

SUSTAINABLE DISTILLERY RESEARCH CENTRE

DESIGN AND ACCESS STATEMENT

01/03/2021

REV 01

GRIMSHAW

01 - INTRODUCTION

This Design and Access Statement is prepared by Grimshaw Architects for Cornish Geothermal Distillery Company Ltd in support of the outline planning application for the design of a Sustainable Distillery Research Centre on land adjacent to the United Down Deep Geothermal Power (UDDGP) project, United Downs, Cornwall. The dedicated state-of-the-art sustainable distillery research facility will be directly connected to the UK's first geothermal power plant. The Centre will develop pioneering patent-pending technologies aimed at decarbonising the distillery sector, from malting and fermentation, to distillation and maturation, using waste geothermal heat and resources. The £3.5m - £4m scheme will offer the local area a number of economic, social, environmental and sustainability orientated benefits, including the creation of 5-6 permanent full-time skilled jobs.

Why is this proposal important?

- Help Cornwall meet its Climate Emergency targets to become county carbon neutral by 2030
- Help UK meet carbon targets by 2050
- Help UK and international distillery sector decarbonise energy and heat intensive processes
- Contribution to development of green, sustainable and circular economies
- Positive showcase for 2021 G7 summit being hosted in Cornwall, focussed on tackling climate change
- Creates technology applicable for non-distillery related industry sectors
- Creates skilled research roles and opportunities
- Dedicated facility to support ongoing development from our BEIS Green Distillery funding

02 - SITE

The application site is located to the south of the United Downs Industrial Estate and at the northern edge of the former United Mines landfill site. The United Mines Landfill operated between the 1970s and 2010. The landfill has since been capped, has gas and groundwater monitoring in place, is undergoing habitat restoration, and is controlled by an Environmental Permit. It is possible to safely build the proposed development in this location without compromising the former landfill site or environmental protection.

Figure 1: Site photo



Why is it in this location?

The rationale for the application site's location is due to it being adjacent to the UDDGP project, which is located within the industrial estate and run by Geothermal Engineering Limited. The UDDGP is a project in which Cornwall Council, the European Regional Development Fund and Thrive Renewables plc have made strategic investments. The aim of the UDDGP project is to produce power and heat from the hot granite rocks deep below the ground in the area. Two deep, directional wells have successfully been drilled. The proposed Sustainable Distillery Research Centre will make use of both heat and power from the UDDGP source. In order to maximise energy efficiency, minimise energy loss and minimise capital expenditure it is necessary for the heat and power user to be as close as possible to the supply.

The application site is not within the World Heritage Site and will not impact on car racing activities at the United Downs Raceway

03 - PROPOSAL

The proposed Sustainable Distillery Research Centre will include the following:

- Demonstrator geothermal energy centre
- Demonstrator rum distillery
- Demonstrator rum cask maturation pod
- Area for warehousing, research and development, rum cask processing and filling, rum cask repair (cooperage)
- Area for research and development laboratory, office, presentation room, storage, kitchen, rest area and WC
- Service road, parking area
- Associated drainage and utilities

This project has been developed with sustainability at its heart, from the business model to its energy source and materiality. The project will help bring a new, cleaner economy to the area.

04 - ACCESS

The application site is located on land to the south of the United Downs Industrial Estate and at the northern edge of the former United Mines landfill site. It is accessed from the service road of the former landfill site, not via the industrial estate.

Figure 2: Image indicating proposed site boundary and site access

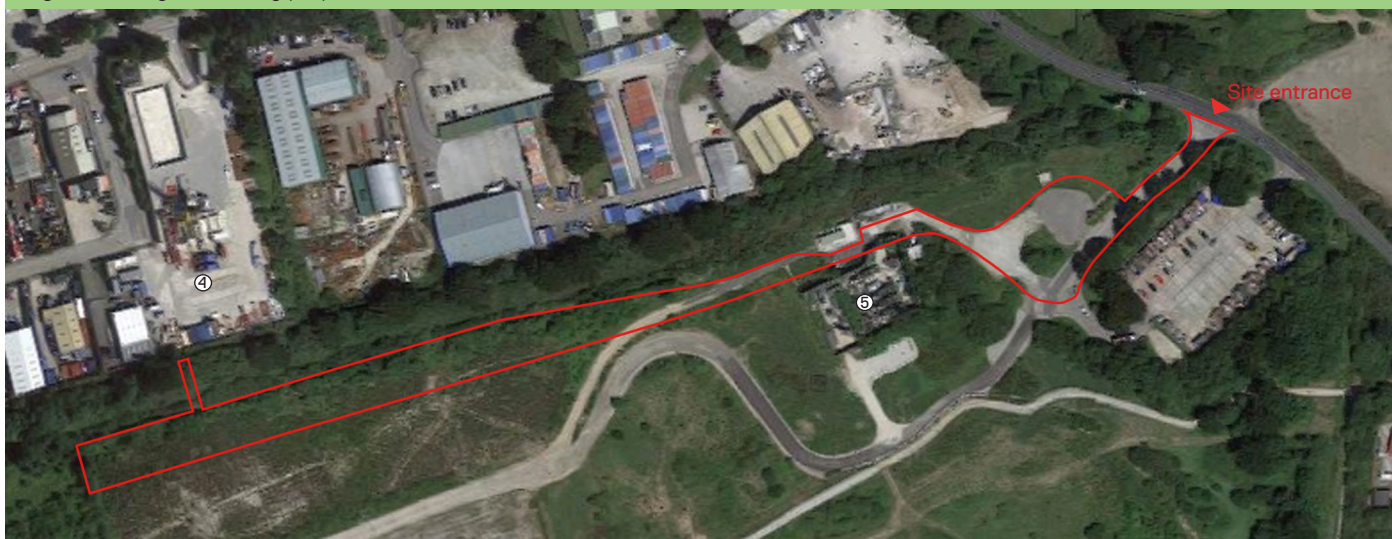
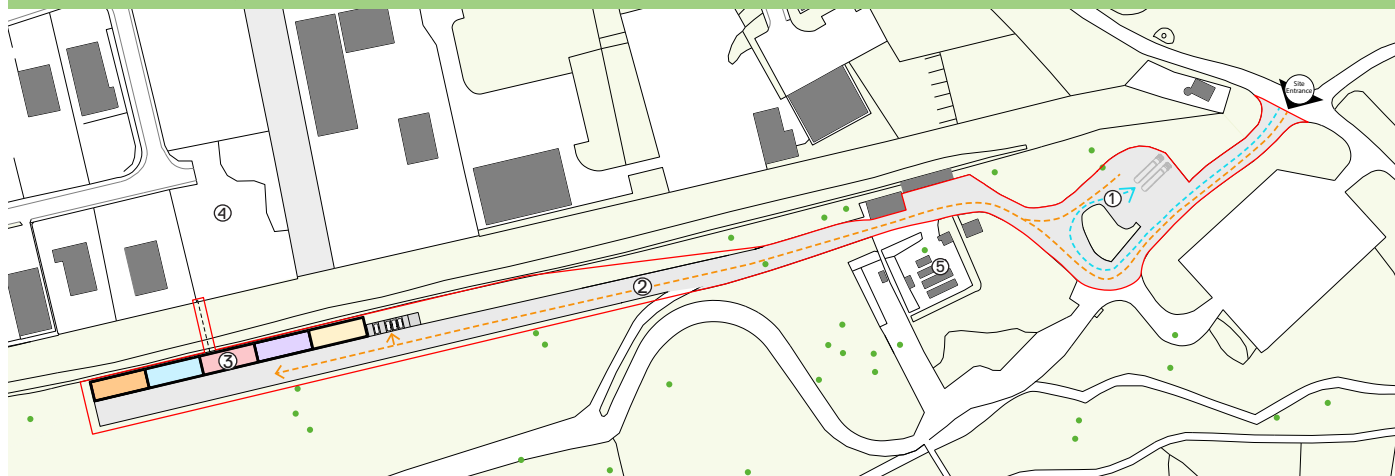


Figure 3: Access diagram



- ① Service route to parking for larger heavy goods vehicles
- ② Service and access route for smaller, light weight vehicles
- ③ Sustainable Distillery Research Facility
- ④ United Downs Deep Geothermal Power Facility
- ⑤ Existing landfill infrastructure