

**Further information required to support planning application and under  
Regulation 25 of the Town and Country Planning  
(Environmental Impact Assessment) Regulations 2017:**

**Proposed Sand and Gravel Extraction on  
Land at White Cross Farm, Wallingford**

**Drainage Information Requested by Oxfordshire CC**

1. Evidence that any overland flows will be treated before reaching the Thames.
2. Evidence of required permits/consents for dewatering and discharge.
3. Calculation files demonstrating that surface water flow will be maintained to Greenfield discharge rates for all relevant return periods, including a 40% Climate Change allowance.
4. A plan showing where surface water flow paths will go once works to following restoration.

**1. Evidence that any overland flows will be treated before reaching the Thames**

The proposed mineral development will incorporate a de-watering and surface water management scheme, as set out in the planning application, which will be typical of all modern sand and gravel quarry operations.

During the operational and restoration phases of the development, all surface water run-off will be collected within the quarry sump and will be pumped into the silt lagoon located adjacent to the quarry processing plant. The water will then flow into the clean water lagoon for use in the mineral washing operations.

During periods of heavy rainfall, or when the clean water lagoon fills to its freeboard level, an overflow pipe will direct water from the lagoon to the ditch that forms the northern boundary of the mineral extraction area. This ditch is primarily used for surface water run-off from the Wallingford by-pass, that flows into the River Thames about 300m to the east of the plant and lagoon area of the quarry. A permit for a discharge into the stream will be obtained from EA as part of the pre-development works.

## **2. Evidence of required permits/consents for dewatering and discharge**

Prior to any site works on the proposed quarry, an EA permit for the abstraction of groundwater will be obtained, together with an EA permit for the discharge of water from the lagoon to the surface system and also for a waste/ recovery permit to allow imported backfill to be used in the site restoration.

These permit applications will be made subject to a resolution to issue planning permission at the Planning Committee. It is normal, upon the grant of planning permission, to include/attach a “note to applicant” (an informative) making clear that such permits must be first obtained from the EA prior to the carrying out of the development, usually with reference to the EA consultation letter. However, it will not be possible to obtain a permit without first obtaining the grant of planning permission for the development itself.

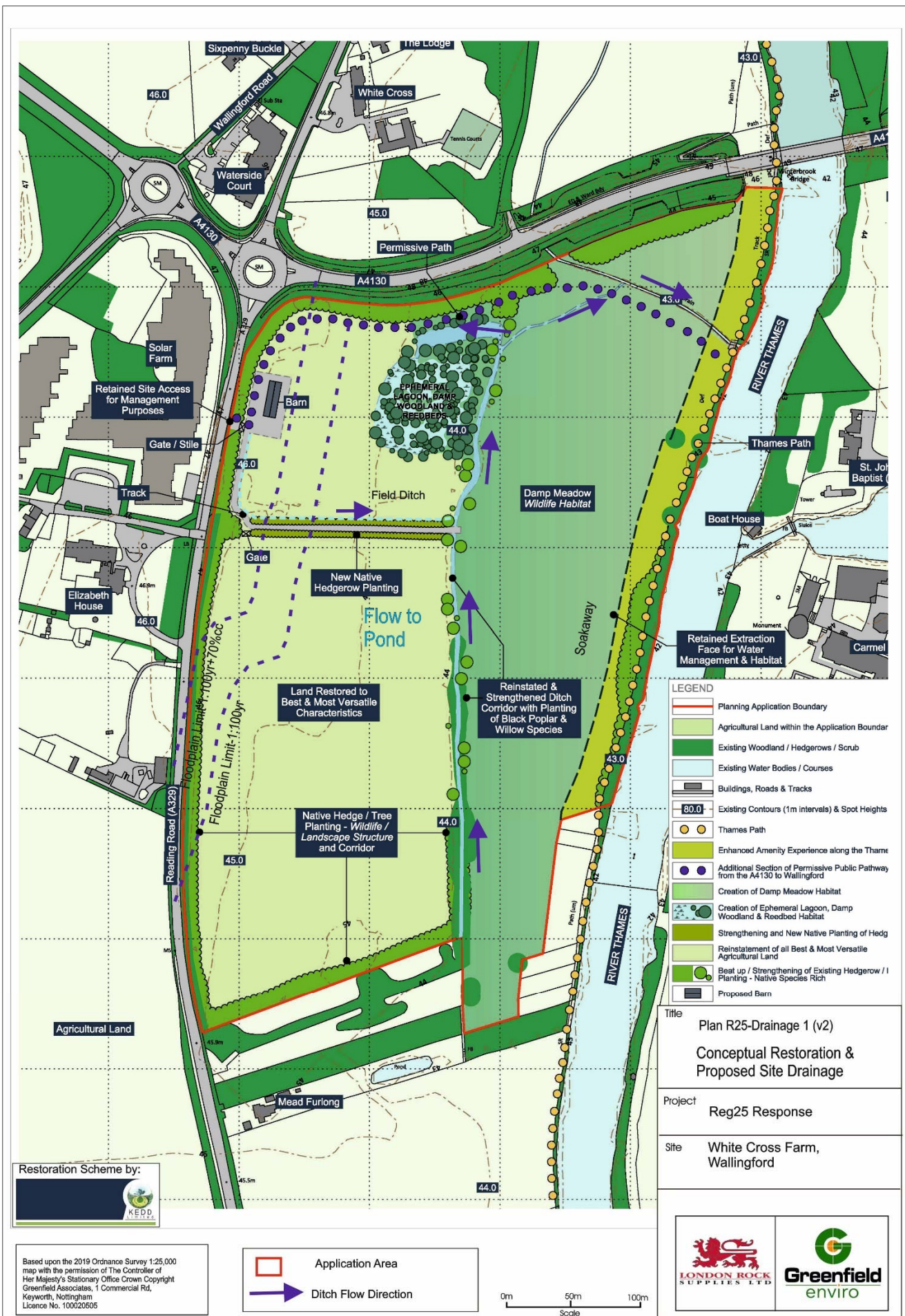
## **3. Calculation files demonstrating that surface water flow will be maintained to Greenfield discharge rates for all relevant return periods, including a 40% Climate Change allowance**

The restoration of the quarry site will be back to original levels, with the soils replaced to allow the existing mix of agricultural arable farming land and floodplain grazing grassland adjacent to the River Thames, with the additional habitats that are typical of the Thames Valley that increase the biodiversity of the site. These additional habitats include “damp meadow with shallow scrapes” together with ephemeral ponds, damp woodland and reed beds. The proposed restoration scheme is shown in Plan R25-Drainage 1 below.

The inclusion of a small lagoon/ pond in the areas of the silt lagoon will enhance the biodiversity of the scheme and also form a collection point for surface water run-off that will issue into the central (north-south trending) ditch. The southern part of this central ditch will be retained with the hedgerow and will be re-instated northwards in it’s original “pre-development” location and elevation.

The proposed restoration with the additional low-lying wetland areas, with the extended range of floodplain habitats, will increase the biodiversity of the site and also assist with the surface water drainage to reduce the discharge from the site compared with the current (pre-development) site.

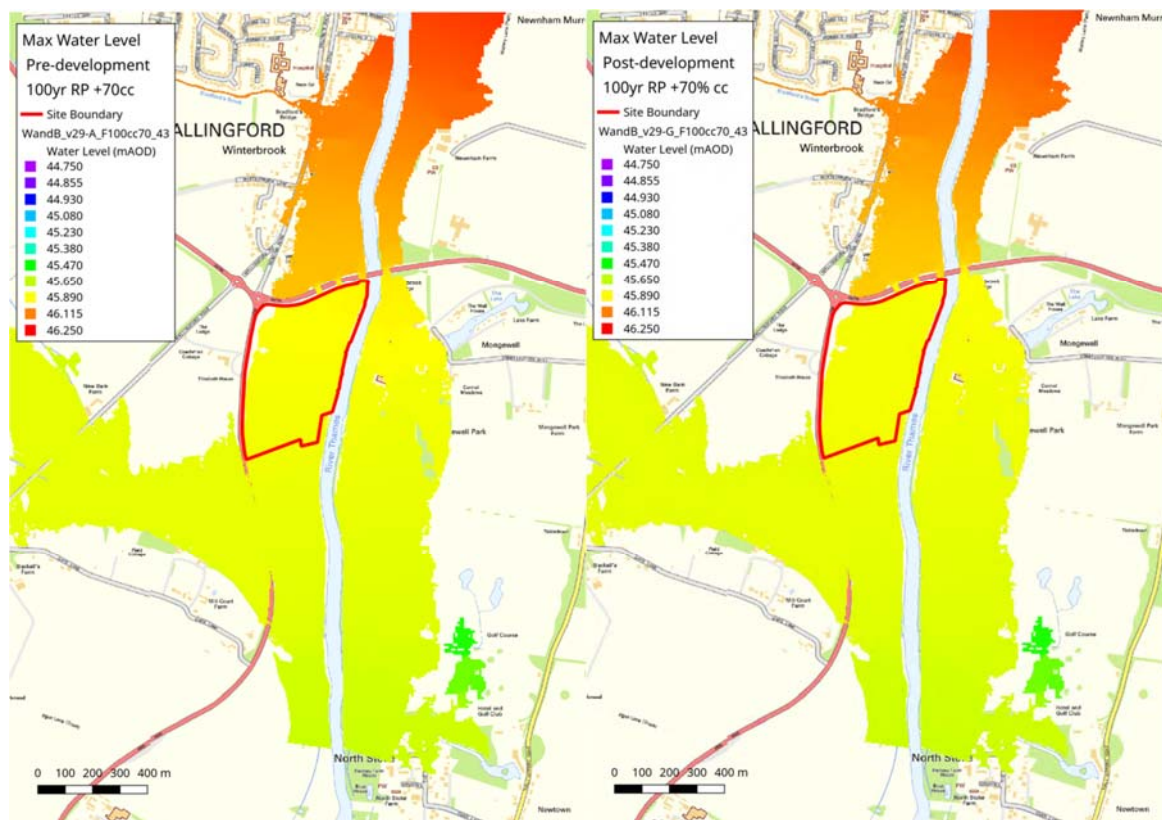
It should be noted that there will be no additional hardstanding or built development as part of the proposed restoration scheme, with the only feature proposed being the replacement of the barn that is currently located in the central part of the site.





The detailed Flood Risk Assessment included as part of the planning application has also been updated as part of the Regulation 25 submission. This confirms that the proposed development will not create any additional flood risk on or adjacent to the site, even allowing for the effects of climate change.

The pre-development 100 year flood event + 70% for climate change is shown below, together with the post-development maximum flood level (also assuming 100 year flood event + 70% cc) from the Flood Risk Assessment. These confirm that the majority of the site will be inundated during a major flood event, which is the situation on the site at the present time.

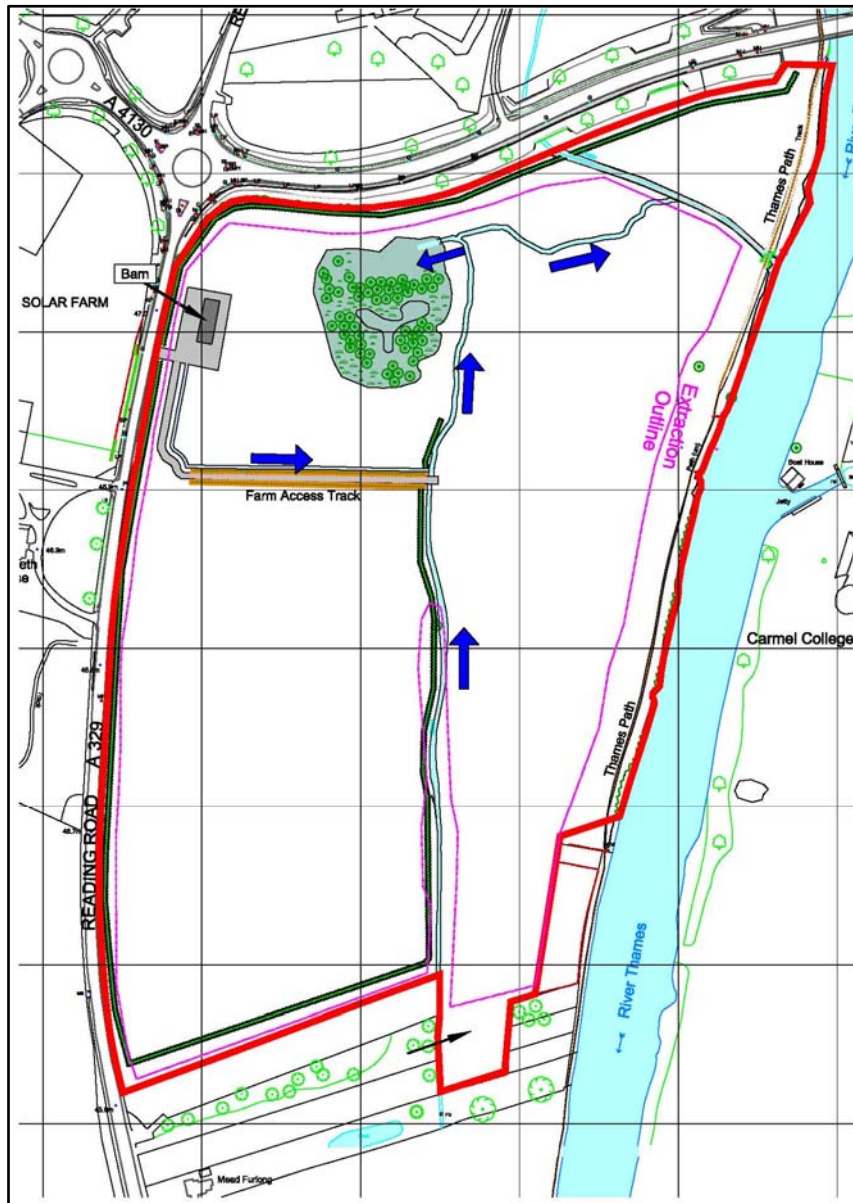


The images for the pre-and post development flood water levels appear very similar. This is due to the restoration surface levels proposed (following mineral extraction) being generally identical to the pre-development levels.

4. A plan showing where surface water flow paths will go once works to following restoration

The restoration scheme, with surface water flow paths are shown in Plan R25-Drainage 1 (above).

A simple plan showing only the drainage system (as part of the proposed site restoration) is given below as Plan R25-Drainage 2.



Plan R25-Drainage 2

Whitecross Fm-Restoration Drainage

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