

# **Works Approval**

Works Approval Number	W6308/2019/1	
Works Approval Holder ACN	Tellus Holdings Ltd 138 119 829	
Registered business address	Suite 2, level 10, 151 Castlereagh Street SYDNEY NSW 2000	
File Number	DER2019/000540	
Duration	7/02/2020 to 6/02/2023	
Date of issue	7 February 2020	
Date of amendment	27 March 2020	
Prescribed Premises	Category 61 – Liquid waste facility Category 61A – Solid waste facility Category 65 – Class IV secure landfill site Category 66 – Class V intractable landfill site	
Premises	Sandy Ridge Facility	
	Crown lease O289974 granted by the State of Western Australia to Tellus Holdings Ltd in respect of Lot 510 on Deposited Plan 413497, Whole Volume 3169 Folio 365.	
	102.5km north of Great Eastern Highway, via Access Reserve 44102, BOORABBIN WA 6429	

This Works Approval is granted to the Works Approval Holder, subject to the following conditions, on 27 March 2020, by:

## A/MANAGER WASTE INDUSTRIES REGULATORY SERVICES

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

# **Explanatory notes**

These explanatory notes do not form part of this Works Approval.

## Defined terms

Definition of terms used in this Works Approval can be found at the start of this Works Approval. Terms which are defined have the first letter of each word capitalised throughout this Works Approval.

Department of Water and Environmental Regulation

The Department of Water and Environmental Regulation (DWER) is established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V, Division 3 of the *Environmental Protection Act 1986* (WA) (EP Act). The Department also monitors and audits compliance with licences and works approvals, takes enforcement action and develops and implements licensing and industry regulation policy.

## Works Approval

Section 52 of the EP Act provides that an occupier of any premises commits an offence if any work is undertaken on, or in relation to, the premises which causes the premises to become, or to become capable of being, Prescribed Premises, except in accordance with a works approval.

Section 56 of the EP Act provides that an occupier of Prescribed Premises commits an offence if Emissions are caused or increased or permitted to be caused or increased, or Waste, noise, odour or electromagnetic radiation is altered or permitted to be altered from Prescribed Premises, except in accordance with a works approval or licence.

Categories of Prescribed Premises are defined in Schedule 1 of the *Environment Protection Regulations 1987* (WA) (EP Regulations).

This Works Approval does not authorise any activity which may be a breach of the requirements of another statutory authority including, but not limited to, the following:

- conditions imposed by the Minister for Environment under Part IV of the EP Act;
- conditions imposed by DWER for the clearing of native vegetation under Part V, Division 2 of the EP Act;
- any requirements under the Waste Avoidance and Resource Recovery Act 2007;
- any requirements under the *Environmental Protection (Controlled Waste) Regulations 2004*; and
- any other requirements specified through State legislation.

It is the responsibility of the Works Approval Holder to ensure that any action or activity referred to in this Works Approval is permitted by, and is carried out in compliance with, statutory requirements.

The Works Approval Holder must comply with the Works Approval. Contravening a Works Approval Condition is an offence under s.55 of the EP Act.

Responsibilities of Works Approval Holder

Separate to the requirements of this Works Approval, general obligations of Works Approval Holders are set out in the EP Act and the regulations made under the EP Act. For example, the Works Approval Holder must comply with the following provisions of the EP Act:

• the duties of an occupier under s.61; and

 restrictions on making certain changes to Prescribed Premises unless the changes are in accordance with a Works Approval, Licence, closure notice or environmental protection notice (s.53).

Strict penalties apply for offences under the EP Act.

### Reporting of incidents

The Works Approval Holder has a duty to report to the Department all Discharges of Waste that have caused or are likely to cause Pollution, Material Environmental Harm or Serious Environmental Harm, in accordance with s.72 of the EP Act.

## Offences and defences

The EP Act and its regulations set out a number of offences including:

- Offence of emitting an Unreasonable Emission from any Premises under s.49.
- Offence of causing Pollution under s.49.
- Offence of dumping Waste under s.49A.
- Offence of discharging Waste in circumstances likely to cause Pollution under s.50.
- Offence of causing Serious Environmental Harm (s.50A) or Material Environmental Harm (s.50B).
- Offence of causing Emissions which do not comply with prescribed standards (s.51).
- Offences relating to Emissions or Discharges under regulations prescribed under the EP Act, including materials discharged under the *Environmental Protection* (Unauthorised Discharges) Regulations 2004 (WA).
- Offences relating to noise under the *Environmental Protection (Noise) Regulations* 1997 (WA).

Section 53 of the EP Act provides that a Works Approval Holder commits an offence if Emissions are caused, or altered, from a Prescribed Premises unless done in accordance with a Works Approval, Licence or the requirements of a closure notice or an environmental protection notice.

Defences to certain offences may be available to a Works Approval Holder and these are set out in the EP Act. Section 74A(b)(iii) provides that it is a defence to an offence for causing Pollution, in respect of an Emission, or for causing Serious Environmental Harm or Material Environmental Harm, or for discharging or abandoning Waste in water to which the public has access, if the Works Approval Holder can prove that an Emission or Discharge occurred in accordance with a Works Approval.

This Works Approval specifies the Emissions and Discharges, and the limits and Conditions which must be satisfied in respect of specified Emissions and Discharges, in order for the defence to offence provision to be available.

### Authorised Emissions and Discharges

The specified and general Emissions and Discharges from the Works authorised through this Works Approval are authorised to be conducted in accordance with the Conditions of this Works Approval.

### Amendment of Works Approval

The Works Approval Holder can apply to amend the Conditions of this Works Approval under s.59 of the EP Act. An application form for this purpose is available from DWER.

The CEO may also amend the Conditions of this Works Approval at any time on the initiative

of the CEO without an application being made.

**Duration of Works Approval** 

The Works Approval will remain in force for the duration set out on the first page of this Works Approval or until it is surrendered, suspended or revoked in accordance with s.59A of the EP Act.

Suspension or revocation

The CEO may suspend or revoke this Works Approval in accordance with s.59A of the EP Act.

# **Definitions and interpretation**

# **Definitions**

In this Works Approval, the terms in Table 1 have the meanings defined.

## Table 1: Definitions

Term	Definition	
Books	has the same meaning given to that term under the EP Act.	
CBR	California Bearing Ratio	
CEO	means Chief Executive Officer.	
	CEO for the purposes of notification means:	
	Director General Department administering the <i>Environmental Protection</i> <i>Act 1986</i> Locked Bag 10 Joondalup DC WA 6919	
	info@dwer.wa.gov.au	
Condition	means a condition to which this Works Approval is subject under s.62 of the EP Act.	
Controlled waste	has the definition in <i>Environmental Protection (Controlled Waste) Regulations</i> 2004.	
Contaminated solid waste	has the meaning defined in the Landfill Definitions.	
Dangerous goods	has the meaning defined in the <i>Dangerous Goods Safety</i> (Storage and Handling of Non-Explosives) Regulations 2007.	
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.	
Department Request	means a request for Books or other sources of information to be produced, made by an Inspector or the CEO to the Works Approval Holder in writing and sent to the Works Approval's address for notifications, as described at the front of this Works Approval, in relation to:	
	(a) compliance with the EP Act or this Works Approval;	
	(b) the Books or other sources of information maintained in accordance with this Works Approval; or	
	(c) the Books or other sources of information relating to Emissions from the Premises.	

Term	Definition	
Discharge	has the same meaning given to that term under the EP Act.	
DWER	Department of Water and Environmental Regulation	
Emission	has the same meaning given to that term under the EP Act.	
Environmental Harm	has the same meaning given to that term under the EP Act.	
EP Act	means the Environmental Protection Act 1986 (WA).	
EP Regulations	means the Environmental Protection Regulations 1987 (WA).	
Facility	refers to the Sandy Ridge Facility	
Freeboard	means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point.	
Hazardous waste	has the meaning defined in the Landfill Definitions.	
HDPE	High Density Polyethylene	
Impervious	means a material with a coefficient of permeability <1 x 10 <sup>-9</sup> metres per second	
Implementation Agreement or Decision	has the same meaning given to that term under the EP Act.	
Inspector	means an inspector appointed by the CEO in accordance with s.88 of the EP Act.	
Intractable waste	has the same meaning given in the Landfill Definitions	
Landfill Definitions	means the document titled 'Landfill Waste Classification and Waste Definitions 1996' published by the CEO of DWER and as amended from time to time.	
LLW	Low Level Waste	
LSA	Low Specific Activity	
Material Environmental Harm	has the same meaning given to that term under the EP Act.	
MMDD	Maximum Modified Dry Density	
NEPM	National Environmental Protection Measure	
NORM	Naturally Occurring Radioactive Material	
PFAS	Per- and polyfluoroalkyl substances	

Term	Definition	
Pollution	has the same meaning given to that term under the EP Act.	
Premises	refers to the premises to which this Works Approval applies, as specified at the front of this Works Approval and as shown on the map in Schedule 1 to this Works Approval.	
Prescribed Premises	has the same meaning given to that term under the EP Act.	
Putrescible waste	has the meaning defined in the Landfill Definitions.	
Quarantined storage area or containment	means a hardstand storage area or sealed-bottomed container that is separate and isolated from authorized waste disposal areas and is capable of containing all non-conforming waste and its constituents, these areas must be clearly marked and their access restricted to authorised personnel.	
Radiological Council	means the independent statutory authority appointed under the Radiation Safety Act in Western Australia	
RMP	means the Radiation Management Plan "Sandy Ridge Facility, Radiation Management Plan – Temporary Surface Storage of Low Level Radioactive Waste 2019 - #DOCID-88105952- 1168" prepared by Tellus Holdings Ltd	
Serious Environmental Harm	has the same meaning given to that term under the EP Act.	
	means a person who:	
	<ul> <li>a) holds a Bachelor of Engineering recognised by the Institute of Engineers; and</li> </ul>	
Qualified Geotechnical Engineer	<ul> <li>b) has a minimum of five years of experience working in a supervisory area of geotechnical engineering; and</li> </ul>	
	<ul> <li>c) Is employed by an independent third party external to the Works Approval Holder's business;</li> </ul>	
	or is otherwise approved in writing by the CEO to act in this capacity.	
	means a person who:	
Qualified Mechanical Engineer	<ul> <li>a) holds a Bachelor of Engineering recognised by the Institute of Engineers; and</li> </ul>	
	<ul> <li>b) has a minimum of five years of experience working in a supervisory area of mechanical or structural engineering; and</li> </ul>	
	<ul> <li>c) Is employed by an independent third party external to the Works Approval Holder's business;</li> </ul>	
	or is otherwise approved in writing by the CEO to act in this capacity.	

Term	Definition	
SCO	Surface Contaminated Objects	
Unreasonable Emission	has the same meaning given to that term under the EP Act.	
Waste	has the same meaning given to that term under the EP Act.	
Waste code	means the waste code assigned to a type of controlled waste for purposes of waste tracking and reporting as specified in DWER's 'Controlled Waste Category List; (July 2014), as amended from time to time.	
Works	refers to the Works described in Schedule 2, at the locations shown in Schedule 1 of this Works Approval to be carried out at the Premises, subject to the Conditions.	
Works Approval	refers to this document, which evidences the grant of the works approval by the CEO under s.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.	

# Interpretation

In this Works Approval:

- (a) the words 'including', 'includes' and 'include' will be read as if followed by the words 'without limitation';
- (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 means the version of the standard, guideline or code of practice in force at the time of granting of this Works Approval and includes any amendments to the standard, guideline or code of practice which may occur from time to time during the course of the Works Approval; and
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act.

# Conditions

# Infrastructure and equipment

- **1.** The Works Approval Holder must install and undertake the Works for the infrastructure and equipment:
  - (a) specified in Column 1;
  - (b) to the requirements specified in Column 2; and
  - (c) at the location specified in Column 3

of Table 2.

- 2. The Works Approval Holder must not depart from the requirements specified in Column 2 of Table 2 except:
  - (a) where such departure does not increase risks to public health, public amenity or the environment; and
  - (b) all other Conditions in this Works Approval are still satisfied.
- Subject to Condition 4, within 30 days of the completion of the Works specified in Column 1 of Table 2, the Works Approval Holder must provide to the CEO a report from a Qualified Geotechnical Engineer, or Qualified Mechanical Engineer, as the case requires, confirming each item of infrastructure or component of infrastructure specified in Column 1 of Table 2 below has been constructed with no material defects and to the requirements specified in Column 2 of Table 2.
- **4**. Where a departure from the requirements specified in Column 2 of Table 2 occurs and is of a type allowed by Condition 2, the Works Approval Holder must provide to the CEO a description of, and explanation for, the departure along with the certification required by Condition 2(b).

Column 1	Column 2	Column 3
Infrastructure/Equipment	Requirements (design and construction)	Site plan reference
Waste Storage - Mixed Store	<ul> <li>Located within the Infrastructure Area as depicted in Figure 3 in Schedule 1</li> <li>Consistent with the proposed construction detail and design as depicted in Figures 4 and 5 in Schedule 2</li> <li>Constructed in accordance with the "Tellus Holdings Ltd, Sandy Ridge Project, Quality Management Plan, TSR-5-SR- 08500-QA-PLN-001, GR Engineering Services" and the "Sandy Ridge Project – EPC Works Specification, TSR-5- PO-07400-EG-SPC-0001,</li> </ul>	as depicted as infrastructure items 14 and 15, shown in Figure 3 in Schedule 1

### Table 2: Infrastructure and equipment requirements table

Column 1	Column 2	Column 3
Infrastructure/Equipment	Requirements (design and construction)	Site plan reference
	<ul> <li>Tellus Holdings Ltd"</li> <li>Hardstand constructed of 80 mm block paving, laid over a minimum 25 mm bedding sand, laid over 200 mm cement modified silcrete/laterite (minimum soaked CBR of 80%), laid over 200 mm cement stabilised in- situ materials, laid over compacted subgrade (minimum CBR 15%)</li> <li>Block pavers dry swept with bentonite clay</li> <li>Stormwater within Mixed Store area to drain to the HDPE lined Yard Containment Pond (as approved under W6243/2019/1)</li> </ul>	
Waste Storage – East Yard	<ul> <li>Located within the Infrastructure Area as depicted in Figure 3 in Schedule 1</li> <li>Consistent with the proposed construction detail and design as depicted in Figures 4 and 5 in Schedule 2</li> </ul>	as depicted as infrastructure item 11, shown in Figure 3 in Schedule 1
	<ul> <li>Constructed in accordance with the "Tellus Holdings Ltd, Sandy Ridge Project, Quality Management Plan, TSR-5-SR- 08500-QA-PLN-001, GR Engineering Services" and the "Sandy Ridge Project – EPC Works Specification, TSR-5- PO-07400-EG-SPC-0001, Tellus Holdings Ltd"</li> </ul>	
	<ul> <li>Hardstand constructed of 250 mm select fill compacted to 95% MMDD, laid over compacted subgrade (minimum CBR 15%)</li> <li>Stormwater diverted to the</li> </ul>	
	north Stormwater Retention Pond (as approved under W6305/2019/1)	

Column 1	Column 2	Column 3
Infrastructure/Equipment	Requirements (design and construction)	Site plan reference
Non-Radioactive Waste Inspection and Unloading Warehouse	<ul> <li>Located within the Infrastructure Area as depicted in Figure 3 in Schedule 1</li> <li>Consistent with the proposed construction detail and design as depicted in Figure 6 in Schedule 2</li> <li>Constructed in accordance with the "Tellus Holdings Ltd, Sandy Ridge Project, Quality Management Plan, TSR-5-SR- 08500-QA-PLN-001, GR Engineering Services" and the "Sandy Ridge Project – EPC Works Specification, TSR-5- PO-07400-EG-SPC-0001, Tellus Holdings Ltd"</li> <li>Warehouse constructed with concrete floor and perimeter concrete bunding</li> <li>Warehouse roofed and walled to prevent rainfall ingress</li> </ul>	as depicted as infrastructure item 16, shown in Figure 3 in Schedule 1
	<ul> <li>Warehouse drainage to include traversable blind sumps constructed of concrete</li> </ul>	
PFAS contaminated waste storage area	<ul> <li>Located within the Infrastructure Area as depicted in Figure 7 in Schedule 2</li> <li>Consistent with the proposed construction detail and design as depicted in Figure 8 in Schedule 2</li> <li>Constructed in accordance with the "Tellus Holdings Ltd, Sandy Ridge Project, Quality Management Plan, TSR-5-SR- 08500-QA-PLN-001, GR Engineering Services" and the "Sandy Ridge Project – EPC Works Specification, TSR-5- PO-07400-EG-SPC-0001, Tellus Holdings Ltd"</li> <li>Nominal area 1540 m<sup>2</sup></li> <li>Designed to store self bunded, covered and lockable</li> </ul>	as designated by the marked red box, shown in Figure 7 in Schedule 2

Column 1	Column 2	Column 3
Infrastructure/Equipment	Requirements (design and construction)	Site plan reference
	<ul> <li>Constructed with an impervious concrete hardstand material</li> <li>300 mm high perimeter bund constructed of concrete</li> <li>Constructed to retain potentially contaminated stormwater</li> <li>Impervious floor of storage area to drain to impervious floor sump (blind)</li> <li>Bund and drainage sump sufficient to retain at least 110% of largest ISO storage container</li> </ul>	
Radiation Scanner	<ul> <li>Located within the Infrastructure Area as depicted in Figure 3 in Schedule 1</li> <li>Installed at the entry of the premises to detect the presence of radiation within incoming waste containers</li> </ul>	as depicted as infrastructure item 7, shown in Figure 3 in Schedule 1
Flammable Goods Store	<ul> <li>Located within the Infrastructure Area as depicted in Figure 3 in Schedule 1</li> <li>Consistent with the proposed construction detail and design as depicted in Figure 9 in Schedule 2</li> <li>Constructed in accordance with the "Tellus Holdings Ltd, Sandy Ridge Project, Quality Management Plan, TSR-5-SR- 08500-QA-PLN-001, GR Engineering Services" and the "Sandy Ridge Project – EPC Works Specification, TSR-5- PO-07400-EG-SPC-0001, Tellus Holdings Ltd"</li> <li>Hardstand constructed of 80 mm block paving, laid over a minimum 25 mm bedding sand, laid over 200 mm cement modified silcrete/laterite (minimum soaked CBR of 80%), laid over 200mm cement stabilised in- situ materials, laid over</li> </ul>	as depicted as infrastructure item 2, shown in Figure 3 in Schedule 1

Column 1	Column 2	Column 3
Infrastructure/Equipment	Requirements (design and construction)	Site plan reference
	<ul> <li>compacted subgrade (minimum CBR 15%)</li> <li>Block pavers dry swept with bentonite clay</li> <li>300 mm high perimeter bund constructed of concrete</li> <li>Hardstand drainage to include blind sumps constructed of concrete</li> <li>Capable of retaining 1:100 year, 72 hour rainfall event</li> </ul>	
Workshop and Laydown Yard	<ul> <li>Located within the Infrastructure Area as depicted in Figure 3 in Schedule 1</li> </ul>	as depicted as infrastructure item 23, shown in Figure 3 in Schedule 1
Low Level Radiation Waste Warehouse/Liquid Waste Unloading Area	<ul> <li>Located within the Infrastructure Area as depicted in Figure 3 in Schedule 1</li> <li>Consistent with the proposed construction detail and design as depicted in Figure 10 in Schedule 2</li> <li>Constructed in accordance with the "Tellus Holdings Ltd, Sandy Ridge Project, Quality Management Plan, TSR-5-SR- 08500-QA-PLN-001, GR Engineering Services" and the "Sandy Ridge Project – EPC Works Specification, TSR-5- PO-07400-EG-SPC-0001, Tellus Holdings Ltd"</li> <li>Warehouse roofed and walled to prevent rainfall ingress</li> <li>Warehouse constructed with concrete floor and perimeter concrete bunding</li> <li>Bund and drainage sufficient to retain at least 110% of largest ISO storage container</li> <li>Concrete slab to drain to concrete floor sump (blind)</li> <li>Piping and pumping infrastructure for the transfer of liquid wastes to the Waste</li> </ul>	as depicted as infrastructure item 21, shown in Figure 3 in Schedule 1

Column 2	Column 3
Requirements (design and construction)	Site plan reference
Immobilisation Plant	
<ul> <li>Located within the Infrastructure Area as depicted in Figure 3 in Schedule 1</li> <li>Consistent with the proposed construction detail and design as depicted in Figures 4 and 5 in Schedule 2</li> </ul>	as depicted as infrastructure item 24, shown in Figure 3 in Schedule 1
<ul> <li>Constructed in accordance with the "Tellus Holdings Ltd, Sandy Ridge Project, Quality Management Plan, TSR-5-SR- 08500-QA-PLN-001, GR Engineering Services" and the "Sandy Ridge Project – EPC Works Specification, TSR-5- PO-07400-EG-SPC-0001, Tellus Holdings Ltd"</li> </ul>	
<ul> <li>Storage for approximately 40 containers or International Standards Organisation (ISO) liquid containers double stacked</li> </ul>	
<ul> <li>Hardstand constructed of 80 mm block paving, laid over a minimum 25 mm bedding sand, laid over 200 mm cement modified silcrete/laterite (minimum soaked CBR of 80%), laid over 200mm cement stabilised in- situ materials, laid over compacted subgrade (minimum CBR 15%)</li> </ul>	
Hardstand drainage to include blind sumps constructed of concrete	
<ul> <li>Capable of retaining 1:100 year, 72 hour rainfall event</li> </ul>	
<ul> <li>Located within the Infrastructure Area as depicted in Figure 3 in Schedule 1</li> <li>Consistent with the proposed construction detail and design as depicted in Figure 11 in</li> </ul>	as depicted as infrastructure items 21, 22, 25 and 26, shown in Figure 3 in Schedule 1
	Requirements (design and construction)         Immobilisation Plant         • Located within the Infrastructure Area as depicted in Figure 3 in Schedule 1         • Consistent with the proposed construction detail and design as depicted in Figures 4 and 5 in Schedule 2         • Constructed in accordance with the "Tellus Holdings Ltd, Sandy Ridge Project, Quality Management Plan, TSR-5-SR-08500-QA-PLN-001, GR Engineering Services" and the "Sandy Ridge Project – EPC Works Specification, TSR-5-PO-07400-EG-SPC-0001, Tellus Holdings Ltd"         • Storage for approximately 40 containers or International Standards Organisation (ISO) liquid containers double stacked         • Hardstand constructed of 80 mm block paving, laid over a minimum 25 mm bedding sand, laid over 200 mm cement modified silcrete/laterite (minimum soaked CBR of 80%), laid over 200mm cement stabilised insitu materials, laid over compacted subgrade (minimum CBR 15%)         • Hardstand drainage to include blind sumps constructed of concrete         • Capable of retaining 1:100 year, 72 hour rainfall event         • Located within the Infrastructure Area as depicted in Figure 3 in Schedule 1

Column 1	Column 2	Column 3
Infrastructure/Equipment	Requirements (design and construction)	Site plan reference
	<ul> <li>Constructed in accordance with the "Tellus Holdings Ltd, Sandy Ridge Project, Quality Management Plan, TSR-5-SR- 08500-QA-PLN-001, GR Engineering Services" and the "Sandy Ridge Project – EPC Works Specification, TSR-5- PO-07400-EG-SPC-0001, Tellus Holdings Ltd"</li> <li>Constructed within a bunded concrete hardstand</li> <li>Planetary mixer enclosed and</li> </ul>	
	installed within the bunded concrete hardstand	
	<ul> <li>Bunded concrete area sufficient to retain a 1:100 year 72 hour rainfall event</li> </ul>	
	<ul> <li>Blind sumps within concrete hardstand to contain spills</li> </ul>	
	<ul> <li>Nominal throughput 30 tonnes per hour</li> </ul>	
	<ul> <li>Automatic dosing of waste and binding additives</li> </ul>	
	<ul> <li>100 tonne bulk cement storage silo with dust collection</li> </ul>	
	Kaolin stockpile area	
	<ul> <li>Kaolin feed hopper and covered conveyors</li> </ul>	
	<ul> <li>Above ground pipework to be located within concrete bund</li> </ul>	
	<ul> <li>Dispending pumps fitted with emergency stop function</li> </ul>	
4 x Stormwater Storage Tanks	<ul> <li>Located within the Mining Area as depicted in Figure 2 in Schedule 1</li> </ul>	as depicted as "Water Storage Tanks", shown in Figure 12 in
	<ul> <li>Consistent with the proposed construction detail and design as depicted in Figures 12 and 15 in Schedule 2</li> </ul>	Schedule 2
	<ul> <li>Each tank with a capacity of 45,000 litres</li> </ul>	
	<ul> <li>Tanks to be connected in series</li> </ul>	

Column 1	Column 2	Column 3
Infrastructure/Equipment	Requirements (design and construction)	Site plan reference
	<ul> <li>Final tank in series to overflow into premises HDPE lined brine pond</li> </ul>	
Brine Pond	<ul> <li>Located within the Mining Area as depicted in Figure 2 in Schedule 1</li> <li>Consistent with the proposed construction detail and design as depicted in Figures 12 and 16 in Schedule 2</li> <li>Constructed in accordance with the "Tellus Holdings Ltd, Sandy Ridge Project, Quality Management Plan, TSR-5-SR- 08500-QA-PLN-001, GR Engineering Services" and the "Sandy Ridge Project – EPC Works Specification, TSR-5- PO-07400-EG-SPC-0001, Tellus Holdings Ltd"</li> <li>To be constructed with a 1.0 mm thick HDPE liner</li> <li>To be constructed of a capacity to contain 2000m<sup>3</sup></li> <li>Stock fence to prevent stock access</li> </ul>	as depicted as "Brine Pond", shown in Figure 2 in Schedule 1
Waste Cells, Air Domes Settlement Pond	<ul> <li>Located within the Mining Area as depicted in Figure 2 in Schedule 1</li> <li>Consistent with the proposed construction detail and design as depicted in Figure 12, 13, 14 and 17 in Schedule 2</li> <li>Constructed in accordance with the "Tellus Holdings Ltd, Sandy Ridge Project, Quality Management Plan, TSR-5-SR- 08500-QA-PLN-001, GR Engineering Services" and the "Sandy Ridge Project – EPC Works Specification, TSR-5- PO-07400-EG-SPC-0001, Tellus Holdings Ltd"</li> <li>Excavated mine cells used for waste deposition</li> <li>Nominal size 80 m x 160 m x</li> </ul>	as depicted as "Mine Pits" and "Settlement sump" shown in Figure 2 in Schedule 1

Column 1	Column 2	Column 3
Infrastructure/Equipment	Requirements (design and construction)	Site plan reference
	<ul> <li>30 m</li> <li>The bottom of the wastes cells to be constructed a minimum 5 m above the underlying unweathered granite bedrock</li> <li>Covered air dome to enclose the length and width of the</li> </ul>	
	<ul> <li>excavated waste cell</li> <li>Air dome fitted with entry and exit doorway airlock</li> <li>Surface water diversion</li> </ul>	
	<ul> <li>channels installed to divert water away from waste cells.</li> <li>Surface water diversion channels to direct surface water to settlement sump</li> </ul>	

# **Emissions**

**5.** The Works Approval Holder must not cause any Emissions from the Works authorised through this Works Approval except for specified Emissions and general Emissions described in Column 1 of Table 3, subject to the exclusions, limitations or requirements specified in Column 2, of Table 3.

## Table 3: Authorised Emissions table

Column 1	Column 2
Emission type	Exclusions/Limitations/Requirements
General Emissions (excluding Specified Emissions)	
Emissions which arise from undertaking the Works set out in Schedule 2.	Emissions excluded from General Emissions are:
	Unreasonable Emissions; or
	<ul> <li>Emissions that result in, or are likely to result in, Pollution, Material Environmental Harm or Serious Environmental Harm; or</li> </ul>
	<ul> <li>Discharges of Waste in circumstances likely to cause Pollution; or</li> </ul>
	<ul> <li>Emissions that result, or are likely to result in, the Discharge or abandonment of Waste in water to which the public has access; or</li> </ul>
	<ul> <li>Emissions or Discharges which do not comply with an Approved Policy; or</li> </ul>
	<ul> <li>Emissions or Discharges which do not comply with prescribed standard; or</li> </ul>
	<ul> <li>Emissions or Discharges which do not comply with the conditions in an Implementation Agreement or Decision; or</li> </ul>
	• Emissions or Discharges the subject of offences under regulations prescribed under the EP Act, including materials discharged under the Environmental Protection (Unauthorised Discharges) Regulations 2004.

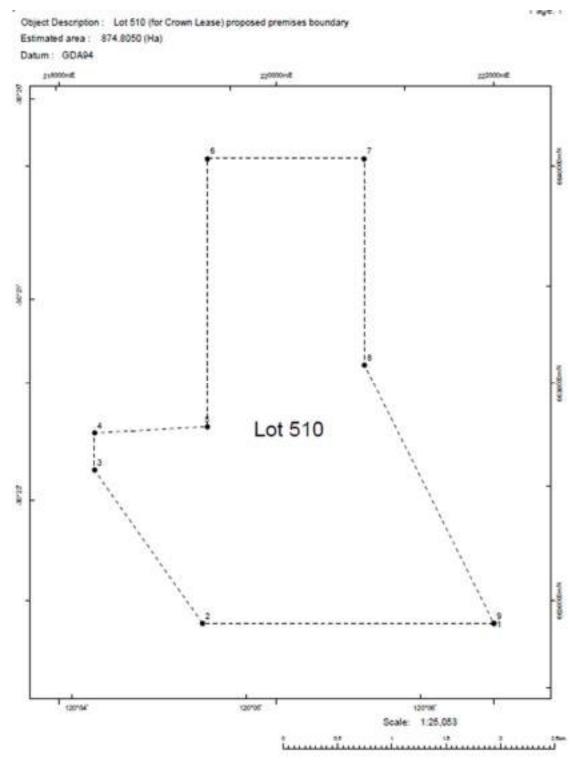
# **Record-keeping**

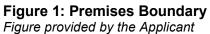
- **6**. The Works Approval Holder must maintain accurate Books including information, reports and data in relation to the Works and the Books must:
  - (a) be legible;
  - (b) if amended, be amended in such a ways that the original and subsequent amendments remain legible or are capable of retrieval;

- (c) be retained for at least 3 years from the date the Books were made;
- (d) be available to be produced to an Inspector or the CEO.
- 7. The Works Approval Holder must comply with a Department Request within 14 days from the date of the Department Request or such other period as agreed to by the Inspector or the CEO.

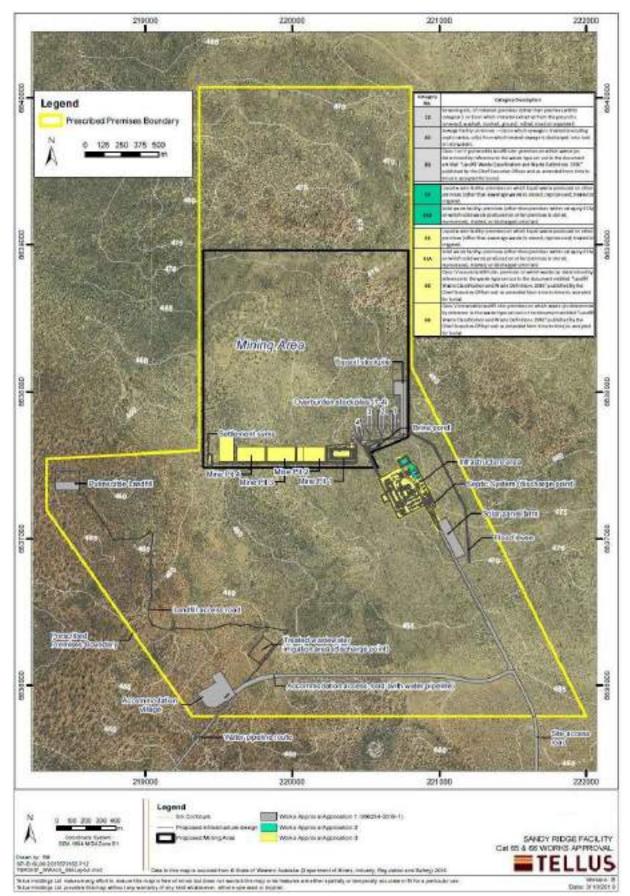
# Schedule 1: Maps

**Premises map** The Premises are shown in the map below.

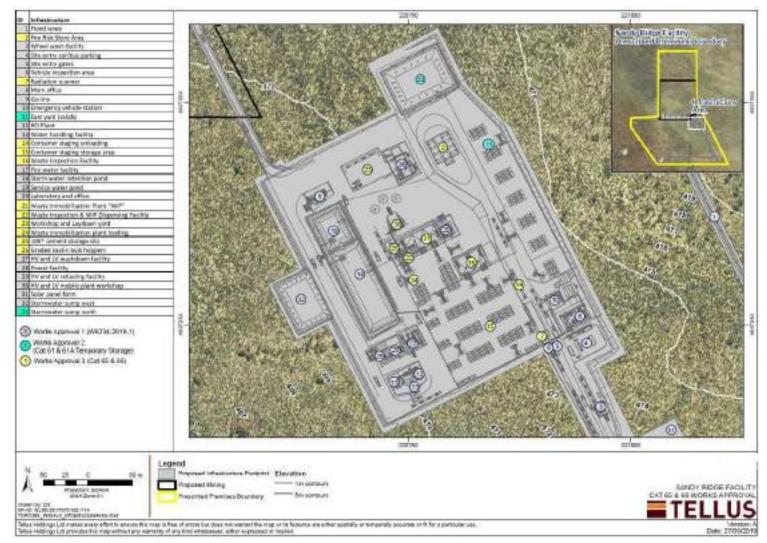




W6308/2019/1 Amendment date 27/03/2020



## Figure 2: Extended Site Layout Plan Figure provided by the Applicant



# Figure 3: Infrastructure Area

Figure provided by the Applicant

W6308/2019/1 Amendment date 27/03/2020

**Premises boundary** The Premises boundary is defined by the coordinates in Table 4.

Point	Easting	Northing
1	222001.483	6635790.945
2	219320.942	6635790.945
3	218326.700	6637198.348
4	218326.700	6637541.348
5	219367.045	6637599.746
6	219367.045	6640073.123
7	220809.210	6640073.123
8	220810.991	6638167.711
9	222001.483	6635790.945

# Table 4: Premises boundary coordinates<sup>1</sup>

Note 1: GDA 1994 MGA Zone 51

# Schedule 2: Works

At the time of assessment, Emissions and Discharges from the Works listed in Table 5 were considered in the determination of the risk and related Conditions for the Works Approval.

Works	Specifications/Drawings
	Constructed in the location as depicted in Figure 3 (Schedule 1) and detailed by the construction arrangement depicted in Figure 4 and Figure 5 (Schedule 2).
Waste Storage – Mixed Store	Constructed in accordance with the "Tellus Holdings Ltd, Sandy Ridge Project, Quality Management Plan, TSR- 5-SR-08500-QA-PLN-001, GR Engineering Services" and the "Sandy Ridge Project – EPC Works Specification, TSR-5-PO-07400-EG- SPC-0001, Tellus Holdings Ltd"
Waste Storage – East Yard	Constructed in the location as depicted in Figure 3 (Schedule 1) and detailed by the construction arrangement depicted in Figure 4 and Figure 5 (Schedule 2).
	Constructed in accordance with the "Tellus Holdings Ltd, Sandy Ridge Project, Quality Management Plan, TSR- 5-SR-08500-QA-PLN-001, GR Engineering Services" and the "Sandy Ridge Project – EPC Works Specification, TSR-5-PO-07400-EG- SPC-0001, Tellus Holdings Ltd"
Non-Radioactive Waste Inspection Warehouse	Constructed in the location as depicted in Figure 3 (Schedule 1) and detailed by the construction arrangement depicted in Figure 6 (Schedule 2).
	Constructed in accordance with the "Tellus Holdings Ltd, Sandy Ridge Project, Quality Management Plan, TSR- 5-SR-08500-QA-PLN-001, GR Engineering Services" and the "Sandy Ridge Project – EPC Works Specification, TSR-5-PO-07400-EG- SPC-0001, Tellus Holdings Ltd"

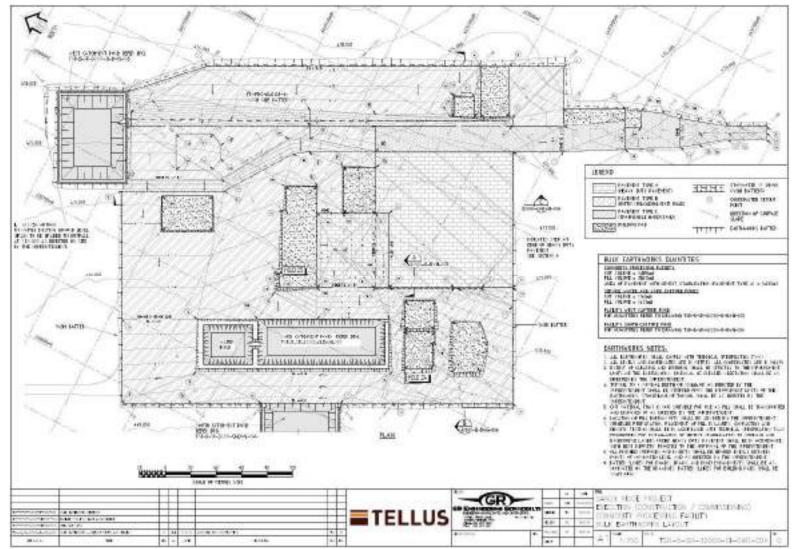
## Table 5: Authorised Works

Works	Specifications/Drawings
	Constructed in the location as depicted in Figure 7 (Schedule 2) and detailed by the construction arrangement depicted in Figure 8 (Schedule 2).
PFAS Contaminated Waste Storage Area	Constructed in accordance with the "Tellus Holdings Ltd, Sandy Ridge Project, Quality Management Plan, TSR- 5-SR-08500-QA-PLN-001, GR Engineering Services" and the "Sandy Ridge Project – EPC Works Specification, TSR-5-PO-07400-EG- SPC-0001, Tellus Holdings Ltd"
Radiation Detector	Constructed in the location as depicted in Figure 3 (Schedule 1).
	Constructed in accordance with the "Tellus Holdings Ltd, Sandy Ridge Project, Quality Management Plan, TSR- 5-SR-08500-QA-PLN-001, GR Engineering Services" and the "Sandy Ridge Project – EPC Works Specification, TSR-5-PO-07400-EG- SPC-0001, Tellus Holdings Ltd"
Flammable Goods Store	Constructed in the location as depicted in Figure 3 (Schedule 1) and detailed by the construction arrangement depicted in Figure 9 (Schedule 2).
	Constructed in accordance with the "Tellus Holdings Ltd, Sandy Ridge Project, Quality Management Plan, TSR- 5-SR-08500-QA-PLN-001, GR Engineering Services" and the "Sandy Ridge Project – EPC Works Specification, TSR-5-PO-07400-EG- SPC-0001, Tellus Holdings Ltd"
Workshop and laydown yard	Constructed in the location as depicted in Figure 3 (Schedule 1).
	Constructed in accordance with the "Tellus Holdings Ltd, Sandy Ridge Project, Quality Management Plan, TSR- 5-SR-08500-QA-PLN-001, GR Engineering Services" and the "Sandy Ridge Project – EPC Works Specification, TSR-5-PO-07400-EG- SPC-0001, Tellus Holdings Ltd"

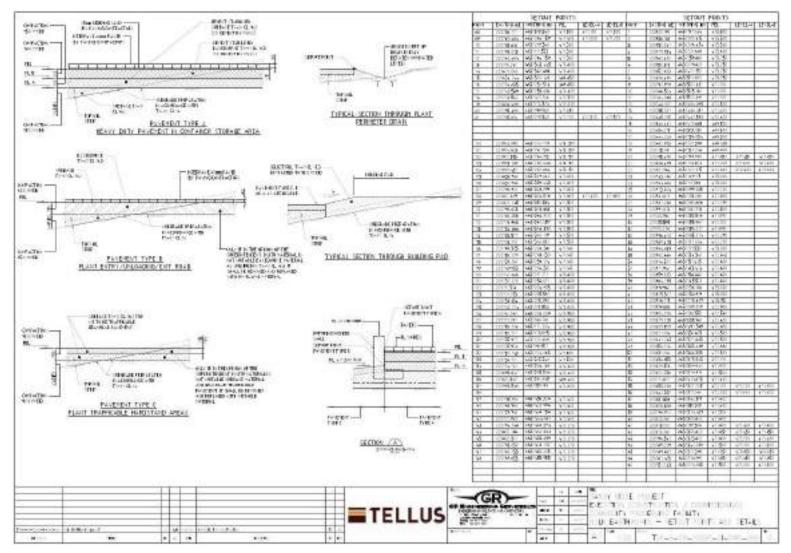
Works	Specifications/Drawings
	Constructed in the location as depicted in Figure 3 (Schedule 1) and detailed by the construction arrangement depicted in Figure 10 (Schedule 2).
Low Level Radiation Waste Warehouse/Liquid Waste Unloading Area	Constructed in accordance with the "Tellus Holdings Ltd, Sandy Ridge Project, Quality Management Plan, TSR- 5-SR-08500-QA-PLN-001, GR Engineering Services" and the "Sandy Ridge Project – EPC Works Specification, TSR-5-PO-07400-EG- SPC-0001, Tellus Holdings Ltd"
Low Level Radiation Waste Storage Yard	Constructed in the location as depicted in Figure 3 (Schedule 1) and detailed by the construction arrangement depicted in Figure 4 and Figure 5 (Schedule 2).
	Constructed in accordance with the "Tellus Holdings Ltd, Sandy Ridge Project, Quality Management Plan, TSR- 5-SR-08500-QA-PLN-001, GR Engineering Services" and the "Sandy Ridge Project – EPC Works Specification, TSR-5-PO-07400-EG- SPC-0001, Tellus Holdings Ltd"
Waste Immobilisation Plant	Constructed in the location as depicted in Figure 3 (Schedule 1) and detailed by the construction arrangement depicted in Figure 11 (Schedule 2).
	Constructed in accordance with the "Tellus Holdings Ltd, Sandy Ridge Project, Quality Management Plan, TSR- 5-SR-08500-QA-PLN-001, GR Engineering Services" and the "Sandy Ridge Project – EPC Works Specification, TSR-5-PO-07400-EG- SPC-0001, Tellus Holdings Ltd"
4 x Stormwater Storage Tanks	Constructed in the location as depicted in Figure 2 (Schedule 1) and detailed by the construction arrangement depicted in Figure 12 and 15 (Schedule 2).
	Constructed in accordance with the "Tellus Holdings Ltd, Sandy Ridge Project, Quality Management Plan, TSR- 5-SR-08500-QA-PLN-001, GR Engineering Services" and the "Sandy Ridge Project – EPC Works Specification, TSR-5-PO-07400-EG- SPC-0001, Tellus Holdings Ltd"

Works	Specifications/Drawings
	Constructed in the location as depicted in Figure 2 (Schedule 1) and detailed by the construction arrangement depicted in Figure 12 and 16 (Schedule 2).
Brine Pond	Constructed in accordance with the "Tellus Holdings Ltd, Sandy Ridge Project, Quality Management Plan, TSR- 5-SR-08500-QA-PLN-001, GR Engineering Services" and the "Sandy Ridge Project – EPC Works Specification, TSR-5-PO-07400-EG- SPC-0001, Tellus Holdings Ltd"
Waste Cells and Settlement Pond	Constructed in the location as depicted in Figure 2 (Schedule 1) and detailed by the construction arrangement depicted in Figures 12, 13, 14 and 17 (Schedule 2).
	Constructed in accordance with the "Tellus Holdings Ltd, Sandy Ridge Project, Quality Management Plan, TSR- 5-SR-08500-QA-PLN-001, GR Engineering Services" and the "Sandy Ridge Project – EPC Works Specification, TSR-5-PO-07400-EG- SPC-0001, Tellus Holdings Ltd"

**Site layout** The infrastructure and equipment are set out on the Premises in accordance with the site layout specified on the Premises map in Schedule 1.

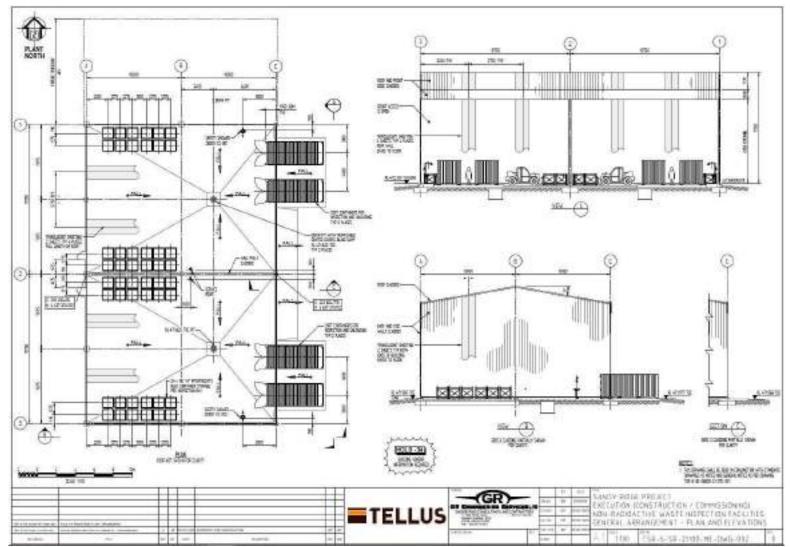


**Figure 4: Infrastructure Area General Concrete and Pavement Arrangement** *Figure provided by the Applicant* 

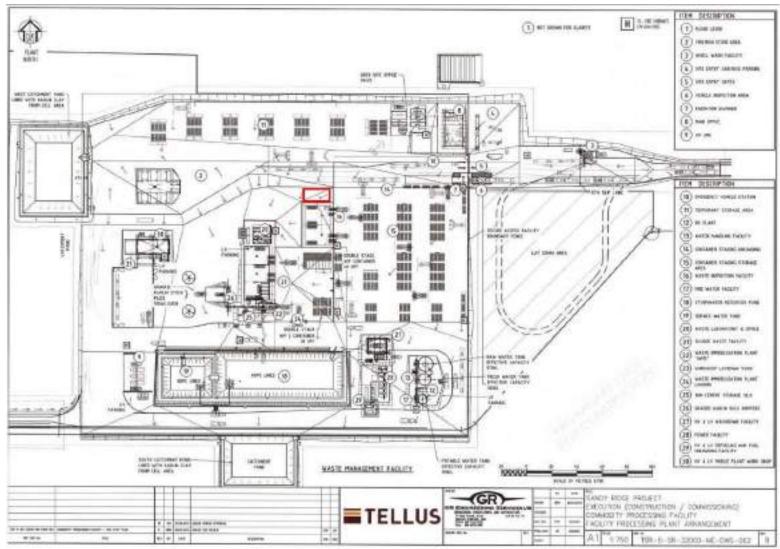


#### **Figure 5: Infrastructure area – pavement detail** *Figure provided by the Applicant*

W6308/2019/1 Amendment date 27/03/2020



**Figure 6: Construction detail – Non-Radioactive Waste Inspection Warehouse** *Figure provided by the Applicant* 



**Figure 7: Infrastructure Area – PFAS Contaminated Waste Storage Area (marked by red box)** *Figure provided by the Applicant* 

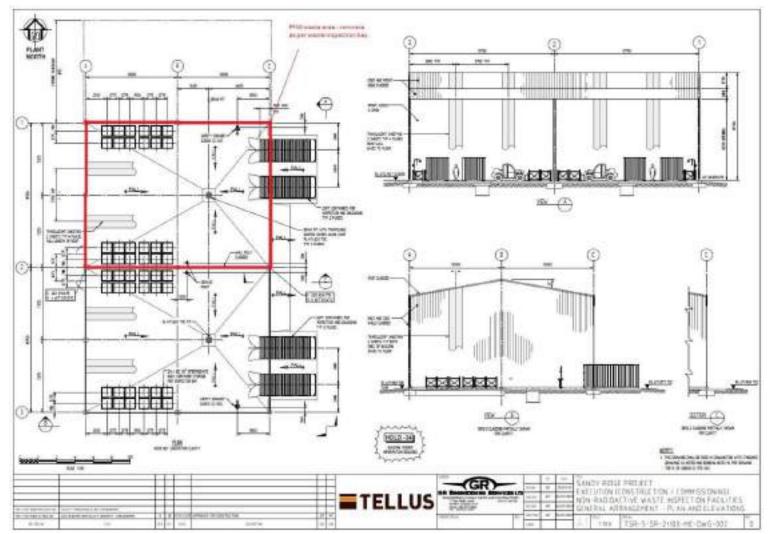
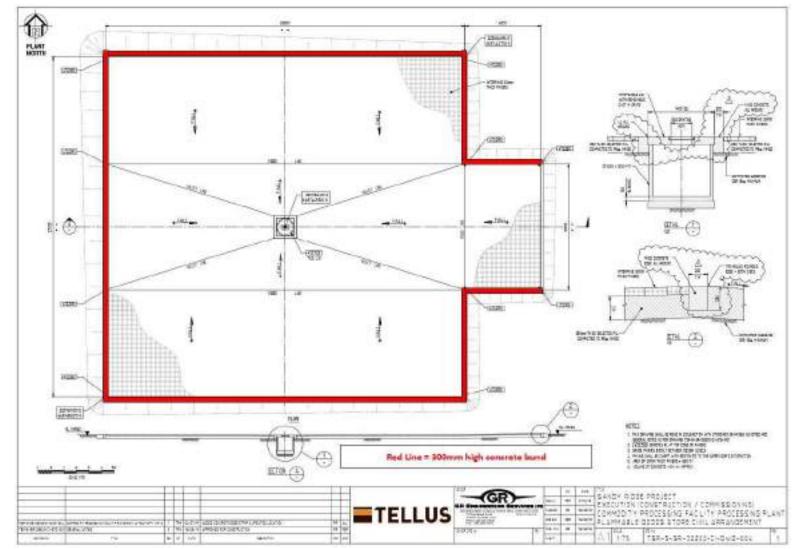
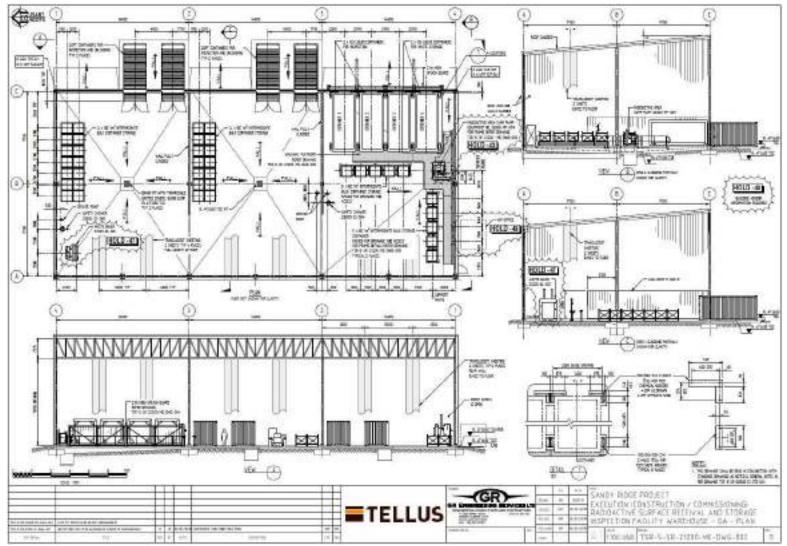


Figure 8: Construction detail – PFAS Contaminated Waste Storage Area (construction specification to match that for the Non-Radioactive Waste Inspection Warehouse, as referenced by the marked red box) *Figure provided by the Applicant* 



### **Figure 9: Construction detail – Flammable Goods Store** *Figure provided by the Applicant*

W6308/2019/1 Amendment date 27/03/2020



**Figure 10:** Construction detail – Radioactive and Liquid Waste Inspection Warehouse *Figure provided by the Applicant* 

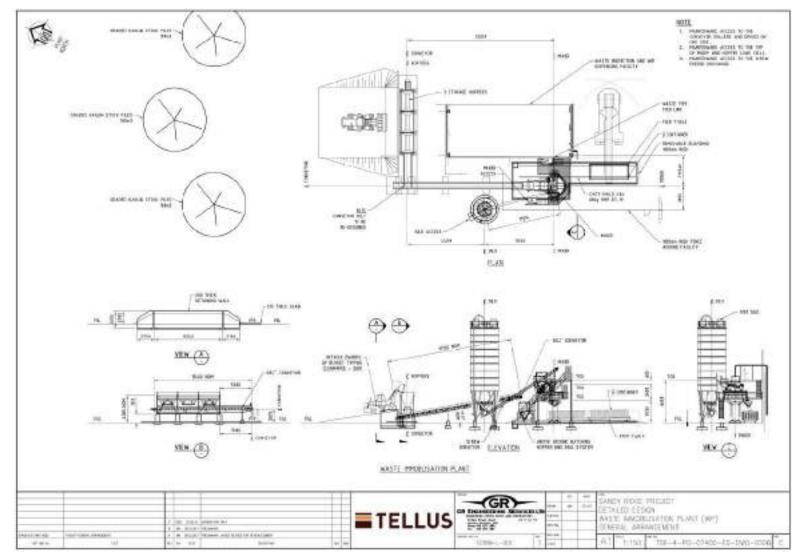
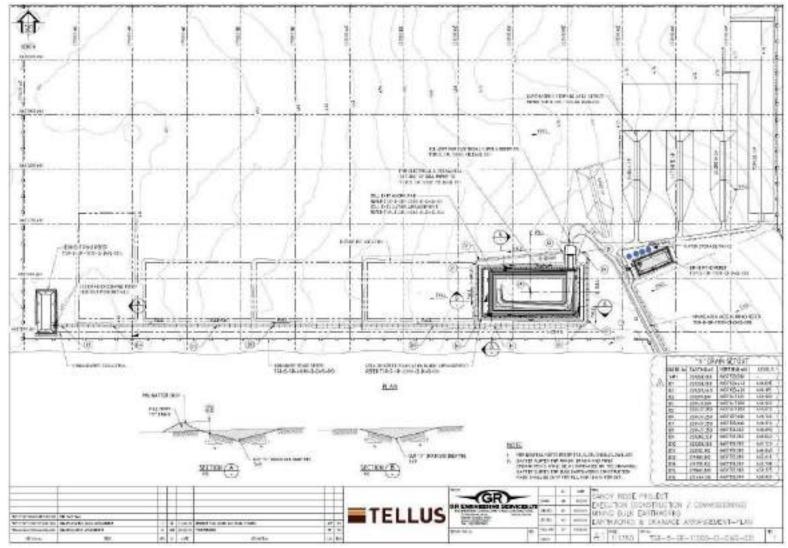
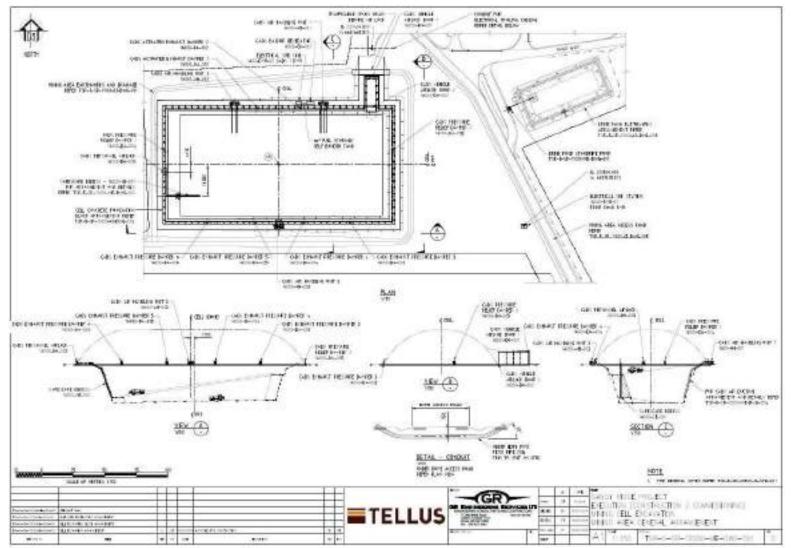


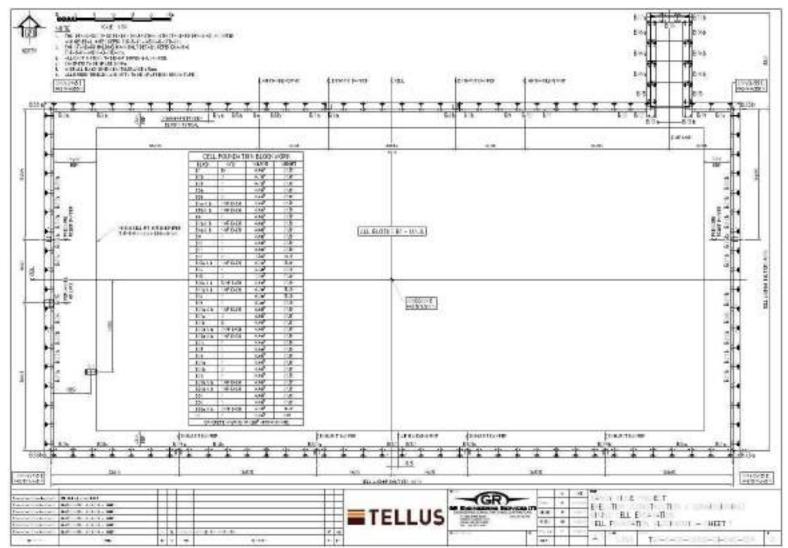
Figure 11: Construction detail – Waste Immobilisation Plant (includes raw material feed hopper and cement storage silo) Figure provided by the Applicant



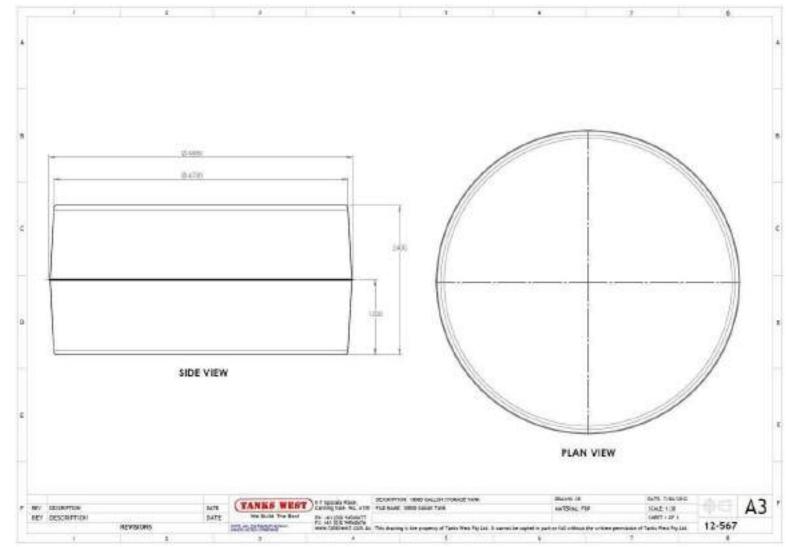
**Figure 12:** General layout – Waste cells, stormwater diversion channel, sediment pond and stormwater water storage tanks. *Figure provided by the Applicant* 



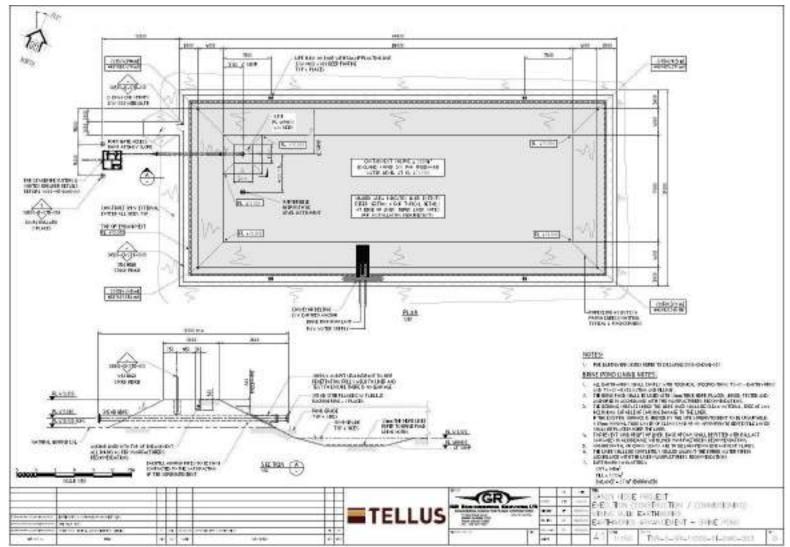




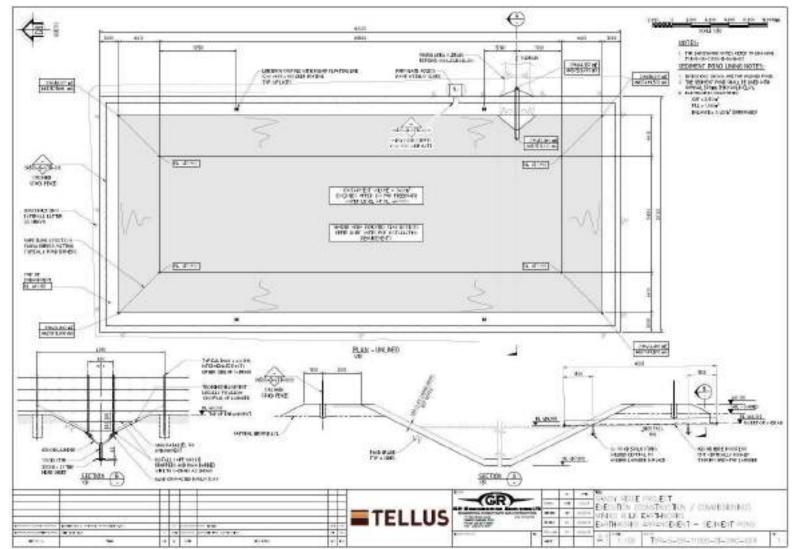
**Figure 14:** Construction Detail – Air dome footing arrangement. *Figure provided by the Applicant* 



**Figure 15: Construction Detail – Stormwater storage tanks.** *Figure provided by the Applicant* 



**Figure 16: Construction Detail – Brine Pond.** *Figure provided by the Applicant* 



**Figure 17: Construction Detail – Sediment pond.** *Figure provided by the Applicant*