

## General Track Construction Methods and Technical Specifications, July 2019

### STEEL MESH ELEVATED WALKWAY (elevated structures)

Steel mesh refers to a raised steel mesh walkway like that which has previously been installed along the Kosciuszko Walkway and on the new Mt Lee walkway on the Main Range. Raw steel is used and allowed to 'rust' to blend with the natural surroundings. Steel mesh is used as the walking surface and the mesh allows light and water through to the vegetation underneath (Figure 1).



*Figure 1: examples of raised steel mesh walkway constructed at Mt Lee, Main Range, Kosciuszko NP*

The steel mesh walkway surface will be 800 mm wide with 200 mm either side allowed as a vegetation management zone. Micrositing and survey will occur prior to construction.

The following technical specifications and methodology are most likely:

- Maximum slope of walkway in the direction of travel 5% generally and 10% over short sections as approved by project manager;
- Clear the alignment of vegetation to grass/small shrub height to a temporary width of 2.8 m to allow for construction;
- Mark out pier positions which are approx. at a 2.9 m span along length. Drill pilot hole with a petrol driven 80 mm auger to resistance or 800 mm deep. Place soil around posts;
- Complete driving in the pier to refusal with hydraulic post driver;
- Cut piers to specified height. Weld on bearer and ensure fire controls in place;
- Weld on joists. Weld on steel mesh (800 mm wide).

Final design of steel mesh walkway will be done by a contractor to suit the specific environment and location and approved by the Project Team.

## ROCK PAVING

Rock paving refers to rock that is 'pitched' or constructed by 'cobbling' to create a surface that is extremely durable, will not erode, blends with the local natural surroundings and will not shift due to forces of moving snow-loads.

Rock is to be installed to a width of 500 mm for the walking track surface. Rock will also be used to construct half drains, rock step over drains and steps where required.

Prior to and during construction of rock paving the following steps will occur:

- Microsite alignment and survey with contractor;
- Clear or trim vegetation to a temporary disturbance width of up to 3.5 m to allow for construction;
- Maintain 0.35 m either side of final track surface as vegetation maintenance zone. The remaining construction zone is to be rehabilitated with sods from site, weed free straw and locally sourced seed if required;
- Mark out drains, areas for storing rock, gravel, soil, fuel and area for shelter;
- Transport excavator to site. Options are: flying in by helicopter, driving along track corridor on ground protection covers, driving along elevated walkway where possible.
- Fly in all materials where possible to be stored without causing damage to vegetation;
- Lay down ground protection mats for excavator to drive on during operations.

Rock laying procedure to be used is as follows (Figure 2):

- Remove sod and soil down to 150 mm deep and 500 mm wide and store for reuse;
- Level soil bed and fill with 75 mm of minus 10 crushed gravel compacted to 50 mm;
- Lay rock paving 125 – 200 mm thick with 1.5-3.5% out-slope;
- Pack minus 10 gravel between rocks and finish the top off with compacted sod.

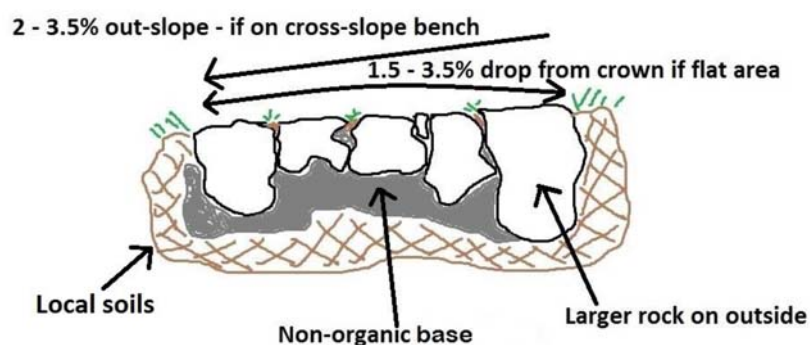


Figure 2: rock paving drawing

## Half Drains and Rock Step Over Drains

The laying procedure for half drains and rock step over drains are similar for rock paving except:

- Rock should be 100 mm above existing rock surface
- 5% outfall and extend beyond outside of the track (see Figures 3 and 4)

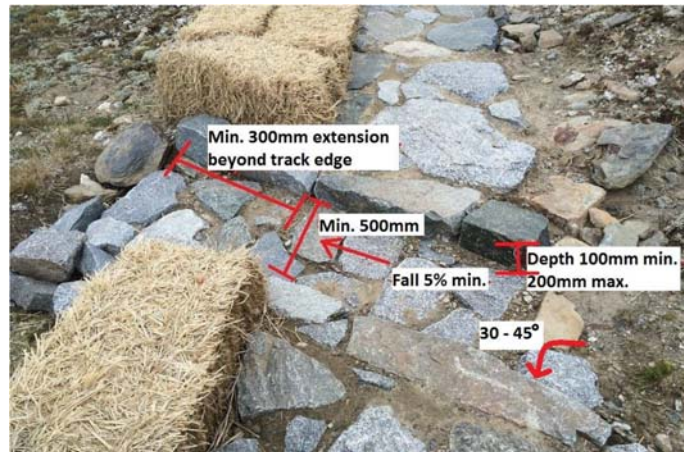


Figure 3: example of rock step over drain

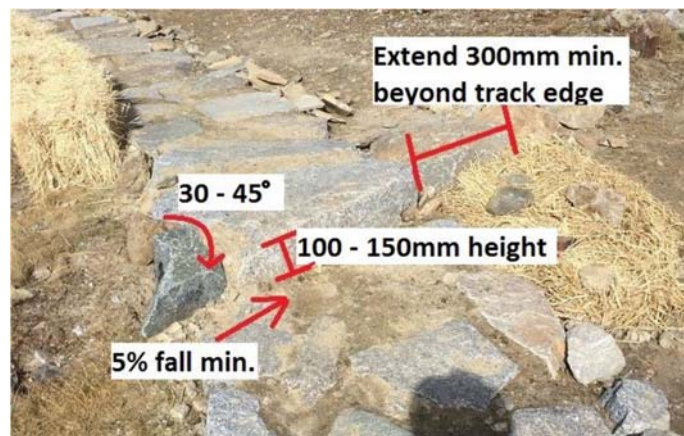


Figure 4: example of half drains with rock paving

## GRAVEL/NATURAL SURFACE

Gravel and natural surface will be constructed to a permanent track width of 500 mm. In construction of the natural/gravel surface the following steps are likely:

- Microsite and survey track alignment with contractor;
- Clear or trim alignment of vegetation to temporary width of 3.5 m wide to grass/low shrub level to allow for construction;
- Mark out drains, areas for storing gravel, clay and equipment;
- Gravel mix to be used is minus 10 crushed granite with bagged clay at 10:1 ratio;
- Remove sod and soil to depth of 100 – 150mm and store for reuse;



- Place gravel mix into trench and compact until it is at least 50mm above grass level with a crown to allow water runoff;
- Install half drains (rock) as required.

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