

# Form WRD: Application for a new abstraction licence or a technical variation to an abstraction licence

## Application type

Reference number (The number you generated in form WRA). Example:  
WRNATURALRESOURCESWALES1101

WRMCWY0707A

Are there any applications currently being assessed by us that are linked to this application?

Yes

Is the proposed abstraction going to be aggregated with another existing abstraction?

No

## Linked applications

Please confirm how this application is linked to the other application(s)

Example: this application could be one of multiple abstractions and/or impoundment licence applications at the same site. The proposal could involve water rights trading, or this application could be linked to another application for a previously exempt activity.

This abstraction transfer licence (PPN 01034) will be linked with a surface water discharge consent application (PPN 01035).

### Linked application numbers

PPN-01035

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Are any applications, at the same site; being assessed by the Environment Agency?

No

Tell us when you want your abstraction licence to end: [DD/MM/YY]

01/01/2025

If you require a shorter or longer duration licence, please provide details and your justification

This is a temporary water abstraction licence to be utilised during a commercial development project. Marshalls are looking to commence a commercial development project at Plot B, The Airfields, Northern Gateway, Deeside, Flintshire, CH5 2RD. Planning consent RES/000385/22 covers the construction of a 'Proposed storage and distribution unit with ancillary offices, associated accesses, car parking, service yards, security gatehouse, electricity substation, pump house and landscaping'. Marshall's have confirmed that shallow groundwater exists at the site at approximately 1.1m - 1.4m below existing ground levels within the superficial geological deposits (primarily sands). As a consequence, groundwater abstraction and its subsequent discharge will be required onsite, specifically during the installation of underground services (drainage) and building foundations.

## Abstraction details

Abstraction location name/reference

Abstraction from excavations (superficial sands aquifer).

Abstraction point type

Area

National Grid Reference

Middle of site: SJ 32584 70001

Downstream National Grid Reference (If abstracting from a reach), or corners of the area.

SJ 32335 70145  
SJ 32772 70112  
SJ 32758 69815  
SJ 32514 69840

Do you have any further points of abstraction?

No

## Means of abstraction

Provide full details of the equipment you propose to use to abstract water, such as maximum pump capacity and any relevant dimensions, e.g. pipe diameter. For groundwater abstractions, include details about the borehole (depth and diameter) and details of screening and lining.

Dewatering Services Limited are the contractor whom will be supplying the dewatering equipment. They have supplied the equipment details as requested above. Mecon Ltd are the groundworkers who will be carrying out the de-watering. The following equipment to be used as part of the abstraction and subsequent discharge process have been summarised below.

Abstraction will be completed using a wellpoint and riser system before being pumped to the temporary storage lagoons. Dewatering Services Limited will utilise a diesel driven abstraction piston pump (Selwood S100 S/S Auto Start 4" Pump) with a maximum pumping capacity of 90 m<sup>3</sup> / hour. At all times a duty and a standby pump will be available in case of equipment failure. The piston pump is connected to a 150mm header main (160m length) that is connected to the 38mm diameter wellpoints that are installed to 6m below ground level. Following abstraction, the groundwater will be pumped to the temporary storage lagoons.

## Abstraction quantities

Abstraction location name/reference

Groundwater abstraction from excavations (superficial sands aquifer).

What purpose will the water be used for?

It will be transferred to adjacent surface water drainage ditches. No intermediate use.

Period of abstraction Will it be all year?

Yes

Maximum quantities (cubic metres)

**Annual** Unknown.

**Daily** Unknown.

**Hourly** Unknown.

Peak abstraction rate (in litres per second)

Unknown.

Number of hours of abstraction per day

Unknown.

Add quantities for another location?

No

## Calculations and supporting information

Use this section to show us how you have calculated the amount of water you require. This should include details of your operational regime (for example, number of hours and days you intend to abstract, number of units produced or area to be irrigated). We use this information to determine if the volumes you propose to abstract are appropriate for the purpose. Depending which industry you are in, you may need to provide additional information below.

If your proposal involves the provision of a residual flow via a notch or orifice, provide information on how this is being calculated. This should include details of the equation being used.

The volume of water to be abstracted is dependent on the volume of groundwater entering the excavations.

The excavations will occur at multiple locations within the development area. The entire site is approximately 10 hectares in size, although the area to be excavated for foundations will be significantly smaller.

The project duration has been estimated by Marshalls as 64 weeks.

## Means of measurement

State how you intend to measure the quantity of water you abstract. You do not need to do this for a temporary or transfer licence.

**Other (please specify):**

Not required for a transfer licence.

## Water efficiency

Provide details of what measures you provide or intend to implement, to ensure efficient use of water. This could include water storage, re-use or recirculation, monitoring and checking for leaks, undertaking water audits or other industry specific good practice.

N/A

## Fish and eel considerations (surface water abstractions only)

Confirm the fish species present at your site. If you're not proposing any measures to protect fish and eels, you must justify this. For example, we may have confirmed in our pre-application response that the intake is inaccessible to fish or you undertook a fish survey to confirm.

N/A - Groundwater transfer application.

## Discharge details

If you intend to return any of the abstracted water to the environment, provide details below. Details of discharge location(s) should correspond with any maps submitted. Do not include discharges to a public sewage system.

	Discharge location name / reference	National Grid Reference of discharge point (12 digit)	Total volume to be discharged (cubic metres)	Environmental Permit for Water Discharge Activity number (if applicable)
	HW1	332432, 370155	Unknown.	01035 (pre-application)
	HW5	332782, 370082	Unknown.	01035 (pre-application)
	HW10	332759, 369872	Unknown.	01035 (pre-application)
	HW12	332437, 369928	Unknown.	01035 (pre-application)

Provide a description of the structure and equipment involved in discharge.

Dewatering Services Limited are the contractor whom will be supplying the dewatering equipment. They have supplied the equipment details as requested above. Mecon Ltd are the groundworkers who will be carrying out the de-watering. The following equipment to be used as part of the discharge process have been summarised below.

A diesel powered piston pump (Selwood S100 S/S Auto Start 4" Pump) will be utilised to pump the water from the temporary holding lagoons via a suction hose to the 1500 Gallon Selwood Settlement Tank which will provide primary treatment of the abstracted groundwater to reduce solid content. A flow meter will be installed at the outlet of the settlement tank to measure the volume of flow before final discharge into the surface water drainage ditches. Marshall's will take a photograph of the flow meter at the start and end of the project to record the overall discharge. Another pump system will then be used to pump the groundwater from the settlement tank to the final point of discharge at the closest headwall (HW 1, 5, 10 & 12) before discharge into the adjacent drainage ditches.

## Other abstractors / water users

Provide details of nearby abstractors or users of water who could be affected by your proposal. This should include deregulated users (exempt activities or abstractions < 20 cubic metres per day), anglers and canoeists. Your local authority's environmental health will hold details of exempt domestic abstractors.

According to the JPG Geoenvironmental Desk Study Report for Plot B, The Airfields, Deeside (Ref: 4671-JPG-XXXX-RP-G-0644-S2-P01) there are four recorded active groundwater abstraction licenses within 2km of the site, the nearest is located approximately 1387m north-east of the site. There are no active potable water abstraction licences within 2km of the site. Flintshire Freedom of Information Team confirmed via an email dated 29/06/2023 that there were no exempt private water supplies within 1km buffer of Plot B, The Airfields, Deeside, CH5 2RD.

## Planning application

Have you sought advice on your planning application?

Yes

Submit a copy of the Planning Authority's response.

- File: RES00038522\_Decision\_Notice.pdf - [Download](#)

## Declaration

By signing below, you are declaring that, to the best of your knowledge; the information given in this form, on any map and in any supporting or additional information; is true.

**Signed** Robert Tinsley RJT Consulting Partnerships Ltd

**Print name** Robert Tinsley RJT Consulting Partnerships Ltd

**position** Director RJT Consulting Partnerships Ltd

If an agent is to sign on behalf of the Licence Holder, a letter of authorisation from the Licence Holder is required.

- File: Letter of Authorisation.pdf - [Download](#)

Date

\* 18/09/2023

Would you like a copy of your submission?

Yes

Your email address

bprescott@rjtconsulting.co.uk