

Lesson 1: Plan of entrance area

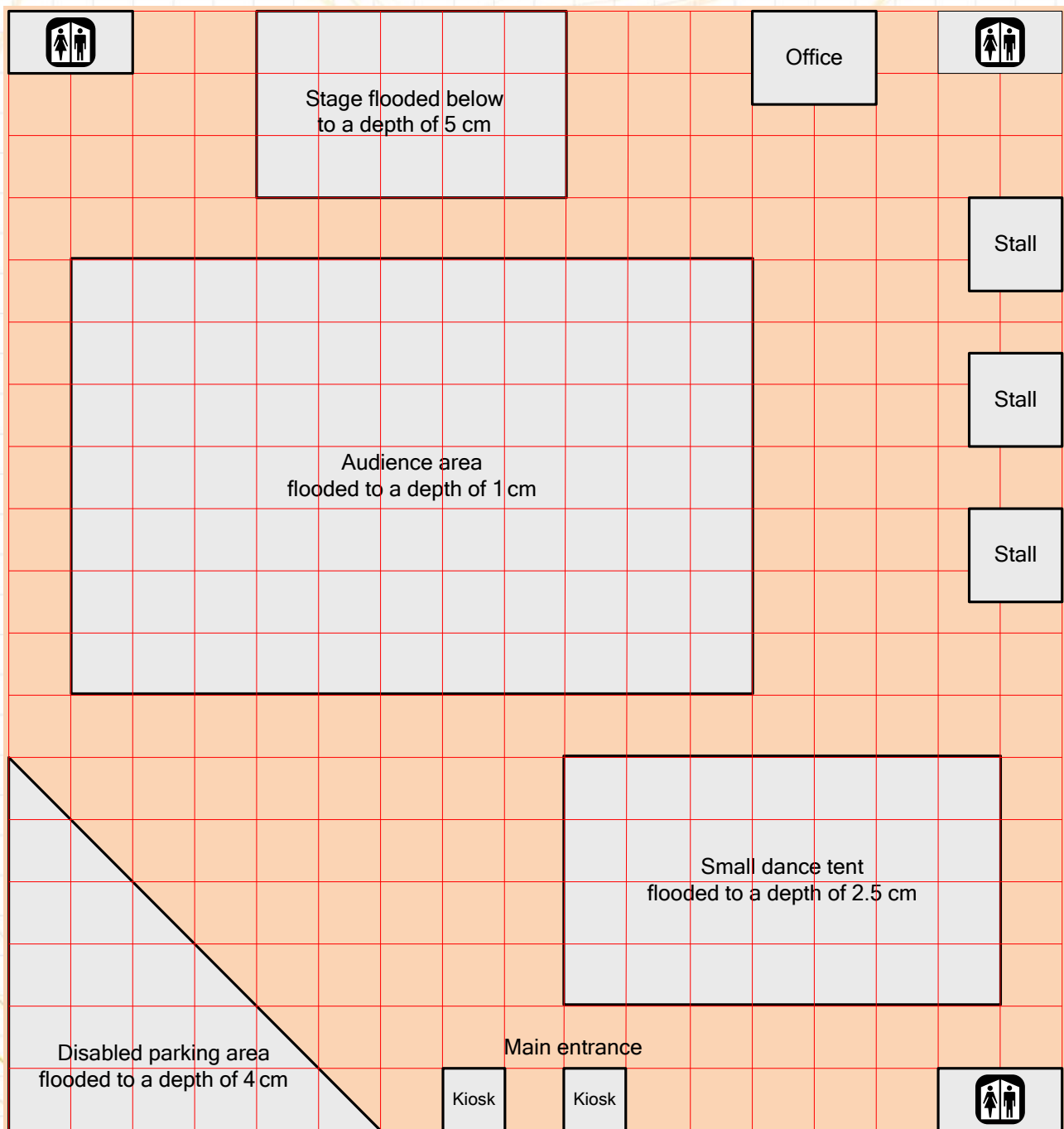
Resource 1.2

Torrential rain has hit Torbury Festival and the site is flooded! When the equipment arrives, you will have just one hour left to avoid the festival becoming a washout!

This is a plan of the entrance area, a small part of the festival site. On the plan, **1 centimetre represents 10 metres**. On the next page, there are details of four ways of removing water.

Can you remove the water from the four flooded areas in time for the festival to open?

Which method of removing water will you use in which area? You must decide!



Resource 1.2 [continued]

Ways of removing the water	m ³ per minute
Pumping it into tanks to be airlifted away using the headline act's helicopter	1.18
Spreading straw from the farm to bind the squelchy ground and water	1.2
Pumping into the underground drain that runs to the river	1.25
Using the suction truck, normally used to empty the portaloos	1.3

	Area (m ²)	Volume of water (m ³)
Stage		
Audience seating		
Parking area		
Dance tent		

	Volume of water (m ³)	Time (min) at 1.18 m ³ /min using helicopter	Time (min) at 1.2 m ³ /min using straw	Time (min) at 1.25 m ³ /min using drain	Time (min) at 1.3 m ³ /min using suction truck
Stage					
Audience					
Parking					
Dance tent					

Which method of removing water will you use in which area? You must decide!

