container will be established at the Mobile Maintenance Workshop (**Attachment 2A**) to provide lubes and greases required for the maintenance of mining trucks

Based on the proposed capacity (5 kL) this facility does not trigger the need for an approval under the EP Act. The risk of a significant spill from these facilities based on their design has been determined to have an overall risk of Low (Minor, Rare).

### 7.3. Oily water separators

Potentially hydrocarbon contaminated water from the Ministers North fuel facility and associated wash bay will water will collected in a sump, before being run through an oily water separator, then and transferred to a 20 kL storage tank (**Attachment 2A, Attachment 2I [Drawing number 1200-A-12755\_E]** and **Attachment 2K [Drawing number 1200-A-12802\_D]**). Treated water in the storage tank will be tested for hydrocarbons and, if total recoverable hydrocarbons (TRH) are 15 mg/L or less, will be pumped to a turkeys nest for use in dust suppression. If the treated water has a TRH above 15 mg/L the water will be removed from site and disposed on in a licenced facility

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Based on the separation distances to surface water receptors and expected water quality the facility has been determined to have an overall risk of Low (Slight, Possible).

#### **7.4. Concrete Batching Plant(s)**

A mobile concrete batching plant(s) will be required to support the construction of the Eastern Front End and the Ministers North NPI area. This plant(s) does not trigger the need for an approval under the EP Act as the batch plant(s) will be established within the works approval application area and no material will be taken off site.

Based on the lack of sensitive receptors and the limited onsite operation potential dust and noise impacts associated with the facility has been determined to have an overall risk of Low (Slight, Unlikely).

## 8. Heritage

BHP complies with the *Aboriginal Heritage Act 1972*, and all other state and federal heritage legislation. All land disturbance activities are subject to ethnographic and archaeological surveys as part of an internal PEAHR. The PEAHR process ensures that all heritage sites in the vicinity of the project area are identified and avoided where practicable.

The Application Area is situated within the Banjima People Native Title Claim (WC11/06). Ethnographic and archaeological surveys of the Amendment Application Area have been conducted in consultation with the Banjima people. There are a number of heritage sites which intersect the Works Approval Application Area (site details are not provided here out of respect of the wishes of the Traditional Owners).

If any heritage site cannot practicably be avoided, BHP would consult the relevant traditional owners and seek approval under the *Aboriginal Heritage Act 1972* before the site is disturbed.

## 9. Conclusion

The proposed activities for the development of Ministers North are unlikely to introduce unacceptable emissions or discharges to land, water and air. The level of risk associated with each type of impact is believed to be low enough not to cause impacts to nearby sensitive receptors (human or environmental).

## 10. References

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- Biologic (2017) *Ministers North to Yandi Corridor Single Season Level 2 Fauna and Detailed Flora and Vegetation survey*. Unpublished Report for BHP Billiton Iron Ore.
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- Onshore Environmental (2020) *Ministers North and Yandi Consolidated Vegetation Mapping Review*. Unpublished Report for BHP Billiton Iron Ore.
- van Vreeswyk, A.M.E., Payne, A.L., Leighton, K.A. and Hennig, P. (2004) *An Inventory and Condition Survey of the Pilbara Region, Western Australia*. Technical Bulletin No. 92, Department of Agriculture, Perth.

**Ministers North Works Approval**



**IRON ORE (McCAMEY'S MONSTER)  
AGREEMENT AUTHORIZATION ACT 1972  
MINING LEASE**

**266 SA**



# DUPLICATE

WESTERN AUSTRALIA MINING ACT 1978

IRON ORE (McCAMEY'S MONSTER)

AGREEMENT AUTHORIZATION ACT 1972

MINING LEASE

MINING LEASE NO. 266SA

The Minister for Mines a corporation sole established by the Mining Act 1978 with power to grant leases of land for the purposes of mining in consideration of the rents hereinafter reserved and of the covenants on the part of the Lessee described in the First Schedule to this lease and of the conditions hereinafter contained and pursuant to the Mining Act 1978 (except as otherwise provided by the Agreement (hereinafter called the Agreement) described in the Second Schedule to this lease) hereby leases to the Lessee the land more particularly delineated and described in the Third Schedule to this lease for iron ore subject however to the exceptions and reservations set out in the Fourth Schedule to this lease and to any other exceptions and reservations which subject to the Agreement are by the Mining Act 1978 and by any Act for the time being in force deemed to be contained herein to hold to the Lessee for a term of twenty one years commencing on the date set out in the Fifth Schedule to this lease with the right to renew the same as provided in but subject to

the Agreement for further periods each of twenty one years (subject to sooner determination of the said term upon cessation or determination of the Agreement) upon and subject to such of the provisions of the Mining Act 1978 except as otherwise provided by the Agreement as are applicable to mining leases granted thereunder and to the terms covenants and conditions set out in the Agreement and to the covenants and conditions herein contained or implied and any further conditions or stipulations set out in the Sixth Schedule to this lease the Lessee paying therefor the rents and royalties as provided in the Agreement PROVIDED ALWAYS that this lease is subject also to the following covenants and conditions that is to say -

- (1) that the Lessee shall use the land bona fide exclusively for the purposes of the Agreement;
- (2) subject to the provisions of the Agreement the Lessee shall observe perform and carry out the provisions of the Mines Regulation Act 1946; and
- (3) that the Lessee shall if required by the Minister for Mines supply information of a geological nature relating to the Lessee's operations on the land the subject of this lease

and PROVIDED FURTHER that this lease and any renewal thereof shall not be determined or forfeited otherwise than in accordance with the Agreement.

In this lease -

- "Lessee" includes the successors and permitted assigns of the Lessee and if the Lessee be more than one the respective successors and permitted assigns of each Lessee.
- If the Lessee be more than one the liability of the Lessee hereunder shall be joint and several.
- Reference to any Act includes all amendments to that Act for the time being in force and also any Act passed in substitution therefore or in lieu thereof and the regulations and by-laws for the time being in force thereunder.

#### FIRST SCHEDULE

HANCOCK MINING LIMITED a company incorporated in Western Australia and having its registered office at 1st Floor, 49 Stirling Highway, Nedlands.

SECOND SCHEDULE

The Agreement authorized by the Iron Ore (McCamey's Monster) Agreement Authorization Act 1972 including any amendments to that Agreement.

THIRD SCHEDULE

Locality : Wheelara Hill  
Mineral Field : Peak Hill  
Area : 90.65 square kilometres

Being the land shown and marked pink on the plan marked 'B' referred to in the Agreement.

FOURTH SCHEDULE

All petroleum as defined in the Petroleum Act 1967 on or below the surface of the land the subject of this lease is reserved to the Crown in right of the State of Western Australia with the right of the Crown in right of the State of Western Australia and any person lawfully claiming thereunder or otherwise authorized to do so to have access to the land the subject of this lease for the purpose of searching for and for the operations of obtaining petroleum (as so defined) in any part of the land.

FIFTH SCHEDULE

*11th October 1988*

SIXTH SCHEDULE

1. Survey
2. The lessee adhering to the proposals as assessed by the Environmental Protection Authority and fulfilling the commitments made in the Notice of Intent.
3. The lessee shall seek advice from the Main Roads Department over the construction of the rail spur, floodways and location of borrow pits for material and the proponent shall construct the crossing at the Great Northern Highway to the specification of the Main Roads Department.
4. The lessee shall, on completion of the project, rehabilitate the rail spur and before completion of the project, the lessee shall provide, to the satisfaction of the Environmental Protection Authority, a programme for that rehabilitation.
5. The lessee shall remove, stockpile and use topsoil from the process site in the rehabilitation of the lease area to the satisfaction of the State Mining Engineer.
6. Any additional proposal to hard rock mine or to increase the mining rate beyond 5 million tonnes per annum (required to be submitted under Clause 9 of the Iron Ore (McCamey's Monster) Agreement) shall be referred to the Environmental Protection Authority by the Minister for the time being responsible for the administration of the Agreement.

7. No interference with Geodetic Survey Station (Rob 12 and Rob 17) and mining within 15 metres thereof being confined to below a depth of 15 metres from the natural surface.

In witness whereof the Minister for Mines has affixed his seal and set his hand hereto

this 11<sup>th</sup> day of OCTOBER 1988.



## **MINING LEASE 266SA - ENDORSEMENTS**

**Application to Amend 187H/923** amending name and address to read 'BHP Iron Ore (Jimblebar) Limited, 18<sup>th</sup> Floor, 200 St George's Terrace, Perth WA 6000' registered 10.30am on 13 January 1993. [REDACTED]

**Application to Amend No. 527H/934** registered 11.40am on 21 June 1994 amending name of BHP Iron Ore (Jimblebar) Limited to read BHP IRON ORE (JIMBLEBAR) PTY LTD [REDACTED]

### **ADDITIONAL AREAS:** [REDACTED]

By Approval of the Minister for Mines and Petroleum on 02 April 2014, the additional areas bordered 'yellow' on the plan filed as document No. 2860429 on Department of Mines and Petroleum File for Mining Lease 266SA and identified as Sections 2 to 8 in Tengraph were included into Mining Lease 266SA. New Nett Area – 46,923 hectares. [REDACTED]

### **ENDORSEMENT ATTACHING TO THE MINING LEASE 266SA:** [REDACTED]

The grant of Section 5 of this lease does not include the land contained in General Purpose Leases 52/257, 52/258, 52/260, 52/261, 52/263 to 274, 52/277 and 52/279 except that below a depth of 15 metres from the natural surface of the land. [REDACTED]

By approval of the Minister for Mines on 23 September 1993 condition No. 2 is deleted and substituted as shown hereunder:

2. "Mining being carried out in accordance with the proposals submitted under Clauses 7, 9 or 9A and approved under Clause 8 of the Iron Ore (McCamey's Monster) Agreement Authorisation Act as amended and in accordance with other terms, covenants and conditions of the above Agreement Act or leases or licences issued pursuant to that Agreement"

By approval of the Minister for State Development on 5 May 2005 Consent to Mine on Geodetic Survey Station Robertson 12 is granted.

By approval of the Minister for Mines and Petroleum on 28 November 2008 the term of Mining Lease 266SA is renewed for a further term of 21 years from 11 October 2009 to 10 October 2030 subject to previously approved conditions.

By approval of the Minister for Mines and Petroleum on 10 November 2015 condition No. 8 is added as shown hereunder:

8. The rights of ingress to and egress from Miscellaneous Licence 52/108 being at all times preserved to the licensee and no interference with the purpose or installations connected to the licence.



Government of Western Australia  
Department of Mines and Petroleum

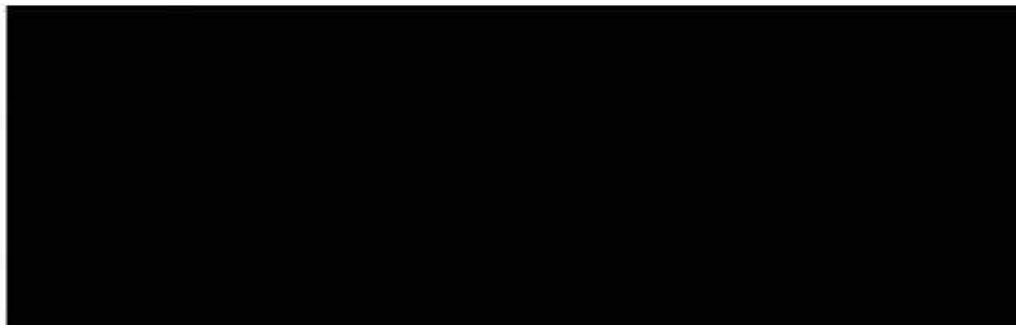
**MINING LEASE 266A - ENDORSEMENTS**  
**- inclusion of additional area (clause 11B(1))**

The additional area of land contained within Exploration Licence 52/2238-I as shown on the Department of Mines and Petroleum's electronic mapping system (TENGRAPH) is hereby included in the Mining Lease by endorsement, pursuant to clause 11B(1) of the *Iron Ore (McCamey's Monster) Agreement Authorisation Act 1972*.

The additional area is shown as Section 9 in TENGRAPH.

New Nett Area – 47190.211 hectares.

Dated at Perth this 10<sup>th</sup> day of November 2015.



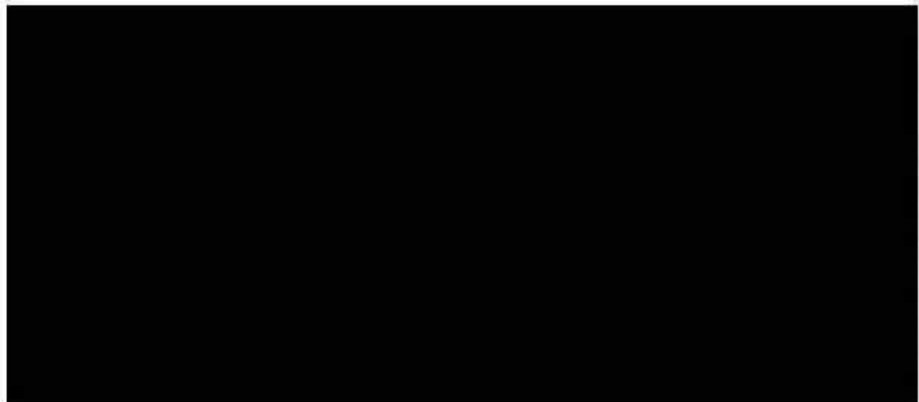
**MINING LEASE 266A - ENDORSEMENTS**  
**- inclusion of additional area (clause 11B(1))**

The additional area of land contained within General Purpose Lease 52/257 as shown on the Department of Mines and Petroleum's electronic mapping system (TENGRAPH) is hereby included in the Mining Lease by endorsement, pursuant to clause 11B(1) of the *Iron Ore (McCamey's Monster) Agreement Authorisation Act 1972*.

The additional area is within Section 5 of Mining Lease 266SA as depicted in TENGRAPH.

Nett Area – 47190.211 hectares.

Dated at Perth this 22 day of Nov. 2016.



**MINING LEASE 266SA  
ENDORSEMENT**

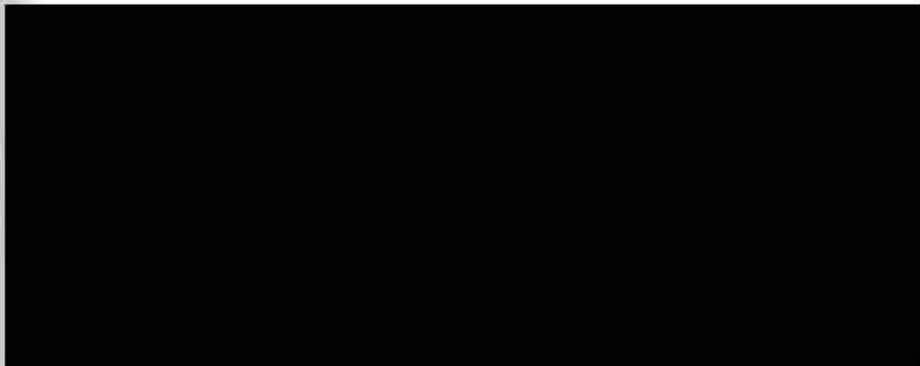
**Inclusion of an additional area under (clause 11B(1)) of the Iron Ore  
(McCameys Monster) Agreement Authorisation Act 1972**

The additional area of land contained within Mining Leases 47/703-I, 47/704-I, 47/705-I, 47/706-I and 47/707-I as shown on the Department of Mines, Industry Regulation and Safety's electronic mapping system (TENGRAPH) is hereby included in the Mining Lease by endorsement, pursuant to clause 11B(1) of the *Iron Ore (McCamey's Monster) Agreement Authorisation Act 1972*.

The additional area is delineated as Section 10 in TENGRAPH.

Nett Area 50492.3486 hectares.



Dated at Perth this 26<sup>th</sup> day of FEBRUARY 2018.



**Endorsements and Condition attaching to the inclusion of General Purpose Lease 52/257 into Mining Lease 266SA**

**Endorsements:**

**In respect to Water Resource Management Areas (WRMA) the following endorsements apply:**

1. The Licensees attention is drawn to the provisions of the:
  - Waterways Conservation Act, 1976
  - ~~Rights in Water and Irrigation Act, 1914~~ *ceased 22/11/2014* 
  - Metropolitan Water Supply, Sewerage and Drainage Act, 1909
  - ~~Country Areas Water Supply Act, 1947~~ *ceased 22/11/2014* 
  - Water Agencies (Powers) Act 1984
2. The rights of ingress to and egress from, and to cross over and through, the mining tenement being at all reasonable times preserved to officers of Department of Water (DoW) for inspection and investigation purposes.
3. The storage and disposal of petroleum hydrocarbons, chemicals and potentially hazardous substances being in accordance with the current published version of the DoWs relevant Water Quality Protection Notes and Guidelines for mining and mineral processing.
4. The taking of groundwater from an artesian well and the construction, enlargement, deepening or altering of any artesian well is prohibited unless current licences for these activities have been issued by DoW.
5. Advice shall be sought from the DoW if proposing any mining/activity in respect to mining operations within a defined waterway and within a lateral distance of:
  - 50 metres from the outer-most water dependent vegetation of any perennial waterway, and
  - 30 metres from the outer-most water dependent vegetation of any seasonal waterway.
6. Measures such as drainage controls and stormwater retention facilities are to be implemented to minimise erosion and sedimentation of adjacent areas, receiving catchments and waterways.
7. All activities to be undertaken so as to avoid or minimise damage, disturbance or contamination of waterways, including their beds and banks, and riparian and other water dependent vegetation.

**In respect to Proclaimed Surface Water Areas, Irrigation District Areas and Rivers (RIWI Act) the following endorsements apply:**

8. The taking of surface water from a watercourse or wetland is prohibited unless a current licence has been issued by DoW.
9. Advice shall be sought from DoW and the relevant water service provider if proposing mining activity in an existing or designated future irrigation area, or within 50

metres of a channel, drain or watercourse from which water is used for irrigation or any other purpose, and the proposed activity may impact water users.

10. No mining activity is to be carried out if:

- it may obstruct or interfere with the waters, bed or banks of a watercourse or wetland
- it relates to the taking or diversion of water, including diversion of the watercourse or wetland

unless in accordance with a permit issued by the DoW.

**In respect to Proclaimed Ground Water Areas the following endorsement applies:**

11. The taking of groundwater and the construction or altering of any well is prohibited without current licences for these activities issued by DoW, unless an exemption otherwise applies.

**In respect to Public Drinking Water Source Areas (PDWSA) - Newman Water Reserve 6 - the following endorsements apply:**

12. All activity within proclaimed public drinking water source areas shall comply with the current published version of the DoWs [Water Quality Protection Note 25 Land Use Compatibility in Public Drinking Water Source Areas]. Key issues that need to be considered within the Water Quality Protection Note are:

- All mining/activity in respect to mining operations involving the handling, storage, transport and use of toxic and hazardous substances (including human wastes) within public drinking water source areas is prohibited unless approved in writing by the Department of Water.
- Seek written advice from the DoW if handling, storing and/or using hydrocarbons and potentially hazardous substances.

13. All mining/activity in respect to mining operations to be conducted in accordance with the current published version of the DoWs Water Quality Protection Guidelines: [Mining and Mineral Processing] and relevant Water Quality Protection Notes including [Land use compatibility in public drinking water source areas]. Key issues derived from the various Water Quality Guidelines and Notes include:




- All mining/ activity in respect to mining operations within 3 metres of the maximum wet season water table are prohibited in public drinking water source areas unless approved in writing by the DoW.
- Disposal of domestic and industrial waste (other than approved tailings) is incompatible within public drinking water source areas, except for class 1 landfill (inert) materials which may be disposed of within P3 areas at designated sites if approved in writing by the DoW.
- Mineral processing, tailings storage, wastewater treatment plants and mechanical plant servicing are incompatible with P1 and P2 areas.
- Advice shall be sought from the DoW if proposing mineral processing, tailings storage, wastewater treatment plants and mechanical plant servicing within P3 areas.
- Underground petroleum hydrocarbon and other chemical storage tanks are incompatible within P1 and P2 areas.

- Underground petroleum hydrocarbon and other chemical storage tanks are prohibited within P3 areas, unless approved in writing by the DoW.
- Above ground petroleum hydrocarbon and other chemical storage tanks are incompatible with P1 areas.
- Advice shall be sought from the DoW if proposing above ground petroleum hydrocarbon and other chemical storage tanks within P2 and P3 areas.
- Advice shall be sought from the DoW if proposing mining or construction camps in public drinking water source areas.

**Condition:**

**Consent to mine on Newman Water Reserve 6 granted.**

By approval of the Minister for Mines and Petroleum on 26 February 2018 on the inclusion of Mining Leases 47/703-707 into Mining Lease 266SA Endorsements 14-16 are added as shown hereunder:

14. ~~The Lessee's attention is drawn to the provisions of the Aboriginal Heritage Act 1972 and any Regulations thereunder.~~ Ceased 26/02/2018 
15. ~~This mining lease authorises the mining of the land for all minerals as defined in Section 8 of the Mining Act 1978 with the exception of uranium ore.~~ Ceased 26/02/2018 
16. ~~The Lessee's attention is drawn to the Environmental Protection Act 1986 and the Environmental Protection (Clearing of Native Vegetation) Regulations 2004, which provides for the protection of all native vegetation from damage unless prior permission is obtained.~~ Ceased 26/02/2018 

By approval of the Minister for Mines and Petroleum on 26 February 2018 on the inclusion of Mining Leases 47/703-707 into Mining Lease 266SA Conditions 9-12 are added as shown hereunder:

9. The rights of ingress to and egress from Miscellaneous Licences 47/92, 47/95, 47/182 and 47/183 being at all times preserved to the licensee and no interference with the purpose or installations connected to the licences.
10. No interference with the transmission line or the installations in connection therewith, and the rights of ingress to and egress from the facility being at all times preserved to the owners thereof.
11. No mining on a strip of land 60 metres wide with the MAC to Yandi Railway Line as the centreline and no materials being deposited or machinery or buildings being erected on such strip of land.
12. Blasting operations being controlled so that no damage or injury can be caused by fly rock, concussion, vibration or other means.

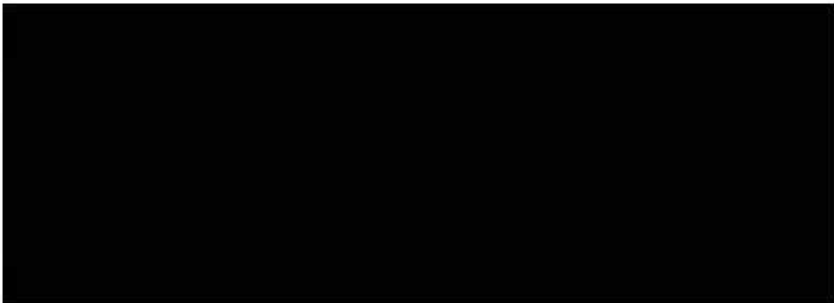
**Mining Lease 266SA - Endorsement -  
Inclusion of additional area (clause 11B(1))**

The additional area of land contained within Exploration Licence 52/3413-I and General Purpose Lease 52/8 as shown on the Department of Mines, Industry Regulation and Safety's electronic mapping system (Tengraph) is hereby included in Mining Lease 266SA by endorsement, pursuant to clause 11B(1) of the *Iron Ore (McCamey's Monster) Agreement Authorisation Act 1972*.

The additional area is shown as Section 11 in Tengraph.

New Nett Area 517.56 km<sup>2</sup> (51756.3486ha)

Dated at Perth this 8<sup>th</sup> day of JUNE 2020.





**IRON ORE (MARILLANA CREEK ) AGREEMENT ACT 1991**

**MINING LEASE 270 S.A.**

DUPLICATE

THE SCHEDULE

WESTERN AUSTRALIA

MINING ACT 1978

IRON ORE (MARIILIANA CREEK) AGREEMENT ACT 1991

MINING LEASE

MINING LEASE NO. 270 SA

The Minister for Mines a corporation sole established by the Mining Act 1978 with power to grant leases of land for the purposes of mining in consideration of the rents hereinafter reserved and of the covenants on the part of the Lessee described in the First Schedule to this lease and of the conditions hereinafter contained and pursuant to the Mining Act 1978 (except as otherwise provided by the Agreement (hereinafter called "the Agreement") described in the Second Schedule to this lease) hereby leases to the Lessee the land more particularly delineated and described in the Third Schedule to this lease for iron ore subject however to the exceptions and reservations set out in the Fourth Schedule to this lease and to any other exceptions and reservations which subject to the Agreement are by the Mining Act 1978 and by any Act for the time being in force deemed to be contained herein to hold to the Lessee this lease for a term of ~~twenty-one~~ years commencing on the date set out in the Fifth Schedule to this lease/ <sup>and expiring on 3 September 2012</sup> (subject to the sooner determination of the said term upon the cessation or determination of the Agreement) upon and subject to such of the provisions of the Mining Act 1978 except as otherwise provided by the Agreement as are applicable to mining leases granted thereunder and to the terms covenants and conditions set out in the Agreement and to the covenants and conditions herein contained or implied and any further conditions or stipulations set out in the Sixth Schedule to this lease the Lessee paying therefor the rents for the time being and from time to time prescribed pursuant to the provisions of the Mining Act 1978 at the times and in the manner so prescribed and royalties as provided in the

*Mpr*

LEASE INSTRUMENT ISSUED BY DEPT OF MINES AND PETROLEUM REGISTRATION DIVISION PERTH WA 2001



Agreement with the right during the currency of the Agreement and in accordance with the provisions of the Agreement to take two successive renewals of the term each for a further period of 21 years upon the same terms and conditions subject to the sooner determination of the term upon cessation or determination of the Agreement PROVIDED ALWAYS that this lease shall not be determined or forfeited otherwise than in accordance with the Agreement.

In this lease :-

- "Lessee" includes the successors and permitted assigns of the Lessee.
- If the Lessee be more than one the liability of the Lessee hereunder shall be joint and several.
- Reference to an Act includes all amendments to that Act for the time being in force and also any Act passed in substitution therefor or in lieu thereof and to the regulations and by-laws for the time being in force thereunder.

#### FIRST SCHEDULE

BHP MINERALS LIMITED a company incorporated in the State of Western Australia and having its registered office at Level 17, 200 St. George's Terrace, Perth.

CT MINERALS AUSTRALIA PTY LTD a company incorporated in the State of Western Australia and having its registered office at 22nd Level, 221 St. George's Terrace, Perth.

MITSUI IRON ORE CORPORATION PTY LTD a company incorporated in the State of Western Australia and having its registered office at Level 24, 221 St. George's Terrace, Perth.

**SECOND SCHEDULE**

The Agreement made between the State of Western Australia and BHP Minerals Limited and ratified by the Iron Ore (Marillana Creek) Agreement Act 1991.

**THIRD SCHEDULE**

(Description of land) : All those parcels of land at Marillana Creek shaded yellow on the plan attached hereto.

Locality : Marillana Creek

Mineral Field : West Pilbara Area etc. : 300.945 sq km

Being the land delineated on Survey Diagram No. : OP 2162

and recorded in the Department of Mines, Perth.

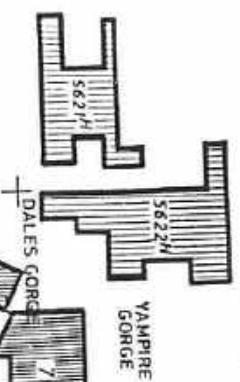
**FOURTH SCHEDULE**

All petroleum as defined in the Petroleum Act 1967 on or below the surface of the land the subject of this lease is reserved to the Crown in right of the State of Western Australia with the right of the Crown in right of the State of Western Australia and any person lawfully claiming thereunder or otherwise authorised to do so to have access to the land the subject of this lease for the purpose of searching for and for the operations of obtaining petroleum (as so defined) in any part of the land.

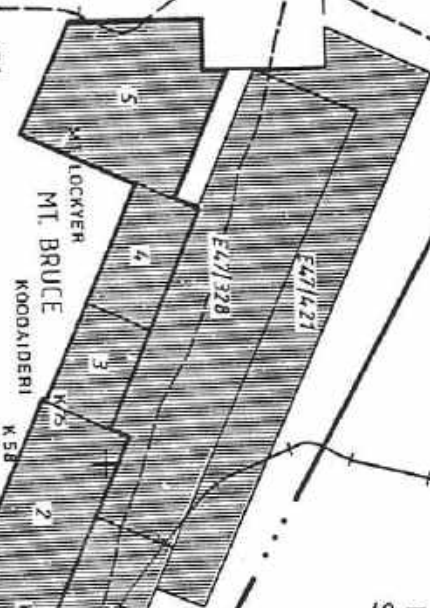
**FIFTH SCHEDULE**

The Sixth day of February, Nineteen Hundred and Ninety Two.

WITTENOOM

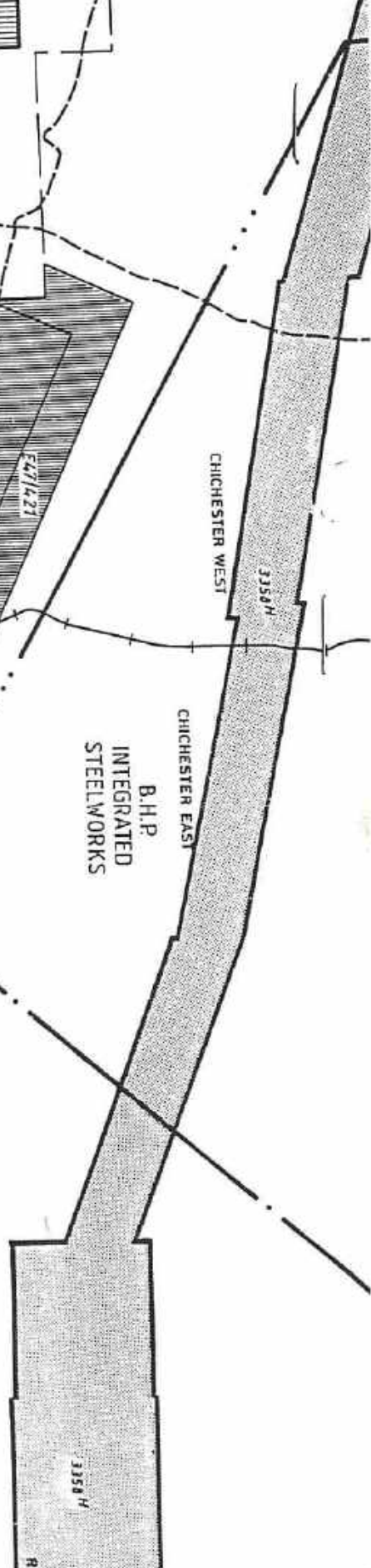


ML 252 SA  
Sections

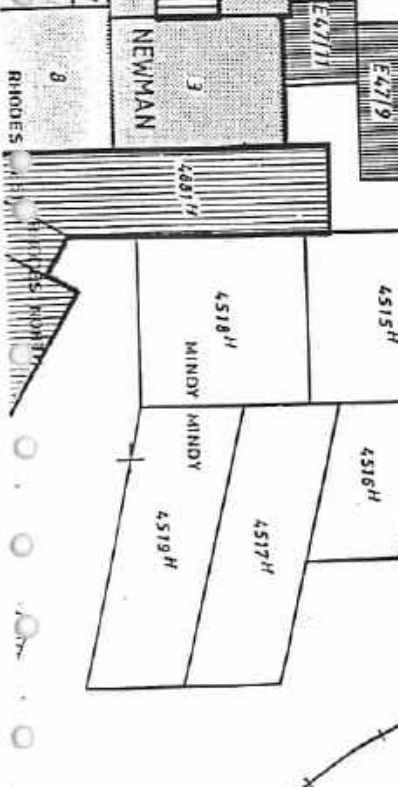
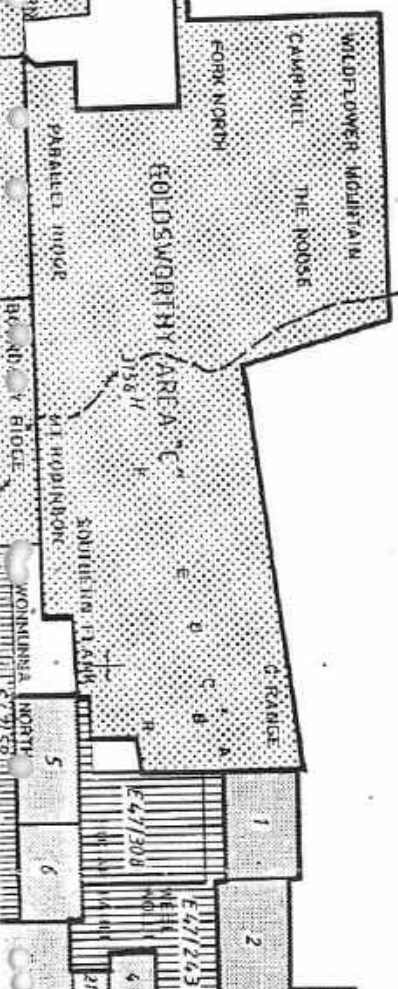


CHICHESTER WEST

CHICHESTER EAST  
B.H.P.  
INTEGRATED  
STEELWORKS



JCE



MINERAL LEASE 270SA

AMENDMENT 652H/012 REGISTERED 2.30PM ON 15 FEBRUARY 2002 AMENDING  
NAME FROM BHP MINERALS PTY LTD TO **BHP BILLITON MINERALS PTY LTD** [REDACTED]

AMENDMENT 501H/034 REGISTERED 4.22PM ON 30 APRIL 2004 AMENDING  
NAME FROM CI MINERALS AUSTRALIA PTY LTD TO **ITOCHU MINERALS & ENERGY  
OF AUSTRALIA PTY LTD**. [REDACTED]

RENEWED PURSUANT TO CLAUSE 12(2) OF THE STATE AGREEMENT FOR A FURTHER  
PERIOD OF 21 YEARS TO 3 SEPTEMBER 2033.

APPLICATION TO AMEND 626923 RECORDED 12.05PM ON 25/06/2021  
AMENDING NAME FROM BHP BILLITON MINERALS PTY LTD TO READ  
BHP MINERALS PTY LTD [REDACTED]

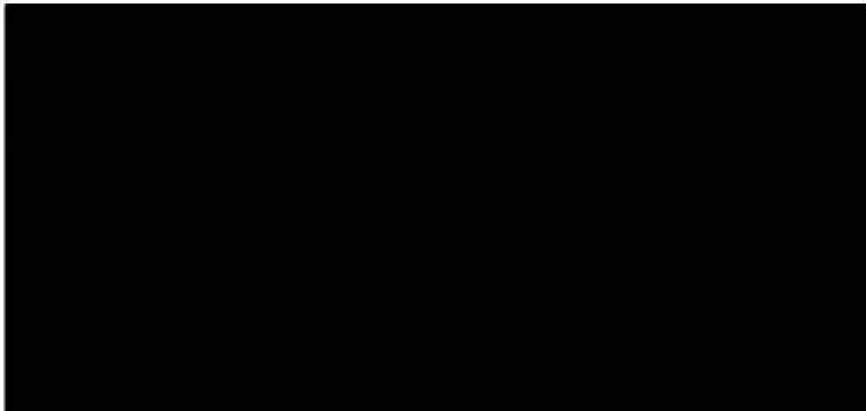
**MINING LEASE 270SA - ENDORSEMENTS**  
**- inclusion of additional area (clause 12A(1) )**

The additional area of land contained within Mining Leases 47/69-I, 47/70-I, 47/71-I, 47/281-I and 47/292-I as shown on the Department of Mines and Petroleum's electronic mapping system (TENGRAPH) is hereby included in the Mining Lease by endorsement, pursuant to clause 12A(1) of the *Iron Ore (Marillana Creek) Agreement Act 1991*.

The additional area is displayed within Section 1 and as Section 4 in TENGRAPH.

Nett Area – 30,343.7124 hectares.

Dated at Perth this 29<sup>th</sup> day of June 2017.



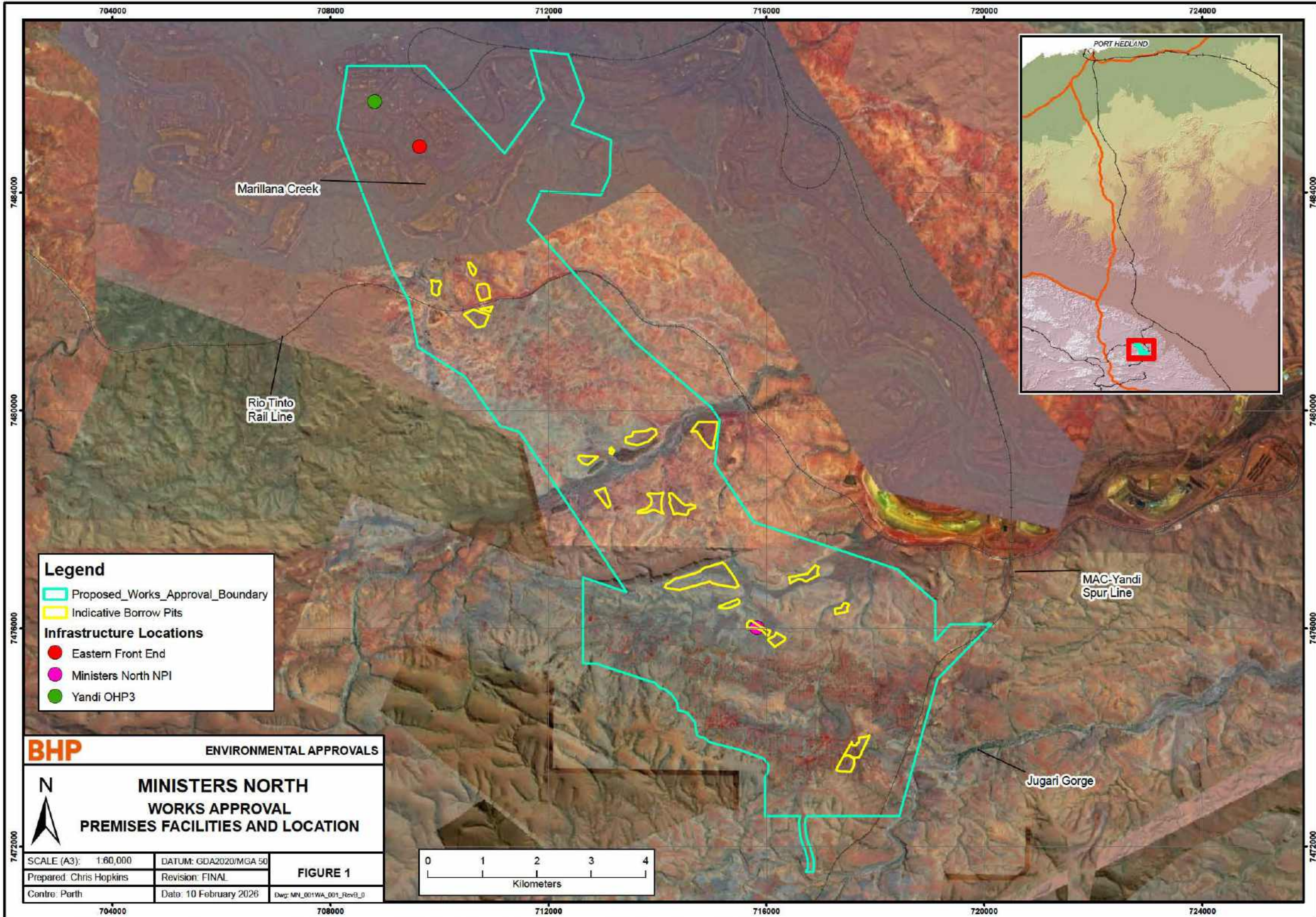
**Ministers North Works Approval**

**Attachment 1C: Authorisation to act as representative of the occupier**

Not Required.

**Ministers North Works Approval**

**Attachment 2A: Figure 1: Ministers North Works Approval Premises Facilities and Location  
(MN\_001WA\_001\_RevA\_0)**



**Legend**

- Proposed\_Works\_Approval\_Boundary
- Indicative Borrow Pits

**Infrastructure Locations**

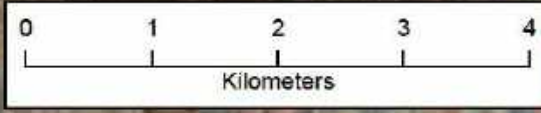
- Eastern Front End
- Ministers North NPI
- Yandi OHP3

**BHP** ENVIRONMENTAL APPROVALS



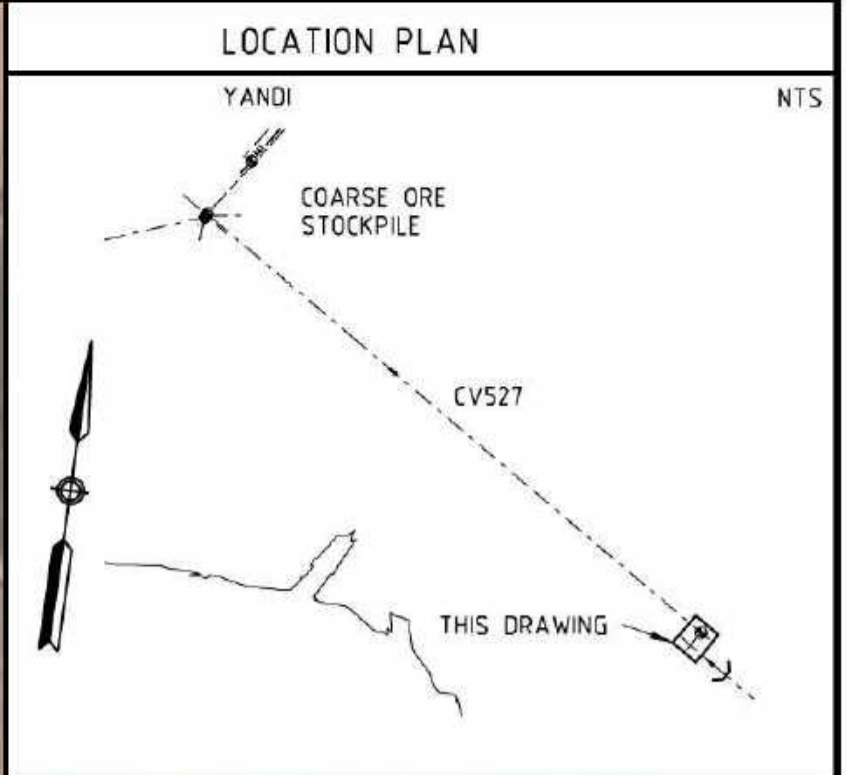
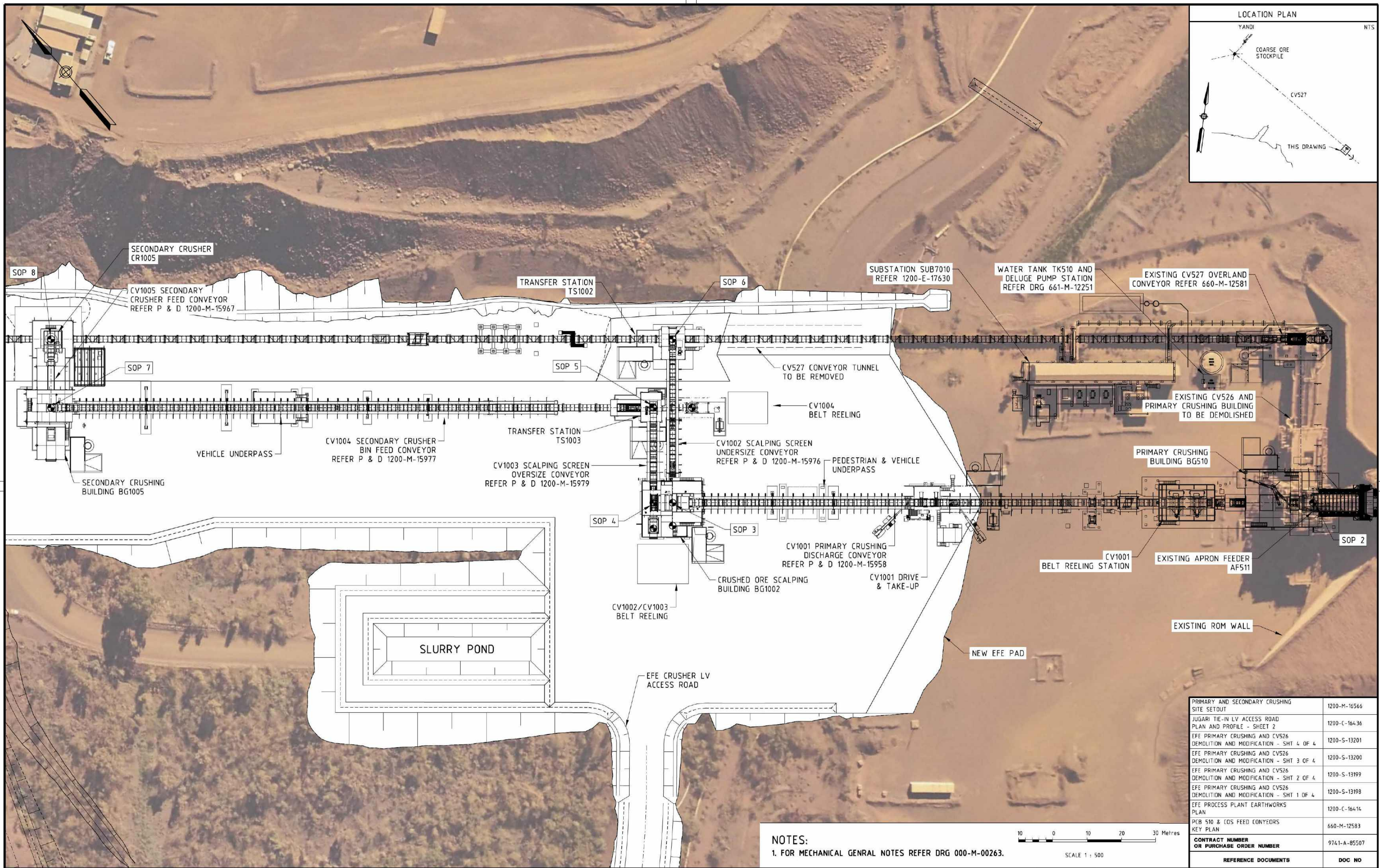
**MINISTERS NORTH  
WORKS APPROVAL  
PREMISES FACILITIES AND LOCATION**

SCALE (A3): 1:60,000	DATUM: GDA2020/MGA 50	<b>FIGURE 1</b>
Prepared: Chris Hopkins	Revision: FINAL	
Centre: Perth	Date: 10 February 2026	



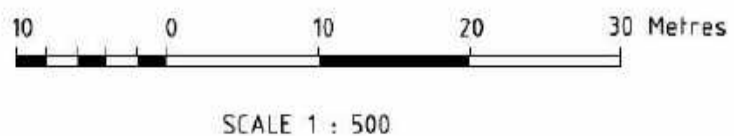
**Ministers North Works Approval**

**Attachment 2B: Ministers North DPS Primary and Secondary Crushing General Arrangement (Drawing 1200-M-15960\_E)**



REFERENCE DOCUMENTS	DOC NO
PRIMARY AND SECONDARY CRUSHING SITE SETOUT	1200-M-16566
JUGARI TIE-IN LV ACCESS ROAD PLAN AND PROFILE - SHEET 2	1200-C-16436
EFE PRIMARY CRUSHING AND CV526 DEMOLITION AND MODIFICATION - SHT 4 OF 4	1200-S-13201
EFE PRIMARY CRUSHING AND CV526 DEMOLITION AND MODIFICATION - SHT 3 OF 4	1200-S-13200
EFE PRIMARY CRUSHING AND CV526 DEMOLITION AND MODIFICATION - SHT 2 OF 4	1200-S-13199
EFE PRIMARY CRUSHING AND CV526 DEMOLITION AND MODIFICATION - SHT 1 OF 4	1200-S-13198
EFE PROCESS PLANT EARTHWORKS PLAN	1200-C-16414
PCB 510 & LOS FEED CONVEYORS KEY PLAN	660-M-12583
<b>CONTRACT NUMBER OR PURCHASE ORDER NUMBER</b>	<b>9741-A-85507</b>

**NOTES:**  
1. FOR MECHANICAL GENERAL NOTES REFER DRG 000-M-00263.



CONSTRUCTION AS-BUILT (RED INK)	COMMISSIONING AS-BUILT (BLUE INK)
COMPANY	COMPANY
SIGNATURE	SIGNATURE
NAME	NAME
PROJECT CODE	PROJECT CODE
<input type="checkbox"/> DRAWING MARKED UP	<input type="checkbox"/> DRAWING MARKED UP
<input type="checkbox"/> NO CHANGE	<input type="checkbox"/> NO CHANGE

NO	DATE	REVISION COMMENT TO INCLUDE PROJECT CODE FOR ALL REVISIONS
D	28.05.25	AP03109 - MINISTERS NORTH DPS ISSUED FOR CLIENT REVIEW
C	20.05.25	AP03109 - MINISTERS NORTH DPS ISSUED FOR INTERNAL REVIEW
B	05.07.23	AP03109 - MINISTERS NORTH TRUCKING-ISSUED FOR STUDY
A	07.06.23	AP03109 - MINISTERS NORTH TRUCKING-ISSUED FOR REVIEW
E	23.06.25	AP03109 - MINISTERS NORTH DPS ISSUED FOR STUDY

BHP IO TO COMPLETE		
DRAWING STATUS	SIGNED	DATE REV
INFORMATION ONLY		2025 07 03 16:24:28
AS BUILT		09/07
CONSTRUCTION MAY PROCEED		
CONSTRUCTION MAY PROCEED EXCEPT AS NOTED		
REVISE AND RESUBMIT		

BHP IO/REVIEWER TO COMPLETE		DESIGNER/CONTRACTOR TO COMPLETE	
COMPANY	BHP	COMPANY	BECHTEL
SIGNED		DESIGNED BY	
		DRAWN BY	
		CHECKED BY	
		DESIGN & HSEC APPROVED BY	

**BHP Iron Ore Pty Ltd** A.B.N. 48 008 700 881

**STUDY PHASE**  
WAO PROJECT MINISTERS NORTH DPS  
PRIMARY AND SECONDARY CRUSHING  
GENERAL ARRANGEMENT

**BHP**

SCALE 1:500

**A1 DRG. NO. 1200 - M - 15960 / E**

**Ministers North Works Approval**

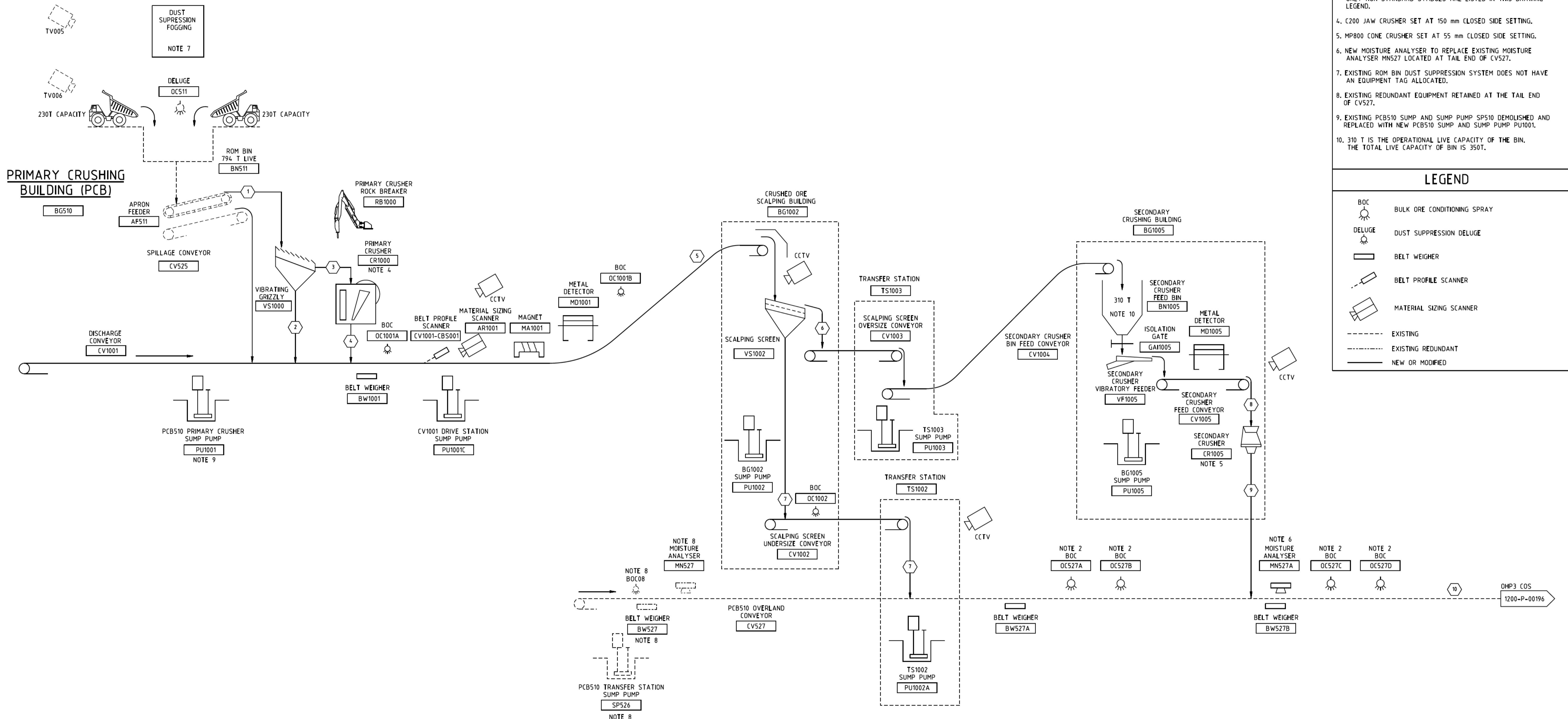
**Attachment 2C: Ministers North DPS 20 mtpa – Primary and Secondary Crushing Process Flow Diagram (Drawing 1200-P-00195\_J)**

**GENERAL NOTES**

1. CCTV CAMERA LOCATIONS AND QUANTITIES TO BE CONFIRMED.
2. BOC SPRAYS REQUIRED TO RAISE BULK ORE MOISTURE CONTENT ABOVE THE DEM VALUE PRIOR TO THE TLO.
3. REFER WAO STANDARDS PROCESS EQUIPMENT SYMBOLS 000-M-00249 AND 000-M-00250 FOR STANDARD SYMBOL LEGEND. ONLY NON-STANDARD SYMBOLS ARE LISTED IN THIS DRAWING LEGEND.
4. C200 JAW CRUSHER SET AT 150 mm CLOSED SIDE SETTING.
5. MP800 CONE CRUSHER SET AT 55 mm CLOSED SIDE SETTING.
6. NEW MOISTURE ANALYSER TO REPLACE EXISTING MOISTURE ANALYSER MNS27 LOCATED AT TAIL END OF CV527.
7. EXISTING ROM BIN DUST SUPPRESSION SYSTEM DOES NOT HAVE AN EQUIPMENT TAG ALLOCATED.
8. EXISTING REDUNDANT EQUIPMENT RETAINED AT THE TAIL END OF CV527.
9. EXISTING PCB510 SUMP AND SUMP PUMP SP510 DEMOLISHED AND REPLACED WITH NEW PCB510 SUMP AND SUMP PUMP PU1001.
10. 310 T IS THE OPERATIONAL LIVE CAPACITY OF THE BIN. THE TOTAL LIVE CAPACITY OF THE BIN IS 350T.

**LEGEND**

- BOC BULK ORE CONDITIONING SPRAY
- DELUGE DUST SUPPRESSION DELUGE
- BELT WEIGHER
- BELT PROFILE SCANNER
- MATERIAL SIZING SCANNER
- EXISTING
- EXISTING REDUNDANT
- NEW OR MODIFIED



PROCESS EQUIPMENT SYMBOLS - SHEET 2	000-M-00250
PROCESS EQUIPMENT SYMBOLS - SHEET 1	000-M-00249
20 MTPA MN MASS BALANCE	1200-P-00197
20 MTPA MN BLOCK FLOW DIAGRAM	1200-P-00194
20 MTPA MN - OHP3 & OUTFLOW PROCESS FLOW DIAGRAM	1200-P-00196
<b>CONTRACT NUMBER OR PURCHASE ORDER NUMBER</b>	9741-A-85507
<b>REFERENCE DOCUMENTS</b>	<b>DOC NO</b>

CONSTRUCTION AS-BUILT (RED INK)	COMMISSIONING AS-BUILT (BLUE INK)	H	08.02.24	AP03109 - MINISTERS NORTH TRUCKING ISSUED FOR STUDY	D	25.08.23	AP03109 - MINISTERS NORTH TRUCKING ISSUED FOR REVIEW - UPDATED FOR 20 MTPA SCOPE	BHP/IO TO COMPLETE		BHP/IO/REVIEWER TO COMPLETE		DESIGNER/CONTRACTOR TO COMPLETE			
COMPANY _____	COMPANY _____	G	23.01.24	AP03109 - MINISTERS NORTH TRUCKING ISSUED FOR CLIENT REVIEW - DPS UPDATE	C	29.05.23	AP03109 - MINISTERS NORTH TRUCKING ISSUED FOR STUDY	DRAWING STATUS REVIEW	SIGNED	DATE	REV	COMPANY	BHP	COMPANY	BECHTEL
SIGNATURE _____	SIGNATURE _____	F	08.01.24	AP03109 - MINISTERS NORTH TRUCKING ISSUED FOR INTERNAL REVIEW - DPS UPDATE				INFORMATION ONLY				SIGNED		DESIGNED BY _____	
NAME _____	NAME _____	E	06.10.23	AP03109 - MINISTERS NORTH TRUCKING ISSUED FOR STUDY - UPDATED FOR 20 MTPA SCOPE	J	26.05.25	AP03109 - MINISTERS NORTH TRUCKING RE-ISSUED FOR STUDY - MINOR UPDATES	AS BUILT						DRAWN BY _____	
PROJECT CODE _____	PROJECT CODE _____	NO	DATE	REVISION	NO	DATE	REVISION	CONSTRUCTION MAY PROCEED						CHECKED BY _____	
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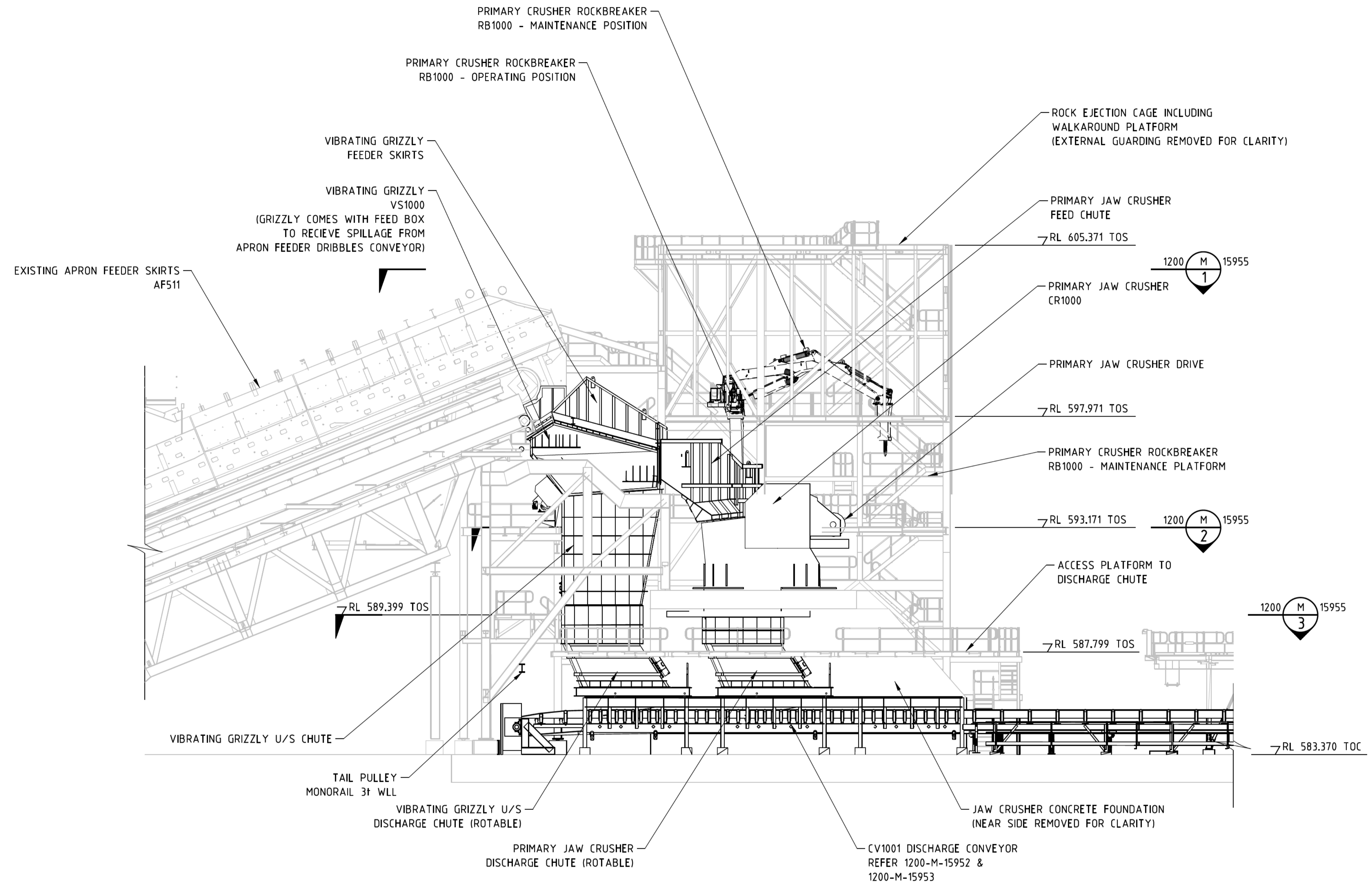


SCALE N.T.S.

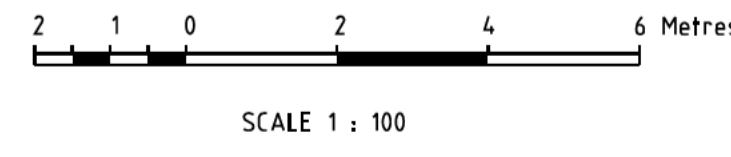
**BHP Iron Ore Pty Ltd** A.B.N. 48 008 700 981  
**STUDY PHASE**  
**WAO PROJECT - MINISTERS NORTH DPS**  
**20 MTPA MN - PRIM. AND SEC. CRUSHING**  
**PROCESS FLOW DIAGRAM**  
**A1 DRG. NO. 1200 - P - 00195 / J**

**Ministers North Works Approval**

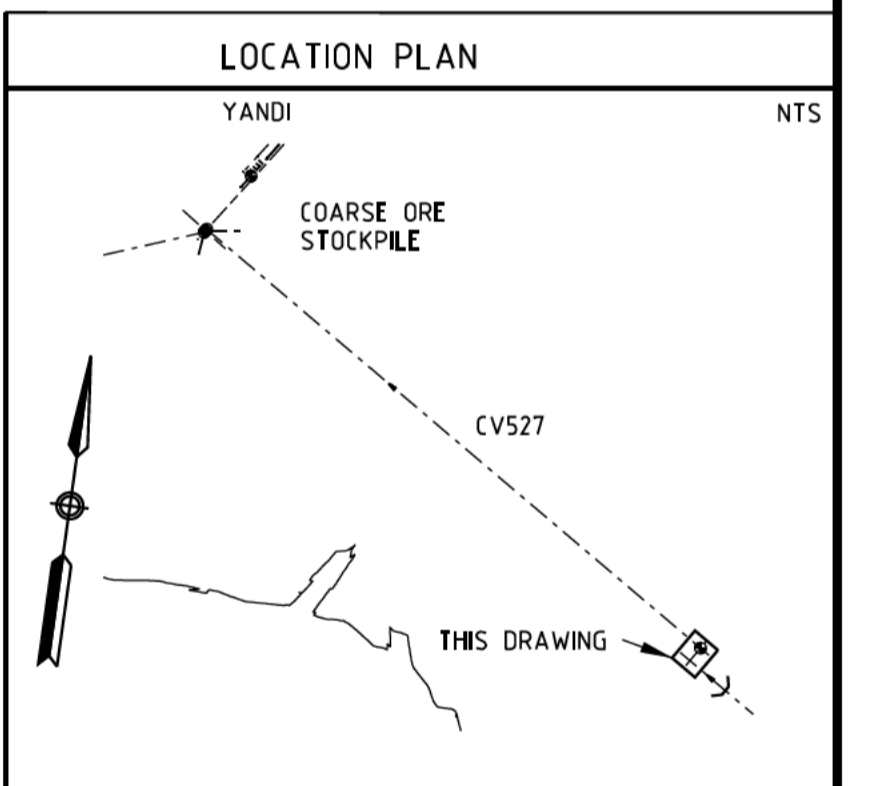
**Attachment 2D: Ministers North Trucking SPS – Primary Crushing General Arrangement  
Sheet 1 (Drawing 1200-M-15954\_B)**



PRIMARY CRUSHING ELEVATION



NOTES:  
 1. FOR CONSTRUCTION MODULARISATION METHODOLOGY REFER DRAWINGS 1200-S-13202 TO 1200-M-13203  
 2. FOR MECHANICAL GENERAL NOTES REFER DRG 000-M-00263.



REFERENCE DOCUMENTS	DOC NO
NEW EFE PRIMARY CRUSHING BUILDING MODULE DRAWING - SHEET 1 OF 2	1200-S-13202
NEW EFE PRIMARY CRUSHING BUILDING MODULE DRAWING - SHEET 2 OF 2	1200-S-13203
PRIMARY CRUSHER DISCHARGE CONVEYOR CV1001 - GENERAL ARRANGEMENT - ELEVATION	1200-M-15953
PRIMARY CRUSHER DISCHARGE CONVEYOR CV1001 - GENERAL ARRANGEMENT - PLAN	1200-M-15952
PRIMARY CRUSHING GENERAL ARRANGEMENT - SHEET 2	1200-M-15955
CONTRACT NUMBER OR PURCHASE ORDER NUMBER	AP03109

CONSTRUCTION AS-BUILT (RED INK)	COMMISSIONING AS-BUILT (BLUE INK)	NO	DATE	REVISION COMMENT TO INCLUDE PROJECT CODE FOR ALL REVISIONS
		B	04.07.23	AP03109 - MINISTERS NORTH TRUCKING-ISSUED FOR STUDY
		A	06.06.23	AP03109 - MINISTERS NORTH TRUCKING-ISSUED FOR REVIEW

BHP/IO TO COMPLETE				BHP/REVIEWER TO COMPLETE		DESIGNER/CONTRACTOR TO COMPLETE	
DRAWING STATUS REVIEW	SIGNED	DATE	REV	COMPANY	BHP	COMPANY	BECHTEL
INFORMATION ONLY				SIGNED		DESIGNED BY	
AS BUILT				CHECKED BY		DRAWN BY	
CONSTRUCTION MAY PROCEED				CHECKED BY		CHECKED BY	
CONSTRUCTION MAY PROCEED EXCEPT AS NOTED				REVISE AND RESUBMIT		DESIGN & HSEC APPROVED BY	

**BHP** **BECHTEL**

**BHP Iron Ore Pty Ltd** A.B.N. 48 008 700 981

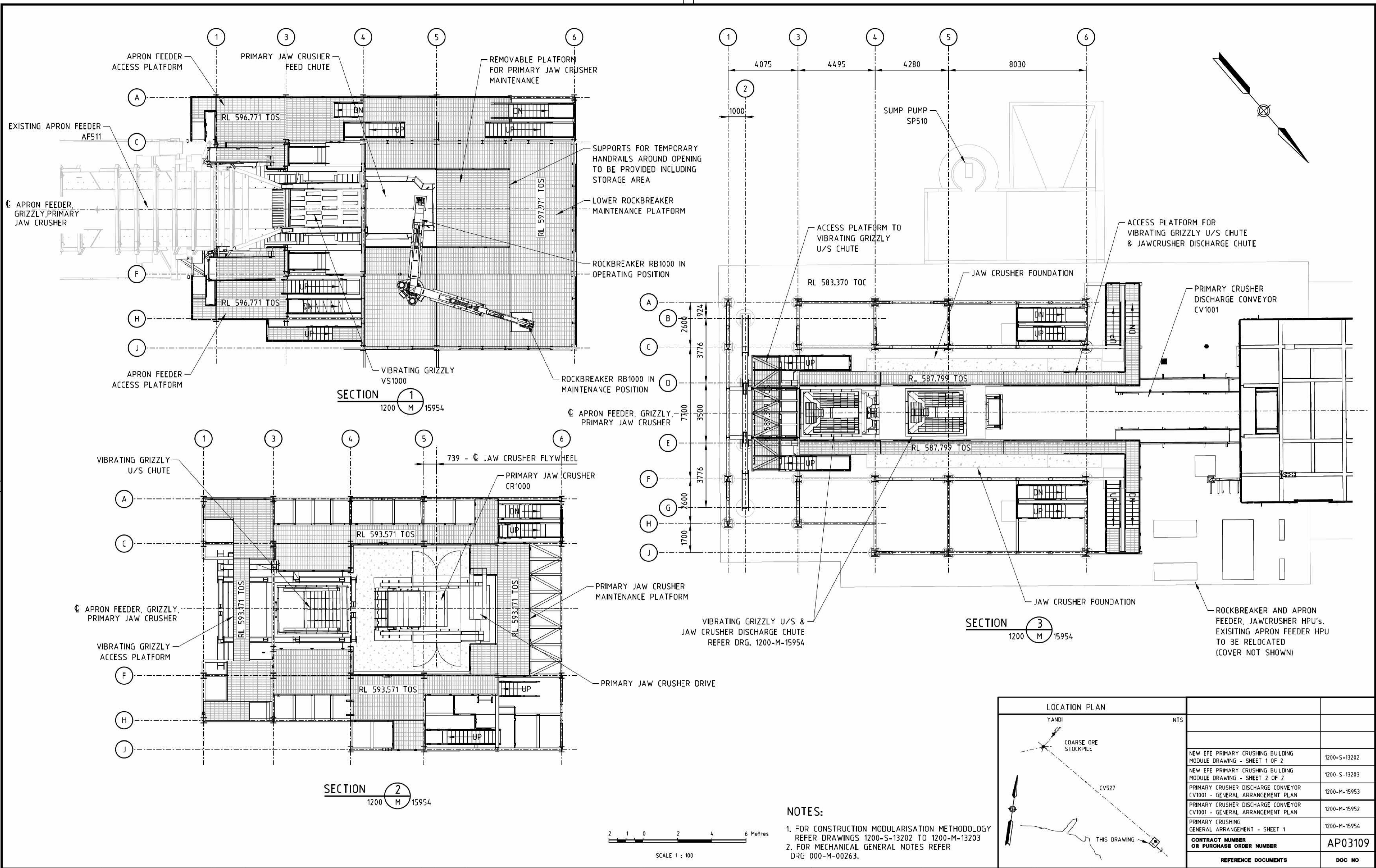
STUDY PHASE  
 WAIO PROJECT MN TRUCKING SPS  
 PRIMARY CRUSHING  
 GENERAL ARRANGEMENT - SHEET 1

SCALE 1:100

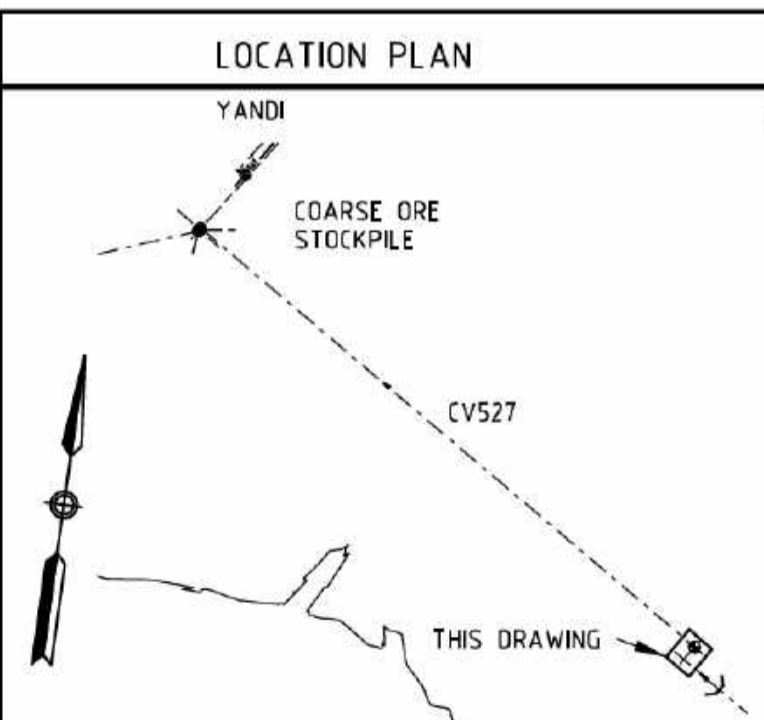
**A1 DRG. NO. 1200 - M - 15954 /B**

**Ministers North Works Approval**

**Attachment 2E: Ministers North Trucking SPS – Primary Crushing General Arrangement  
Sheet 2 (Drawing 1200-M-15955\_B)**



- NOTES:**
1. FOR CONSTRUCTION MODULARISATION METHODOLOGY REFER DRAWINGS 1200-S-13202 TO 1200-M-13203
  2. FOR MECHANICAL GENERAL NOTES REFER DRG 000-M-00263.



REFERENCE DOCUMENTS	DOC NO
NEW EFE PRIMARY CRUSHING BUILDING MODULE DRAWING - SHEET 1 OF 2	1200-S-13202
NEW EFE PRIMARY CRUSHING BUILDING MODULE DRAWING - SHEET 2 OF 2	1200-S-13203
PRIMARY CRUSHER DISCHARGE CONVEYOR (CV1001) - GENERAL ARRANGEMENT PLAN	1200-M-15953
PRIMARY CRUSHER DISCHARGE CONVEYOR (CV1001) - GENERAL ARRANGEMENT PLAN	1200-M-15952
PRIMARY CRUSHING GENERAL ARRANGEMENT - SHEET 1	1200-M-15954
<b>CONTRACT NUMBER OR PURCHASE ORDER NUMBER</b>	<b>AP03109</b>

CONSTRUCTION AS-BUILT (RED INK)		COMMISSIONING AS-BUILT (BLUE INK)	
COMPANY	SIGNATURE	COMPANY	SIGNATURE
NAME	NAME	PROJECT CODE	PROJECT CODE
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NO	DATE	REVISION COMMENT TO INCLUDE PROJECT CODE FOR ALL REVISIONS
B	04.07.23	AP03109 - MINISTERS NORTH TRUCKING-ISSUED FOR STUDY
A	06.06.23	AP03109 - MINISTERS NORTH TRUCKING-ISSUED FOR REVIEW

BHP/IO TO COMPLETE				BHP/REVIEWER TO COMPLETE		DESIGNER/CONTRACTOR TO COMPLETE	
DRAWING STATUS	REVIEW	SIGNED	DATE	REV	COMPANY	BHP	SIGNED
INFORMATION ONLY							
AS BUILT							
CONSTRUCTION MAY PROCEED							
CONSTRUCTION MAY PROCEED EXCEPT AS NOTED							
REVISE AND RESUBMIT							

**BECHTEL**  
U.S. & CAN. INC. REGISTERED ACCOUNTING MEMBERSHIP CO.

**BHP**  
U.S. & CAN. INC. REGISTERED ACCOUNTING MEMBERSHIP CO.

**BHP Iron Ore Pty Ltd**  
A.B.N. 48 008 700 981

**STUDY PHASE**  
**WAO PROJECT MN TRUCKING SPS**  
**PRIMARY CRUSHING**  
**GENERAL ARRANGEMENT - SHEET 2**

SCALE 1:100

**A1 DRG. NO. 1200 - M - 15955 / B**

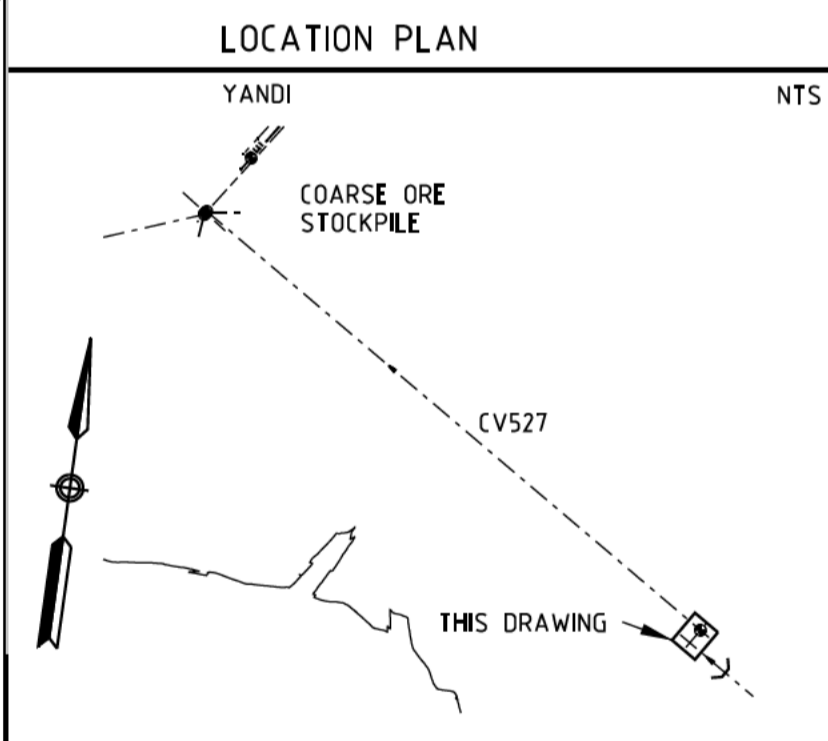
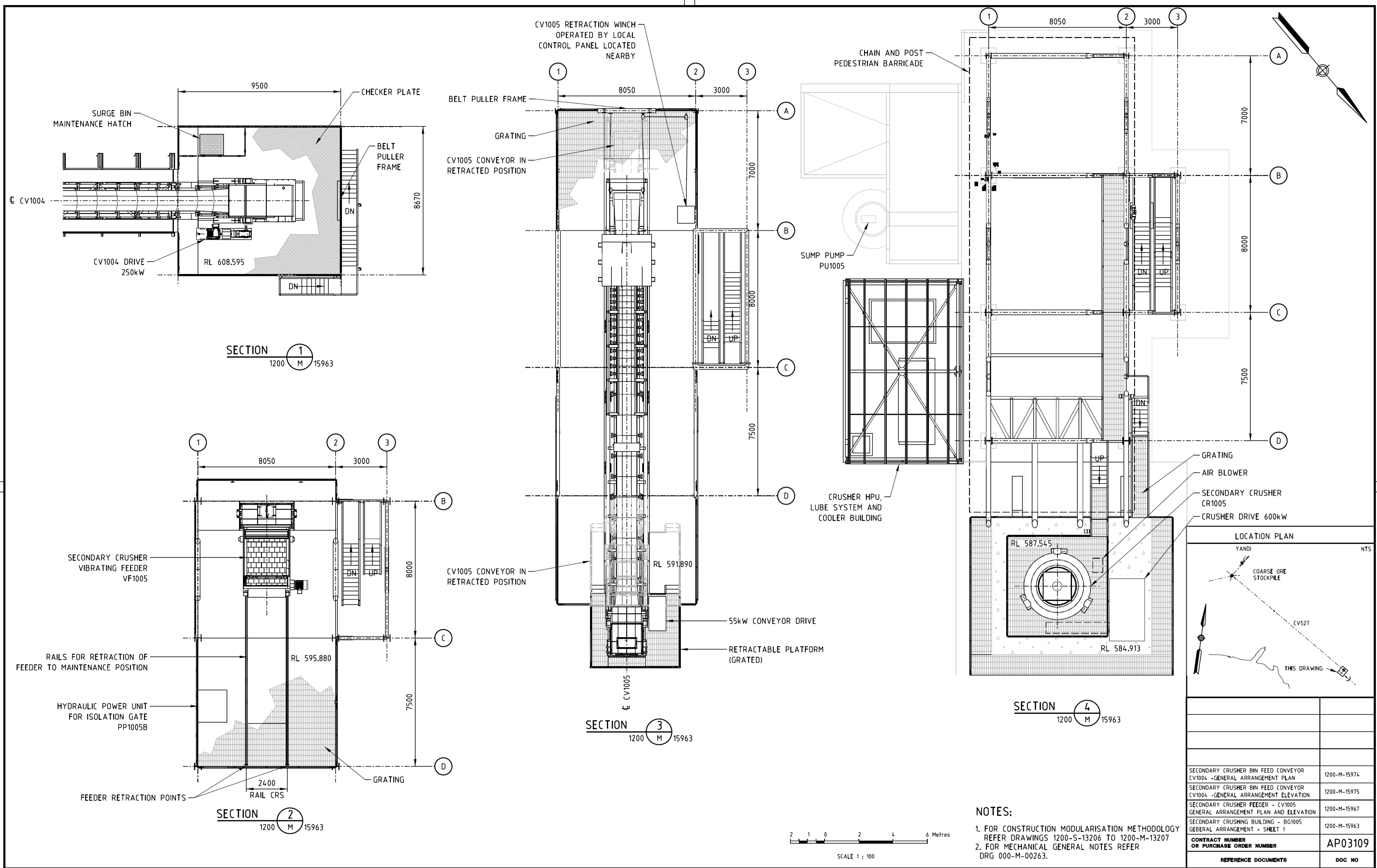
**Ministers North Works Approval**

**Attachment 2F: Ministers North Trucking SPS – Secondary Crushing Building BG1005  
General Arrangement Sheet 1 (Drawing 1200-M-15963\_B)**



**Ministers North Works Approval**

**Attachment 2G: Ministers North Trucking SPS – Secondary Crushing Building BG1005  
General Arrangement Sheet 2 (Drawing 1200-M-15964\_B)**



SECONDARY CRUSHER BIN FEED CONVEYOR CV1004 - GENERAL ARRANGEMENT PLAN 1200-M-15974	
SECONDARY CRUSHER BIN FEED CONVEYOR CV1004 - GENERAL ARRANGEMENT ELEVATION 1200-M-15975	
SECONDARY CRUSHER FEEDER - CV1005 GENERAL ARRANGEMENT PLAN AND ELEVATION 1200-M-15967	
SECONDARY CRUSHING BUILDING - BG1005 GENERAL ARRANGEMENT - SHEET 1 1200-M-15963	
CONTRACT NUMBER OR PURCHASE ORDER NUMBER	AP03109
REFERENCE DOCUMENTS	DOC NO

**NOTES:**  
 1. FOR CONSTRUCTION MODULARISATION METHODOLOGY REFER DRAWINGS 1200-S-13206 TO 1200-M-13207  
 2. FOR MECHANICAL GENERAL NOTES REFER DRG 000-M-00263.

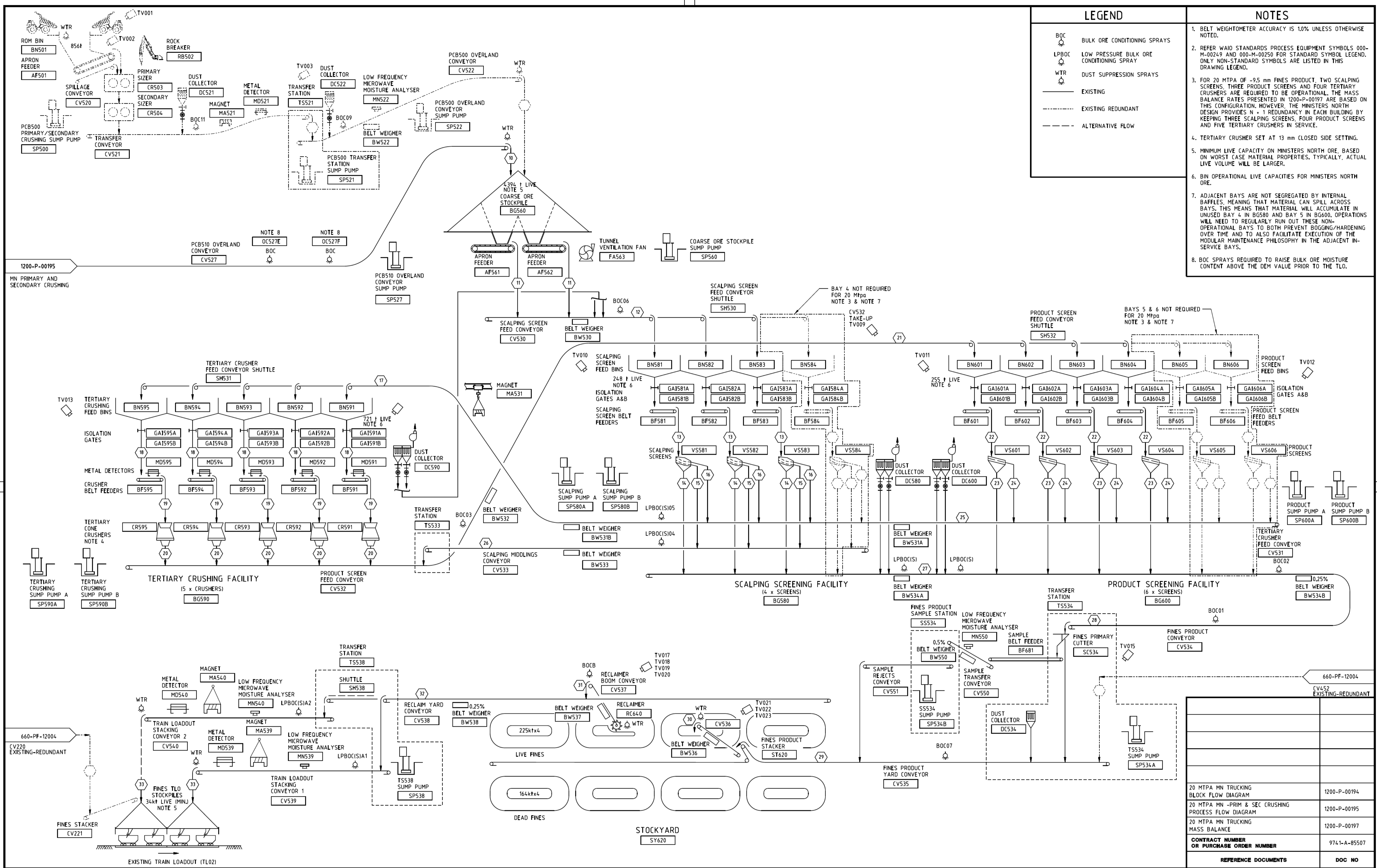
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NO	DATE	REVISION												
B	05.07.23	AP03109 - MINISTERS NORTH TRUCKING-ISSUED FOR STUDY												
A	06.06.23	AP03109 - MINISTERS NORTH TRUCKING-ISSUED FOR REVIEW												
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NO	DATE	REVISION												
NO	DATE	REVISION												

BHP/IO TO COMPLETE DRAWING STATUS REVIEW INFORMATION ONLY AS BUILT CONSTRUCTION MAY PROCEED CONSTRUCTION MAY PROCEED EXCEPT AS NOTED REVISE AND RESUBMIT	BHP/REVIEWER TO COMPLETE COMPANY BHP SIGNED _____ THIS DRAWING HAS BEEN REVIEWED FOR GENERAL COMPLIANCE TO SCOPE AND COMPANY STANDARDS	DESIGNER/CONTRACTOR TO COMPLETE COMPANY BECHTEL DESIGNED BY _____ DRAWN BY _____ CHECKED BY _____ DESIGN & HSEC APPROVED BY _____
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**BHP Iron Ore Pty Ltd** A.B.N. 48 008 700 981  
**STUDY PHASE**  
**WAO PROJECT MN TRUCKING SPS**  
**SECONDARY CRUSHING BUILDING - BG1005**  
**GENERAL ARRANGEMENT - SHEET 2**  
**SCALE 1:100**  
**A1 DRG. NO. 1200 - M - 15964 / B**

**Ministers North Works Approval**

**Attachment 2H: Ministers North DPS 20 mtpa – OHP3 and Outflow Process Flow Diagram  
(Drawing 1200-P-00196\_H)**



LEGEND	
	BULK ORE CONDITIONING SPRAYS
	LOW PRESSURE BULK ORE CONDITIONING SPRAY
	DUST SUPPRESSION SPRAYS
	EXISTING
	EXISTING REDUNDANT
	ALTERNATIVE FLOW

- | NOTES |                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.    | BELT WEIGHTOMETER ACCURACY IS 1.0% UNLESS OTHERWISE NOTED.                                                                                                                                                                                                                                                                                                                                                       |
| 2.    | REFER WAO STANDARDS PROCESS EQUIPMENT SYMBOLS 000-M-00249 AND 000-M-00250 FOR STANDARD SYMBOL LEGEND. ONLY NON-STANDARD SYMBOLS ARE LISTED IN THIS DRAWING LEGEND.                                                                                                                                                                                                                                               |
| 3.    | FOR 20 MTPA OF -95 mm FINES PRODUCT, TWO SCALPING SCREENS, THREE PRODUCT SCREENS AND FOUR TERTIARY CRUSHERS ARE REQUIRED TO BE OPERATIONAL. THE MASS BALANCE RATES PRESENTED IN 1200-P-00197 ARE BASED ON THIS CONFIGURATION. HOWEVER, THE MINISTERS NORTH DESIGN PROVIDES N + 1 REDUNDANCY IN EACH BUILDING BY KEEPING THREE SCALPING SCREENS, FOUR PRODUCT SCREENS AND FIVE TERTIARY CRUSHERS IN SERVICE.      |
| 4.    | TERTIARY CRUSHER SET AT 13 mm CLOSED SIDE SETTING.                                                                                                                                                                                                                                                                                                                                                               |
| 5.    | MINIMUM LIVE CAPACITY ON MINISTERS NORTH ORE, BASED ON WORST CASE MATERIAL PROPERTIES. TYPICALLY, ACTUAL LIVE VOLUME WILL BE LARGER.                                                                                                                                                                                                                                                                             |
| 6.    | MIN OPERATIONAL LIVE CAPACITIES FOR MINISTERS NORTH ORE.                                                                                                                                                                                                                                                                                                                                                         |
| 7.    | ADJACENT BAYS ARE NOT SEGREGATED BY INTERNAL Baffles MEANING THAT MATERIAL CAN SPILL ACROSS BAYS. THIS MEANS THAT MATERIAL WILL ACCUMULATE IN UNUSED BAY 4 IN BG580 AND BAY 5 IN BG600. OPERATIONS WILL NEED TO REGULARLY RUN OUT THESE NON-OPERATIONAL BAYS TO BOTH PREVENT BOGGING/HARDENING OVER TIME AND TO ALSO FACILITATE EXECUTION OF THE MODULAR MAINTENANCE PHILOSOPHY IN THE ADJACENT IN-SERVICE BAYS. |
| 8.    | BOC SPRAYS REQUIRED TO RAISE BULK ORE MOISTURE CONTENT ABOVE THE DEM VALUE PRIOR TO THE TLO.                                                                                                                                                                                                                                                                                                                     |

1200-P-00195  
MN PRIMARY AND SECONDARY CRUSHING

660-PF-12004  
EXISTING-REDUNDANT

660-PF-12004  
EXISTING-REDUNDANT

CONSTRUCTION AS-BUILT (RED INK)	COMMISSIONING AS-BUILT (BLUE INK)	H	16.06.25	AP03109 - MINISTERS NORTH TRUCKING RE-ISSUED FOR STUDY - MINOR UPDATES	D	06.10.23	AP03109 - MINISTERS NORTH TRUCKING ISSUED FOR STUDY - UPDATED FOR 20 MTPA SCOPE
		G	08.02.24	AP03109 - MINISTERS NORTH TRUCKING ISSUED FOR STUDY	C	25.08.23	AP03109 - MINISTERS NORTH TRUCKING ISSUED FOR REVIEW - UPDATED FOR 20 MTPA SCOPE
		F	23.01.24	AP03109 - MINISTERS NORTH TRUCKING ISSUED FOR CLIENT REVIEW - DPS UPDATE	B	14.04.23	AP03109 - MINISTERS NORTH TRUCKING ISSUED FOR STUDY
		E	08.01.24	AP03109 - MINISTERS NORTH TRUCKING ISSUED FOR INTERNAL REVIEW - DPS UPDATE	A	15.03.23	AP03109 - MINISTERS NORTH TRUCKING ISSUED FOR REVIEW
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DRAWING STATUS REVIEW	SIGNED DATE REV	COMPANY	BHP	COMPANY	BECHTEL
INFORMATION ONLY		SIGNED		DESIGNED BY	
AS BUILT				DRAWN BY	
CONSTRUCTION MAY PROCEED				CHECKED BY	
CONSTRUCTION MAY PROCEED EXCEPT AS NOTED				DESIGN & HSEC APPROVED BY	
REVISE AND RESUBMIT					

REFERENCE DOCUMENTS		DOC NO
20 MTPA MN TRUCKING BLOCK FLOW DIAGRAM		1200-P-00194
20 MTPA MN -PRIM & SEC CRUSHING PROCESS FLOW DIAGRAM		1200-P-00195
20 MTPA MN TRUCKING MASS BALANCE		1200-P-00197
CONTRACT NUMBER OR PURCHASE ORDER NUMBER		9741-A-85507

**BHP Iron Ore Pty Ltd** A.B.N. 48 008 700 981

**STUDY PHASE**  
WAO PROJECT - MINISTERS NORTH DPS  
20 MTPA MN - OHP3 AND OUTFLOW  
PROCESS FLOW DIAGRAM

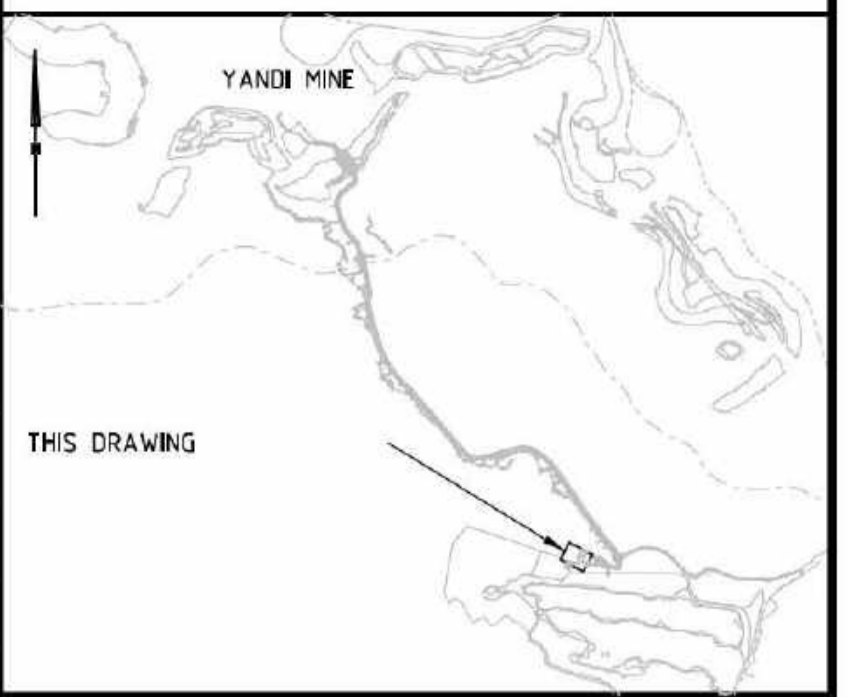
**BHP** **BECHTEL**

SCALE ..... **A1** DRG. NO. **1200 - P - 00196 / H**

**Ministers North Works Approval**

**Attachment 2I: Ministers North DPS NPI Main Precinct General Arrangement (Drawing 1200-A-12753\_G)**

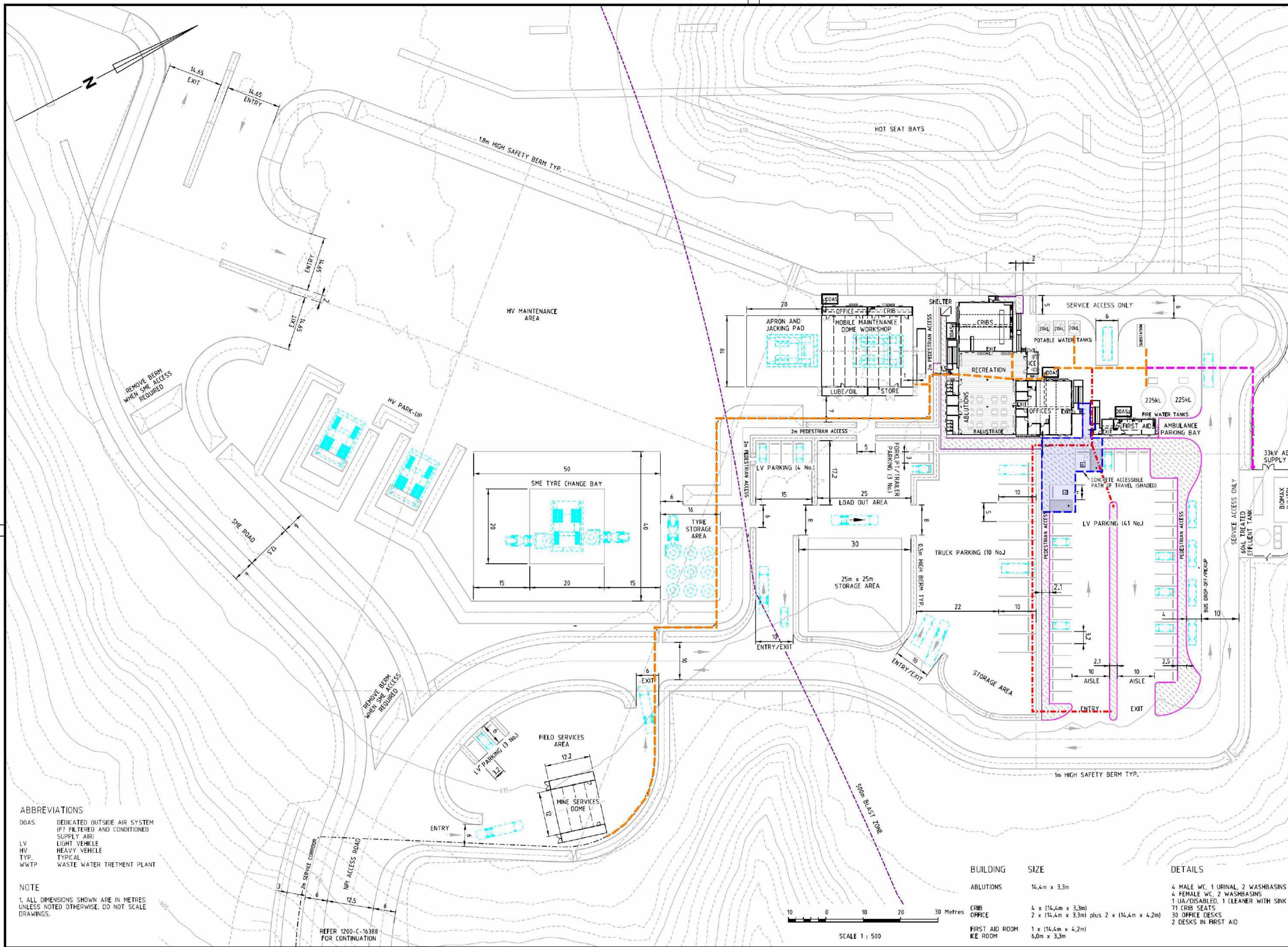
LOCATION PLAN



THIS DRAWING

GENERAL NOTES

1. HORIZONTAL DATUM: YANDI PROJECT GRID (YAN94).
2. VERTICAL DATUM: AUSTRALIAN HEIGHT DATUM (AHD).
3. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.



**LEGEND**

- PRECAST BARRIER KERB (420m)
- POWER, COMMS AND WATER COMBINED TRENCH (~300m)
- POWER & COMMS TRENCH (~150m)
- SUBSTATION 33kV SUPPLY - UNDERGROUND TRANSITION
- ACCESSIBLE PATH OF TRAVEL

NOTE: WATER, COMMS AND POWER LAYOUT TO BE CONFIRMED IN DETAIL DESIGN

REFERENCE DOCUMENTS	DOC NO
MN FUEL FACILITY GENERAL ARRANGEMENT	1200-A-12755
NPI PAD, TURKEYS NEST, - LAYOUT PLAN	1200-C-16388
PRIMARY NPI 11kV POWER DISTRIBUTION	1200-E-17613
MN RAW WATER DISTRIBUTION TO MN TURKEYS NEST & NPI - LAYOUT	1200-M-15996
<b>CONTRACT NUMBER OR PURCHASE ORDER NUMBER</b>	<b>9741-A-85507</b>

**ABBREVIATIONS**

DOAS DEDICATED OUTSIDE AIR SYSTEM (F7 FILTERED AND CONDITIONED SUPPLY AIR)

LV LIGHT VEHICLE

HV HEAVY VEHICLE

TYP. TYPICAL

WWTP WASTE WATER TREATMENT PLANT

**NOTE**

1. ALL DIMENSIONS SHOWN ARE IN METRES UNLESS NOTED OTHERWISE. DO NOT SCALE DRAWINGS.

**BUILDING SIZE**

ABLUTIONS	14.4m x 3.3m
CRIB OFFICE	4 x (14.4m x 3.3m) 2 x (14.4m x 3.3m) plus 2 x (14.4m x 4.2m)
FIRST AID ROOM	1 x (14.4m x 4.2m)
ICE ROOM	6.0m x 3.3m

**DETAILS**

4 MALE WC, 1 URINAL, 2 WASHBASINS
4 FEMALE WC, 2 WASHBASINS
1 UA/DISABLED, 1 CLEANER WITH SINK
71 CRIB SEATS
30 OFFICE DESKS
2 DESKS IN FIRST AID

CONSTRUCTION AS-BUILT (RED INK)	COMMISSIONING AS-BUILT (BLUE INK)
COMPANY	COMPANY
SIGNATURE	SIGNATURE
NAME	NAME
PROJECT CODE	PROJECT CODE
<input type="checkbox"/> DRAWING MARKED UP	<input type="checkbox"/> DRAWING MARKED UP
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NO	DATE	REVISION COMMENT TO INCLUDE PROJECT CODE FOR ALL REVISIONS
G	14.03.25	AP03109 - MINISTERS NORTH DPS UPDATED FOR DPS - ISSUED FOR STUDY
F	16.10.24	AP03109 - MINISTERS NORTH DPS UPDATED FOR DPS - ISSUED FOR CLIENT REVIEW
E	25.09.24	AP03109 - MINISTERS NORTH DPS UPDATED FOR DPS - ISSUED FOR INTERNAL REVIEW

NO	DATE	REVISION COMMENT TO INCLUDE PROJECT CODE FOR ALL REVISIONS
D	26.07.23	AP03109 - MN TRUCKING - ISSUED FOR STUDY
C	06.07.23	AP03109 - MN TRUCKING - ISSUED FOR REVIEW
B	19.06.23	AP03109 - MN TRUCKING - ISSUED FOR STUDY
A	12.04.23	AP03109 - MN TRUCKING - ISSUED FOR REVIEW

BHPIO TO COMPLETE	BHPIO/REVIEWER TO COMPLETE	DESIGNER/CONTRACTOR TO COMPLETE
<b>DRAWING STATUS REVIEW</b>	<b>SIGNED</b>	<b>DATE</b>
INFORMATION ONLY		
AS BUILT		
CONSTRUCTION MAY PROCEED		
CONSTRUCTION MAY PROCEED EXCEPT AS NOTED		
REVISE AND RESUBMIT		

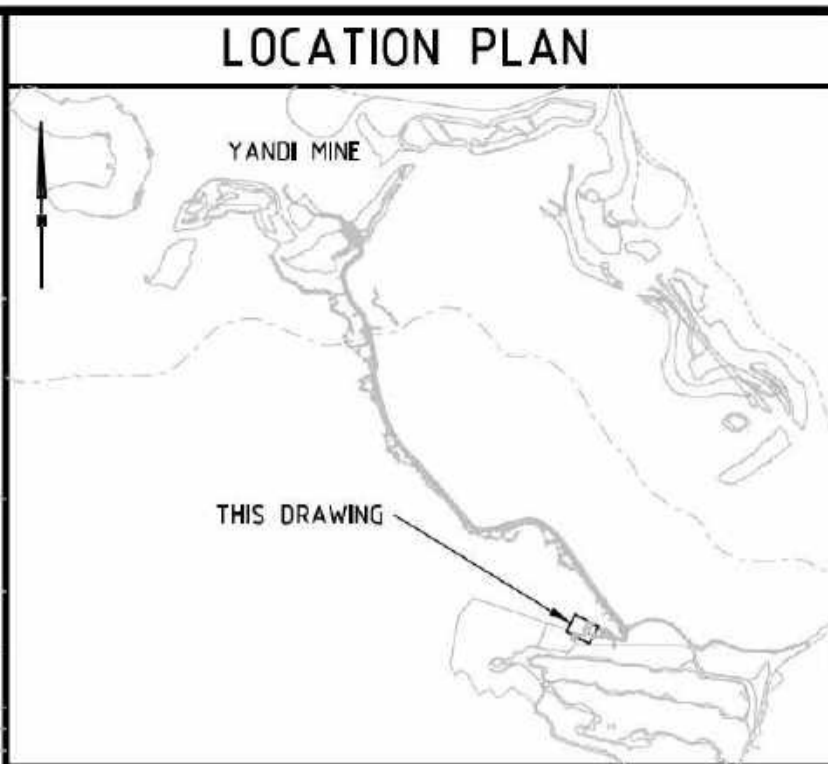
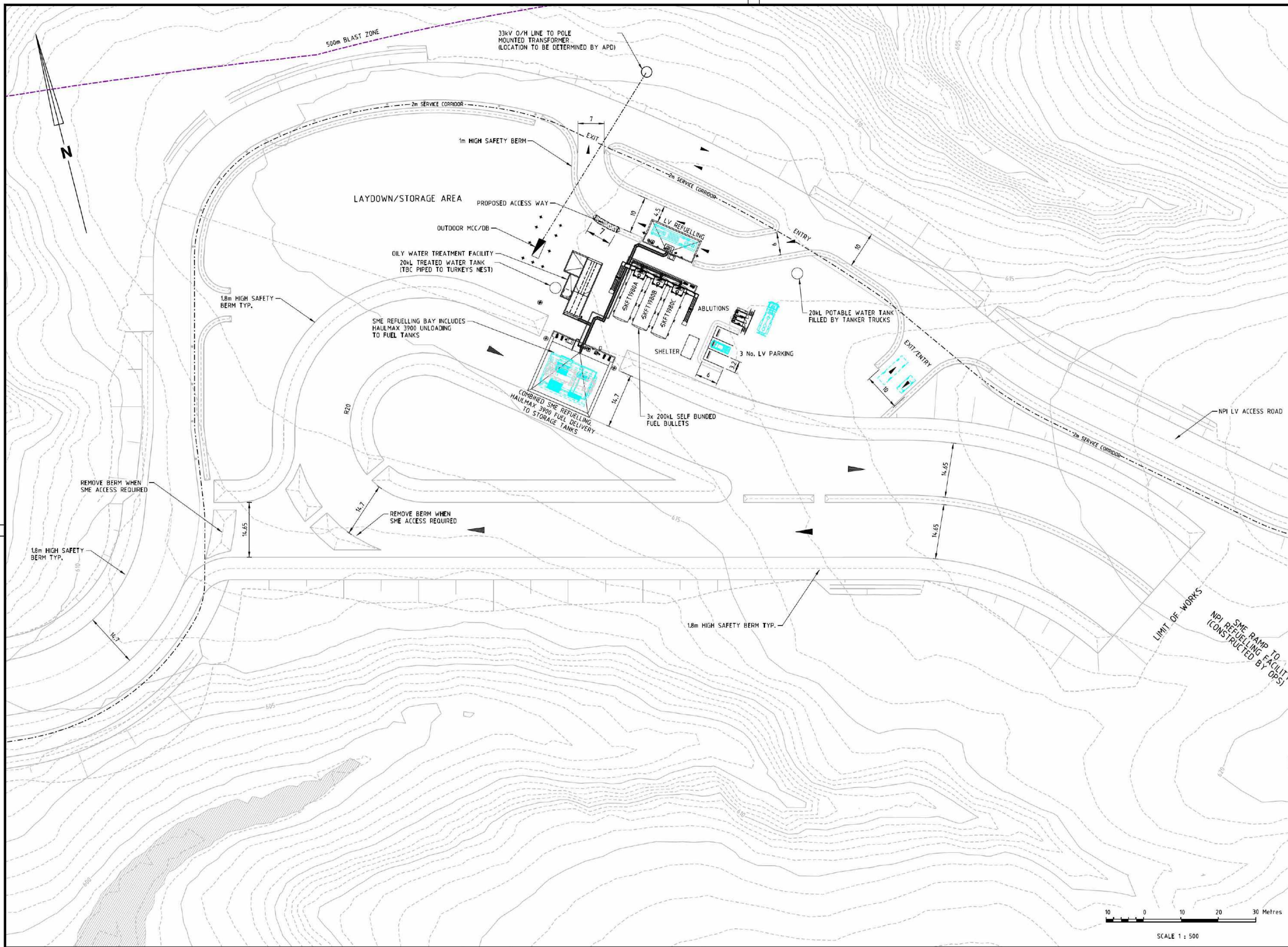
**BHP Iron Ore Pty Ltd** A.B.N. 48 008 700 881

**STUDY PHASE**  
**WAO PROJECT - MINISTERS NORTH DPS**  
**NPI MAIN PRECINCT**  
**GENERAL ARRANGEMENT**

**SCALE 1:500** **A1 DRG. NO. 1200 - A - 12753 /G**

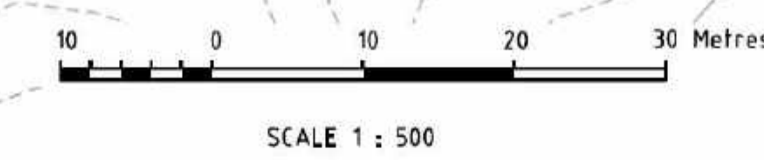
**Ministers North Works Approval**

**Attachment 2J: Ministers North Trucking DPS NPI Fuel Facility Precinct General Arrangement (Drawing 1200-A-12755\_E)**



- GENERAL NOTES**
- HORIZONTAL DATUM: YANDI PROJECT GRID (YAN94).
  - VERTICAL DATUM: AUSTRALIAN HEIGHT DATUM (AHD).
  - ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.

- LEGEND**
- ⊕ SME BOLLARD
  - ⊕ LV BOLLARD
  - - - U/G WATER
  - - - U/G 33kV POWER CABLE



REFERENCE DOCUMENTS	DOC NO
MN NPI MAIN PRECINCT GENERAL ARRANGEMENT	1200-A-12753
NPI PAD, TURKEYS NEST, - LAYOUT PLAN	1200-C-16388
PRIMARY NPI 11kV POWER DISTRIBUTION	1200-E-17613
MN RAW WATER DISTRIBUTION TO MN TURKEYS NEST & NPI - LAYOUT	1200-M-15996
CONTRACT NUMBER OR PURCHASE ORDER NUMBER	9741-A-85507

CONSTRUCTION AS-BUILT (RED INK)	COMMISSIONING AS-BUILT (BLUE INK)
COMPANY _____	COMPANY _____
SIGNATURE _____	SIGNATURE _____
NAME _____	NAME _____
PROJECT CODE _____	PROJECT CODE _____
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<input type="checkbox"/> NO CHANGE	<input type="checkbox"/> NO CHANGE

NO	DATE	REVISION COMMENT TO INCLUDE PROJECT CODE FOR ALL REVISIONS
D	16.10.24	AP03109 - MINISTERS NORTH DPS UPDATED FOR DPS - ISSUED FOR CLIENT REVIEW
C	02.10.24	AP03109 - MINISTERS NORTH DPS UPDATED FOR DPS - ISSUED FOR INTERNAL REVIEW
B	26.07.23	AP03109 - MN TRUCKING - ISSUED FOR STUDY
A	22.06.23	AP03109 - MN TRUCKING - ISSUED FOR REVIEW

BHP/IO TO COMPLETE				BHP/IO/REVIEWER TO COMPLETE		DESIGNER/CONTRACTOR TO COMPLETE	
DRAWING STATUS REVIEW	SIGNED	DATE	REV	COMPANY	BHP	COMPANY	BECHTEL
INFORMATION ONLY	_____	_____	_____	SIGNED	_____	DESIGNED BY	_____
AS BUILT	_____	_____	_____	CHECKED BY	_____	DRAWN BY	_____
CONSTRUCTION MAY PROCEED	_____	_____	_____	DESIGN & HSEC APPROVED BY	_____	CHECKED BY	_____
CONSTRUCTION MAY PROCEED EXCEPT AS NOTED	_____	_____	_____	THIS DRAWING HAS BEEN REVIEWED FOR GENERAL COMPLIANCE TO SCOPE AND COMPANY STANDARDS	_____	DESIGNED BY	_____
REVISE AND RESUBMIT	_____	_____	_____			DRAWN BY	_____

**BHP Iron Ore Pty Ltd** A.B.N. 48 008 700 881

**STUDY PHASE**  
**WAIO PROJECT MN TRUCKING DPS**  
**NPI FUEL FACILITY PRECINCT**  
**GENERAL ARRANGEMENT**

**BHP** **BECHTEL**

SCALE 1: 500

**A1 DRG. NO. 1200 - A - 12755 / E**

Ministers North Works Approval

**Attachment 2K: Ministers North DPS Prestrip Facility General Arrangement**



**Attachment 2L: Works Approval Boundary Coordinates**

The coordinates of the Works Approval Application Area are provided below in GDA 2020 MGA50.

<b>Easting</b>	<b>Northing</b>
712651.95	7485725.24
712429.77	7485241.88
713152.27	7484956.22
713126.05	7484300.71
712965.81	7483948.19
711868.72	7484021.31
711619.17	7483478.40
713580.53	7481264.21
714988.30	7480059.99
715141.54	7479825.38
715057.03	7479009.44
715768.56	7477951.04
718406.02	7477089.42
719106.91	7476491.09
719106.36	7475775.87
719382.94	7476076.78
720132.08	7476077.18
719143.73	7475068.99
718438.62	7472556.41
716749.77	7472556.41
716749.67	7472556.09
716748.33	7472552.09
716748.26	7472551.88
716747.11	7472548.82
716745.76	7472545.84
716745.04	7472544.44
716742.96	7472540.54
716740.41	7472535.75
716739.58	7472534.25
716737.85	7472531.47
716737.72	7472531.28
716734.65	7472526.73
716728.27	7472516.84
716727.83	7472516.17
716727.03	7472515.00
716716.32	7472499.92
716715.99	7472499.47
716715.09	7472498.24
716714.15	7472493.58
716713.77	7472490.16
716714.00	7472486.26
716714.09	7472483.25
716713.99	7472479.98
716713.98	7472479.92

## Ministers North Works Approval

Easting	Northing
716713.45	7472472.00
716713.14	7472468.79
716712.60	7472465.57
716712.52	7472465.17
716710.71	7472456.45
716709.60	7472448.80
716709.24	7472446.62
716707.86	7472439.43
716707.70	7472438.17
716707.98	7472433.77
716708.36	7472430.55
716709.58	7472424.27
716709.95	7472422.15
716711.73	7472410.31
716712.86	7472403.83
716713.19	7472401.71
716713.44	7472399.34
716714.25	7472389.63
716714.32	7472388.75
716714.43	7472385.66
716714.49	7472369.07
716714.73	7472349.56
716714.73	7472348.94
716714.73	7472348.77
716714.66	7472327.91
716715.06	7472319.36
716716.46	7472307.59
716718.36	7472293.78
716720.19	7472284.58
716720.20	7472284.55
716720.30	7472284.03
716722.90	7472270.17
716722.99	7472269.68
716726.63	7472249.21
716730.80	7472228.44
716730.82	7472228.34
716730.84	7472228.21
716735.25	7472205.72
716735.42	7472204.85
716738.85	7472185.56
716738.87	7472185.42
716742.08	7472167.03
716745.97	7472147.16
716749.92	7472131.62
716754.98	7472114.59
716759.81	7472101.08

## Ministers North Works Approval

Easting	Northing
716767.16	7472082.29
716773.65	7472067.02
716786.22	7472037.51
716786.41	7472037.05
716786.67	7472036.42
716794.33	7472017.18
716795.23	7472014.76
716795.28	7472014.61
716800.62	7471998.69
716800.74	7471998.35
716808.43	7471974.89
716815.23	7471955.25
716815.33	7471954.96
716815.45	7471954.58
716821.66	7471935.80
716822.30	7471933.72
716827.31	7471916.00
716834.46	7471891.37
716834.74	7471890.37
716834.93	7471889.64
716843.30	7471856.41
716851.91	7471822.96
716857.45	7471804.09
716857.55	7471803.75
716865.06	7471777.48
716865.28	7471776.68
716865.82	7471774.46
716869.43	7471758.03
716870.72	7471752.44
716871.05	7471750.92
716871.58	7471747.69
716871.66	7471747.10
716872.43	7471740.60
716872.68	7471737.94
716872.78	7471735.56
716872.97	7471724.60
716872.98	7471723.72
716872.96	7471722.39
716872.55	7471707.00
716872.46	7471705.06
716872.39	7471704.08
716871.51	7471693.74
716871.21	7471680.11
716870.87	7471658.46
716871.14	7471645.11
716871.60	7471623.27

Ministers North Works Approval

Easting	Northing
716871.61	7471622.20
716871.51	7471618.93
716870.60	7471576.37
716866.75	7471566.03
716866.88	7471559.61
716866.89	7471558.57
716866.78	7471555.30
716866.46	7471552.04
716865.93	7471548.81
716865.26	7471545.90
716864.29	7471542.22
716864.22	7471541.94
716863.27	7471538.81
716862.12	7471535.75
716860.85	7471532.96
716724.01	7471534.91
716724.36	7471536.14
716727.09	7471545.08
716727.57	7471546.56
716728.72	7471549.62
716730.07	7471552.60
716730.09	7471552.63
716732.71	7471557.93
716734.23	7471560.79
716735.51	7471562.88
716737.89	7471566.58
716738.34	7471567.26
716740.25	7471569.92
716742.32	7471572.45
716743.17	7471573.39
716746.62	7471577.13
716746.77	7471577.30
716752.15	7471583.06
716753.38	7471584.34
716755.77	7471586.58
716756.69	7471587.37
716761.30	7471591.22
716761.36	7471591.89
716761.53	7471593.34
716761.54	7471593.37
716763.14	7471605.45
716763.66	7471613.33
716763.83	7471626.74
716763.46	7471650.65
716763.45	7471651.39
716763.42	7471683.94

**Ministers North Works Approval**

<b>Easting</b>	<b>Northing</b>
716763.42	7471683.99
716763.50	7471686.74
716764.99	7471713.80
716765.74	7471728.22
716765.87	7471732.07
716764.71	7471737.24
716764.45	7471738.45
716764.38	7471738.83
716763.08	7471745.63
716759.67	7471757.24
716759.65	7471757.33
716749.49	7471792.18
716749.20	7471793.23
716748.79	7471794.85
716744.24	7471814.43
716739.17	7471834.11
716734.15	7471853.15
716727.20	7471878.43
716716.61	7471913.98
716705.84	7471945.25
716705.77	7471945.45
716705.71	7471945.64
716697.52	7471970.08
716697.16	7471971.19
716692.51	7471986.23
716689.54	7471994.19
716680.72	7472014.48
716669.42	7472039.81
716668.89	7472041.05
716668.59	7472041.80
716658.00	7472068.58
716657.15	7472070.89
716656.83	7472071.86
716652.18	7472086.55
716651.71	7472088.13
716645.57	7472109.96
716645.41	7472110.54
716645.02	7472112.10
716641.62	7472126.64
716641.27	7472128.26
716641.25	7472128.38
716636.77	7472151.21
716636.36	7472153.55
716631.23	7472188.38
716628.00	7472204.54
716623.56	7472224.25

## Ministers North Works Approval

Easting	Northing
716623.31	7472225.47
716623.27	7472225.64
716619.10	7472246.99
716618.94	7472247.86
716614.91	7472270.63
716614.69	7472272.00
716612.22	7472288.68
716612.10	7472289.49
716612.00	7472290.31
716609.77	7472309.77
716609.58	7472311.78
716608.44	7472327.12
716608.41	7472327.55
716608.31	7472330.46
716608.19	7472346.86
716608.19	7472347.22
716608.19	7472347.27
716608.21	7472367.50
716608.12	7472380.40
716607.55	7472387.66
716605.97	7472399.05
716604.07	7472410.25
716603.78	7472412.12
716603.73	7472412.51
716602.39	7472423.36
716602.12	7472426.22
716602.03	7472428.25
716601.81	7472437.22
716601.79	7472438.46
716601.87	7472441.30
716602.41	7472450.73
716602.44	7472451.15
716602.70	7472453.96
716604.31	7472467.13
716604.37	7472467.58
716604.56	7472468.89
716606.51	7472481.19
716607.98	7472491.77
716608.51	7472497.00
716608.74	7472504.61
716608.83	7472506.33
716609.15	7472509.59
716609.68	7472512.82
716609.76	7472513.19
716611.34	7472520.82
716611.91	7472523.29

## Ministers North Works Approval

<b>Easting</b>	<b>Northing</b>
716613.92	7472531.00
716614.01	7472531.35
716614.96	7472534.48
716616.11	7472537.54
716616.40	7472538.22
716620.16	7472546.93
716621.22	7472549.23
716622.77	7472552.12
716624.49	7472554.89
716625.57	7472556.41
715978.68	7472556.41
715977.70	7473276.42
716015.91	7473335.32
716020.71	7473342.49
716024.89	7473350.10
716028.43	7473358.09
716031.30	7473366.38
716033.47	7473374.91
716034.92	7473383.61
716043.14	7473455.49
716043.70	7473463.86
716043.59	7473472.24
716042.79	7473480.58
716041.31	7473488.81
716039.17	7473496.87
716036.39	7473504.69
716032.97	7473512.22
716028.96	7473519.39
716024.38	7473526.15
716019.26	7473532.45
715963.70	7473596.39
715957.75	7473602.63
715951.35	7473608.33
715944.53	7473613.43
715937.34	7473617.91
715929.84	7473621.74
715922.06	7473624.89
715527.75	7473766.76
715526.05	7473767.35
715518.30	7473769.64
714977.36	7473905.81
714873.04	7473981.48
714866.32	7473985.94
714859.30	7473989.85
714852.02	7473993.16
714844.53	7473995.86

**Ministers North Works Approval**

<b>Easting</b>	<b>Northing</b>
714736.75	7474030.02
714727.49	7474042.71
714698.32	7474247.75
714696.87	7474255.56
714694.83	7474263.21
714692.22	7474270.65
714689.04	7474277.84
714685.33	7474284.72
714681.11	7474291.24
714676.40	7474297.37
714564.35	7474432.99
714558.48	7474439.44
714552.14	7474445.35
714545.36	7474450.67
714538.20	7474455.36
714530.71	7474459.40
714522.92	7474462.75
714514.91	7474465.40
714385.18	7474502.74
714363.44	7474631.65
714361.84	7474639.26
714359.67	7474646.70
714356.96	7474653.92
714353.71	7474660.88
714349.95	7474667.54
714345.71	7474673.84
714265.12	7474784.65
714260.95	7474789.99
714256.46	7474795.01
714251.67	7474799.69
714246.59	7474804.02
714167.39	7474867.17
714161.09	7474871.79
714154.49	7474875.90
714147.62	7474879.47
714140.54	7474882.49
714133.26	7474884.94
714125.84	7474886.80
714047.83	7474903.39
713982.93	7474980.45
713976.85	7474986.88
713970.31	7474992.76
713963.34	7474998.04
713956.00	7475002.69
713948.33	7475006.68
713940.38	7475009.98

## Ministers North Works Approval

Easting	Northing
713932.21	7475012.57
713923.87	7475014.43
713915.41	7475015.56
713906.90	7475015.94
712921.55	7475341.94
712913.80	7475345.93
712905.77	7475349.22
712897.52	7475351.79
712889.10	7475353.63
712880.57	7475354.72
712871.98	7475355.06
712863.39	7475354.64
712639.41	7475361.40
712636.54	7476934.48
713437.37	7476666.49
711472.32	7479603.78
711111.76	7479714.95
710473.19	7480615.10
709613.11	7481159.62
709428.05	7482033.98
709153.83	7482542.44
708126.31	7485161.90
708311.65	7486318.30
709739.45	7486317.83
711196.65	7484716.74
711918.58	7485712.71
711673.56	7486609.75
712364.57	7486532.10
712651.95	7485725.24

**Ministers North Works Approval**

**Attachment 3A: Environmental commissioning plan**

**Iron Ore Major Projects****Ministers North****Document Number: MNT-PLN-00071****Revision: 0****Revision History**

<b>Revision No</b>	<b>Revision Status</b>	<b>Date of Change</b>
0	Issued for Use	22/01/2026

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## Commissioning Management Plan

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### 1 Executive Summary

The Commissioning Management Plan (CMP), together with the documents it references, defines how Commissioning will be managed on the Ministers North project. The CMP is a living document and is regularly reviewed and maintained in alignment with the Project Execution Plan (MNT-PLN-00064).

The CMP complies with the phase requirements of MAP Commissioning External Standard (MAUPRJ-STD-00023) and defines outputs that comply with the requirements of the Investment Process Group Level Document. A Commissioning and Handover Strategy (MNT-PLN-00072) is prepared by the end of DPS, along with the CMP is prepared in DPS. The CMP is an evolving document and is regularly reviewed and maintained via the project's Management of Change (MOC) process.

This document contains the overarching commissioning requirements and responsibilities based on the information available during DPS.

Commissioning activity will be executed over a four (4) stage process, as outlined below:

- Stage 0 Factory Acceptance Testing
- Stage 1 Construction Verification
- Stage 2 Non-Process/No Load Commissioning
- Stage 3 Process/Load Commissioning
- Stage 4 Ramp-up/Performance Testing

#### 1.1 Overview

Ministers North (Project) is a high-grade, Above Water Table (AWT) Brockman ore deposit located ~13km south-east of Yandi in Central Pilbara. With a resource of ~240Mt and an average grade of 61.2% Fe of schedulable ore (fines only), Ministers North will deliver 20Mtpa Ore for Rail (OFR) with an expected Life of Mine (LoM) of approximately 11-years. First ore is scheduled for FY28.

The Project scope consists of establishing a satellite mining operation, supporting mine site infrastructure, BHP and RTIO powerline relocation to enable eastern pit development, a haul road connecting MN to Yandi including a bridge over RTIO rail and a land-bridge through a disused pit, and modification of the existing Yandi processing infrastructure to process MN Brockman ore. For a detailed breakdown of the scope, refer to the Ministers North Project Scope of Facilities (MN-SOF-0001).

The purpose of this document is to:

- Define the overall commissioning framework for the Ministers North Project.
- Define the requirements for Company witnessing and assisting the EPC and other contractors through the commissioning phases, including the brownfields scope as well as the Greenfields scopes.
- Define acceptance points of new equipment by the Company before conducting load commissioning and startup activities.

Further, this document defines the BHP roles and responsibilities, states the commissioning requirements, handover to BHP Operations and information on Performance Testing.

This document should be read in conjunction with the relevant project scopes of works (Section 1.3 Related Documents) and the Handover Plan (MNT-PLN-00072).

Commissioning Management Plan

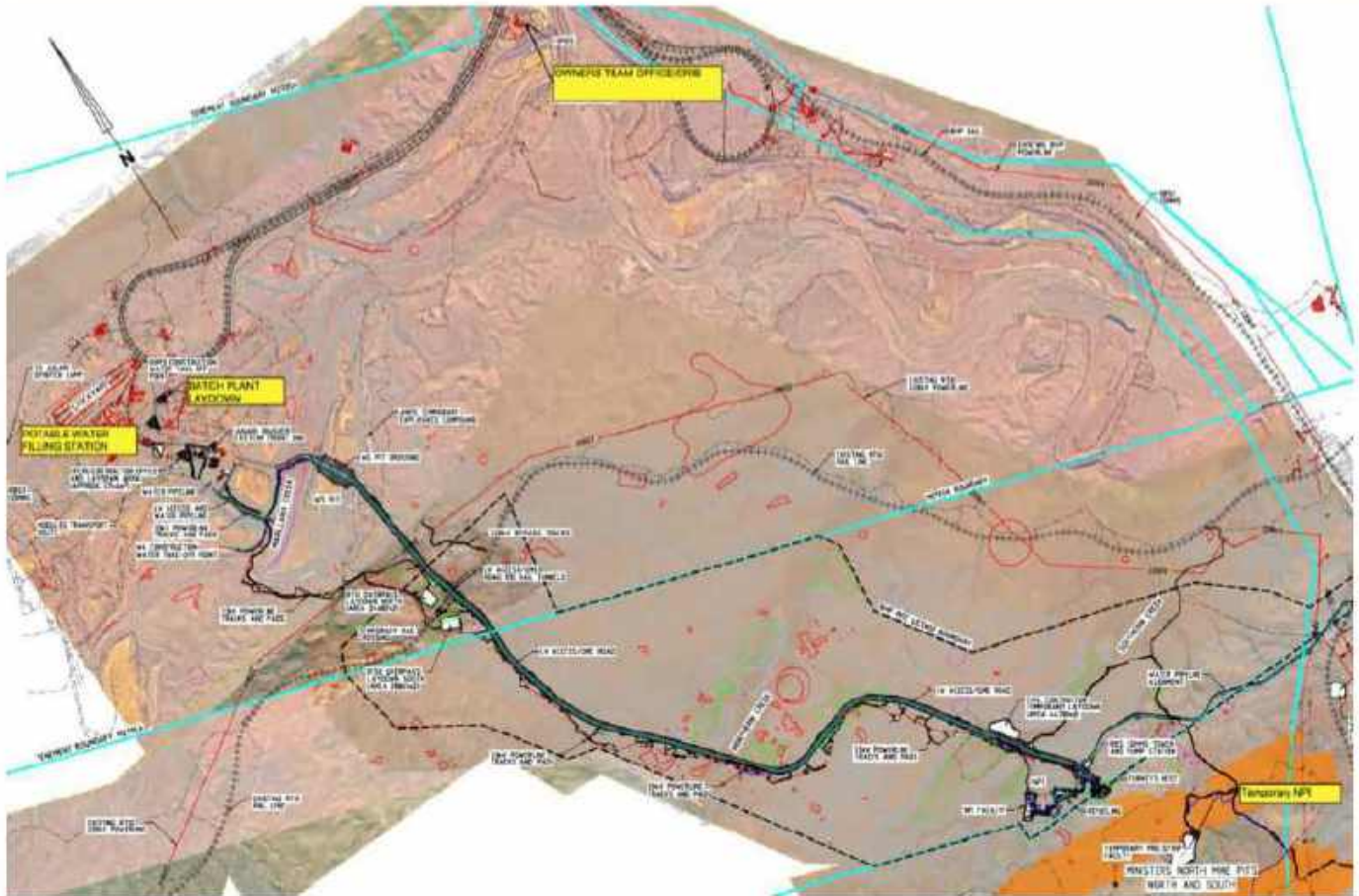


Figure 1-1: Ministers North Site Layout and Project Overview

1.2 Structure of the Plan

This CMP has been developed to expand on the details provided in the Ministers North Commissioning Strategy (MNT-STR-00002). The process requirements of this plan are developed in accordance with the MAP Internal Standard (MAUPRJ-STD-00020) and Commissioning External Standard (MAUPRJ-STD-00023). It aligns with the Ministers North Project Execution Plan (MNT-PLN-00064) which contains summary level detail.

Relevant package contractors will be responsible for the development of their individual Commissioning Execution Plans (CEP), in accordance with the MAP Commissioning External Standard (MAUPRJ-STD-00023). The CEP's will be reviewed by the Companies representatives before starting the execution works.

Each contractor will be responsible for writing their own project commissioning procedures, including Factory Acceptance Testing, No-Load and Load commissioning, Control System FAT's and Control System SAT's. the BHP Technology team will provide support for all Technology and other Technology-related works.

All contractor commissioning procedures will be subject to the Company's approval, to ensure alignment with all phases of commissioning and eventual handover to Operations.

1.3 Related Documents

Document Number	Document Title
MAUPRJ-STD-00020	MAP Internal Standard
MAUPRJ-STD-00023	MAP Commissioning External Standard
MAUPRJ-PRO-00023	MAP Commissioning Functional Procedure
MN-SOF-0001	Ministers North Project Scope of Facilities

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Document Number	Document Title
PREP-1200-PI-00011	Ministers North EPCM Performance Test Criteria
MNT-PLN-00016	Ministers North Operation Management Plan
MNT-PLN-00070	Ministers North Operational Ramp Up Plan
MNT-PLN-00072	Ministers North Handover Plan
SPEC-000-G-13016	WAIO Information Requirements Specification
FRM-ESA-GEN-00025	SEP-15 Document Request Form
TECH-PRO-00134	Transition to Operations Procedure
SOW-1200-C-00055	Civil and Bulk Earthworks (Contract 1) Scope of Work
SOW-1200-G-12605	Communications Infrastructure Execution Scope of Work
SOW-1200-G-12647	Enabling and General Services Scope of Work
SOW-043-G-12063	MN Non-Process Infrastructure Scope of Work
SOW-661-G-12008	Minister North Project EFE Processing Facility EPC Scope of Work
SOW-1200-E-00188	132kV Powerline Relocation and 33kV Line Reticulation Scope of Work

1.4 Acronyms

Acronym	Description
CCC	Care, Custody & Control
CVC	Construction Verification Certificate
D&C	Design & Construct
DPS	Definition Phase Study
E2C	End of Stage 2 Certificate
E3C	End of Stage 3 Certificate
EFE	Eastern Front End
EPC	Engineering, Procurement and Construction
EUC	End User Computing
EXE	Execution Phase
FAC	Final Acceptance Certificate
FAT	Factory Acceptance Testing
FATC	Factory Acceptance Test Certificate
FMS	Fleet Management System
HV	High Voltage
ITR	Inspection Test Record
NoE	Notice of Energisation
NPI	Non-Process Infrastructure
OHP3	Ore Handling Plant 3

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Acronym	Description
RTIO	Rio Tinto Iron Ore

## 2 Scope

### 2.1 Project Scope

At a high level the Ministers North Project scope comprises the following:

- Pre-stripping to establish a satellite mining operation.
- Construction of mining area Non-Process Infrastructure (NPI) including, offices, crib facilities, 33kV power supply (from Yandi) and mining fleet servicing equipment.
- Powerline relocation to enable mining of the eastern pit (132kV).
- Construction of 13km haul road connecting MN to Yandi including a bridge over Rio Tinto Iron Ore (RTIO) rail and a land-bridge over disused pit W5.
- Modification of the existing Yandi processing infrastructure (Eastern front end [EFE] crushing facilities and ore handling plant 3 [OHP3]) to handle MN Brockman ore.

#### 2.1.1 Eastern Front End (EFE)

Removal of the Eastern Front End redundant equipment forms part of the critical path for development of the crushing facility located at Yandi Operations; and is included in the PCF2 scope in order to de-risk the schedule for commencement of the Ministers North Primary and Secondary crushing facility works.

Redundant processing facilities to be removed includes the following:

- Crusher building BG510 housing primary and secondary sizers CR513 and CV514, rock breaker and tail end of Conveyor CV526.
- Conveyor CV526 truss.
- Transfer station TS526 including all dust collection equipment.
- Sections of Conveyor CV527 where Minister North facilities will be installed.
- All associated concrete foundations and slabs; and
- Modification of the control system to allow operation of remaining Yandi facilities.
- The run of mine bin, apron feeder and associated structure will remain and form part of the new EFE primary crushing building.

The revised Eastern Front End comprises:

- Detailed earthworks and concrete foundations.
- Primary crushing building including rock breaker, grizzly screen and jaw crusher.
- Scalping screen building with a single vibrating screen.
- Secondary crusher building with vibrating feeder, belt feeder and cone crusher.
- Conveyor systems.
- Modified Substation SUB701.
- 33kV power system.
- All water, power, hydraulics and communication services; and
- Revised control system integrated into the existing Yandi system.

Contractor mobilisation activities shall be undertaken during the period between Gate 3 funding approvals and State Agreement approval being obtained, allowing for immediate commencement of Work post primary approvals being obtained.

#### 2.1.2 NPI Precinct

A Non-Process Infrastructure (NPI) precinct will be installed at Ministers North as the centre for mining fleet servicing and location for the mining team's office and crib facilities. During PCF2 a Design and Construct contract will be awarded for the design phase (AFC).

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Raw water tanks, piping and pump stations will be fully designed by a design consultant to expedite the long lead time procurement items such as tanks, pumps and piping.

The NPI precinct comprises:

- Heavy vehicle and light vehicle parking.
- Fuel handling facility.
- Tire change and storage bay.
- Mine service & Maintenance workshop.
- Crib, first aid, recreation, offices and ablutions.
- Process, fire and potable Water, air, power, communications reticulation.
- Waste water handling and disposal; and
- Turkeys Nest and Standpipes.



Figure 2-1: NPI Precinct Area

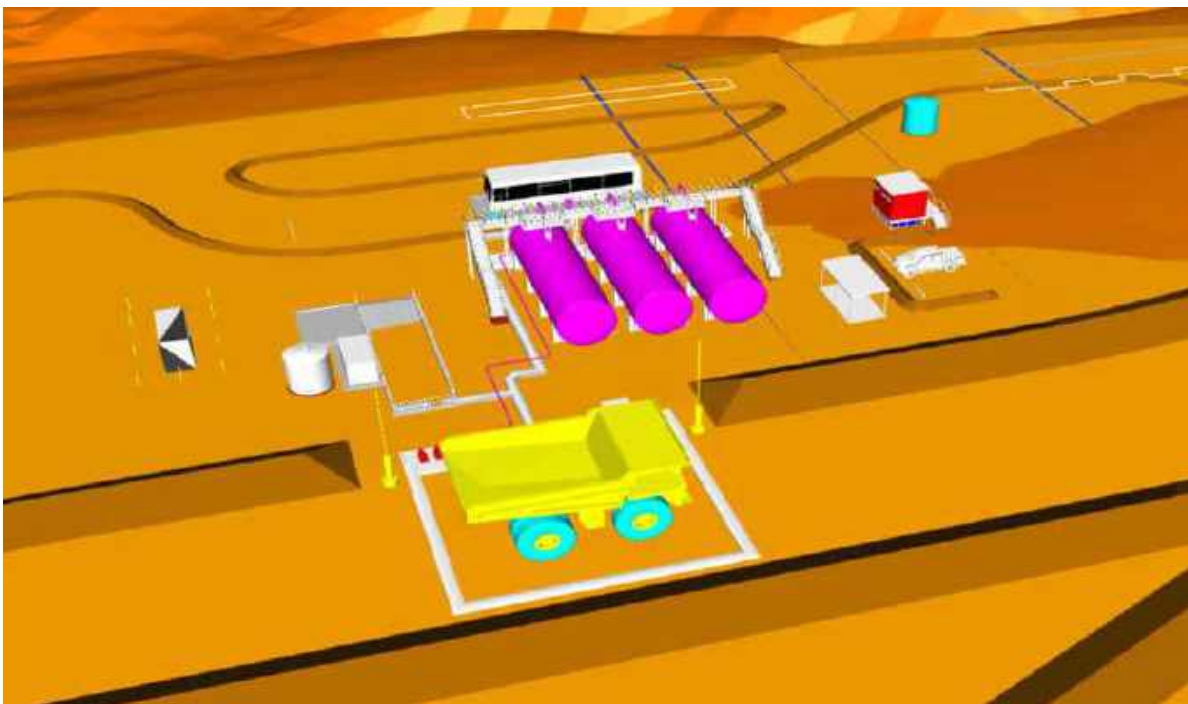


Figure 2-2: NPI Fuel Facility

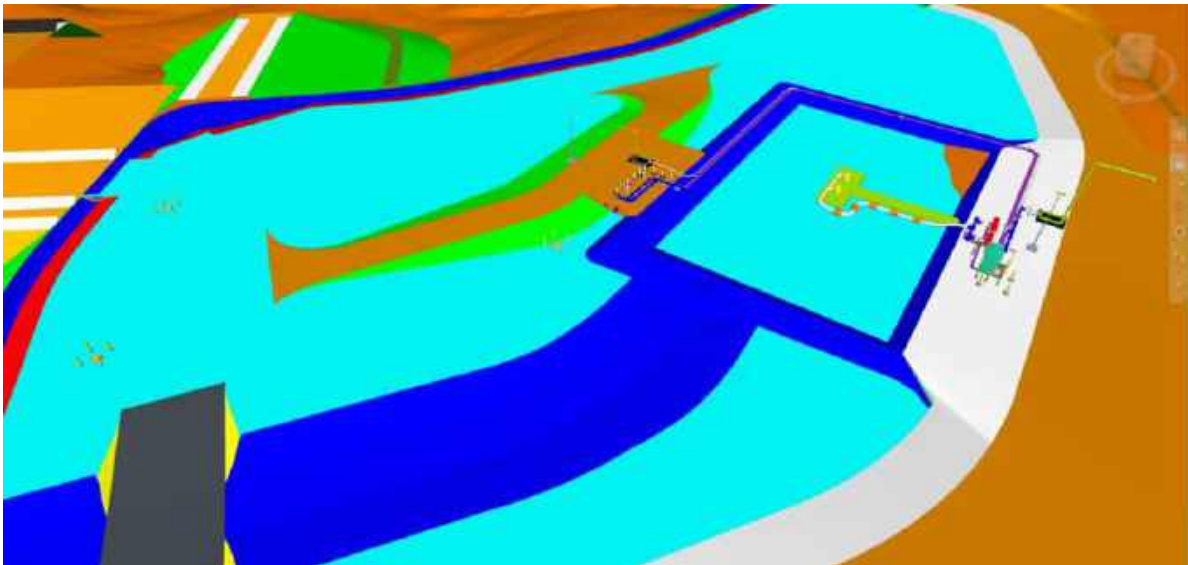


Figure 2-3: Turkeys Nest and Standpipes layout

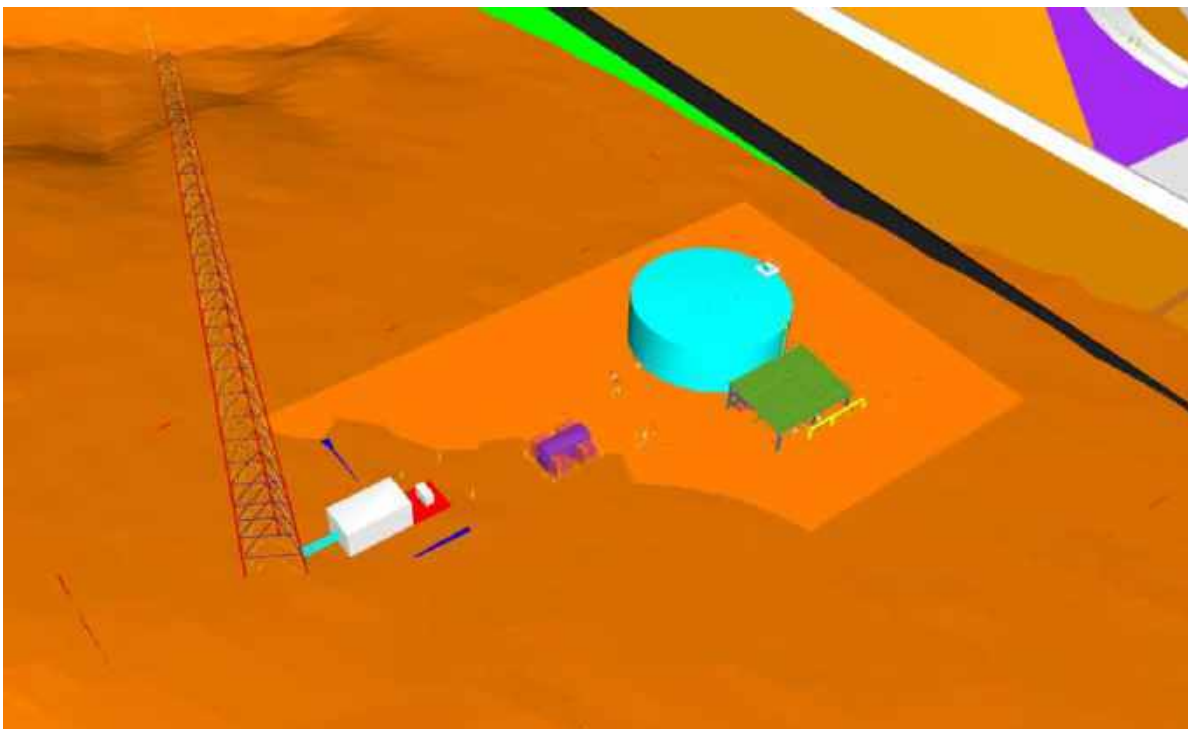


Figure 2-4: Process water Tank and Pumping station

### 2.1.3 Haul Road

The haul road links the Ministers North mine site to the Eastern front end and broadly comprises:

- Dual lane heavy vehicle road.
- Separate dual lane light vehicle road.
- Services corridor including water.
- 33kV transmission line providing power from Yandi to the Ministers North NPI precinct
- Completion of the land bridge over disused mining pit W5; and

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- Bridge over the RTIO rail line.

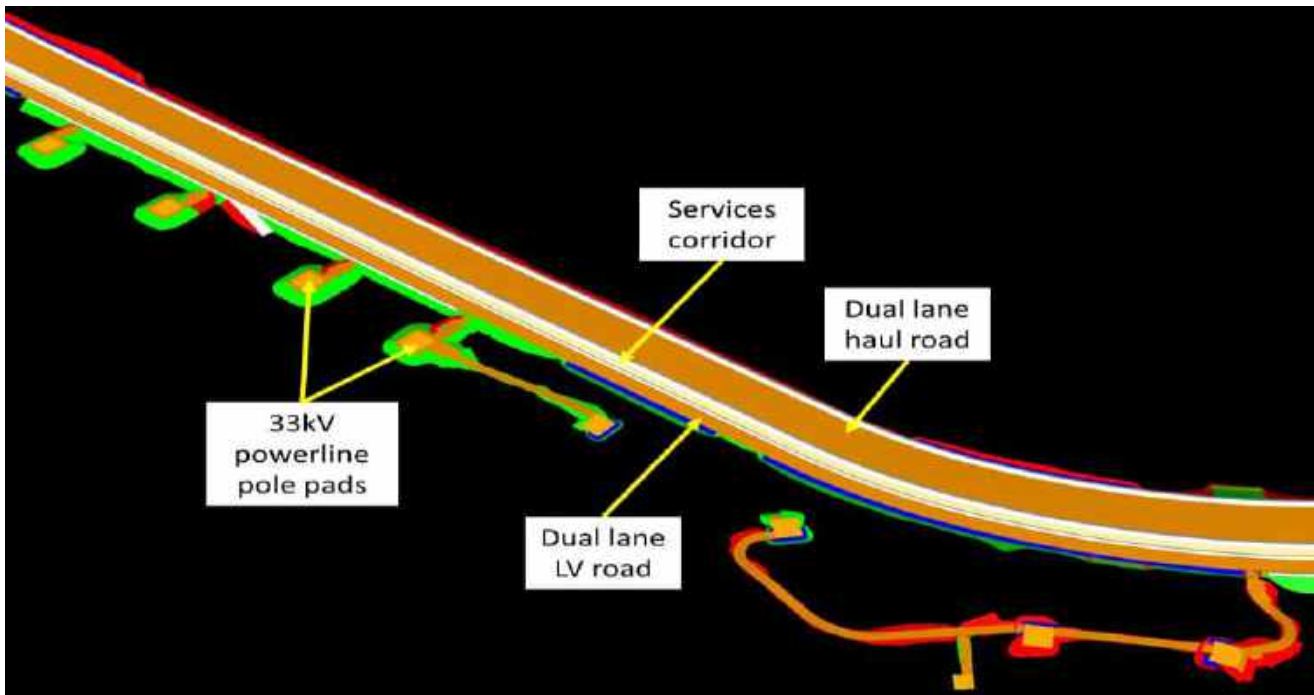


Figure 2-5: Haul Road Layout

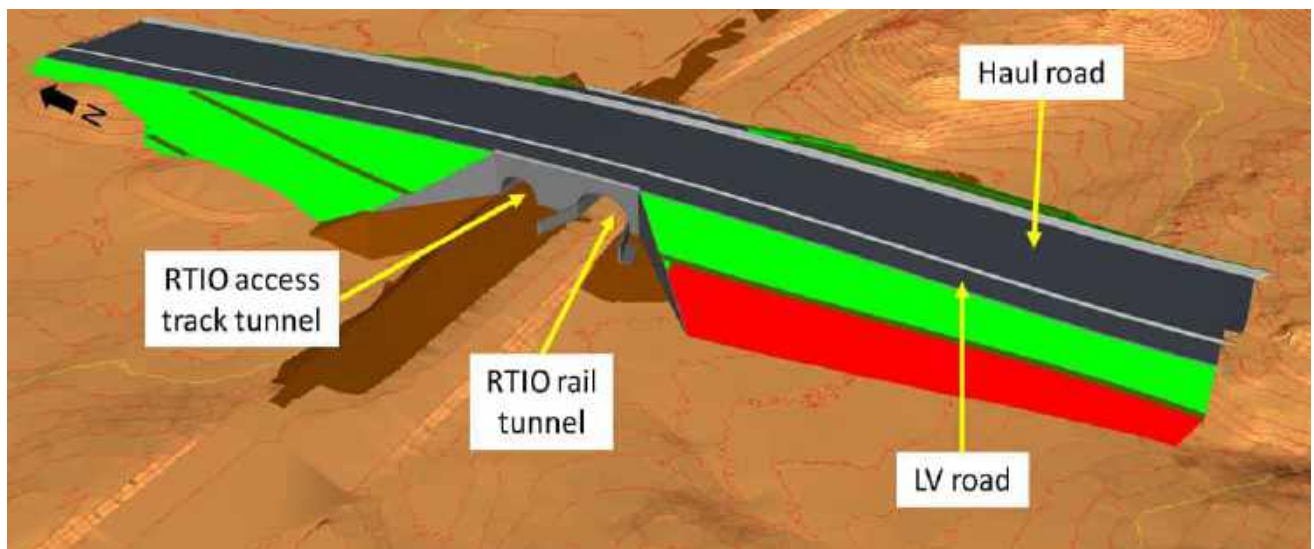


Figure 2-6: Rio Tinto Rail Overpass

Due to the new haul road cutting access to RTIO's existing 220kV infrastructure corridor, a new set of diversion tracks via the rail overpass tunnel will be established.

### 2.1.4 High Voltage Works

The existing RTIO 220kV and BHP 132kV transmission lines traverse the eastern edge of Ministers North mining area, and both must be relocated. Geographically the 132kV line must be relocated prior to the 220kV line.

The current BHP and RTIO shut down dates require BHP to commence design and procurement of the 132kV transmission line during PCF2. During PCF2 BHP will tender a D&C contract and award the design and procurement phase (combined with 33kV scope). It is intended that all transmission lines components

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will be available on site to allow immediate mobilisation upon gate 3 approval and de-risk delay in commencement of planned power shutdowns for both BHP and RTIO.

The Owner's Team must collaborate with RTIO representatives to coordinate and plan relocation of the 220kV infrastructure (managed and funded by RTIO).

### 2.1.5 Technology & Mining communications

The Technology Delivery team is delivering the digital backbone for Ministers North to enable safe, efficient, and compliant operations from day one. This includes reliable communications (radio, telemetry, FM rebroadcast, mobile coverage), mining systems like Fleet Management System (FMS) and Drill & Blast, and IT/OT segregation for cyber compliance. Technology shall provide end-to-end network infrastructure, hosting capacity, and security posture to support applications, along with supply chain and business systems for planning and reporting. Our scope also covers End User Computing (EUC) for NPI facilities and IROC integration for remote operations, plus governance for CCTV and access control.

### 2.1.6 Mining Fleet

The WAAP Fleet & Autonomy Team will manage the delivery of approximately 200 fleet assets for Ministers North, spanning PCF1, PCF2 and Execution. The team will be supported by BHP Supply Fleet Category Management and Mobile Engineering to execute procurement, refurbishment and hire activities to enable delivery of the Load and Haul, Ancillary and Auxiliary equipment.

The Fleet Delivery scope covers the end-to-end planning, execution and readiness activities required to deliver this fleet. It encompasses all stages from procurement, refurbishment and hiring, through to transport, commissioning and operational handover. A key enabler for delivering this work is the establishment of two Build Pads at MAC and Yandi.

## 2.2 Commissioning Scope

### 2.2.1 Processing Infrastructure – EFE & Brownfields Modifications

The commissioning scope relates to activities required to verify, test, and integrate the new Eastern Front End (EFE) crushing facilities into the existing Yandi Operations. Commissioning will ensure that all new equipment and systems are installed correctly, function as intended, and meet operational and safety requirements prior to handover.

Commissioning activities include:

- Pre-commissioning and inspection:
  - Verification of mechanical completion for all new EFE assets.
  - Inspection of electrical installations, instrumentation, and control systems.
  - Confirmation of water, power, hydraulic, and communication services availability.
- Functional testing:
  - Testing of primary crushing building equipment (rock breaker, grizzly screen, jaw crusher).
  - Testing of scalping screen and secondary crusher building equipment (vibrating feeder, belt feeder, cone crusher).
  - Conveyor systems and transfer stations operational checks.
  - Substation SUB701 modifications and 33kV power system energisation.
- Control system integration:
  - Commissioning of revised control systems integrated into the existing Yandi network.
  - Verification of interlocks, alarms, and safety systems.
  - Testing of remote operation and monitoring capabilities.
  - Functional Safety verification where required.

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- Performance and reliability checks:
  - Load testing of crushing and screening equipment.
  - Verification of dust suppression, lubrication, and hydraulic systems.
  - Confirmation of compliance with Performance Testing criteria.

### 2.2.2 NPI Precinct

The commissioning scope for the NPI Precinct focuses on verifying and integrating all infrastructure and services required to support mining fleet operations and site personnel facilities at Ministers North. Commissioning will ensure that all systems are installed, tested, and ready for operational use in accordance with design specifications and safety standards.

Scope includes:

- Pre-commissioning and inspection:
  - Verification of mechanical and electrical completion for all NPI facilities.
  - Inspection of raw water tanks, piping, and pump stations.
  - Confirmation of utility reticulation (water, air, power, communications) readiness.
- Functional and no-load testing:
  - Testing of fuel handling systems and associated safety interlocks.
  - Verification of tire change and storage bay equipment functionality.
  - Testing of mine service and maintenance workshop utilities and equipment.
  - Checks on crib, first aid, office, and ablution facilities for power, water, and HVAC systems.
  - Testing of wastewater handling and disposal systems.
  - Verification of fire water and potable water systems.
- Control and communication systems:
  - Commissioning of communications infrastructure for operational connectivity.
  - Integration of monitoring systems for utilities and safety equipment.
- Performance and reliability checks:
  - Pump station and raw water system performance testing.
  - Verification of standpipes and Turkey's Nest water supply functionality.
  - Testing of fuel dispensing and storage systems under simulated operational conditions.

### 2.2.3 HV Works

The commissioning scope for the transmission line relocation focuses on verifying and energising the new 132kV and 33kV infrastructure installed by BHP, while coordinating with Rio Tinto (RTIO) for the relocation and commissioning of their 220kV assets. Commissioning will ensure that all electrical systems meet design specifications, safety standards, and are fully integrated for operational readiness.

Scope includes:

- Pre-commissioning and inspection:
  - Verification of mechanical and electrical completion for the new 132kV transmission line and associated 33kV infrastructure.
  - Inspection of towers, conductors, insulators, and earthing systems.
  - Confirmation of protection and control systems installation.
- Functional and energisation testing:

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- Testing of circuit breakers, isolators, and protection relays.
- Verification of SCADA integration and remote monitoring capability.
- Energisation of the 132kV line and associated substations in accordance with BHP standards.
- Coordination with RTIO:
  - Alignment of commissioning schedule with RTIO for 220kV line relocation.
  - Joint planning for shutdown windows and energisation sequencing.
  - Interface testing for any shared infrastructure or operational dependencies.
- Performance and reliability checks:
  - Load testing and verification of line capacity.
  - Confirmation of compliance with electrical safety and regulatory requirements.
  - Validation of redundancy and fault response systems.

### 2.2.4 Technology & Mining Communications

The commissioning scope for Technology Delivery ensures that all digital infrastructure and systems required for safe, efficient, and compliant operations at Ministers North are fully implemented, tested, and integrated prior to operational start-up. Commissioning will validate connectivity, system functionality, and security compliance across IT and OT environments.

Scope includes:

- Network and communications infrastructure:
  - Commissioning of end-to-end network backbone, including fibre, wireless, and redundant links.
  - Testing of radio systems, telemetry, FM rebroadcast, and mobile coverage.
  - Verification of bandwidth, latency, and failover performance.
- Mining systems and operational technology:
  - Functional testing of Fleet Management System (FMS) and Drill & Blast systems.
  - Integration of mining applications with operational control systems.
  - Validation of IT/OT segregation for cyber compliance.
- Site services and end-user computing (EUC):
  - Commissioning of EUC devices and connectivity for NPI facilities.
  - Testing of office IT systems, printers, and collaboration tools.
  - Verification of access control and CCTV governance.
- Hosting and security posture:
  - Validation of hosting capacity for applications and business systems.
  - Testing of cybersecurity measures, including firewalls, intrusion detection, and patch compliance.
  - Confirmation of segregation and secure remote access for IROC integration.
- Performance and reliability checks:
  - End-to-end testing of supply chain and business systems for planning and reporting.
  - Verification of system redundancy and disaster recovery capabilities.
  - Load and stress testing of network and application layers.

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**3 Commissioning Strategy**

For the Ministers North Project, there will be various commissioning responsibilities for each scope of work, dependent on the scope complexities and contractor capabilities. The below table shows who the commissioning responsibilities lies with, whether it is commissioning by the BHP Owners Team, or by the relevant package contractor.

Package	Commissioning Strategy	Transfer to Project (End of Stage)
Enabling & General Services	Contractor Commissioned	Stage 3
Civil Contact 2	Owner Team Commissioned	Stage 1
Eastern Front End (EFE) & OHP3	EPC Commissioned	Stage 4
NPI Precinct	Owner Team Commissioned	Stage 1
132kV Transmission Line & 33kV Power Line Reticulation	Contractor Commissioned	Stage 3
WTS/DRS Communication Infrastructure	Contractor Commissioned	Stage 3

Table 3-1: Commissioning Responsibilities

**3.1.1 Processing Infrastructure – EFE & Brownfields Modifications**

The EPC Contractor will be responsible for design, procurement, and construction management for all Stage 1 to Stage 4 testing requirements. Upon completion of the Construction Verification Certificate (CVC), responsibility will be transferred to the EPC Commissioning team to complete Stage 2-4, with assistance from their construction resources as required, as well as the BHP Owners Team. The EPC will maintain responsibility for any design deficiencies which are picked up through the commissioning process.

Upon completion of any Stage 2 No Load and Stage 3 Load Commissioning for defined areas, End of Stage 2 Certificates (E2C) and End of stage 3 Certificates (E3C) will be issued by the contractor and approved by the BHP Owners Team Commissioning Manager, or their delegate.

The EPC contractor will manage Stage 4 Ramp Up / Performance Testing, with assistance from the BHP Owners and Operations teams as required.

Stage 4 Ramp Up / Performance Testing will be carried out in accordance with the Performance Testing Criteria document developed during DPS (PREP-1200-PI-00011).

**3.1.2 NPI Precinct**

For the NPI Precinct, general construction contractors will be responsible for Stage 1 – Construction Verification. At the completion of this stage, the contractor will issue a Construction Verification Certificate (CVC), which must be reviewed and approved by the BHP Owners Team, including both delivery and commissioning representatives.

Once the CVC has been issued for each system or subsystem, BHP will assume responsibility for commissioning activities. From this point onward, any further construction or punch-listing works associated with those systems and subsystems will require approval from the BHP Commissioning Manager or delegate via the permit system. Issuing the CVC does not relieve the contractor of contractual obligations, including Punchlist completion and warranty works.

The End of Stage 2 Certificate (E2C) will signify the completion of Stage 2 – No-Load Commissioning and the commencement of Stage 3 – Load Commissioning. The permit system will remain in effect, with BHP as the permit issuer for all affected systems and subsystems.

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Stage 3 – Load Commissioning and Stage 4 – Ramp-Up / Performance Testing will be fully managed by the BHP Owners Team, with support from contractor resources as required. For design-and-construct packages, the contractor will retain responsibility for any design deficiencies identified during the commissioning process.

### 3.1.3 HV Works

Commissioning of the HV scope of works will be the responsibility of the Design and Construct contractor. The contractor will be responsible for completing Stages 1 Construction Verification through to Stage 3 Load Commissioning.

The contractor will be responsible for putting together a suitably qualified commissioning team capable of performing all the relevant commissioning scope. The commissioning team will take ownership of the equipment completed with each relevant CVC and maintain ownership until the End of stage 3 Certificate (E3C) is signed.

Any further construction or Punchlisting works associated with a system or subsystem under commissioning ownership will need the approval of the commissioning manager or delegate via way of the permit system.

The BHP Owners Team will provide governance during the commissioning phase of the HV scope of works. During Stage 2 No Load Commissioning and Stage 3 Load Commissioning, BHP Operations will provide switching support throughout the commissioning phases. This will need to be carefully planned as availability may be limited at times.

The 132kV line relocations will fall under NPI HV & Power ownership, whereas portions of 33kV scope will fall under the site HV team and NPI HV & Power. For the Yandi / Ministers North battery limits, refer to HV Power Distribution – Yandi Battery Limits for Ownership, Operation & Maintenance (0129264).

### 3.1.4 Civil Contract 2

For Civils Contract 2, the construction contractor will be responsible for Stage 1 – Construction Verification of all civil works within their scope. At the completion of this stage, the contractor will issue a Construction Verification Certificate (CVC), which must be reviewed and approved by the BHP Owners Team, including delivery and commissioning representatives. Issuing the CVC does not relieve the contractor of contractual obligations, including Punchlist completion and warranty works.

Once the CVC has been issued for each system or subsystem, BHP will assume responsibility for all commissioning activities. From this point onward, any remaining construction or punch-listing works associated with those systems and subsystems will require approval from the BHP Commissioning Manager or delegate via the permit system. Issuing the CVC does not relieve the contractor of contractual obligations, including punch-list completion and warranty works.

The End of Stage 2 Certificate (E2C) will signify the completion of Stage 2 – No-Load Commissioning and the commencement of Stage 3 – Load Commissioning. The permit system will remain in effect, with BHP as the permit issuer for all affected systems and subsystems.

Stage 3 – Load Commissioning and Stage 4 – Ramp-Up / Performance Testing will be fully managed by the BHP Owners Team, with support from contractor resources as required. For design-and-construct packages, the contractor will retain responsibility for any design deficiencies identified during the commissioning process.

### 3.1.5 Technology & Communications

For the Technology & Communications scope, the Technology Delivery team will be responsible for commissioning all technology-related assets, including network infrastructure, communications systems, CCTV cameras, access control platforms, and end-user computing devices. These activities will be undertaken alongside the construction contractor during Stage 2 No-Load Commissioning to ensure proper integration with supporting infrastructure. Construction contractors will remain responsible for commissioning non-technology assets such as electrical and mechanical services, physical security hardware, and facility services, with governance and oversight provided by the BHP Owners Team.

At the completion of Stage 1 Construction Verification, the contractor will issue a Construction Verification Certificate (CVC) for each system or subsystem, which will be reviewed and approved by the BHP Owners Team, including delivery and commissioning representatives. Once the CVC is accepted, responsibility for the

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area will transfer to the contractor's commissioning function, and any further construction or Punchlisting will require approval from the commissioning manager or delegate via the permit system.

Stage 2 will involve joint commissioning activities, where the Technology Delivery team will commission its technology assets in parallel with the contractor's no-load commissioning of non-technology systems. Completion of this stage will be confirmed through the issue of an End of Stage 2 Certificate (E2C), signifying readiness for Stage 3 Load Commissioning. The permit system will remain in effect, with BHP as the permit issuer for affected systems and subsystems. The E2C does not relieve either party of contractual obligations, including Punchlist resolution and warranty commitments.

Stage 3 Load Commissioning and Stage 4 Ramp-Up / Performance Testing will be managed by the BHP Owners Team, with active participation from both the Technology Delivery team and the construction contractor. These stages will validate full operational functionality under load conditions and confirm integration of technology systems with site operations. Any design deficiencies identified during commissioning will remain the responsibility of the relevant design and construct contractor.

## 4 Commissioning Structure and System Breakdown

The commissioning structure and systemisation shall be developed to align with the Ministers North Project Handover Plan (MNT-PLN-00072) Section 2.5.4 – Breakdown Structure. This ensures that commissioning packages, system boundaries, and turnover milestones correspond directly with the progressive handover requirements defined in the plan. Relevant contractors are responsible for structuring their systemisation in accordance with this framework, maintaining consistency between construction completion, commissioning stages, and final handover.

Systemisation will be designed to support clear traceability from sub-systems through to systems, facilities, and areas, enabling efficient verification, certification, and turnover. This structure will align with the project's Work Breakdown Structure (WBS) and contract packaging, ensuring that commissioning activities can be tracked against project scopes. By linking commissioning packages to WBS codes, the process will provide transparency for progress reporting, punch list management, and turnover documentation. Tie-ins to existing infrastructure will be incorporated into the systemisation strategy, with isolation and permit-to-work processes applied to manage interface risks.

## 5 Commissioning Sequence and Schedule

### 5.1 Commissioning Sequence

The commissioning sequence for Ministers North will follow a structured, progressive approach designed to ensure safe integration of all systems and facilities while meeting operational readiness requirements. The sequence considers construction dependencies, tie-in requirements, and the need for early energisation of critical utilities to support commissioning activities. This approach provides a logical flow from pre-commissioning through to ramp-up and performance testing, ensuring alignment with the overall project handover strategy.

The sequence begins with pre-commissioning activities, which include completion of construction verification for each system and the issue of Construction Verification Certificates (CVC). During this stage, primary power supply and communications infrastructure will be energised, and utilities such as water, power, and compressed air will be verified to support subsequent commissioning activities.

The final commissioning sequence will be determined by the construction schedule and will align with the proposed commissioning structure and system breakdown. This ensures that commissioning activities are integrated with construction progress and handover milestones, providing a clear path from mechanical completion through to operational readiness.

#### 5.1.1 Power and Utilities

Commissioning of power and utility systems will occur in parallel with mechanical systems where possible. This includes energisation and testing of 33kV and 132kV power systems, integration of substations and LV distribution, and commissioning of raw water, potable water, and fire water systems to support both process and non-process facilities.

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### 5.1.2 Non-Process Infrastructure (NPI)

Once utilities are available, commissioning of NPI facilities can commence. This includes offices, crib rooms, workshops, and fuel systems, as well as functional testing of water and sewerage systems. LV distribution and auxiliary services will also be commissioned to ensure site readiness for operational support.

### 5.1.3 Ore Handling Plant (OHP3) – Eastern Front End

Following NPI commissioning, the focus will shift to the Eastern Front End of the Ore Handling Plant. This stage involves commissioning primary crushing systems such as the jaw crusher, apron feeder, and rock breaker, followed by scalping screens and conveyors. Dust suppression and fire water systems will be integrated, and secondary crushing systems and associated conveyors will be commissioned to complete this phase.

After the crushing facilities are commissioned, material handling systems will be brought online. This includes overland conveyors and tie-ins to existing Yandi infrastructure, as well as commissioning of coarse ore stockpile reclaim systems. Stacking, reclaiming, and train loadout systems will follow to enable full material flow through the plant.

### 5.1.4 Final Integration and Load Commissioning

The final stage involves load commissioning across crushing and material handling systems, followed by ramp-up and performance testing. This stage validates system performance under operational conditions and ensures full integration of all systems into the facility. Progressive handover to operations will occur following successful completion of toll gates and performance criteria.

### 5.1.5 Dependencies and Tie-ins

Power and water systems must be commissioned before mechanical systems can be energised. Control system integration and communications must be completed prior to functional testing. Tie-ins to existing Yandi infrastructure will require isolation and permit-to-work processes to manage interface risks safely.

## 5.2 Commissioning Schedule

The commissioning schedule will identify all key milestones required to achieve progressive handover and operational readiness. At a minimum, the schedule will be developed to Level 2 detail initially, with further refinement to Level 4 prior to commencement of commissioning execution. This schedule will demonstrate integration points with the main project schedule, ensuring alignment between construction progress, commissioning activities, and operational milestones.

Each contractor will be responsible for preparing their own commissioning schedule, which may be integrated into the overall project schedule or maintained as a standalone document. These schedules must clearly define all relevant commissioning milestones, including Construction Verification Certificate (CVC) dates for each sub-system, punch list walkdown dates, and the issue of End of Stage 2 and Stage 3 Commissioning Certificates (E2C and E3C). Contractors are accountable for ensuring their schedules reflect the logical sequence of commissioning activities and dependencies on construction completion, utility availability, and tie-ins to existing infrastructure.

Detailed commissioning schedules shall also identify any dependencies on BHP resources, such as high-voltage (HV) switching support, operational assistance, and other specialist services required to complete commissioning safely and efficiently. These dependencies must be highlighted early to ensure resource planning and avoid delays during execution.

The integrated commissioning schedule will provide visibility of critical path activities and dependencies across all facilities, including Non-Process Infrastructure, Ore Handling Plant systems, power and utilities, and material handling systems. This approach ensures that commissioning activities are coordinated effectively, avoiding delays and supporting timely achievement of handover milestones.

For owner team commissioned scopes the BHP commissioning owner team will develop the commissioning schedule.

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## 6 Commissioning Budget

The commissioning budget must include a full build-up of all resources required to execute commissioning safely and successfully. This covers personnel, commissioning spares, materials, consumables, technical resources, vendor support, and any special tools or equipment necessary for the scope of works.

Contractors are responsible for ensuring that all required resources, subcontractors, tooling, and equipment to complete their portion of the commissioning scope are fully allowed for in their estimates. Likewise, the BHP Owners Team will allow for all resources, subcontractors, tooling, and equipment needed to complete their commissioning scope, and these will be incorporated into the overall BHP budget estimate.

## 7 Commissioning Procedures

Commissioning procedures will be developed by the EPC contractor for their scope of work, by individual contractors for their respective commissioning scopes, and by BHP for its own commissioning activities. All procedures must comply with BHP standards and site requirements to ensure safety, consistency, and alignment with project objectives.

The following BHP standards and procedures must be referenced and adhered to by all parties:

- MAP Internal Standard (MAUPRJ-STD-00020)
- BHP Commissioning External Standard (MAUPRJ-STD-00023)
- WAIO Isolations and Barricading Procedure (0127717)
- Permit to Work Procedure (0127034)

These documents govern critical commissioning activities, including isolation, permitting, and energisation. EPC and contractors will integrate these requirements into their commissioning procedures and apply them throughout all phases of the work.

Commissioning will require strict adherence to energisation, permitting, and isolation protocols. Energisation processes must include steps for safely bringing electrical systems online, verifying isolation, completing pre-start checks, and coordinating under the Permit to Work system. All commissioning activities will be managed through BHP's Permit to Work process to control risks and prevent conflicting tasks. Isolation protocols, as defined in the WAIO Isolation and Barricading Procedure, will mandate lock-out and tag-out practices to prevent inadvertent energisation and safeguard personnel.

The following procedures will be developed and implemented for the project:

- **Factory Acceptance Testing (TEST)** – Testing major critical equipment prior to delivery to site to confirm compliance with design and functional requirements.
- **Stage 2 & Stage 3 Commissioning (COMP)** – Detailed steps for commissioning each package or area, ensuring systems are installed, integrated, and functionally tested.
- **Stage 4 Performance Testing (COMP)** – Methods to achieve nameplate capacity for each package or area, in compliance with the Performance Testing Criteria document (PREP-1200-PI-00011).
- **Commissioning Reports (COMR)** – Procedures for control system Site Acceptance Testing (SAT) and proper storage of all commissioning documentation, including ITRs and as-left software settings.

These project-specific procedures will incorporate and align with the above BHP standards, ensuring consistency, safety, and compliance across all commissioning activities.

For owner team commissioned scopes the BHP commissioning owner team will develop the commissioning procedures.

## 8 HSEC Management

Commissioning introduces unique Health, Safety, Environment, and Community (HSEC) risks that must be proactively managed to ensure safe execution. These risks arise from the transition between construction and operational phases, where systems are progressively energised and tested. The complexity of simultaneous activities and interaction between multiple contractors increases the potential for incidents if controls are not rigorously applied.

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## Commissioning Management Plan

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Major Potential HSEC Risks During Commissioning are as follows:

- Energisation of New Equipment – Electrical systems and rotating machinery being powered for the first time.
- Stored Energy Hazards – Pressurised pipelines, hydraulic systems, and vessels containing fluids, gasses or compressed air.
- Mechanical Hazards – Entanglement risks from conveyors, rotating equipment, and moving parts during testing.
- Hazardous Materials – Use of chemicals, lubricants, and fuels during flushing, cleaning, and start-up.
- Simultaneous Operations (SIMOPS) – Overlapping activities between commissioning, construction, and operations teams.
- Working in Live Areas – Increased exposure to energized systems and incomplete isolations.

The approach to managing these risks will focus on strict compliance with BHP's safety-critical processes, including energisation procedures, lock-out/tag-out isolation procedures, and the Permit to Work system. Hazardous materials will be managed under approved handling and disposal procedures, and SIMOPS will be controlled through detailed planning and coordination between all parties. Verification of isolations and barricading will be mandatory before any energisation or mechanical testing occurs.

A stand-alone Commissioning HSEC Management Plan will not be developed; instead, commissioning-specific risks and controls will be fully integrated into the Project HSEC Management Plan. Supporting plans and procedures, such as WAIO Isolation and Barricading, Permit to Work, and Hazardous Materials Management, will provide additional coverage for high-risk activities. Each contractor is responsible for identifying the risks associated with their particular scope of work.

All equipment and project specific risks will be captured in the project WRAC (Workplace Risk Assessment and Control), detailed in Job Hazard Analyses (JHAs), and embedded within the relevant commissioning procedures. These measures ensure that commissioning risks are addressed comprehensively and consistently across the project.

## 9 Statutory Compliance

Statutory compliance during commissioning will be maintained through strict adherence to all applicable Western Australian legislation and regulatory requirements. This includes compliance with the Work Health and Safety Act 2020 (WA), Work Health and Safety (Mines) Regulations 2022, Mines Safety and Inspection Act 1994 (transitional provisions), and Electrical Licensing Regulations (WA), as well as relevant environmental and building codes. These frameworks govern the safe introduction of energy, hazardous materials, and feedstock, as well as emissions and water management during commissioning.

### 9.1 Introduction of First Energy

The energisation of electrical systems will comply with the Electrical Licensing Regulations and WHS legislation. All energisation activities must be carried out by licensed personnel under approved procedures, ensuring isolation verification and compliance with BHP's Permit to Work system.

### 9.2 Introduction of Hazardous Materials

The handling and introduction of hazardous substances such as chemicals, fuels, and lubricants will follow WHS regulations and approved hazardous materials management plans. Contractors must ensure safe storage, handling, and disposal practices to prevent environmental harm and protect personnel.

Introduction of First Feed and Production Start-Up

When first feed is introduced and production processes commence, statutory obligations relating to process safety, environmental controls, and emissions management will apply. Compliance will include adherence to the Mines Safety and Inspection Act and environmental reporting requirements under WA mining regulations.

### 9.3 Effluent and Water Management

Effluent discharge and water use during commissioning will be managed in accordance with WA environmental

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## Commissioning Management Plan

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legislation and site-specific water management plans. Monitoring and reporting will ensure compliance with regulatory limits and prevent contamination.

### 9.4 Building Occupancy Permits

Progressive occupation of buildings and facilities during commissioning will require compliance with statutory building codes and approvals. Permits to occupy will be obtained before any facility is used for commissioning or operational activities.

### 9.5 Responsibilities and Transition

Each contractor is responsible for ensuring statutory compliance within their scope of work, under the oversight of BHP as the principal. All statutory obligations introduced during commissioning will be embedded in commissioning procedures and verified through audits and inspections. Statutory accountabilities for site management and reporting will transition from the Project team to Operations in a controlled manner, including the handover of compliance documentation, permits, and regulatory reporting obligations.

## 10 Risk and Change Management

Risk and change management during commissioning will be governed by BHP's established frameworks and procedures to ensure all hazards and changes are identified, assessed, and controlled. The approach will integrate risk reviews at key commissioning milestones and apply formal change management processes whenever modifications to scope, systems, or conditions occur.

### 10.1 Risk Management

All project risks will be managed through Active Risk Manager (ARM), BHP's internal system for tracking and controlling major project risks. The process will follow the MAP Risk Management Functional Procedure (MAUPRJ-PRO-00077), which defines the minimum risk management activities required during all project phases.

Compliance with the Risk Management Global Standard, MAP Standard Material Risks, and MAP Risk Analysis and Contingency Development Procedure will ensure a structured and consistent approach. WAIO-specific obligations under WAIO Material Risk Management (0173715) require risks to health and safety to be eliminated so far as is reasonably practicable (SFAIRP) or minimized where elimination is not possible.

### 10.2 Change Management

The objective of change management during commissioning is to effectively manage deviations from the approved project scope and design. This will be achieved through early identification of potential changes, timely assessment and approval, and clear communication and implementation. All changes will be recorded, assessed, and tracked in a formal Change Register, with an assigned owner and documented approval process.

#### 10.2.1 Commissioning Change Management

Commissioning often requires temporary modifications or "workarounds" due to unforeseen circumstances such as equipment failures or schedule delays. These may include temporary power supplies, piping, control system overrides, or bypassing non-critical functions. If not properly managed, these changes can introduce additional risks beyond the approved-for-construction (AFC) design. Therefore, all temporary or permanent changes will follow the Management of Change (MOC) process and include formal risk assessments, design approvals (marked-up drawings), workforce notifications, signage and barricading, and tracking through the CCMS database. Controls will ensure that any temporary changes are reversed and the design restored to AFC status.

#### 10.2.2 Bridges and Overrides

The EPC Contractor will define the process for managing electrical and software bridges and overrides. All such changes will be tracked in a Bridge Register and approved through a formal matrix to ensure appropriate risk controls. These activities will comply with the BHP WAIO Bridging and Overriding Procedure (0103485) and WAAP Commissioning Bridge and Override Procedure (0158564).

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### 10.2.3 CCMS and Interface with Operations

All material changes during commissioning will be captured and managed through the CCMS system, with BHP approval required for significant changes. Operations must be fully informed of all changes prior to work commencing, in accordance with WAIO Management of Change Procedure (SPR-IHS-SAF-028). Where interim handovers are required (e.g., during shutdowns or HV works), changes will be documented and signed off by Operations to ensure accountability for ongoing maintenance.

### 10.2.4 Engineering Support and Final Documentation

Engineering will support commissioning by resolving technical issues and reviewing changes. After load commissioning, a Stage 6 HSECCOMS review will assess all marked-up changes. At project completion, all drawings and documents will be updated to as-built status in accordance with BHPBIO Standard SEP-57 Engineering Technical Document and Drawing Requirements.

## 11 Communications

### 11.1 Key Communications Objectives

Key project commissioning-related communication will be shared with relevant groups as necessary to seek an open communicative style on the project. The key purpose of the communication is to keep stakeholders informed with relevant information and updates regarding the project activities.

### 11.2 Key Communications Processes

#### 11.2.1 Meetings

Throughout the execution phase, commissioning will participate in or convene meetings and working groups to ensure that all communications and interfaces are routinely addressed. The frequency of meetings will increase as the commissioning phase becomes the critical phase of the project. The meetings will include:

- **Pre-Start Meeting:** Held at the start of each shift and attended by all commissioning personnel (including vendor representatives and Operations when available). The Commissioning Lead or delegate will chair the meeting. Its purpose is to keep the participants abreast of the commissioning activities for the shift and discuss any issues from the previous shift.
- **Weekly Commissioning Meeting:** To be chaired by the Commissioning Lead or delegate and will report progress on key commissioning deliverables and progress against the schedule, and handovers.
- **Routine project meetings** to ensure preparations remain aligned to project progress plan.
- **As construction approaches completion** specific construction – commissioning meetings will be scheduled to monitor and manage the progression to completion by system and smooth transition into commissioning.
- **Contractor Meeting** – regular meeting with the Contractor's to assess performance, facilitate operations interface and provide assurance that the execution of commissioning is in line with the approved process and quality expectations.
- **Routine meetings** will also be held with the operations representatives to manage the commissioning – operations interface. Separate meetings may need to be held regularly with the different operations groups including Production, Fixed Plant Maintenance, Mining, IROC, NPI etc.

#### 11.2.2 Bulletin Notifications

Some key communication will be by Bulletin Notification example including High Risk test activities, Shutdowns and outages, Notice of Energisation (NoE), CCC, Safety Bulletins, Management of Change activities. Bulletin notification will be distributed at pre-start meetings and placed on notice boards where deemed necessary.

#### 11.2.3 Aconex (Project Management Software)

All correspondence that has potential commercial impact, involves review/workflow/approval/transmittal of documentation, or requires traceability shall be communicated using the Aconex.

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## 12 Commissioning Resources and Organisation

### 12.1 Organisation

The commissioning function is a project support function, responsible for ensuring the safe and successful completion of the commissioning phase. It operates within the overall project structure and reports through the designated commissioning leadership to the Project Delivery Manager. This alignment ensures commissioning activities are fully integrated with construction, engineering, and operations interfaces.

For BHP, the commissioning organisation structure will follow the figures provided in this plan, outlining key roles and reporting lines. Each role will have defined responsibilities and accountabilities, including oversight of commissioning execution, safety compliance, and coordination with contractors and operations. Typical roles include Commissioning Manager, Area Leads, Discipline Engineers, and Commissioning Technicians.

In the case of contractor-commissioned packages, the contractor will be required to include their commissioning organisation structure in the scope specific Commissioning Execution Plan. Once received, this Commissioning Management Plan will be updated to reference the contractor's structure and ensure clarity of responsibilities across all parties.

This approach ensures that commissioning governance is clearly defined, reporting responsibilities are transparent, and all stakeholders understand their roles in delivering a safe and efficient commissioning phase.

### 12.2 Commissioning Resources

BHP will assemble an Owner's Team to manage and oversee its allocated scopes of work, including Civil Contract 2 and the NPI Precinct.

The EPC contractor will provide all required personnel and resources for commissioning activities associated with the EFE and OHP3 facilities.

Package contractors will supply commissioning resources necessary to complete their respective scopes in accordance with project standards and safety requirements. These scopes include:

- Enabling and General Services
- 132kV and 33kV electrical systems
- WTS/DRS communications infrastructure

A small BHP Commissioning Team will provide assurance and governance of EPC commissioning activities. Operations personnel will participate in commissioning to gain practical training and familiarity with new equipment prior to handover.

For the HV and Power scope, commissioning will be executed by the construction contractor. BHP will provide governance and oversight only, supported by the NPI HV as required.

BHP Commissioning will actively participate in all contractor activities to ensure compliance and completeness of package equipment.

### 12.3 Specialist Contractors

It is the responsibility of all contractors to ensure that appropriate specialist subcontractors are engaged for their respective scopes of work where in-house capability does not exist. These specialist service providers will be contracted directly by the primary contractor and managed in accordance with project requirements and safety standards.

BHP will also have a responsibility to engage specialist commissioning contractors for resources required to execute its commissioning scope. These resources will be drawn from panel contractors with proven experience and familiarity with BHP standards and requirements.

Typical examples of specialist contractors include:

- **High Voltage (HV) Testing** – for verification and energization of HV systems.
- **Control Systems** – Configuration, Integration, and functional testing of automation and control systems; and

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- **Hydrostatic Testing Services** – For pressure testing of piping and vessels.

The engagement of these subcontractors will be coordinated by the responsible contractor, ensuring compliance with project specifications, quality assurance processes, and commissioning schedules. Their roles and responsibilities will be reflected in the scope specific Commissioning Execution Plan (CEP).

### 12.4 Vendor Participation and Support

Contractors will be responsible for engaging vendors as required to support commissioning activities within their respective scopes of work. Each contractor must nominate the vendors they intend to use for specific packages and ensure these vendors are available at the appropriate stages of commissioning.

Vendor participation will include:

- Pre-commissioning and commissioning support equipment supplied under their scope
- Specialist technical assistance for troubleshooting, configuration, and performance verification
- Compliance with OEM requirements for installation and testing
- Factory Acceptance Testing (FAT) – Vendors will play a key role in FAT by providing facilities, executing tests, and supplying documentation in accordance with Inspection and Test Plan (ITP) requirements. FAT requirements will be identified within each contractor's scope of work.

The engagement process will be managed by the responsible contractor, ensuring vendor activities are aligned with the commissioning schedule and integrated into the overall project plan. Vendor roles and responsibilities will be documented in the commissioning governance framework.

## 13 Roles, Responsibilities and Accountabilities / RACI

The below outlines identified responsibilities within the MN Project, further definition of the roles and responsibilities are detailed in Appendix B Project RACI.

### 13.1 BHP Owners Team

#### 13.1.1 Commissioning Manager - Ministers North

Reports to the site BHP Project Manager and is responsible for:

- Ensuring BHP attendance with relevant discipline on all FAT's.
- Ensuring BHP witness testing of the agreed EPC and Contractor no-load commissioning activities.
- Ensuring BHP involvement in EPC and Contractor commissioning to gain operational knowledge.
- Ensuring EPC and Contractor commissioning plans, procedures, and other deliverables per SDDL are reviewed and approved by relevant BHP discipline.
- Maintenance and repair of equipment until handover to BHP operations.
- Supporting handover and acceptance of the facilities with inputs into the preparation and transmission of CCC certificates.
- Review and approval of EPC and Contractor CCMS database – ITR matrix, systemisation, subsystem scope drawings.
- Development of commissioning plans and procedures for the BHP commissioning scope.
- Ensuring commissioning WRACs and HAZOP reviews are conducted and responsible for Stage 6 HAZOP post-load commissioning.
- Ensure BHP commissioning team participates in CVC Punchlist walkdowns.
- Ensuring BHP commissioning approval on critical EPC and Contractor commissioning toll gates and assurance certificates – CVC, NoE and E2C and E3C or as agreed with the EPC and Contractor.
- Monitoring and providing guidance to the contractor during preparation and no-load commissioning.

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- Performing and/or arranging for informal checks or formal audits to be performed on the contractor to ensure compliance with the SOW, commissioning execution plan, and contractor schedule.
- Ensuring that all relevant load commissioning and performance testing procedures, ITRs and vendor Installation, Operation and Maintenance Manuals are developed and/or approved and available prior to commissioning.
- Assuming control of all equipment and documentation handed over from the contractor at each relevant handover point.
- Ensuring appropriate commissioning spares are available prior to the commencement of load commissioning.
- Management, supervision and arranging on-site vendor support during load commissioning as identified in the scopes of work.
- Determining when the plant is ready for safe load commissioning.
- Planning, organising and safely leading the BHP commissioning team in executing load commissioning and performance testing.
- Ensuring that during load commissioning, the Punchlist process database is being updated with relevant information, approving punch list completion where required.
- Facilitating the involvement of operations personnel in the commissioning activities.

### 13.1.2 Commissioning Lead

Reports to the BHP Commissioning Manager and is responsible for:

- Supporting the Commissioning Manager in executing responsibilities outlined in the previous section
- Tracking completion of contractor ITRs and punch list items for their respective discipline (mechanical or electrical/instrumentation).
- Facilitating completion of outstanding punch list items for which BHP is responsible.
- Reviewing and approving load commissioning ITRs and assigning them to equipment in the CCMS.
- Completing load commissioning and all assigned load commissioning ITRs in accordance with load commissioning procedures and vendor IOMs.
- Coordinating, supervising, and executing load commissioning activities in the field, including repairs as required.
- Signing off all blue-line mark-ups to reflect equipment changes during load commissioning and performance testing prior to handover to operations.
- Developing handover documentation.

### 13.1.3 Control Systems Lead

Reports to the BHP Commissioning Manager and is responsible for:

- Monitoring and checking contractor PLC code to ensure compliance with the Scope of Work (SOW) and project Functional User Specification Packages (FUSPs).
- Reviewing contractor redlined FUSPs.
- Providing input to and reviewing the contractor's control systems integration plan.
- Completing load commissioning tests and associated test documentation.
- Reviewing EPC and contractor redlined FUSPs and applying further redlines for any changes made during load commissioning.
- Managing control system change processes during commissioning.
- Interfacing with the contractor and BHP Operations personnel to transition plant ownership.

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- Developing handover documentation.

### 13.2 EPC Contractor Commissioning Team

Reports to the EPC Contractor Project Manager and is responsible for:

- Completing all no-load commissioning activities in accordance with the approved Commissioning Execution Plan
- Submitting CCC handover package documentation to BHP for review and acceptance
- Providing personnel and technical support to assist BHP during load commissioning and performance testing
- Ensuring vendor participation and support as required for commissioning activities
- Complying with all project safety, quality, and assurance requirements during commissioning

Further details on responsibilities and processes will be outlined in the EPC Contractor's Commissioning Execution Plan.

### 13.3 Equipment Vendors/Suppliers

Responsible for:

- Attending site to witness and/or assist with no-load and load commissioning of supplied equipment.
- Rectifying any punch list items raised for vendor action.
- Performing troubleshooting, analysis, calibration, and optimisation of relevant plant equipment.
- Providing a commissioning report that includes "as commissioned" information.
- Delivering operator training for supplied equipment.

## 14 Interface Management

A key role of the BHP commissioning team is to establish and maintain interfaces with the various project stakeholders and functions. These interfaces include oversight of EPC and contractor construction and commissioning activities, close coordination with EPC for the EFE and OHP3 scopes, and engagement with other contractors for the HV and NPI scopes. This involves ensuring alignment of schedules, technical requirements, and commissioning deliverables across all parties, as well as facilitating timely resolution of interface issues to avoid delays or conflicts.

### 14.1 Operations

Successful management of the interface with the Operations group is fundamental to commissioning success. Operations plays a dual role as both a participant in commissioning activities and the ultimate customer receiving the commissioned assets. The objective is to ensure a smooth transition from commissioning to steady-state operations.

#### 14.1.1 Interface Management Processes

Operations will be engaged early in the planning phase to provide input on operability, maintainability, and safety requirements. Their defined role in commissioning, as detailed in Section 21, includes participation in Punchlist walkdowns, functional testing, and performance verification. To ensure a smooth transition to operations, a structured handover process has been agreed to (MNT-PLN-00072) and will be implemented, incorporating CCC certificates, as-commissioned documentation, and operator training.

#### 14.1.2 Key Interface Points

Operations will participate during load commissioning and performance testing of the EFE and OHP3 scopes, as well as the HV scope of works. Their involvement will include supporting functional testing, performing switching and operation of new high-voltage equipment, and gaining familiarity with systems prior to handover.

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Once commissioning is complete and all documentation is verified, Operations will formally accept the systems as part of the structured handover process.

### 14.1.3 Responsible Individuals

The Operations Focal Point will coordinate Operations involvement and sign-off during commissioning, while the BHP Commissioning Manager is responsible for ensuring Operations engagement and readiness for handover. For project scopes involving tie-ins to existing operations, the BHP Commissioning Manager will work closely with the Operations Focal Point to plan and execute tie-ins safely.

## 14.2 Construction

The critical focus for the construction interface is ensuring alignment throughout the construction completion and turnover process. Commissioning will engage with Construction through structured coordination to prevent churn at the turnover point, avoid quality issues surfacing post-turnover, and eliminate duplication of effort between construction testing and no-load commissioning.

Commissioning will monitor construction progress and verify completion of ITRs prior to system turnover through a progressive handover process. This ensures that systems are ready for commissioning without rework or delays.

Joint walkdowns will be conducted by Construction and Commissioning teams to confirm readiness and resolve outstanding punch list items before turnover. This collaborative approach reduces the risk of incomplete work being passed to commissioning.

Clear demarcation of responsibilities for construction testing versus commissioning activities will be established to avoid duplication and ensure compliance with project standards. This will be documented in the Commissioning Execution Plan for contractor /EPC commissioned scopes, and in the Appendix B Project RACI for Owner Team Commissioned Scopes.

Regular coordination meetings between Construction and Commissioning teams will be held to review status, address issues, and align schedules. These meetings will provide a forum for raising concerns and ensuring timely resolution.

If issues cannot be resolved at the discipline level, they will follow an escalation process to the BHP Commissioning Manager and, if necessary, to the Site Project Manager to maintain progress and accountability.

In addition, the BHP Commissioning team interface with Construction will include:

- Participation in all walkdowns and punch list identification.
- Review and acceptance of CVC packages where BHP commissioning is responsible for no-load commissioning (e.g., Brownfield HV packages).
- Approval of all contractor toll-gate certificates – including CVC, NOE, E2C, etc.
- Management of punch list completion by Construction after handover to the BHP commissioning team.
- Participation in regular construction progress meetings, with frequency increasing toward the end of the construction phase.
- Review of CCMS setup and change management.

## 14.3 Contracts and Procurement

Services provided by EPC and other contractors to support the BHP commissioning team will be based on daily rates or variations to the Contract Price. The BHP commissioning team will:

- Develop commissioning milestones, including spares, linked to EPC and contractor payments to drive efficiency and the right behaviours.
- Define performance testing requirements with engineering support and manage EPC and contractor obligations for performance and warranties through and post-commissioning. This may include secondment of commissioning team members into Operations to assist with warranty matters.

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- Support EPC award through presentations, one-on-one alignment sessions, and clarifications.
- Sign off on Inspection Release Certificates as required, including witnessing and verification of performance requirements or other inspections.
- Provide input into defining conditions for EPC practical completion and final acceptance milestones, jointly prepared with Delivery.

### 14.4 Engineering

EPC engineering design progress will lead to the development of a systemisation structure that supports commissioning. To ensure alignment between design and commissioning requirements, the following considerations and processes will apply:

#### 14.4.1 Design Considerations

- Ensure power reticulation aligns with the required energisation sequence.
- Align power distribution details to enable commissioning in logical chunks, such as grouping equipment within subsystems or systems to common MCCs or substations.
- Include appropriate isolation points to enable progressive energisation and commissioning.
- Allow for temporary works where required to facilitate commissioning.
- Maintain clear alignment between design, design margins, and required performance standards.

#### 14.4.2 Engineering Support During Commissioning

- Provide engineering support during commissioning, including resolution of issues that arise during commissioning and performance testing.
- Ensure engineering resources are available for troubleshooting and technical clarifications throughout commissioning.

#### 14.4.3 Interface and Communication

- Establish clear communication protocols and key contact points between Engineering and Commissioning teams.
- Maintain alignment through structured coordination meetings and documented change management processes.

### 14.5 Project Services

The major interfaces between Project Services, EPC, and other contractors will include:

- Review the EPC and other contractors commissioning schedules and integrate them with the BHP master schedule as required.
- Define commissioning areas, systems, and subsystems, ensuring alignment with the Work Breakdown Structure (WBS).
- Align commissioning sequence and schedule with the BHP commissioning schedule where required.
- Develop commissioning budget and cost estimates, ensuring alignment with project financial controls.
- Track and report progress for home office preparation, commissioning field execution, and handover activities.
- Monitor and report costs associated with commissioning activities (BHP OT Commissioning scopes only).

These interfaces will be managed through structured coordination, including individual and routine stakeholder meetings, workshops, and discussions with EPC and other contractors.

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14.6 External Interfaces

The commissioning team may require interfaces to be established with minor works / support contractors for the provision of machinery and equipment hire, scaffolding, plumbing and electrical works, and water trucks during commissioning.

On site interfaces with existing warehousing and logistics teams will be established for provision of spare parts and transport of equipment that may require repairs in offsite facilities.

15 Equipment Preservation

Preservation of equipment during offsite storage, transport, and onsite storage is critical, as failure to correctly preserve equipment can lead to unforeseen delays during commissioning and handover. EPC and all contractors are responsible for preservation up to the point of handover to BHP. The BHP commissioning team will work closely with EPC and contractors to ensure that critical items requiring preservation are stored correctly at or offsite in accordance with vendor IOM manuals.

Each contractor, including EPC, must submit a preservation procedure for all relevant equipment under their care and custody until handover. This procedure may be included in the contractor’s Commissioning Execution Plan. These activities will be uploaded and tracked on the project CCMS and will form part of the contractor’s handover requirements. Documentation and preservation activities will be audited regularly by BHP. EPC and contractors will use CCMS-generated preservation test sheets to confirm that equipment is fully preserved at/offsite and that warranty provisions under the contract remain valid.

For free-issue equipment, BHP will be responsible for full preservation activities from the point of delivery from the manufacturer until delivery to the contractor. BHP must ensure that preservation requirements for free-issue equipment are identified in CCMS so that contractors can execute preservation activities in accordance with OEM requirements.

16 Commissioning Stages, Toll Gates and Turn-over Processes

16.1 Overview

The Commissioning Stages, Toll Gates and Turnover / Handover Processes for the Ministers North Project will be structured to comply with the MAP Commissioning Procedure (MAUPRJ-PRO-00023) and the MAP Commissioning External Standard (MAUPRJ-STD-00020).

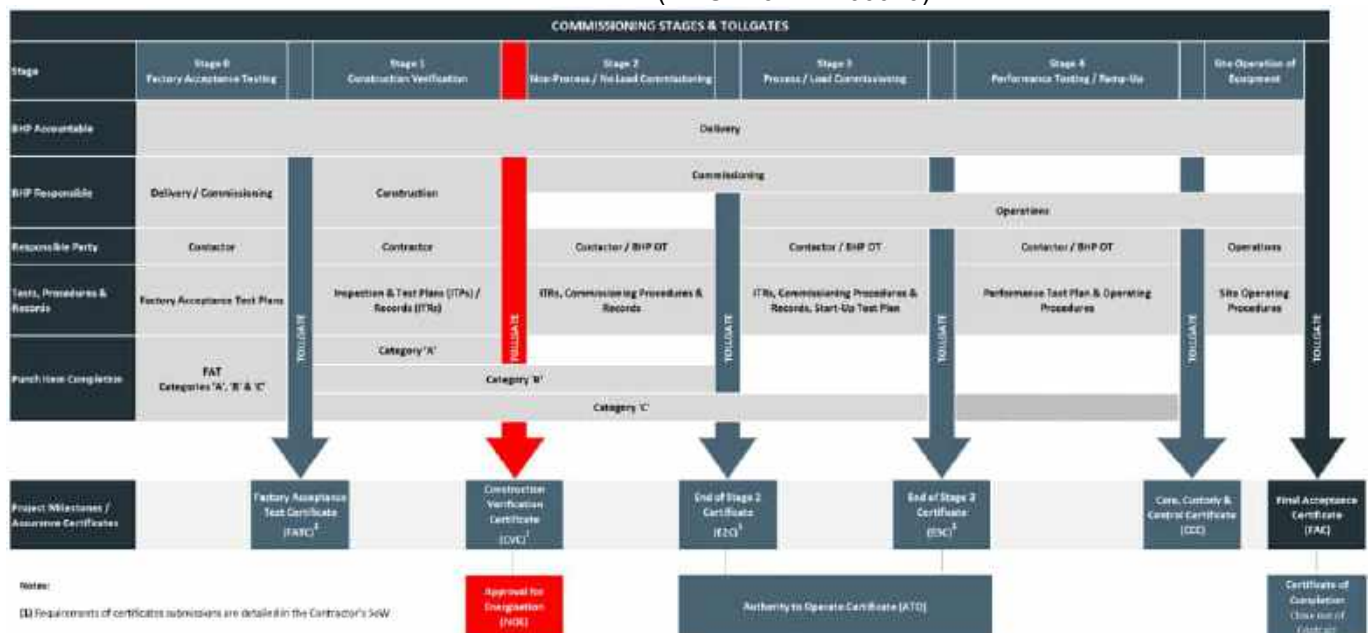


Figure 16-1: Commissioning Stages & Tollgates

Each phase will have a clearly defined set of deliverables and pre-requisites which will be tracked, managed, validated and approved via the CCMS database. The party responsible for the stage will produce the applicable certificate in the CCMS at the completion of the stage. This will act as a tollgate for progression to the following

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stage of commissioning.

The CVC, E2C & E3C tollgate certificates produced by the contractors will require BHP approval and act as a hold point in the commissioning process. The FATC can be approved internally by the contractor, but BHP Witness / Hold points will be in accordance with the applicable approved ITPs.

### 16.2 Stage 0 – Factory Acceptance Testing

Testing and commissioning requirements for FAT will be defined in the scopes of works for the contractors and suppliers.

To reduce site-based commissioning man hours and the risk of injury and delays due to equipment failure, offsite commissioning will be maximised where possible, particularly for items such as:

- HV & LV Switchgear and MCC's.
- Transformers.
- Pump Stations.
- Control Panels.
- Critical vendor equipment.

The contractor will be required to track all FAT activities in the CCMS. The BHP commissioning team will take an active role in witnessing and validating the commissioning of this equipment, and may engage a specialist commissioning contractor if required, including the hiring of specialist test equipment.

All Factory Acceptance Tests (FAT) will include functional checks wherever possible. The list of equipment and items requiring FAT will be agreed upon collaboratively with suppliers and contractors. All FAT dates will be incorporated into the master schedule to ensure visibility and effective tracking.

Equipment with pending punch items shall not be sent to site without the approval of the BHP representative. If this approval is obtained, then the outstanding punch items must be captured in the CCMS. Refer to MAP Punch Listing Functional Work Instruction (MAUPRJ-WIN-00016) for the punch list process.

At the completion of this stage the Factory Acceptance Certificate (FATC) is signed, to allow for the release of equipment post-FAT.

#### 16.2.1 Factory Acceptance Test Certificate (FATC)

A FATC shall be a prerequisite for the release of equipment to site post-FAT. The FATC shall be preceded by a Punchlist walkdown and must meet the following requirements:

Complies with Purchase Order and meets the corresponding BHP and Australian Standards.

- FAT completed, acceptable and uploaded to CCMS.
- MDR reviewed, compilation summary provided. Relevant documents provided with package for delivery.
- All testing bridges, forces and overrides have been removed, and the Bridge/Force register is attached.
- Punch Items reviewed, all open items to be completed post FATC. Punchlist attached and to be recorded in CCMS.
- All RFI and TQs have been closed.
- Approved as-built mark-ups of all Vendor and Engineering drawings completed and provided.
- Software and configuration files are updated and provided in native format.
- Transportation, preservation, and packaging as per Manufacturer and BHP guidelines.
- Complies with relevant VURS (valid user requirements specification) and FUSP (functional specification).

The FATC Certificate shall be managed and recorded in the agreed commissioning and completions

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management system (CCMS).

Refer to Appendix C CCMS RACI for the approval and acceptance matrix.

### 16.3 Stage 1 – Construction Verification

This stage is the progressive construction completion of a System or Subsystem, and its purpose is to:

- Verify that all construction and component installation works were carried out according to the design drawings and technical specifications of the Project.
- Validate that the Subsystems are suitable to be safely energised for the first time.

Construction completion verification is the process by which testing, and inspection is carried out across all relevant engineering disciplines (e.g. structural, civil, mechanical, electrical etc.) to collate evidence that the plant or equipment has been constructed in accordance with design drawings, applicable specifications/standards, and project expectations.

The verification records generated during this stage must be assigned a tag number at subsystem level and include the activities as described in the CCMS database ITR Matrix.

All construction will be executed by the EPC or other contractors under BHP governance. Upon completion of construction, the contractors will initiate a punch-list walkdown with key stakeholders. All non-conformance items will be classified, and any safety-related items will be rectified prior to issuing a Construction Verification Certificate (CVC).

At the completion of this stage, the Construction Verification Certificate (CVC) is signed, and Notice of Energisation (NoE) can be issued to allow Stage 2 Non-Process/No Load Commissioning to begin.

#### 16.3.1 Construction Verification Certificate (CVC)

Once the physical construction works are completed and 90% of testing is executed, a punch list walk down shall be coordinated as per the MAP Punch Listing Functional Work Instruction (MAUPRJ-WIN-00016). All stage 1 ITRs and Cat A & B punch list items identified shall be completed prior to the CVC being accepted. A Construction Verification package shall be developed that contains the following as a minimum:

- Redline As-Built Drawings
- Inspection Test Record (ITR) Completion Report
- Punch List Status Report
- Relevant Vendor Inputs
- Detailed List of Any Exclusions
- Outstanding NCRs
- Open TQs

The CVC Certificate shall be managed and recorded in the agreed commissioning and completions management system (CCMS).

Refer to Appendix C CCMS RACI for the approval and acceptance matrix.

#### 16.3.2 Notice of Energisation (NoE)

A Notice of Energisation is the tollgate that communicates site wide that the listed equipment in the NOE is deemed live, and that commissioning works are set to commence. The NOE bulletin and certificate shall coincide with a final walk through and inspection by the commissioning supervisor.

The project, where practical will provide 24 hours' notice prior to energisations. Shortened periods of notice can be performed as an exception to the normal process. Exceptions shall be approved by the BHP delivery manager or delegate.

- The NOE bulletin shall be distributed via email to an agreed distribution list developed during the execution phase.

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- The NoE Certificate shall be managed and recorded in the agreed commissioning and completions management system (CCMS).
- Be accompanied with a heat map (Single Line or P&ID drawing highlighting equipment intended to be energised).

The NoE Certificate shall be managed and recorded in the agreed commissioning and completions management system (CCMS).

Refer to Appendix C CCMS RACI for the approval and acceptance matrix.

### 16.4 Stage 2 – Non-Process / No Load Commissioning

Non-Process / No-Load commissioning is the staged progression of tests before introducing process fluids (e.g., ore, slurry, acid) to verify that equipment, systems, and facilities operate in accordance with design.

Typical activities include:

- Energisation and monitoring of electrical distribution systems.
- Motor rotation checks.
- Instrument setup and ranging (calibration certificates included in the CVC).
- Equipment run tests under local control.
- Actuated valve stroking.
- Control system I/O testing.
- Coupled runs without ore.
- Sequence and interlock testing.
- Functional testing of Safety PLCs.
- Introduction of water and full commissioning of water systems.
- Site Acceptance Testing (SAT).
- Full integrated system and facility run tests from local control and the Integrated Remote Operating Centre (IROC).

Following the issuance of the Construction Verification Certificate (CVC), a Notice of Energisation (NOE) will be circulated to all relevant stakeholders. Once all assigned Non-Process / No-Load commissioning tests and documentation is completed and Punchlist items are closed, the relevant contractors Commissioning Manager will sign the End of Stage 2 Commissioning Certificate (E2C) for acceptance by the BHP Commissioning Manager. This signifies that the plant is ready for Load Commissioning.

#### 16.4.1 End of Stage 2 Certificate (E2C)

An E2C shall be a prerequisite for the commencement of the Process/Load Commissioning phase and must align with the requirements set out in the End of Stage 2 (E2C) Functional Work Instruction (MAUPRJ-WIN-00023). The E2C shall be preceded by a punch list walkdown and contain the following deliverables:

- All Cat C punch list items closed out. Unless exceptions have been approved and carryover punch list attached.
- All TQs have been reviewed and accepted, including outstanding items.
- All NCRs have been reviewed and accepted, including outstanding items.
- All Stage 2 Non-Process/No Load Commissioning ITRs complete and CCMS ITR open and closed status report attached.
- Blueline drawings are available.
- Statutory documentation completed.
- Vendor and Sub-contractor documentation, as detailed in SoW and Deliverables Requirements List

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## Commissioning Management Plan

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are available.

The E2C Certificate shall be managed and recorded in the agreed commissioning and completions management system (CCMS).

Refer to Appendix C CCMS RACI for the approval and acceptance matrix.

### 16.4.2 Authority to Operate (ATO)

Within complex brownfield scopes and shutdown environments, there may be significant value in further accelerating the authority to operate to Operations. In these scenarios an Authority to Operate (ATO) certificate should be considered. The intent of an ATO is similar to that of the Care, Custody, and Control (CCC) process in the fact it transfers accountability for a nominated asset to a single owner. The requirements for an ATO must still ensure that the asset is safe to operate and maintain, however completion and transfer of all data into end state systems and tools may not be complete, and therefore the provision of ongoing project support for an interim period prior to CCC is needed.

The approval and acceptance is outlined in Appendix C - CCMS RACI and the MN Handover Plan (MNT-PLN-00072) but at a minimum must:

- Contain an agreed list of required deliverables to safely operate and maintain the asset.
- Ensure that the asset is safe to operate and maintain.
- Contain a punch list status report showing the completion of all Priority A and B punch list items.
- Confirmation of Training completed for BHP Operations Personnel.
- Authority to Operate / Stakeholder walkthrough has been completed.
- Accepted by the Operations/Client Manager.

The ATO Certificate and deliverables shall be managed and recorded in the agreed commissioning and completions management system (CCMS).

Refer to Appendix C CCMS RACI for the approval and acceptance matrix.

### 16.5 Stage 3 – Process / Load Commissioning

Stage 3 Load Commissioning commences after successful completion of Stage 2 No-Load Commissioning and successful transfer of the E2C certificate. Stage 3 involves the introduction of ore/reactive materials/process material, in order to demonstrate the functionality and process capability according to the process design.

The party responsible for the execution of load commissioning will develop commissioning procedures for Stage 3 to load test the operability of the entire System or Subsystem including automatic sequence and functionality as defined by the design documents. The commissioning test records are again uploaded into the CCMS database.

For the EFE scope, this will be the first time ore is processed through the facility and will require significant involvement from BHP operations to tie in with existing production requirements. To ensure planned commissioning activity does not negatively impact daily operations, pre-shift pre-start meetings will be conducted by the EPC Commissioning Lead with attendance extended to the BHP Operations and Operational Readiness team(s).

At the completion of this stage the end of Stage 3 Certificate (E3C) is signed, to allow Stage 4 Performance Testing/Ramp-up to begin.

#### 16.5.1 End of Stage 3 Certificate (E3C)

An End of Stage 3 Certificate shall be a prerequisite for the commencement of Stage 4 Performance Testing/Ramp-up and must align with requirements set out in the End of Stage 3 Certificate (E3C) Functional Work Instruction (MAUPRJ-WIN-00024). The E3C shall be preceded by a punch list walkdown and contain the following deliverables/conditions:

- All punch list items closed out. Unless exceptions have been approved and carryover punch list attached.

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- All TQs have been reviewed and accepted, including outstanding items.
- All NCRs have been reviewed and accepted, including outstanding items.
- All Stage 3 Process/Load Commissioning ITRs complete and CCMS ITR open and closed status report attached.
- Blueline drawings are available.
- Statutory documentation completed.
- Vendor and Sub-contractor documentation, as detailed in SoW and Deliverables Requirements List are available.

The E3C Certificate shall be managed and recorded in the agreed commissioning and completions management system (CCMS).

Refer to Appendix C CCMS RACI for the approval and acceptance matrix.

### 16.6 Stage 4 – Performance Testing/Ramp-up

This stage of the Operations process begins at the end of the process/load commissioning stage, with the approval of the System or Area End of Stage 3 Certificate (E3C).

The execution of this stage should be through a series of tests as defined in and conducted in accordance with the Performance Test Criteria (PREP-660-PI-00004). The key objectives of performance testing are:

- Verification that the facilities are capable of continuously operating to the requirements of the design criteria and specifications, and to establish that all agreed performance criteria are met.
- To validate the vendor's contractual obligations with respect to performance requirements.
- Verification and sustainability of the plant during incremental increase of throughput as part of the Ramp-Up process
- To validate the engineer's contractual obligations with respect to performance requirements.

### 16.7 Commissioning Hand-over to Operations

The commissioning hand-over to Operations validates that load commissioning is complete and that the facility or area is ready for safe, effective operation. The process begins with confirmation that all systems have been energized, functionally tested under load, and stabilized to normal operating parameters. Operations readiness is verified by demonstrating that alarms, interlocks, protections, and controls perform as designed, that start/stop sequences are reliable, and that interfaces to upstream/downstream systems are working. The area is accepted for operations when risk is reduced to as low as reasonably practicable and remaining items do not impair safety, integrity, or production.

Supporting documentation focuses on providing access to the minimum information necessary to operate safely and effectively. This includes the latest approved P&IDs or single-line diagrams, as-commissioned configuration and protection settings, operating procedures and start-up/shut-down instructions, cause-and-effect matrices, vendor load commissioning reports, an ITR status index showing completed tests, and a Punchlist status index with risk-rated residual items. Access to the current HSE risk assessment and risk register, isolation registers and permits, bridges and forces registers, and an outstanding items list covering tests, drawings, manuals, and certificates is also required. The emphasis is on visibility and timely access rather than document ownership transfer.

Access provisioning is aligned with Asset Integration so that the information presented at hand-over is consistent with the engineered source of truth and will flow into the permanent asset records. Asset Integration governs how engineering data, tags, documents, and configuration baselines are structured, validated, and ultimately delivered into Operations systems of record (e.g., asset registers, CMMS, DMS, control system repositories). During hand-over, Operations is granted read-access to the validated working sets while Asset Integration continues the formal data quality checks and metadata enrichment needed for final delivery.

Final records migration occurs after hand-over and ensures that controlled copies of drawings, data sheets, ITRs, certificates, vendor manuals, and configuration files are captured in the designated repositories with traceability to supply and installation contracts. Warranty provisions are supported by storing proof of

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commissioning, performance verification, and any deviations or concessions approved at start-up. Where interim configurations or temporary works were necessary to achieve hand-over, these are documented, risk assessed, and tracked for removal or formalization, preserving warranty rights and compliance with contract terms.

The relationship between hand-over and final acceptance is staged. Hand-over authorizes Operations to take control based on demonstrated operability and access to essential information; final acceptance occurs when all contractual deliverables are complete, quality requirements are met, defects are cleared, and documentation is fully migrated into the asset records. Outstanding EPCM/contractor obligations after hand-over are managed through a controlled Punchlist and defects register with clear ownership, due dates, and risk controls. Items that affect safety or critical performance remain blockers to final acceptance; non-critical items may be managed under agreed operational risk controls until rectified.

Governance is maintained through a CCC certificate, which confirms scope, status, constraints, and conditions of hand-over. The entire process will follow the Project Handover Plan (MNT-PLN-00072) to ensure consistency and compliance with agreed standards.

### 17 Defect and Punch-list Management

The contractors are responsible for collation and management of the Punchlist until the completion of their scope of works.

Punch listing is a formal, documented inspection of constructed works to identify minor defects, errors, scope omissions, non-conformances, or substandard design or installation work that must be corrected for satisfactory completion of the works. The process involves a walkdown, where a group of stakeholders jointly inspect the field to identify defects and record actions required for rectification. The Punchlist walkdown record includes the attendance list, defines the walkdown scope, and contains handwritten notes from the inspection. After completion, this record is scanned and uploaded into CCMS.

There will be two formal punch-list walkdowns:

1. CVC walkdown at the CVC tollgate
2. CCC walkdown at the CCC handover tollgate to Operations

Any defects identified during any commissioning activities that are attributable to construction will be the responsibility of the construction contractors to rectify. Defects arising from design will remain with the D&C contractor, who retains the engineering risk.

Punchlisting during walkdowns will be completed using mobile devices whenever possible. If paper-based punch lists and attendance registers are used, they must be entered into CCMS immediately after the walkdown and circulated to all attendees for review and comment.

Immediately following each walkdown, a post-walkdown meeting will be held where all punch items raised are reviewed, graded, and agreed upon.

#### 17.1 Punchlist Walkdowns

The CVC walkdown will typically be conducted by subsystem following completion of all construction activities, inspections, and tests for that area. It is a prerequisite to the CVC and shall be managed and coordinated by the construction team. After the CVC is complete, the subsystem is handed over to the commissioning team. A CVC walkdown schedule must be included in the master schedule and updated by the Contractor.

Mandatory attendees include:

- Construction Manager – Contractor
- Commissioning Manager – Contractor and BHP
- Construction Supervisor – Contractor
- Commissioning Supervisor – Contractor and BHP
- Discipline Engineers – Contractors and BHP
- Operations Representative (optional but preferred)

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As a system or subsystem approaches construction completion, the Contractor shall prepare a punch-list walkdown request with at least 7 days' notice and:

- Prepare a walkdown package for the area, including key drawings and specifications defining the scope and boundaries (based on systemisation).
- Submit for approval to the Company a "Works to Go" list for each portion of the work under contract.
- Ensure the walkdown area is cleaned and prepared by removing construction equipment, materials, debris, and any other items that may prevent safe and effective inspection. Provide safe access and adequate lighting.

When 7 day's notice cannot be achieved due to a shutdown environment or re-scheduling a walkdown, it will be determined on a case by case basis at the approval of the BHP Commissioning Manager.

The Construction Manager shall:

- Nominate a representative (Scribe) responsible for recording all defects raised during the walkdown and ensuring all participants sign the attendance register.
- Record punch items using the CCMS mobile application or a hard copy punch-list form, capturing:
  - Date
  - Subsystem number
  - Tag number
  - Punch-list item number
  - Description of defect
  - Photo of item (if possible)
  - Person who raised the item
  - Priority of the punch-list item
- At the end of the walkdown, all participants shall agree on the category assigned to each item in accordance with the punch-list categorisation table. If a paper form is used, it must be signed by all participants; otherwise, the CCMS workflow shall be followed.
- Enter the Punchlist and attendance register into CCMS immediately after the walkdown.

Any in-scope outstanding Category B and C punch-list items remaining after Construction Verification sign-off shall be completed at the Contractor's expense. The Contractor shall maintain the status of punch-list items in CCMS. All out-of-scope punch-list items (Category D) shall be entered into CCMS and assigned to BHP.

Punchlist Category	Description	Required Rectification Timeframe
Category A	Safety-critical and must be closed prior to commencement of commissioning or energised testing.	Before the issue of a CVC or the "next" certificate if found in Stage 2/3/4
Category B	A non-safety critical defect that requires a shutdown or isolation to rectify.	Prior to the End of Stage 2 Certificate (E2C) being signed.
Category C	Minor defects that that do not require isolation or shutdown of equipment.	Before End of Stage 3 Certificate (E3C) being signed (approved exceptions before CCC handover).
Category D	Non-safety critical defect that is not within the Contractors scope.	Not for contractor rectification unless directed, approved and budgeted in accordance with contract variation process.

Table 17-1: Punchlist Categories

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After rectification, Contractors shall update punch-list items to “Completed” status in CCMS. Each item will then be verified by a BHP Construction or Commissioning representative and formally closed in CCMS. At the time of CCC certificate submission, only a minimal number of Category C items should remain outstanding.

All safety-critical items assessed as being outside the Contractor’s scope must be reviewed and assigned to an appropriate contractor for completion. Refer to Punch Listing Work Instruction 0136216 for detailed requirements. Refer to the MAP Punch Listing Functional Work Instruction (MAUPRJ-WIN-00016) for more information.

This punch-list walkdown is managed by the party responsible for CCC handover to Operations and is performed when load commissioning of the equipment is substantially complete. Its purpose is to confirm that the scope of work is complete and the plant can sustain steady-state operation.

### 17.2 CCC Handover to Operations Walkdowns

These walkdowns are typically conducted by area after all assigned commissioning activities have been completed. It is a preferred step prior to CCC handover and is coordinated by the party responsible for transferring the system to Operations. At this stage, the relevant equipment will be operating under load, and the walkdown ensures that no damage has occurred during commissioning. A CCC walkdown schedule shall be developed by the party responsible for the handover of facilities within their scope.

Mandatory attendees include:

- Relevant Manager – Contractor and BHP
- Commissioning Supervisor – Contractor and BHP
- BHP Commissioning Lead
- Operations Maintenance Supervisor
- Operations Production Supervisor
- Additional Operations personnel (optional)

All out-of-scope punch-list items (Category D) shall be discussed during this walkdown.

With digital execution, punch-list items are entered directly into CCMS using mobile devices as they are raised. Reviews can then be completed in CCMS after the walkdown.

## 18 Completions Management

Completions management for the project will be executed using the Hexagon Smart Completions (CCMS) platform. All contractors are required to comply with the MAP Completions and Commissioning Management System Functional Procedure (MAUPRJ-PRO-00111). Contractors shall provide suitably qualified personnel to administer CCMS and ensure accurate, timely data entry and status updates.

BHP will provide training for contractors on the use of the Smart Completions system as required. The CCMS will serve as the central tool for tracking completions progress, managing punch lists, and supporting commissioning activities. It will integrate with overall project progress control tools to provide real-time visibility of system readiness and handover status.

This approach ensures that completions data is consistent, auditable, and aligned with project milestones, enabling effective coordination between construction, commissioning, and operations.

For contractor-commissioned scopes of work, the contractor is responsible for developing their own systemization, ITR (Inspection and Test Record) matrices, and must define the approach to management of the CCMS System including an approvals matrix in the scope specific Commissioning Execution Plan (CEP). These documents define how systems and subsystems are grouped for construction, testing, and commissioning, and outline the required verification steps. Once prepared, these will be submitted to the BHP Commissioning Lead for review and endorsement to ensure compliance with project standards and alignment with commissioning requirements.

For BHP-commissioned scopes of work, the BHP Commissioning function will develop the systemisation and ITR matrices and present them to the contractor for review. This collaborative approach ensures that contractors can incorporate the agreed system boundaries and test requirements into their construction

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methodologies and schedules. By doing so, the project maximizes efficiency and minimizes delays, ensuring that the largest possible volume of equipment is handed over to commissioning at any one time without compromising safety or quality. The Responsibility and Approvals Matrix for the BHP-commissioned scopes of work can be seen in Appendix C CCMS RACI.

Systemisation plays a critical role in defining the logical breakdown of the plant into manageable systems and subsystems for construction, pre-commissioning, and commissioning activities. It provides clarity on scope boundaries, interfaces, and dependencies, enabling better planning and sequencing of work. The ITR matrix complements this by specifying the required inspections and tests for each system, ensuring that all quality and functional requirements are met before handover.

This process also supports progress tracking and completions management through the CCMS platform, as systemisation and ITR matrices form the basis for tagging, status updates, and readiness reporting. By aligning systemisation with construction schedules and commissioning priorities, the project can achieve smoother transitions between phases and reduce idle time for resources.

## 19 Progress and Cost Management, Tracking and Reporting

### 19.1 Progress Management, Tracking and Reporting

The project will use Hexagon Smart Completions (CCMS) to track and manage Construction Verification and Commissioning activities. Performance will be measured based on actual progress reported in CCMS. Weekly and monthly reports comparing actual commissioning progress against budget and forecast will be prepared by the Contractor and BHP PC&A.

If progress falls behind schedule or costs exceed budget, Project Controls will issue status reports and escalate to Management. Management will work with relevant parties to implement mitigation measures and recover satisfactory progress and cost performance.

Progress tracking will utilize CCMS features such as Subsystem Completion Reports and Skyline views based on completed test records. Regular reporting of actual commissioning progress against plan will be conducted by the party responsible for each stage.

### 19.2 Cost Management, Tracking and Reporting

The cost baseline for commissioning activities will align with the approved project budget. Contractors performing commissioning work are responsible for managing their costs within these approved budgets and ensuring accurate reporting of actual expenditure.

Weekly and monthly cost tracking and reporting will be conducted jointly by the Contractor and BHP Project Controls & Analysis (PC&A). Reports will compare actual commissioning cost performance against the approved budget and forecast, providing visibility of variances and trends.

Where cost performance exceeds budget or forecast, Project Controls will issue variance reports and escalate to Management. Management will work with relevant parties to identify root causes, implement corrective actions, and ensure cost recovery plans are in place. This process ensures proactive management of financial risks and supports timely decision-making.

Cost tracking will be integrated with progress reporting through the CCMS platform and linked to overall project controls tools. This integration enables accurate forecasting, alignment of cost and progress data, and improved transparency for stakeholders.

## 20 Commissioning As-Builts

Effective change management of design drawings and documents is critical to ensuring a safe and successful commissioning and handover of the project. The management of as-built drawings will generally comply with Company Standard SEP-57, WAIO Document Management, Marking Up and Submitting Drawings, Errors, Process, and Guideline (TRAP-000-G-12215) and will be defined in the Contractor's Commissioning Execution Plans.

The Construction Contractor is responsible for compiling and maintaining a set of Master Drawings for all relevant disciplines, including Electrical (logic diagrams, block diagrams), P&IDs, and Structural/Mechanical/Civil drawings as required. Any deviation from the Approved for Construction (AFC)

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design must be clearly marked up, checked, and signed by the Contractor's Engineer. These master drawings and documents, including all markup changes, will be handed over at the agreed stage of handover from contractor to BHP (refer section 3 Commissioning Strategy).

- Changes made to IFC drawings before CVC shall be marked in red.
- Changes made during commissioning shall be marked in blue by the team responsible for the commissioning of the system.

The management and handover of electronic copies will follow the project's Digital Strategy, usually Aconex workflow or transmittal, and requirements in this section may be subject to review and updates as digital processes evolve. Following completion of CCC, the respective Contractor or ESP shall backdraft the as-built drawings to reflect all approved changes.

### 20.1 Composite Services

All Composite Services shall be surveyed and mapped into a CSM database in accordance with WAIO Standard SEP-54. The contractors Construction Manager is responsible for ensuring that Composite Services records remain current and that the project database is updated progressively. The CSM files shall be handed over to Operations as part of the CCC deliverables and integrated into the WAIO database prior to final acceptance by Operations.

## 21 Operations Participation

Operations personnel will play a critical role during commissioning to ensure a smooth transition from project delivery to steady-state operations. Their involvement will focus on supporting key commissioning activities, validating operability, and preparing for long-term asset ownership.

### 21.1 Roles and Responsibilities

Operations will provide assistance during Stage 3 – Load Commissioning and Stage 4 – Ramp-Up / Performance Testing, including:

- Supporting performance testing for the Eastern Front End (EFE).
- Assisting with HV switching and operating HV equipment for the 33kV and 132kV scopes.
- Providing operational oversight during energization and start-up sequences.
- Mining Operations will assist with stockpile building for EFE commissioning, ensuring the required material volumes are available for testing.

### 21.2 Resourcing and Assignment

Operations resourcing will be managed through a **staffing ramp-up plan**, developed jointly by Operations and Commissioning. This plan will define:

- Required roles and competencies for commissioning support.
- Timing and duration of Operations involvement.
- Allocation of Operations and Maintenance personnel without compromising day-to-day operational readiness.

Assignments will follow an agreed process between Operations and Commissioning, ensuring resources are available when needed and that demands on their time are balanced between commissioning and operational responsibilities.

### 21.3 Interface Management

Clear communication and coordination will be maintained through:

- Joint planning sessions to align commissioning milestones with operational readiness.
- Daily interface meetings during critical commissioning phases.
- Use of the permit-to-work system to manage access and control of systems during overlap periods.

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## Commissioning Management Plan

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### 21.4 Overlap and Handover

During any overlap between commissioning and operations, strict governance will be applied to maintain commissioning rigor while meeting operational requirements. Operations will progressively assume control of systems as commissioning milestones are achieved, supported by:

- Access to validated commissioning data and documentation.
- Defined roles for Operations in punch-list resolution and acceptance testing.

### 21.5 Post-Handover Support

Commissioning support structures, including technical specialists and documentation systems, will remain in place for a defined period after handover to assist Operations with troubleshooting and optimization during ramp-up.

## 22 Documentation

All Technical documents such as Commissioning Procedures, Commissioning Records, Functional Descriptions/Specifications, Design Criteria, IFC Drawings, Equipment Lists etc. shall be work flowed through the BHP Technical Document management database Aconex.

As Built Redline Drawings and As Commissioned Blue-line Drawings will be hard copy approved and transmitted via Aconex.

All test Documentation workflows and Punchlist management processes shall be managed through CCMS.

**HOLD (Refer to Section 30 Document Hold Table)**

## 23 Training

Refer to the Ministers North Operational Readiness Plan (MNT-PLN-00016).

## 24 Spares

### 24.1 Commissioning Spares

Commissioning Spares are spare parts identified as likely to fail during commissioning or pose a significant risk to the project if they fail, due to long procurement lead times or limited availability. Each equipment manufacturer will provide a recommended Commissioning Spares list for consideration. Availability of these spares is critical to preventing unforeseen schedule delays caused by equipment or part failure during commissioning.

At the end of the project, all remaining commissioning spares will be transferred to the Yandi Operations group. A Spares Management Plan will be developed to:

- Define how, where, and when spares will be transferred, stored, and preserved at site.
- Mitigate risks of spares being in unacceptable condition at the time of transfer.
- Ensure correct preservation practices and transfer of preservation history and future requirements to the Operations warehouse team.
- Establish a process to catalogue each item and transfer it to Operations (warehouses) upon completion of commissioning activities.

The party responsible for executing commissioning will manage the identification, procurement, and preservation of all commissioning spares. EPC will supply all required commissioning spares, including those needed for load commissioning and the start-up phase, ensuring availability to prevent delays and maintain continuity during critical commissioning activities.

Contractors are responsible for identifying, procuring, managing, and preserving all commissioning spares until handover to Operations. They must submit a Commissioning Spares List to BHP for approval, purchase the approved items, and ensure receipt of these spares is linked to milestone payments. Spares must be managed in accordance with the contractor's approved Materials Logistics Plan, including tracking, stocktake, and

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preservation in line with manufacturer recommendations. Contractors are required to maintain a register of spares used, re-order high-risk items as needed, and perform a joint stocktake with BHP prior to handover. All remaining spares will be catalogued and transferred to Company Stores, and this transfer will form a contractual requirement at handover.

For free-issue equipment, BHP will identify, procure, manage, and preserve all commissioning spares. Vendors will be required to provide recommended spares lists during tender, which will be reviewed and refined by Procurement, Engineering, and Commissioning teams and compared against existing stock to avoid unnecessary orders. Commissioning spares will be ordered alongside primary equipment, received onsite, catalogued, and stored in the BHP Central Storage Facility with assistance from the Operations team. A “Hold” status will be applied in 1SAP to prevent removal by non-project personnel without BHP authorization.

**HOLD (Refer to Section 30 Document Hold Table)**

### 24.2 Operational Spares

Operational spares, including capital and insurance spares, will be identified, procured, and managed by the Operations Readiness (OR) team. Many plant and equipment items are standard BHP assets and already catalogued in the 1SAP system, reducing front-end work. The OR team will work closely with BHP Engineering to ensure alignment between specified equipment, catalogue details, and asset management data. Some capital and insurance spares, particularly long-lead items, will be purchased by BHP as part of major procurement packages.

During commissioning, if equipment failures occur and parts are not immediately available, the project may leverage the Operations stores network, first within the Pilbara region and then across Minerals Australia sites. Availability of equipment at short notice will depend on business risk and operational priorities.

## 25 Materials, Supplies and First Fills

### 25.1 Water Supply

The exact quantities of water required for commissioning are currently unknown. Water will be sourced initially from temporary construction supplies where volumes allow. For Eastern Front End (EFE) load commissioning, larger volumes will rely on completion and commissioning of the Central Pilbara Hub Surplus Water 1 (CPHSW1) project, as well as the Ministers North civils package, which includes the overland piping infrastructure. Smaller quantities will continue to be drawn from construction water sources, while significant volumes necessary for EFE commissioning will depend on these co-commitment projects being operational.

### 25.2 Ore Feed

The BHP commissioning team, in collaboration with Operations and Mining, will identify ore requirements for commissioning well in advance, including quantity, grade, impurities, and schedule, to ensure availability for first ore and subsequent load commissioning. This planning is critical to achieving the First Ore milestone of 200kt. Commissioning is currently working with Operational Readiness and Planning to confirm the exact volume of ore required and the delivery date.

Haul road and fleet supply works remain a key precursor to meeting these requirements, as they enable timely delivery of ore to the ROM pads. Approximately one week before ore is required at the ROM, the mining team will be given sufficient notice to deliver the agreed specification and tonnage. Mining will provide loading machines, trucks, and all associated ROM pad logistics.

Additional coordination will include notifying IPRO of start-up requirements and commissioning details to ensure a controller is available, potentially on site. The Yandi OHP Superintendent will confirm readiness of the COS for ore acceptance, and the Maintenance Superintendent will ensure maintenance resources are on standby to support commissioning activities.

### 25.3 Reagents

Contractors to specify and develop a list of Reagents if required.

### 25.4 Other Consumables

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The following consumables will be required during commissioning:

- **Oils**
  - All first fills by the Contractor.
  - Top-up and 200-hour first oil change requirements by EPC during Stages 2, 3 & 4, whichever stage it falls in.
- **Greases** – for mechanical gear and motors (same approach as oils)
- **Transformer Oils**
- **Lubrication Filters** – for first change-out and replacement of fouled filters
- **HVAC Filters** – for first change-out and replacement of fouled filters
- **Fuses and Breaker Spares** – for each equipment type
- **Low-Speed Coupling Fasteners** – single-use fasteners for re-alignment or disconnection during commissioning
- **HSE Equipment**
  - Personal Danger Tags
  - Out-of-Service Tags
  - Commissioning, Construction, and Operations Custody (Ownership) Tags
- **Stickers, Padlocks & Lockboxes**

Detailed consumable requirements will be confirmed by commissioning leads as the design nears completion. Where preferred suppliers exist, the project will leverage these for procurement. Certain consumables will also be sourced from major equipment suppliers in conjunction with spare parts requirements.

### 25.5 Special Tools

The EPC and specialist commissioning contractors will supply a significant portion of the required test equipment. In many cases, equipment will be included in the technicians' overall day rate. Their scope of work includes:

- Rental of commissioning tools and test equipment
- Provision of HV specialist services and associated test equipment

Operations maintenance personnel forming part of the BHP commissioning team will use tools and test equipment from the fixed plant allocation. Additional tools will be hired through the specialist commissioning contractor as needed.

Tooling and test equipment requirements for BHP Operations Technicians (OT) will be confirmed during the DPS/Execution stage, including measures to prevent loss of equipment.

Any special tools required for installation and commissioning of the process components will be provided by suppliers as part of their scope of work.

Operations will also provide personnel and equipment for permits and isolations assistance, including lock boxes and lanyards where required. Padlocks and tags will be procured directly by the Project.

**HOLD (Refer to Section 30 Document Hold Table)**

### 25.6 Other

Other material resources that will be required throughout Commissioning include the following:

- Vehicles including Utes and minibuses
- Office Space, Technician's cribbing rooms
- Instrument calibration hut and Permit hut(s)

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- Secure storage for Commissioning Tools and Test equipment –in containers with shelving and lighting.
- Large tools, cranes, EWP's from Implementation Contractors
- Scaffolding

## 26 Acceptance and Performance Testing

### 26.1 Acceptance Testing

The EPC and relevant contractors will develop and execute no-load site acceptance testing requirements for their respective process facility packages. These tests will be witnessed by the BHP commissioning team and other stakeholders to verify that each system is ready to accept ore and commence load commissioning and start-up activities.

Completion of no-load testing is a toll-gate requirement for Stage 3 and will be incorporated into the commissioning procedures for each contractor's scope of work.

### 26.2 Performance Testing

Upon completion of all Stage 3 activities, the EPC and relevant contractors will conduct a suite of performance tests on new systems to:

- Demonstrate actual performance against design criteria and specifications
- Confirm the plant can achieve design throughput
- Verify the facilities can operate continuously with acceptable availability and reliability over extended periods
- Ensure vendor-supplied equipment performs at its specified design rate

BHP has defined the project performance test criteria in PREP-1200-PI-00011. The EPC and relevant contractors are responsible for developing detailed Performance Test plans and procedures to validate compliance with these criteria.

Performance testing will commence once all Stage 3 Load Testing criteria have been met, all relevant E3Cs have been signed off, and inflow routes have achieved steady-state operation during Stage 3 Load Commissioning.

The BHP Commissioning Manager will assist the EPC contractor in planning and organizing performance testing. The EPC will hold **Care, Custody, and Control (CCC)** of the project until the completion of Stage 4 for the EFE while Operations will operate and maintain the plant as defined and accepted using a ATO Certificate.

During load commissioning and performance testing, average plant throughput may be constrained by the mine's ability to deliver sufficient ore. Appropriate volumes of both high-grade (HG) and low-grade (LG) ore must be stockpiled in advance, and commissioning tests may need to be scheduled around ore availability.

Performance testing will be executed by the party responsible for that portion of the commissioning scope. A suite of benchmarking tests for the EFE will also be performed by the EPC prior to CCC handover to Operations.

**HOLD (Refer to Section 30 Document Hold Table)**

## 27 Production Impacts and Ramp Up

### 27.1 Production Impacts

The Project Scope section of this plan identifies the Brownfields Process Infrastructure tie-ins. Tie-in outages are expected to be kept to a minimum and will be incorporated into operations production planning. Upon completion of construction tie-ins, no-load and load commissioning activities will be performed as applicable, and these activities may also impact production. Quantification of production impacts will be estimated as detailed commissioning procedures are developed, and provisional estimates will be revised accordingly.

It is anticipated that minimal production impacts will occur as a result of no-load and load commissioning. Some

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## Commissioning Management Plan

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delays to production may arise from conveyor load tests, safety checks, and braking activities. Additionally, there are portions of the brownfield scope that will require full plant shutdowns to execute. These will be identified and scheduled to align with planned plant shutdowns and maintenance windows.

### 27.2 Ramp-up

A period of ramp-up typically occurs after handover to Operations, during which the operations team gradually increases ore supply to full capacity over a sustained period. The commissioning requirements for load commissioning and performance testing will be fully integrated with the plant ramp-up plans. The ramp-up stage is the responsibility of the Operator and can be supported by BHP OT commissioning resources to optimize plant operation as required. Refer to Ministers North Ramp-Up Plan (MNT-PLN-00070) for more details.

## 28 Success Factors and KPIs

Commissioning management objectives and KPIs will be aligned with the overall project objectives and KPIs.

### Success Factors

The ultimate success factor for Ministers North commissioning is the safe, high-quality handover of each Area in accordance with the schedule and budget, and successful ramp-up of the plant as per the ramp-up plan.

Key success factors include:

- **Safety** – Safe delivery of the project, incident and injury free
- **Schedule** – Maintaining First Ore date
- **Cost** – Complete handover within allotted budget
- **Ramp-up** – Maintain or improve on the project ramp-up plan

### KPIs

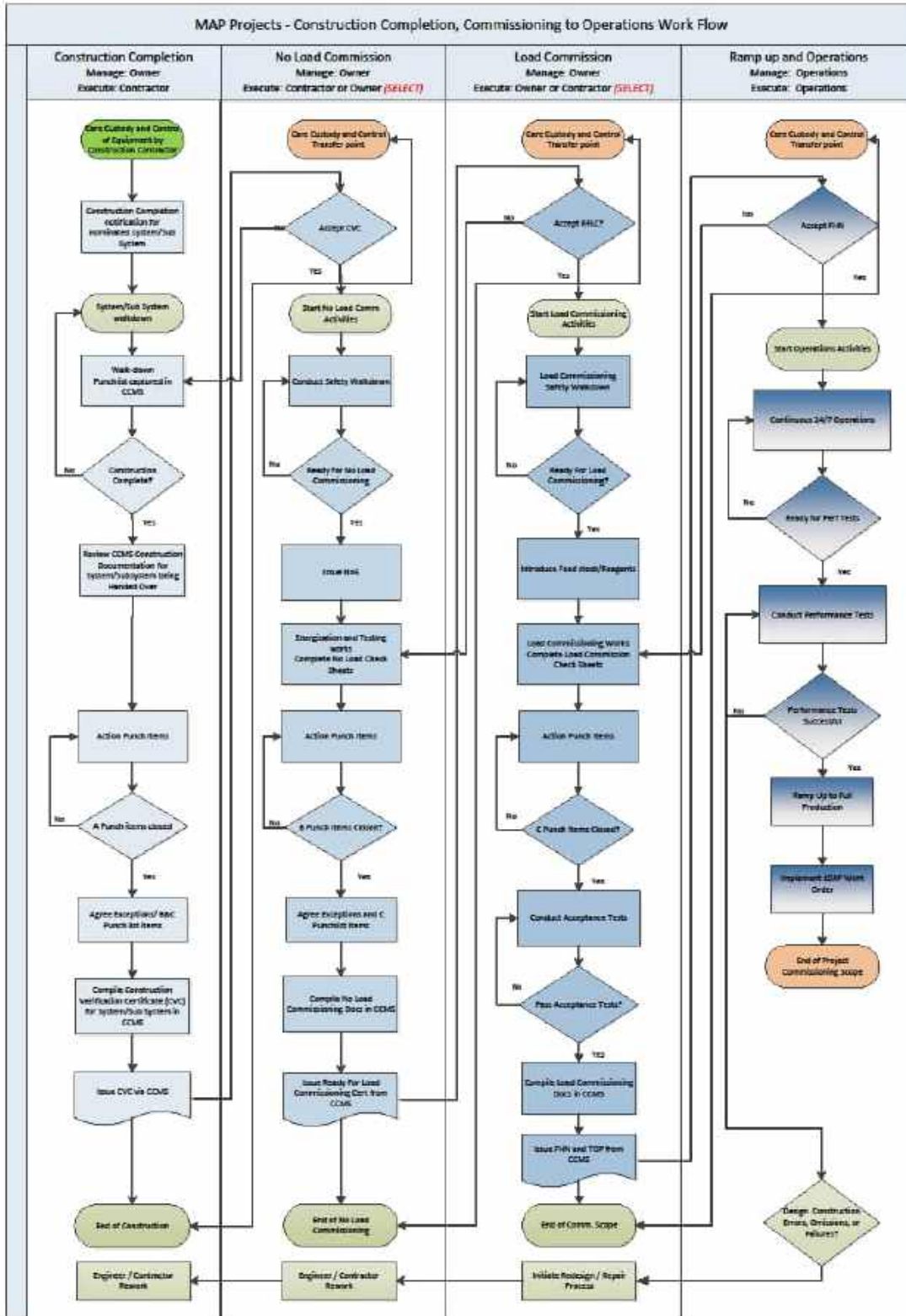
The Commissioning Team's KPIs are based on the following:

- **Safety**
  - Maintain TRIFR for all commissioning activities in accordance with project KPI
  - Field leadership activities as per site targets
- **Schedule**
  - First Ore dates achieved
  - CCC handover delivered within scheduled timeframes
- **Cost**
  - FTE headcount maintained
  - Commissioning expenses not exceeding project budget
- **Ramp-up**
  - Achieve project ramp-up target as per mine schedule

Commissioning Management Plan

29 Appendices

Appendix A Commissioning Workflow



Appendix B Project RACI

**HOLD** (Refer to Section 30 Document Hold Table)

Commissioning Management Plan

Appendix C CCMS RACI

**HOLD** (Refer to Section 30 Document Hold Table)

MINISTERS NORTH PROJECT		Trade Contractor Technician <sup>1</sup>	Trade Contractor Discipline Supervisor <sup>1</sup>	EPCCU Construction Superintendent <sup>1</sup>	EPCCU Construction Manager <sup>1</sup>	EPCCU Commissioning Superintendent <sup>1</sup>	EPCCU Commissioning Manager <sup>1</sup>	EPCCU CCMS Administrator	EPCCU Project Delivery Engineer <sup>1</sup>	EPCCU Safety Manager <sup>1</sup>	EPCCU Project Manager <sup>1</sup>	BHP Over Team Commissioning Lead <sup>1</sup>	BHP Over Team Operational Readiness Lead <sup>1</sup>	BHP Over Team Delivery Lead <sup>1</sup>	BHP Over Team Project Manager <sup>1</sup>	BHP Plant Reception Representative <sup>1</sup>	BHP Operations Control Manager <sup>1</sup>
Deliverable / Task	Code / Acronym																
<b>Toll Gates &amp; Certificates</b>																	
<b>Offsite FAT &amp; Modernisation</b>																	
Factory Acceptance Test Certificate	FATC		R	A	C	C	C	C	C		A	I					
FATC - Signatures (Issued by, Approved by, Reviewed by, Accepted by)	FATC		1			2	3				4						
<b>Stage 1 - Construction Verification</b>																	
Punch List Walkdown Certificate	PLWD		R	C	A	C	I	I				C	C	I			C
PLWD - Signatures (Contractor, BHP Contractor / Commissioning, BHP Operations)	PLWD		1	2	3	4											
Delivery Walkdown Certificate	DWC		R	C	A	C	I	I	3								
DWC - Signatures	DWC		1	2	3	4			5								
Construction Verification Certificate	CVC		R	C	A	C	I	I			C	I	I	I			I
CVC - Signatures (Issued by, Approved by, Reviewed by, Accepted by)	CVC		1	2	3	4					5						
<b>Stage 2 - No Load / No-Process Commissioning</b>																	
Notice of Erection Certificate	NEC		C	C	I	R	A	I			I	C	I	I			
NEC - Signatures (Installation Contractor, Commissioning Discipline, Commissioning Authorisation, Client Authority)	NEC		1			2	3					4					
Notice of Erection Control/Alert	NEC_GA		C	I	I		NR	I									I
End of Stage 2 Certificate	E2C		C	I	I	R	A	I	I			C	I	I			I
E2C - Signatures (Issued by, Approved by, Reviewed by, Accepted by)	E2C		1			2	3					4					
<b>Stage 3 - Load / Process Commissioning</b>																	
Authority to Operate	ATO		C	I	I	R	A	I	C			C	C	I			C
ATO - Signatures (Issued by, Approved by, Reviewed by, Accepted by)	ATO		1			2	3		4								5
End of Stage 3 Certificate	E3C		C	I	I	R	A	I	C			C	C	I			C
E3C - Signatures (Issued by, Approved by, Reviewed by, Accepted by)	E3C		1			2	3		4								5
<b>Stage 4 - Ramp Up / Performance Testing</b>																	
Care Custody and Control Plan/Handover	CCC-PLWD				I	R	A	I			I	C	C	C	I		C
Care Custody and Control Certificate	CCC				I	C	R	I			A	I	I	I		C	I
CCC - Signatures (Project Leader, Client Representative, Operations Manager)	CCC				1						2					3	4
Final Acceptance Certificate	FAC				I		I				A				R		R
FAC - Signatures (Submitted, Accepted)	FAC										1				2		3
<b>ITRs &amp; CCMS Workflow</b>																	
<b>Stage 1 - Construction Verification (Digital / Paper ITRs)</b>																	
Performed by Signatory	ITR		R	C	A	I	I										
Reviewed by Signatory	ITR		C	R	A	I	I										
Accepted by Signatory	ITR		C	R	A	I	I										
<b>Stage 2 - Stage 1 - Commissioning (Digital / Paper ITRs)</b>																	
Performed by Signatory	ITR		R	C	A	I	I										
Reviewed by Signatory	ITR		C	R	A	I	I										
Accepted by Signatory	ITR		C	R	A	I	I										
<b>Stage 3 - Stage 2 - Commissioning</b>																	
Uploaded / Completed by Signatory	CCMS		R		I	I	I				A	I					
Accepted / Closed by Signatory	CCMS		R		I	I	I				A	I					
<b>CCMS Punch List</b>																	
<b>Stage 1 - Construction Verification</b>																	
Original Punch Items	CCMS_PL		R	R	C	A	I	I				R	R	R			
Submit Punch Items	CCMS_PL		R	R	C	A	I	I				I	I	I			
Accept Punch Items	CCMS_PL		I	I	R	A	I	I				I	I	I			
Complete Punch Items	CCMS_PL		R	R	C	A	I	I				I	I	I			
Close Punch Items	CCMS_PL		I	I	R	A	I	I	R			I	I	I			
<b>Stage 2 - Stage 1 - Commissioning</b>																	
Original Punch Items	CCMS_PL		R	R	I	I	C	A	I			R	R	R			
Submit Punch Items	CCMS_PL		R	R	I	I	C	A	I			I	I	I			
Accept Punch Items	CCMS_PL		I	I	I	I	R	A	I			I	I	I			
Complete Punch Items	CCMS_PL		R	R	I	I	C	A	I			I	I	I			
Close Punch Items	CCMS_PL		I	I	I	I	R	A	I	R		I	I	I			
<b>CCMS Management of Change (MoC)</b>																	
Submit CCMS MoC	CCMS_MoC		R	R	R	I	R	A	I			I					
Accept CCMS MoC	CCMS_MoC		I	I	C	I	R	A	I			C					
Complete CCMS MoC	CCMS_MoC		I	I	C	I	C	A	R			I					
Close CCMS MoC	CCMS_MoC		I	I	I	I	I	A	R			I					



Notes:  
<sup>1</sup> Note: Manager (or Delegate)  
<sup>2</sup> Note: informed may be by any of the below means:  
 - CCMS Access  
 - Site Notices  
 - Reporting  
 - Email Notifications / Invitations

**Roles and Responsibilities**  
 Responsible, Accountable, Consulted, Informed

R	Responsible
A	Accountable
C	Consulted
I	Informed <sup>2</sup>
#	Not Applicable / Signatory

30 Document Hold Table

Hold	Section	Description	Date Raised
HOLD.001	Section 22	Define process and responsibilities for the blacklining completed drawings for Owner Team Commissioned Scope.	12/01/2026
HOLD.002	Section 24.1	Define how commissioning spares will be managed for OT Commissioned Scope, Or Reference a Spares Management Plan.	12/01/2026
HOLD.003	Section 25.5	Define How Special Tooling will be managed for OT Commissioned Scope.	12/01/2026
HOLD.004	Section 26.2	Further define once all packages have been awarded.	12/01/2026
HOLD.005	Appendix B	Detailed Project RACI to be workshopped once packages have been awarded.	12/01/2026
HOLD.006	Appendix C	Detailed CCMS RACI to be workshopped once packages have been awarded.	12/01/2026

**Ministers North Works Approval**

**Attachment 3B: Proposed activities**

See Sections 1 to 7.

**Ministers North Works Approval**

**Attachment 3C: Map of Area Proposed to be cleared**

Not required

**Ministers North Works Approval**

**Attachment 3D: Additional information for clearing assessment**

Not required

**Ministers North Works Approval**

**Attachment 4: Marine surveys (only applicable if marine surveys included in application)**

Not required

Ministers North Works Approval

**Attachment 5A: Other Approvals: Ministerial Statement 1105**

**THIS DOCUMENT**

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Published on: 11 July 2019

Statement No. 1105

**STATEMENT THAT A FUTURE PROPOSAL(S) IDENTIFIED IN A STRATEGIC PROPOSAL MAY BE IMPLEMENTED**

**(Sections 40B and 45 of the *Environmental Protection Act 1986*)**

**PILBARA EXPANSION STRATEGIC PROPOSAL**

**Strategic Proposal:** To construct and operate the iron ore mine developments, listed and described in Table 2 of Schedule 1 and represented in Figures 1 and 2 of Schedule 1.

**Proponent:** BHP Billiton Iron Ore Pty. Ltd.  
Australian Company Number 008 700 981

**Assessment Number:** 1934

**Report of the Environmental Protection Authority: 1619**

Pursuant to sections 40B and 45 of the *Environmental Protection Act 1986* (the Act), it has been agreed that in the event of a declaration by the Environmental Protection Authority pursuant to section 39B of the Act that it is a derived proposal, a proposal to do one or more of the Developments (including the Associated Activities and Operations) listed in Column 1 within the location described in Column 2 and subject to the limitations and extent detailed in Column 3 of Table 2 in Schedule 1 of this Statement, and which was identified in the Strategic Proposal to which Report 1619 relates, may be implemented.

Upon declaration that the proposal is a derived proposal, subject to the Minister for Environment's identification of relevant conditions under section 45A(3) of the Act, the implementation of the proposal shall be subject to the following implementation conditions and procedures.

The Strategic Proposal or any future proposal does not include and this Statement does not authorise any developments, activities or operations within any existing national park, including the Karijini National Park.

## **1 Derived Proposals**

- 1-1 Proposals referred to the EPA and declared to be derived proposals containing one or more of the Developments (including the Associated Activities and Operations) listed in Column 1 of Table 2, within the location described in Column 2 shall not exceed the Description of Limits or Extent, relevant to the Developments provided for in Column 3 of Table 2.

## **2 Contact Details**

- 2-1 The proponent shall notify the CEO of any change of its name, physical address or postal address for the serving of notices or other correspondence within twenty-eight (28) days of such change. Where the proponent is a corporation or an association of persons, whether incorporated or not, the postal address is that of the principal place of business or of the principal office in the State.

## **3 Time Limit for Substantial Commencement**

- 3-1 If the proposal is not substantially commenced within five (5) years from the date of issue of the Section 45A Notice, the proposal may not be implemented.
- 3-2 If the proposal is substantially commenced in accordance with condition 3-1, the proponent must provide to the CEO documentary evidence demonstrating that it has complied with condition 3-1 no later than thirty (30) days after the expiration of five (5) years from the date of issue of the Section 45A Notice.

## **4 Compliance Reporting**

- 4-1 The proponent shall prepare, and maintain a Compliance Assessment Plan which is submitted to the CEO at least six (6) months prior to the first Compliance Assessment Report required by condition 4-6, or prior to implementation of the proposal, whichever is sooner.
- 4-2 The Compliance Assessment Plan shall indicate:
- (1) the frequency of compliance reporting;
  - (2) the approach and timing of compliance assessments;
  - (3) the retention of records concerning compliance assessments;
  - (4) the method of reporting of potential non-compliances and corrective actions taken;
  - (5) the table of contents of Compliance Assessment Reports; and
  - (6) public availability of Compliance Assessment Reports.

- 4-3 After receiving notice in writing from the CEO that the Compliance Assessment Plan satisfies the requirements of condition 4-2 the proponent shall assess compliance with conditions in accordance with the Compliance Assessment Plan required by condition 4-1.
- 4-4 The proponent shall retain reports of all compliance assessments described in the Compliance Assessment Plan required by condition 4-1 and shall make those reports available when requested by the CEO.
- 4-5 The proponent shall advise the CEO in writing of any potential non-compliance including exceedance of threshold criteria and/or failure to implement management actions in an Environmental Management Plan within seven (7) days of that potential non-compliance being known.
- 4-6 The proponent shall submit to the CEO a Compliance Assessment Report annually by 1 October each year addressing compliance in the previous financial year, or as otherwise agreed in writing by the CEO.
- 4-7 The Compliance Assessment Report shall:
- (1) be endorsed by the proponent's CEO or a person delegated to sign on the CEO's behalf;
  - (2) include a statement as to whether the proponent has complied with the conditions;
  - (3) identify all potential non-compliances and describe corrective and preventative actions taken;
  - (4) be made publicly available in accordance with the approved Compliance Assessment Plan; and
  - (5) indicate any proposed changes to the Compliance Assessment Plan required by condition 4-1.
- 4-8 The proponent:
- (1) may review and revise the Compliance Assessment Plan, or
  - (2) shall review and revise the Compliance Assessment Plan as and when directed by the CEO.
- 4-9 The proponent shall implement the latest revision of the Compliance Assessment Plan, which the CEO has confirmed by notice in writing, satisfies the requirements of condition 4-2.

## **5 Public Availability of Data**

5-1 Subject to condition 5-2, within a reasonable time period approved by the CEO after the issue of the Section 45A Notice and for the remainder of the life of the proposal the proponent shall make publicly available, in a manner approved by the CEO, all validated environmental data (including sampling design, sampling methodologies, empirical data and derived information products (e.g. maps)), environment plans and reports relevant to the assessment of the strategic proposal and implementation of this proposal.

5-2 If any data referred to in condition 5-1 contains particulars of:

- (1) a secret formula or process; or
- (2) confidential commercially sensitive information;

the proponent may submit a request for approval from the CEO to not make these data publicly available. In making such a request the proponent shall provide the CEO with an explanation and reasons why the data should not be made publicly available.

## **6 Condition Environmental Management Plans**

6-1 The proponent shall prepare and submit Condition Environmental Management Plans:

- (1) prior to ground-disturbing activities, and within six (6) months from the date of issue of the Section 45A Notice or as otherwise agreed in writing by the CEO, to demonstrate that the environmental objectives specified in the conditions referred to in the Section 45A Notice for the proposal will be met.

6-2 The Condition Environmental Management Plan(s) shall:

- (1) specify environmental outcomes that achieve the environmental objectives, specified in the relevant conditions referred to in the Section 45A Notice for the proposal;
- (2) specify trigger criteria that will provide early warning for the implementation of trigger level actions if exceeded;
- (3) specify threshold criteria that provides a limit beyond which the environmental outcome is not achieved;
- (4) specify monitoring to determine if trigger criteria and threshold criteria are exceeded;
- (5) specify trigger level actions to be implemented in the event that trigger criteria have been exceeded;

- (6) specify threshold contingency actions to be implemented in the event that threshold criteria are exceeded;
- (7) provide the format and timing for the reporting of monitoring results against trigger criteria and threshold criteria to demonstrate that the relevant conditions referred to in the Section 45A Notice for the proposal have been met over the reporting period in the Compliance Assessment Report required by condition 4-6; and
- (8) provide for reporting of exceedances of the trigger and threshold criteria.

**Or where it is not possible to specify environmental outcomes for the proposal:**

- (9) specify the environmental objectives to be achieved, as specified in the relevant conditions referred to in the Section 45A Notice for the proposal;
- (10) specify risk-based management actions that will be implemented to demonstrate compliance with the environmental objectives specified in the relevant conditions referred to in the Section 45A Notice for the proposal;
- (11) specify measurable management target(s) to determine the effectiveness of the risk-based management actions;
- (12) specify monitoring to measure the effectiveness of management actions against management targets, including but not limited to, parameters to be measured, baseline data, monitoring locations, and frequency and timing of monitoring;
- (13) specify a process for revision of management actions and changes to proposal activities, in the event that the management targets are not achieved. The process shall include an investigation to determine the cause of the management target(s) not being achieved;
- (14) provide the format and timing to demonstrate that the relevant conditions referred to in the Section 45A Notice for the proposal have been met for the reporting period in the Compliance Assessment Report required by condition 4-6 including, but not limited to:
  - (a) verification of the implementation of management actions; and
  - (b) reporting on the effectiveness of management actions against management target(s).

6-3 The failure to implement one or more management actions, the exceedance of a threshold criteria (regardless of whether threshold contingency actions have been or are being implemented in accordance with condition 6-7(2)), and/or

comply with the requirements of a Condition Environmental Management Plan(s) represents non-compliance with these conditions.

6-4 After receiving notice in writing from the CEO that the Condition Environmental Management Plan(s) satisfies the requirements of relevant conditions referred to in the Section 45A Notice for the proposal, the proponent shall:

- (1) implement the provisions of the Condition Environmental Management Plan(s); and
- (2) continue to implement the Condition Environmental Management Plan(s) until the CEO has confirmed by notice in writing that the proponent has demonstrated the objectives specified in the relevant conditions referred to in the Section 45A Notice for the proposal have been met.

6-5 If monitoring, tests, surveys or investigations indicate non-achievement of management target(s) specified in a Condition Environmental Management Plan(s), the proponent shall:

- (1) report the non-achievement in writing to the CEO within twenty-one (21) days of the non-achievement being identified;
- (2) investigate to determine the cause of the management target(s) not being achieved;
- (3) provide a report to the CEO within ninety (90) days of the non-achievement being reported as required by condition 6-5(1). The report shall include:
  - (a) the cause(s) of the management targets not being achieved;
  - (b) the findings of the investigation required by condition 6-5(2);
  - (c) details of revised and/or additional management actions to be implemented to prevent non-achievement of the management target(s); and
  - (d) relevant changes to proposal activities.

6-6 If monitoring, tests, surveys or investigations indicate that one or more management actions specified in a Condition Environmental Management Plan(s) has not been implemented, the proponent shall:

- (1) report the failure to implement the management action(s) in writing to the CEO within seven (7) days of identification;
- (2) investigate to determine the cause of the management action(s) not being implemented;

- (3) investigate to determine the potential environmental harm or alteration of the environment that occurred due to the failure to implement the management action(s);
- (4) provide a report to the CEO within twenty-one (21) days of the reporting required by condition 6-6(1). The report shall include:
  - (a) the cause of the failure to implement the management actions;
  - (b) the findings of the investigations required by conditions 6-6(2) and 6-6(3);
  - (c) relevant changes to proposal activities; and
  - (d) measures to prevent, control or abate the environmental harm which may have occurred.

6-7 In the event that monitoring, tests, surveys or investigations indicates exceedance of trigger criteria and/or threshold criteria specified in a Condition Environmental Management Plan(s), the proponent shall:

- (1) report the exceedance in writing to the CEO within seven (7) days of the exceedance being identified;
- (2) immediately implement the trigger level actions and/or threshold contingency actions specified in the Condition Environmental Management Plan(s) and continue implementation of those actions until the trigger criteria and/or threshold criteria are being met and implementation of the trigger level actions and/or threshold contingency actions are no longer required;
- (3) investigate to determine the cause of the trigger criteria and/or threshold criteria being exceeded;
- (4) identify additional measures required to prevent the trigger criteria and/or threshold criteria being exceeded in the future;
- (5) investigate to determine potential environmental harm or alteration of the environment that occurred due to threshold criteria being exceeded; and
- (6) provide a report to the CEO within ninety (90) days of the exceedance being reported. The report shall include:
  - (a) details of any trigger level actions or threshold contingency actions implemented;
  - (b) the effectiveness of the trigger level actions or threshold contingency actions implemented, monitored and measured against trigger criteria and threshold criteria;

- (c) the findings of the investigations required by conditions 6-7(3) and 6-7(5);
- (d) additional measures to prevent the trigger or threshold criteria being exceeded in the future; and
- (e) measures to prevent, control or abate the environmental harm or alteration of the environment which may have occurred.

6-8 The proponent:

- (1) may review and revise the Condition Environmental Management Plan(s), or
- (2) shall review and revise the Condition Environmental Management Plan(s) as and when directed by the CEO.

6-9 The proponent shall implement the latest revision of the Condition Environmental Management Plan(s), which the CEO has confirmed by notice in writing, satisfies the requirements of condition 6-3.

## **7 Flora and Vegetation Environmental Management Plan**

7-1 The proponent shall manage the implementation of the proposal to meet the following environmental objective:

- (1) protect flora and vegetation so that biological diversity and ecological integrity are maintained, and in particular:
  - (a) maintain the local and regional populations of flora taxa declared as threatened flora under the relevant legislation.
  - (b) avoid and minimise direct and indirect impacts on flora taxa that is specially protected under the relevant legislation.
  - (c) avoid and minimise direct and indirect impacts on flora taxa listed as priority flora.
  - (d) avoid and minimise direct and indirect impacts on the occurrences of threatened and priority ecological communities, and their habitat.

7-2 The proponent shall prepare a Flora and Vegetation Management Plan required by condition 6-1 that satisfies the requirements of condition 6-2, to meet the objectives specified in condition 7-1, in consultation with the agency responsible for administration of the *Wildlife Conservation Act 1950* and the *Biodiversity Conservation Act 2016*.

- 7-3 The Flora and Vegetation Management Plan required by condition 6-1 shall include provisions required by condition 6-2 to address impacts on conservation significant flora and vegetation, where relevant, including from, but not limited to: changes to groundwater levels and groundwater quality; changes to surface water flows and quality; dust; fire regimes, and weeds.
- 7-4 The proponent shall continue to implement the version of the Flora and Vegetation Management Plan most recently approved by the CEO until the CEO has confirmed by notice in writing that the plan required by condition 6-1 satisfies the requirements of condition 6-2 to meet the objectives specified in condition 7-1.

## **8 Terrestrial Fauna Environmental Management Plan**

- 8-1 The proponent shall manage the implementation of the proposal to meet the following environmental objective:
- (1) protect terrestrial fauna so that biological diversity and ecological integrity are maintained, and in particular:
    - (a) maintain the local and regional populations of terrestrial fauna taxa that are listed as threatened or specially protected under the relevant legislation;
    - (b) avoid and minimise direct and indirect impacts on the habitat of terrestrial fauna that is specially protected under the relevant legislation;
    - (c) avoid and minimise direct and indirect impacts on terrestrial fauna listed as priority fauna, and its habitat; and
    - (d) avoid and minimise direct and indirect impacts on conservation significant short-range endemic fauna.
- 8-2 The proponent shall prepare a Terrestrial Fauna Management Plan required by condition 6-1 that satisfies the requirements of condition 6-2, to meet the objectives specified in condition 8-1, in consultation with the agency responsible for administration of the *Wildlife Conservation Act 1950* and the *Biodiversity Conservation Act 2016*.
- 8-3 The Terrestrial Fauna Management Plan required by condition 6-1 shall include provisions required by condition 6-2 to address impacts on conservation significant fauna, where relevant, including from, but not limited to: loss of habitat, changes to surface water regimes; risk of vehicle strikes; changes to fire regimes; emissions of dust, light and noise; and impacts from feral animals.
- 8-4 The proponent shall continue to implement the version of the Terrestrial Fauna Management Plan most recently approved by the CEO until the CEO has

confirmed by notice in writing that the plan required by condition 6-1 satisfies the requirements of condition 6-2 to meet the objectives specified in condition 8-1.

## **9 Subterranean Fauna Environmental Management Plan**

9-1 The proponent shall manage the implementation of the proposal to meet the following environmental objective:

- (1) protect subterranean fauna so that biological diversity and ecological integrity are maintained, and in particular:
  - (a) maintain the local population of subterranean fauna taxa which are known to have a restricted distribution;
  - (b) maintain the local and regional populations of subterranean fauna that is specially protected under the relevant legislation;
  - (c) avoid and minimise direct and indirect impacts on the habitat of subterranean fauna that is specially protected under the relevant legislation; and
  - (d) avoid and minimise direct and indirect impacts on the occurrences of threatened and priority ecological communities, and their habitat, which are recognised as having conservation significant subterranean fauna values, including, but not limited to:
    - (i) Ethel Gorge aquifer stygobiont community Threatened Ecological Community.

9-2 The proponent shall prepare a Subterranean Fauna Management Plan required by condition 6-1 that satisfies the requirements of condition 6-2, to meet the objectives specified in condition 9-1, in consultation with the agency responsible for administration of the *Wildlife Conservation Act 1950* and the *Biodiversity Conservation Act 2016*.

9-3 The Subterranean Fauna Management Plan required by condition 6-1 shall include provisions required by condition 6-2 to address impacts on conservation significant subterranean fauna, where relevant, including from, but not limited to: changes to groundwater levels and groundwater quality; ground disturbance.

9-4 The proponent shall continue to implement the version of the Subterranean Fauna Management Plan most recently approved by the CEO until the CEO has confirmed by notice in writing that the plan required by condition 6-1 satisfies the requirements of condition 6-2 to meet the objectives specified in condition 9-1.

## 10 Water Environmental Management Plan

- 10-1 The proponent shall manage the implementation of the proposal to meet the following environmental objective:
- (1) maintain the hydrological regimes and quality of groundwater and surface water so that environmental values are protected, including where relevant avoiding and minimising direct and indirect impacts of the proposal, on:
    - (a) Fortescue Marsh;
    - (b) hydrological regimes that support threatened and priority ecological communities;
    - (c) proclaimed Public Drinking Water Source Areas;
    - (d) permanent and ephemeral rock pools;
    - (e) wetlands which are Ramsar listed, or listed in the Directory of Important Wetlands in Australia;
    - (f) wild rivers;
    - (g) wetland types which may be poorly represented;
    - (h) natural springs;
    - (i) ecosystems which support conservation significant flora/vegetation and fauna species or communities, including migratory waterbirds, bats, groundwater dependent biota and subterranean fauna; and
    - (j) ecosystems which support significant amenity, recreation and cultural values.
- 10-2 The proponent shall prepare a Water Management Plan required by condition 6-1 that satisfies the requirements of condition 6-2, to meet the objectives specified in condition 10-1, in consultation with the agency responsible for administration of the *Wildlife Conservation Act 1950* and the *Biodiversity Conservation Act 2016*.
- 10-3 The Water Management Plan required by condition 6-1 shall include provisions required by condition 6-2 to address impacts on hydrological regimes and water quality, where relevant, including from, but not limited to: water abstraction; managed aquifer recharge; disposal of mine dewater to surface water systems; diversion of surface water systems; discharge of wastes to storage or evaporative basins and dewatering of aquifers and exposure of potentially acid forming material or the creation of acid and metalliferous drainage.

10-4 The proponent shall continue to implement the version of the Water Management Plan most recently approved by the CEO until the CEO has confirmed by notice in writing that the plan required by condition 6-1 satisfies the requirements of condition 6-2 to meet the objectives specified in condition 10-1.

## **11 Air Quality Environmental Management Plan**

11-1 The proponent shall manage the implementation of the proposal to meet the following environmental objective:

(1) maintain air quality and minimise emissions so that environmental values are protected, and in particular:

(a) meet recognised air quality standards and criteria, including:

(i) National Environment Protection (Ambient Air Quality) Measure for carbon monoxide, nitrogen dioxide, ozone, sulfur dioxide, lead, particles as PM<sub>10</sub> and PM<sub>2.5</sub>; or

(ii) other guidelines on a proposal specific basis as determined by the CEO.

11-2 The proponent shall prepare an Air Quality Management Plan required by condition 6-1 that satisfies the requirements of condition 6-2, to meet the objectives specified in condition 11-1.

11-3 The Air Quality Management Plan required by condition 6-1 shall include provisions required by condition 6-2 to address impacts on air quality, where relevant, including from, but not limited to: dust emissions due to clearing of vegetation; emissions from power plants; mining (including blasting), handling, stockpiling and transport of iron ore; and crushing and screening of materials.

11-4 The proponent shall continue to implement the version of the Air Quality Management Plan most recently approved by the CEO until the CEO has confirmed by notice in writing that the plan required by condition 6-1 satisfies the requirements of condition 6-2 to meet the objectives specified in condition 11-1.

## **12 Greenhouse Gas Management Plan**

12-1 The proponent shall manage the implementation of the proposal to meet the following environmental objective:

(1) avoid, where possible, and minimise greenhouse gas emissions as far as practicable.

- 12-2 The proponent shall prepare a Greenhouse Gas Management Plan required by condition 6-1 that satisfies the requirements of condition 6-2, to meet the objective required by condition 12-1.
- 12-3 The Greenhouse Gas Management Plan required by condition 6-1 shall include provisions required by condition 6-2 to address the following matters:
- (1) benchmarking and design of the proposal;
  - (2) monitoring and public reporting;
  - (3) continuous improvement and minimising net emissions; and
  - (4) offsets for greenhouse gas emissions.
- 12-4 The proponent shall continue to implement the version of the Greenhouse Gas Management Plan most recently approved by the CEO until the CEO has confirmed by notice in writing that the plan required by condition 6-1 satisfies the requirements of condition 6-2 to meet the objectives specified in condition 12-1.

### **13 Cultural Heritage Management Plan**

- 13-1 The proponent shall prepare and submit, within six (6) months from the date of issue of the Section 45A Notice or as otherwise agreed in writing by the CEO, a Cultural Heritage Management Plan to meet the following environmental objective:
- (1) manage the proposal to minimise the impacts on Aboriginal heritage and culture.
- 13-2 The Heritage Management Plan required by condition 13-1 shall address impacts on Aboriginal heritage and culture, where relevant, including from, but not limited to: disturbance of the ground that may impact cultural associations and heritage; potential loss of access to areas to undertake traditional activities; and changes to water regimes of water resources known to have Aboriginal heritage value.
- 13-3 After receiving notice in writing from the CEO that the Cultural Heritage Management Plan satisfies the requirements of condition 13-2, the proponent shall:
- (1) implement the provisions of the Cultural Heritage Management Plan; and
  - (2) continue to implement the Cultural Heritage Management Plan(s) until the CEO has confirmed by notice in writing that the proponent has demonstrated the objectives in condition 13-1 have been met.

13-4 The proponent:

- (1) may review and revise the Cultural Heritage Management Plan, or
- (2) shall review and revise the Cultural Heritage Management Plan as and when directed by the CEO.

13-5 The proponent shall implement the version of the Cultural Heritage Management Plan most recently approved by the CEO until the CEO has confirmed by notice in writing that the plan required by condition 13-1 satisfies the requirements of condition 13-2 to meet the objectives specified in condition 13-1.

#### **14 Conservation Reserve Impact Avoidance Plan**

14-1 The proponent shall prepare and submit, within six (6) months from the date of issue of the Section 45A Notice or as otherwise agreed in writing by the CEO, a Conservation Reserve Impact Avoidance Plan to meet the following environmental objectives:

- (1) avoid direct impacts on public reserve lands to which the *Conservation and Land Management Act 1984* (or any subsequent Act with similar objectives to that Act) applies and their associated public values and uses.
- (2) avoid, where possible, and minimise indirect impacts as far as practicable on public reserve lands to which the *Conservation and Land Management Act 1984* (or any subsequent Act with similar objectives to that Act) applies and their associated public values and uses to the requirements of the CEO on the advice of the Director General responsible for the *Conservation and Land Management Act 1984*.

14-2 The Conservation Reserve Impact Avoidance Plan required by condition 14-1 shall address impacts on flora, fauna, heritage and where applicable to the type of reserve, public use and amenity, including from, but not limited to: changes to groundwater levels and groundwater quality; surface water regimes and quality; dust emissions; altered fire regimes; and weed introduction and spread.

14-3 After receiving notice in writing from the CEO that the Conservation Reserve Impact Avoidance Plan satisfies the requirements of condition 14-2, the proponent shall:

- (1) implement the provisions of the Conservation Reserve Impact Avoidance Plan; and
- (2) continue to implement the Conservation Reserve Impact Avoidance Plan until the CEO has confirmed by notice in writing that the proponent has demonstrated the objectives in condition 14-1 have been met.

14-4 The proponent:

- (1) may review and revise the Conservation Reserve Impact Avoidance Plan, or
- (2) shall review and revise the Conservation Reserve Impact Avoidance Plan as and when directed by the CEO.

14-5 The proponent shall implement the version of the Conservation Reserve Impact Avoidance Plan most recently approved by the CEO until the CEO has confirmed by notice in writing that the plan required by condition 14-1 satisfies the requirements of condition 14-2 to meet the objectives specified in condition 14-1.

## **15 Rehabilitation and decommissioning**

15-1 The proponent shall manage the implementation of the proposal to meet the following environmental objective:

- (1) ensure that the proposal is decommissioned and the site of the proposal rehabilitated to be safe, stable and non-polluting and in an ecologically appropriate and sustainable manner.

15-2 Within six (6) months from the date of issue of the Section 45A Notice or as otherwise agreed in writing by the CEO, the proponent shall prepare and submit a Mine Closure Plan in accordance with the Guidelines for Preparing Mine Closure Plans, May 2015 (or any subsequent revisions of the guidelines), on advice of the Department of Mines, Industry Regulation and Safety and, where the proposal impacts on land managed pursuant to the *Conservation and Land Management Act 1984*, the Department of Biodiversity, Conservation and Attractions.

15-3 The plan required by condition 15-2 shall include provisions to address the following:

- (1) specify the environmental objectives to be achieved, as specified in condition 15-1;
- (2) specify the management actions that will be implemented to demonstrate compliance with the environmental objectives specified in condition 15-1. Failure to implement one or more of these management actions represents non-compliance with these conditions;
- (3) the provisions required by conditions 6-2(11) to 6-2(13); and
- (4) demonstrate the validity of assumptions used in the Mine Closure Plan and consideration of the effects of breakdown of those assumptions.

- 15-4 If monitoring, tests, surveys or investigations indicate non-achievement of management target(s) specified in the Mine Closure Plan, the proponent shall:
- (1) report the non-achievement in writing to the CEO within twenty-one (21) days of the non-achievement being identified;
  - (2) investigate to determine the cause of the management targets not being achieved;
  - (3) provide a report to the CEO within ninety (90) days of the non-achievement being reported as required by condition 15-4(1). The report shall include:
    - (a) cause of management targets not being achieved;
    - (b) the findings of the investigation required by condition 15-4(2);
    - (c) details of revised and/or additional management actions to be implemented to prevent non-achievement of the management target(s); and
    - (d) relevant changes to proposal activities.
- 15-5 In the event that monitoring, tests, surveys or investigations indicate that one or more management actions specified in the Mine Closure Plan have not been implemented, the proponent shall:
- (1) report the failure to implement management action/s in writing to the CEO within seven (7) days of identification;
  - (2) investigate to determine the cause of the management action(s) not being implemented;
  - (3) investigate to provide information for the CEO to determine potential environmental harm or alteration of the environment that occurred due to the failure to implement management actions;
  - (4) provide a report to the CEO within twenty-one (21) days of the reporting required by condition 15-5(1). The report shall include:
    - (a) cause for failure to implement management actions;
    - (b) the findings of the investigation required by conditions 15-5(2) and 15-5(3);
    - (c) relevant changes to proposal activities; and
    - (d) measures to prevent, control or abate the environmental harm which may have occurred.

- 15-6 The proponent shall review and revise the Mine Closure Plan required by condition 15 at intervals not exceeding three (3) years, or as otherwise specified by the CEO, and submit the plan to the CEO at the agreed interval.
- 15-7 The proponent shall continue to implement the version of the Mine Closure Plan, which the CEO has confirmed by notice in writing, satisfies the requirements of condition 15-2, to meet the objectives of condition 15-1.

## **16 Offsets**

- 16-1 In view of the significant residual impacts as a result of the implementation of the proposal identified in condition 16-2, the proponent shall contribute funds to the Pilbara Environmental Offsets Fund.
- 16-2 The significant residual impacts are:
- (1) clearing of 'Good' to 'Excellent' condition native vegetation, including habitat for threatened fauna species, within the Hamersley and/or Chichester IBRA subregion.
  - (2) clearing of native vegetation referred to in condition 16-2(1) which has other important or specialised environmental values within the Hamersley and/or Chichester IBRA subregion.
  - (3) clearing of 'Good' to 'Excellent' condition native vegetation, including habitat for threatened fauna species, within the Fortescue IBRA subregion.
  - (4) clearing of native vegetation referred to in condition 16-2(3) which has other important or specialised environmental values within the Fortescue IBRA subregion.
- 16-3 The proponent shall contribute funds to the Pilbara Environmental Offsets Fund calculated pursuant to conditions 16-4 and 16-5, subject to any reduction approved by the CEO under condition 16-11.
- 16-4 The proponent's contribution to the Pilbara Environmental Offsets Fund shall be paid biennially, with the amount to be contributed calculated based on the clearing undertaken in each year of the biennial reporting period in accordance with the following calculation:

$$C = R \times H$$

Where:

C = the contribution to the fund for clearing done in the relevant year

R = contribution rate for the year in which the clearing is undertaken as published for the Pilbara Environmental Offsets Fund by the CEO for each significant residual impact identified in condition 16-2.

H = number of hectares of land cleared in the relevant year for each significant residual impact referred to in condition 16-2.

- 16-5 The first biennial reporting period shall commence at the beginning of the financial year that ground-disturbing activities causing one or more of the significant residual impacts identified in condition 16-2 are undertaken.
- 16-6 Prior to ground-disturbing activities, the proponent shall prepare and submit an Impact Reconciliation Procedure to the CEO.
- 16-7 The Impact Reconciliation Procedure required pursuant to condition 16-6 shall:
- (1) state that clearing calculations for each biennial reporting period will commence on 1 July of the required reporting period, unless otherwise agreed by the CEO;
  - (2) include a methodology to calculate the amount of clearing undertaken during each year of the biennial reporting period for each of the significant residual impacts identified in condition 16-2; and
  - (3) indicate the timing and content of the Impact Reconciliation Reports.
- 16-8 The proponent shall not commence ground-disturbing activities, unless otherwise agreed by the CEO, until the CEO has confirmed in writing that the Impact Reconciliation Procedure satisfies the requirements of condition 16-7.
- 16-9 The proponent shall submit Impact Reconciliation Reports in accordance with the Impact Reconciliation Procedure approved in condition 16-8.
- 16-10 The Impact Reconciliation Reports required pursuant to condition 16-9 shall provide the location and spatial extent of the clearing undertaken within each biennial reporting period.
- 16-11 The proponent may seek the written approval of the CEO to reduce all or part of the contribution payable under condition 16-4 where:
- (1) a payment has been made to satisfy a condition of an approval under the *Environment Protection and Biodiversity Conservation Act 1999* in relation to the proposal;
  - (2) the payment counterbalances impacts of the proposal on matters of national environmental significance; and
  - (3) the payment counterbalances the significant residual impacts to the environmental values identified in condition 16-2.

[signed on 11 July 2019]

## Guidelines for submitting a derived proposal

When submitting a request to the EPA to declare a referred proposal to be a derived proposal, the proponent must comply with the following:

1. a request to declare a referred proposal to be a derived proposal must include:
  - (a) targeted surveys identifying conservation significant flora and vegetation, terrestrial fauna and subterranean fauna species;
  - (b) a demonstration of how the results of the targeted survey have been used to apply the mitigation hierarchy to the proposal;
  - (c) a report that details the following information:
    - (i) the types of ecosystems and total area of rehabilitation that the proponent will be required to rehabilitate across their iron ore tenure including the derived proposal.
    - (ii) an analysis of the history of rehabilitation that the proponent has undertaken in the Pilbara and the demonstrated success of this rehabilitation.
    - (iii) the likely success of future rehabilitation activities in establishing self-sustaining areas of rehabilitation, taking into account:
      - relevant contemporary scientific evidence;
      - the types of area to be rehabilitated; and
      - the scale of rehabilitation activities.
  - (d) draft management plans that specifically demonstrate how the objectives in the conditions of this Ministerial Statement will be met by the implementation of the management plans for the proposal; and
  - (e) details of the consultation that has been undertaken with relevant stakeholders in regards to the proposal and the outcomes of this consultation.

**Supplementary note:** The wildlife protection provisions of the *Biodiversity Conservation Act 2016* (BC Act) came into effect on 1 January 2019. In relation to implementation conditions 7 to 9, please note that the implementation of derived proposals under these conditions will not affect the capacity of the Minister for Environment or delegate to grant or refuse an authorisation to take or disturb threatened flora and/or fauna, or to modify a threatened ecological community that is protected under Part 3 of the BC Act.

Table 1: Summary of the Strategic Proposal

<b>Proposal title</b>	Pilbara Expansion Strategic Proposal
<b>Short description</b>	This Strategic Proposal identifies future iron ore mining and associated activities and operations within the project boundary delineated in Figure 1.

Table 2: Location and authorised extent of physical and operational elements

<b>Column 1 Developments</b>	<b>Column 2 Location</b>	<b>Column 3 Description of limits/extent</b>
<p>Iron ore mines and associated activities and operations, being new mining operations at:</p> <ul style="list-style-type: none"> <li>• Caramulla</li> <li>• Coondiner</li> <li>• Gurinbidy</li> <li>• Jinidi</li> <li>• Marillana</li> <li>• Mindy</li> <li>• Ministers North</li> <li>• Mudlark</li> <li>• Munjina/Upper Marillana</li> <li>• Ophthalmia/Prairie Down</li> <li>• Rocklea</li> <li>• Roy Hill</li> <li>• Tandanya</li> </ul> <p>and future expansions to new mining operations listed above and existing mining operations at:</p> <ul style="list-style-type: none"> <li>• Jiblebar</li> <li>• Mining Area C</li> <li>• Newman</li> <li>• Yandi.</li> </ul>	<p>Within mining tenements and any other interest in land, including amendments to these tenements and interests, or the future acquisition of related tenements or interests, held by BHP or its Associates within the Project Boundary and as identified in Figures 1 and 2.</p> <p>Associated Activities and Operations may be located on tenements and any other interests in land currently held by BHP or its Associates or, which will be acquired in the future, and located within the Project Boundary as identified in Figures 1 and 2.</p>	<ol style="list-style-type: none"> <li>1. Clearing (as defined in s51A of the <i>Environmental Protection Act 1986</i>), caused by or likely to be caused by all future proposals identified in Column 1 of Table 2, shall not exceed 98,500 hectares</li> <li>2. Planned, designed and managed (demonstrated in the referral of future proposal and draft management plans submitted at the time of referral of future proposals) to ensure: <ol style="list-style-type: none"> <li>a. Cumulative impacts to key environmental factors are minimised through use, where practicable, of existing mine infrastructure, rail, road and associated developments and do not exceed cumulative impact limit of 98,500 ha specified above</li> <li>b. The environmental objectives specified in the relevant conditions will be met</li> <li>c. Scientifically verifiable estimates of the likely success of future rehabilitation have been made.</li> </ol> </li> </ol>

**Table 3: Abbreviations and definitions**

Acronym or Abbreviation	Definition or Term
Associates	Means joint venture partners, subsidiaries, related bodies corporate, contractors or agents.
Associated activity and operations	<p>Means:</p> <p>(a) any of the following activities associated with the Developments:</p> <ul style="list-style-type: none"> <li>(i) Geotechnical investigations and associated activities</li> <li>(ii) Mine pit excavation</li> <li>(iii) Dewatering</li> <li>(iv) Blasting, drilling, and extraction</li> <li>(v) Ore transportation infrastructure, including conveyors</li> <li>(vi) Ore processing infrastructure including crushers</li> <li>(vii) Beneficiation and associated activities</li> <li>(viii) Over burden storage areas, ore stockpiles and topsoil stockpiles and associated stacking, reclaiming and loading activities</li> <li>(ix) Laydown areas, vehicle maintenance areas, assembly areas, water bores, turkey nests and culverts</li> <li>(x) Tailings storage facilities, fuel and hydrocarbon storage, explosives storage and storage of environmentally hazardous goods and materials</li> <li>(xi) Accommodation camps</li> <li>(xii) Airstrips and airports</li> <li>(xiii) Administration and workshop buildings</li> <li>(xiv) Rehabilitation and decommissioning activities</li> <li>(xv) Ancillary infrastructure and associated activities, including concrete batching plants</li> <li>(xvi) Ground-disturbance and earthworks (vegetation, habitat and landform removal)</li> <li>(xvii) Emissions to the environment</li> <li>(xviii) Abstractions from the environment</li> <li>(xix) Water supply, water abstraction, water use, water storage, water treatment, drainage and stormwater management and water discharge and water reinjection</li> <li>(xx) Power distribution infrastructure including substations, switchyards and above or below ground cables</li> <li>(xxi) Diesel power generators</li> <li>(xxii) Waste management</li> </ul> <p>(b) any rail associated with the Development and including:</p> <ul style="list-style-type: none"> <li>(i) Rail spurs</li> <li>(ii) Rail loops</li> <li>(iii) Expanded rail capacity of the Newman-Port Hedland rail line</li> </ul>

Acronym or Abbreviation	Definition or Term
	<ul style="list-style-type: none"> <li>(iv) Accommodation camps for rail development</li> <li>(v) Borrow pits</li> <li>(vi) Rail welding yards</li> <li>(vii) Workshops and repair yards</li> <li>(viii) Support infrastructure including pipelines, powerlines, fibre optic cables and other service infrastructure</li> <li>(ix) Laydown areas</li> <li>(x) Roads and access tracks</li> </ul>
CEO	The Chief Executive Officer of the Department of the Public Service of the State responsible for the administration of section 48 of the <i>Environmental Protection Act 1986</i> , or his delegate.
EPA	Environmental Protection Authority
EP Act	<i>Environmental Protection Act 1986</i>
Ecological Integrity	The composition, structure, function and processes of ecosystems, and the natural range of variation of these elements.
'Good' to 'Excellent' condition native vegetation	Means the condition of native vegetation rated in accordance with the EPA's <i>Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment</i> (December, 2016), including any revision to this technical guidance.
ha	Hectare
IBRA	Interim Biogeographic Regionalisation for Australia
Other important or specialised environmental values	Refers to areas identified as specialised fauna habitat, important vegetation types, and management and/or conservation areas, such as but not limited to, riparian vegetation, threatened or priority ecological communities, or Fortescue Marsh management zones
Pilbara Environmental Offsets Fund	A special purpose account created pursuant to section 16(1)(d) of the <i>Financial Management Act 2006</i> by the Department of Water and Environmental Regulation.
Relevant legislation	Means the <i>Wildlife Conservation Act 1950</i> and/or the <i>Biodiversity Conservation Act 2016</i> or any other Western Australian legislation that has similar objects to the above Acts.
wild rivers	Rivers listed in DWER's Water Notes no. 37 <i>Wild rivers in Western Australia</i> (January 2009).

<b>Acronym or Abbreviation</b>	<b>Definition or Term</b>
<b>Management-based provisions</b>	
Management actions	Risk-based actions to be implemented to meet the environmental objective.
Management targets	Targets to determine the effectiveness of the management actions.
Monitoring	Monitoring to measure the effectiveness of management actions.
Reporting	Reporting of implementation of management actions and reporting on the effectiveness of management actions to demonstrate that the objective/s have been met.
<b>Outcome-based provisions</b>	
Outcome	Proposal-specific, desired state for an environmental factor/s to be achieved from the implementation of outcome-based provisions.
Trigger criteria	Criteria that provide an early warning that the threshold criteria may not be met.
Threshold criteria	Limit of acceptable impact beyond which there is likely to be a significant effect on the environment, which indicates the environmental outcome is not being met.
Monitoring	Monitoring to determine if trigger criteria and threshold criteria are exceeded.
Trigger level actions	Actions to be implemented in the event that trigger criteria are exceeded.
Threshold contingency actions	Actions to be implemented in the event that threshold criteria are exceeded.
Reporting	Reporting of monitoring results against trigger criteria and threshold criteria to demonstrate that the outcome/s have been met.

### **Figures (attached)**

Figure 1 Strategic Proposal project boundary and BHP Billiton Iron Ore tenements

Figure 2 Future proposals Identified in the Strategic Proposal

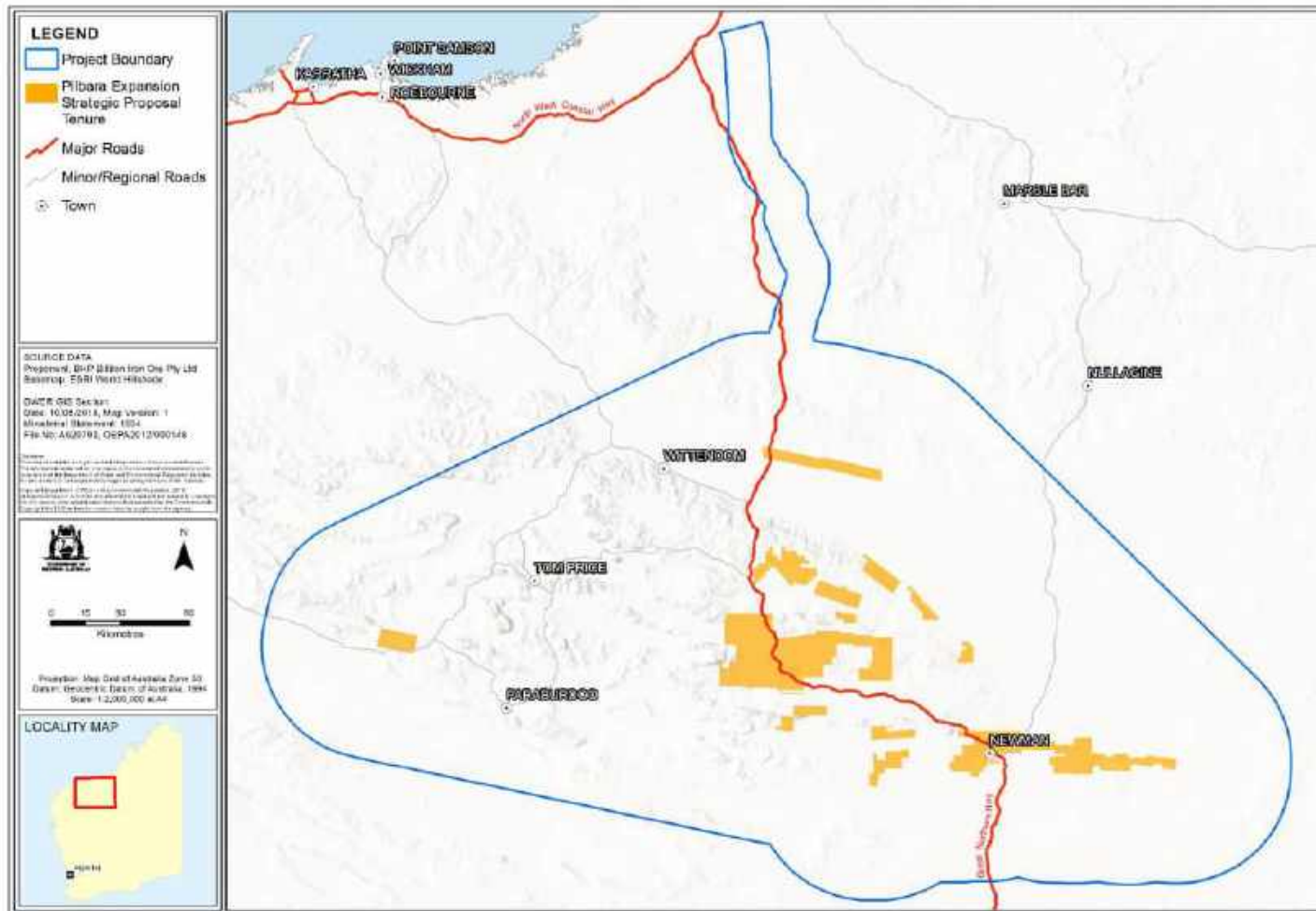


Figure 1: Strategic Proposal project boundary and BHP Billiton Iron Ore tenements

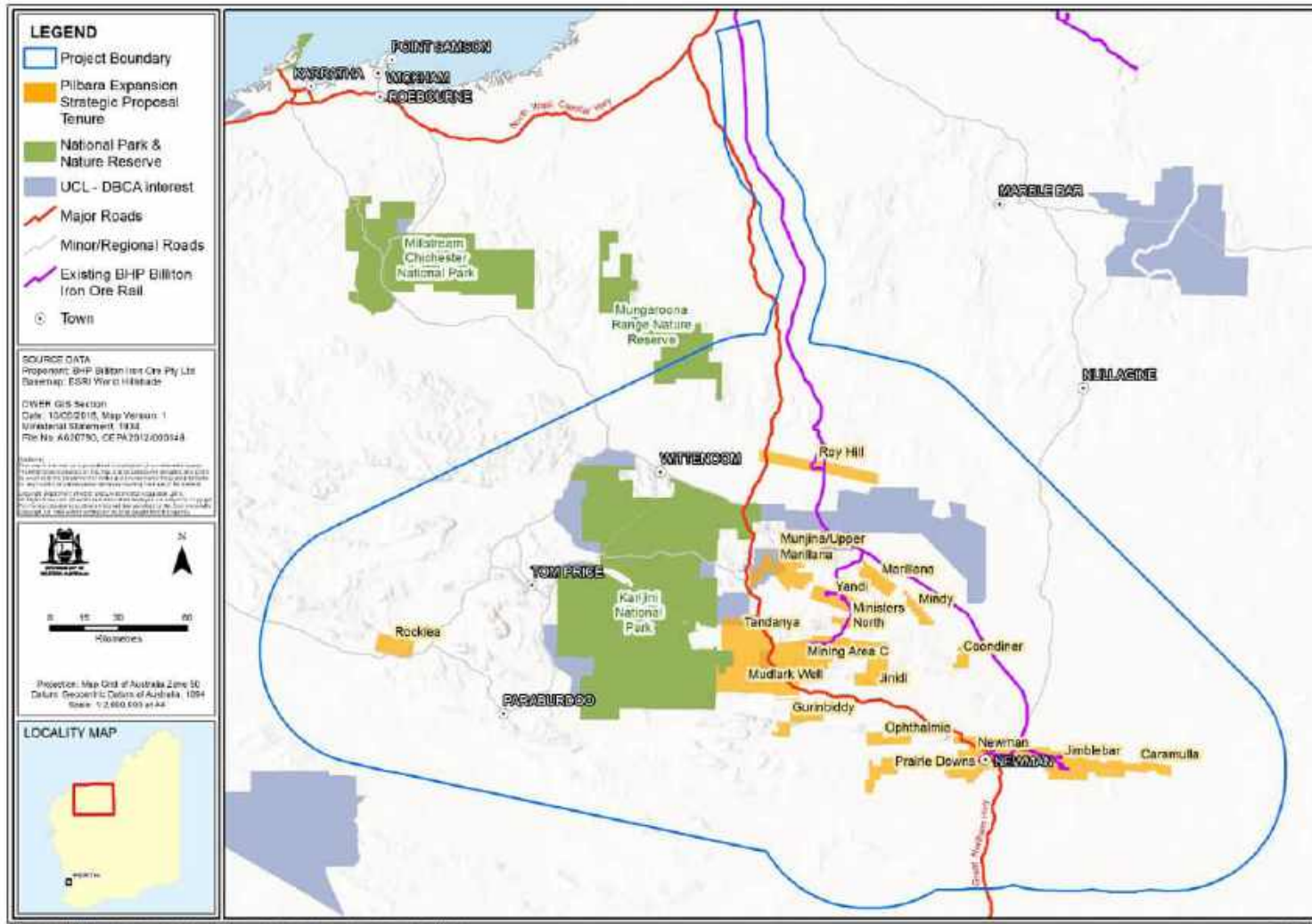


Figure 2 Future Proposals identified in the Strategic Proposal

## **Schedule 2**

Coordinates defining the Project Boundary and Future Proposals identified in the Strategic Proposal are held by the Department of Water and Environmental Regulation, 2018-1528354351392.

Ministers North Works Approval

**Attachment 5B: Yandi Hub Environmental Licence L6168/1991/11**

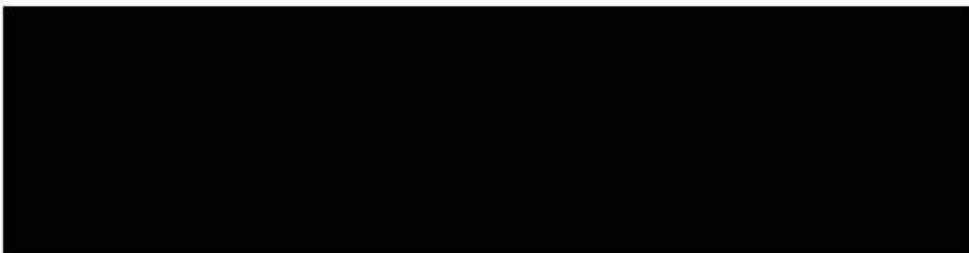


<b>Licence number</b>	L6168/1991/11
<b>Licence holder</b>	BHP Iron Ore Pty Ltd
<b>ACN</b>	008 700 981
<b>Registered business address</b>	125 St Georges Terrace PERTH WA 6000
<b>DWER file number</b>	DER2013/001190-1
<b>Duration</b>	17/11/2025 to 16/11/2035
<b>Date of issue</b>	12/11/2015
<b>Date of amendment</b>	23/10/2024
<b>Premises details</b>	Yandi (Marillana Creek) Iron Ore Mine Mining Tenements M270SA, G47/12, G47/13, G47/14, G47/15, G47/16, G47/17, G47/18, G47/19, NEWMAN WA 6753

As defined by the coordinates in Schedule 2

<b>Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)</b>	<b>Assessed production / design capacity</b>
Category 5 – Processing or beneficiation of metallic or non-metallic ore	87,000,000 tonnes per annual period
Category 6 – Mine dewatering	15,000,000 tonnes per annual period
Category 12 – Screening, etc. of material	200,000 tonnes per annual period
Category 52 – Electric power generation	45 megawatts
Category 54 – Sewage facility	773 cubic metres per day
Category 62 – Solid waste depot	15,000 tonnes per annual period
Category 64 – Class II putrescible landfill site	31,800 tonnes per annual period
Category 73 – Bulk storage of chemicals etc.	4000 cubic metres in aggregate

This licence is granted to the licence holder, subject to the attached conditions, on 23 October 2024, by:



## Licence history

Date	Reference number	Summary of changes
15/11/2000	L6168/1991/3	Licence renewal
13/11/2001	L6168/1991/4	Licence renewal
15/11/2002	L6168/1991/5	Licence renewal
17/11/2003	L6168/1991/6	Licence renewal
15/11/2004	L6168/1991/7	Licence renewal
15/11/2005	L6168/1991/8	Licence renewal
12/11/2009	L6168/1991/9	Licence renewal
15/11/2012	L6168/1991/10	Licence renewal
12/11/2015	L6168/1991/11	Licence renewal
22/09/2016	L6168/1991/11	Licence amendment to update premises address, include inert waste disposal location and other minor amendments, including removal of conditions that are not valid, enforceable and/or risk based
05/12/2018	L6168/1991/11	Amendment notice 1 issued to include category 12 and 52, construct a new inert landfill, increase the category 64 disposal limit, increase the category 73 storage volume and update the premises map.
17/06/2022	L6168/1991/11	Licence amendment to consolidate amendment notice 1, remove tenements, remove discharge point MCDMDEW031, amend waste management conditions and modify landfarm conditions.
27/06/2023	L6168/1991/11	Licence amendment for the following landfill updates only: <ul style="list-style-type: none"> <li>• Allowing for the construction and operation of a Category 62 solid waste depot facility (consisting of two areas approximately 200m apart) with a capacity of 15,000 tonnes per annual period;</li> <li>• Allowing for the construction and operation of three new inert landfill facilities at Yandi Camp, increasing the Category 64 disposal limit by 10,000 tonnes per annum up to 31,800 tonnes per annual period; and</li> <li>• Adding the locations of the above new facilities to the map in Schedule 1 of the Licence.</li> </ul>
23/10/2024	L6168/1991/11	Licence amendment for the inclusion of an additional discharge point to enable the temporary provision of surplus groundwater for a short-term hydrogeological trial.

## Interpretation

In this licence:

- (a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline, or code of practice in this licence:
  - (i) if dated, refers to that particular version; and
  - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

**NOTE:** This licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

## Licence conditions

The licence holder must ensure that the following conditions are complied with:

### General Conditions

- The Licence Holder must ensure the limits specified in Table 1 are not exceeded.

**Table 1: Production or design capacity limits**

Category	Category Description	Premises production or design capacity limit
5	Crushing and screening facilities	87,000,000 tonnes per annual period.
6	Dewatering infrastructure	15,000,000 tonnes per annual period.
12	Crushing and screening facilities	200,000 tonnes per annual period.
52	Power station	45 megawatts
73	Fuel storage and handling areas	4000 cubic metres in aggregate.

### Infrastructure and equipment

#### Premises operation

- The Licence Holder shall only accept waste on to the landfill and WWTPs if:
  - it is of a type listed in Table 2;
  - the quantity accepted is below any quantity limit listed in Table 2; and
  - it meets any specification listed in Table 2.

**Table 2: Waste acceptance**

Waste type	Quantity limit	Specification <sup>1</sup>
Inert Waste Type 1	Combined total of up to 31,800 tonnes per annual period for Category 64 activities	None specified Includes inert concrete and pipework
Inert Waste Type 2		Tyres, conveyor belts and plastic only
Putrescible Waste	Combined total of up to 15,000 tonnes per annual period for Category 62 activities	None specified
Sewage	1,028 m <sup>3</sup> /day <sup>2</sup>	Accepted through sewer inflow(s) only

Note 1: Additional requirements for the acceptance of controlled waste (including asbestos and tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

Note 2: Quantity limit measured as volume of treated wastewater discharged to designated irrigation areas.

- The Licence Holder shall ensure that where waste does not meet the waste acceptance criteria set out in condition 2 it is removed from the Premises by the delivery vehicle or, where that is not possible, stored in a quarantined storage area or container and removed to an appropriately authorised facility as soon as practicable.

4. The Licence Holder shall ensure that wastes accepted onto the landfill and WWTP are only subjected to the process(es) set out in Table 3 and in accordance with any process limits described in that Table.

**Table 3: Waste processing**

Waste type	Process(es)	Process limits <sup>1, 2</sup>
Inert Waste Type 1	Receipt, handling and disposal of waste by landfilling	<p><u>All waste types</u></p> <ul style="list-style-type: none"> <li>disposal of waste by landfilling shall only take place within the landfill area shown on the Map in Schedule 1: Maps, Premises map;</li> <li>waste is disposed of in a defined trench or within an area enclosed by earthen bunds;</li> <li>no waste shall be temporarily stored or landfilled within 35 metres from the boundary of the premises;</li> <li>the tipping area is restricted to a maximum linear length of 30 metres and is no greater than 2 metres in height;</li> <li>the separation distance between the base of the landfill and the highest groundwater level shall not be less than 2m;</li> <li>Windrows will be maintained along the landfill boundaries to direct stormwater away from the trenches; and</li> <li>Perimeter fencing maintained around active landfill trenches.</li> </ul> <p><u>Used Tyres and Conveyor belts</u></p> <p>Shall only be buried in the areas located within the prescribed premises boundary shown in Schedule 1: Maps, Premises map.</p> <p><u>Inert waste type 1</u></p> <p>Concrete and pipework only are also authorised for disposal within pit voids and overburden storage areas.</p> <p>Following up to 10,000 m<sup>3</sup> of inert concrete material, from the decommissioning of the Yandi Camp, placed into up to three Inert Landfills, excavated soil shall be used to cap the facility to a depth of 0.5m when deposition of the waste concrete is complete.</p>
Inert Waste Type 2		
Putrescible Waste		
Sewage	Biological, physical and chemical treatment	None specified
Sewage sludge	Drying and storage	None specified
Hydrocarbon contaminated waste	Bioremediation	Contaminated soil is only to be remediated within the Landfarm facilities shown on the Map in Schedule 1, Maps: Premises map.

Note 1: Requirements for landfilling tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.

Note 2: Additional requirements for the acceptance and landfilling of controlled waste (including asbestos and tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

- The Licence Holder shall ensure that cover is applied and maintained on landfilled wastes in accordance with Table 4 and that sufficient stockpiles of cover are maintained on site at all times.

**Table 4: Cover requirements<sup>1</sup>**

Waste Type	Material	Depth	Timescales
Inert Waste Type 1	No cover required		
Inert Waste Type 2	Type 1 Inert waste or soil	100 mm	As soon as practicable after deposit Plastic waste with the potential to become windblown shall be covered as soon as practicable after deposit
Putrescible Waste		300 mm	As soon as practicable after deposit and not later than weekly

Note 1: Additional requirements for the covering of tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.

- The Licence Holder shall ensure that wind-blown waste is contained within the boundary of the Premises and that wind-blown waste is returned to the tipping area on at least a monthly basis.
- The Licence Holder shall ensure that the waste material specified in Table 5 is only stored and/or treated within the vessels or compounds provided with the infrastructure detailed in Table 5.

**Table 5: Containment infrastructure**

Vessel or compound	Material	Infrastructure requirements
Spinifex Camp WWTP anaerobic, facultative and maturation ponds	Effluent from the Spinifex Camp	<ul style="list-style-type: none"> <li>HDPE lined to achieve a permeability of <math>1 \times 10^{-9}</math> m/s or less</li> <li>Maintain vertical freeboard of 400 mm</li> </ul>
OHP3 Oily Wastewater Ponds	Treated oily water from the OHP3 oily water separator	<ul style="list-style-type: none"> <li>HDPE lined to achieve a permeability of <math>1 \times 10^{-9}</math> m/s or less</li> <li>Maintain vertical freeboard of 400 mm</li> </ul>
OHP3 Sewage Treatment Facility Evaporation Ponds	Treated wastewater from the OHP3 Wastewater Treatment facility	<ul style="list-style-type: none"> <li>HDPE lined to achieve a permeability of <math>1 \times 10^{-9}</math> m/s or less</li> <li>Maintain vertical freeboard of 400 mm</li> </ul>
Central and Eastern Landfarms	Hydrocarbon contaminated soils	<ul style="list-style-type: none"> <li>Any potentially contaminated runoff from the treatment cells is contained</li> </ul>

8. The Licence Holder must construct and/or install the infrastructure listed in Table 6, in accordance with:
- (a) the corresponding design and construction requirement / installation requirement; and
  - (b) at the corresponding infrastructure location; and
  - (c) within the corresponding timeframe,
- As set out in Table 6.

**Table 6: Design and construction/installation requirements**

Infrastructure/ Equipment	Requirements (design and construction)	Site plan reference
Thirty-two (32) 1.6 MW Cat 3516B Diesel Generator Sets or similar	<ul style="list-style-type: none"> <li>• Design and construction specifications of temporary power station pad in accordance with the power generation facilities – Yandi, Temporary Power Station Pad – General Arrangement, Drawing No 644.</li> <li>• Generators equipped with belly tanks and internally bunded.</li> <li>• Bunded areas for oil storage.</li> </ul>	Schedule 1, Maps: Premises map and Temporary Power Station map general arrangement design drawing and typical layout
Power station bulk fuel storage facility	<ul style="list-style-type: none"> <li>• Four (4) 110,000 kL double skinned storage tanks.</li> <li>• Fuel unloading spill traps</li> <li>• Double skinned pipework, installed along a culvert system draining to underground level alarmed catchment tanks</li> <li>• Fuel unloading spill traps</li> </ul>	Schedule 1, Maps: Premises map
Putrescible landfills	<p>Three new putrescible landfills:</p> <ul style="list-style-type: none"> <li>• Each landfill will be constructed with a series of trenches (exact number will depend on available space at each location) with the following maximum dimensions: length of 200m, width 25m, depth 2.5m deep and volume 12,500 m<sup>3</sup>;</li> <li>• Windrows will be maintained along the landfill boundaries to direct stormwater away from the trenches;</li> <li>• Perimeter fencing maintained around active landfill trenches; and</li> <li>• To extend landfill life additional cells may be installed on top of the original cells once they have</li> </ul>	Schedule 1, Maps: Premises map

Infrastructure/ Equipment	Requirements (design and construction)	Site plan reference
	reached capacity.	
Bioremediation landfarms	<p>Landfarm facilities will be constructed with the following requirements:</p> <ul style="list-style-type: none"> <li>• Synthetic Lined to achieve a permeability of <math>1 \times 10^{-9}</math> m/s;</li> <li>• Stormwater run-off diverted so as not to flow onto the treatment facility;</li> <li>• designed so that any potentially contaminated runoff from the treatment cells is contained;</li> <li>• Within the prescribed premises</li> <li>• Not to be constructed within 50m of surface water courses;</li> <li>• Adequately fenced or positioned to prevent public access; and</li> <li>• Appropriate signage warning of contamination placed.</li> </ul>	Schedule 1, Maps: Premises map
Solid waste depot	<ul style="list-style-type: none"> <li>• Located within the cleared footprint of OHP1 in a previously cleared, levelled and bunded area to minimise surface water entry to the OHP1 operational areas;</li> <li>• Existing bund / windrow which will minimise water entering and exiting the facility;</li> <li>• Two areas approximately 200 m apart; and</li> <li>• Maximum capacity of 15,000 tonnes per annual period.</li> </ul>	Schedule 1, Maps: Premises map
Inert landfills	<ul style="list-style-type: none"> <li>• Up to three new inert landfills;</li> <li>• Approximately 1.5 ha in area;</li> <li>• Maximum capacity of 10,000 tonnes per annual period;</li> <li>• Excavation to a depth of 3 m;</li> <li>• Windrow to be established along the landfill boundaries to direct stormwater away from the excavation; and</li> <li>• Landfill to be covered with 0.5 m of excavated soil following completion of deposition of waste.</li> </ul>	Schedule 1, Maps: Premises map

9. The Licence Holder shall submit a compliance document to the CEO, following the construction and/or installation of an item of infrastructure or equipment required by Condition 8, Table 6. The compliance document/s shall:
  - (a) be certified by a suitably qualified engineer and certify that the works were constructed in accordance with the construction requirements specified in Condition 8, Table 6;
  - (b) include as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 8, Table 6; and
  - (c) be signed by a person authorised to represent the Licence Holder and contain the printed name and position of that person within the company.
10. The Licence Holder shall operate the infrastructure specified in Condition 8, Table 6 in accordance with the conditions of this Licence, following submission of the compliance documents required under condition 0.
11. The Licence Holder must:
  - (a) notify the department one week prior to the power station commencing operation; and
  - (b) must operate the power station for a period of twelve (12) months only unless authorised by the CEO.

## Emissions and discharges

### Point source emissions to surface water and groundwater

12. The Licence Holder shall ensure that where waste is emitted to surface water from the emission points in Table 7 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this Licence.

**Table 7: Emission points to surface water**

Emission point reference and location	Description	Source including abatement
MCDMDEW040 (As depicted in the Premises Map under Schedule 1, Figure 1)	Discharge of excess mine dewatering water to Marillana Creek	Water abstracted to facilitate mining below the water table
MCDMDEW041 (As depicted in the Premises Map under Schedule 1, Figure 1)	Contingency discharge point to Marillana Creek	Discharge of water during wet weather events
Yandi Transfer Tanks to reinjection bore HMN0045P (As depicted under Schedule 1, Figure 6)	Temporary discharge point to Ministers North Aquifer as part of the hydrogeological trial (for a period up to 6 months)	Discharge of water to support groundwater supplementation at Ministers North Aquifer

13. The Licence Holder shall implement the Jugari Short Term Trial Groundwater Supplementation Scheme: Trigger Action Response Plan (TARP).
14. The Licence Holder must ensure that emissions from the discharge points listed in Table 8 do not exceed the parameter concentration limits specified in Table 8 when monitored in accordance with condition 22 and 26.

**Table 8: Emission and Discharge limits**

Discharge points	Parameter	Limit	Unit
MCDMDEW040	Perfluorooctane sulfonic acid (PFOS)	0.0091	µg/L
MCDMDEW041 Yandi Transfer Tanks to reinjection bore HMN0045P (refer to Table 7 for discharge description and location details)	Perfluorooctanoic acid (PFOA)	19	

15. If PFAS compounds monitored in accordance with Condition 22 and 26 are found to exceed the limits specified in Table 8, the Licence Holder shall carry-out additional monitoring of the source water and prepare a detailed risk assessment in accordance with the PFAS NEMP to determine related risks to the receiving environment. A report outlining the outcomes of the risk assessment shall be provided to the CEO within 60 days of the related analytical results being issued by the laboratory.

#### Emissions to land

16. The Licence Holder shall ensure that where waste is emitted to land from the emission points in Table 9 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this Licence.

**Table 9: Emissions to land**

Emission point reference and location	Emission point reference on Map of emission points	Description	Source including abatement
MCSWSTP004 (As depicted in the Premises Map under Schedule 1, Figure 1)	Spinifex Camp irrigation area	6.9 hectare irrigation area	Treated wastewater from Spinifex Camp WWTP (420 m <sup>3</sup> /day)
OHP3 Oily Waste Water Ponds (As depicted in the Premises Map under Schedule 1, Figure 1)	OHP3 Oily Waste Water Ponds	Discharge of treated wastewater	Treated wastewater from the OHP3 Oily Water Treatment Facility

#### Point source emissions to air

17. The Licence Holder shall ensure that where waste is emitted to air from the emission

points in Table 10 and identified on the map of emission points in Schedule 1, it is done so in accordance with the conditions of this licence.

**Table 10: Point source emissions to air**

Emission point reference and location	Source including abatement
45MW temporary power station (As depicted in the Premises Map under Schedule 1, Figure 1)	Thirty-two (32) Cat 3516B diesel generators, or similar

## Monitoring

### General monitoring

18. The Licence Holder shall ensure that:
  - (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;
  - (b) all wastewater sampling is conducted in accordance with AS/NZS 5667.10;
  - (c) all surface water sampling is conducted in accordance with AS/NZS 5667.6 as relevant;
  - (d) laboratory sample must be analysed using the appropriate limit of reporting to allow comparison with relevant assessment levels for water quality; and
  - (e) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.
19. The Licence Holder shall ensure that:
  - (a) monthly monitoring is undertaken at least 15 days apart; and
  - (b) quarterly monitoring is undertaken at least 45 days apart.
20. The Licence Holder shall ensure that all monitoring equipment used on the Premises to comply with the conditions of this Licence is calibrated in accordance with the manufacturer's specifications.
21. The Licence Holder shall, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.

### Monitoring of point source emissions to surface water

22. The Licence Holder shall undertake the monitoring in Table 11 according to the specifications in that table and record and investigate results.

**Table 11: Monitoring of point source emissions to surface water**

Emission point reference	Monitoring point location	Parameter	Units	Averaging Period	Frequency	Method
MCDMDEW040 MCDMDEW041 (As depicted in the Premises Map under Schedule 1, Figure 1)	Flow meters to discharge point	Volumetric flow rate (cumulative)	m <sup>3</sup> /day	Quarterly	Continuous	As per condition 18
		Discharge points	pH <sup>1</sup>			
		Electrical Conductivity	(µS/cm)	Spot sample	Quarterly	
		Total Dissolved Solids	mg/L or µg/L			
		Total Suspended Solids				
		TRH C <sub>5</sub> -C <sub>10</sub>				
		TRH C <sub>10</sub> -C <sub>16</sub>				
		TRH C <sub>16</sub> - C <sub>34</sub>				
		TRH C <sub>34</sub> - C <sub>40</sub>				
		Benzene, toluene, ethylbenzene and xylenes (BTEX)				
		Total Polycyclic Aromatic Hydrocarbons (PAH)				
		Sodium				
		Potassium				
		Calcium				
		Magnesium				
		Chloride				
	Carbonate					
	Bicarbonate					
	Sulfate					

Emission point reference	Monitoring point location	Parameter	Units	Averaging Period	Frequency	Method
		Nitrate				
		Aluminium				
		Boron				
		Iron				
		Copper				
		Zinc				
		Silver				
		Arsenic				
		Chromium				
		Cadmium				
		Mercury				
		Nickel				
		Selenium				
		Manganese				
		PFOS				
		PFOA				
		PFAS compounds, as listed in Schedule 3.				

Note 1: In-field non-NATA accredited analysis permitted.

### Monitoring of emissions to land

23. The Licence Holder shall undertake the monitoring in Table 12 according to the specifications in that table.

**Table 12: Monitoring of emissions to land**

Emission point reference	Monitoring point location	Parameter	Limit	Units	Averaging period	Frequency
MCSWSTP001 (As depicted in the Premises Map under	Treated wastewater from final storage	Volumetric flow rate	-	m <sup>3</sup> /day	Quarterly	Continuous
		pH <sup>1</sup>	-	-	Spot	Quarterly

Emission point reference	Monitoring point location	Parameter	Limit	Units	Averaging period	Frequency
Schedule 1, Figure 1)  MCSWSTP004 (As depicted in the Premises Map under Schedule 1, Figure 1)	tank prior to discharge  Spinifex Camp WWTP maturation pond	Biochemical Oxygen Demand	-	mg/L	sample	
		Total Suspended Solids	-	mg/L		
		Residual Chlorine <sup>1</sup>	-	mg/L		
		Total Nitrogen	-	mg/L		
		Total Phosphorus	-	mg/L		
		<i>E. coli</i>	-	MPN or cfu/ 100mL where MPN is not available		
OHP3 Oily Wastewater Ponds (As depicted in the Premises Map under Schedule 1, Figure 1)	Treated wastewater pond prior to discharge	Total Recoverable Hydrocarbons	15	mg/L	Spot sample	Prior to discharge

Note 1: In-field non-NATA accredited analysis permitted.

### Monitoring of inputs and outputs

24. The Licence Holder shall undertake the monitoring in Table 13 according to the specifications in that table.

**Table 13: Monitoring of inputs and outputs**

Input/Output	Parameter	Units	Averaging period	Frequency
Waste inputs	Inert Waste Type 1 and Inert Waste Type 2	Tonnes	N/A	Annual records of total waste arriving at the landfill facility

**Ambient environmental quality monitoring**

25. The Licence Holder shall undertake the monitoring in Table 14 according to the specifications in that table and record and investigate results.

**Table 14: Monitoring of ambient surface water quality**

Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
Marillana Creek surface water monitoring sites YNSWPC001 YNSWPC002 (As depicted in the Premises Map under Schedule 1, Figure 1).	pH <sup>1</sup>	-	Spot sample	Following rain events
	Electrical Conductivity	(µS/cm)		
	Total Dissolved Solids	mg/L		
	Total Suspended Solids	mg/L		
	Total Recoverable Hydrocarbons	mg/L		
	Sodium	mg/L		
	Potassium	mg/L		
	Calcium	mg/L		
	Magnesium	mg/L		
	Chloride	mg/L		
	Carbonate	mg/L		
	Bicarbonate	mg/L		
	Sulfate	mg/L		
	Nitrate	mg/L		
	Aluminium	mg/L		
	Boron	mg/L		
	Iron	mg/L		
	Copper	mg/L		
	Zinc	mg/L		
	Silver	mg/L		
Arsenic	mg/L			
Chromium	mg/L			

	Cadmium	mg/L		
	Mercury	mg/L		
	Nickel	mg/L		
	Selenium	mg/L		
	Manganese	mg/L		

Note 1: In-field non-NATA accredited analysis permitted.

26. The Licence Holder shall undertake the monitoring in Table 15 according to the specifications in that table and record and investigate results.

**Table 15: Monitoring of point source emissions to groundwater and ambient groundwater quality (Jugari Gorge Reinjection Trial)**

Monitoring point reference as shown in Figure 6: Trial monitoring bore locations	Parameter	Units	Averaging Period	Frequency	Method
<u>Adjacent Monitoring bores:</u> HMN0015M HMN0016M HMN0083M	Standing water level <sup>2</sup>	m (AHD) and mbgl	-	Monthly	As per condition 18
	pH <sup>3</sup>	-	Spot sample	Fortnightly for the first two months of hydrogeological trial and quarterly thereafter.	
	Electrical Conductivity <sup>3</sup>	(µS/cm)			
<u>Jugari Gorge Monitoring Bores</u> HMN0077M HMN0078M HMN0079M HMN0080M HMN0081M HMN0082M HMN0084M <sup>1</sup> HMN0085M <sup>1</sup> HMN0086M <sup>1</sup> HMN0087M <sup>1</sup>	Total Dissolved Solids	mg/L or µg/L			
	Total Suspended Solids				
	TRH C <sub>5</sub> -C <sub>10</sub>				
	TRH C <sub>10</sub> -C <sub>15</sub>				
	TRH C <sub>15</sub> -C <sub>34</sub>				
	TRH C <sub>34</sub> - C <sub>40</sub>				
<u>Ministers North Aquifer Monitoring Bores</u> HMN0013P HMN0017M HMN0018M HMN0024M HMN0028M HMN0032M HMN0034M	Benzene, toluene, ethylbenzene and xylenes (BTEX)				
	Total Polycyclic Aromatic Hydrocarbons (PAH)				
	Sodium				

HMN0046M HMN0047M HMN0049M HMN0054M HMN0057M MN1499RM MN1503RM MN0088RM MN0121RM MN2623RM  <u>Yandi Transfer Tanks to reinjection bore HMN0045P</u>	Potassium				
	Calcium				
	Magnesium				
	Chloride				
	Carbonate				
	Bicarbonate				
	Sulfate				
	Nitrate				
	Aluminium				
	Boron				
	Iron				
	Copper				
	Zinc				
	Silver				
	Arsenic				
	Chromium				
	Cadmium				
	Mercury				
	Nickel				
	Selenium				
	Manganese				
PFOS					
PFOA					
PFAS compounds, as listed in Schedule 3					

Note 1: Monitoring for standing water levels only.

Note 2: Monitoring of standing water levels does not apply to the Yandi Transfer tanks

Note 3: In-field non-NATA accredited analysis permitted.

## Records and reporting

### Records

- 27.** All information and records required by the Licence shall:
- (a) be legible;
  - (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
  - (c) except for records listed in 27(d) be retained for at least 6 years from the date the records were made or until the expiry of the Licence or any subsequent licence; and
  - (d) for those following records, be retained until the expiry of the Licence and any subsequent licence:
    - (i) off-site environmental effects; or
    - (ii) matters which affect the condition of the land or waters.
- 28.** The licence holder must:
- (a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and
  - (b) prepare and submit to the CEO by 1 October after the end of the annual period an Annual Audit Compliance Report in the approved form.
- 29.** The licence holder must record the following information in relation to complaints received by the licence holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
- (a) the name and contact details of the complainant, (if provided);
  - (b) the time and date of the complaint;
  - (c) the complete details of the complaint and any other concerns or other issues raised; and
  - (d) the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.
- 30.** The licence holder must maintain accurate and auditable books including the following records, information, reports, and data required by this licence:
- (a) the calculation of fees payable in respect of this licence;
  - (b) the works conducted in accordance with condition 8 of this licence;
  - (c) monitoring programmes undertaken in accordance with conditions 22 to 26 of this licence; and
  - (d) complaints received under condition 29 of this licence.
- 31.** The books specified under condition 30 must:
- (a) be legible;
  - (b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
  - (c) be retained by the licence holder for the duration of the licence; and
  - (d) be available to be produced to an inspector or the CEO as required.

## Reporting

32. The Licence Holder shall submit to the CEO an Annual Environmental Report by the 1 October each year. The report shall contain the information listed in Table 16 in the format or form specified in that table.

Table 16: Annual Environmental Report

Condition or table (if relevant)	Parameter	Format or form <sup>1</sup>
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified
Condition 1, Table 1 Condition 2, Table 2	Production or design capacity data and limit exceedances	None specified
Condition 2, Table 2	Waste acceptance	None specified
Condition 4, Table 3	Quantity of hydrocarbon contaminated waste placed in landfarms for remediation. Reporting required for monitoring purposes only – no limit in place.	None specified
Condition 12, Table 7	Cumulative volume discharged via each separate emission point	None specified
Condition 13	Summary of implementing the TARP.	None specified
Condition 14, Table 8	Summary of limit exceedances.	None specified
Condition 15	Summary of investigations and reports provided to the CEO	None specified
Condition 22, Table 11	Point source emissions to surface water monitoring results and a comparison of results against established trigger values. Details of investigations conducted, including outcomes, environmental impacts and remedial actions, in relation to trigger exceedances and a discussion of any trends identified	None specified
Condition 23, Table 12	Limit exceedances and emissions to land monitoring results and comparison of results against the manufacturers specifications	None specified
Condition 24, Table 13	Monitoring of inputs and outputs	None specified

Condition or table (if relevant)	Parameter	Format or form <sup>1</sup>
Condition 25, Table 14	Ambient surface water quality monitoring results and a comparison of results against established trigger values. Details of investigations conducted, including outcomes, environmental impacts and remedial actions, in relation to trigger exceedances and a discussion of any trends identified	None specified
Condition 26, Table 15	Dewatering source water and ambient groundwater quality monitoring results for the Jugari ReInjection Trial and a comparison of results against relevant assessment levels and/or established trigger values.  Details of investigations conducted, including outcomes, environmental impacts and remedial actions, in relation to trigger exceedances and a discussion of any trends identified.	None specified
Condition 28	Compliance	None specified
Condition 29	Complaints summary	None specified

33. The Licence Holder shall ensure that the Annual Environmental Report also contains an assessment of the information contained within the report against previous monitoring results and Licence limits.

34. The Licence Holder shall submit the information in Table 17 to the CEO according to the specifications in that table.

**Table 17: Non-annual reporting requirements**

Condition or table (if relevant)	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form <sup>1</sup>
-	Copies of original monitoring reports submitted to the Licence Holder by third parties	Not Applicable	Within 14 days of the CEO's request	As received by the Licence Holder from third parties

Note 1: Forms are in Schedule 3

**Notification**

35. The Licence Holder shall ensure that the parameters listed in Table 18 are notified to the CEO in accordance with the notification requirements of the table.

**Table 18: Notification requirements**

Condition or table (if relevant)	Parameter	Notification requirement <sup>1</sup>	Format or form <sup>2</sup>
Condition 1, Table 1 Condition 2, Table 2 Condition 14, Table 8 Condition 23, Table 12	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next usual working day. Part B: As soon as practicable	N1
Condition 21	Calibration report	As soon as practicable.	None specified

Note 1: Notification requirements in the Licence shall not negate the requirement to comply with s72 of the Act

Note 2: Forms are in Schedule 4

## Definitions

In this licence, the terms in Table 19 have the meanings defined.

**Table 19: Definitions**

Term	Definition
ACN	Australian Company Number.
Act	means the Environmental Protection Act 1986.
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website).
annual period	means the inclusive period from 1 July until 30 June in the following year.
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples
AS/NZS 5667.6	means the Australian Standard AS/NZS 5667.6 Water Quality – Sampling – Guidance on sampling of rivers and streams
AS/NZS 5667.10	means the Australian Standard AS/NZS 5667.10 Water Quality – Sampling – Guidance on sampling of waste waters
averaging period	means the time over which a limit is measured or a monitoring result is obtained.
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer of the Department of Environment Regulation.
CEO	for the purpose of correspondence means: Chief Executive Officer / Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 Telephone: (08) 6367 7000 or: <a href="mailto:info@dwer.wa.gov.au">info@dwer.wa.gov.au</a>
Compliance Report	means a report in a format approved by the CEO as presented by the or as specified by the CEO from time to time and published on the Department's website.
controlled waste	has the definition in Environmental Protection (Controlled Waste) Regulations 2004.

Term	Definition
Department	means the department established under section 53 of the Public Sector Management Act and designated as responsible for the administration of Division 3 Part V of the Environmental Protection Act 1986.
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.
EP Act	<i>Environmental Protection Act 1986 (WA).</i>
freeboard	means the distance between the maximum water surface elevation and the top of retaining banks or structures at their lowest point.
HDPE	means high density polyethylene.
Inert Waste Type 1	has the meaning defined in Landfill definitions.
Inert Waste Type 2	has the meaning defined in Landfill definitions.
Landfill Definitions	means the document titled "Landfill Waste Classification and Waste Definitions 1996" published by the Chief Executive Officer of the Department of Environment as amended from time to time.
licence	means this Licence numbered L6168/1991/11 and issued under the under section 57 of the EP Act by the CEO, subject to the specified conditions contained within.
licence holder	means the person or organisation who is the occupier of the premises, named as Licence Holder on page 1 of the Licence.
MPN	most probable number.
NATA	means the National Association of Testing Authorities, Australia.
NATA accredited	means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis.
normal operating conditions	means any operation of a particular process (including abatement equipment) excluding start-up, shut-down and upset conditions, in relation to stack sampling or monitoring.
OHP	Ore Handling Plant
PAS NEMP	means <i>Heads of EPAs Australia and New Zealand (HEPA) 2020, 'PFAS National Environmental Management Plan Version 2.0', – January 2020, Department of Climate Change, Energy, the Environment and Water</i>

Term	Definition
premises	means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Licence.
prescribed premises	has the same meaning given to that term under the EP Act.
Putrescible	has the meaning defined in Landfill definitions.
quarterly	means the 4 inclusive periods from 1 April to 30 June, 1 July to 30 September, 1 October to 31 December and in the following year, 1 January to 31 March.
Relevant assessment levels	Means relevant screening risk assessment levels published in the following standards and/or guidelines: <ul style="list-style-type: none"> <li>• "Assessment of Site Contamination NEPM" means the <i>National Environment Protection (Assessment of Site Contamination) Measure 1999</i>, as amended from time to time; and/or</li> <li>• "Guideline: Assessment and management of contaminated sites" means the document titled <i>Assessment and management of contaminated sites, Contaminated sites guidelines</i>, as amended from time to time; and/or</li> <li>• PFAS NEMP.</li> </ul>
Schedule 1	means Schedule 1 of this Licence unless otherwise stated.
Schedule 2	means Schedule 2 of this Licence unless otherwise stated.
Schedule 3	means Schedule 3 of this Licence unless otherwise stated.
spot sample	means a discrete sample representative at the time and place at which the sample is taken.
TARP	means BHP's <i>Jugari Short Term Trial Groundwater Supplementation Scheme – Trigger Action Response Plan (TARP)</i> , dated 21 October 2024.
TRH	means Total Recoverable Hydrocarbons
usual working day	means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia.
waste	has the same meaning given to that term under the EP Act.
WWTP	means wastewater treatment plant.

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**END OF CONDITIONS**

# Schedule 1: Maps

## Premises map

The boundary of the prescribed premises and arrangement of major infrastructure is shown in the map below (Figure 1).

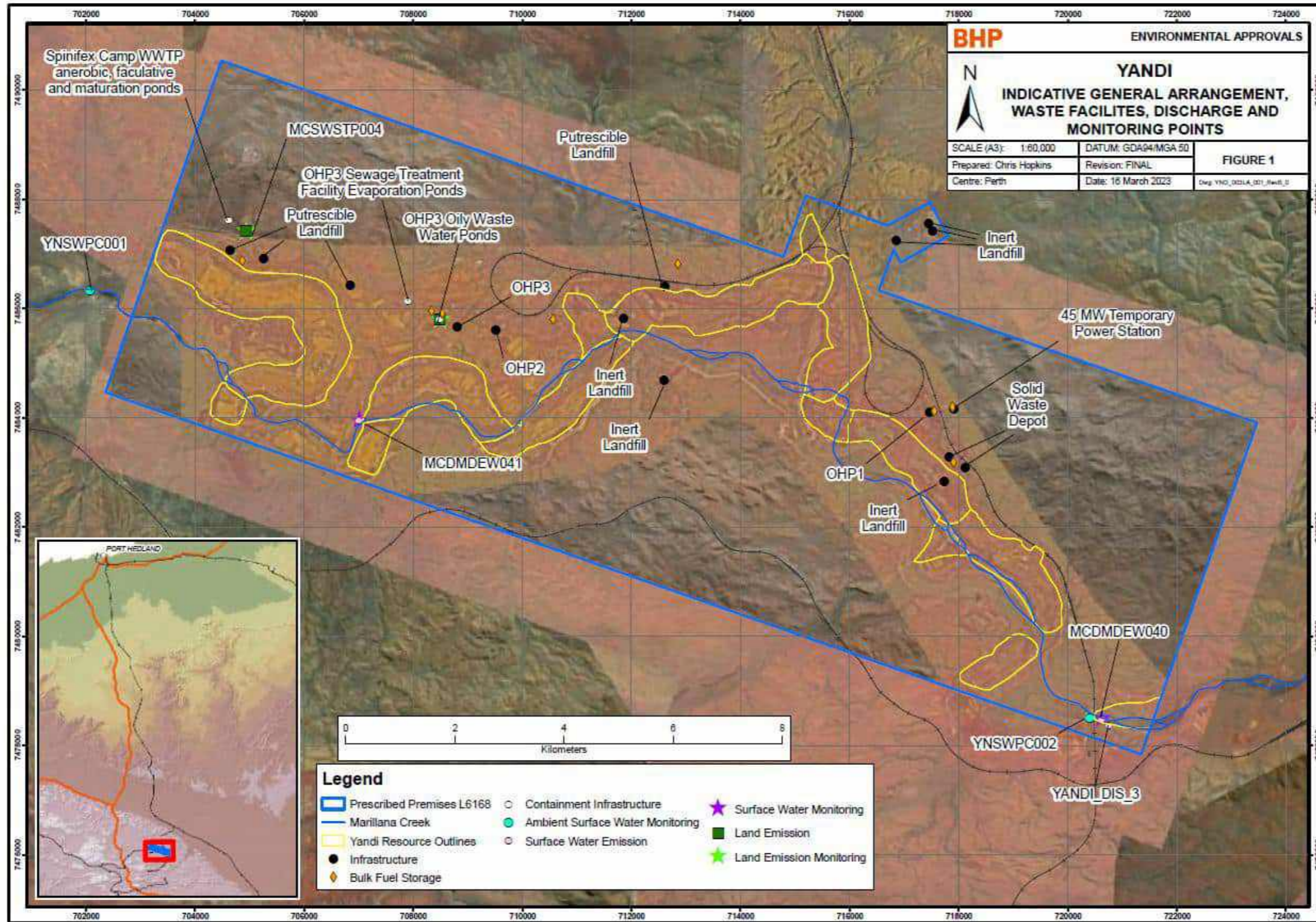


Figure 1: Map of the boundary of the prescribed premises and arrangement of major infrastructure

# Temporary Power Station map

The General (Pad) arrangement of the temporary power station is shown in the map below (Figure 2).

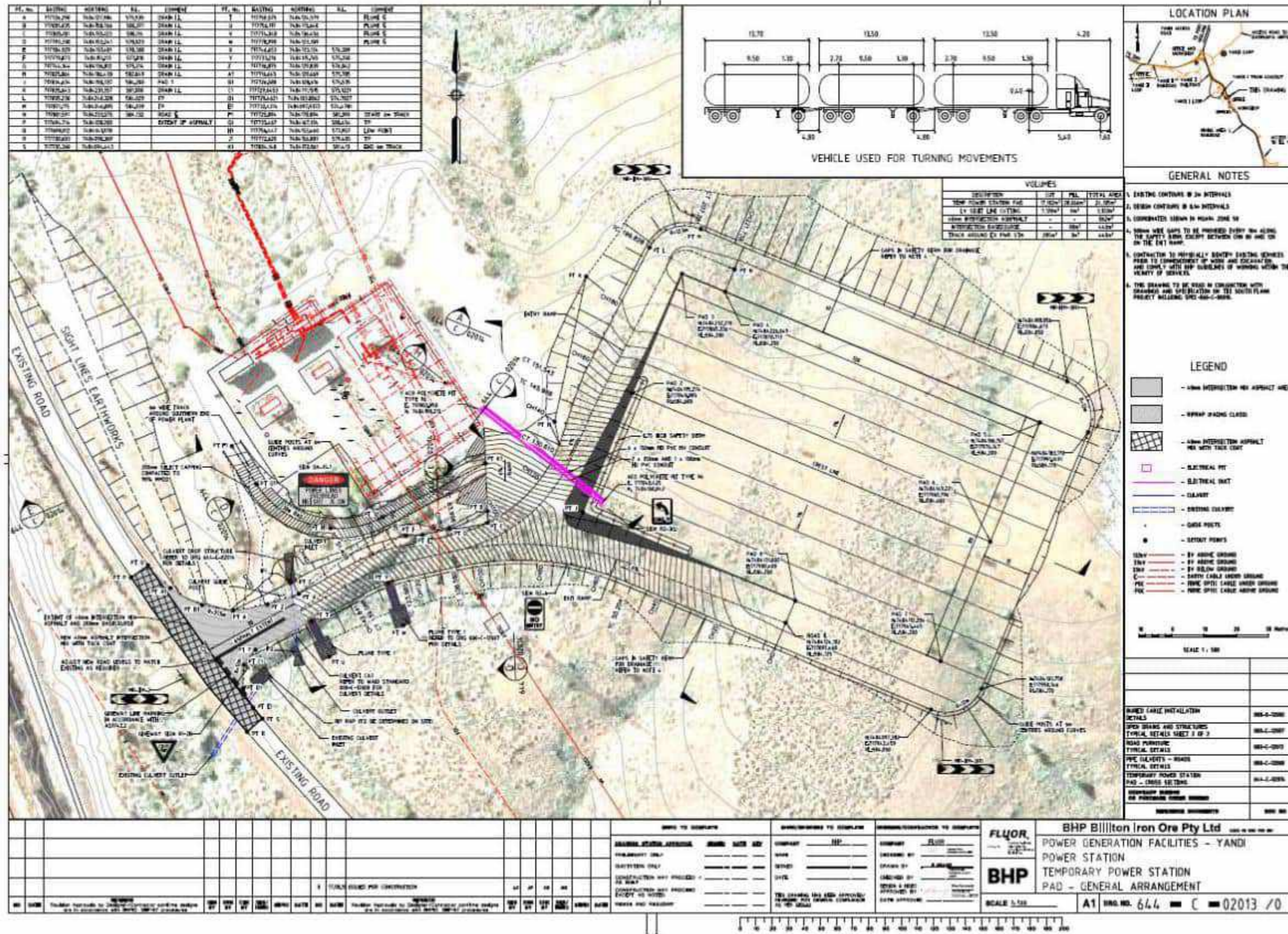


Figure 2: General (Pad) arrangement of the temporary power station

Typical layout of the Temporary Power Station is shown in the figure below (Figure 3)

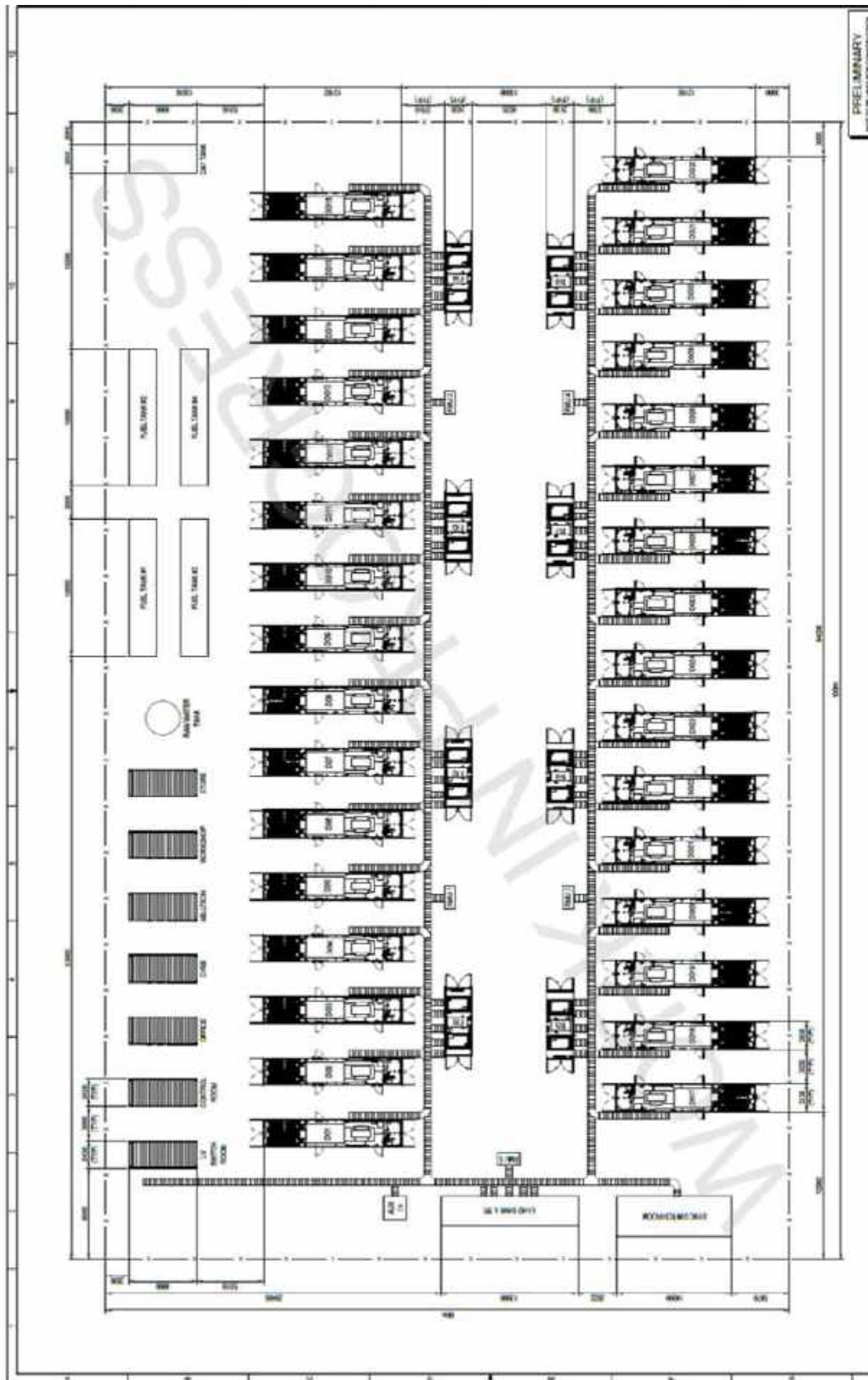


Figure 3: Temporary power station – typical layout

L6168/1991/11 (amended 23 October 2024)

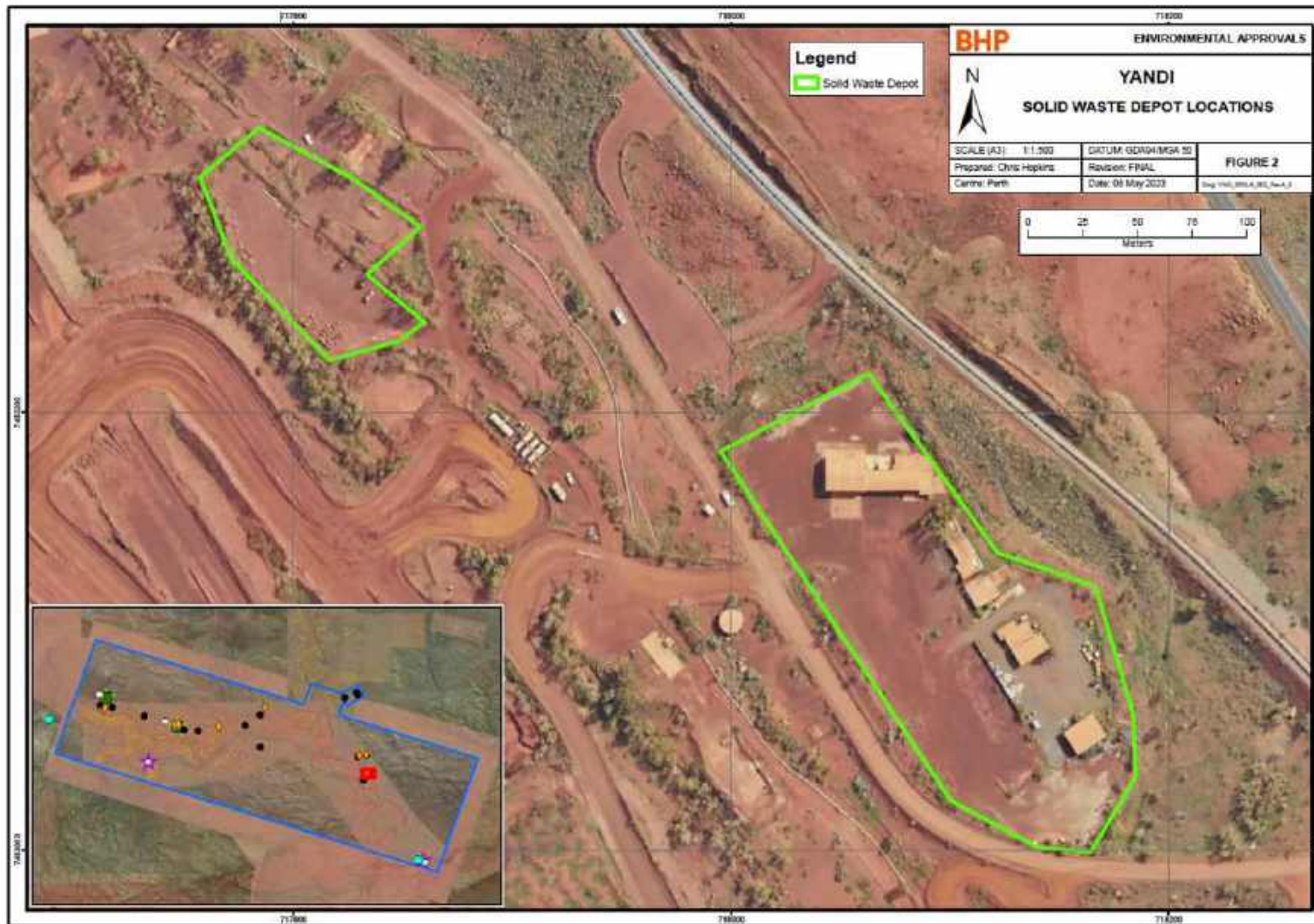


Figure 4: Solid Waste Depot Locations

L6168/1991/11 (amended 23 October 2024)

IR-T06 Licence template (v7.0) (February 2020)

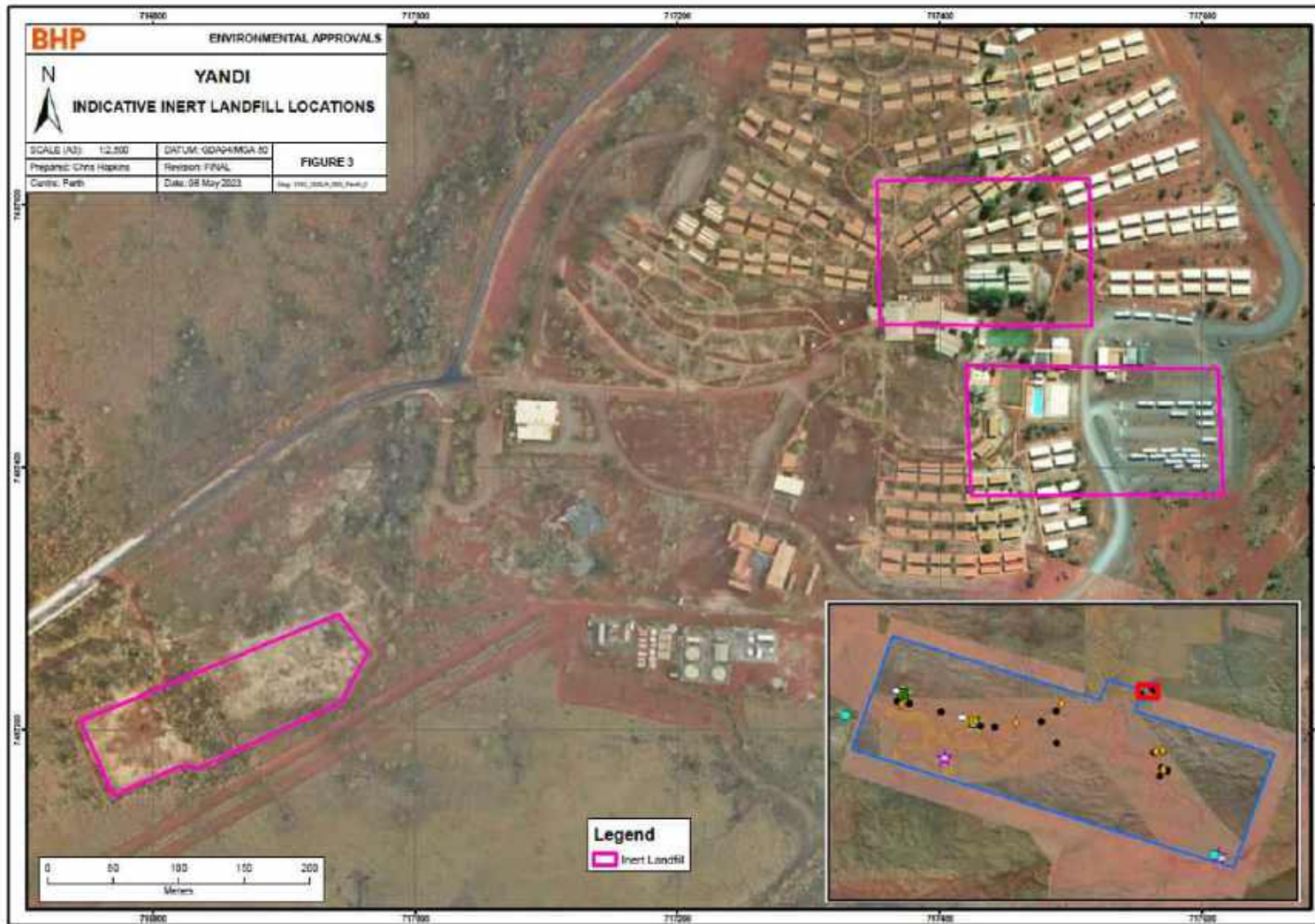


Figure 5: Indicative Inert Landfill Locations

L6168/1991/11 (amended 23 October 2024)

IR-T06 Licence template (v7.0) (February 2020)

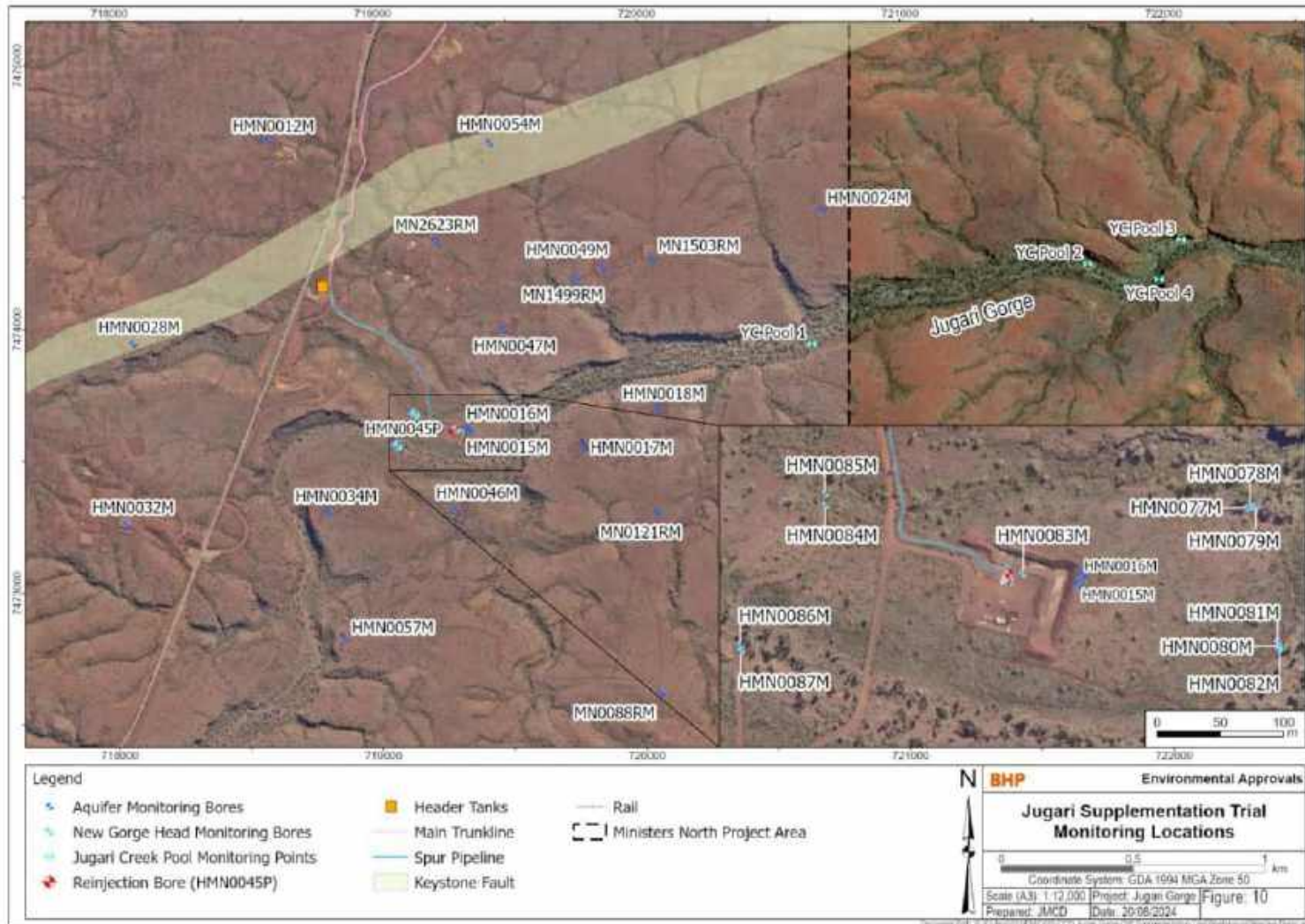


Figure 6: Trial monitoring bore locations

L6168/1991/11 (amended 23 October 2024)

## Schedule 2: Premises boundary

The corners of the premises boundary are the coordinates listed in Table 20.

**Table 20: Premises boundary coordinates (GDA2020)**

	<b>Easting</b>	<b>Northing</b>	<b>Zone</b>
1.	704481.82	7490541.67	GDA 1994 MGA Zone 50
2.	714784.89	7486945.16	GDA 1994 MGA Zone 50
3.	715198.68	7488071.36	GDA 1994 MGA Zone 50
4.	716701.09	7487519.20	GDA 1994 MGA Zone 50
5.	717466.94	7487946.94	GDA 1994 MGA Zone 50
6.	717808.33	7487335.66	GDA 1994 MGA Zone 50
7.	716935.12	7486847.97	GDA 1994 MGA Zone 50
8.	716805.61	7487079.86	GDA 1994 MGA Zone 50
9.	716531.93	7486335.29	GDA 1994 MGA Zone 50
10.	723469.10	7483913.57	GDA 1994 MGA Zone 50
11.	721347.81	7477838.09	GDA 1994 MGA Zone 50
12.	702360.11	7484466.54	GDA 1994 MGA Zone 50
13.	704481.82	7490541.67	GDA 1994 MGA Zone 50

## Schedule 3: Monitoring parameters

Table 21: Point source emissions to surface water monitoring parameters

Monitoring parameter
<p><b>PFAS (28 compounds):</b></p> <p><u>Perfluoroalkyl sulfonic acids</u></p> <ol style="list-style-type: none"> <li>1. Perfluorobutane sulfonic acid (PFBS);</li> <li>2. Perfluoropentane sulfonic acid (PFPeS);</li> <li>3. Perfluorohexane sulfonic acid (PFHxS);</li> <li>4. Perfluoroheptane sulfonic acid (PFHpS);</li> <li>5. Perfluorooctane sulfonic acid (PFOS)<sup>1</sup>;</li> <li>6. Perfluorodecane sulfonic acid (PFDS);</li> </ol> <p><u>Perfluoroalkyl carboxylic acids</u></p> <ol style="list-style-type: none"> <li>7. Perfluorobutanoic acid (PFBA);</li> <li>8. Perfluoropentanoic acid (PFPeA);</li> <li>9. Perfluoroheptanoic acid (PFHpA);</li> <li>10. Perfluorohexanoic acid (PFHxA);</li> <li>11. Perfluorooctanoic acid (PFOA)<sup>1</sup>;</li> <li>12. Perfluorononanoic acid (PFNA);</li> <li>13. Perfluorodecanoic acid (PFDA);</li> <li>14. Perfluoroundecanoic acid (PFUnDA);</li> <li>15. Perfluorododecanoic acid (PFDoDA);</li> <li>16. Perfluorotridecanoic acid (PFTrDA);</li> <li>17. Perfluorotetradecanoic acid (PFTeDA);</li> </ol> <p><u>Perfluoroalkyl sulfonamides</u></p> <ol style="list-style-type: none"> <li>18. Perfluorooctane sulfonamide (FOSA);</li> <li>19. N-methyl perfluorooctane sulfonamide (MeFOSA);</li> <li>20. N-ethyl perfluorooctane sulfonamide (EtFOSA);</li> <li>21. N-methyl perfluorooctane sulfonamidoethanol (MeFOSE);</li> <li>22. N-ethyl perfluorooctane sulfonamidoethanol (EtFOSE);</li> <li>23. N-methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA);</li> <li>24. N-ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA);</li> </ol> <p><u>Fluorotelomer sulfonic acid</u></p> <ol style="list-style-type: none"> <li>25. 4:2 fluorotelomer sulfonic acid (4:2 FTS);</li> <li>26. 6:2 fluorotelomer sulfonic acid (6:2 FTS);</li> <li>27. 8:2 fluorotelomer sulfonic acid (8:2 FTS);</li> <li>28. 10:2 fluorotelomer sulfonic acid (10:2 FTS).</li> </ol> <p>Appropriate limits of reporting (LOR) must be adopted.</p>

Note 1: Parameter already specified in Table 11.

## Schedule 4: Notification Form



Government of **Western Australia**  
Department of **Water and Environmental Regulation**

Licence:

Licence holder:

Form: N1

Date of breach:

### Notification of detection of the breach of a limit.

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

### Part A

Licence number	
Name of operator	
Location of premises	
Time and date of the detection	

Notification requirements for the breach of a limit	
Emission point reference/source	
Parameter(s)	
Limit	
Measured value	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Part B

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident.	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission.	
The dates of any previous N1 notifications for the Premises in the preceding 24 months.	

Name	
Post	
Signature on behalf of licence holder	
Date	

**Ministers North Works Approval**

**Attachment 6A: Emissions and discharges**

See Sections 1 to 7.

**Ministers North Works Approval**

**Attachment 6B: Waste acceptance**

See Sections 1 to 7.

**Ministers North Works Approval**

**Attachment 7: Siting and location**

See Attachment 2A.

**Ministers North Works Approval**

**Attachment 8: Supporting document**

See Sections 1 to 10.

**Ministers North Works Approval**

**Attachment 9: Category-specific checklist(s)**

Not required



**Ministers North Works Approval**

**Attachment 11: Request for exemption from publication Submission of application**

Not Required.