Welcome to **Part 2** of my **Introduction to Maps.** In this Part we will look at map Symbols and Features, what they are and how to use them.

But first, let's recap on **Part 1: Scales** and take a look at the answers:

Q1: The North of Dartmoor is a very featureless environment. If doing a multiday expedition from the North Moor to the South Moor, what scale or scales of map would you choose and why?

A: A **1:40,000** Harvey British Mountain Map or a **1:50,000** OS Landranger Map due to their large area coverage and lack of detail so to not clutter the map.

Q2: Look at the two maps below. Using your knowledge of map scales, what are the scales of these two maps?

A:
- Image 1 Scale: **1:25,000**
- Image 2 Scale: **1:40,000**

Q3: Using your knowledge of map scales, match the type of map to the correct scale:

1.	Road Map	**a. 1:250,000**
2.	Orienteering Map	**b. 1:10,000**
3.	Harvey British Mountain Map	**c. 1:40,000**
4.	Ordnance Survey Explorer Map	**d. 1:25,000**
5.	Town Map	**e. 1:1,250**
6.	Floor Plan of your Home	**f. 1:100**

Q4: **Name three difference between a 1:25,000 scale map and a 1:50,000:**

- **1:50,000 covers a larger area**
- **1:25,000 shows more detail**
- **1:50,000 makes larger contour features and other major features more prominent**

**Q5: A bit of home research now, what other scales of map do Harvey Maps produce?**

- **1:12,500**
- **1:30,000**
- **1:60,000**
- **1:100,000**

As mentioned in Part 1, a map is a two-dimensional, or birds eye view of an area. To visualise the main features on the ground, symbols are used to help us understand what is around us. From the shape of the land and type of terrain, to railway stations and even phone boxes (remember them?), symbols show, in great detail, all the information we need as navigators.

There are hundreds of symbols and abbreviations used on maps, and the symbols used by OS are not the same as those used by Harvey Maps, so as to not overwhelm you, I have condensed this article down to the main points:

- What are symbols
- How do we use them?

Map Legends

Open up a map for the first time and the lines and symbols will not make much sense at first. What are those blue lines? What is that triangle with a dot in the middle? And what are those dashed lines?

The answer to these questions can be found in what is known as the Map Legend or margin of information. This is a list of all the signs and symbols found on the map and a good starting point to learning how to read a map.

On OS maps, the legend is usually found at the side, in a corner or the top of the map.

On Harvey Maps it is either on the reverse of the map or in a corner.
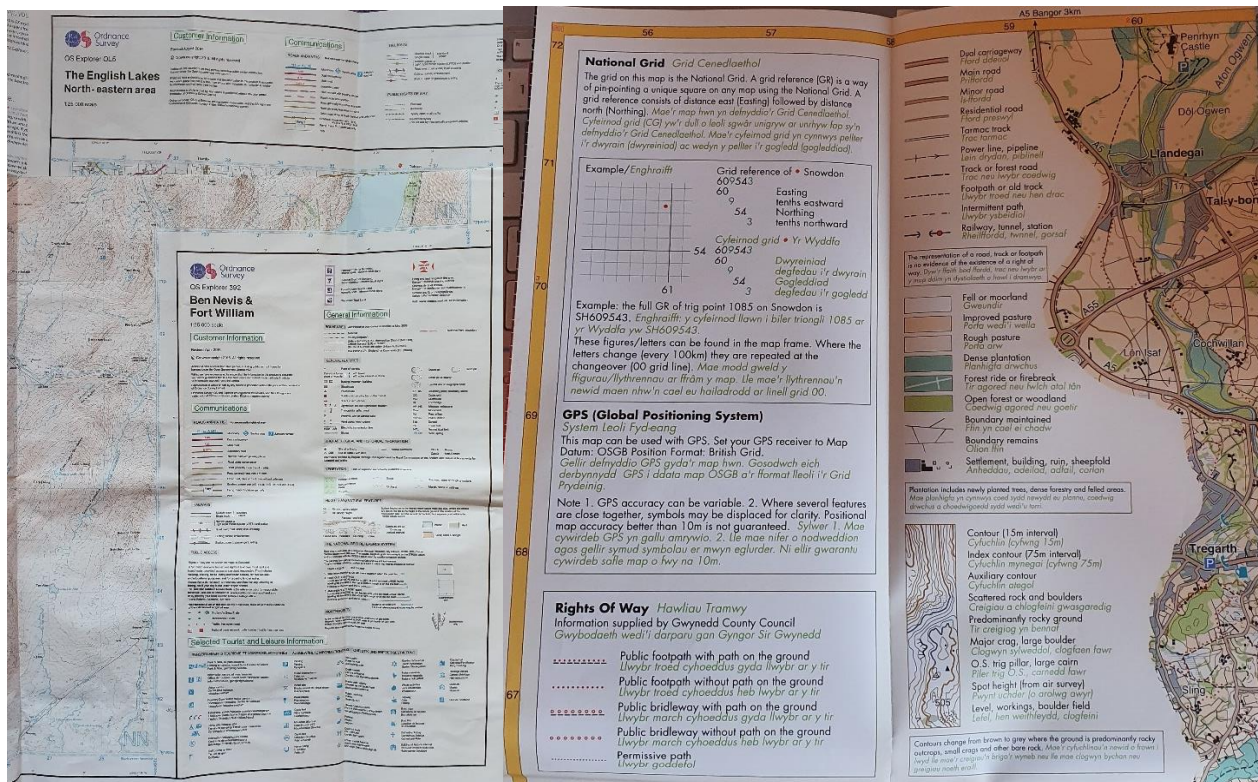
Above images:
1. **Left**: OS maps showing the legend at the top of a map and at the side
2. **Right**: Harvey map showing the legend in the corner

The legend will also give you more information about the map, such as the year it was printed, the north points and magnetic declination (more on this in a later article), the map area, scale and sheet number.

Learning the Legend

At first glance, it may seem like an endless task to try and learn all the symbols in a map legend. So to begin with, I will break the legend down into three types of features to try and help you learn some of the key symbols as a starter. These features are:

- Linear Features
- Spot Features
- Area Features

For your own reference, I have highlighted below where you can download the legend for both OS maps and Harvey Maps so you can learn symbols for yourself.

Download OS map legends:
1:25,000 OS Explorer Legend
1:50,000 OS Landranger Legend

Download Harvey Map legends:
Super Walker Legend
British Mountain Map Legend

Linear Features

Linear features are 'lines' on the map that you can use to follow. They are commonly referred to as 'handrails' (much like a banister on the stairs is used to 'lead' you up them as something to 'hold on to').
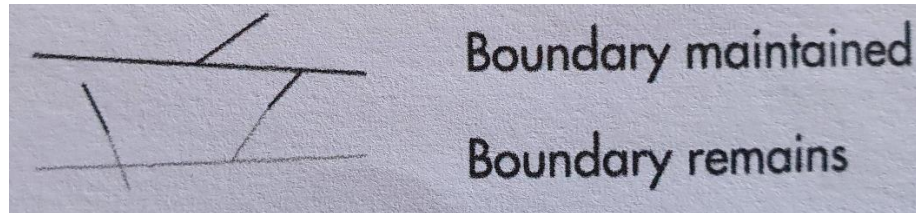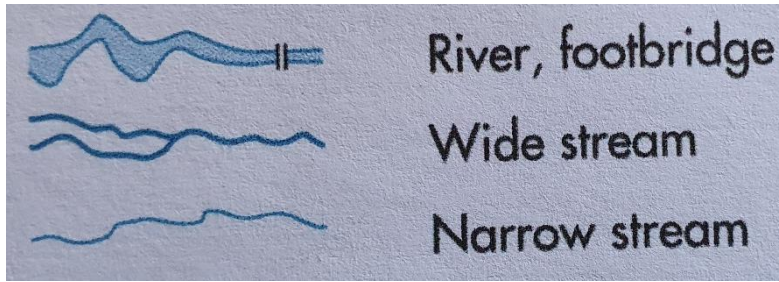
Examples of linear features (or Handrails) are:

- Rivers and streams
- Roads and tracks
- Footpaths and other public rights of way
- Boundaries
- Major landforms such as ridge lines

Example of OS Linear features
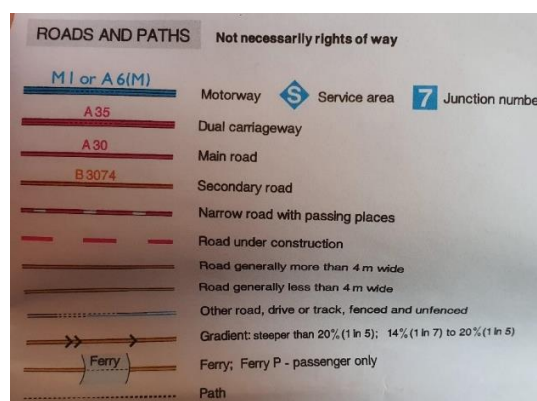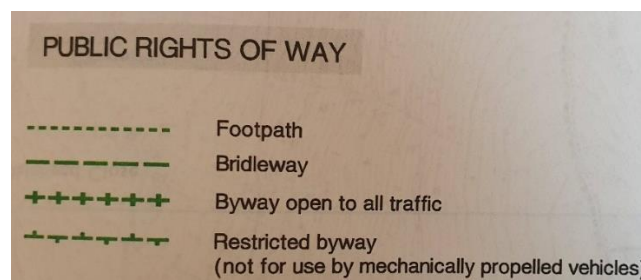
Example of Harvey Maps Linear features

River, footbridge
Wide stream
Narrow stream

Boundary maintained
Boundary remains

Dual carriageway
Main road
Wide minor road
Minor road
Residential road
Tarmac track
Railway, station, tunnel
Dismantled railway
Track or forest road
Path or old track
Intermittent path
Powerline
Pipeline
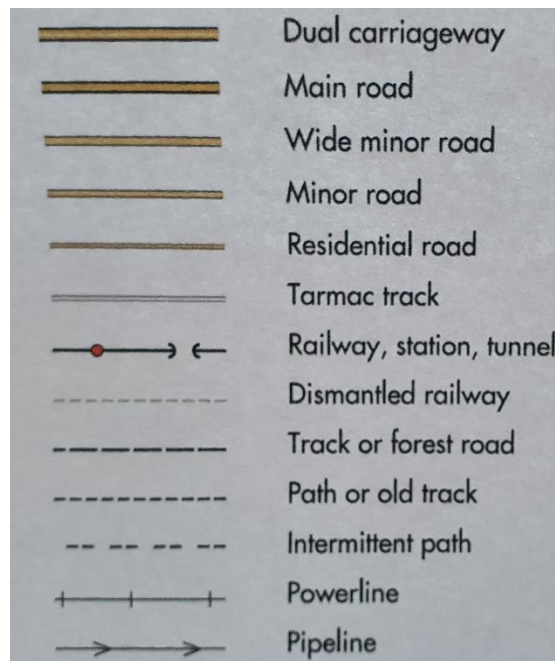
At a basic level, we use handrails to orientate the map to the ground and relating the features on the map to those on the ground. I will cover this in more detail in a later article.

Spot Features

Spot features are small points or single point features that pinpoint a particular location.

Examples of spot features include:

- Small lake or pond
- Track junctions
- Triangulation Pillar (Trig Point)
- Footbridge
- Buildings

Area Features

Area features are large features. Examples include:

- Lakes
- Woodland and forests
- Marshes
- Slopes

I have purposely not added examples above for Spot and Area features as I want to encourage you to look at the Legends of maps and find them for yourself. Below is an image from a Mountain Training Publication (Hillwalking) which shows examples of all three types of features. Have a guess at what types of feature are numbered. Answers at the end of this article.

Illustration from 'Hillwalking' © MTUK/VG 2015
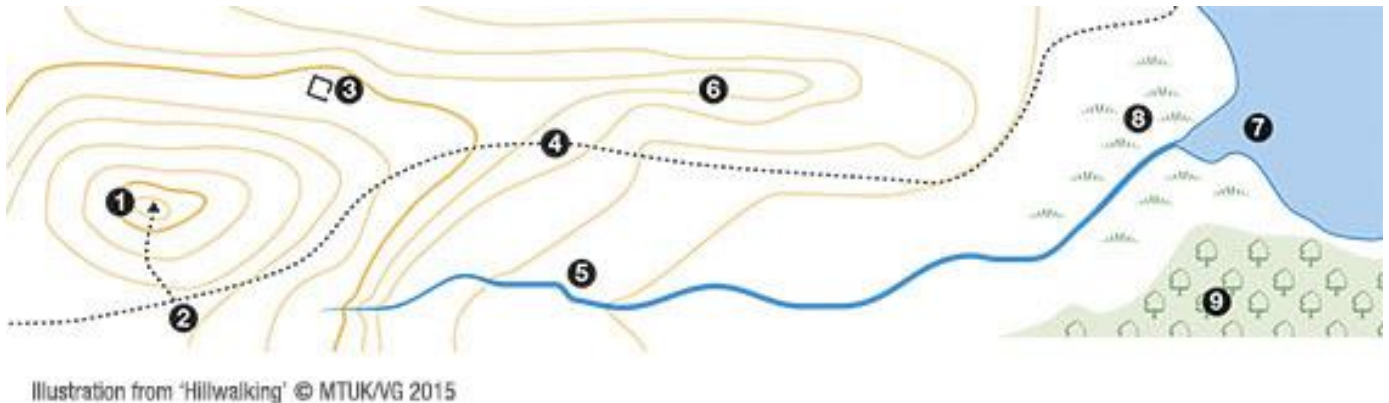
To learn more about OS map symbols, take a look at their Flash Cards

Once you are able to identify a few symbols for each type of feature, you can begin to develop the basic skills to navigate along footpaths. These symbols and features are the key to learning navigational techniques to aid you following a route. Two of these techniques are '**Collecting**' and '**Catching**' features.

Collecting Features

This is a technique used to help keep you on track and know where you are. It involves looking at your route on the map and identifying symbols along your route that you will pass by. As you pass by these features on your walk, you 'collect' or 'tick off' these features. This helps you visualise your walk and enables you to stay on track as you know what features to look out for.

Catching Features

These are effectively a 'back stop' (like in cricket) or a safety net to 'catch' you if you have gone too far. Take a look at your route and look beyond your objective to find a large obvious feature that isn't too far away (a few hundred metres). This could be a large area feature (such as a woodland or even change in direction of the slope) or maybe a linear feature such as a stream or a footpath. As the saying goes; "If you get to this feature, you've gone too far"

I will go into more detail about **Collecting** and **Catching** features in a later article.

Finally, take a look at this extract below from Harvey Maps Superwalker XT25 - Snowdonia North. Use the Downloadable Harvey Maps legend and see how many features and symbols you can find in this area.
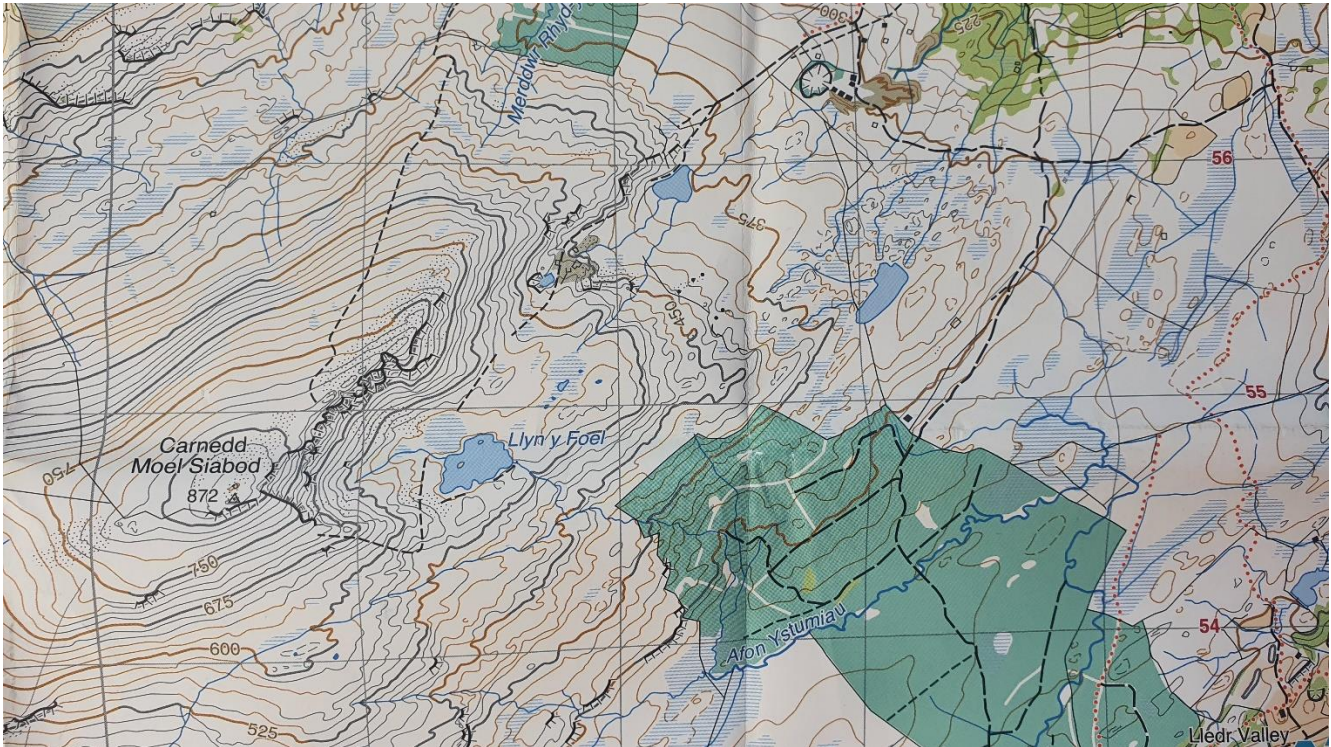
Next Up:

The next Part in this series will be **Part 3: The Grid system and Grid references**

To learn more, take a look at my navigation courses and National Navigation Award Scheme courses.

All **confirmed bookings** will receive a **10% discount** code to use on **Harvey Maps** products from their site.
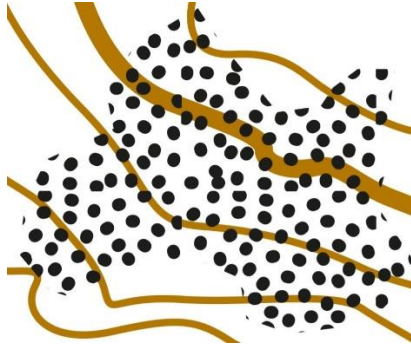
Answers to 'what types of feature' image:
1. *Spot*
2. *Spot*
3. *Spot*
4. *Linear*
5. *Linear*
6. *Linear*
7. *Area*
8. *Area*
9. *Area*

Questions:

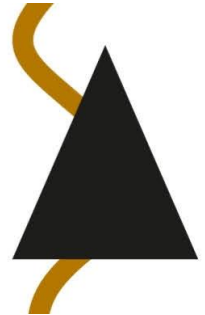1. **Using a Harvey Maps Superwalker Legend, what are these three symbols and what type of feature are they?**

a)   b)   c)
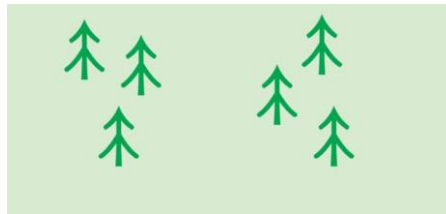
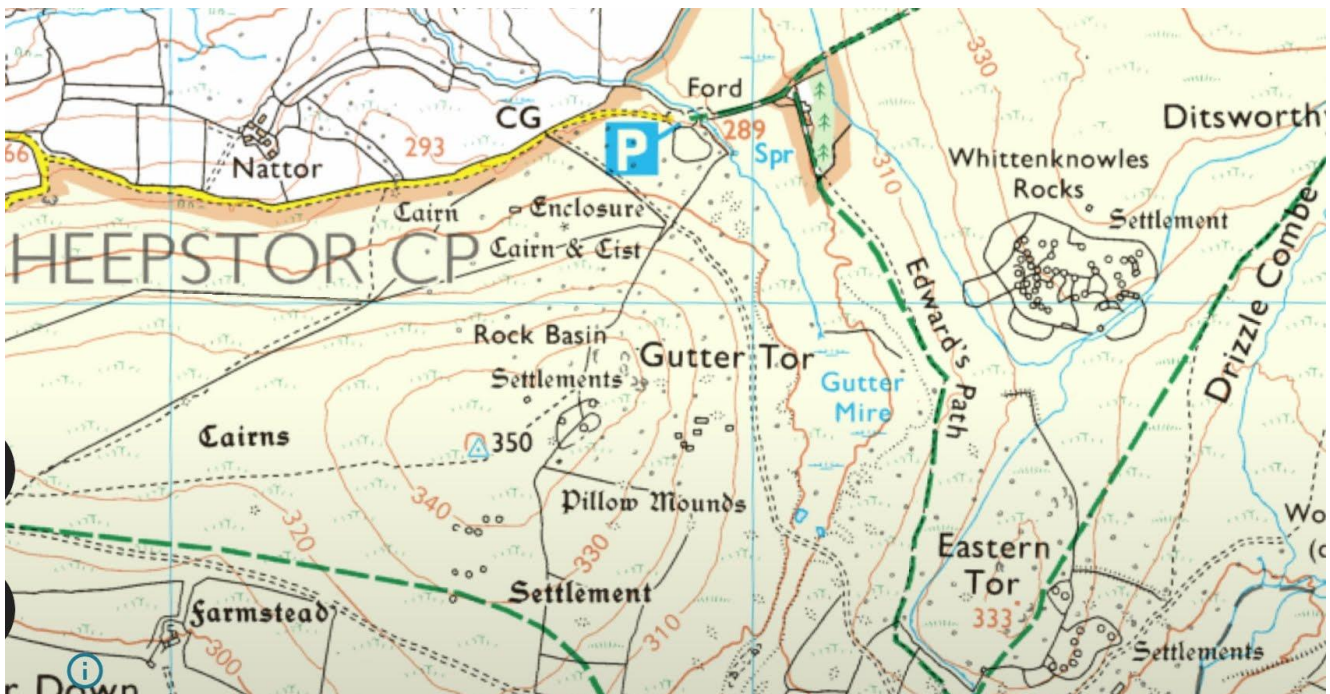2. **Using an OS Explorer Legend, what are these three symbols and what type of feature are they?**
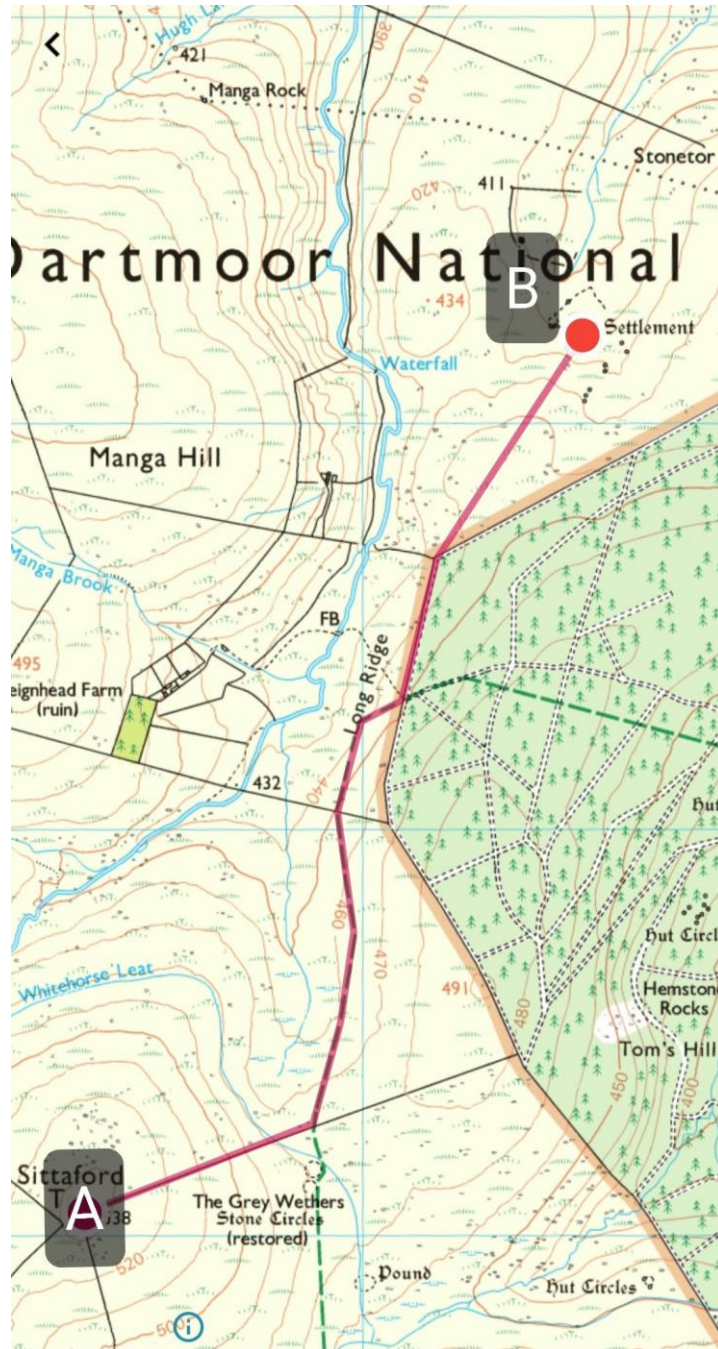

a)   b)   c)

3. **Looking at the map below and using a legend, what handrails can you see?**

4. **Look at the map below. From <u>A</u>, follow the marked route to <u>B</u>. What features would you use as collecting features?**

5. **Using the same map above, what could you use as a catching feature if you overshot <u>B</u>?**

*You can find the **answer sheet** to these questions attached to the beginning of **Part 3: The Grid \system and Grid References***

Feel free to email me any questions you may have if you are unsure:

info@attheedgemountaineering.co.uk