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|------------------------------------|---|------------|
| Works approval number | W6100/2017/1 | |
| Works approval holder | Hanson Construction Materials Pty Ltd | |
| ACN | 009 679 734 | |
| Registered business address | Level 1, 35 Great Eastern Highway Rivervale, WA, 6103 | |
| DWER file number | DER2017/001688 | |
| Duration | 23/08/2022 to | 23/08/2025 |
| Date of issue | 24/8/2022 | |
| Premises details | McKinley Road Quarry McKinley Road NOWERGUP Legal description - Mining Lease M70/1316 As defined by the coordinates in Schedule 1 of the Works Approval | |

| Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>) | Assessed production capacity |
|---|------------------------------|
| Category 12: screening etc. of material | 1 million tonnes per annum |

This works approval is granted to the works approval holder, subject to the attached conditions, on 24 August 2022, by:

**A/MANAGER, RESOURCE INDUSTRIES
INDUSTRY REGULATION**

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Works approval history

| Date | Reference number | Summary of changes |
|------------|------------------|------------------------|
| 24/08/2022 | W6100/2017/1 | Works approval granted |

Interpretation

In this works approval:

- (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 works approval:
 - (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 works approval requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this works approval.

Works approval conditions

The works approval holder must ensure that the following conditions are complied with:

Construction phase

Infrastructure and equipment

1. The works approval holder must:
 - (a) construct and install the infrastructure and equipment;
 - (b) in accordance with the corresponding design and construction requirements; and
 - (c) at the corresponding infrastructure location.
 as set out in Table 1.

Table 1 Design and construction requirements

| | Infrastructure | Design and construction requirements | Infrastructure location |
|----|------------------------------------|--|---|
| 1. | Excavation and screening circuit | <ul style="list-style-type: none"> Install and maintain all mobile equipment as per manufacturer's requirements Screening plant not to exceed 106dB(A) | Stages 1 and 2 as shown in Figure 2 of Schedule 1 |
| 2. | Mobile machinery and vehicles | <ul style="list-style-type: none"> All mobile equipment to be fitted mufflers and noise shielding devices. Broad band reversing alarms to be used to minimise noise (as opposed to tonal alarms) | |
| 3. | Front-end loader | Front end loader intended for overburden remove (during time limited operations) with a sound power level: <ul style="list-style-type: none"> not exceeding 103 dB(A) – intended for use within 550m of residences not exceeding 107 dB(A) – intended for use between 1km and 550m of residences | |
| 4. | Fuel storage tank bund | <ul style="list-style-type: none"> Install a 17,500 L self-bunded tank, located on concrete hard stand equipped with a 500L HDPE or concrete lined sump. Fuel storage tank to be located outside the public drinking water source protected area. | Located as shown in Figure 4 of Schedule 1 |
| 5. | Stormwater draining infrastructure | Stormwater drainage infrastructure designed to: <ul style="list-style-type: none"> divert clean stormwater around construction and operational areas; and retain potentially contaminated or | Stages 1 and 2 as shown in Figure 2 of Schedule 1 |

| | Infrastructure | Design and construction requirements | Infrastructure location |
|----|----------------------|--|---|
| | | contaminated stormwater on-site. | |
| 6. | Osiris dust monitors | Real time dust monitors are to be installed at the site and operational prior to the commencement of time limited operations for each stage. | <p><u>For Stage 1:</u></p> <p>AQ1 and AQ2 as shown in Figure 2 of Schedule 1</p> <p><u>For Stage 2:</u></p> <p>AQ3, AQ4, AQ5 as shown in Figure 3 of Schedule 1</p> |

Compliance reporting

2. The works approval holder must within 30 calendar days of an item of infrastructure or equipment required by condition 1 being constructed and installed:
 - (a) undertake an audit of their compliance with the requirements of condition 1; and
 - (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.
3. The Environmental Compliance Report required by condition 2, must include as a minimum the following:
 - (a) certification by a third party crushing/screening plant operator that the screening plant or component(s) thereof, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;
 - (b) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1; and
 - (c) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

Time limited operations phase

Commencement and duration

4. The works approval holder may only commence time limited operations for an item of infrastructure identified in condition 1 until the Environmental Compliance Report as required by condition 3 has been submitted by the works approval holder for that item of infrastructure.
5. The works approval holder may conduct time limited operations for “Stage 1” of the project (as shown in Figure 1) for an item of infrastructure specified in condition 7 (for “Stage 1” as applicable):
 - (a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 4 for that item of infrastructure; or
 - (b) until such time as a licence for that item of infrastructure is granted in accordance with Part V of the *Environmental Protection Act 1986*, if one is granted before the end of the period specified in condition 5(a).
6. The works approval holder may conduct time limited operations for “Stage 2” of the project (as shown in Figure 1) for an item of infrastructure specified in condition 7 (for “Stage 2” as applicable):

- (a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 4 for that item of infrastructure; or
- (b) until such time as a licence for that item of infrastructure is granted in accordance with Part V of the *Environmental Protection Act 1986*, if one is granted before the end of the period specified in condition 6(a).

Time limited operations requirements and emission limits

7. During time limited operations, the works approval holder must ensure that the premises infrastructure and equipment listed in Table 2 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 2.

Table 2 Infrastructure and equipment requirements during time limited operations

| | Site infrastructure and equipment | Operational requirement | Infrastructure location |
|----|-----------------------------------|--|---|
| 1. | Screening plant | <ul style="list-style-type: none"> To be operated from within the base of the excavation pit at a sound power level not exceeding 106dB(A) | Stage 1 site as shown in Figure 2 in Schedule 1 |
| 2. | Water cart | <ul style="list-style-type: none"> Maintain as per manufacturers specifications | |
| 3. | Front-end loader | <ul style="list-style-type: none"> Overburden removal not to occur within 100 metres of the tenement boundary with adjacent residential dwellings (where dwellings are less than 500m from the tenement boundary) Use only one front-end loader at a time with a sound power level not exceeding 107dB(A) when operating between 1km and 550metres distance from nearest residences Use only one front-end loader at a time with a sound power level not exceeding 103 dB(A) when operating within 550 metres of residences | |
| 4. | Mobile machinery and vehicles | <ul style="list-style-type: none"> All mobile equipment to be maintained with mufflers and noise shielding devices. Broad band reversing alarms to be used to minimise noise (as opposed to tonal alarms) | |

8. The works approval holder must ensure that no visible dust generated from the primary activities crosses the boundary of the premises.
9. The works approval holder must manage dust generation at the premises by:
- (a) wetting down unsealed roads and exposed areas;
 - (b) wetting down stockpiles, pit floor and operational areas;
 - (c) ensure all loads for transport outside the excavation area are covered; and
 - (d) limit all vehicle traffic within the premises to speeds of less than 40km/hour.

- 10.** The works approval holder must ensure that operations at the premises only occur between:
- (a) the hours of 07:00 to 17:00 and on the days Monday through to Saturday and at no time on Sundays or public holidays, for operations taking place within 800 metres of residential dwellings; and
 - (b) the hours of 07:00 to 19:00 and on the days Monday through to Sunday, for operations taking place at distances of more than 800 metres from residential dwellings.

Monitoring during time limited operations

Noise emissions

- 11.** Within 7 days of the commencement of operations requiring use of the screening plant within 800 metres of residential dwellings, the works approval holder must retain the services of a person qualified and experienced in the area of environmental noise assessment and who by their qualifications and experience is eligible to hold membership of the Australian Acoustical Society or the Australian Association of Acoustical Consultants to:
- (a) investigate the nature and extent of noise emissions from the premises including undertaking noise monitoring during normal operations at the boundary of the closest noise sensitive human receptor;
 - (b) assess in accordance with the methodology required in the *Environmental Protection (Noise) Regulations 1997*, the compliance of the noise emissions from the primary activities, against the relevant assigned levels specified in those Regulations; and
 - (c) compile and submit to the works approval holder within 14 days of the completion of noise monitoring, a report in accordance with condition 19; and
 - (d) undertaken separately for commencement within “stage one” and “stage two” locations as shown in Figure 1 of Schedule 1.

Dust emissions

- 12.** Within 7 days of the commencement of operations within 800 metres of residential dwellings, the works approval holder must monitor and record the air for concentrations of the parameters listed in Table 3:
- (a) undertaken separately for stage one and stage two locations;
 - (b) at the corresponding monitoring location;
 - (c) in the corresponding unit;
 - (d) at no less that the corresponding frequency;
 - (e) for the corresponding averaging period;
 - (f) using the corresponding method,
- as set out in Table 3.

Table 3 Monitoring of Air Quality (Dust)

| Parameter | Monitoring Location | Units | Frequency | Averaging Period | Method |
|------------------|---|-------------------|---|------------------|---------------------------------|
| PM ₁₀ | <u>When within stage one:</u> AQ1 and AQ2 shown in Figure 2 of Schedule 1 <u>When within stage two:</u> AQ3, AQ4, AQ5 shown in Figure 3 of Schedule 1 | µg/m ³ | Continuous during time limited operations | 5 minute | Osiris dust monitors- real time |

13. When operating within 800 metres of residences the works approval holder must monitor and record the ambient meteorological conditions at the premises in accordance with the requirements specified in Table 4 and record the results of all such monitoring.

Table 4 Monitoring of ambient meteorological conditions

| Parameter | Unit | Monitoring location(s) | Height | Frequency | Averaging period | Method |
|-------------------------------------|-----------|--|--------|------------|------------------|-----------------------------------|
| Wind speed | m/s | <u>When within stage one:</u> Either AQ1 and AQ2 shown in Figure 2, Schedule 1 <u>When within stage one:</u> | 10m | Continuous | 6 min | AS/NZS 3580.14 AS/NZS 3580.1.1 |
| Wind direction | degrees | | | | | |
| Wind direction (standard deviation) | | | | | | |
| Temperature | ° Celsius | | - | | 6 min | |
| Rainfall | mm | Any locations AQ3-AQ5 within Figure 3 of Schedule 1 | - | | 6 min | |

14. The works approval holder must record and submit the results to the CEO as a written report of all monitoring activity required by conditions 12 and 13.
15. The works approval holder must ensure that all monitoring equipment used to comply with conditions 12 and 13 is operated and calibrated in accordance with the manufacturer's specifications.

Specified actions

16. The works approval holder must notify the CEO of an exceedance, via an exceedance report in accordance with reporting condition 29, where ambient concentrations:
- (a) at the monitoring location listed in Table 5;
 - (b) for the corresponding parameter;

- (c) exceed the corresponding trigger and/or limit value,
when monitored in accordance with condition 12.

Table 5 Ambient air quality trigger value

| Monitoring location | Parameter | Trigger value | Limit |
|---|------------------|---|-------|
| Osiris monitor: AQ1 and AQ2 shown in Figure 2 of Schedule 1 | PM ₁₀ | 100 µg/m ³ over a 24-hour averaging period | N/A |
| AQ3, AQ4, AQ5 shown in Figure 3 of Schedule 1 | | | |

- 17.** The works approval holder must, in the event of PM₁₀ exceeding the corresponding trigger value specified in condition 16, undertake the management actions that correspond with the relevant parameter and corresponding monitoring locations within the corresponding timeframes as specified in Table 6

Table 6: Management actions required in the event of trigger value exceedance

| Monitoring location | Parameter | Management action | Timeframe |
|---|------------------|---|--|
| Osiris monitor: AQ1 and AQ2 shown in Figure 2 of Schedule 1 | PM ₁₀ | <ul style="list-style-type: none"> Investigation of the dust source and actions corresponding to findings; If dust source identified implement immediate dust abatement measures which may include but are not limited to ceasing/changing dust causing activities; Application of dust suppression methods to dust source; Cease activities if dust cannot be adequately controlled. | Management actions to commence immediately upon works approval holder being notified of exceedance and be continued for the duration of the trigger event. |
| AQ3, AQ4, AQ5 shown in Figure 3 of Schedule 1 | | | |

Compliance reporting

Noise emissions

- 18.** A report prepared pursuant to condition 11(c) is to include:
- a description of the methods used for monitoring and/or modelling of noise emissions from the premises;
 - details and the results of the investigation undertaken pursuant to condition 11(a); and
 - details and results of the assessment of the noise emissions from the premises, against the relevant assigned levels in the *Environmental Protection (Noise) Regulations 1997* undertaken pursuant to condition 11(b).
- 19.** The works approval holder must submit to the CEO the report prepared pursuant to condition 11(c) within 7 days of receiving it.
- 20.** Where an assessment pursuant to condition 11(b) indicates that noise emissions do not comply with the relevant assigned levels in the *Environmental Protection (Noise) Regulations 1997*, the license holder must:
- cease time limited operations for the infrastructure specified in condition 7;

- (b) within 21 days of receiving an assessment report pursuant to condition 11(c) prepare a plan to ensure the undertaking of the licensed activity will no longer lead to any contravention of the *Environmental Protection (Noise) Regulations 1997*; and
- (c) provide to the CEO a copy of the plan prepared pursuant to condition 20(b) within 30 days of its preparation.

Compliance reporting – time limited operations

- 21. Reports prepared pursuant to condition 18 are to include timeframes for the completion of additional mitigation measures.
- 22. The works approval holder may recommence time limited operations of the infrastructure specified in condition 7 upon implementation of all noise mitigation measures identified in accordance with conditions 20 and 21.
- 23. Where operations are recommenced in accordance with condition 22, the works approval holder must notify the CEO in writing a minimum of 48 hours prior to recommencing time limited operations.
- 24. The works approval holder must submit to the CEO a report on the time limited operations within 30 calendar days of the completion date of time limited operations.
- 25. The works approval holder must ensure the report required by condition 24 includes the following:
 - (a) a summary of the time limited operations, including timeframes and amount of material processed;
 - (b) a summary of the environmental performance of all infrastructure as constructed or installed;
 - (c) a review of performance and compliance against the conditions of the works approval;
 - (d) where the manufacturer's design specifications and the conditions of this works approval have not been met, what measures will the works approval holder take to meet them, and what timeframes will be required to implement those measures;
 - (e) A summary of observations recorded in accordance with condition 1; and
 - (f) monitoring data as required by condition 12.

Records and reporting (general)

- 26. The works approval holder must record the following information in relation to complaints received by the works approval 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 works approval holder to investigate or respond to any complaint.
- 27. The works approval holder must maintain accurate and auditable books including the

following records, information, reports, and data required by this works approval:

- (a) the works conducted in accordance with condition 1;
- (b) any maintenance of infrastructure that is performed in the course of complying with condition 1;
- (c) monitoring programmes undertaken in accordance with conditions 11, 12 and 13; and
- (d) complaints received under condition 26.

28. The books specified under condition 27 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 works approval holder for the duration of the works approval; and
- (d) be available to be produced to an inspector or the CEO as required.

29. Where an exceedance of the trigger have been identified as per condition 16, the works approval holder must provide the following information in relation to any exceedances identified in that condition:

- (a) the nature, volume, and characteristics of the emissions or ambient concentrations exceedance;
- (b) the time and date when the exceedance occurred;
- (c) whether any environmental impact occurred as a result of the exceedance and, if so, what that impact was and where the impact occurred;
- (d) the details of the management action(s) taken pursuant with conditions 17 response to the exceedance;
- (e) the details of the results and effectiveness of the management action(s) taken;
- (f) the details and result of any investigation undertaken into the cause of the exceedance;
- (g) the details of any action or specified measures that have been taken, or will be taken, to prevent the exceedance occurring again and for the purpose of minimising the likelihood of pollution or environmental harm; and
- (h) the corresponding data as set out in Table 7 below.

Table 7: Data to include in the exceedance report

| Condition | Requirement | Format or form |
|-----------|--|--|
| 12 | Osiris real time monitoring PM ₁₀ | Tabulated details on any dust criteria exceedances with corresponding meteorological conditions recorded at time of exceedance |

Definitions

In this works approval, the terms in Table 8 have the meanings defined.

Table 8: Definitions

| Term | Definition |
|---------------------------------|---|
| annual period | a 12 month period commencing from 1 July until 30 June of the immediately following year. |
| AS1726 | the Australian Standard Geotechnical Site Investigations |
| AS/NZS 3580.14:2014 | Methods for sampling and analysis of ambient air Meteorological monitoring for ambient air quality monitoring applications |
| AS/NZS 3580.1.1:2016 | Methods for sampling and analysis of ambient air Guide to siting air monitoring equipment |
| books | has the same meaning given to that term under the EP Act. |
| CEO | means Chief Executive Officer. CEO for the purposes of notification means: Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au |
| Department | means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V Division 3 of the EP Act. |
| discharge | has the same meaning given to that term under the EP Act. |
| ecologist | as recognised by an Australian professional group or organisation to be competent in the duties required of an ecologist |
| emission | has the same meaning given to that term under the EP Act. |
| Environmental Compliance Report | means a report to satisfy the CEO that the conditioned infrastructure and/or equipment has been constructed and/or installed in accordance with the works approval. |
| EP Act | <i>Environmental Protection Act 1986</i> (WA). |
| EP Regulations | <i>Environmental Protection Regulations 1987</i> (WA). |
| HDPE | High-density polyethylene |
| NATA | National Association of Testing Authorities |

| Term | Definition |
|-------------------------|---|
| PM ₁₀ | PM10 describes particulate matter (inhalable particles) with diameters that are generally 10 micrometers and smaller. |
| premises | the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map (Figure 1) in Schedule 1 to this works approval. |
| prescribed premises | has the same meaning given to that term under the EP Act. |
| quarterly | The works approval holder shall ensure that monitoring is undertaken at least 45 days apart. |
| time limited operations | refers to the operation of the infrastructure and equipment identified under this works approval that is authorised for that purpose, subject to the relevant conditions. |
| works approval | refers to this document, which evidences the grant of the works approval by the CEO under section 54 of the EP Act, subject to the conditions. |
| works approval holder | refers to the occupier of the premises being the person to whom this works approval has been granted, as specified at the front of this works approval. |

END OF CONDITIONS

Schedule 1: Maps

Premises map

The boundary of the prescribed premises is indicated in red on the map below with the **approved stages outlined in yellow**. Other stages (3 – 5) have not been assessed or authorised as part of this works approval.

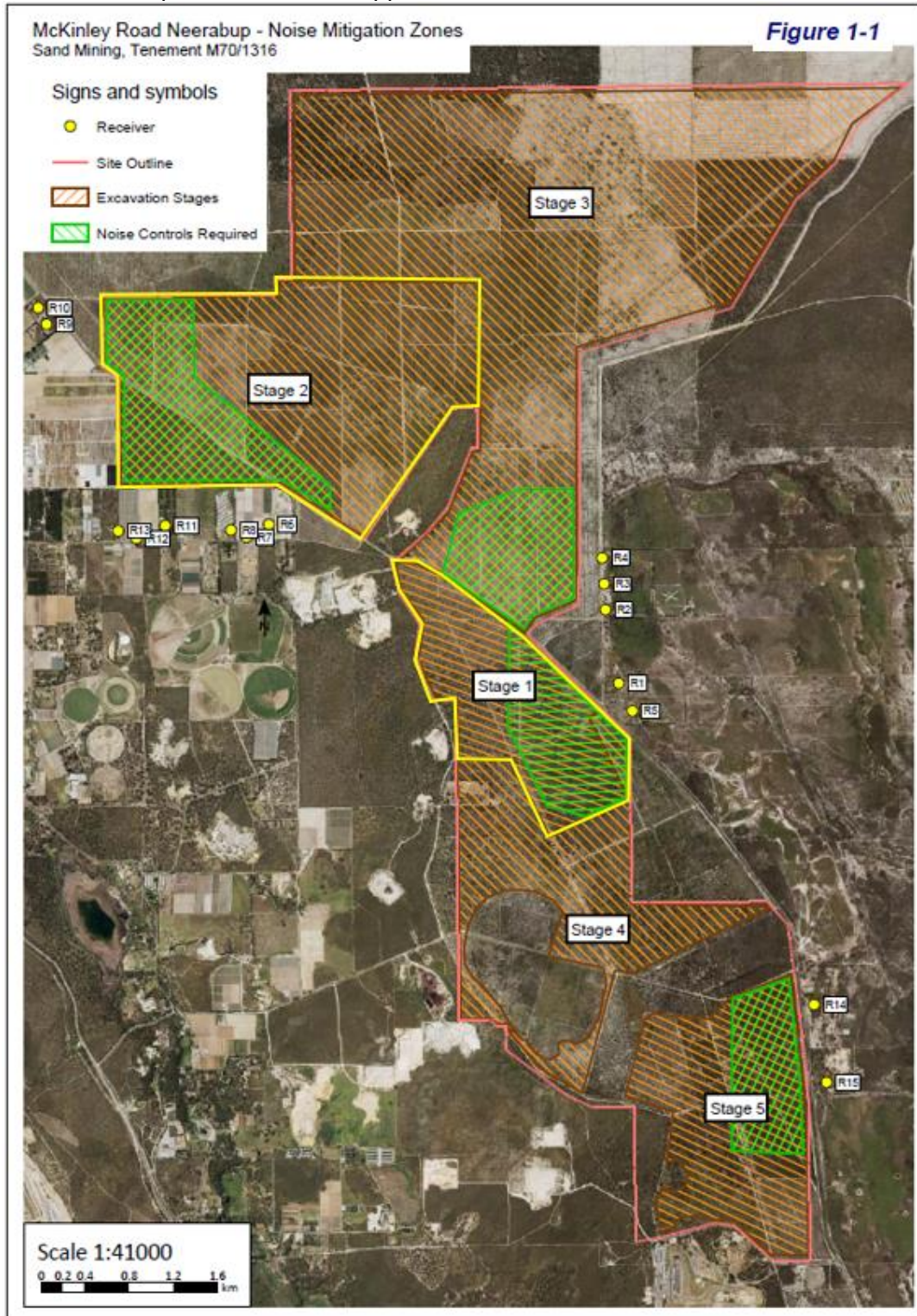


Figure 1 Premises boundary (red) and authorised stages (yellow)

McKinley Road Neerabup - Haul Trucks Route
Stage 1 Sand Mining, Tenement M70/1316

Figure 3-1

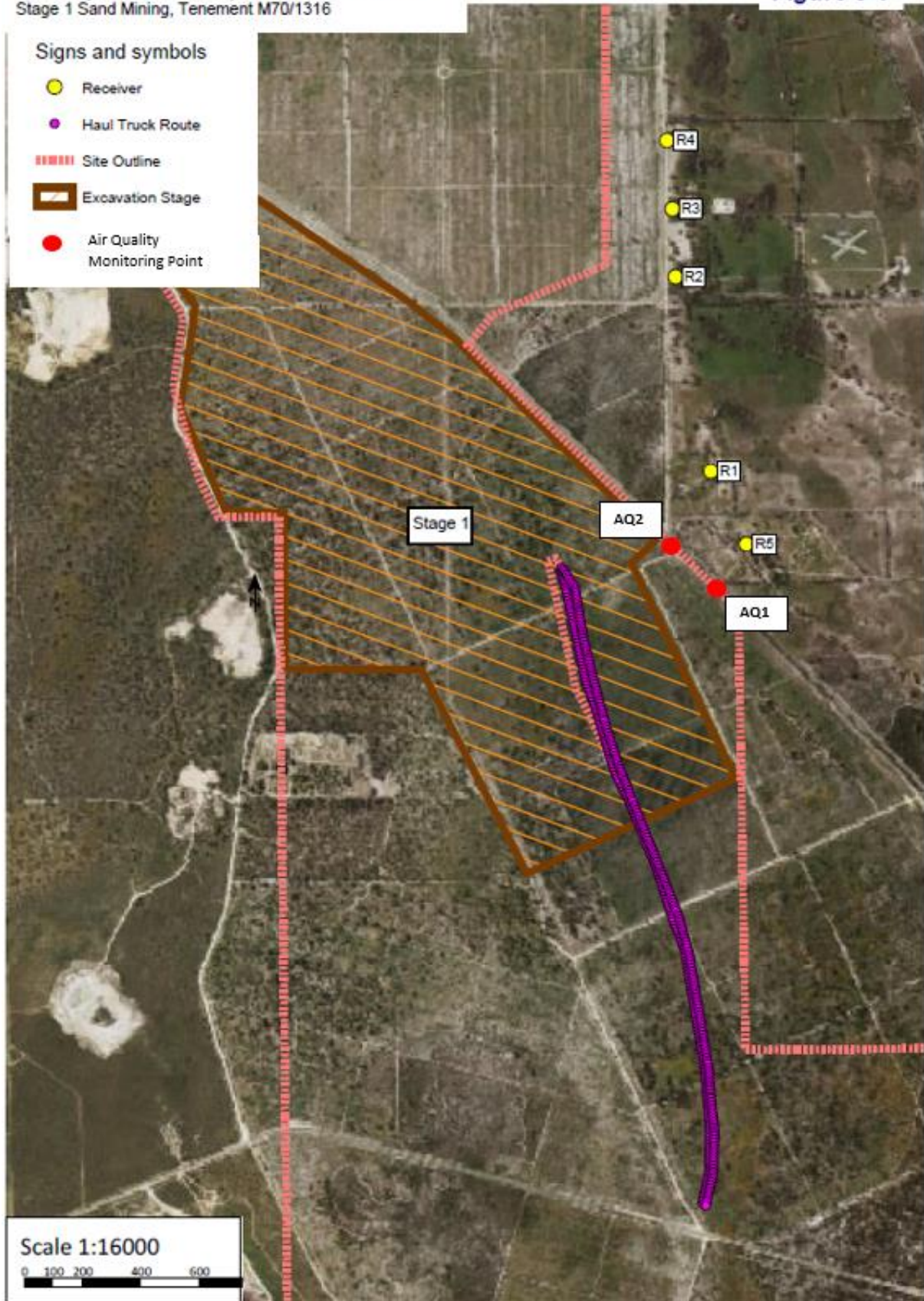


Figure 2: Stage 1 Air quality monitoring locations

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IR-T05 Works approval template (v5.0) (February 2020)

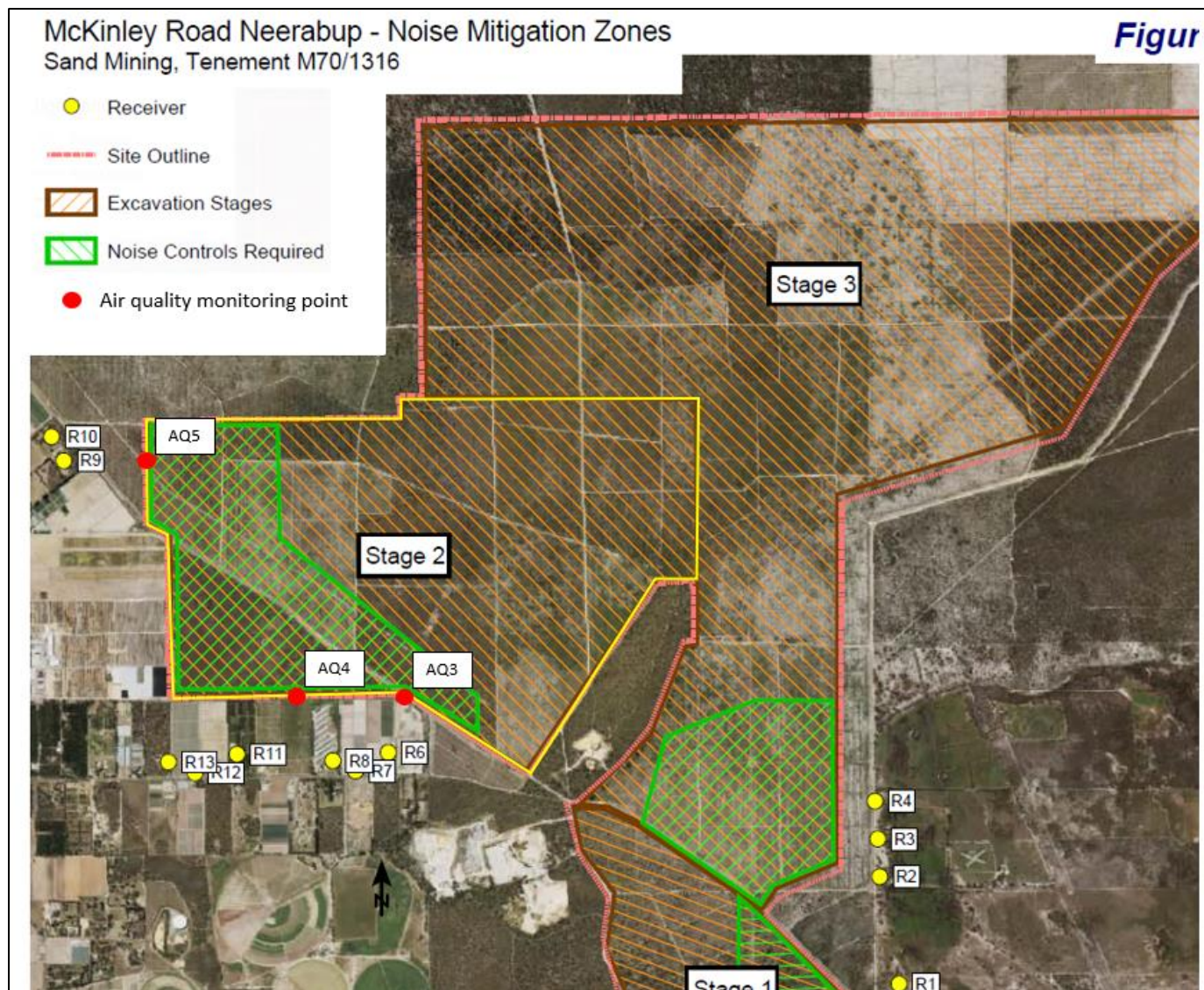


Figure 3: Stage 2 Air quality monitoring locations

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IR-T05 Works approval template (v5.0) (February 2020)

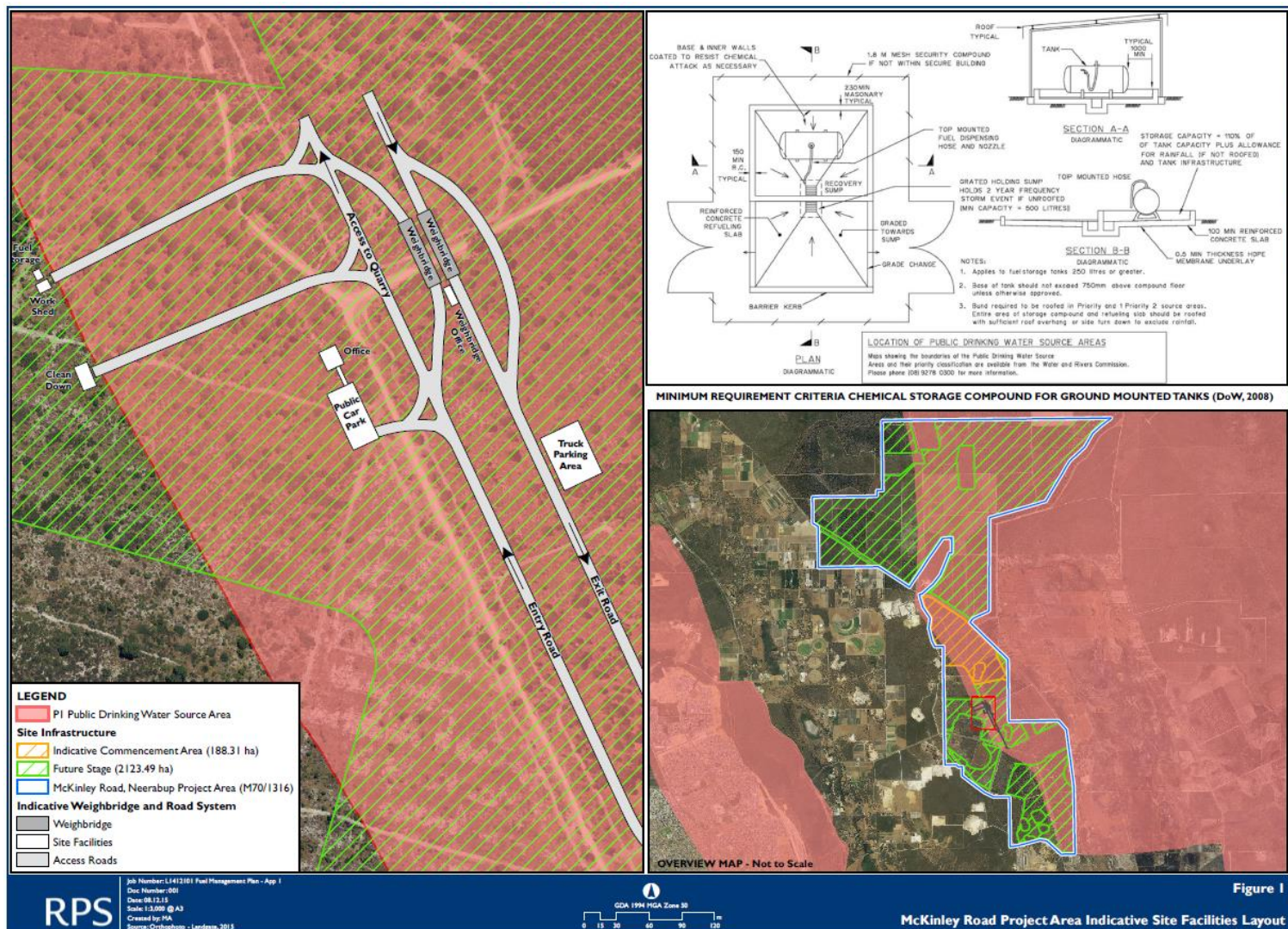


Figure 4 Location of fuel storage - outside of the P1 Public Drinking Water Source Area

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IR-T05 Works approval template (v5.0) (February 2020)