

Oldbury B – Site Appraisal



Fig 1: Approximate Location of Oldbury B Power Station Site.

Site Context

Oldbury B, as mentioned in the Government's new energy strategy, is a potential candidate for a new nuclear reactor site. The site is located in South Gloucestershire, BS35 1RQ (Figure 1).

The site is located on the eastern bank of the Severn Estuary, immediately north of the existing Oldbury power station. The site is made up of predominantly agricultural grassland in the form of irregular fields. There are a number of houses and farmsteads located to the north and south of the site. Access to the site is by Shepperdine Road, connecting to Oldbury in the south.

The nearest settlement to the site is the neighbouring village of Shepperdine. Other nearby settlements include the village of Oldbury-On-Severn (circa 2km south west of the site), and Oldbury Naite (circa 1.5km south of the site).

As noted, an existing power station 'Oldbury Nuclear Power Station', is located immediately adjacent to the site.

Site Constraints

Flood Risk

The site and immediate surrounding area are located within Flood Zone 3: Areas benefitting from flood defences (Figure 2). Flood Zone 3 indicates a high probability of flooding. The site is located in an area that is protected by flood defences which indicates the probability of flooding is reduced. However, this does not completely remove the potential risk.

There are no major watercourses within the site. The River Severn runs along the northern boundary of the site although, the area has been identified as being at very low risk of flooding from rivers, the sea and surface water.

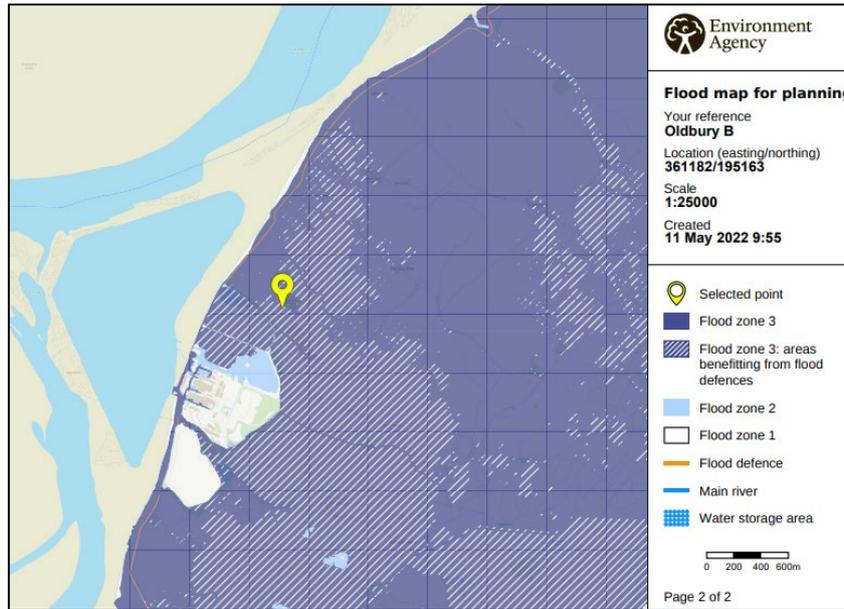


Fig 2: Oldbury B Flood Map for Planning

Sea Level Rise

From desktop review, the site has been predicted to be below annual flood level by 2030. Figure 3 taken from the Climate Central Sea Level Rise and Coastal Flood Map shows the majority of the proposed site, and the immediate surrounding area as being below the annual flood level, this therefore indicating the severity of the local rising sea level.

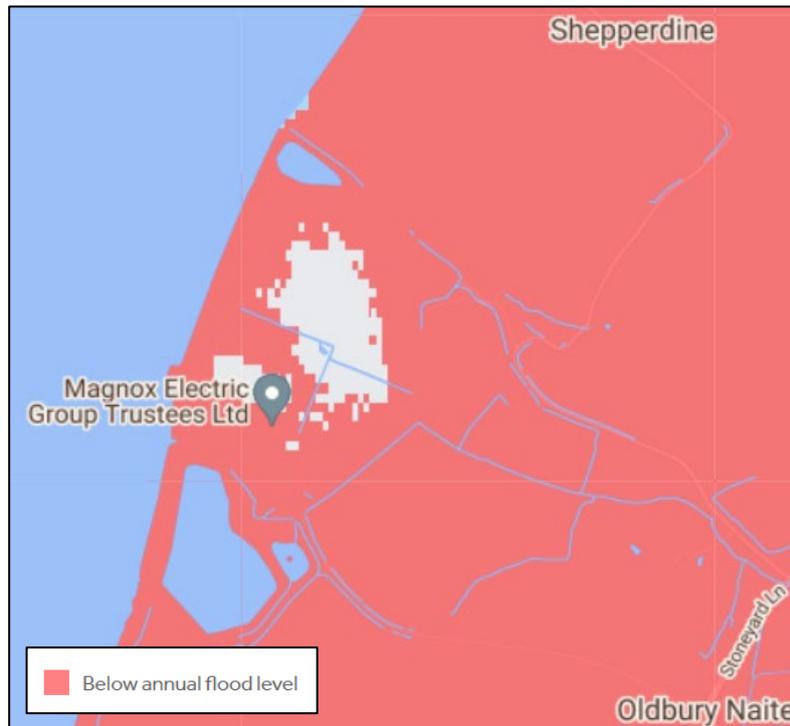


Fig 2: Oldbury B Site - Projected Annual Flood Level Map [Climate Central | Land projected to be below annual flood level in 2030](#)

Heritage

In regard to heritage assets, there are 10 listed buildings located within a 500m buffer of the site. The closest and therefore potentially impacted by the development of the Oldbury B power station are:

- Jobsgreen Farmhouse and Attached Barn (Grade II) – within the southern portion of the site
- Dairy Farmhouse (Grade II) – on the eastern border of the site.
- The Wells, and associated outbuilding (Grade II) – on the eastern border of the site.
- Shepperdine House and Cottage (Grade II) – circa 500m east from the centre of the site.

The 'Oldbury Camp: an Iron Age fort at Oldbury-on-Severn' scheduled monument is located approx. 1.9km south of the site.

Public Rights of Way (PROWs)

There is an extensive PROW network surrounding the site. Those closest to the site are:

- Footpath OOS 14/10 – along the northern site boundary and the coastline.
- Bridleway OOS 16/50 – along the southern boundary.
- Bridleway OOS 13/10 – in the north of the site.
- Footpath OOS 36/10 – south west of the site.

Landscape

The site is located in National Character Area 106: Severn and Avon Vales, a low-lying open agricultural vale landscape. The NCA states the development, of a new nuclear power station in Oldbury, would potentially impact a large area of floodplain grazing marsh surrounding the site.

The surrounding landscape is mainly classified as agricultural with surrounding settlements, however there is an existing industrial area directly adjacent to the proposed site.

The site itself is made up of undeveloped agricultural fields, lined with good quality hedgerows containing regular mature trees. The surrounding area is interspersed by small farmsteads and the villages of Shepperdine and Oldbury-on-Severn, and access to the site is gained by a number of narrow lanes.

There are a small number of scattered residential properties and farmsteads, located to the north and east of the site.

The existing Oldbury power station bounds the site to the immediate south west. This is visible in the surrounding area, interrupting the open agricultural landscape. This providing evidence that power stations can be successfully integrated into the local landscape regardless of potential visual impacts.

Ecology

A review of DEFRA Magic Map found the following designations located in the north of the proposed development site:

- Severn Estuary (Ramsar)
- Severn Estuary (Site of Special Scientific Interest) – designated for its estuarine geomorphology and habitats.
- Severn Estuary (Special Protection Area) – designed for wintering birds.
- Severn Estuary (Ramsar)

Conclusion – Key Points:

- There is evidence that nuclear power stations can be assimilated into the local landscape and surrounding area, as evidenced by the existing Oldbury power station, adjacent to the proposed site.
- The site is located within Flood Zone 3: Areas benefitting from flood defences, indicating a high probability of flooding.
- There are a number of listed building heritage assets within and close to the proposed site, alongside a scheduled monument to the south.
- The site and immediate surroundings are predicted to be below annual flood level from 2030.