



**Works approval number** W6666/2022/1

**Works approval holder** Paulsens East Iron Ore Pty Ltd  
**ACN** 643 291 230  
**Registered business address** Suite 1 680 Murray Street WEST PERTH 6005  
**DWER file number** DER2021/000719

**Duration** 05/01/2023 to 04/01/2027

**Date of issue** 05/01/2023

**Premises details** PEIO Project Transshipment Facility  
Warrirda Road Onslow Western Australia 6710  
Legal description -  
As defined by the coordinates in Schedule 2 as depicted in Schedule 1

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i> )	Assessed production capacity
<b>Category 58:</b> Bulk material loading or unloading	No more than 2 million tonnes per annum; and no more than 10,000 tonnes of iron ore per day

This works approval is granted to the works approval holder, subject to the attached conditions, on 5 January 2023, by:

**Alana Kidd**

**Manager, Resource Industries**

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

## Works approval history

Date	Reference number	Summary of changes
05/01/2023	W6666/2022/1	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 install the infrastructure listed in Table 1 in accordance with:
  - (a) The corresponding design and installation requirements; and
  - (b) At the corresponding infrastructure location; and
  - (c) within the corresponding timeframe,as set out in Table 1.

**Table 1: Design and installation requirements**

Infrastructure	Design and installation requirements	Infrastructure location	Timeframe
SPTV: Loading infrastructure and equipment	<ul style="list-style-type: none"><li>• Water misting curtain installed along the edge of the open hold for use during loading to minimise dust emissions</li><li>• Sides below the hold are inclined to prevent blockages and allow for free flow of material</li><li>• Gates at the bottom of each hold designed to open for material deposition onto a below deck conveyor</li><li>• below deck conveyor to move iron ore material horizontally below the hold and onto an incline conveyor which transports the material upward into the loading arm</li><li>• External conveyors fitted with covers</li><li>• Loading arm fitted with a sock to minimise dust emissions when discharging the material into the hold of the OGV</li><li>• Dust collectors fitted at transfer points on conveying system</li></ul>	Within premises boundary as per Schedule 1: Maps, Figure 1	Prior to the submittal of the Environmental Compliance Report required by condition 2(b)
SPTV: Waste material containment infrastructure and equipment	<ul style="list-style-type: none"><li>• On board sump for collection of deck and external surfaces wash down water to be stored in wash tank/s of 239.63 cubic metres or greater volume.</li><li>• Sewage treatment plant installed on board</li></ul>	Within premises boundary as per Schedule 1: Maps, Figure 1	

## 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/or 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(b), must include as a minimum the following:
  - (a) certification by a suitably qualified person that the items of infrastructure 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.

## Environmental commissioning phase

### Environmental commissioning requirements and emission limits

4. The works approval holder may only commence environmental commissioning of an item of infrastructure listed in Table 2 once the Environmental Compliance Report has been submitted for that item of infrastructure in accordance with condition 3 of this works approval.
5. Any environmental commissioning activities undertaken for an item of infrastructure specified in Table 2 may only be carried out:
  - (a) in accordance with the corresponding commissioning requirements; and
  - (b) for the corresponding authorised commissioning duration.

**Table 2: Environmental commissioning requirements**

Infrastructure	Commissioning requirements	Authorised commissioning duration
OGV	<ul style="list-style-type: none"> <li>Loading activities to occur within the premises boundary as depicted in Figure 1</li> <li>Each shipment to carry a load of no more than 60,000 tonnes of iron ore product</li> </ul>	For a period not exceeding 3 shipments
SPTV	<ul style="list-style-type: none"> <li>Maximum throughput at the premises does not exceed 10,000 tonnes per day</li> <li>SPTV to berth alongside the OGV and once secured, the boom discharges iron ore product into the open hold of the OGV</li> <li>Works Approval Holder to minimise spillage of iron ore material entering the marine environment during loading activities</li> <li>dust generation at the premises must be managed during loading activities by slowing the loading rate or increasing dust suppression via the water mist curtain during windy weather conditions that give rise to dust emissions</li> <li>Works Approval Holder to temporarily suspend loading operations when wind speeds exceed 8 m/s</li> <li>Appropriate cyclone mooring is to be utilised where there is a threat of cyclonic weather impacting the premises</li> <li>Wash down water from the cleaning of the SPTV deck and external surfaces to be collected via an on-board sump and stored within wash tanks</li> <li>Reverse Osmosis plant and sewage treatment plant to be operated as per manufacturers specifications during loading activities</li> <li>No brine waste discharges from the Reverse Osmosis plant or sewage discharges from the sewage treatment plant to occur within the premises boundary</li> </ul>	

6. The works approval holder must submit to the CEO an environmental commissioning report within 30 calendar days of the completion date of the third shipment authorised under the environmental commissioning phase.
7. The works approval holder must ensure the environmental commissioning report required by condition 6 includes:
  - (a) a summary of throughput for each shipment of iron ore product, including the number of days loading occurred, the tonnes loaded per day, and the final tonnage of each shipment;

- (b) moisture content data averaged over each shipment and showing a comparison against the DEM level, where the DEM level can be determined; and
- (c) where environmental performance has not met expectations, measures proposed to meet the requirements of conditions of this works approval, together with timescales for implementing the proposed measures.

## Time limited operations phase

### Commencement and duration

8. The works approval holder may conduct time limited operations for the export of iron ore product;
  - (a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 3 for that item of infrastructure and submits the environmental commissioning report required by condition 7, 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 8(a).

### Time limited operations requirements

9. During time limited operations, the works approval holder must ensure that the premises infrastructure and equipment listed in Table 1 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirements set out in Table 3:

**Table 3: Operational requirements during time limited operations**

Activity	Operational Requirements	Infrastructure location
Export of iron ore product	<ul style="list-style-type: none"> <li>Maximum throughput at the premises does not exceed 10,000 tonnes per day</li> <li>SPTV to berth alongside the OGV and once secured, the boom discharges iron ore product into the open hold of the OGV.</li> <li>Works Approval Holder to minimise spillage of iron ore material entering the marine environment during loading operations</li> <li>dust generation at the premises must be managed during loading activities by slowing the loading rate or increasing dust suppression via the water mist curtain during windy weather conditions</li> <li>Works Approval Holder to temporarily suspend loading operations when wind speeds exceed 8 m/s</li> <li>Appropriate cyclone mooring is to be utilised where there is a threat of cyclonic weather impacting the premises</li> <li>Wash down water from the cleaning of the SPTV deck and external surfaces to be collected via an on-board sump and stored within wash tanks</li> <li>Reverse Osmosis plant and sewage treatment plant to be operated as per manufacturers specifications during loading operations</li> <li>No brine waste discharges from the Reverse Osmosis plant or sewage discharges from the sewage treatment plant to occur within the premises boundary</li> </ul>	As depicted In Figure 1 Schedule 1

### Compliance reporting during time limited operations

10. 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 or 120 calendar days before the expiration date of the works approval, whichever is the sooner.
11. The works approval holder must ensure the report required by condition 10 includes the following:
  - (a) summary of the time limited operations, including timeframes and amount of iron ore product loaded per day and per shipment; and
  - (b) Moisture content data averaged over each shipment and showing a comparison against the DEM level, where the DEM level can be determined; and
  - (c) a review of performance and compliance against the conditions of the works approval; and
  - (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.

## Records and reporting (general)

- 12.** The works approval holder must obtain and maintain accurate records of the moisture content for each shipment of iron ore during the environmental commissioning and time limited operational phases
- 13.** 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.
- 14.** 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) complaints received under condition 13.
- 15.** The books specified under condition 14 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.



## Definitions

In this works approval, the terms in Table 4 have the meanings defined.

**Table 4: Definitions**

Term	Definition
ACN	Australian Company Number
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 <a href="mailto:info@dwer.wa.gov.au">info@dwer.wa.gov.au</a>
condition	means a condition to which this works approval is subject under s.62 of the EP Act
DEM Level	means the dust extinction moisture number. It is the Moisture Content of the iron ore at which the Dust Number is 10 derived from the Australian Standard AS4156.6-2000 or a standard approved by the CEO.
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.
emission	has the same meaning given to that term under the EP Act.
environmental commissioning	means the sequence of activities to be undertaken to test equipment integrity and operation, or to determine the environmental performance, of equipment and infrastructure to establish or test a steady state operation and confirm design specifications.
Environmental Commissioning Report	means a report on any commissioning activities that have taken place and a demonstration that they have concluded, with focus on emissions and discharges, waste containment, and other environmental factors.
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure and/or equipment has been designed, constructed and/or installed in accordance with the works approval.
EP Act	<i>Environmental Protection Act 1986</i> (WA).

Term	Definition
EP Regulations	<i>Environmental Protection Regulations 1987 (WA).</i>
Moisture content	<p><i>moisture content means the ratio of the mass of water in a sample to the mass of solids in the sample, expressed as a percentage. In equation form:</i></p> $w = \frac{m_1 - m_2}{m_1} \times 100$ <p>where:  w = moisture content of sample;  m<sub>1</sub> = initial mass, in grams, of the test portion; and  m<sub>2</sub> = mass, in grams, of the test portion after drying</p>
Mtpa	means million tonnes per annual period
m/s	means meters per second
premises	the premises to which this works approval 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.
SPTV	means Special Purpose Transshipment Vessel
OGV	Means Ocean-Going Vessel
Shipment	The export of iron ore product via an Ocean-Going Vessel with a load of no more than 60,000 tonnes of iron ore product.
suitably qualified person	<p>Means a person who:</p> <ul style="list-style-type: none"> <li>(a) Holds a relevant tertiary academic qualification; and</li> <li>(b) Has a minimum of at least three years of experience working in the area of expertise</li> </ul>
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.
waste	has the same meaning given to that term under the EP Act.
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 shown in green in the map below (Figure 1).

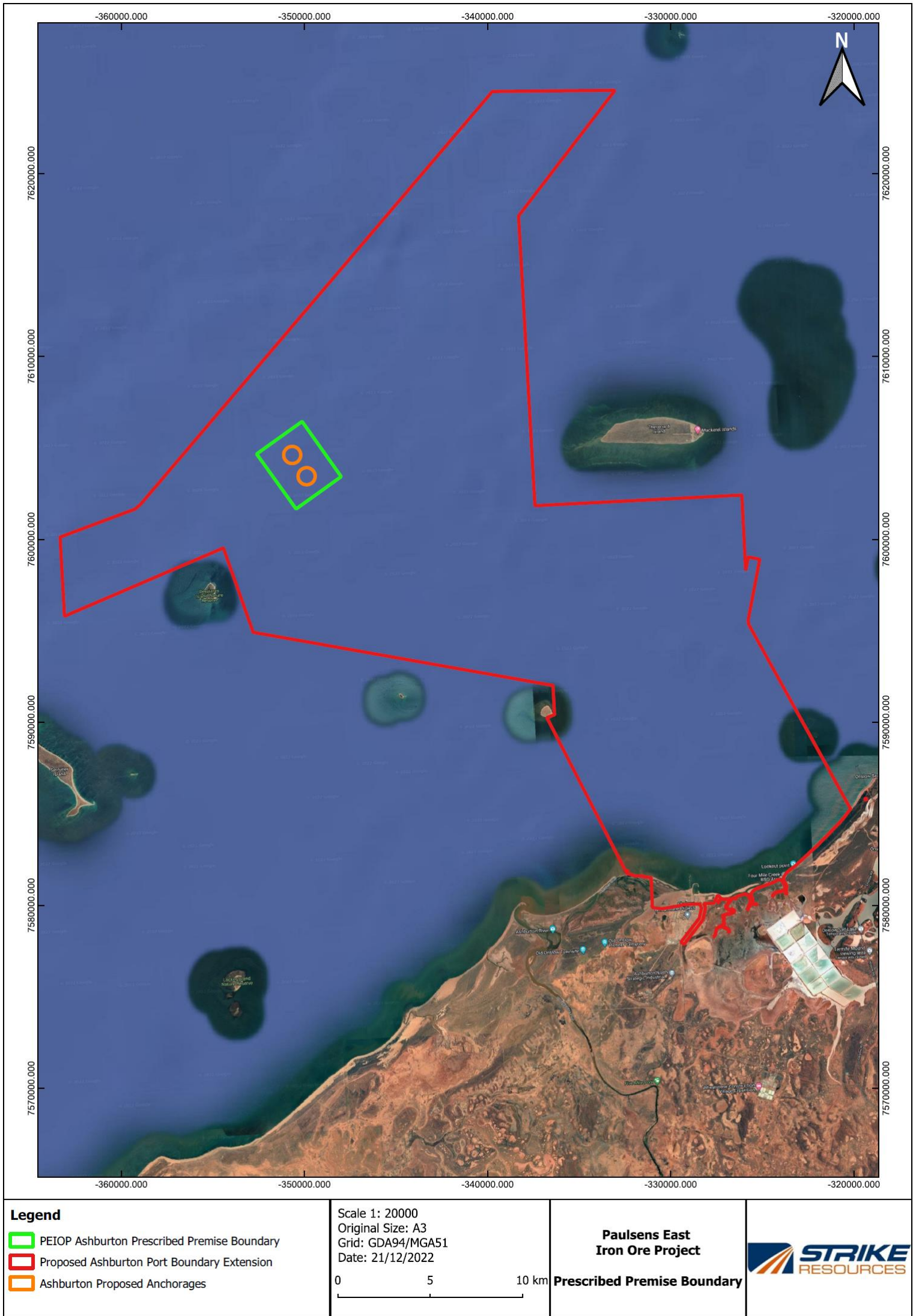


Figure 1: Map showing the boundary of the prescribed premises

## Schedule 2: Premises boundary

The premises boundary is defined by the coordinates in Table 5.

**Table 5: Premises boundary coordinates**

Coordinate location	Easting	Northing
Northwest corner	271147.8626	7625501.956
Northeast corner	273675.9471	7627167.153
Southwest corner	273166.8334	7622442.975
Southeast corner	275674.7235	7624097.944