

47 Pembrey Ward, Furnace Policy Unit

47.1 Area Description

The Furnace Policy Unit in Pembrey comprises a predominantly rural and suburban area with culverted unnamed ordinary watercourse. The watercourses originate to the north on top of Mynydd Pen-bre and discharge into the canal that heads towards Burry Port Marina. The watercourses are culverted from Jerusalem Chapel and Gwscwm Quarry to an open section of watercourse by Dwynant, from here it is culverted again until it discharges to the canal leading to the Marina.

47.2 Why is this area a Flood Risk Policy Unit?

The uFMfSW (EA, 2013) highlights this area to be at risk of flooding. These surface water flood maps are useful in highlighting the flood risk from small watercourses.

Pembrey, and in particular the Furnace Policy Unit, is a suburban area comprising of mainly single dwelling properties, above this is a very steep catchment with a large area of rural agricultural fields that drain towards Pembrey. During periods of heavy rain, the area can be particularly flashy and water can be conveyed very quickly towards the culverted watercourses below.

In addition to this, culverted sections of watercourse and trash screens are at risk of blockage and these blockages can result in flooding. There is also a capacity issue within the culvert and watercourse which can lead to the watercourse coming out of the channel.

47.3 Flooding Events

- Dwynant has had incidents of flooding in 2008, 2012, 2013 and 2016.
- Gwscwm Road had an incident of flooding in 2008.
- The cycle path floods frequently.

47.4 Flood Defence Capital Works undertaken by CCC

CCC have done works to upgrade the trash screen at Jerusalem Chapel and Dwynant, increasing their size for improved capacity. The culvert from Jerusalem Chapel has also been relined to remove a serious risk of collapse. In 2017 CCC installed a bypass channel along the open watercourse at Dwynant due to the restrictions caused by residential accesses across the watercourse, increasing the overall capacity of the channel.

CCTV works have also been undertaken in the area at various points.

47.5 Flood Defence Assets

Jerusalem Chapel Trash Screen	Gwscwm Quarry Outfall	Gwscwm Park Sluice
Dwynant Trash Screen	Dwynant Outfall	

47.6 Routine Works and Maintenance

Area	Works Undertaken	When
Gwscwm Quarry, Dwynant & Waun Wen	Watercourse trashing and grass cutting	Annually
Trash Screens	Formal T98 Inspection	Annually
	Debris management	Weekly in the winter Monthly in the summer
Culverts	CCTV camera survey	2018, 2020
Outfalls	Formal T98 Inspection	Annually

47.7 Proposed Future Works

Undertake CCTV camera survey. Any structural or service faults will be actioned on a risk-based basis.

47.8 Flood Risk

47.8.1 Map 1: Total Properties

Map 1 over the page displays data on the total number of properties at risk of flooding. Total properties can include dwellings, garages, commercial premises, industrial premises and similar structures.

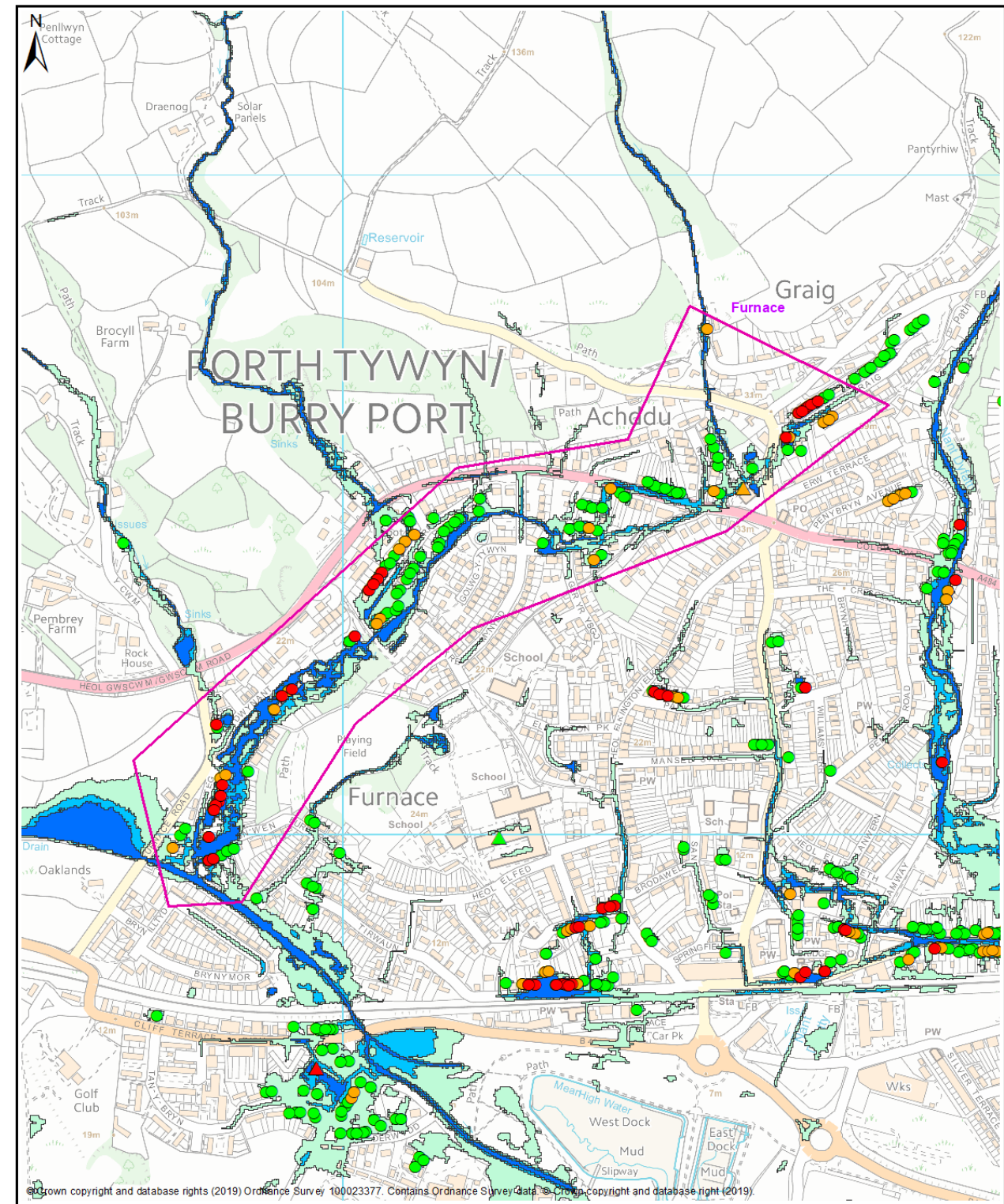
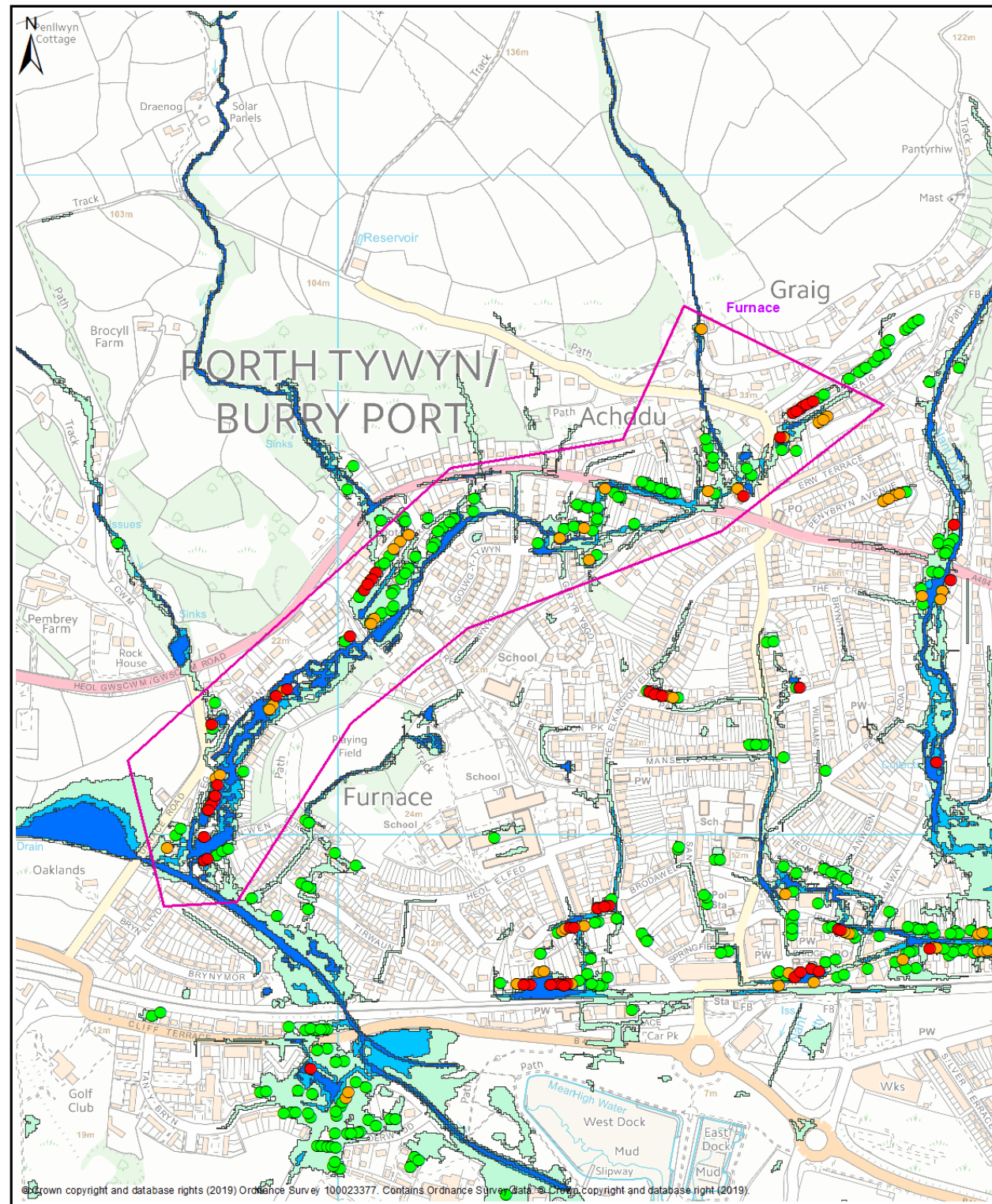
47.8.2 Map 2: Dwellings and Services

Map 2 below displays data on the residential properties and services at risk of flooding.

47.8.3 Map 3: Community at Risk Register (CaRR)

This is the most recent flood mapping from Welsh Government. This dataset depicts all properties at risk of pluvial (surface water) flooding in a storm event with a 1 in 100 probability.

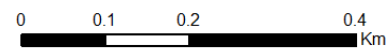
	Number of specified units at risk of flooding		
	1 in 30 probability storm event	1 in 100 probability storm event	1 in 1000 probability storm event
Map 1 Total Properties	27	49	120
Map 2 Dwellings and Services	26	46	111
Map 3 CaRR	n/a	10	n/a



Map 1 - All Properties

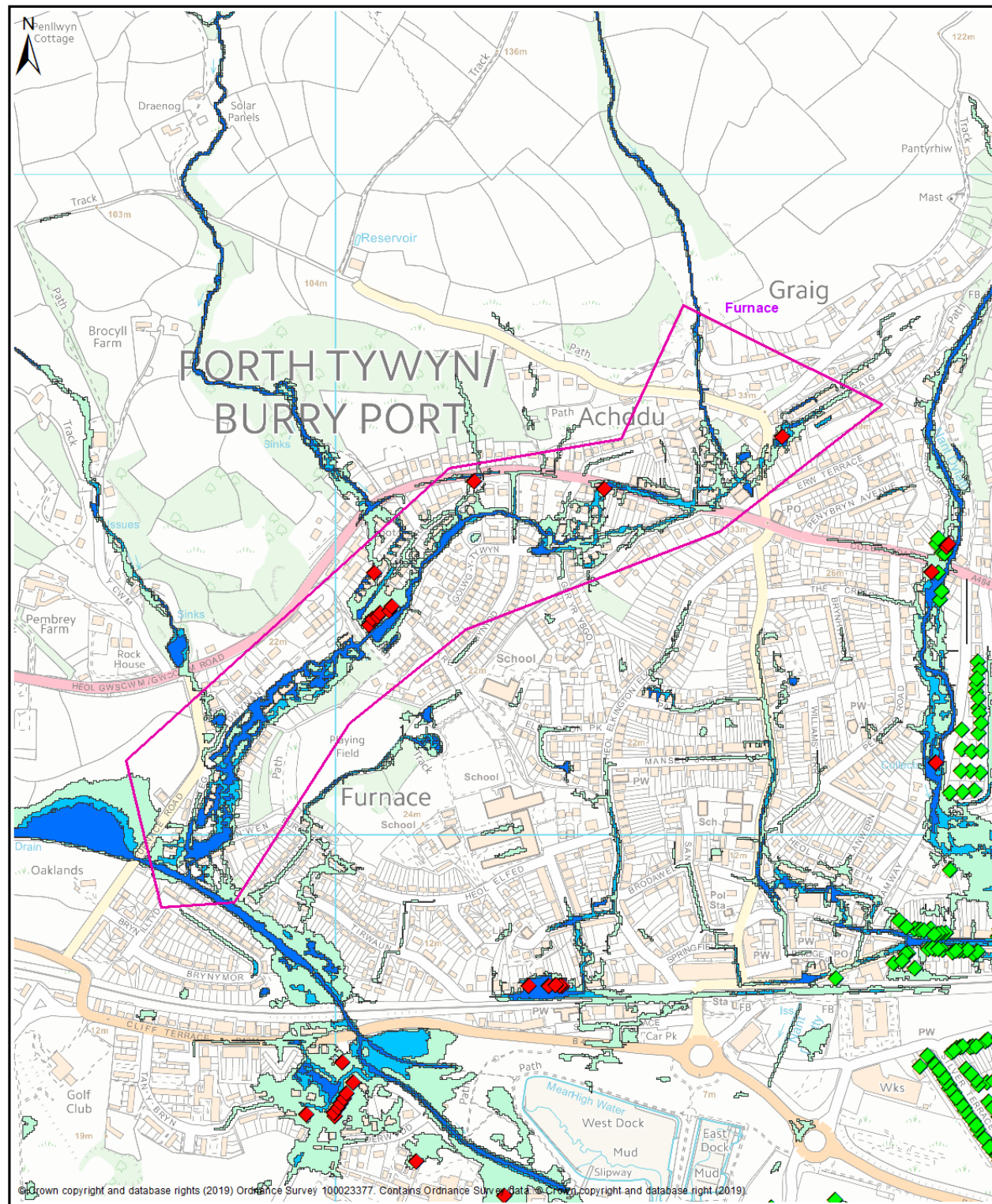
- Legend**
- Policy Unit
 - uFMSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
 - uFMSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
 - uFMSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
 - Q30 All Property Classes Flood Depth 150mm or Greater
 - Q100 All Property Classes Flood Depth 150mm or Greater
 - Q1000 All Property Classes Flood Depth 150mm or Greater

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Map 2 - Dwellings and Services

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- Policy Unit
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 - Q30- Dwellings Flood Depth 150mm or Greater
 - Q100- Dwellings Flood Depth 150mm or Greater
 - Q1000- Dwellings Flood Depth 150mm or Greater
 - ▲ Q30- Services Flood Depth 150mm or Greater
 - ▲ Q100- Services Flood Depth 150mm or Greater
 - ▲ Q1000- Services Flood Depth 150mm or Greater



Map 3 - Communities at Risk Register

- Legend**
- Policy Unit
 - uFMSW Q30 Surface Water Flood Outline 1 in 30 Probability Storm Event
 - uFMSW Q100 Surface Water Flood Outline 1 in 100 Probability Storm Event
 - uFMSW Q1000 Surface Water Flood Outline 1 in 1000 Probability Storm Event
 - ◆ CARR Pluvial
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