Firs Farm Wetlands Interpretation proposal

1. Main entrance signage

1.1 Purpose

The main purpose of this signage is to familiarise visitors with the layout of the wetlands. A secondary benefit is that this signage gives an opportunity to credit project funders and partners.

1.2 Location

Two main entrance signs are proposed for the wetlands, as shown below. One sign is positioned to be seen as you enter Firs Farm from the A10 (eastern entrance), and the other as you enter from Firs Lane (western entrance).

Fig. 1 Map showing proposed location of main entrance signage (red dots)

Fig. 2 Position of main entrance signage (1) - eastern entrance

Fig. 3 Position of main entrance signage (2) - western entrance

1.3 Design

1.3.1 Structure

A timber monolith is proposed for the main entrance signage. Using a single slab of timber is the preferred option (fig. 4), but a structure comprised of wooden panels mounted to a stainless steel frame have also been considered (fig. 5).

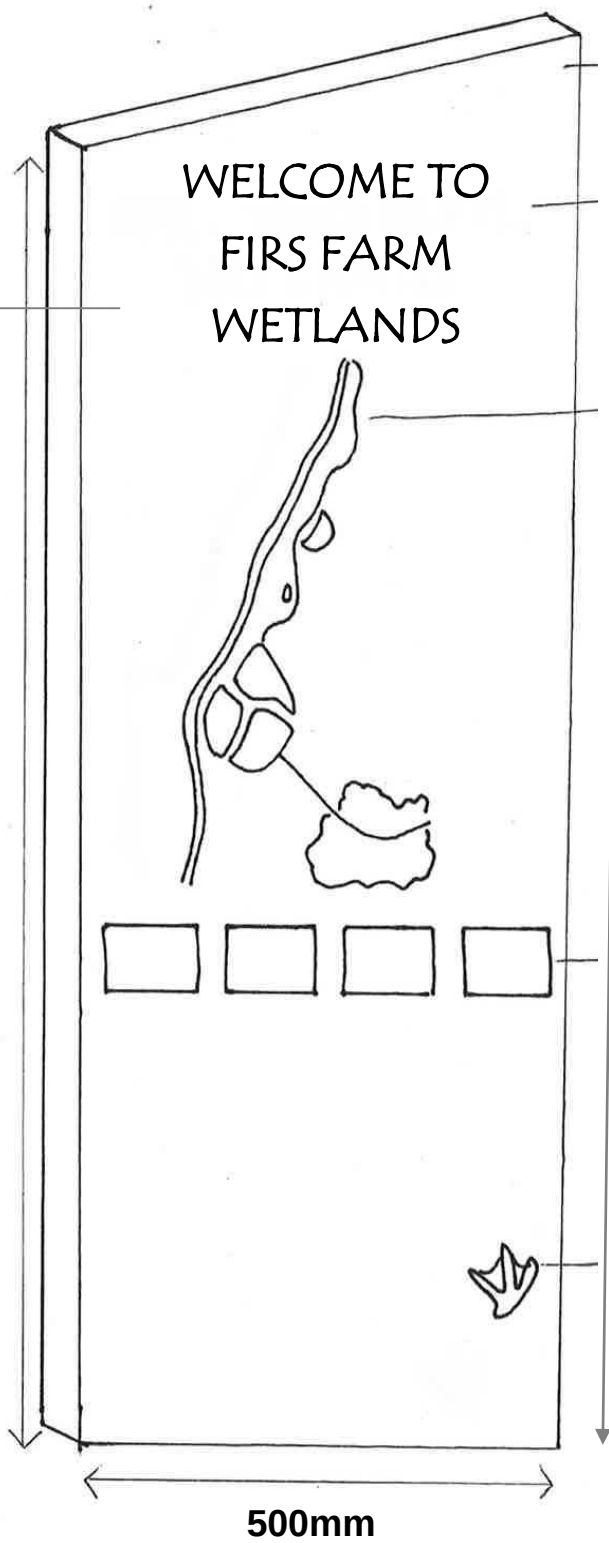

Fig. 4

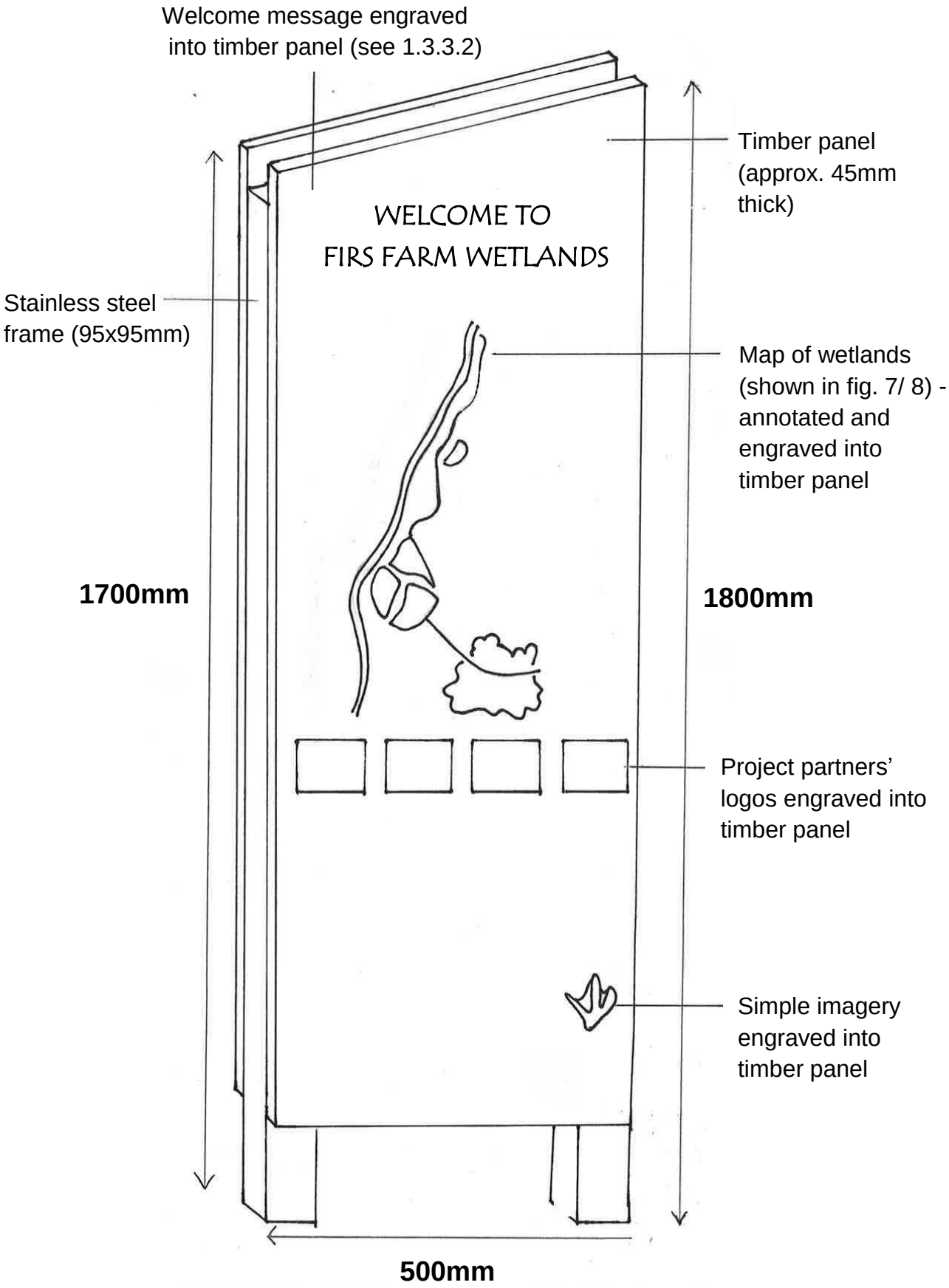
Welcome message engraved into timber panel (see 1.3.3.2)
WELCOME TO
FIRS FARM WETLANDS
Timber panel (approx. 45mm thick)
Stainless steel frame (95x95mm)
Map of wetlands (shown in fig. 7/ 8) - annotated and engraved into timber panel
1700mm
1800mm
Project partners' logos engraved into timber panel
Simple imagery engraved into timber panel
500mm

Fig. 5

1.3.2 Materials

Timber has been specified as the primary material for the signage around the wetlands as it complements the natural features of this area. Douglas Fir and Oak (English and European) have been considered for the project. Both can be obtained in slab and panel form, and could be applied to the structures shown in fig. 4 and fig. 5. Further details of the properties of each timber is given below.

Douglas Fir is the preferred choice for the main entrance signage because: (1) it is less prone to cracking and warping than Oak; (2) it is less expensive than (dry) Oak; and (3) it is more easily obtainable in (dry) slab form than Oak.

1.3.2.1 Douglas Fir

This Canadian softwood has good durability. Once pressure treated, signage made from this wood offers a 20 year in-ground solution. The timber is easily engraved to give a good finish. Over time the pale brown colour of the unstained wood (shown below) is likely to bleach grey. PEFC Douglas Fir is readily available, ensuring a sustainable source of timber.

1.3.2.2 European (or British) Oak

Oak is a native hardwood with a medium durability. The biggest issues with this timber is that green Oak is prone to warping and cracking as it settles. Dried Oak is less prone to cracking but is very expensive, and difficult to obtain, in large slabs. An alternative to green Oak is to use a number of dried Oak panels laminated together to create the pretence of a large monolithic slab. The light colour and texture of the timber allows for easy engraving. Over time the honey colour will bleach to a silvery grey. FSC Oak is readily available, ensuring a sustainable source of timber.

Fig. 5 Example of large engraved Canadian softwood monolith (above)
Fig. 6 Example of engraved Oak monolith in galvanised socket (below left)
Fig. 7 Example of engraved green Oak monolith (below right)

1.3.3 Graphics

1.3.3.1 Maps

Two reader-oriented versions of a simple site map of the wetlands have been created, as shown below in fig. 8 and fig. 9. Note that these images are sketches designed to give an impression of the proposed graphic and do not show the final graphic to be engraved. Each version of the map will be presented on signage at either end of the wetlands. As well as the annotations shown in fig. 8 and 9, the location of the wetland trail markers, the dipping platform and the wildlife hide will be indicated.

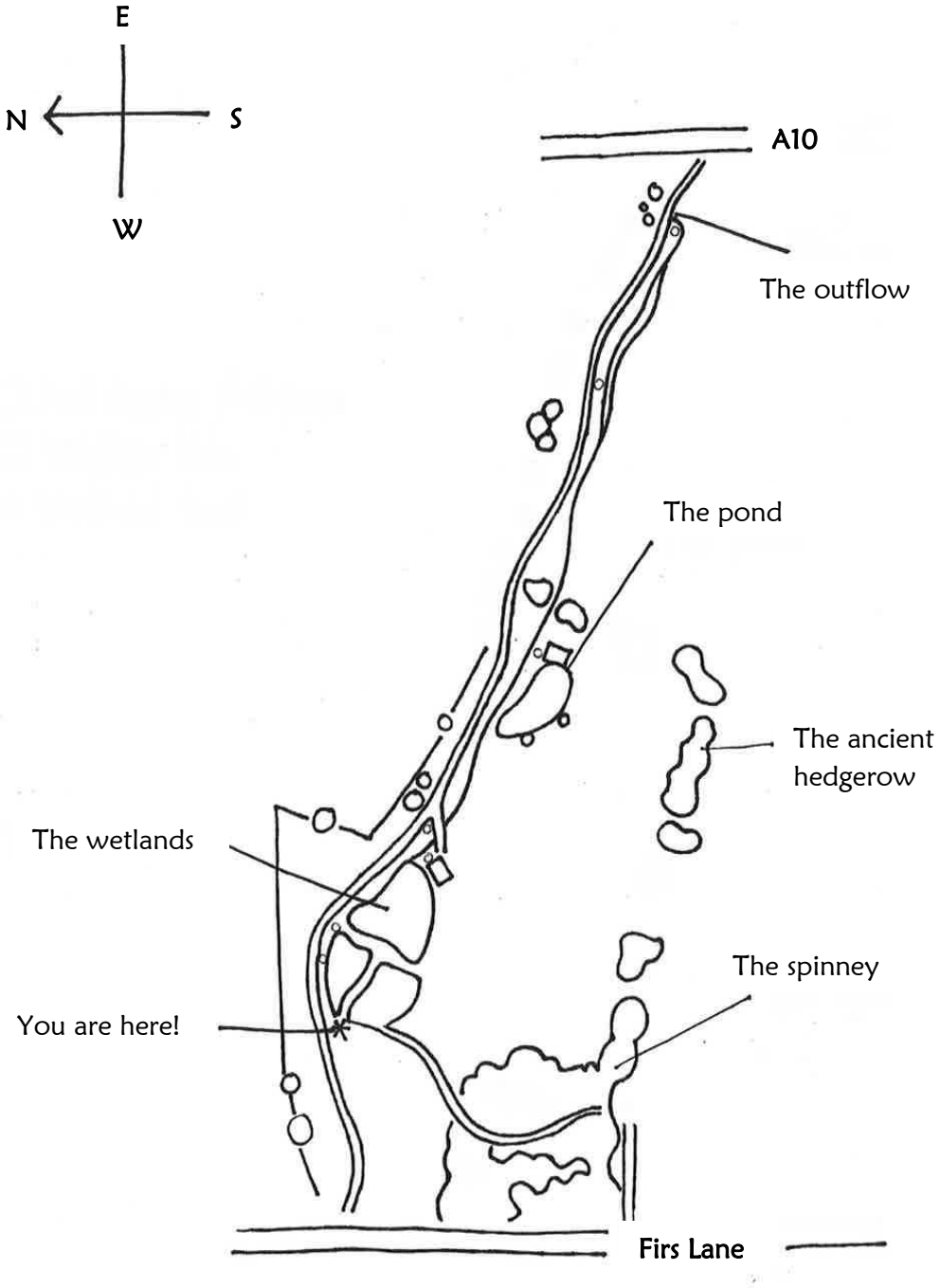

Fig. 8 Sketch of map to be engraved in timber on signage at western entrance

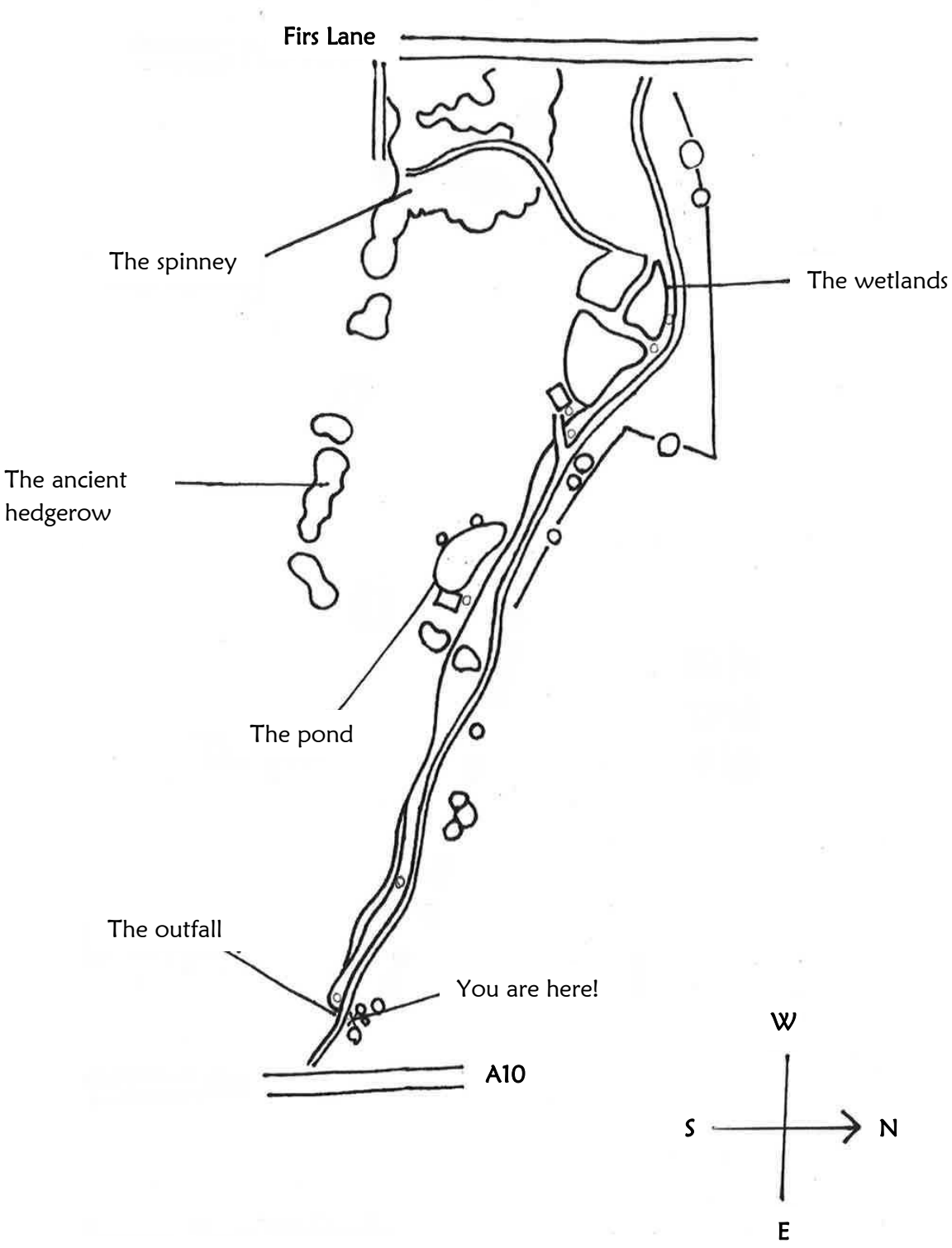

Fig. 9 Sketch of map to be engraved in timber on signage at eastern entrance

1.3.3.2 Welcome message

This is to be discussed and agreed with project partners. Suggestions include: ‘Welcome to Firs Farm Wetlands’ (as shown in fig. 4 and fig. 5) and ‘Our Wonderful Wetlands’.

1.3.3.3 Colour

A colour fill is recommended, as it allows text and imagery to stand out more clearly on the timber signage. A monochrome approach can be taken with a single colour fill (as shown in fig. 5-7) or a range of colours can be applied to the engraved wood. The alternative option is to leave the engraving uncoloured, as shown in fig. 17.

1.3.3.4 Engraving

It is proposed that text and imagery should be engraved into the wood by sand blasting. Sand blasting will allow for medium resolution graphics (including logos) and text to be reproduced in timber (as shown in fig. 5-7). There are some restrictions in the amount of detail that can be captured using this method, it requires a simplified version of the map graphic for example. The alternative engraving process is lazar carving which allows very fine detail but can only be applied to timber panels <50mm thick, so would require alterative design options to be considered.

1.3.4 Fixings

There are a number of options for securely fixing the timber monolith signage in position. If using a timber slab (as in fig 4) two options for fixing are given below (fig. 10 and 11). If using timber panels (as in fig 5) these would be mounted to a 95mm aluminium post frame.

1.3.4.1 Grounding

A slab of timber is directly set in concrete in the ground (fig. 10). Grounding is more expensive than using galvanised sockets (as in fig. 11) because a greater length of timber is required. Grounding is expected to give the most 'natural' appearance of all the options presented here.

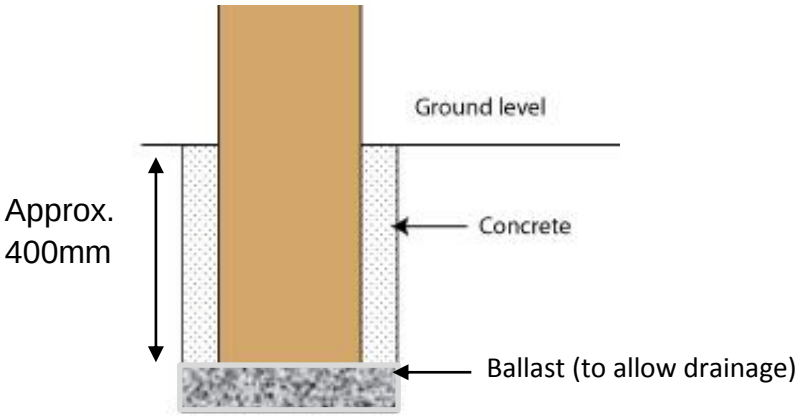

Fig. 10 Graphic showing wooden slab grounded in concrete

1.3.4.2 Galvanised sockets

A slab of timber is fixed to a metal base which sits above the ground, as shown below (fig. 11). Less timber required -and therefore reduced costs- are a key benefit of this fixing. Galvanised sockets will be clearly visible above ground, as shown below.

Fig. 11 Example of timber monolith sign supported by galvanised sockets

2. Wetland trail signage

2.1 Purpose

The purpose of this signage is to educate and engage people who visit the wetlands. This signage is designed to be simple and interesting, and to convey the project partners' key themes, including: the benefits of wetlands, local flood risk, water quality issues and the urban water cycle.

2.2 Location

Eight 'information posts' are proposed as part of the wetland trail. The location of each post is shown on the map below. Each post will be situated next to a footpath accessible for wheelchairs and pushchairs.

Fig. 12 Map showing proposed locations of wetland trail signage (blue dots)

2.3 Design

2.3.1 Structure

Timber posts are proposed for the wetland trail signage. Various design options are detailed below. The final post design could be a combination of any of the elements described in fig.12 and 13 and is to be discussed and agreed with project partners.

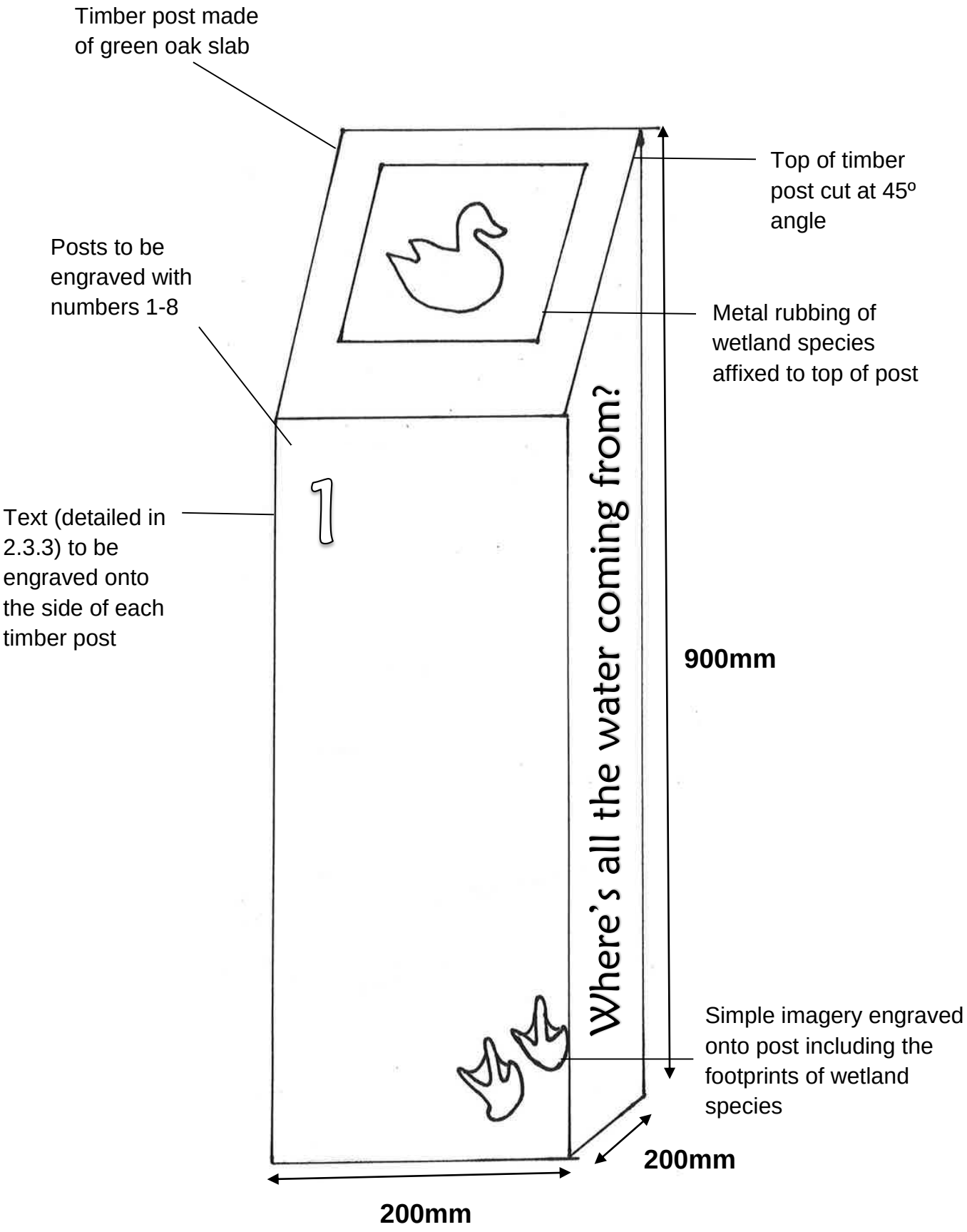
Timber post made of green oak slab
Top of timber post cut at 45º angle
Posts to be engraved with numbers 1-8
Metal rubbing of wetland species affixed to top of post
Text (detailed in 2.3.3) to be engraved onto the side of each timber post
1
Where's all the water coming from?
900mm
Simple imagery engraved onto post including the footprints of wetland species
200mm
200mm

Fig. 13a

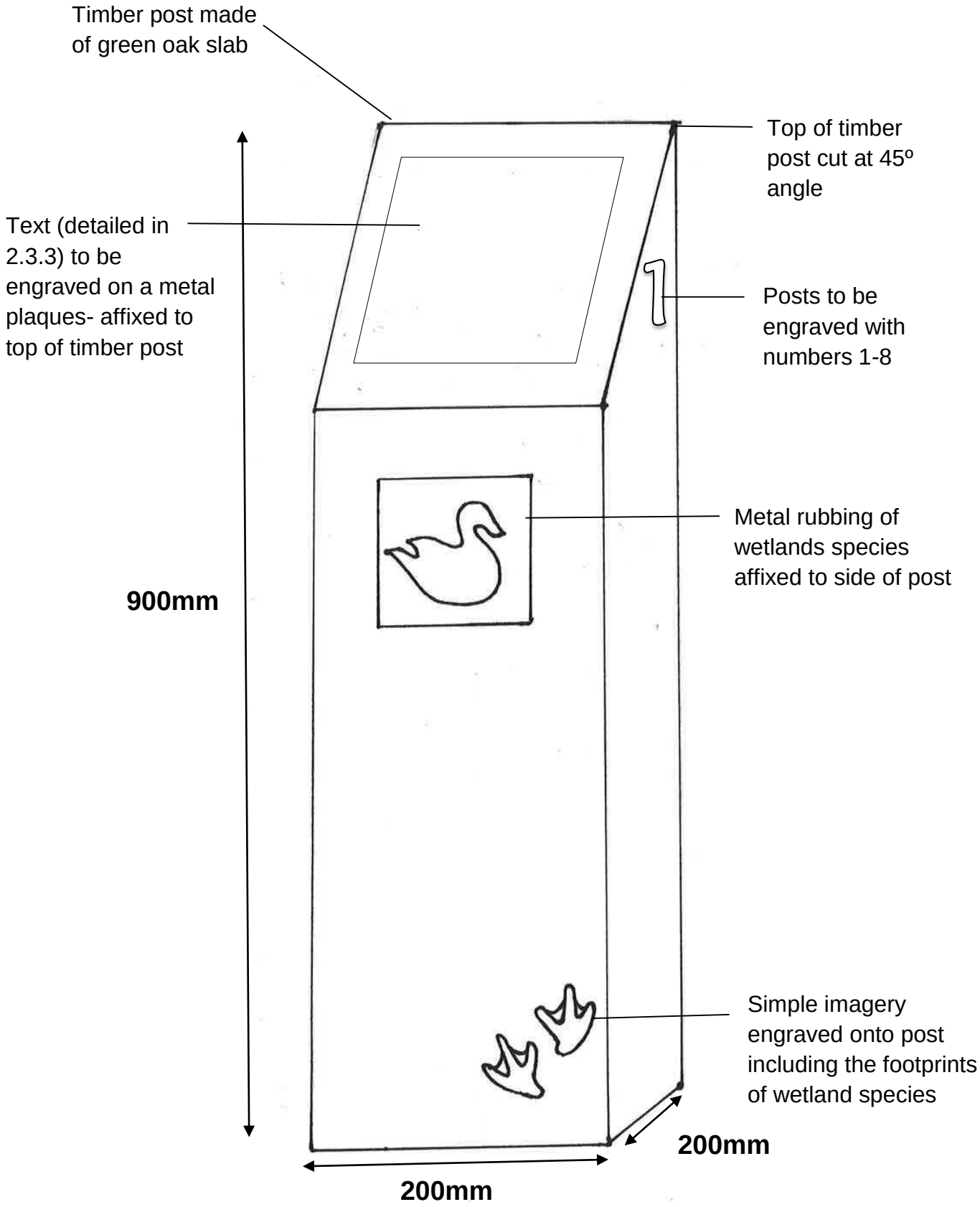
Timber post made of green oak slab
Top of timber post cut at 45º angle
Text (detailed in 2.3.3) to be engraved on a metal plaques- affixed to top of timber post
Posts to be engraved with numbers 1-8
Metal rubbing of wetlands species affixed to side of post
900mm
Simple imagery engraved onto post including the footprints of wetland species
200mm
200mm

Fig. 13b

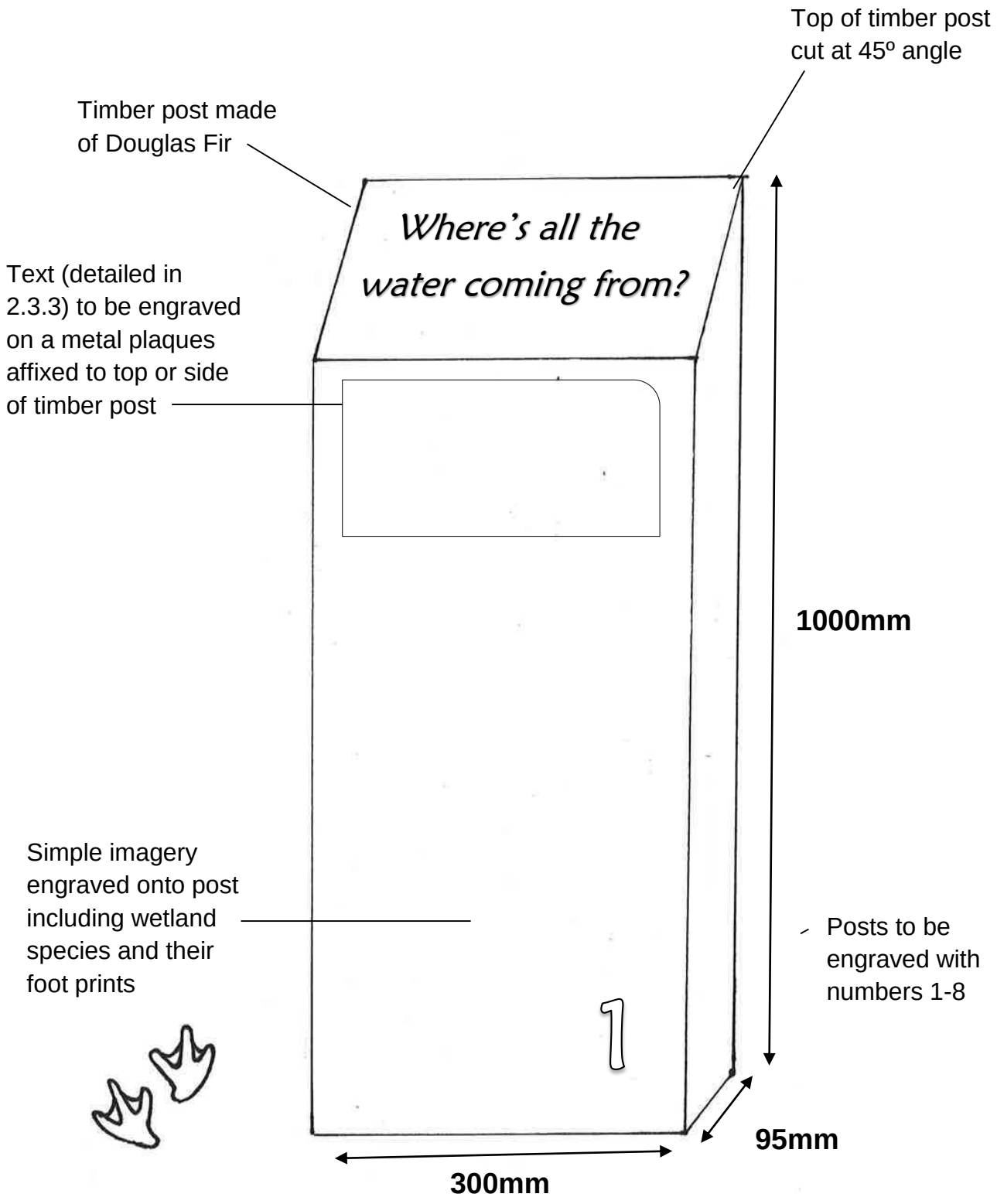
Top of timber post cut at 45º angle
Timber post made of Douglas Fir
Where's all the water coming from?
Text (detailed in 2.3.3) to be engraved on a metal plaques affixed to top or side of timber post
1000mm
Simple imagery engraved onto post including wetland species and their foot prints
Posts to be engraved with numbers 1-8
1
95mm
300mm

Fig. 14

2.3.2 Materials

Timber has been specified as the main material for the information posts. Options for the posts include Oak and Douglas Fir (as described in section **1.3.2**). The dimensions of these posts are restricted by the type of timber used; green Oak slabs up to 300x300mm (w x d) can be used to create the information posts (fig.13), whereas a maximum depth of 95mm can be obtained in posts made of Douglas Fir (fig.14).

Fig. 15 Douglas Fir post stained dark brown and engraved (above left)
Fig. 16 Green Oak post with engraved stainless steel plaque on top (above right)
Fig. 17 Green Oak post with metal rubbing and engraving (below)

2.3.3 Graphics

2.3.3.1 Text

Text to be applied to each information post is detailed below. Note that the numbers below match the locations indicated in fig.12. A ‘question and answer’ approach has been taken to allow user interaction, but the text has been designed so that any single phrase carries a message or provokes thought. Various ways of presenting the text below on each post have been explored, including engraving the text directly onto the timber (fig 13) and engraving part of the text onto a metal plaque mounted to the post (fig 14). Using either method the long answer text could be displayed at font size 26 (Centuary Gothic). To further encourage user interaction with the trail posts, answer text is designed to be displayed much smaller than question text or displayed on consecutive posts, so that users have search for the answer.

[1] - *Woodland inflow*

Where’s all the water coming from?

A pipe that carries rainwater underground.

The Moore brook is a lost river – many lost rivers like this flow underground in London. The Moore brook used to flow freely through Firs Farm and over other parts of Enfield. The river was put into a pipe underground as more houses were built in the area. People now know that it’s better for rivers to be out in the daylight and today, Firs Farm is a space for the river to flow freely above ground again.

[2] - *Next to first drain cover*

Can you hear the water under your feet?

Listen carefully and take a look down the drain…

The water that enters the wetlands here has run off local roads and roofs, and down the drain. It has travelled across Enfield through underground pipes to Firs Farm. Oil and other pollutants get mixed up with the water on its journey underground. The wetlands will help to clean this water now that it is back into the open.

[3] – *Informal seating area*

What was here before the wetlands?

There used to be a farm on this site with a river running through it…

Firs Farm existed on this site for just over 200 years, until 1927 when it was demolished. When the farm still existed, the Moore Brook ran across its land. The river was put into a pipe underground soon after the farm was closed, leaving the field bare. In 2015, diggers moved 15,000m^3 of soil around this site to create these wetlands and let the river flow freely again. That's enough material to fill 130 double decker buses!

[4] – *Close to footbridge, facing wetlands*

Who created these wetlands?

The local community did!

Enfield council designed these wetlands and over 180 volunteers have helped to plant them up. Plants have been especially chosen for their colour and for their ability to take pollution out of the water entering the wetlands. This space has been created for everyone to enjoy, including the birds and the bees.

[5] – *Education area: Wildlife hide*

Why is this habitat important for wildlife?

Wetlands are a very special environment for many plants and animals…

But 90% of wetlands in the UK have been destroyed. Firs Farm Wetlands provides a new habitat for birds and insects to live and thrive in.

[6] – *Education area: Dipping platform*

What can you see in the water?

Look out for dragonflies!

There are 57 different types of dragonfly in the UK. How many can you see here today?

[7] - *Next to stepping stone crossing*

How many pebbles can you count?

If there are fewer than 8 stepping stones visible, the water must be high! Has it been raining recently?

Homes in the local area were at risk of flooding before the wetlands were created. Now the Firs Farm Wetlands and park can store up to 25,000m^3 of when it rains heavily, protecting houses from flooding. That's the same amount of water that would fill 10 Olympic swimming pools!

[8] – *Outflow feature*

Where will this water flow next?

Underground towards Pymmes Park and eventually all the way to the sea!

This water in the Moore Brook is now going back into a pipe underground. It'll next appear at Pymmes Park Wetlands where it joins the Pymmes Brook. This water will eventually flow all the way to the River Lea, into the Thames and finally out to the North Sea!

2.3.3.2 Imagery

The aim is that the imagery on these posts would help to link the wetland trail together and non-verbally communicate information to people exploring the wetlands. It is proposed that different wetlands species and their footprints are included on each of the trail posts. Including metal rubbings of these species (or their footprints) will to add an interactive feature to the posts, but not one that is easily damaged.

2.3.4 Fixings

The timber posts shown in fig. 13 and 14 would be grounded in concrete (1.3.4.2) at each location highlighted in fig. 12.

3. Directional finger post

3.1 Purpose

The purpose of this signage is to put Firs Farm Wetlands in the wider context of the Moore Brook/ Lea Catchment, and to highlight other similar projects and waterways in the local area.

3.2 Location

Fig. 18 Map showing proposed locations for directional finger post (purple dots)

Three options are presented on the map above as potential locations for the directional finger posts. The proposal is to deliver a directional finger post at one of these locations. Option 1 is the preferred location because it is situated at a path junction in the centre of the wetlands.

3.3 Design

3.3.1 <u>Structure</u>

A timber finger post is proposed for the directional marker. An example is shown below (fig. 19). The central post could either be square (as shown) or circular to allow a wider range of directions to be incorporated. The number of fingers, and exact text, on the post is to be discussed and agreed with project partners.

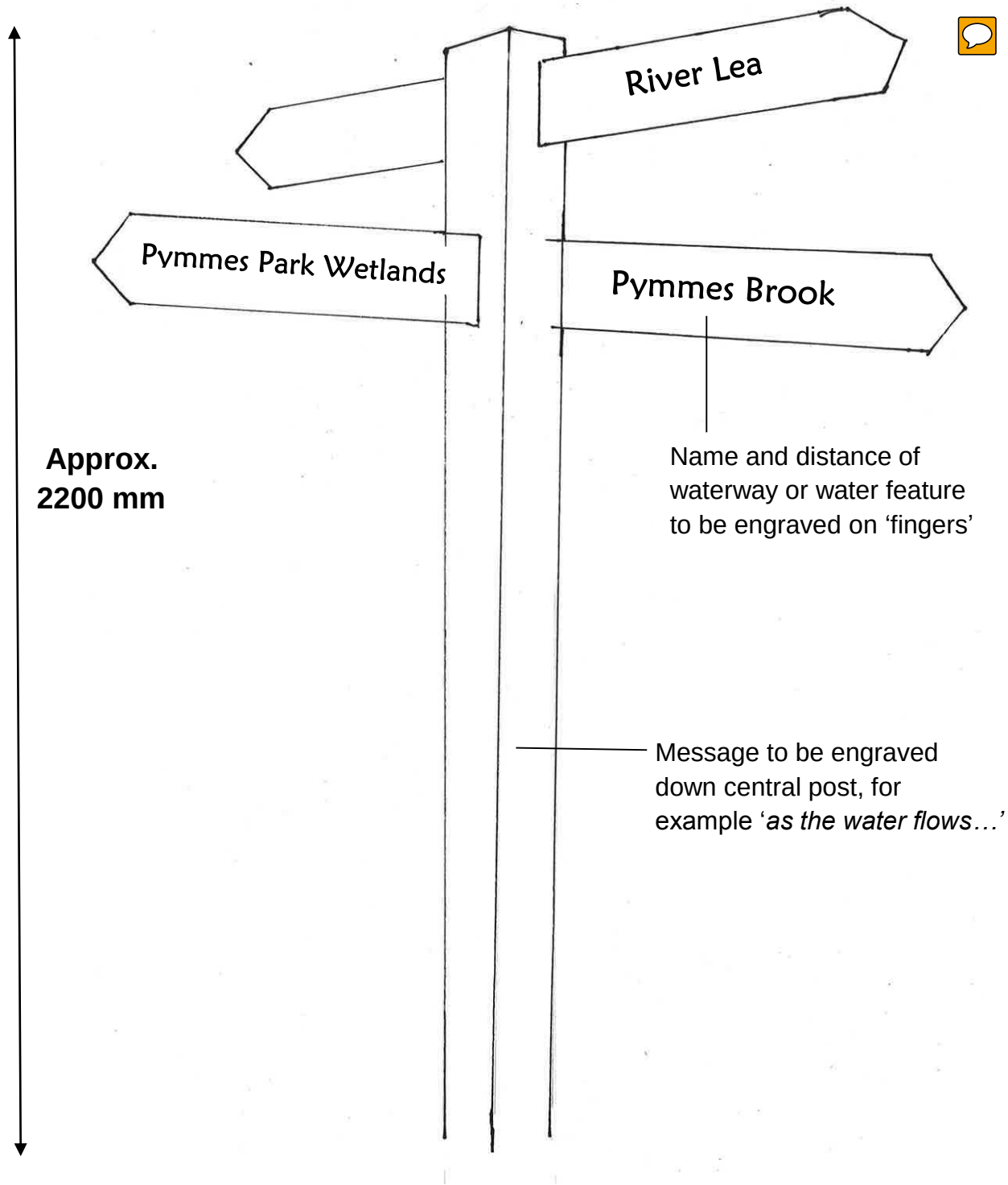
River Lea
Pymmes Park Wetlands
Pymmes Brook
Approx.
2200 mm
Name and distance of waterway or water feature to be engraved on 'fingers'
Message to be engraved down central post, for example '*as the water flows…*'

Fig. 19

3.3.2 Materials

Timber has been specified for the directional finger post. Wood options are Douglas Fir and Oak, as described above in section **1.3.2**. Examples are shown below of green Oak and Douglas Fir finger posts soon after construction.

Fig. 20 Example of an Oak finger post

Fig. 21 Example of a Douglas Fir finger post

3.3.3 Graphics

The exact text on the directional post is to be discussed and agreed with project partners. The proposal is that the post directs people to their nearest waterways and natural water features, such as Pymmes Park Wetlands and Pymmes Brook. This would involve some fingers directing park users to new locations ‘as the water flows’, and others by way of the quickest walking route. Distances (not indicated on fig. 19) would also be included on the finger post.

3.3.4 Fixings

The directional finger post shown would be grounded in concrete (1.3.4.2) at the chosen location.

4. Mosaic

4.1 Purpose

The purpose of delivering mosaic elements to Firs Farm wetlands is to raise awareness of the urban water cycle using sensory media. The aim is that the mosaic would be delivered as a community arts project, allowing local people to further contribute to the project and feel connected to the site.

4.2 Location

Fig. 22 Map showing proposed locations for mosaic features (blue dots)

Two locations (shown in detail in fig. 23 and 24, below) are proposed for mosaic features around the inflow and outflow. The aim is to highlight water entering and leaving the wetlands through underground pathways.

Fig. 23 Photo showing drain cover close to main inflow

Fig. 24 Photo showing drain cover close to main outflow

4.3 Design

The proposal is that mosaic elements would be introduced around the drain covers shown above to highlight the presence of water running underground. There are various narratives that could be presented through the mosaic, such as the journey through the city or the positive impact of the wetlands on water quality. The final design of the mosaic would be created by the local community with the guidance of an artist. The Mosaic would be broken up into smaller elements (as shown in example fig. 25) and cover <50% of the ground in the locations indicated. The Mosaic features would also be set flush with the concrete to avoid being a trip or slip hazard. Colours used in the mosaic will include blues and earthy pastels to reflect the nature of the wetlands (similar to those shown in fig. 26).

Fig. 25

Fig. 26

5 ‘School of fish’ project

5.1 Purpose

The aim of the ‘school of fish’ project is to raise awareness of: the urban water cycle, people’s connection to their local rivers and the positive impact of the wetlands on water quality. Wooden fish, decorated by pupils from local schools and the local community, would be affixed to a fence surrounding the outflow feature. This project would add colour and creativity to the protective fencing without compromising it.

5.2 Location

Fig. 27 Proposed location of ‘school of fish’ project around outflow feature (blue dot)

5.3 Design

Fish shapes made of wood to be painted by local school and the community, weather proofed and affixed to the fence surrounding the outflow feature.

Fig. 28 Example of ‘school of fish’ project adding colour to a chain link fence