Subgrade Treatment:

The City of Port Phillip is situated within a coastal wetland and dune system meaning that managing the effects of soft subgrades and shallow groundwater must be addressed in the construction of all pavement structures.

A typical detail showing a methodology for ground improvement has been provided below.

Where ground improvement has been undertaken, the subgrade CBR of the pavement profile may be adopted as equal to or greater than 5% (CBR $\geq 5\%$).

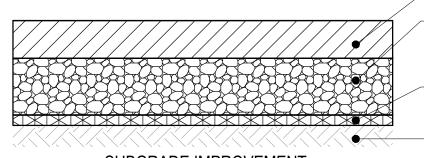
The typical detail assume that appropriate site-specific geotechnical investigations will be undertaken by the developer and /or construction team prior to selecting a particular pavement profile and before progressing with construction.

The testing frequency to confirm subgrade conditions, including the depth of groundwater, shall be undertaken in accordance with VicRoads Technical Note 78 - Guide to Planning Geotechnical Site Investigations.

Subgrade Improvement:

Where the existing subgrade CBR is <3% (or where otherwise required), the following subgrade improvement steps shall be undertaken to improve the subgrade equal to or greater than 5% (CBR $\geq 5\%$).

- 1. Strip and prepare the subgrade surface level and compact with rolller in accordance with VicRoads Standard Section 204 Earthworks, to provide an even surface.
- 2. Place a geocomposite Tensar TX160 geogrid bonded to Bidim A14 geofabric directly over the prepared subgrade.
- 3. Place a minimum 300mm layer of 40mm class 3 crushed rock subbase over the geogrid. Class 3 material must be placed and compacted in 150mm maximum layers.
 - It is important to note that in areas with shallow groundwater, this subgrade improvement layer placed over the geogrid must be a free draining materials i.e. single sized 20mm crushed rock.
- 4. Place subsequent pavement layers as per CPP1101 to CPP1106.



Refer to point 4.

300mm layer min.
40mm Class 3 crushed rock subbase (maximum size) or free draining material refer to point 3.
Geocomposite Tensar TX160 geogrid bonded to Bidim A14 geofabric placed on subgrade, refer to point 2.

Prepared subgrade, refer to point 1.

SUBGRADE IMPROVEMENT

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Date	Dec. 2020	ginal Size A Drawing No	CPP1107	Rev: A