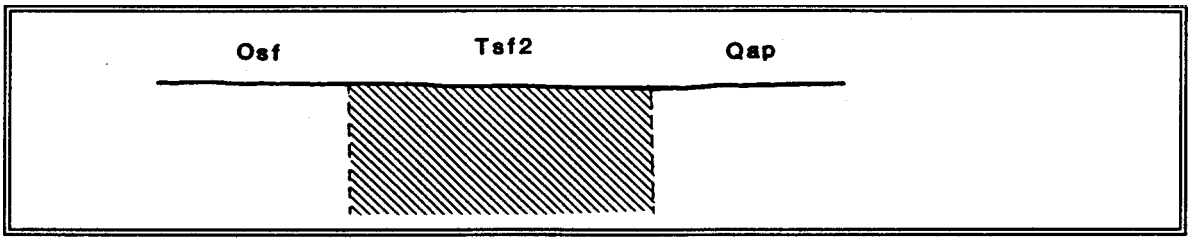
| Map Unit: | Tertiary sediments, very gentle slope, 2 | Map Unit Symbol: | Tsf2 |
|---|---|---|---|
| | | % of Study Area: | 0.3 |




**General Description:**

The Tertiary sediment soils at Epsom represent only a small area of the Rural City. They are yellow duplex soils with fine sandy loam topsoils, sporadically bleached hardsetting A2 horizons and yellow light clay subsoils with abundant red mottles. Ironstone and quartz gravels occur throughout the profile. The soils in the minor drainage lines were not sampled or delineated because of their similarity to those of the very gentle slopes.

**Site characteristics:**

| | | | |
|---|---|---|---|
| **Parent material age:** | Tertiary | **Depth seasonal watertable:** | < 2 m |
| **Lithology:** | Sediments | **Potential recharge to groundwater:** | Low |
| **Landform Pattern:** | Gently undulating rises | **Flooding risk:** | Nil |
| **Element:** | Slope | **Drainage:** | Moderately well drained |
| **Slope common:** | 2% | **Depth to hardrock:** | 0.8 m |
| **range:** | 1-3% | | |
| **Rock outcrop:** | 0% | | |

**Major vegetation:** Grey Box, Yellow Gum, River Red Gum, Round-leaf Wattle, Whirrakee Wattle, Peppercorn, Drooping Cassinia, Dogwood, Spear Grass, Buckshorn Plantain, Wallaby Grass, Spiny Rush, Capeweed, rushes

**Present land use:** Grazing (major), residential (minor)

| Land degradation: | Water erosion | | Wind erosion | Salting | Acidification |
|---|---|---|---|---|---|
| | Sheet/rill | Gully | | | |
| Susceptibility | Moderate | Moderate | Low | Low | Moderate |
| Incidence | Low | Nil | Low | Low | Low |

**Soil profile characteristics:**

| | |
|---|---|
| Permeability (measured - average, range): | 29, 7 - 70 mm/day |
| (estimated): | - |
| Available water capacity: | 115mm$H_20$ |
| Linear shrinkage (B horizon): | 9.8 % |

**Map Unit Symbol: Tsf2**

**Soil profile description:**

A1 0-8 cm Greyish brown (7.5YR4.2) fine sandy loam, moderate structure, subangular blocky peds 1-2 mm, smooth fabric, moderately weak consistence, less than 2% medium sized subangular quartz, ferruginous and lateritic gravel fragments, high organic matter, pH 5.4. Clear transition to

A2 8-17 cm Dull yellow orange (10YR6/3) hardsetting fine sandy loam, sporadically bleached (10YR7/4) when dry, many distinct medium sized orange and brownish grey mottles, massive structure, earthy fabric, very strong consistence, less than 2% charcoal segregations, common medium sized subangular quartz, ferruginous and lateritic gravel fragments, pH 5.0. Clear transition to

B21 17-30.5 cm Greyish yellow brown (10YR5/2) light clay with some sand particles, abundant medium sized distinct reddish brown mottles, moderate structure, subangular blocky peds 10-20 mm, smooth fabric, moderately firm consistence, less than 2% charcoal segregations, a few medium sized subrounded quartz, ferruginous and lateritic gravel fragments, pH 5.8. Clear transition to B22 30.5 – 80 cm

B22 30.5-80 cm Dull brown (7.5YR5/4) light day with some sand particles, abundant medium sized distinct orange, yellow and red mottles, moderate structure, angular blocky peds 10-20 mm, smooth fabric, very strong consistence, a few charcoal segregations, medium sized subrounded quartz, ferruginous and lateritic gravel fragments, pH 8.0. Clear transition to

C 80 cm Rock

**Soil classification:**

**Factual Key (Northcote):** Dy 3.33
**Australian Soil Classification:** Mottled, Eutrophic, Grey, Chromosol; moderate, medium, loamy, non-gravelly
**Unified Soil Group:** ML

**Interpretation of soil analyses***

| Horizon | pH | Gravel % | E.C. (salts) | Nutrient status | P | K | Al | Organic matter | Dispersibility |
|---|---|---|---|---|---|---|---|---|---|
| $A_1$ | 5.4** | 4.9 | VL | L | D | S | T | H | L |
| $A_2$ | 5.4** | 9.3 | VL | L | D | D | T | H | M |
| $B_{21}$ | 5.8 | 11.1 | VL | M | D | S | S | L | VH |
| $B_{22}$ | 8.0 | 9.5 | M | M | D | S | S | L | VH |

VL : Very Low; L : Low; M : Moderate; H : High;
VH : V e r y High; D : Deficient; S : Satisfactory; T : Toxic; **: Acid * See Appendix 4 for analytical results

**Land capability assessment**

| Land use | Class | Major limiting feature(s)/landuse |
|---|---|---|
| Agriculture (CTS values) | $C_3T_2S_4$ | Shallow depth to hardrock, poor condition of the A2 |
| Effluent disposal (septic tanks) | 4 | Slow permeability |
| Farm dams (earthen) | 5 | Shallow depth to hardrock, very low suitability of subsoil, very dispersible subsoil, high seasonal watertable |
| Building foundations<br>* slab<br>* stumps/footings | <br>3<br>3 | <br>Moderate drainage, moderate depth to seasonal watertable<br>Moderate drainage, moderate depth to seasonal watertable |
| Secondary roads | 4 | Universal Soil Group |
| Urban residential | 4 | Secondary roads |
| Rural residential | 5 | Farm dams |