

# Engineering Specification

## Specifications for Pavement and Drainage of Non Trafficable Areas in Industrial Areas

*Following are the two options available to choose for utilising non trafficable area as lay down area or storage in Industrial premises of City of Kwinana*

### **Option 1:**

#### **1. Subgrade**

Compact the existing soil to at least 92 % of Maximum Dry Density after removing vegetation and other unacceptable material from the soil to be compacted.

#### **2. Sub-base**

Limestone Conforming to standard specification of road building to be laid and compacted to the density of at least 93% of MDD with minimum compacted thickness of **100 mm**.

#### **3. Base – Course**

Base course could be either Rock base, Recycled Concrete or Recycled Asphalt material but needs to conform to the general specification of road base material. Base course to be compacted to at least 94 % of MDD using minimum compacted thickness of **75 mm**.

#### **4. Sealing (Optional)**

The entire area could be sealed with Primer seal or any other mode of cost effective sealing product. Sealing would make the pavement impermeable which would require extra soakage capacity from drainage consideration.

#### **5. Drainage**

After compaction of road base material to the required specification , the pavement could be used as non trafficable area but it would need to be drained either by grading the pavement towards some permeable area like Swale / Sump or by installation of Soakwells.

For unsealed Pavement minimum required should be to contain 1 in 20 year storm, over 72 hour duration, within the property.

With sealing option as per item 4, the drainage requirement would be for 45 M2 of catchment area 1 M3 of soakage capacity.

## **Option 2:**

### **1. Subgrade**

Compact the existing soil to at least 92 % of Maximum Dry Density after removing vegetation and other unacceptable material from the soil to be compacted.

### **2. Sub-base/Base – Course**

Sub-base/Base course material to be used over compacted soil could be either Rock base, Recycled Concrete or Recycled Asphalt material but needs to conform to the general specification of road base material. Base course to be compacted to at least 94 % of MDD using minimum compacted thickness of 100 mm.

### **3. Sealing (Optional)**

The entire area could be sealed with Primer seal or any other mode of cost effective sealing product. Sealing would make the pavement impermeable which would require extra soakage capacity from drainage consideration.

### **4. Drainage**

After compaction of road base material to the required specification , the pavement could be used as non trafficable area but it would need to be drained either by grading the pavement towards some permeable area like Swale/ Sump or by installation of Soakwells.

For unsealed Pavement minimum required should be to contain 1 in 20 year storm, over 72 hour duration, within the property.

With sealing option as per item 4, the drainage requirement would be for 45 M2 of catchment area 1 M3 of soakage capacity.

**Any alternative materials must not be installed without the prior approval of Council's Manager Engineering Services. Note all regularly trafficked areas must be sealed and drained to comply with Council's specification for trafficked areas.**

**For further information please contact the City's Engineering Department on 9439 0200.**