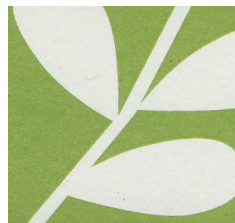


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**Detail of why the hotchpotch Planting List
for the 8 hectare Beaumaris Secondary
College site would severely degrade the
indigenous vegetation character of the
site and its adjacent bushland reserves**



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Beaumaris Conservation Society Inc's [critique](#) of the VSBA's Planting List for Beaumaris Secondary College is augmented below by the country or region of origin, and the weed potential of each plant. If more information or help on weed potential is needed, the [Royal Botanic Gardens](#), Australian Garden, at Cranbourne, Victoria, has a very robust weediness assessment program set up by Warren Worboys. This is a good argument for one Government department giving benefit to another.

It is hard to believe that the Victorian Government's Planning Department or its Education Department and [Victorian School Building Authority](#) have thoroughly checked the plans. The plans appear to have been accepted as presented because:

- The second arborist's report appears to be extremely poor, relying on the first report. That does not seem to be good professional practice, and the report should not have been accepted by the Government if it was serious about a second opinion,
- There is an apparent lack of a finalized plan for the site before work started,
- The NSW landscape firm, [Ochre Landscape](#), seems not to have researched the area, or consulted with the [Bayside Community Plant Nursery](#) staff or [Beaumaris Conservation Society Inc.](#) It might not have been given an adequate brief (lack of leadership) as to the types of plant that would be suitable – **creating a buffer of indigenous plants for [Long Hollow Reserve](#) and connecting other bushland areas**. The firm's philosophy on its website does not match the Planting Plan.

Cricket and sports fields: What is not known are the species of grass to compose the cricket fields, the management plans, or the drainage plans.

Wetland: The wetland on the plan will not function if it is draining the sports fields, and should be used to clean the run-off from those fields instead (also a good environmental education unit). As it is at present, high nutrient and high pesticide drainage will go, via drains or groundwater, into Long Hollow Reserve and compromise its vegetation.

Tree protection: The second tree report gave a formula [distance (metres) = 12 times the tree diameter] for placing tree protection barriers – but that has not been followed. As the tree roots necessary for collecting nutrients and water and fungal associations are within the top 100 mm of the soil, and protected beneath the canopy, tree roots have already been extensively damaged by soil removal and compaction from heavy machinery – that has happened at a time of rapid growth. The large *Eucalyptus* trees on the plan adjacent to sports fields on the western and eastern sides are unsuitable as they will overhang the cricket and soccer fields. Why were they chosen for such a small area? They will probably be removed in the future or not planted at all.

INDIGENOUS plants: [List of Local Native Plants](#) by [Dr J H Willis](#), former Assistant Government Botanist, was used to support the 10 species in the list below that are **INDIGENOUS** to land not on the Beaumaris coastline, which represents a mere 22% of the 46 species, and only 28% of the 5,046 plants proposed.

EXOTIC plants: Examples, in the photos here, of some of the **EXOTIC** plants in the detailed list below that would destroy the indigenous Australian character of the Secondary College site and its harmony with the Long Hollow Heathland Reserve on its southern boundary, and Balcombe Park and the world-class bushland character of the Royal Melbourne Golf Links on the other side of Balcombe Road.



South African Spider Aloe



European Olive



American Pin Oak



Mexican Sage



Illawarra Flame Tree (NSW)



Water Gum (Queensland rainforest tree)

A detailed list of distribution and weed potential of the proposed planting species follows:

Plant name	Origin & distribution	Weed potential
SPIDER ALOE <i>Aloe spinosissima</i>	Southern Africa (i.e. Malawi, Mozambique, Zimbabwe, South Africa and Swaziland) https://www.specialitytrees.com.au/library/olea/europaea/swan-hill	EXOTIC: A potential weed of bushland. Most succulents and cacti reproduce vegetatively and are spread by dumping of garden waste. Some may also spread by seed after flowering.
<i>Dietes grandiflora</i> <i>Dietes robinsonian</i> , islands near Australia	South Africa (5 of 6 spp) along the coastlines of the areas of KwaZulu-Natal, the Eastern and Southern Cape, as well as in forest margins and on ocean-facing mountain slopes	EXOTIC: Environmental weed
LICORICE PLANT <i>Helichrysum petiolare</i>	South Africa Cape region Occurs in the drier inland parts, sheltered slopes and forest margins of the Western Cape (Cederburg and Jonkershoek Mountains), Eastern Cape and Kwazulu-Natal.	EXOTIC: Potential invasive weed in Victoria
EUROPEAN OLIVE <i>Olea europaea</i> 'Swan Hill'	Eastern Africa Non-fruiting cultivar. https://www.google.com.au/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8-q=quercus-palustris	EXOTIC: Deceptively called 'Swan Hill' non-fruiting appears to be non-invasive. <i>Olea europaea</i> - Aggressive woody weed. Seeds spread by birds. Permanently changes the plant diversity and structure of bushland. Will re-shoot from any root stock left in ground.
<i>Crassula</i> 'blue' (Is this 'blue wave' or 'blue bird' or blue jade tree?)	South Africa and Madagascar 'blue' cultivar	EXOTIC: No information on weediness. Some species are invasive.
FOXTAIL FERN <i>Asparagus densiflorus</i> 'Myersii' Cultivar may not be so weedy but could find no information.	South Africa South-eastern Cape and KwaZulu-Natal coastal areas in a wide range of habitats, from coastal dunes to open rocky places or woods.	EXOTIC: Significant environmental weed. <i>Asparagus densiflorus</i> species reproduces by seed and also vegetatively via its creeping underground stems (i.e. rhizomes) and tubers. Its berries are readily eaten by birds, and the seed spread. Its seeds and underground tubers are also commonly dispersed in dumped garden waste. Has become a problem in several countries, including Australia and USA. In Australia has invaded coastal, littoral rainforest, rainforest, frontal dunes and sclerophyll forest and coastal heath.

Plant name	Origin & distribution	Weed potential
GIANT JADE PLANT <i>Crassula argentea</i> (<i>Crassula ovata</i>)	South Africa and Mozambique	EXOTIC: No weed potential listed
<i>Kalanchoe beharensis</i>	Madagascar	EXOTIC: No weed potential listed
DWARF CHALK STICKS <i>Senecio repens</i> (succulent)	South Africa (Cape Province)	EXOTIC: No weed potential listed
AMERICAN PIN OAK <i>Quercus palustris</i>	Eastern and central United States of America. It is also native in the extreme south of Ontario, Canada.	EXOTIC: No weed potential listed
ROSEMARY <i>Rosmarinus</i> 'Blue Lagoon'	<i>Rosmarinus</i> sp. Mediterranean region and Caucasus 'Blue Lagoon' Cultivar	EXOTIC: No weed potential listed
BUTCHER'S BROOM <i>Ruscus hypoglossum</i>	Italy north to Austria and Slovakia and east to Turkey and Crimea	EXOTIC: Creeping rootstock. Spreads by rhizomes. No weediness listed.
MEXICAN SAGE <i>Salvia leucantha</i>	Eastern and central Mexico native to subtropical and tropical conifer forests. https://www.google.com.au/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8 - q=Brachichiton+acerifolius	EXOTIC: None listed
FAN FLOWER <i>Scaevola albida</i> 'Mauve cluster'	Cultivar <i>Scaevola albida</i> South coast Victoria, Bellarine Peninsula, East Gippsland. In sclerophyll forest and low-growing coastal communities.	Not indigenous. No weed potential listed
<i>Correa</i> 'dusky bells' probable hybrid of <i>C. reflexa</i> and <i>C. pulchella</i>	Cultivar <i>C. pulchella</i> SA <i>C. reflexa</i> NSW, Vic, SA	Not indigenous. No weed potential.
<i>Lomandra</i> 'Tanika'	Cultivar	Not indigenous. No weed potential.

Plant name	Origin & distribution	Weed potential
CUSHION BUSH <i>Leucophyta brownii nana</i> 'Silver Nugget'	'Silver Nugget' Cultivar <i>Leucophyta brownii nana</i> along the south coast of Australia's mainland, the northern coasts of Tasmania. On coastal dunes and cliffs.	Not indigenous. No information
<i>Lomandra confertifolia</i> ssp. <i>pallida</i> 'Little Pat'	Cultivar <i>Lomandra confertifolia</i> ssp. <i>pallida</i> NSW and Queensland	Not indigenous. No information
<i>Correa reflexa</i> x <i>Correa backhouseana</i> 'Marian Marvel'	'Marian Marvel' Cultivar <i>Correa reflexa</i> Eastern States Australia <i>Correa backhouseana</i> coastal shrub, endemic to southern Australia - WA, SA, VIC (near Cape Otway) & TAS west and south coasts. Not around Port Phillip.	Not indigenous. No weed potential listed <i>Correa backhouseana</i> listed as vulnerable
SNOWY RIVER WATTLE <i>Acacia boormanii</i>	Eastern Victoria	Not indigenous. No weed potential.
CLAY WATTLE <i>Acacia glaucoptera</i>	Western Australia Albany-Esperance, wheat-belt, Jarrah forests, mallee plant of laterite soils	Not indigenous. Can become weedy and invasive in other regions otherwise low weediness potential
DWARF WOOLLYBUSH <i>Adenanthos sericeus</i> (compact)	Western Australia South-west Botanical Province, Jarrah Forest, Warren or Esperance Plains.	Not indigenous. No weed potential listed
COMMON NET BUSH <i>Calothamnus quadrifidus</i>	Western Australia South-west	Not indigenous. Highly invasive over very short time periods. Escapes from enrichment plantings.
<i>Rhagodia spinescens</i>	Inland, arid Australia SE Queensland and NSW Will grow coastal	Not indigenous. No weed potential. But is high maintenance.
ILLAWARRA FLAME TREE <i>Brachychiton acerifolius</i>	Queensland and NSW Coastal and sub-coastal districts and some parts of eastern New South Wales	Not indigenous. Regarded as an environmental weed in some parts of Victoria (e.g. in the Goulburn Broken Catchment and the Wimmera region). Naturalized beyond its native range in New South Wales. Possibly also naturalized in south-eastern South Australia. An environmental weed in those parts of New South Wales that are beyond its native range. Regarded as an environmental weed in Western Australia.

Plant name	Origin & distribution	Weed potential
<i>Prostanthera ovalifolia compacta</i> Susceptible to <i>Phytophthora cinnamomi</i> .	Inland areas of New South Wales and southern Queensland	Not indigenous. No weed potential. May become weedy in wet situations otherwise no weediness information.
NARROW LEAF PEPPERMINT <i>Eucalyptus radiata</i>	Widespread eastern and southern Australia	INDIGENOUS None listed
<i>Kunzea ericoides</i>	Victoria, New South Wales, Queensland, South Australia Grows in heath and sclerophyll forest, common at higher elevations; often along watercourses.	INDIGENOUS Listed in the 'top 20' weedy Australian native plants in Victoria by Geoff Carr of Ecology Australia. Needs careful management.
<i>Pomaderris racemosa</i>	Victoria, South Australia, New South Wales and Tasmania Open forest hillsides and river banks. Not coastal.	Not indigenous. No weed potential.
<i>Prostanthera rotundifolia</i>	New South Wales, Queensland, Tasmania, Victoria Sheltered hillsides, usually in sylvan habitats, sandy soils over sandstone on rainforest edges and sheltered spots in sclerophyll forests.	Not indigenous. No weed potential.
WATER GUM <i>Tristanopsis laurina</i> 5-20 m high	East coast of Australia , from the Brisbane River in Queensland, through coastal New South Wales to the East Gippsland region of Victoria. It is commonly found growing along creek banks and in rainforest openings in light shade to full sunlight.	Not indigenous. No weed potential. Slow to establish and the post-planting maintenance requirement for this tree would be high.
HEDGE WATTLE <i>Acacia paradoxa</i>	Eastern and southern states Australia, south-west Western Australia and eastern Tasmania	INDIGENOUS Can become an environmental weed outside natural range
SPOTTED GUM <i>Corymbia maculata</i>	New South Wales from Taree south to Bega and disjunctly in eastern Victoria in the Mottle Range.	Not indigenous. Possible serious invasive garden plant
<i>Acacia implexa</i> To 15 m tall	Victoria-New South Wales coastal plains, hill country, light forest open situations on shallow drier soils.	INDIGENOUS Moderate to strong propensity to root sucker or shallow roots may out compete adjacent plants. High potential as environmental weed based on its biology.

Plant name	Origin & distribution	Weed potential
<i>Poa sieberiana</i> var. <i>cyanophylla</i> (Snow grass)	Southern New South Wales, Eastern Victoria from sea-level to Alps in native grasslands, woodlands and forests. Riparian forests of Victorian Alps.	INDIGENOUS None listed
<i>Banksia spinulosa</i>	Coast from Victoria to Cairns , coastline into forest areas of the Great Dividing Range.	Not indigenous
<i>Carpobrotus rossii</i>	Southern Australian coast on sand dunes near the ocean, on sandy soils around coastal lakes and marshes. Occasionally found slightly inland.	Not indigenous to this inland site. None listed
<i>Lomandra longifolia</i>	Scattered in Victoria , absent from north west, usually near streams and in wetter higher altitudes. Generally not coastal	INDIGENOUS None listed
<i>Acacia pavissima nana</i> To 6 m high Cannot assume nana is less of a weed	Victoria Ovens River - Alpine and sub-alpine regions of south-eastern Australia	Not indigenous. Listed as an environmental invasive weed in areas of southern Victoria
<i>Eucalyptus pryoriana</i> https://www.rbg.vic.gov.au/documents/Muelleria_29(1)_Rule.pdf a subspecies of <i>E. viminalis</i> Brooker and Slee (1996)	Victoria Port Phillip region and South Gippsland sandy coastal areas	INDIGENOUS None listed
<i>Banksia marginata</i>	Coastal Victoria	INDIGENOUS None listed
<i>Bursaria spinosa</i> It is an important food plant for several species of butterflies and moths, particularly those of the genus <i>Paralucia</i>	Victoria	INDIGENOUS Rhizomatous, Can aggressively colonize marginal or disturbed areas. Need to source seed from local provenance as seeds can be spread by cockatoos.
<i>Correa alba</i>	Victoria	Not indigenous to this inland site. No
<i>Banksia integrifolia</i>	East coast Australia and south coast to Port Phillip extends into hills.	INDIGENOUS Can become a weed outside natural habitat

* Plants in boxes shaded green are indigenous to the Secondary College site as listed by BCS Inc.

* Many cultivated plants and cultivars do not have information on weediness.

- * The plants listed require a range of soil types, moisture and pH. The soil at each site will need to be prepared for each species to prevent the loss of a large number of plants.
- * The school vegetation should be used as a buffer to protect the Long Hollow Reserve vegetation – and therefore it should be indigenous. It should be chosen to satisfy fauna requirements as well.
- * Many species listed that are **EXOTIC** - or are indigenous to another part of Australia, **but not the School site** - have the potential to be weedy when taken from their natural range or not managed properly.

References used:

- Weedy Acacia key:
www.herbiguide.com.au/Descriptions/hg_a_key_for_weedy_acacias_and_similar_native_species.htm
- Weed Society of Victoria www.wsvic.org.au/image/tid/8
- APS environmental weed guide <http://anpsa.org.au/weeds1.html> and <http://anpsa.org.au/weeds3.html>
- Australian Native Plant Society – Banksia information
<http://anpsa.org.au/banksSG/BSG-reps.html>
- Atlas of Living Australia – good distribution maps and information
- Leon Costerman *Trees and shrubs of South-eastern Australia*.
- Australian Cultivar Registration Authority www.cpbr.gov.au/acra/acra-list-2009.html
- Florabank
- Flora of Victoria (RBGV virtual herbarium)
- Australian National Herbarium
- Victorian Resources on-line
- Geoff Carr of Ecology Australia
www.sgaonline.org.au/environmental-weeds-native-invaders-and-eager-exotics