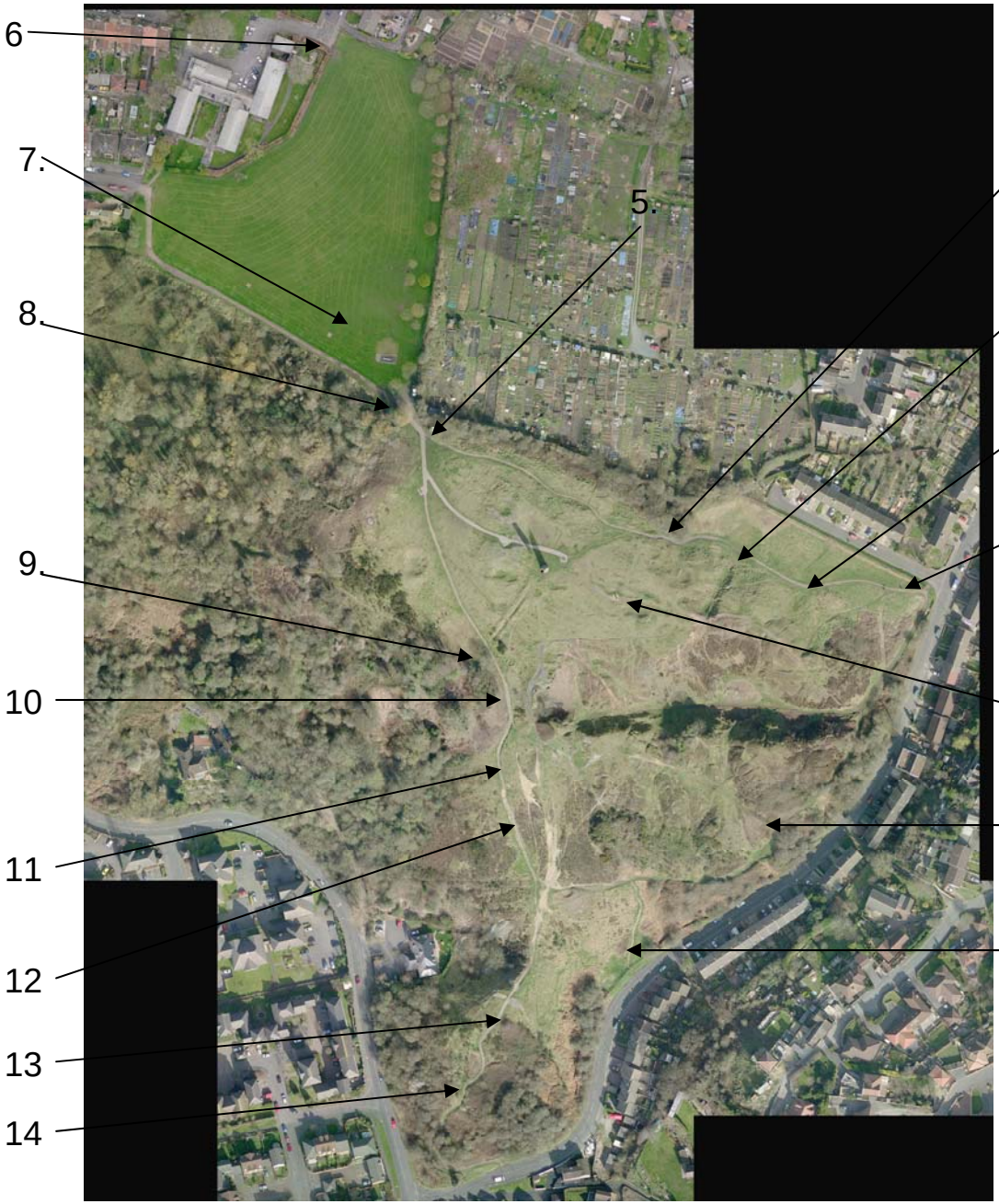
Troopers Hill Stepping Forward – Footpath repairs, erosion control and drainage

Site plan



Prepared by:
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City Development

Construction requirements

• All fill and regrading to be carried out to correct, cambers, levels and cross and long falls as shown on drawings
• Timber sleepers dimensions to be a minimum of 20cm depth by 12cm width.
•On smaller steps a riser of 150mm x 50mm board can be used, with 50mm x 50mm support stob. TBC with CA before commencing
•At least 75% of support stob should be driven into the ground
• Two stobs per step and nailed to the riser from the outside, 13cm or 15cm galvanised nails
•Sandstone aggregate to be used as first choice on site, limestone can be used if sandstone not available. Colour must be a reddish colour to match the rocks on the hill, not yellowish.
•Top surface dressing to be made of sandstone dust with fines. Material for top dressing to be selected such that final surface binds sufficiently to form firm, level and durable surface.
•If soil too loose may need to install a reveted staircase as shown on construction drawings.
•Where they exist retain curves to steps
•Hardcore sub base – 150-200 mm of Type 1 crushed stone, compacted. Laid over Terram geotextile membrane
•Reinstatement can only use the existing soil on site, no imported topsoil or grass seed.
•Soil / vegetation to be removed from front face of all existing steps to be retained (except Section 16). Stobbs and timber to be inspected by CA. Allow for replacement of timber for 12 steps in addition to work detailed in individual sections.
•Any timber that can’t be reused that is in good condition is to be recycled by Parks Department. Please leave on site for collection, location to be confirmed with CA.

1. Greendown Road entrance
Additional timber step above top step, build into edge as per existing.
Allow sufficient length of timber

2. Regrading and fill to bottom step to fill erosion gulley.
Additional timber step required approximately 1.5m below bottom step.
Build into edge, allow sufficient length of timber, approx 140cm wide

3. Regrading and fill, including terram membrane. Include one timber step,
Approximately 110cm length

4. Install small boulders at 2-3 step intervals with gulley to side in Order to drain step as shown on construction drawings

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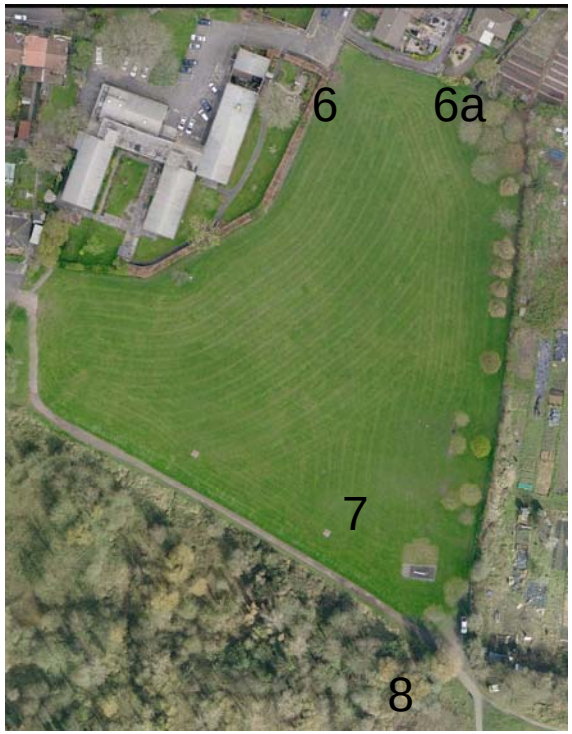
5. Install one timber step approx midway, approx 150cm length.
Excavate, regrade and fill to 4m stretch of path, include terram membrane



6 & 6a. Pedestrian entrance.
Install 12m2 of grasslock surfacing
And reseed.
6a – move tree stump and replace
Once work complete

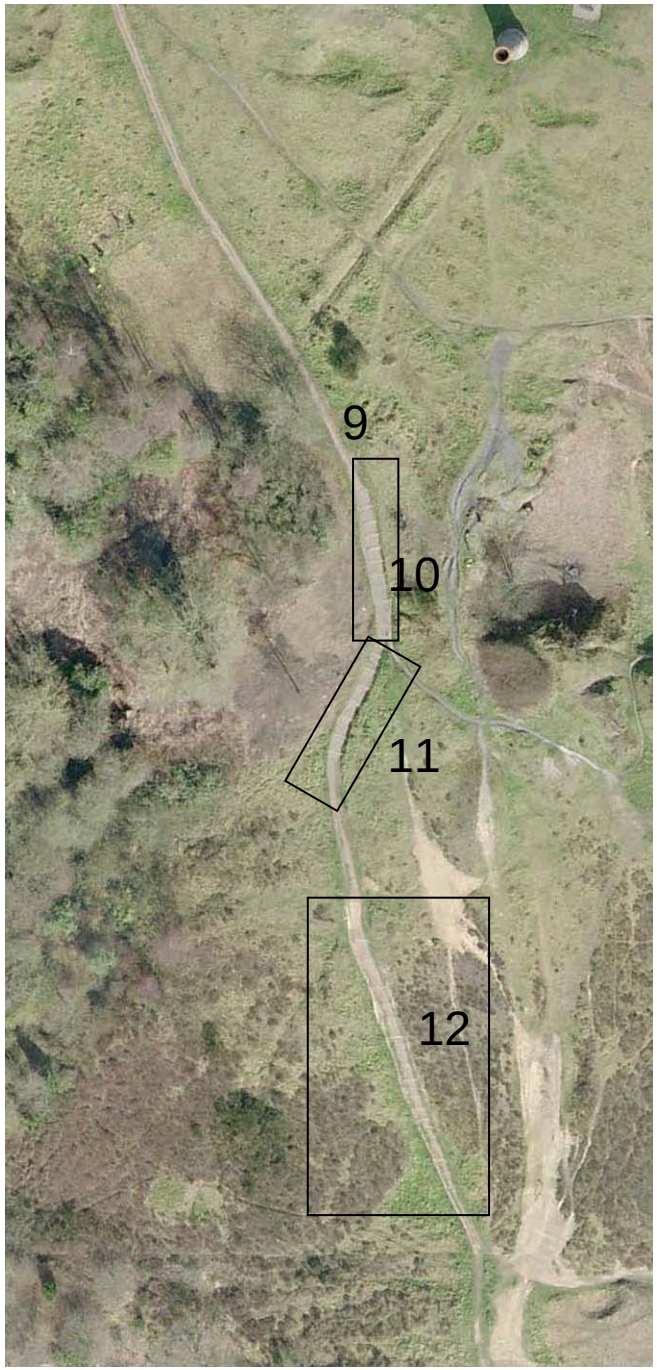
7. Install two flexible perforated land drains to Grassed Area as per specification, to continue under footpath to drain to Wooded area.
See CAD location Plan.

8. Reposition information
board adjacent to path to improve
Accessibility

Install Grass lock surfacing to eroded
Area leading from topfield. To allow for
Fill and regrading around bin
Grass seed

Location and area shown on Cad layout plan

9. Install two sleeper drains side by side across footpath to take surface rain water run off away from the steps into the wooded slopes.
Installation as per construction drawing and specification.
Channels to run to side of path, may require flexible perforated upvc pipe to ensure effective drainage into wooded slope below



Sections 10 & 11. Steps requiring attention, 1 to 23 from top of steps

Step 1. replace and extend into edges. Fill & Regrade below.
Step 2. Place boulder at edge with channel below
To disperse run off. Fill and regrade surface below
Step 3. Fill and regrade below
Step 4. small boulder and gulley to edge. Fill and
Regrade below
Step 5. Replace timber step into edge of path (approx length
2.4m)
Step 6. Replace timber step into edge of path. Regrade and fill
Step 7. Replace timber step into edge of path. Regrade and fill
Step 9. Regrade and fill below
Steps 10-11. some fill needed between
Step 12. replace step to continue to edge
Step 18. install boulder and channel below . Regrade and fill
Step 19. Fill and regrade below
Steps 19-20. Build additional step between, fill and regrade
Step 20. Replace and extend to edge (approx 2.2m)
Step 20-21. Build new step between. Infill and regrade
Step 21-22. Build new step between. Infill and regrade
Step 22-23. Build new step between. Infill and regrade

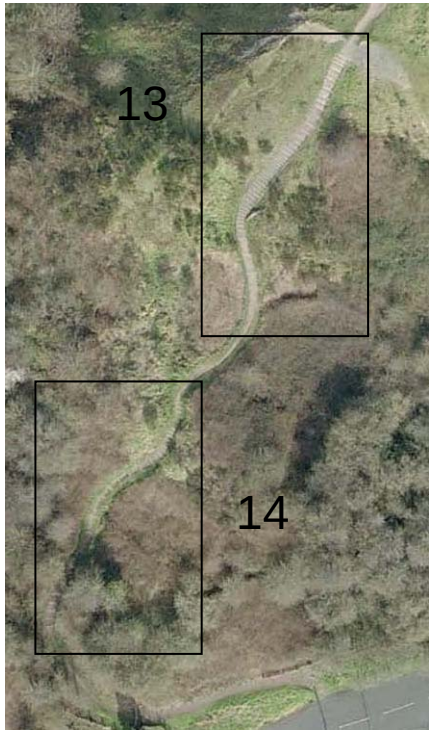






Section 12
Steps 1-20

Step 1. replace to edge. Regrade and fill
Step 1-2. construct additional step inbetween
Step 2. replace to edge. Regrade and fill
Step 3. replace to edge. Regrade and fill
Step 3-4. construct additional step inbetween
Step 4. add boulder at higher edge and channel below to edge
regrade and fill below
Step 5. replace and extend across to edge, regrade below
Step 6. replace and extend across to edge, regrade below
Steps 6-7. construct additional step inbetween
Step7. replace and move position to ensure steps are well spaced
Step 8. replace to edge. Regrade and fill
Step 9. replace to edge. Regrade and fill
Step 10. replace to edge. Regrade and fill
Step 11. Place boulder to edge with small channel below to drain away
Step 12-16. replace to edge. Regrade and fill.
Steps 16-17. construct additional step inbetween
Steps 19-20. replace to edge. Regrade and fill.



Section 13- 47 steps
In general.
Replace broken or missing stobs
and remove any protruding nails.
Spot fill and regrade
Replace 3 timber steps
Fill and compact to base of timber steps
where gaps are present

Section 14
Step 2-6. replace timber steps, regrade and fill
Steps 16-21 add two steps between , regrade and fill
Replace any broken stobs
Steps 22 &23 regrade and fill
Steps 24 & 26 replace and extend into edge
Steps 25 to 28 protruding rocks to be removed, fill and regrade
Step 29. replace step and new stobs

No works required to steps adjacent to the road outside the kissing gate

Section 15
Spot replacement of timber steps
Contractor to allow for replacement of 6 steps to be marked by CA, including stobs.
Steps to be reinstated with as dug material

Section 16
Spot replacement of timber steps
Fill trip hazard
Repair at foot of steps
Possible placing of a few boulders to edges,
(TBC on site exact locations)
with drainage channels below

Section 17
Plinth to bench that is sat too high above ground level due to erosion around base of bench.
Plinth to be constructed with timber surround and filled with stone as per step construction.
Plinth to be whole area under the bench extending 750mm in front.
Falls to allow water to drain off. Concrete fixing pads to be squared up or recast.