
Department of Agriculture



NATIONAL HORTICULTURAL CENTRE FEASIBILITY STUDY

- Summary -

Coopers and Lybrand Consultants

May 1991

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INTRODUCTION

The Department of Agriculture & Rural Affairs ("DARA") retained Coopers & Lybrand Consultants ("C&LC") in May 1990 to complete three reports examining the feasibility and benefits of developing a National Horticultural Centre ("NHC") at Wantirna.

The three reports are as follows:

- Report 1: "Economic Potential in Horticulture in Victoria and the Potential Role of a National Horticultural Centre at Wantirna in Improving Horticultural Industry Performance" January 1991.
- Report 2: "Commercial Developments Business Plans" February 1991.
- Report 3: "Government Research and Service Activities at NHC Wantirna" January 1991.

Report 1 shows how the horticultural industry in Victoria will benefit from the development of the NHC, whilst Report 3 discusses the feasibility of establishing Government research and technical services facilities on the NHC site. The main report to the NHC study is Report 2, which provides a detailed assessment of the economic and financial feasibility of each of several commercial developments planned for the site.

In order to consolidate the findings of each study into one document, this report includes Executive Summaries of Report 1 and Report 3 as well as for Report 2. Accordingly, Report 2 comprises two main parts as follows:

PART I - OVERALL BUSINESS PLAN

- | | |
|----------|------------------------------------|
| Report 1 | Executive Summary |
| Report 2 | Executive Summary |
| | - Background |
| | - Planning, Land Tenure and Rental |
| | - Overall Business Plan |
| | - Home For Horticulture |
| | - Wholesale Flower Market |
| | - Education Facilities |
| | - Horticulture Industry Park |
| | - Technical Services |
| | - Convenience Retail Shops |
| Report 3 | Executive Summary |

PART II - COMMERCIAL BUSINESS PLANS

Home For Horticulture
 Souvenir Shop
 Specialist Retailing Facilities
 Convenience Retail Shops
 Food & Beverage Facilities
 Education Facilities
 Wholesale Flower Market
 Technical Services

REPORT 1 - EXECUTIVE SUMMARY

Report 1 first analyses Victoria horticultural industry market opportunities and economic potential, the role of government, key success factors and barriers relevant to the exploitation of these opportunities. From this basis, the report identifies the potential roles and contributions of NHC and attempts to estimate the potential benefit to the industry and to the State of Victoria from the establishment of such a centre.

Economic Potential

Economic potential is greater in the domestic market than in export. The two major market opportunities not adequately exploited at present both lie in the Australian domestic market:

- (a) Australia's low level of cut flower consumption by world standards;
- (b) Australia's relatively low past growth rate in vegetable consumption, given the increase in consumer concern about nutrition and food safety.

In both of these situations there is overseas evidence that consumption can be dramatically increased by more effective marketing, promotion and consumer education.

In the case of cut flowers, the industry in Victoria is seriously handicapped at present at both domestic and export markets by the lack of an adequate wholesale market and export consolidation centre.

The importance of domestic markets in horticulture relates not only to increased revenue potential but also to the importance of discriminating and quality conscious domestic buyers in improving overall industry standards and performance which will also enhance global comparative advantage. To achieve the required concentration on increasing and meeting domestic consumer expectations in such a complex and fragmented industry requires both a geographical focus and greatly improved sectoral leadership and commitment.

To quote Mr J van Doesburg, Chairman of the Flower Council of Holland, speaking at the 1990 Australian National Flower Show:

"Don't neglect the home market. The Home Market is the most important market".

A similar situation applies in relation to ornamentals and other nursery products. Over half of total industry revenue contribution (\$1.6 billion) relates to amenity horticulture (\$979 million estimated) and home gardening (over \$200 million annual household expenditure - Exhibit 4.2 Report No 1). Achieving even small increases in this can mean very significant economic benefit to nursery operators. The key to this again relates to increasing and satisfying consumer expectations as the driver for the development of new and better plant varieties. However, the major potential for increased benefit is intangible, coming from increased public participation and other intangible benefits such as visual pleasure, improved environment, therapy opportunities.

There is less economic potential and scope for dramatic domestic market growth in the fruit sector, except possibly for nashi pears and some berries and nuts. Rather there is a need to protect existing market by cost reduction and improved varieties in terms of flavour, appearance and post harvest attributes. A further most urgent need is to put much greater effort into consumer education on nutrition and product safety issues, such as chemical residues.

Economic potential in domestic markets is large with estimated total domestic market growth opportunities by 1994/95 of the order of \$140 million per annum.

While export opportunities are significant, these are of lower additional potential total sales and economic value than domestic opportunities. The key constraint is Australia's relatively much higher production costs and greater transport inefficiencies than those of its other major Southern Hemisphere competitors (South Africa, Zimbabwe, Brazil, Chile) for out-of-season Northern Hemisphere markets.

Australia and Victoria's comparative advantage in world markets relates to:

- (a) out of season temperate and to some extent semi-tropical production capabilities;
- (b) proximity to Asian and Pacific markets including the West Coast of America;
- (c) relative freedom from diseases and pests;
- (d) unique native plant species;
- (e) international research standing in molecular biology.

Identified export market growth opportunities relate to:

- (a) cut flowers:
 - (i) based on Northern Hemisphere established varieties produced out of season;
 - (ii) Australian native cut flowers all year round;
- (b) ornamentals, particularly unique Australian flora:
 - (iii) propagation rights for PVR protected new varieties;
 - (ii) niche markets for bare root plants unique to Australia.
- (c) fruit: high quality Asian, North American and possibly European markets for out of season supplies of grapes, peaches, pears, nashi, citrus and some berries. The key issues are quarantine constraints, quality and post harvest management. Increased exports for fruit sectors are a must, not just an opportunity, to dispose of surplus production from recent new plantings in sectors such as pome fruit, nashi, cherries, citrus, blueberries, avocados.

Economic potential from export is significantly less than for domestic markets with total export growth potential by 1994/95 estimated to be of the order of \$40 million per annum.

Key Success Factors and Barriers

The industry sectors with the greatest needs to strengthen key success factors and remove or reduce barriers across almost all success factor groups are the cut flowers and ornamentals sectors. There are at the same time, more specific needs in the home gardening, fruit and vegetables sectors.

The key domestic market needs relate to better marketing and promotion backed up by more effective use of existing knowledge rather than to generation of new knowledge. Failure to exploit identified market opportunities derives significantly from industry lack of focus, leadership and cohesion. This failure has been exacerbated by a similar fragmentation and lack of cohesion in services provided by government and by a divergence of industry and research manager views on the nature of government service needs and hence objectives. Research managers see themselves as committed to longer term strategic improvement of competitive advantage; industry participants see themselves as having a myriad of small problems with no one place to go for help and see government resource allocation as having moved away from helping with both their small problems such as diagnostic and extension services and their longer term needs in post harvest management improvement.

Specific industry priority needs identified are:

- (a) for the cut flowers and ornamentals sector, a geographical focus in the Melbourne metropolitan area based on a dedicated wholesale market (ie a place where growers go regularly for sound commercial reasons);
- (b) generally better and more responsive access to information, diagnostic and testing services with greater emphasis on interpretation of test results;
- (c) much greater research and technical resource commitment to post harvest research in all its forms, including new variety development, and to research on alternative treatments to pesticides for export;
- (d) independent centre for PVR related new variety identification and certification;
- (e) a single horticulture research unit to support these needs;
- (f) better access to and more practically oriented and industry specific education programmes at all levels, but with specific need to improve access to short courses (management, marketing and technical) and facilities for post graduate programmes in horticulture;
- (g) for the fruit and vegetables sectors, better opportunities and resources for consumer education on food safety and chemical residues and for display of new varieties;
- (h) for the ornamentals sector, availability for garden displays including both mature plants and newly developed varieties with associated extension and consumer education facilities;
- (i) for home gardeners, access on the one site to display gardens of differing styles, to mature plants and to information and library services.

Potential Role of NHC

Analysis of success factors, barriers and industry needs in relation to the activities proposed for the NHC at Wantirna show that from the industry viewpoint the wholesale market is the key to the ability to attract flower and ornamental growers regularly to the site. If such a market is viable, then the NHC role expands logically and easily to include diagnostic, testing, extension and other information related services, facilitating industry education programmes, variety certification, export order consolidation and containerisation together with export support services such as transport and quarantine, a horticulture research institute. The site might possibly also include advanced biotechnology research and tertiary education facilities particularly for higher degree students.

If to this wholesale industry base is added a group of very well maintained gardens, associated exhibition facilities and activity displays which can attract several hundred thousand visitors per annum, NHC will provide to the industry as a whole and to individual sectors greatly increased opportunities for display and testing consumer reactions to new developments and varieties and for consumer education.

For the visitors to NHC, such facilities offer both a pleasurable experience and an opportunity at the same time to obtain information about gardening and plant related issues. It would provide the logical site for relocation of the Burnley Garden Advisory Service and the Royal Horticultural Society library material.

This analysis has been centred on the NHC site at Wantirna but many or all of these needs could as well be met on other similar sites.

Report No 2 which is concerned with business plans for these and related activities assesses the financial viability of these NHC role options.

Relevance to Identified NHC Components

Industry needs and NHC possibilities have been considered in relation to NHC components identified in the consultant brief.

Original Home For Horticulture Proposal

As conceived, this component involves:

- (a) display and recreational gardens;
- (b) exhibition facilities;
- (c) accommodation for societies;
- (d) public information and education facilities.

Melbourne has no one place where a home gardener can see a wide range of mature plants in real garden settings. Melbourne also lacks a central point with public access to a horticultural library and information facilities. The industry lacks a central point at which it can display both plants and other related products in real garden and mature growth situations under conditions which allow continuing changes to be made to reflect changing market opportunities and new product development. Other venues such as the Botanical Gardens comprise relatively more permanent and unchanging material.

Certain sectors of the industry have specific needs to display new varieties, including ornamentals and fruit. Other sectors need increased and cost effective opportunities for consumer education both in the scope and effective use of their products and on health and nutrition issues, including chemical residues. Generally the industry needs a focus for its interaction with its various publics.

The importance of these focussed public access horticulture facilities relates first to the importance of raising the quality expectations of the domestic consumer earlier identified as central to improving competitive advantage. At the same time it recognises that the major growth opportunities in horticulture and some of the major threats relate to domestic rather than export markets.

The gardens and trialling areas will also provide a very valuable facility for practical training both of apprentices and of VCAH higher degree students. This is of great interest to Outer Eastern TAFE. They thus contribute to an important educational objective.

Horticulture Retail Facilities

While the industry, given the number of retail nurseries already operating in Victoria, does not see the need for a major plant retailing facility at NHC, the revenue potential from such a facility needs to be considered as a contribution to the underwriting of "Home For Horticulture" facilities and activities.

Apart from such commercial realities, there are specialist retailing needs than can contribute more directly to primary industry objectives:

- (a) a specialist garden shop, as at Wisley in the UK, which sells books and other media material, educational videos, specialist garden tools, clothing etc;
- (b) specialist plant retail facilities associated with specific permanent or temporary displays oriented to the promotion of new varieties;
- (c) order taking facilities eg for bulk bulb orders.

Hospitality Facilities (Food & Beverages)

Primarily these will produce revenue from servicing the needs of the visiting public or industry people on business at the site.

There is at the same time an opportunity to use the public related facilities to demonstrate new fruit and vegetable products and new ways of preparing them, eg a top vegetarian restaurant.

Education Facilities

We have already commented on the value of the gardens for practical apprenticeship training.

The other educational needs to which NHC will contribute include:

- (a) industry education:
 - (i) facilities for the practical component of supervisor and specialist technical short course training;
 - (ii) co-ordination and marketing of specialist industry continuing education;
 - (iii) if a major research facility is included, as a base to support NCAH Masters and other higher degree programmes;

- (b) consumer education:
 - (i) as a venue for practically oriented, one or two day or shorter specialist courses for home gardeners;
 - (ii) in association with neighbouring facilities, as the venue for weekend courses;
 - (iii) by providing opportunities for industry sectors to communicate on health, nutrition and safety issues with the large volume of visitors to the NHC.

Horticultural Industry Park

This facility can be considered under two headings:

- (a) permanent or semi-permanent product display;
- (b) industry office and/or trading facilities.

The commercial contributions of both types of park relate to broad domestic and export industry support objectives. Such facilities need to be addressed in terms both of industry need and commercial and financial contribution. They derive from primary general public and industry related facilities at the site and have little self standing justification in their own right.

Wholesale Flower (and Plant) Market and Distribution Centre

This is the core attractive element for the commercial industry. Without this facility there will be little to attract growers and industry suppliers to NHC. It is a high priority need of the cut flower sector (including flowering pots and indoor plants) and has a similar potential to replace existing wholesale plant and nursery product markets both as an attractive NHC revenue earner and as an improved market facility.

A wholesale market will make a very significant contribution to priority needs of the cut flower sector:

- (a) a dedicated market with an environment conducive to the development of domestic markets for cut flowers - a major market opportunity;
- (b) as a point of consolidation for containerised export shipments of cut flowers: this role is supported both by flower growers and by transport industry flower specialists;

- (c) "a place where industry people go regularly for meaningful commercial reasons".

NHC role in plant wholesaling is essentially an add-on to the flower market. It is attractive as much for the revenue that it generates and retains to support overall industry needs as for the need for better market facilities.

Government Horticulture Services

Industry needs are clearly focussed on:

- (a) **more responsible diagnostic services**, supported by problem solving and applied research where necessary;
- (b) more responsive approaches to quarantine;
- (c) support for **new variety development**, identification and certification for PVR purposes;
- (d) **post harvest improvement**, including packaging and development of new varieties with better post harvest attributes;
- (e) **information access** (involving where necessary skilled intermediaries) and assistance in its use (extension);
- (f) research supportive to the development of **new procedures to meet overseas quarantine and general access requirements**.

A key concern is that government activities in these areas are excessively fragmented. Therefore we interpret the industry's first preference is to have one point of access to the full range of these services. This is certainly of relevance to the proposed NHC site:

- (a) sufficient land is available;
- (b) if the Home For Horticulture and the wholesale market go ahead, it will become the focus for growers, support industries and consumers.

However if the wholesale market does not go ahead, there will be much less attraction to growers to come to NHC. The relevance of the NHC site is then restricted to land availability and possibly to "Home For Horticulture" gardens. In these latter circumstances, other locations may be more attractive.

The main NHC focus of consumer and general public as opposed to industry needs will be on government services involved in information, testing and education. This points to the potential benefits of relocating the Burnley Garden Advisory Service to NHC.

Advanced Horticultural Research Facilities

Even if the full NHC proposal goes ahead and it becomes the focus for government services to horticulture listed above, there are divided views about the relevance of NHC as the site for an advanced horticultural research facility. The industry sees a need for this and has a preference for its juxtaposition to diagnostic and other applied R&D facilities if they are to be located at NHC. However DARA research managers are concerned about the viability of a more limited "horticulture research institute" as opposed to a larger "plant research institute".

An alternative could be to develop a horticulture research institute as an add-on to VCAH eg a satellite of VCAH on the NHC site, upgrading VCAH research and higher degree capabilities.

We conclude that the NHC site is relevant and the space is available. Ultimately, however, decisions on what to locate where will involve much broader public policy issues than this study can address.

Potential Benefits From NHC

Finally we have attempted to assess the potential additional benefits which might be directly related to the establishment of NHC. This assessment assumes that both grower and general public related facilities are established at NHC. The more direct benefits are likely to accrue to the amenity horticulture, home gardening, cut flowers and nursery sectors. Our judgemental assessments indicate potential benefits from NHC to these sectors in the medium term of \$5 to \$7 million per annum in revenue, representing added value of the order of \$3 to \$5 million.

Potential benefits to the fruit and vegetable sectors are less direct and will be more dependent on the establishment of a full range of technical support, plant research and some related educational facilities on the one site at NHC. If this occurs, our judgemental assessments suggest an additional potential benefit to the fruit and vegetable sectors of the order of \$6 million per annum in revenue representing added value of the order of \$3 million.

There will clearly also be very significant additional benefits to the home gardeners and to the public generally who visit the Home For Horticulture elements. These cannot be quantified.

However if the market centred grower related facilities are not located at NHC, then the potential benefits to the commercial side of horticulture will be significantly reduced.

Estimated Potential Benefits

The estimation of potential economic benefit is always difficult and largely a matter of judgement and conjecture. It has been particularly difficult in this present situation due to:

- (a) the lack of reliable and internally consistent output data and the limited availability of sectoral value added statistics;
- (b) the conceptual nature of the issues at stake.

We have therefore judgementally assessed likely benefits on an industry sector-by-sector basis as a percentage improvement in current output, resulting from strengthening of key success factors and/or removal of barriers identified in other chapters. Where possible, this has been done in two parts: in total and where the major impact could be attributed to the establishment of the NHC.

Amenity Horticulture

This is the sector where there is least obvious and immediate financial benefit from NHC since its input needs are reasonably well met at present.

We have assessed the total potential benefit as 1 percent and the benefit attributable to NHC as only 0.1 percent of its Victorian output value estimated at \$1 billion (being the 1982 value adjusted to March 1990 prices). This suggests a potential annual benefit from NHC of \$1 million to this sector.

Home Gardening

The benefits in home gardening (as also in Amenity Horticulture) will primarily relate to non-tangible issues like increased participation and outdoor activity, pleasure, therapy and visual and social quality of life generally. Such increased participation will certainly result in increased inputs.

We suggest 1 percent per annum as a reasonable expectation of NHC generated contribution estimated on a total Victorian input value of \$226 million; this represents an annual money benefit of the order of \$2 million.

Cut Flowers

For cut flowers, a more systematic and sustainable approach to benefit estimation is possible.

The economic benefit has been assessed on the basis of the increase in production value likely to be achieved in Australian domestic and overseas markets as a result of establishing the NHC. Productivity improvements will also be important to the sector if the projected growth is to be sustained but are difficult to quantify.

The Market, Export, Quarantine and Promotions Workshop along with industry interviews established as priorities the access to and availability of reliable industry data, maintenance of quality, suitable wholesale markets, reliable transport and promotion. The key elements were assessed in terms of the percentage increase which could be achieved if the NHC Wantirna project proceeded. These increases were based on the best informed judgements and seen to be increases "over and above" the industry estimated expansion.

Whilst the NHC project will create a focus for horticulture, it is the linkages between the market place and grower, the market place and research worker, the market place and the support industries as well as the market place and educational training which will create the additional benefit per annum to the sector. There is a multiplier effect created through improved infrastructure and industry culture. To achieve the benefits, each of the NHC grower attractions and consumer public attractions will be essential. It is a case of all or nothing.

Conservative estimates of contribution specifically and potentially attributable to NHC as added sales value are set out in Exhibit 1.1.

Exhibit 1.1
Potential Benefits to Cut Flowers Sector

Key Success Factors	1988/89 Production Value \$ Million PA	Improvement Per annum in Production Value	
		Short Term (2 to 5 yrs)	Long Term (6 to 10 yrs)
Market Data)		0.3%	0.5%
Production Data)		0.1%	0.2%
Data Evaluation)		0.2%	0.5%
Quality Assurance)	\$51M	0.3%	0.3%
Post Harvest)		0.3%	0.4%
Transport)		0.2%	0.5%
Wholesale Market)		0.5%	0.7%
Promotion)		0.5%	0.5%
		2.4%	3.6%

This suggests a contribution at 1988/1989 prices from NHC of 2.4 percent or \$1.2 million per annum increase in sales value (domestic and export) in the short term rising to 3.6 percent or \$1.8 million per annum in the longer term. This represents additional added value to the industry of \$0.8 million rising to \$1.2 million per annum (assuming Added Value is 65% of Production Value).

Ornamentals and Other Nursery Products

We have estimated the potential benefits to the "ornamentals and other nursery products" sector (Exhibit 1.2) in a similar manner to those for the cut flower sector.

Exhibit 1.2
Potential Benefits to Ornamentals and Other Nursery Products Sector

Key Success Factors	Current Production Value \$ Million PA	Improvement Per annum in Value	
		Short Term (2 to 5 yrs)	Long Term (6 to 10 yrs)
Applied Research)		0.2%	0.7%
Training & Education)	\$98M	0.3%	0.7%
Promotion)		0.5%	0.5%
		1.0%	1.9%

Based on the current value of the ornamentals and other nursery products sector of \$98 million, an increase of the order of \$1 million in annual value may be expected in the short term from improved applied research, promotion of current products and consumer education. In the longer term an annual value increase of up to \$2 million may be expected from the added benefits of new product development, trialling and demonstration. This represents increased added value of \$0.65 million rising to \$1.3 million (assuming Added Value represents 65% of Production Value).

Fruit and Vegetables

Benefits to the fruit and vegetables sectors from NHC will generally be less direct than for the home gardening, cut flower and ornamental sectors. These benefits will derive essentially from:

- (a) the concentration in the NHC catchment area of temperate fruit tree propagators who will benefit directly from access to NHC facilities;
- (b) the potential impact of NHC in reducing fragmentation of such a diverse industry.

Extension of NHC facilities to include technical support and plant research facilities on the site as discussed earlier can be expected to improve the attractive power and relevance of NHC to the fruit and vegetable sectors.

However the potential benefits are likely to be very limited if NHC scope is restricted to "Home For Horticulture" and wholesale flower market facilities.

Under the "full range of facilities" scenario for NHC, analysis of the potential benefits from the establishment of a centre at Wantirna that could address key success factors or barriers within the fruit and vegetable industry shows that the greater benefits can be derived from:

- (a) servicing knowledge-related needs;
- (b) improving marketing and distribution;
- (c) promotion of food safety and nutrition.

Knowledge related benefits can flow both to:

- (a) the fruit and vegetable industries;
- (b) the consumers.

Potential increases in current value of fruit and vegetable production which can be expected from the establishment of the NHC are small in percentage terms but quite large in total dollars (Exhibit 1.3).

Exhibit 1.3 Potential Additional Economic Benefits to Victorian from NHC

	<u>Benefit Source and Assessed Potential</u>		<u>Resulting % Increase in Production Value</u>				
	<u>Production Value</u>		<u>Knowledge</u>	<u>Quality</u>	<u>Promotion</u>	<u>Applied</u>	<u>Potential</u>
	<u>PA Victoria</u>						
	<u>(S Million)</u>		<u>Related</u>	<u>Assurance</u>		<u>Research</u>	<u>Additional</u>
	1988/89	1994/95					<u>Sales Value</u>
							<u>S p.a.</u>
Pome fruit	65	63	0.2%	0.4%	0.5%	0.5%	1.04
Stone fruit	38	41	0.4%	0.5%	0.5%	0.5%	0.72
Citrus	27	32	0.2%	0.4%	0.4%	0.3%	0.35
Table Grapes (1)	29	NA(2)	0.2%	0.2%	0.3%	0.2%	0.26
Nuts and Berries	10	NA(2)	0.4%	0.2%	0.5%	0.5%	0.16
Kiwifruit	NA(2)	NA(2)	-	0.1%	0.4%	0.2%	NA
Potatoes	72	70	0.2%	0.1%	0.1%	0.1%	0.36
Other Vegetables	131	135	0.5%	0.4%	0.5%	0.8%	2.881
	372	341(3)					5.77(4)

- Notes:
- (1) Dried and wine grapes have been excluded as not being directly relevant to this study.
 - (2) Inadequate disaggregated data for Victoria.
 - (3) Excludes grapes, nuts and berries and Kiwi fruit.
 - (4) Excludes Kiwi fruit.

Source: ATA Analysis

While these gains are extremely difficult to quantify, it is expected that the principal increases will come from increased domestic consumption of fruit and vegetables through consumer education and a heightened awareness of the nutritional aspects of good diet and the willingness of producers to meet the consumers' wants for safe attractive products. It is not expected that initiatives at NHC would have as significant a potential to enhance export earnings from fruit and vegetables as much as from cut flowers and nursery products.

Potential % increases in production value expected from the establishment of the above facilities at NHC are assessed for each of the four identified sources (knowledge related, quality, promotion, research) by applying the sum of assessed potential increases to estimated present Victorian production value.

The short to medium term gains can be expected to be of the order of \$5.8 million or 2 percent of forecast 1995 annual revenue, with an added value of \$3.1 million (assuming Added Value is 53% of Production Value).

Horticultural Inputs

No attempts have been made to assess separately the benefits of NHC to suppliers of goods and services to the industry. As these will be generated as a result of industry output, separate estimates could result in double counting.

There will however be real benefits to suppliers from NHC in the improved opportunities to produce, educate about the use of and sell their products, quite apart from those that derive from any improved sectoral activity.

Transport

Clearly a wholesale flower market with a key export role at NHC offers both new market and cost management opportunities in the transport of cut flowers particularly to interstate and export markets. We are however unable to quantify these in a meaningful way.

Summary of NHC Potential Benefits

Potential quantifiable benefits to Victoria that may be expected from NHC summarised in Exhibit 1.4.

Exhibit 1.4 Potential NHC Generated Benefit (At 1989/90 Prices)

<u>Sector</u>	<u>Forecast 1994/95</u>		<u>NHC Potentially</u>	
	<u>Production Value</u>	<u>Added Value</u>	<u>Generated Additional Value</u>	
	<u>Victoria</u>		<u>Production Value</u>	<u>Added Value</u>
	SM	SM	SM	SM
Amenity Horticulture	1,039(1)	N/A	1.0	N/A
Home Gardening	225(1)	N/A	2.0	N/A
Cut Flowers	84(2)	54(5)	1.2 - 1.8	0.8 - 1.2
Ornamentals	144(3)	94(5)	1.0 - 2.0	0.7 - 1.3
Fruit and Vegetables (1)	380(4)	201(6)	5.8	3.1
Estimated Total Values	1,872	N/A	11.0 to 12.6	N/A

- Notes:
- (1) Table 4.2, Report No 1.
 - (2) Exhibit 7.1, Report No 1.
 - (3) Exhibit 8.1, Report No 1.
 - (4) Exhibit 20.3, Report No 1: total adjusted to include 1988/89 production value for table grapes (\$29 million) and nuts and berries (\$10 million) as no forecast data available for these products. No Victorian recent production data is available for Kiwi fruit.
 - (5) Assumes added value as 65% of production value (Exhibit 4.1, Report No 1).
 - (6) Assumes added value as 53% of production value (Exhibit 4.1, Report No 1).

Source: C&L and ATA Analysis.

In addition to these benefits that we have attempted to quantify, there are very large potential social, recreational and educational potential benefits from the NHC "Home For Horticulture" and associated facilities. These cannot be quantified but must not be overlooked.

We conclude that there are likely to be very significant quantifiable and non-quantifiable social, recreational and educational benefits to Victoria from the establishment of the NHC.

Our analysis of the potential benefits that derive directly from increased production, productivity and added value suggests that these quantifiable benefits may represent \$11 to \$13 million per annum additional production value and possibly more than half of this amount in added value. This figure, given the uncertainties in the analysis involved, must be seen as an indicative figure on the assumption that all proposed NHC facilities are provided.

Quite apart from the provision of the NHC facilities, better mobilisation of the industry's own resources will be essential if these potential benefits from NHC are to be achieved.

REPORT 2 - EXECUTIVE SUMMARY

Report 2 provides the commercial business plans to each of the elements proposed for the NHC site. The report begins with a discussion of land tenure, planning and rental issues, and then proceeds to an analysis of each commercial component.

Background

The Home for Horticulture ("HFH") is a concept which has been mooted for 10 years: it involves the development of a tourist attraction based on a series of theme or specialist gardens. The site for the proposed HFH is within parkland currently owned by the Melbourne & Metropolitan Board of Works ("MMBW") at Wantima. More recently, the HFH concept has been extended and it is now seen as the key element of a broader National Horticulture Centre ("NHC") which is to act as a focus for the horticulture industry in Victoria.

Coopers & Lybrand Consultants ("C&LC") has been retained by The Department of Agriculture & Rural Affairs ("DARA") to evaluate the economic and financial feasibility of including a range of proposed commercial activities on the NHC site including the following:

- (a) Home for Horticulture (theme gardens);
- (b) Souvenir Shop (attached to the HFH);
- (c) Specialist Horticulture Retailing Facilities;
- (d) Convenience Retail Shops (located within the NHC site and aimed at serving the needs of students, workers and visitors to the site);
- (e) Food & Beverage Facilities & Function Room (located within the HFH);
- (f) Education Facilities (located on the NHC site but separate to the HFH);
- (g) Wholesale Flower Market (creation of a dedicated wholesale flower market on the NHC site);
- (h) Technical Support Services (located on the NHC site, but also separate to the HFH);
- (i) Horticultural Industry Park (an industrial park tenanted by businesses associated with the horticultural industry).

Each of the above elements is examined in detail in separate Business Plans which draw conclusions as to the feasibility of including each element on the NHC site.

Planning, Land Tenure & Rental

The proposed NHC site at Wantirna is located within parkland currently owned by the MMBW and is zoned "Public Open Space". The MMBW is prepared to allow 100ha of parkland to be used for the establishment of the National Horticulture Centre which would include a broad range of land use activities. The planning requirements of each element need to be separately considered.

The City of Knox has already granted a Planning Permit for the development of the Home For Horticulture, ie the theme gardens attraction. That planning permit has now lapsed and a new permit must be sought not only for the HFH, but also for each proposed element for the NHC site.

In order to proceed with the NHC concept, DARA must address the planning issues by seeking, where and if appropriate, the rezoning of part or all of the NHC site to zonings which permit the function of each activity on the site. It is possible that the current zoning of the site would not allow, for example, such uses as a flower market or an industrial park.

DARA must present a case to show that the NHC is vital to the consolidation of the horticultural industry in Victoria, and that each element of the site is critical to the successful operation of the whole NHC. The argument being that the loss of public open space is off-set by the public benefit of a consolidated focus to the horticultural industry in Victoria.

Discussions with the MMBW indicate that the Board would consider selling part of the parkland site if the proposed use for the site does not conform with its current zoning of public open space. In addition, the Board is likely to require replacement parkland for parts of the site which would be sold. For the remaining site, the Board would enter into a long-term lease at appropriate rental levels.

The Board's attitude to each component planned for the site is summarised below with respect to whether replacement parkland would be sought:

No Replacement Parkland Required	-	Home For Horticulture
	-	Wholesale Flower Market
	-	Souvenir Shop
	-	Food & Beverage Facilities
	-	Education Facilities
Replacement Parkland Required	-	Industry Park
	-	Convenience Retail Shops
	-	Specialist Retailing Facilities
	-	Technical Support Services

Previous consultants to this study have accepted an annual rental base for the HFH site as comprising a \$10,000 base and 10% of operating surplus. The MMBW has advised C&LC to include a rental basis from a draft lease drawn up in 1987. The MMBW rental basis for the HFH site is higher than the rents used in previous assessments of the HFH. The MMBW rent comprises both base and percentage rents which scale upwards each year from a base rent in Year 1 of \$10,000 to \$70,000 by Year 8, with the percentage of operating surplus increasing from 12% in Year 1 to 30% in Year 8. Cash flow analyses include the MMBW rental base, as well as those used in previous assessments of this project.

The MMBW has provided no firm indication of rental levels likely to be applied to the Wholesale Flower Market. However, as this rent is likely to be "close to market rents", C&LC has provided an estimate of the equivalent of \$3 psm in 1990 dollars.

The MMBW site set aside for the National Horticultural Centre comprises 100ha. About 35ha of this site is to be retained as parkland; this area extends west from an SEC transmission line to the Dandenong Creek. It is proposed that the remaining 65ha be used for a broad range of activities comprising the NHC. The land use and land budget for each proposed element of the NHC is shown in the schedule below:

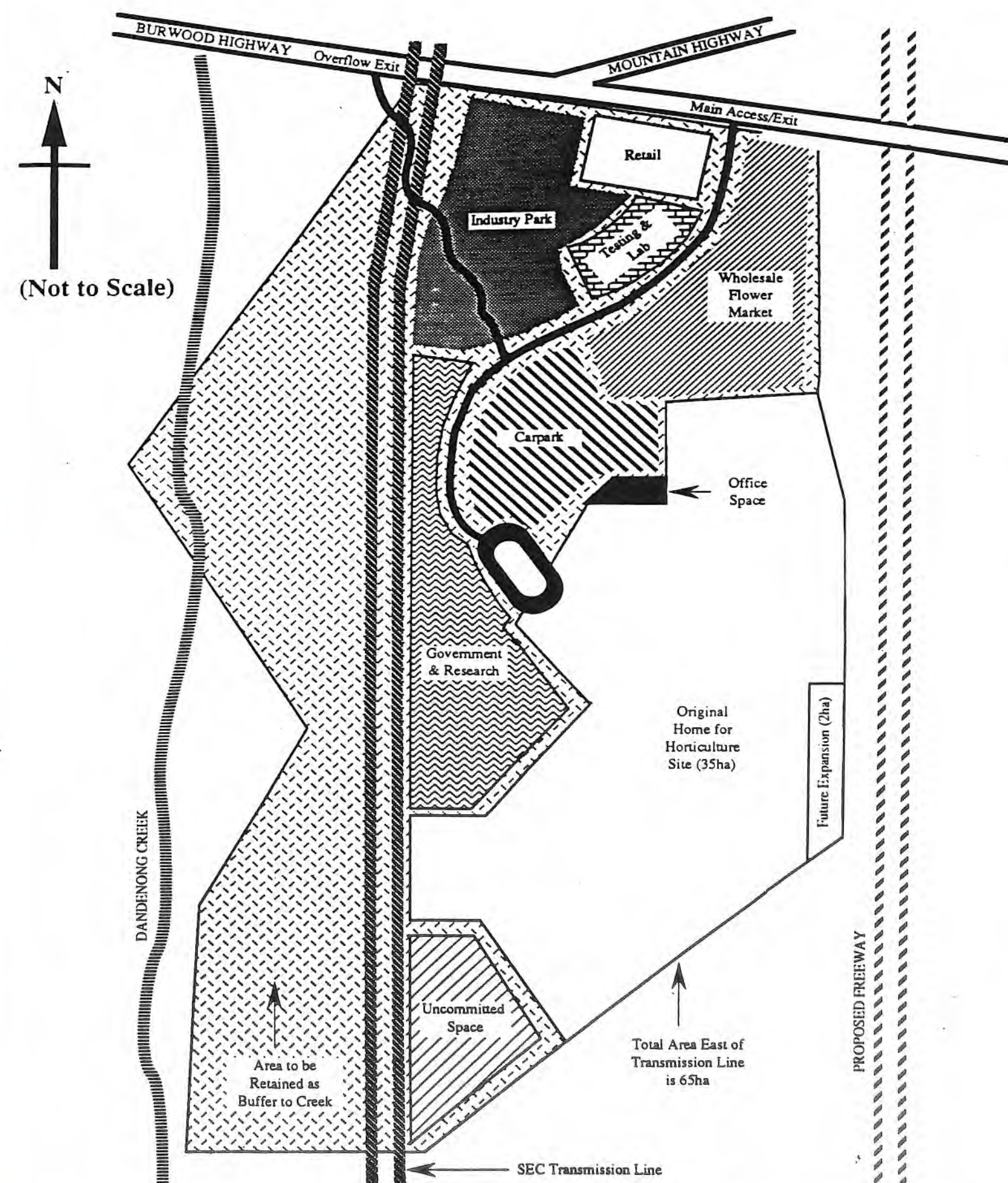
<u>Component</u>		<u>Sq m</u>	<u>ha</u>
Home For Horticulture	Stage I	100,000	10.0
	Stage II	250,000	25.0
Central Carparking Area	Estimate	30,000	3.0
Wholesale Flower Market	Stage I	29,000	2.9
	Stage II	21,000	2.1
Horticultural Industry Park	Stage I	13,333	1.3
	Stage II	13,333	1.3
	Stage III	13,333	1.3
Education Facilities		1,000	0.1
Technical Support Services		2,000	0.2
Specialist Horticulture Retailing		2,000	0.2
Balance of Site (roads, landscaping)		<u>176,000</u>	<u>17.6</u>
Total Available Site Area		<u>650,000</u>	<u>65.0</u>

An indicative configuration of each of the proposed elements on the NHC site is provided in the map on the following page.

Overall Business Plan

The C&LC evaluation of the commercial viability of each of the proposed components for the NHC site is that only some activities should proceed. The combination of activities which is likely to produce the best possible development of the NHC site include the following:

- (A) **Home for Horticulture**
 - including some office space, take-away food, bistro, souvenir shop, function room, allied trades display, Garden Advisory Service as well as theme gardens. (See Business Plans in Sections I, II, V.)
- (B) **Wholesale Flower Market**
 - possibly including a weekly wholesale plant market. (See Business Plan in Section VIII.)
- (C) **Specialist Horticulture Retailing Facilities**
 - long-term provision for a small scale development located on the Burwood Highway, to be developed by the private sector. (See Business Plan in Section III.)
- (D) **Education & Technical Services**
 - long-term provision for the possible inclusion of these activities at a future date. (See Business Plans in Sections VI & IX.)



It is recommended that the NHC does not include the following elements:

- Horticultural Industry Park
 - risky development with large holding costs for a "thin" market. (See Business Plan in Section VII.)
- Convenience Retail Shops
 - insufficient market demand; convenience line goods could be carried by take-away food/souvenir shop. (See Business Plan in Section IV.)

Home For Horticulture

The recommended composition of the HFH combines several commercial activities into a single, more dynamic, focus of horticultural activity in Victoria. With regard to the HFH, the following activities could be built into Stage I:

- the Allied Trades Display area included as part of the Exhibition Hall;
- Garden Advisory Service included within the entrance core building;
- commercial office space provided as part of the entrance core building;
- take-away food and bistro facilities also consolidated in the entrance core building;
- the Function Room located as part of the entrance core building sharing kitchen facilities with the bistro;
- convenience retailing needs met by either an expanded souvenir shop or take-away food shop.

The combining of all of the above activities together with the functions necessary to the operation and administration of the HFH (library, meeting & lecture rooms, administration), reduces building costs in Stage I, and contributes to the creation of a vital and dynamic focus for horticultural activity in Victoria.

Stage I of the HFH would comprise the following land areas for each component:

Component	Sqm	
Theme Gardens	25,831	
Exhibition Hall (incl Allied Trades Display)	1,500	
Administration	400	
Library	500	
Garden Advisory Service	460	
Meeting & Lecture Rooms	300	
Office Space	2,000	
Souvenir Shop	100	
Function Room	250	
Take-Away Food	30	
Bistro	150	
Sub-Total Developed Areas	31,521	(3.2 ha)
Circulation & Service Areas	68,479	(6.8 ha)
Total Stage I	100,000	(10 ha)

Visitor Levels

Visitor levels have been estimated by comparing the actual attendance levels of a range of tourist attractions in Victoria which charge an entrance fee and which are open all year round. Using these data as "benchmarks", the likely attendance level at the HFH has been estimated at 340,000 per year. A downside attendance level has been estimated at 220,000 per year. Attendance figures are projected to scale up to these maximum levels over a period of 5 years as the HFH becomes established.

The upside level estimate of visitor numbers by C&LC falls at the lower end of the range projected by previous consultants, and represent what we consider to be a realistic view of the HFH as a tourist attraction. The main factor which limits the attraction of the HFH to visitors is that it has minimal appeal to children by comparison with other tourist attractions. Attractions which record visitor levels well in excess of 340,000 per year are multi-dimensional, truly unique, or are centrally located in Melbourne. The HFH is not truly unique as is the Penguin Parade, and it is not multi-dimensional as is Sovereign Hill. The HFH is however well positioned with respect to the urban mass of Melbourne.

The projected visitor levels to the HFH have been estimated as follows:

Year	Upside Estimate	Downside Estimate
1 (opening year)	200,000	130,000
2	220,000	145,000
3	250,000	165,000
4	290,000	190,000
5 (full potential)	340,000	220,000

Admission Fees

Admission fees for the HFH have been estimated by comparing the range of fees charged at other attractions in Victoria. Again using these data as a benchmark, the HFH admission fees are assessed as follows:

	\$1990 (June)
Adults	6.00
Children	2.00
Pensioners	3.00

Income

Income for the HFH would derive from several sources including:

- gate receipts
- souvenir shop profit
- take-away & bistro rent
- function room rent
- Exhibition Hall (allied trades display) rent
- office space rent.

The income stream from gate receipts, the souvenir shop and take-away food/bistro areas would be highly sensitive to visitor numbers. The function room would essentially service the local Knox community and would not be directly responsive to HFH visitor levels. The Exhibition Hall rent would also be less responsive to fluctuations in visitor numbers; the office space rent would not be affected by visitor numbers.

Assuming an opening date of January 1993, the total income flow for the HFH resulting from the above elements is calculated as follows:

Year	Upside Visitor Estimate (\$M)	Downside Visitor Estimate (\$M)
1993	1.829	1.351
1994	2.182	1.620
1995	2.621	1.936
1996	3.140	2.289
1997	3.802	2.738
1998	4.133	2.971
1999	4.493	3.225
2000	4.885	3.501
2001	5.311	3.801
2002	5.776	4.127

Operating Costs

Recurrent operating costs will include several elements, namely:

- staff salaries & on-costs
- grounds & maintenance
- services
- promotion
- Garden Advisory Service (subsidy)
- rent payable to MMBW
- miscellaneous

The HFH has been evaluated on two separate annual rental bases, the first is a \$10,000 base rent plus 10% of operating surplus, whilst the second comprises a base and percentage rent which scales up as the HFH becomes established. The first rental base has been used in previous assessments of the HFH. The second is derived from a draft lease agreement set up between the MMBW and the HFH in 1987, and it incorporates a much higher overall rental figure than that previously applied to this project. Cash flow analyses include both rental bases.

Operating costs are not tied to visitor numbers in the cash flow analysis because it is argued that certain standards of maintenance and service must be ensured.

Development Costs

Development costs associated with the HFH are extensive and have been inflated from original estimates provided by Green Dale & Wright in 1988. C&LC has excluded concessions such as the use of voluntary labour and contributions by the MMBW to roadworks. The development costs are therefore considered to be a realistic up-grade of the original estimates. Differences in the composition of the HFH between the Green Dale & Wright Master Plan (1988), and the concept as proposed by C&LC (1991), are taken into account by applying pro-rata construction costs (especially in building area).

The main components of the development costs of the HFH in 1990 dollars are set out below:

<u>Component</u>	<u>\$1990</u>
Site Works	376,000
Civil Works	2,513,000
Water Features	574,000
Framework Plumbing	430,000
Theme Gardens	651,800
Buildings	7,623,000
Planting Labour	81,000
Miscellaneous	<u>291,000</u>
Total	12,539,800

The development cost of the HFH is likely to be spread over two years, ie 1991 and 1992.

Cash Flow Analysis

Several cash flows have been assembled to evaluate the financial performance of the HFH as proposed. The relevant variables in each of the cash flows are as follows:

- Visitor numbers (upside and downside);
- Rental base (MMBW and C&LC);
- Taxation (included and excluded).

Various combinations of these variables generate eight different cash flows analyses. In each case, the total funds required to develop and construct the HFH, and to lease the site during the construction phase, remains constant at \$13.260 million in 1991 dollar values. Additionally, each scenario shows a positive net cash flow each year from the first year that the HFH is open to the public (assumed to be 1993).

This positive net cash flow from 1993 can be used to support a loan of funds at commercial rates to contribute to development costs incurred during the construction phase of 1991 and 1992. The assumptions regarding this "commercial" loan are as follows:

- Term of 12 years from January 1991 to December 2002
- Interest rate of 13.5% pa
- Principal and interest loan.

The capacity of the HFH to service such a loan varies significantly with each of the variables of visitor numbers, taxation and rental base. No combination of these variables enables the project to entirely support a commercial loan (as defined) of the required \$13.260 million in 1991 dollar values. In each scenario, a portion of the development cost must be provided from other sources. The schedule below shows the size of the "cash injection" required in 1991 dollar values to finance the project.

Funds Required Additional to Serviceable Loan

Tax Assumption	Rental Base	Visitor Numbers	
		Upside (1991 \$M)	Downside (1991 \$M)
Including Taxation	C&LC	8.515	10.624
	MMBW	9.168	11.021
Excluding Taxation	C&LC	6.111	9.549
	MMBW	7.215	10.231

The schedule above shows that applying the C&LC rental base, excluding taxation and assuming the upside visitor forecasts, the HFH would require \$6.111 million in addition to loan funds. The loan funds required (\$7.149 million) in this scenario could be supported by a 12-year principal and interest loan at 13.5% pa interest, with repayments being made by a positive net cash flow from 1993.

On the other hand, assuming the MMBW rental base, including taxation and assuming the downside visitor forecasts, the HFH would require \$11.021 million in addition to loan funds. The loan funds required (\$2.239 million) in this scenario could be supported by a 12-year principal and interest loan at 13.5% pa interest, with repayments being made by a positive net cash flow from 1993.

In terms of the range of cash flow scenarios provided, we consider that it would be prudent to assume:

- (a) that the MMBW will press ahead with its draft lease agreement drawn up in 1987; and
- (b) that the management structure of the HFH will incur taxation.

On this basis, the level of funding required for this project is within the range of \$9.168 million to \$11.021 million in 1991 dollar values. Project funding at this level is unlikely to be provided from the horticultural industry or public fund-raising. Government funding remains the most likely source of funds for a project of this scale.

Wholesale Flower Market

In addition to the HFH and associated activities, the NHC site could also accommodate a wholesale flower market. Cut-flower distribution in Melbourne is currently channelled through the Footscray fruit & vegetable market ("Fresh Centre"), although a large proportion of the cut-flower trade is supplied directly to sellers through grower delivery runs. This situation is reversed in Sydney where the main distribution method is via the Flemington Flower Market.

The Footscray Flower Market actually forms part of a fruit & vegetable market; as such there is no dedicated cut-flower wholesaling facility in Melbourne. Additionally, many of the growers of cut flowers in Victoria are located in the Dandenong Ranges and Mornington Peninsula regions. The Footscray market is not centrally located with respect to growers. Cut-flower production in Victoria could well be improved, and would be better placed to develop export markets if distribution, packaging and storage facilities were improved and centralised. The option of establishing a dedicated wholesale flower market at Wantirna on the NHC site would provide the industry with a central distribution point, and would also encourage export development by concentrating buyers, growers, distributors and storage facilities in a single purpose-built market place.

Preferred Option

C&LC examined two basic structures for the proposed Wholesale Flower Market ("WFM"), namely Full Facilities and Shell Only. The former provides a broad range of stand, warehouse, office and support space to be tenanted by buyers and growers. The latter involves a simpler construction providing users of space with the flexibility of constructing their own office, storage and cool room areas.

An analysis of development costs and expected rental levels indicates that neither option is viable if all development funds are borrowed at commercial rates. However, of the two options, the Shell Only facility was the more attractive in the evaluation of development and operating costs and income flows.

The Shell Only building for the WFM comprises the following elements:

<u>Component</u>	<u>Sqm</u>
300 stands @ 20 sqm each	6,000
Wholesale supplies (pots, ribbons etc)	500
Cafe	150
Bank	80
Total	6,730

The WFM would comprise a total of 6,730 sqm of net lettable floorspace, including services such as a bank, cafe and wholesale suppliers (ribbons, pots, etc), together with 300 stands. It is further estimated that the WFM would require about 300 carparking spaces to service a market of this size. The total site area required under the Shell Only option is estimated at 2.9ha, and it is recommended that a further 2.1ha be set aside for future expansion.

Income

Income from the market primarily derives from the lettable floor space. A permanent vacancy factor has been built into the cash flow model, and due allowance is made for a build-up of stand occupancy levels over several years. Stand rental levels are comparable (on a dollar per sqm basis) with the Footscray and Flemington Markets.

Based on discussions with the operators of the Flemington Flower Market, further income allowances were made for the letting out of the building for Sunday Markets, and for commission on Good Will on the sale of the stand rights.

Operating Expenses

The WFM would incur operating expenses relating to staff and maintenance costs, together with outgoings and other sundry costs. In terms of rental levels the MMBW has indicated that it is likely to require a "less-than-market" rent for the WFM site. No dollar value has been agreed on land rental, however C&LC has estimated that a commercial or market rental for NHC land would be in the order of \$4 psm in 1990 dollars. The cash flow analysis for the WFM has included a rental allowance equivalent to \$3 psm in 1990 dollars. The 5ha site required for Stage I of the WFM would therefore incur an annual rental of \$150,000 in 1990 dollars.

Development Costs

The development costs associated with the Shell Only option of the WFM have been estimated at \$5.308 million in 1991 dollars. This includes construction of the building, as well as full development of the carparking area and landscaping. Due allowance has also been made for project management fees in the estimate of total development costs.

Cash Flow Analysis

Several cash flows have been assembled to evaluate the financial performance of the WFM as proposed. The key variables in these analyses were:

- Building structure with full facilities;
- Building structure shell only;
- Inclusion and exclusion of taxation;
- Inclusion of a wholesale plant market at the WFM on a daily, weekly and monthly basis.

Various combinations of these variables have been used to generate 10 different cash flow analyses. The total funds required to develop to construct the WFM ranges from \$5.469 million to \$8.113 million in 1991 dollars. The range of development costs is brought about by the option of either building a "full-facility" or "shell-only" structure, together with the possible addition of a separate structure for a daily wholesale plant market.

Each of the cash flows constructed show a positive net cash flow from the first year that the WFM is fully operational (assumed to be 1992), even allowing for a scaling-up of leasing commitments. This positive net cash flow from 1992 can be used to support a loan of funds at commercial rates to contribute to development costs incurred during the construction phase. The assumptions regarding this "commercial" loan are as follows:

- (a) Term of 11 years from January 1991 to December 2001
- (b) Interest rate of 13.5% per annum
- (c) Principal and interest loan.

The capacity of the WFM to service such a loan varies with each of the variables. No combination of these variables enables the project to support a commercial loan of the required \$5.469 million to \$8.113 million in 1991 dollars. A portion must be provided from other sources.

The cash flow analyses indicate that the most efficient option is to construct a building shell only, and to include a weekly wholesale plant market. Under this option, the analysis shows that the WFM would require \$2.042 million in addition to loan funds supported by the WFM's operations.

However, if the wholesale plant market is excluded, then the next preferred option is to construct a building shell only. Under this scenario, the WFM would require \$3.111 million in addition to loan funds that could be supported by the WFM's operation.

On this basis, the WFM will require funding of an estimated \$2.042 million to \$3.111 million in 1991 dollars in order to finance the project. Again, it is unlikely that funding of this scale could be supported by industry or public fund-raising. Accordingly, the WFM project will depend on Government funding.

Wholesale Plant Market

The Nurseryman's Association of Victoria ("NAV") has expressed interest in establishing a wholesale plant market at the proposed WFM. The NAV currently operate a monthly market at the Caribbean Gardens, and a private company ("Plantmark") operates a daily wholesale plant market at Dandenong.

Several options were examined for the inclusion of a wholesale plant market at the WFM. The most attractive of these proved to be the option of including a weekly wholesale plant market in the WFM building and carpark. This option would require no additional development cost, but would contribute to the income stream for the WFM. A wholesale plant market could be held on a Tuesday, a slow trading day for cut flowers.

On this basis, we conclude that in order for the WFM to be developed it will require the following:

- simple construction (Shell Only) minimising development costs
- possible inclusion of a weekly wholesale plant market
- letting out of the building for alternative uses such as a Sunday Market.

Specialist Horticulture Retailing Facilities

The C&LC assessment of the market scope for specialist horticulture retailing facilities on the NHC site concludes that it would be appropriate to develop only a small retail centre with a frontage to Burwood Highway. Such a development should be undertaken by the private sector. Provision should be made in the land use planning of the NHC site to allow for a development of this kind at some future date.

Specialist retailing facilities cannot be located within the NHC away from the Burwood Highway. Such a location would limit the trading base of retail outlets to visitors to the HFH and to students and workers on the NHC site. There is simply insufficient visitor numbers to support such a specialist retail facility within the HFH.

Further analysis reviewed the market potential for a broad range of specialist retail outlets facing Burwood Highway. Such a facility would draw most of its trade from the surrounding residential areas as well as from visitors to the NHC site. An assessment of the level of provision of retail floorspace in nurseries and florists in the City of Knox at the time of the last Retail Census in 1986 shows that there was little scope for additional specialist retail outlets servicing the horticultural needs of residents in the Knox area.

Within this context, it is our view that there is limited market scope for a small specialist retail facility on the NHC. Such a facility would comprise a group of 4 to 6 shops (about 500 sq m in total), clustered around the entrance to the NHC off the Burwood Highway. The retail outlets likely to occupy such premises include:

- specialist seed retailing;
- garden furniture;
- specialist herb or bulb nursery;
- garden tools, fertilizers, fixtures etc.

A group of 4 to 6 shops with a total floorspace of 500 sq m in this location could be expected to generate a total retail turnover of about \$1,000,000 with rental levels of about \$200 psm in 1990 dollars. When fully let, this small facility would generate an annual gross income of about \$100,000 which, if capitalised at 12%, would have a valuation of about \$830,000.

The development of a specialist horticulture retailing facility is unlikely to significantly boost visitation levels to the HFH. Much of the trade generated by the facility would derive from local households, and there would be a limit to the number of times that local residents would visit the HFH. However, a specialist retailing facility would contribute to an "image" of the NHC site as being a focus for the horticultural industry in Victoria.

The specialist retailing facility would comprise a purely commercial operation largely depending on local households for business. Under these circumstances, the MMBW is likely to either require full commercial rent for the site area, or it may consider selling the part of the NHC site used for this purpose. Under this scenario, the MMBW would require replacement parkland. Such costs may actually preclude the development of a specialist retailing facility on the NHC site, even in the longer term.

Development and design of successful retailing centres (especially those focused on "themes") is a specialised task which is best tackled by the private sector. In addition, the use of the NHC land for purely commercial purposes will likely require rezoning whether or not the land is sold or leased. In either case, the rezoning process would only serve to extend holding/leasing costs which again are best borne by the private sector.

Taking all of these factors into account, we consider that the NHC site plan should make provision for a small specialist retail facility on the Burwood Highway access road to the NHC site. Development of a specialist retail facility on this location could be instigated after completion of Stage I of the HFH.

Education Facilities

The NHC can make a significant contribution to areas of education and training where there are demonstrated needs for improvement. These needs include the practical aspects of apprenticeship training, specialist courses (both technical and management oriented), post-graduate student training and consumer education.

Role options considered include:

- a limited NHC facilities access role,
- the location of a major Victorian College of Agriculture & Horticulture ("VCAH") facility at the NHC, and
- pro-active marketing of educational and training services.

In the immediate post establishment period, the NHC role should be confined to providing access to its facilities for practical aspects of industry training, post graduate work and consumer education. This option will include use of apprentices from the Outer Eastern TAFE College to assist with garden development and maintenance as part of their practical course work.

Once the NHC is established and recognised as a "Centre-of-Excellence" in horticulture in Victoria, consideration should be given to developing a pro-active role in planning, marketing and managing specialist horticulture related short courses. This will involve additional building rental and staff costs on a recurrent basis of the order of \$93,000 to \$158,000 per annum in 1990 dollars.

Land use planning of the NHC site should maintain the option of relocating all or part of VCAH Burnley to the NHC site in a location properly placed relative to other linked facilities. If no research facility is provided at the NHC, then such relocation is unlikely to be attractive.

If and when a decision is taken to proceed with the NHC, the Board of Management of the NHC should establish an Education & Training co-ordinating body with representation from VCAH, TAFE, schools and the Royal Horticultural Society to ensure the effective use of available facilities at the NHC and elsewhere.

Horticultural Industry Park

The proposed Horticultural Industry Park would provide a focus for industry and business associated with the horticulture industry in Victoria. The type of horticultural activities envisaged that could require space in an industry park on the NHC site are as follows:

- garden tools and products manufacturers
- chemical and fertilizer distributors
- growers (distribution facility)
- importers and exporters of horticultural products.

Industry parks are generally staged and in view of the fact that the tenants of a horticulture industry park are limited to a single industry group, both the scale and the timing of such a specialist park on the NHC site will be affected, ie the scale reduced and the timing extended over a series of stages. On this basis, a horticulture industry park could be proposed as follows:

	<u>GLA sq m</u>
Stage 1	8,000
Stage 2	8,000
Stage 3	<u>8,000</u>
Total	<u>24,000</u>
(GLA = Gross Leaseable Area)	

The total site area that would need to be set aside for such a development would be in the order of 40,000 sq m or 4ha (allows for a 60% efficiency factor). Part of the gross leaseable floorspace would include an office component (about 20% of GLA).

There are several major obstacles to be overcome in establishing a horticultural industry park. Indeed, these obstacles are such that they throw the feasibility of such a development into doubt. The NHC site is currently zoned "Public Open Space", and that portion necessary for an industry park must be rezoned to an appropriate commercial or industrial zoning. This is an issue which must be resolved by DARA and the Department of Planning & Urban Growth.

The second and perhaps most difficult obstacle is that of a basic lack of depth in the leasing market for industrial floorspace by the horticultural industry. The development of industry parks is a highly specialised process which is best tackled by private sector developers. The proposed horticultural industry park is particularly difficult because prospective tenants must be associated (however loosely) with the horticulture industry.

There is, in our view, simply insufficient depth in the market for industrial accommodation by horticultural industry in Victoria to warrant a specialist park on the NHC site. Additionally, if the land was to be leased rather than sold (freehold), prospective tenants could choose to locate in a range of competitive freehold industry parks in the Knox region. There is no compelling reason for business to choose to locate in the horticulture industry park.

A third difficulty faced by the proposed Horticultural Industry Park is that the MMBW would view this activity as being inconsistent with the site's current zoning of Public Open Space. As such, the site would be sold at commercial rates and the MMBW would seek replacement parkland. In addition, the site would almost certainly have to be rezoned. The rezoning process is extended and in this case may prove difficult to secure because the rezoning is from Public Open Space to an industrial zone.

Based on the assumption that the NHC achieves a rezoning, stages an industry park, develops support infrastructure (roads, services etc), and secures suitable "horticultural" industry tenants, an indicative valuation of the project would be as follows:

- 40,000 sq m total site area;
- 48 lots @ 2,500 sq m each;
- long-term lease land value @ \$90 psm in 1990 dollars;
- total site area value @ \$3.6 million.

On the other hand, if the NHC acts as developer of 24,000 sq m of industrial floorspace, an indicative rental from the fully let industrial park would be:

- 24,000 sq m @ \$70 psm = \$1.68 million annually.

At a 12% capitalisation rate, the value of the project would be \$14 million, assuming that an investor would be prepared to pay commercial rates for a leasehold property.

It is our view that the development of a horticulture industry park is not a project which should be attempted by the public sector on leasehold land which is currently zoned Public Open Space. Even if the land was sold by the MMBW, there is still a problem with insufficient market depth to support a development of this nature.

Delivery of Technical Services to Growers

C&LC asked Daratech to carry out three tasks:

- (a) to evaluate options for the delivery of extension services to growers associated with the NHC;
- (b) to estimate the size of the market for a soil & plant analysis service and a pest & disease diagnosis service based at the NHC;
- (c) to consider the establishment of a "cultivar/variety identification & certification service" based at the NHC.

Daratech believes that the most effective way to deliver the type of extension services required by the industry is via an extension depot attached to the NHC and staffed as follows:

- 2 x SCI IV extension officers (scientific officers)
- 1 x TA (technical assistants)
- 1 x telephonist, receptionist, typist, accounts, etc.

While the office worker could be supplied by the NHC itself, to provide a responsive and effective service, it would be preferable for the extension group to have this extra staff person.

The market for soil & plant analyses is estimated to be of the order of 1,400 samples annually, increasing to 2,400 samples in year 4 as the credibility of the interpretations associated with the analyses increases. The market for the pest & disease diagnosis service is estimated at 1,000 samples annually; little growth is expected in this market as there is a strong self-education factor associated with this type of service.

Revenue generated by such services and other related services (including computer access to international databases) increases from \$180,000 in year 1 to \$380,000 in year 5. However, when salaries and operating costs are taken into account, the extension unit would still make a loss of more than \$100,000 per year. (All costs are at June 1990 prices.)

It was considered that the "Centre for Identification & Certification of Cultivars" was not appropriate for the NHC, as good private work of this nature would tie up the extension staff for little return to the industry as a whole.

Convenience Retail Shops

The need for convenience retail shops on the NHC site has also been examined. The conclusion to this study is that there is an insufficient trade base to support any dedicated convenience retail shops on the NHC site.

It is likely that convenience retail shops would be commercially viable on a site which faced the Burwood Highway. In this location, the convenience retail shops would draw most of their trade from passing traffic and from the surrounding residential population. The purpose of the convenience shops is then shifted from servicing the needs of visitors, to servicing the needs of the local residential community.

However, if the purpose of the convenience retail shops is to provide for the needs of visitors, students and workers on the NHC site, and as such are located off the Burwood Highway, then there is barely sufficient trading base to support one milk bar.

Convenience retailing needs should be met initially be either the souvenir shop or the take-away food outlet at the HFH carrying additional convenience store product lines.

REPORT 3 - EXECUTIVE SUMMARY

Report 3 addresses Government research and service activities which could be relocated to the NHC site, and the impacts of such relocation on interaction with industry and likely financial efficiencies.

Relocation of Government Research and Service Activities

The establishment of an extension "depot" at NHC as envisaged in the Technical Services to Growers Business Plan (Report No 2) will effectively result in the transfer of some present Burnley and Knoxfield technical and information related services to NHC.

This will become even more attractive if the Government chooses to locate at NHC the Institute of Plant Services and Technology ("IPST") presently being considered within DARA following the Baker Report on DARA research activities.

Analysis of the DARA Working Committee report statement of IPST land needs shows that IPST full land needs could be accommodated on the NHC site. On the basis of our consultations, the industry strongly supports the location of applied horticulture research facilities at NHC. The extension to the bigger concept of IPST located at NHC is also likely to be supported by industry provided the extended scope of IPST does not inhibit industry participation in research priority development and IPST scientist involvement in application of new and existing knowledge by industry.

The facilities proposed for the Home For Horticulture elements of the NHC which are foreshadowed in the Business Plan (Report No 2) to attract up to 340,000 visitors per annum, home gardeners and general public, makes NHC a most suitable and indeed preferred site for the future location of the Burnley Garden Advisory Service.

If the wholesale flower market proposed for NHC is to develop as an export consolidation centre, access to quarantine services via the DARA quarantine officer presently based on Knoxfield is essential. We have assumed that the other services presently provided at the Fresh Centre Market by DARA Rural Policy & Marketing Division (wholesaler registration, dispute resolution, price monitoring etc) will be best performed as part of market management, as there are no food safety or nutrition issues involved. These services have been included under General Administration in the Flower Market business plan.

In relation to educational services, NHC facilities will support existing or planned educational activities at all levels. Except for consumer education, eg Royal Horticultural Society, our study does not indicate the need or desirability of relocating any existing education services to NHC.

Industry Interaction

Our comments on industry reaction presuppose the establishment of a wholesale market for cut flowers and probably also for ornamentals and other nursery products at NHC. Without this market, there is little justification for locating any of the above DARA services except the Garden Advisory Service at NHC.

If the market proceeds, the location of technical and information extension services, a major plant research facility and quarantine services at NHC will greatly improve scope for interaction between service suppliers and the industry, particularly the amenity horticulture, cut flowers, ornamentals and other nursery sectors.

Financial Effectiveness

For the commercial grower related services (technical, information, research, plant standards and education), our analysis suggests that relocation to NHC as proposed will, in operational cost, be revenue neutral in the medium term but may incur some additional costs in the immediate post establishment period.

For the Garden Advisory Service, relocation to NHC with potential access to a share of NHC Home For Horticulture revenue and possibly future membership subscriptions, will allow growth of the service to meet market needs (probably at least double the present enquiry volume) at no extra or even in future reducing real cost to the State.

The major potential saving is in trade off between the capital cost of the land for the proposed IPST research facility estimated by the DARA Working Group at \$7.5 million, and the rental payable to MMBW for the use of part of the NHC site for a 20ha site. The land purchase price indicated equates to a purchase price of \$37.50 per sq m or about half the market cost of unserviced industrial land in Melbourne.

However, on the basis that the MMBW would expect to charge a Government department close to a full market rental for land, for such a purpose, we consider that about 75% of the actual market rental would be a fair rental, ie \$3 psm for 20ha, or \$600,000 per annum (as against capital expenditure of at least \$7.5 million which is unlikely to be sufficient to secure a 20ha site in metropolitan Melbourne) at 1990 prices. This basis has been discussed with MMBW officers who have indicated their support in concept (ie, close to market rates) but without commitment at this stage.