

# **UNHCR Emergency Water Platform (Sandbags)**

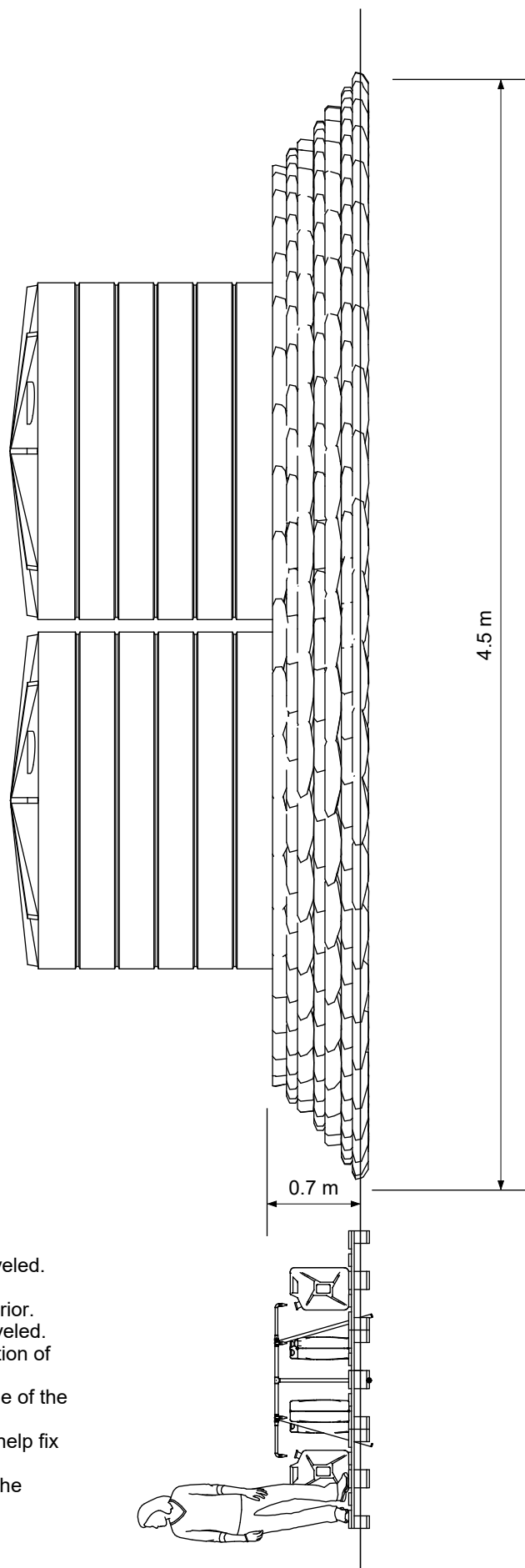
**D306-2015a**

**Tools and Guidance for  
Refugee Settings**



**UNHCR**  
The UN Refugee Agency

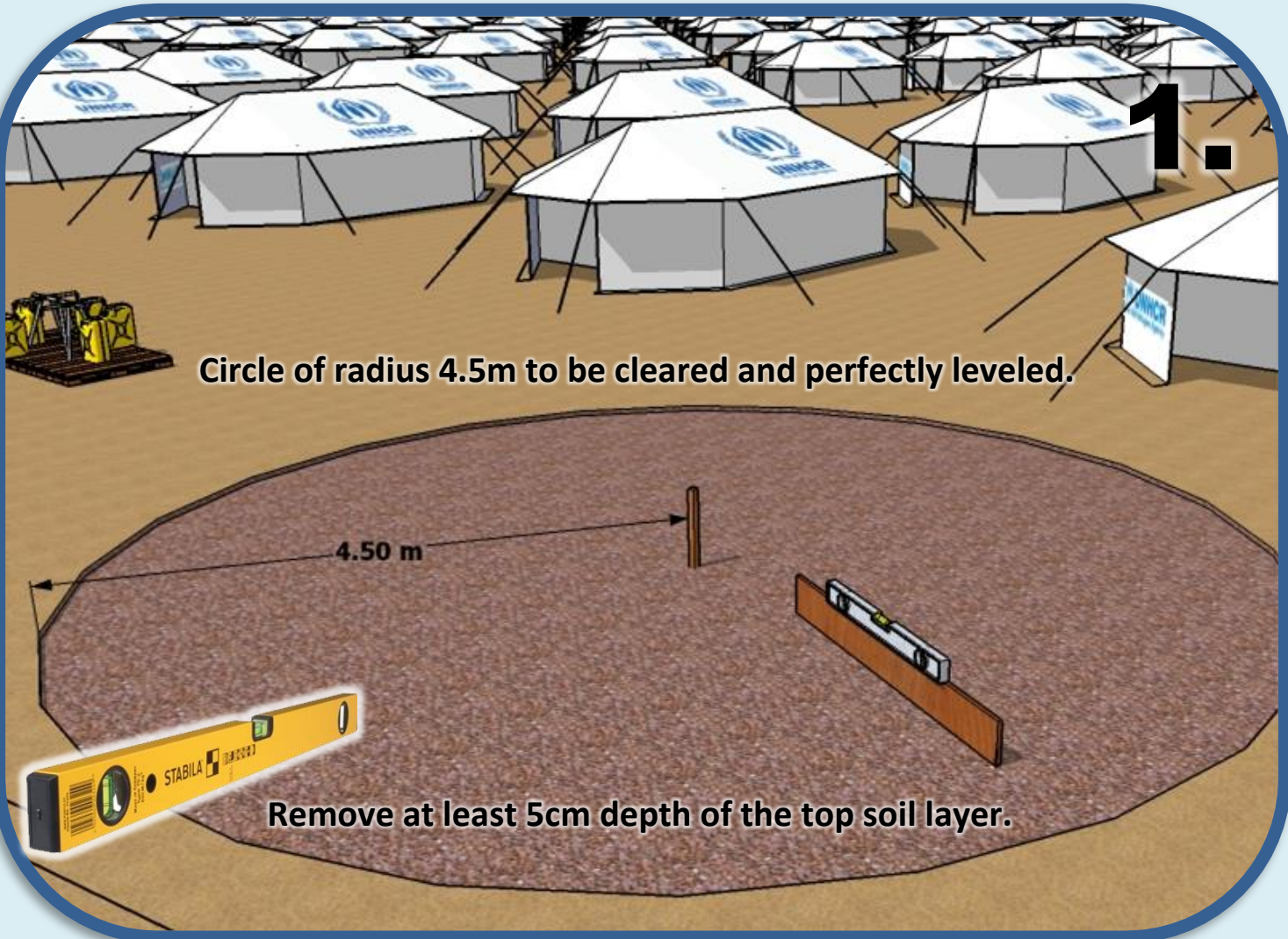
# Side View



## NOTES

1. Circle of radius 4.5m to be cleared and perfectly leveled.
2. Remove at least 5cm depth of the top soil layer.
3. Form the first ring of sand bags and backfill the interior.
4. Ensure that the fill is adequately compacted and leveled.
5. Alternate the direction of sand bags 90° to the direction of the previous row.
6. Set each row of sand bags back away from the edge of the previous row to form a 45° slope.
7. Barbed wire should be used between the layers to help fix the bags securely in place and prevent movement.
8. A mechanical excavator may be used to speed up the process of backfilling.
9. Ensure that the final surface is perfectly level and compacted.

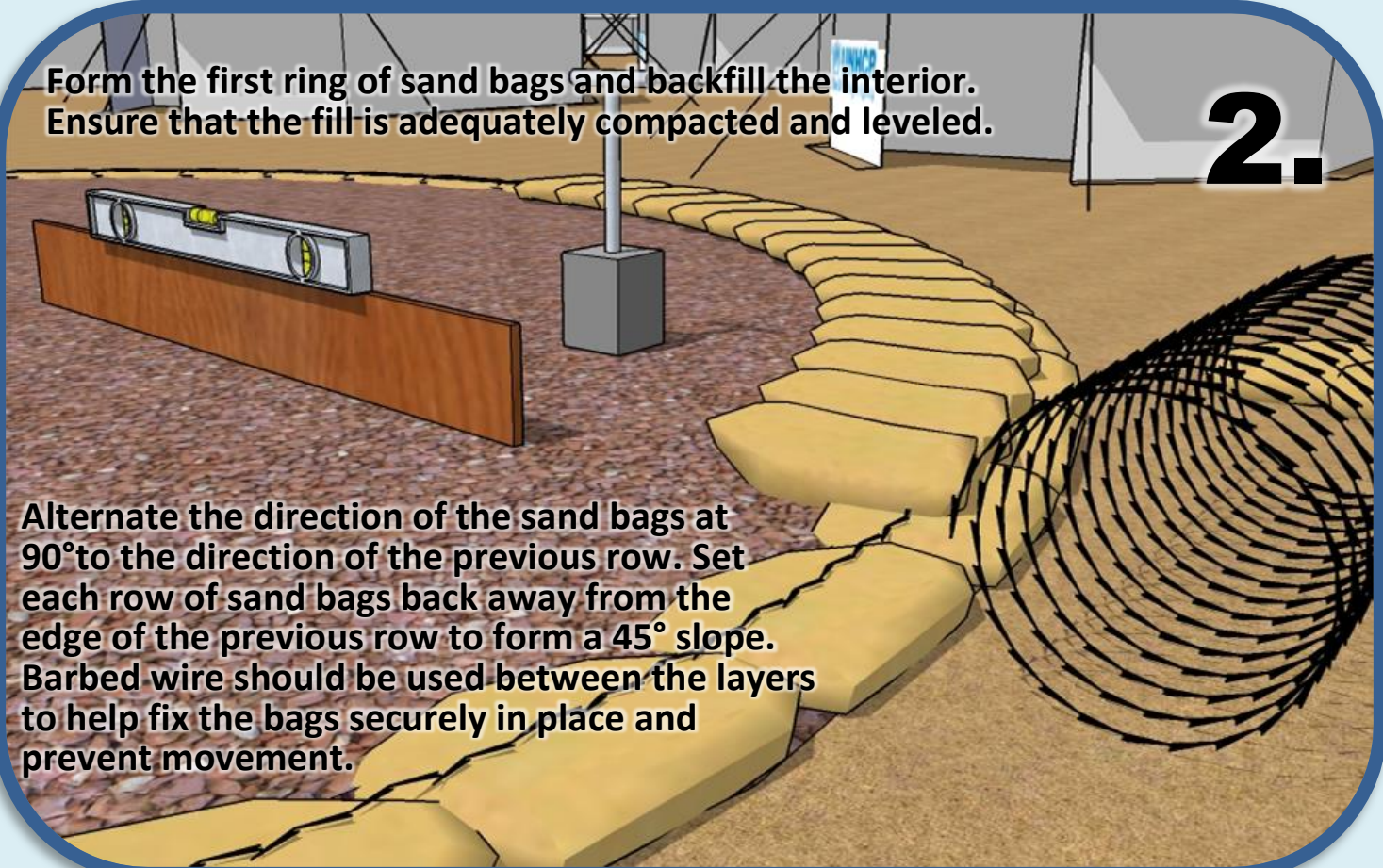
# 1.



Circle of radius 4.5m to be cleared and perfectly leveled.

Remove at least 5cm depth of the top soil layer.

# 2.



Form the first ring of sand bags and backfill the interior.  
Ensure that the fill is adequately compacted and leveled.

Alternate the direction of the sand bags at  $90^\circ$  to the direction of the previous row. Set each row of sand bags back away from the edge of the previous row to form a  $45^\circ$  slope. Barbed wire should be used between the layers to help fix the bags securely in place and prevent movement.



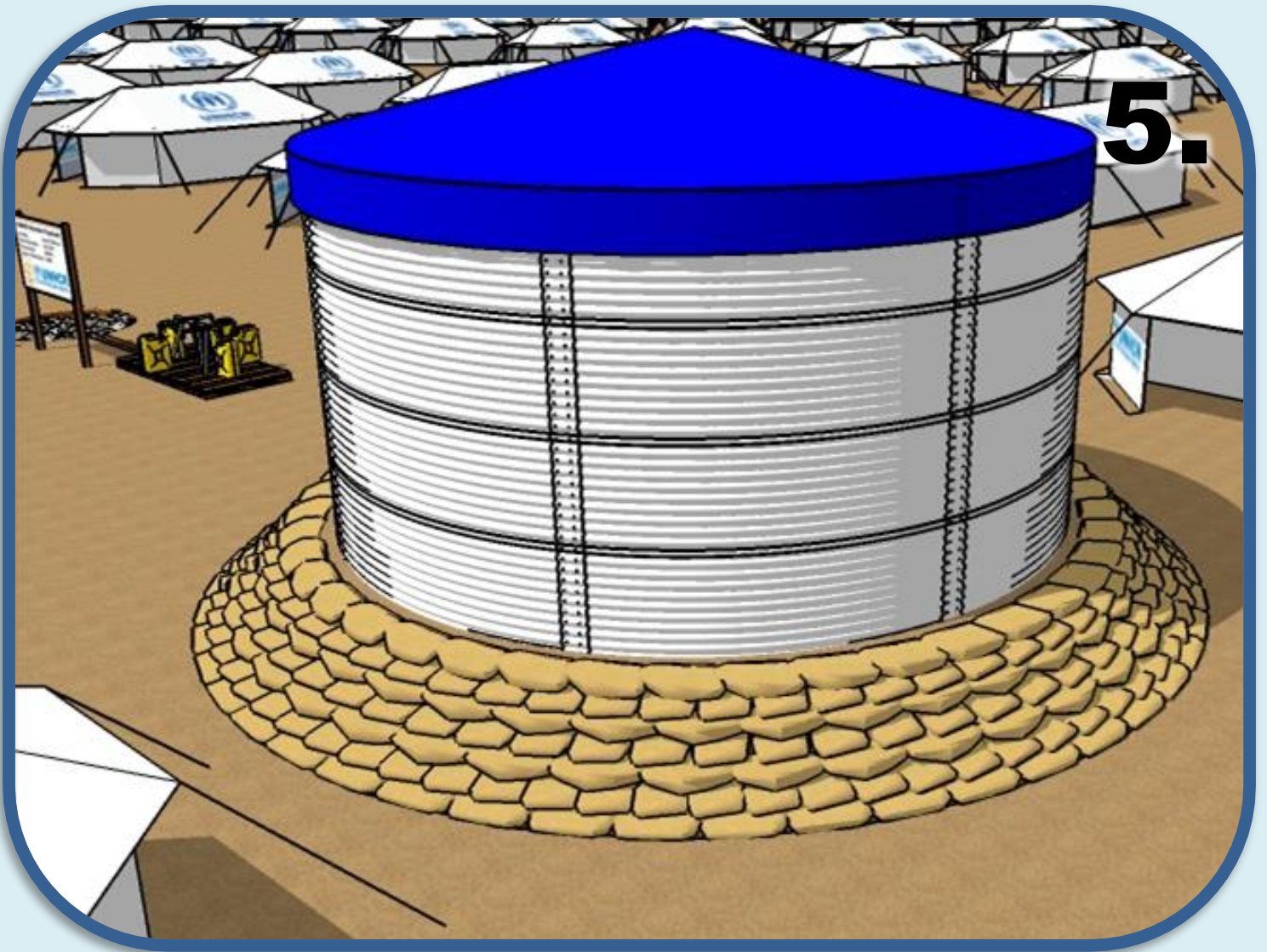


A mechanical excavator may be used to speed up the process of backfilling.



Ensure that the final surface is perfectly level and compacted.





**Roto Tank Option**