

## **FLOOD RISK ASSESSMENT (FRA)**

**SITE: 56 Diamond Road, Ruislip, HA4 0PG**

**PROPOSAL: Erection of front porch (Retrospective)**

### **GUIDANCE:**

- **CLG 2007 'Improving the Flood Performance of New Buildings' publication**
- **Flood maps from the Environment Agency**

### **Contacts:**

**Mrs Ramela M. (BSc.Hons)**

MKM Design & Construction Limited

104 Bridgwater Road, Ruislip, HA4 6LW

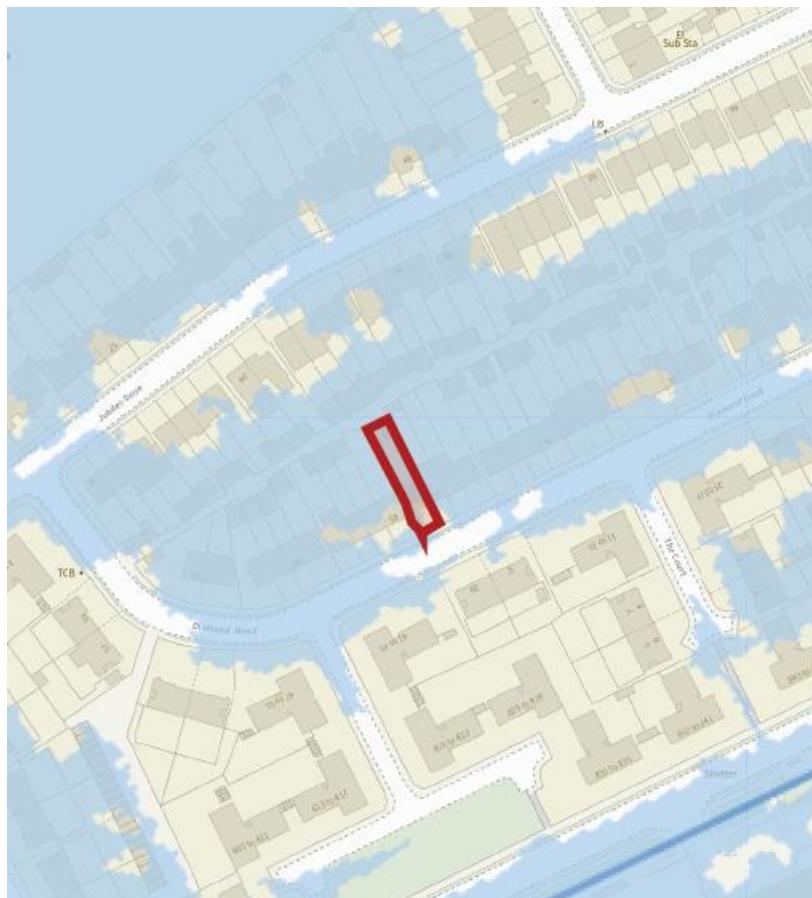
Mob: 07885503039 Email: mathu\_eng@yahoo.co.uk

## **Introduction**

This statement has been prepared on behalf of our client, Mr A. Kugathasan for whom we submit a Flood Risk Assessment in support of the Planning application 16429/APP/2022/3717.

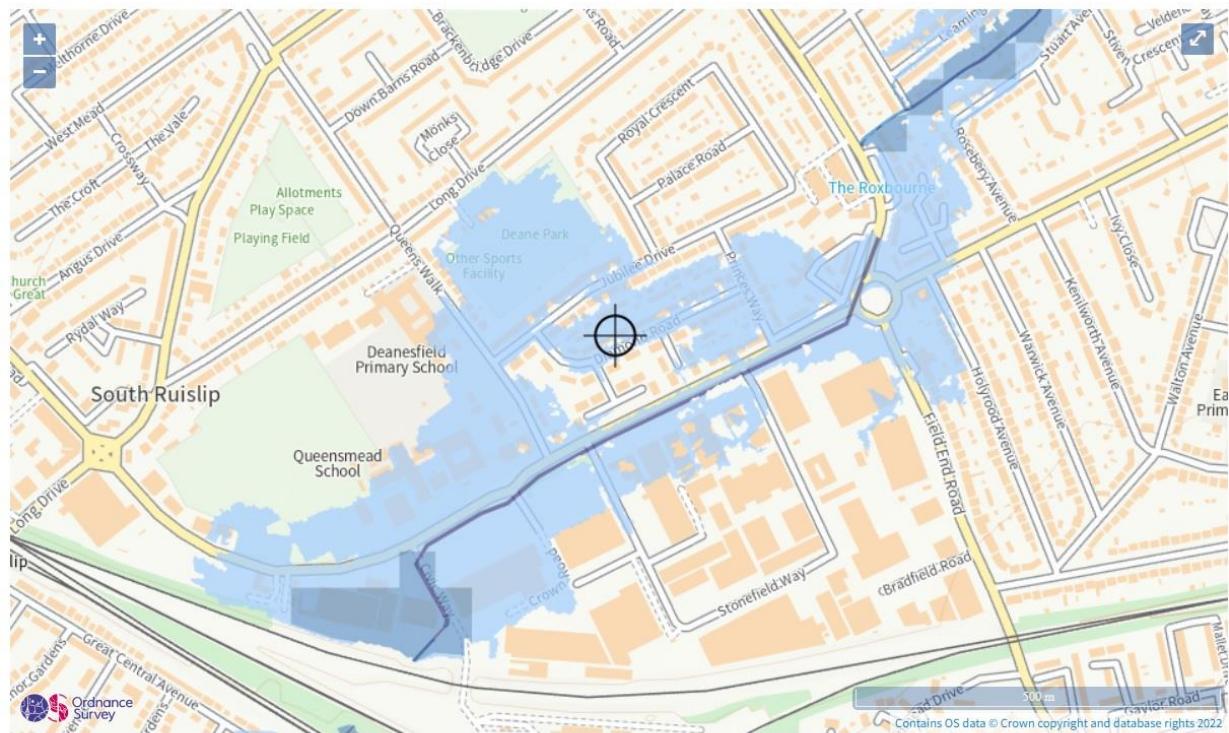
## **Flood zone**

A flood zone map detailed by Environment Agency indicates that the property is in flood zone 2, an area with a medium probability of flooding.



- █ Selected area
- █ Flood zone 3
- █ Flood zone 2
- █ Flood zone 1
- Flood defence
- Main river
- Water storage area

Extract from the flood map from Environment Agency (Map 01)



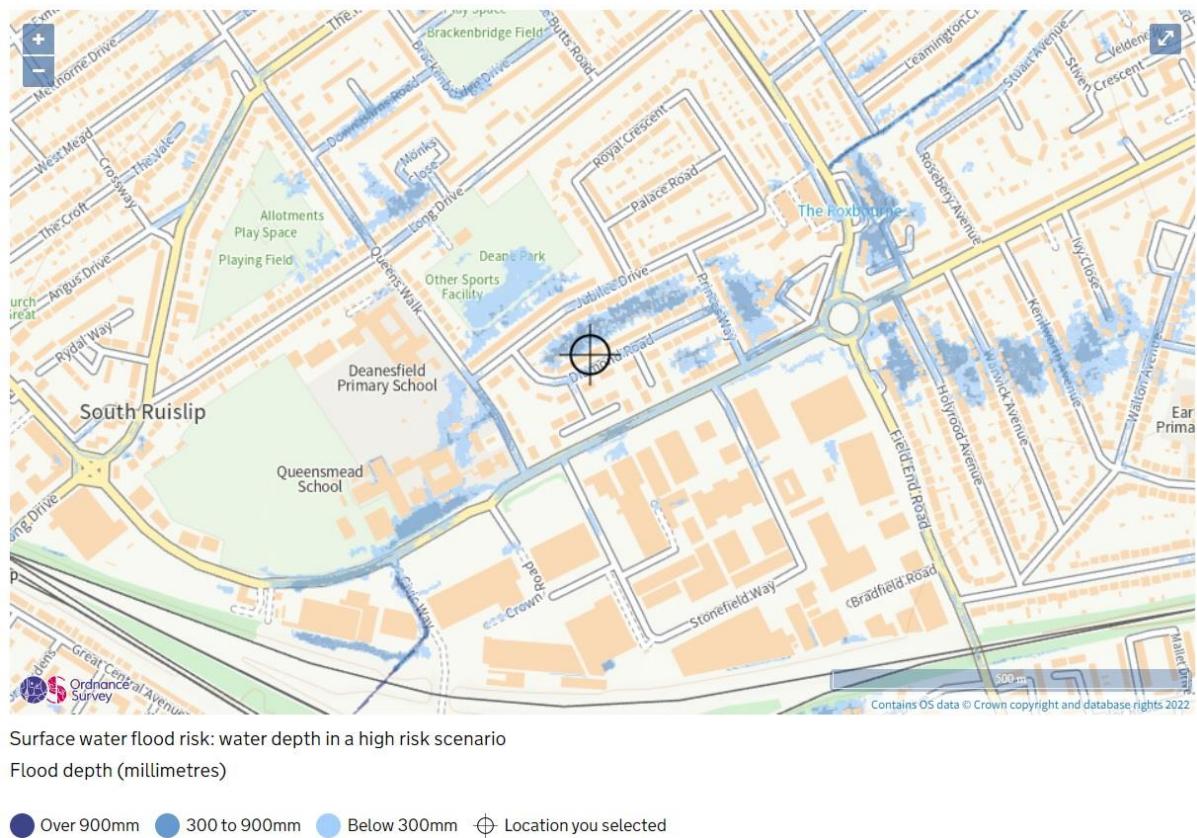
#### Extract from the flood map from Environment Agency (Map 02)

The above map (Map 02) by Environment Agency shows that there is a low risk from flooding from rivers or the sea. Low risk means that this area has a chance of flooding of between 0.1% and 1% each year.



#### Extract from the flood map from Environment Agency (Map 03)

The above map (Map 03) by Environment Agency shows that there is a high risk from flooding from surface water. This flood risk summary reports the highest risk from surface water within a 15 metre radius of this property. High risk means that this area has a chance of flooding of greater than 3.3% each year.



## Extract from the flood map from Environment Agency (Map 04)

The above map (Map 04) shows that the surface water flood depth for the site is below 300mm.

At predicted depths less than 0.3m, and for short duration floods, the strategy is to adopt a 'resistant' approach and try to keep water out of a building i.e. water exclusion strategy. For flood depths between 300 and 600mm a decision needs to be taken as to whether it is feasible or practical to adopt the water exclusion strategy. At predicted depths more than 600mm, the strategy to adopt is the water entry strategy- 'resilient' design.

The depth of surface water flooding expected for the site is below 300mm, therefore it is considered to adopt the water exclusion strategy- 'resistant' approach.

## **FLOOD MITIGATION MEASURES:**

### Floor Level & Construction

The floor level of the porch is proposed to be the same as the existing floor level of the main dwelling house.

### Doors

The existing double glazed door threshold to be raised to the same level of the proposed finished floor level. All effort should be made to ensure a good seal to the frame.

### Flood Warnings

It is recommended that the residents to register with the Environment Agency for flood alerts. In the event of a flood, the residents can move to safe refuge above the flood level e.g. first floor level.

### Drainage & waste

No external main drainage changes are proposed, all existing surface/soil pipes are to be retained. The site is located within an area that is predominantly London clay which would indicate that the potential for soil infiltration would be negligible and that the existing surface water would be discharged via a surface water drain into the local public sewer system.

The increase in surface water run-off from the development will be minimal and unlikely to have any overall detrimental effects upon the surface water system. However, in order to reduce peak flow rates, water butts to be installed to catch the increased surface water.