Carew Quarry, Carew Newton, Kilgetty SA68 0TP – Application to Vary Abstraction Licence WA/061/006/0023 Proposal Summary

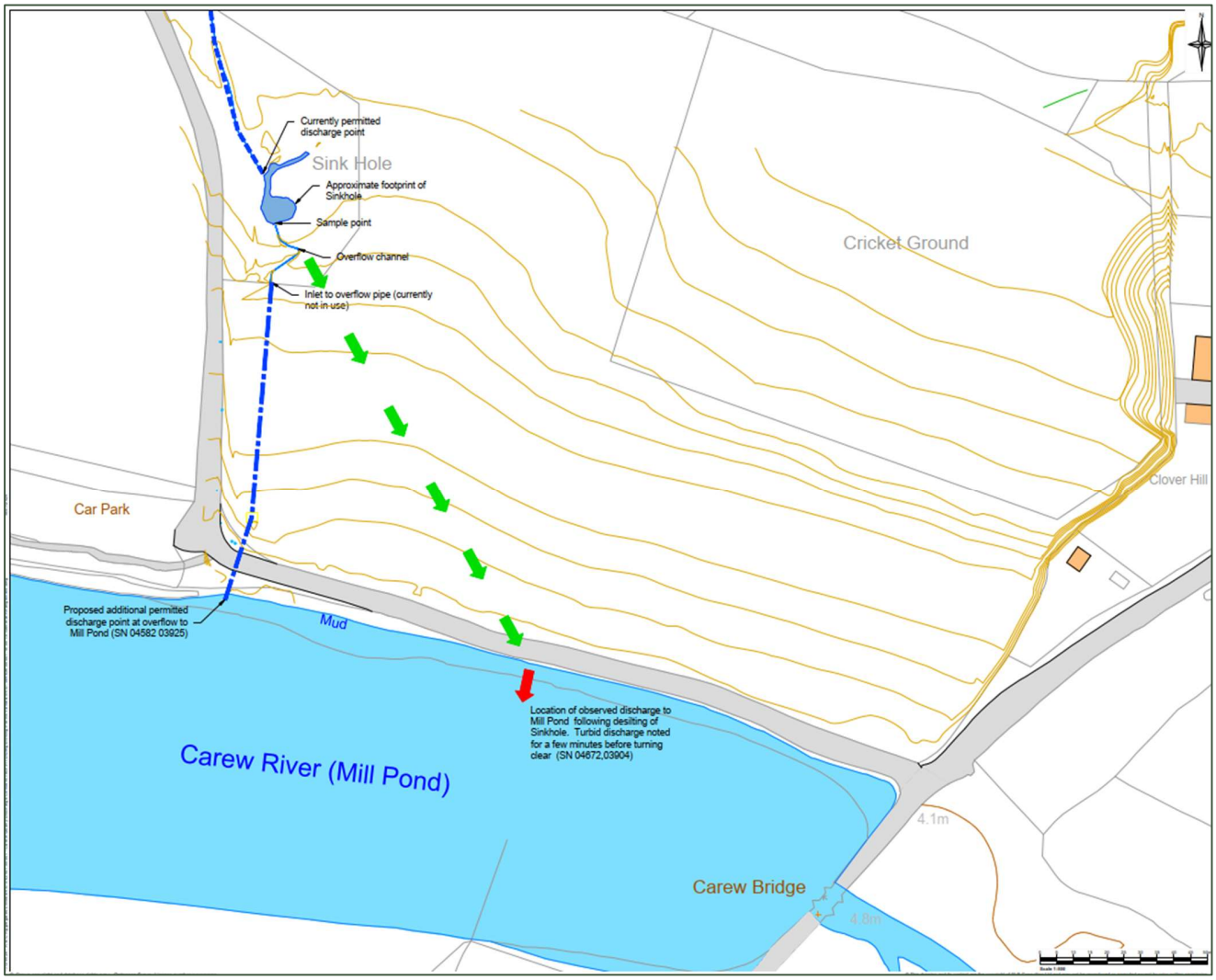
Carew Quarry is an operational quarry that has consent to quarry limestone to 30m below Ordnance Datum that requires the quarry void to be dewatered.

The operator has an environmental permit (Ref: PAN-026220) allowing for a maximum of 10,000m^3day^{-1} of dewatering water to be discharged to a naturally occurring sinkhole in the field between the Quarry and the Mill Pond. It would appear from observations that at least part of the water discharged to the sinkhole drains 'directly' to the northern bank of the Mill Pond via a fissure in the limestone. It is understood to alleviate flooding of Butts Lane from the overtopping of the sinkhole, the previous operator of the Quarry installed an overflow pipe (the Overflow) that discharges directly to the northern bank of the Mill Pond (see figure overleaf).

Since dewatering commenced in 2024, the capacity of the sinkhole has been observed to vary with seasonally, presumably in response to varying groundwater levels, from circa 4,000m^3day^{-1} and 7,500m^3day^{-1}. This has hampered the ability of the operator to dewater the quarry and to maintain levels in the quarry over the wetter winter months. It is for this reason that a permit variation is being sought to allow a direct discharge to the Mill Pond via the Overflow to supplement the capacity of the sinkhole initially during the dewatering phase and then over the winter months to maintain groundwater levels in the base of the quarry void. This application is currently being determined.

The purpose of this variation is to ensure the discharge permit and the abstraction licence have the same discharge locations. The variation required is therefore to add a discharge point on the abstraction licence at National Grid Reference SN 04582 03925 in addition to the current discharge point at SN 04595 04048.

No other changes to the current abstraction licences are proposed.


Currently permitted discharge point
Sink Hole
Approximate footprint of Sinkhole
Sample point
Overflow channel
Inlet to overflow pipe (currently not in use)
Cricket Ground
Clover Hill
Car Park
Proposed additional permitted discharge point at overflow to Mill Pond (SN 04582 03925)
Mud
Location of observed discharge to Mill Pond following desilting of Sinkhole. Turbid discharge noted for a few minutes before turning clear (SN 04672,03904)
Carew River (Mill Pond)
4.1m
Carew Bridge
4.8m