

# Map references

The National Grid provides a unique reference system, which is used on all Ordnance Survey maps of Great Britain, at all scales. It gives us the map references we need to find locations across the country. These map references are made up of letters and numbers.

The National Grid works by dividing Great Britain into 100 kilometre (km) grid squares. Each square is identified by two letters. **It is important to include these letters in all map references as they define which area of the country you are dealing with.**

The numbers represent grid lines which start in the bottom left hand corner of the map. One set of lines runs **vertically**: these are known as **eastings**. The other set runs **horizontally** and are called **northings**.

To find a location using a 6-figure map reference – in this example TL623317 – you need to look at the:

**1. Letters:** In this example TL represents a specific 100 km area of Great Britain. We find this square using this diagram of Great Britain. (Diagram A). These letters are sometimes represented by numbers, shown on the diagram in brackets.

**2. Eastings:** The first three numbers are the eastings. The first two numbers represent the figures running along the north or south sides of your map. The third figure is the number of tenths east of that line to the next, in this case 3. Diagram B shows you how.

**3. Northings:** The last three numbers are the northings. The first two numbers represent the figures running along the east and west sides of the map. The third figure is the number of tenths north of that line to the next, in this case 7. Diagram B shows you how.

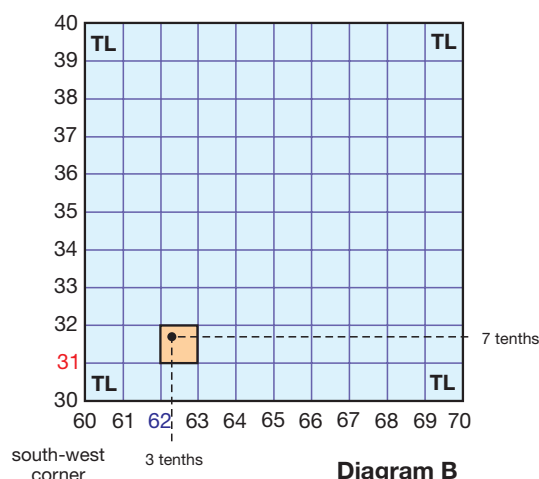
**4. The map reference:** Putting the letters and numbers together gives us the map reference, in this case TL623317.

A 6-figure map reference will give you a location to within 100 m.

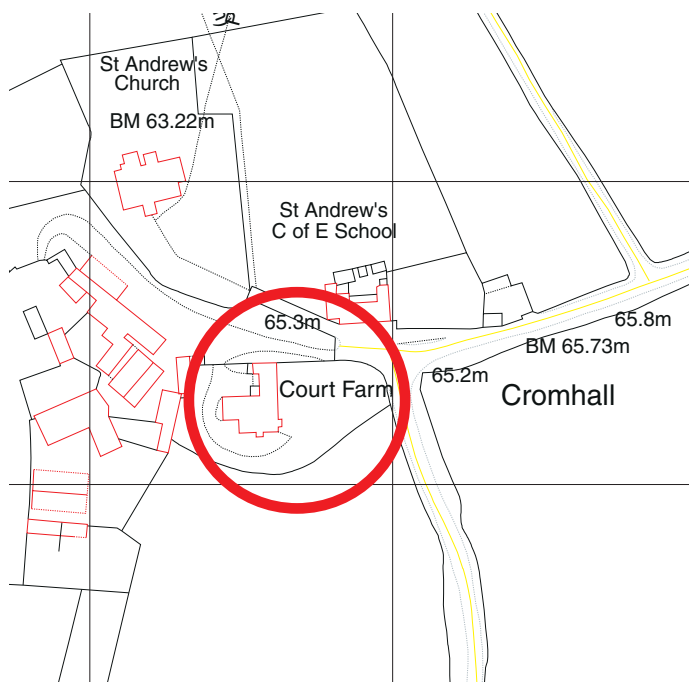
A 10-figure map reference is possible within the National Grid and defines a location to a precision of 1 m. The same letter and number configuration is used with two letters followed by 10 numbers, for example: TL62356 31722. Sometimes, for example, when using the Garmin 12™ hand held GPS, the eastings and northings are separated by the letters BNG indicating that the map reference is in the British National Grid, for example: TL 62356 BNG 31722.

				HP (N42)		
			HT (N31)	HU (N41)		
	HW (N10)	HX (N20)	HY (N30)	HZ (N40)		
NA (09)	NB (19)	NC (29)	ND (39)			
NF (08)	NG (18)	NH (28)	NJ (38)	NK (48)		
NL (07)	NM (17)	NN (27)	NO (37)			
	NR (16)	NS (26)	NT (36)	NU (46)		
	NW (15)	NX (25)	NY (35)	NZ (45)		
		SC (24)	SD (34)	SE (44)	TA (54)	
		SH (23)	SJ (33)	SK (43)	TF (53)	TG (63)
	SM (12)	SN (22)	SO (32)	SP (42)	TL (52)	TM (62)
	SR (11)	SS (21)	ST (31)	SU (41)	TQ (51)	TR (61)
SV (00)	SW (10)	SX (20)	SY (30)	SZ (40)	TV (50)	

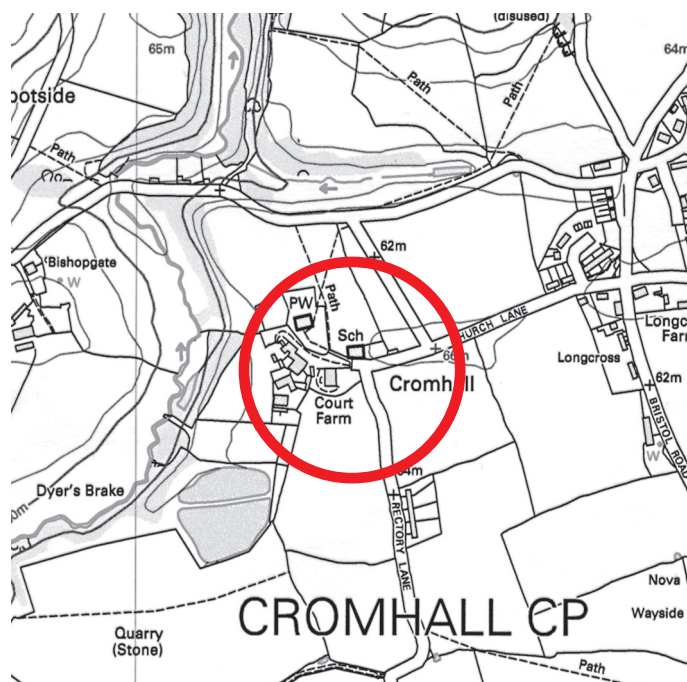
Diagram A



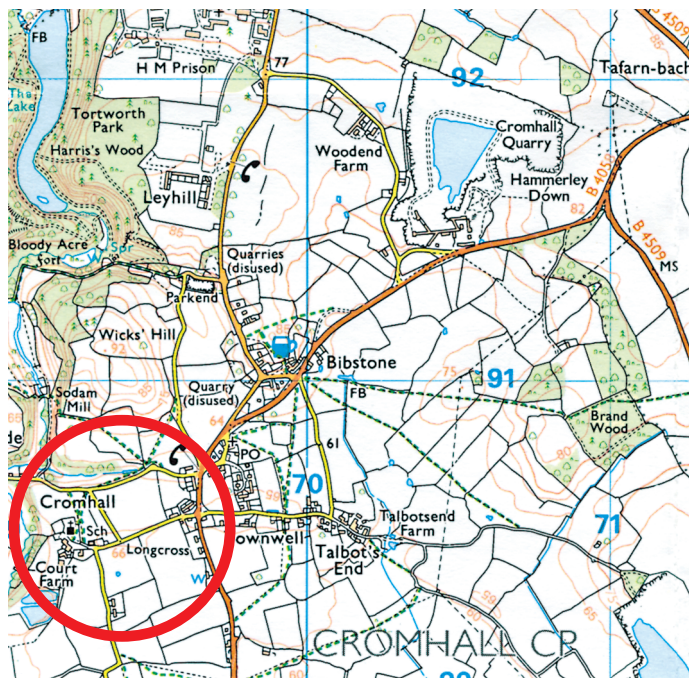
# Ordnance Survey map scales



1:2500 scale (40 cm to 1 km or 25 inches to 1 mile)



1:10 000 scale (10 cm to 1 km or 6 inches to 1 mile)



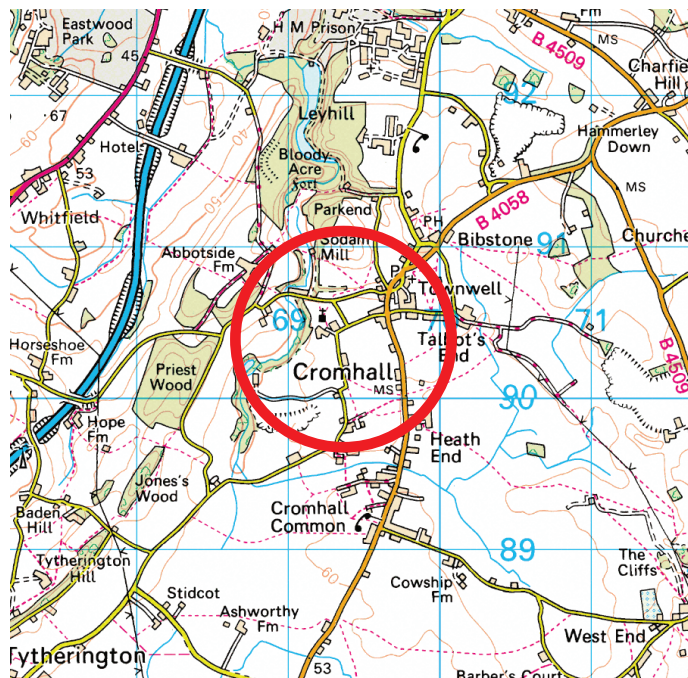
1:25 000 scale (4 cm to 1 km or 2½ inches to 1 mile)

1 metre = 3.3 feet

100 metres = 328 feet

1 kilometre = 0.62 mile

1 mile = 1.6 kilometres



1:50 000 scale (2 cm to 1 km or 1¼ inches to 1 mile)

Other map scales are available, more details at:  
[www.ordnancesurvey.co.uk](http://www.ordnancesurvey.co.uk)