## **The Paddock Cabin**

## **Surface Water Drainage Strategy:**

- The building is designed with a functioning 130m2 'Intensive green roof' with an approx. 20cm depth of soil and meadow vegetation. The vegetation, soil and root structures will 'catch the rainfall and the water will slowly infiltrate and slow the dispersal of the surface water from the roof.
- The building is designed with multiple drainage points around the outside of the roof that will drain direct to the ground and mimicking the natural conditions of the site under rainfall it will be as if the building wasn't there. Minimal guttering and no downpipes mean there is no single point of discharge.
- The area around the structure is grass which will infiltrate the SW from the roof
- Any surface water that hits the field and doesn't infiltrate (generally this would rarely occur under exceptionally heavy rainfall events and saturated ground), will naturally drain overland with the natural gradient/fall of the site which conveniently leads to a pond less than 5m away from the SE corner of the cabin. This pond has an outflow that drains into the Bircham river providing a sustainable drainage solution.
- The minimal earth screw/concrete pad foundations mean the footprint of the building won't impact on the flood plain and the ground underneath the building is permeable.
- Some of the surface water from the roofing is stored in water harvesting tanks, providing some attenuation and sustainable storage of precious rainwater.
- Sewage and grey water pumped to the main sewer OR composting WC will deal with the sewage and grey water