



PLANNING CONSIDERATIONS FOR HORTICULTURAL STRUCTURES

This Practice Note provides guidance for the consideration of horticultural structures under planning schemes.

The Practice Note will:

- *assist in the preparation of local planning policy*
- *provide practical siting and design techniques to improve design outcomes in sensitive rural environments*
- *provide guidance and direction on appropriate planning permit conditions.*

The intensive horticultural industry is of increasing importance to Victoria's rural economy. Horticultural industries can be visually prominent in rural environments. The structures typically associated with horticultural industries include expansive plastic-covered igloos and glasshouses, which stand out as a result of the highly reflective materials used in their construction. These structures can create significant visual and aesthetic impacts, particularly within sensitive rural landscapes, or where they adjoin residential or other urban zonings.

This Practice Note provides guidance to councils, applicants and the community about the planning considerations relevant to horticultural structures and to improve the quality of design and environmental outcomes. It is intended to assist councils in reconciling the specific needs of the horticultural industry with broader objectives for protecting special landscapes and environments. The Practice Note may also be useful for dealing with other large rural structures (such as sheds).

This Practice Note addresses:

- how and when local planning policy can be used to improve design outcomes
- key planning considerations to help the assessment of development applications
- guidelines to help applicants develop site-responsive design proposals
- suggested planning permit conditions to address the range of siting, design and land management considerations.

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What are horticultural structures?

Horticultural structures are not separately defined in planning schemes. Typically, structures include those which provide a controlled growing environment for horticulture or plant nursery use, including plastic igloos, shade houses and glasshouses. They are usually associated with berry farms, wholesale nurseries, vegetable and flower growing and orchards.

Horticultural structures can be intrusive in visually sensitive rural landscapes. The visual impacts of horticultural structures can be reduced in a variety of ways. The guidelines below are intended to provide practical siting and design techniques to improve the visual integration of horticultural structures within sensitive rural environments.

The essential design principles can also be used as a basis for preparing local planning policy to deal with more general siting and design issues for other large rural structures.



When is a planning permit required?

It is likely that horticultural industries will be located in one of the rural zones, although they may also be established in other zones.

A planning permit is only required for a horticultural structure where:

- the minimum setback for a building in the Rural Zone is not met
- the land is included in an Environmental Rural Zone
- the land is included in a Rural Living Zone
- the land is affected by an overlay (most overlays require planning permits for buildings and works), or
- a specific provision in the planning scheme requires a permit to be obtained.

Councils have limited opportunities to improve siting and design outcomes where planning permits are not required for horticultural structures. These guidelines are primarily intended to apply in areas of high sensitivity where planning permits are required, although councils can informally encourage their wider use by industries even where permits are not required.

When should a local planning policy be used?

While horticultural industries can be important to the economic base of a municipality, their visual impact can often be at odds with the municipality's goals for the protection and enhancement of its sensitive rural and rural living environments. In such cases, councils should consider the introduction of a local planning policy to assist in the improvement of design outcomes. By encouraging appropriate design and siting through local planning policy, these structures can be compatible with the protection of landscape and environmental values.

Local planning policy plays an important role in helping applicants and the community understand how the council will exercise discretion and what matters will be considered in the decision-making processes. Before embarking on the preparation of a local planning policy, however, it is important that councils consider how the policy will further the goals of the municipality and how it will implement the specific strategies and objectives as expressed through the Municipal Strategic Statement (MSS). The MSS should provide a clear strategic basis to support the types of development outcomes to be promoted through local planning policy.

It is also important to consider the relationship of any local planning policy to other relevant planning scheme provisions, particularly as the policy will often only apply to land included within an overlay such as a Significant Landscape Overlay, Environmental Significance Overlay, Land Subject to Inundation Overlay or Wildfire Management Overlay. A local planning policy should only be used where the relevant overlay provisions do not provide sufficient direction for the exercise of discretion and do not address issues relevant to the siting of large structures.

The guidelines below are suggested as a basis for preparing local planning policy and assessing planning permit applications.

Key planning considerations

The first step in the preparation of effective local planning policy is to identify the key issues and planning considerations which the policy needs to address.

In this case, the key strategic and physical considerations relevant to the siting and design of horticultural structures may include:

Strategic

- supporting the continued viability of horticultural/agricultural industries
- balancing the needs of horticultural industries with objectives for protection of the natural environment
- protecting key view corridors and scenic areas which are of value to the community
- protecting significant flora and fauna habitats
- managing visual and aesthetic impacts of large built form in sensitive landscape environments
- protecting the water quality and integrity of nearby streams/watercourses
- protecting the amenity of adjoining residential communities
- protecting high-quality agricultural land.

Physical

- identification of design criteria to improve the siting of buildings in their local context
- identification of screening techniques to reduce the high visual impact of landscapes dominated by white reflective plastic
- promoting environmentally responsible soil management practices, earthworks and erosion control
- managing water use and treating site run-off
- managing traffic, noise and amenity considerations in areas close to residential development.

In developing a local planning policy, councils may also wish to distinguish between different types and sizes of horticultural structures (for example smaller scale or domestic structures) when specifying performance measures.

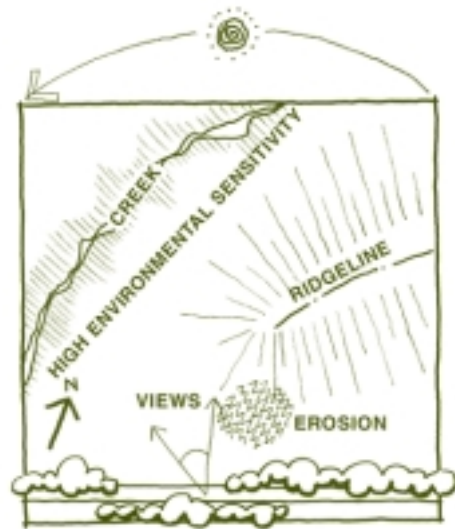


Site context planning

A local planning policy can encourage the preparation of a site and context description as part of a permit application.

A good site and context description should identify the major environmental, visual and physical site constraints that apply to the land. A sound understanding of the features of the site will provide a good basis for a site responsive design. Key physical issues to be considered include:

- Topography:
 - Is the land predominantly flat or hilly?
 - Are there significant ridgelines on the site?
- Identification of natural features:
 - Are there watercourses nearby?
 - Does the site contain significant vegetation, wildlife habitats, etc?
 - Where are erosion prone areas?
 - Is any part of the land subject to flooding?
 - Is there a wildfire hazard?
- Where are the most exposed views into the site?



Features of site and locality

The site and context description should establish the orientation of the site and identify sensitive features of the land that should be avoided by the development. The site and context description should also respond to the location of existing buildings on the site and to any potentially sensitive use and development on adjoining land.

Siting and design techniques

Once the key planning issues and considerations are identified, the local planning policy can then set out practical strategies and techniques to implement the policy objectives.

The following siting and design techniques suggest ways to improve design outcomes and reduce the potential impact of large structures in their local context.

Siting of structures

Siting of structures on the land should respond to the site topography and other features identified in the site assessment, including vegetation characteristics, erosion prone areas, wildfire hazard areas, key viewsheds and other local amenity considerations.

On flat land

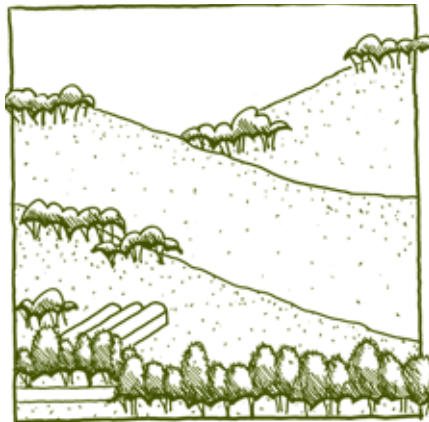
- Locate structures with sufficient setback from roadsides and adjoining property boundaries to allow strong landscape screening treatment.
- Utilise existing vegetation on the site to provide natural screening. Add dense shrubs and planting as required to block close range views of work areas from the adjacent roadside and dwellings on adjoining land.
- Avoid siting structures directly in the view line of adjacent roads and dwellings unless well-screened by vegetation.

On hilly terrain

- Restrict development in areas that are visually prominent or highly exposed. Areas most exposed include ridgelines, elevated areas and areas which have been significantly cleared of vegetation.
- Maintain existing ridgeline planting and site structures to avoid breaking the ridgeline silhouette.
- Avoid siting structures on very steep slopes (greater than 1 in 5). Where structures must be sited on sloping land, the development of terraces or earth platforms should avoid unnecessary or excessive earthworks while promoting an efficient site layout. Excavation equal to the height of the structure (that is, 2–2.5 metres) may be appropriate provided suitable erosion control measures are in place and efficiencies in site layout and site drainage can be demonstrated.
- Locate structures to follow the contours of the land.

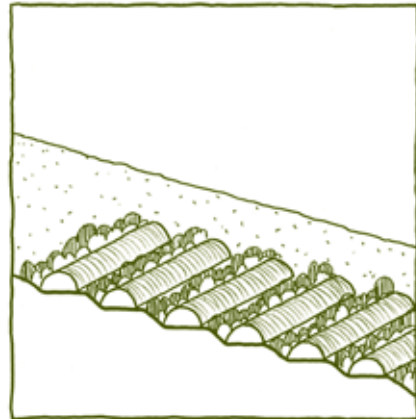


Poor siting
Avoid ridgelines and visually exposed areas

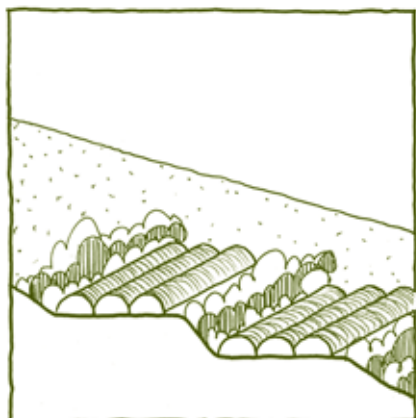


Good siting
Add vegetation to assist screening

Avoid excessive terracing to promote efficient site layout

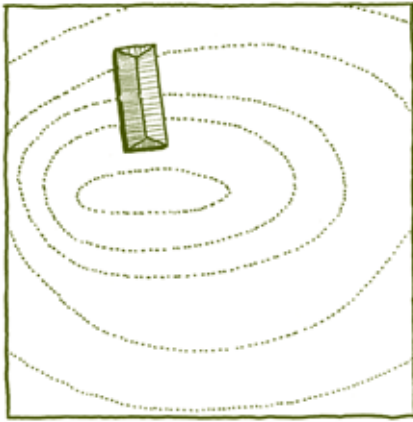


Poor layout

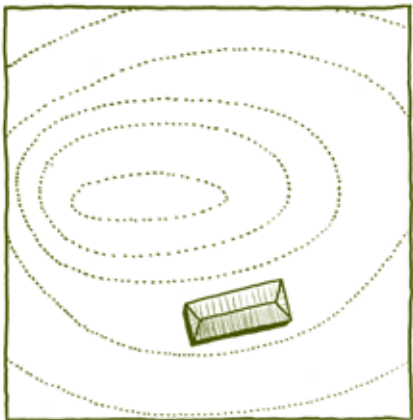


Good layout

Siting should follow the contours of the land



Poor layout



Good layout

Design and materials

Little variation exists in the design of horticultural structures. Most structures are simple and functional in design and consist of a metal frame of 2–3 metres in height, which is then enclosed by a standardised reflective plastic. Regular maintenance and replacement of the plastic (and frames) is essential to maintaining a high standard of amenity and presentation.

For other large rural structures, opportunities exist to reduce building bulk and visual impacts through the use of sensitive materials that blend with the dominant colours and textures in the surrounding environment. Use a non-reflective material based on the natural colours and tones of surrounding vegetation, soil, rocks or other natural features to improve the visual integration of buildings with the natural landscape.

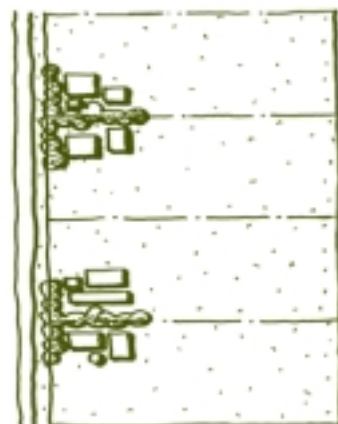
Massing and grouping of structures

- Where possible, mass buildings together to limit the scattering of building forms across the site.
- Discourage the proliferation of buildings directly adjacent to roadsides and dwellings on adjoining land.
- The site coverage of all horticultural or other large rural structures on the site should not generally exceed 60 per cent, except where additional structures can be well screened and the development does not cause any adverse environmental impacts or visual amenity concerns where there are dwellings on adjoining land.
- Provide sufficient adjoining open areas to allow structures to be extended as appropriate.

Avoid scattering buildings across the site



Poor layout



Good layout

Protecting views and vistas

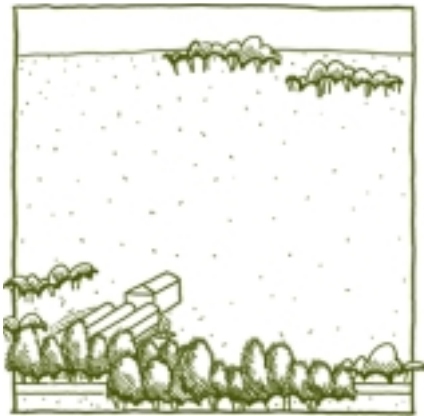
Once the orientation and optimum building envelope and design are determined, the next step is to consider what methods of screening are appropriate to ensure the development creates minimal visual impact.

Landscaping and vegetation

- Use landscape treatments as the basis for achieving effective visual integration for large structures.



Effective landscape screening



Good layout

Use existing vegetation to provide close range screening

Group structures together to reduce impacts across the site

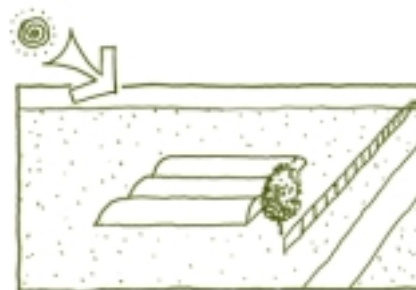
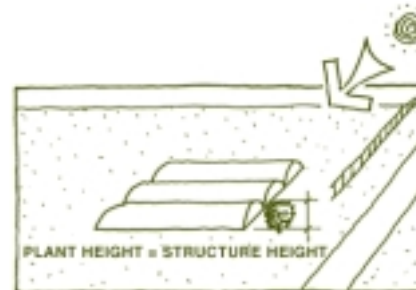
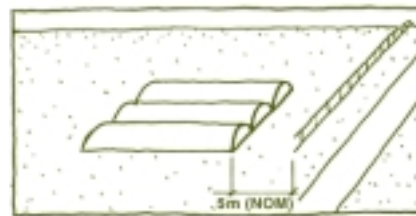


Poor layout

Avoid siting of buildings in unscreened areas

- Use dense vegetation and planting along site frontages and other highly exposed site boundaries to provide close range screening of the development. Although screening opportunities are often limited, views from more distant roadways should also be considered.

- Where there is an established and significant landscape character or where the land has intrinsic environmental value, development on the site should carefully avoid areas of identified sensitivity.
- Protect views of attractive natural features, at least from the nearest road, when siting structures in key viewsheds.
- Vegetation screening should not restrict solar accessibility to horticultural structures.
- Maintain and/or enhance visual amenity for residents on adjoining land.
- Avoid planting vegetation species that may drop branches or leaves in close proximity to structures.
- Provide for all ancillary facilities on site, including access ways and car parks.
- Retain existing remnant vegetation and the significant landscape features of the site when designing the siting and layout of buildings.



Solar access needs to be considered when designing vegetation screening

- If there is a dominant landscape character, take this into account when designing landscaping for the development.
- Maintain the scenic quality and character, particularly of existing view lines and vistas.
- Landscape treatments should reinforce and extend the existing character and qualities of the surrounding environment.

Environmental management

Apart from siting and design issues, ecological and environmental impacts need to be considered. Impacts of development in rural environments may include:

- soil erosion and landslip as a result of vegetation removal
- deterioration of water quality as a result of untreated and uncontrolled run-off
- salinity
- infestation by environmental and noxious weeds.

The following land use and land management practices promote development compatible with environmental objectives:

Soil and vegetation management

- Minimise disturbance to native vegetation by grouping structures where possible and designing access roads and car parking areas to minimise removal of existing vegetation.
- Where possible, stockpile and reuse topsoil on site to promote regeneration and minimise weed invasion.
- Stabilise ground surfaces which are exposed to erosion during and after construction with ground cover planting to minimise erosion.
- Any proposed removal of vegetation should have careful regard to the botanical significance of the vegetation, its role as a wildlife habitat and its contribution to the landscape character of the area.

Flooding, drainage and water quality

- Collect and treat all stormwater run-off from impervious horticultural structures prior to it leaving the site or entering nearby watercourses. Where appropriate, promote the construction of on-site dams for the storage, treatment and reuse of water, in line with the *Best Practice Water Management Guidelines*, prepared by the Nursery Industry Association 1997.
- Avoid concentration of run-off onto one part of the site.
- Where land is subject to flooding pay special attention to its overall management and the nature of use and development within close proximity to floodways. To ensure that land liable to flooding is not impaired by development, locate development to avoid drainage ways and significantly flood-prone areas.



On-site dams for the storage, treatment and reuse of water

Utilities

- Locate access roads on sites to generally follow contours and avoid steep slopes, drainage lines and areas requiring significant earthworks.
- Avoid 'skylining' power poles.

Suggested planning permit conditions

The following conditions are suggested to ensure that high standards of landscaping and site amenity are maintained.

- A minimum two-metre high vegetation screen must be provided...within the site boundary/along the frontage of the site/adjacent to the proposed development...to limit views of the proposed building from the roadside and from neighbouring properties where appropriate. Appropriate plants/species compatible with existing vegetation in the vicinity of the site must be used to the satisfaction of the responsible authority.
- Once established, the landscape screen must be maintained in good condition to the satisfaction of the responsible authority.
- Plastic cladding of the horticultural structures on the site must be maintained in good condition at all times. Cladding must be replaced when damaged or when it no longer provides a high standard of presentation.
- Any equipment, tools or other associated horticultural products (such as plant pots, bins, etc.) must be stored in an area that is generally screened from the adjacent roadside.
- Any soil stockpiles generated by the permitted development and proposed to be retained on the site must be battered to a stable slope and planted with ground cover to prevent erosion of the surface.
- All stormwater discharged from the subject land must be conveyed by means of underground drains to a legal point of discharge or absorbed on site to the satisfaction of the responsible authority.
- All waste water must be treated and contained within the boundaries of the property and there must not be discharge off site.
- No polluted waters or any other liquid wastes may be discharged into the stormwater system or any nearby watercourse.
- Any waste plastics or materials used in the cladding of structures must be disposed of in an environmentally sensitive manner when no longer required and must not be burned or buried on the land.

Useful references

- Cut Flower and Nursery Industries Regulatory Reform Task Force *Review of Regulatory Arrangements in the Cut Flower and Nursery Industries - Discussion Paper* January 1999
- Cut Flower and Nursery Industries Regulatory Reform Task Force *Review of Regulatory Arrangements in the Cut Flower and Nursery Industries - Final Paper* March 1999

- Department of Conservation Forests and Lands *Control of Erosion on Construction Sites* December 1987
- EPA *Construction Techniques for Sediment Pollution Control* May 1991
- EPA *Planning Measures for Environment Protection* June 1994
- Flowers Victoria *Environmental Guidelines for the Victorian Flower Growing Industry* 1998
- Nursery Industry Association of Australia NIASA *Best Practice Guidelines* 1997
- Nursery Industry Association of Australia *Water Management Best Practice Guidelines* 1997
- South East Water Limited *Waste Water Reuse Initiatives* October 1998
- State Government of Victoria *Nutrient Management Strategy for Victorian Inland Waters* March 1995
- Stormwater Committee *Urban Stormwater – Best Practice Environmental Management Guidelines* CSIRO Publishing 1999.

contact information

The Department of Infrastructure (DOI) has published a number of practice notes that provide practical advice on planning matters. For copies of practice notes, visit the DOI web site at www.doi.vic.gov.au

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