

Turf Business Plan Guide
for
Hockey New Zealand

23 August 2006

Contents

1. Executive Summary	2
2. Introduction.....	2
3. What is Proposed	2
3.1. Vision and Objectives	2
3.2. Site Selection and Future Planning.....	3
3.3. Description of Development.....	4
3.4. Technical Aspects.....	4
4. Why is the Development Needed.....	5
4.1. Growing the sport.....	5
4.2. Staying competitive.....	5
4.3. Economic benefits.....	5
4.4. Contribution Towards Community Outcomes - Local Government and Your Project	7
4.5. Description of Need	8
4.6. Summary of Need	9
5. Current Capacity.....	10
5.1. Current association/ Turf Trust Assets	10
5.2. Current Occupancy Levels.....	10
5.3. Non-association Turf Assets	10
5.4. Regional Context	10
6. The How	11
6.1. Ownership and Operational Structures.....	11
7. Financial Plan	13
7.1. GST Implications.....	13
7.2. Insurance of Assets	14
7.3. Current financial position of association	14
7.4. Contribution by Council.....	14
7.5. Pricing Policy.....	14
7.6. Operating Costs and Revenues Plan	15
7.7. Capital Plan.....	18
8. Implementation Plan.....	20
9. Communications Plan	20
10. Information Plan	21
11. Operational Management Plan.....	21

12. Health and Safety Plan.....	21
13. Appendix: Technical Information and Key Questions	22
14. Appendix: Resource Documents Available from Hockey NZ.....	28
14.1. Development Planning, Project Management and Critical Paths	28
14.2. Funding Cases and Submissions	28
14.3. Health and Safety Plans	28
14.4. Trust Deeds and Partnership Agreements	28
14.5. Maintenance Plans and Schedules	28
14.6. Operational Management Plans	28

Purpose of This Document

This Guide has been developed to assist Associations prepare a turf business plan using Hockey NZ's "Turf Business Plan Template".

It contains tips, commentary and background information designed to help associations through the planning and development process. The Guide includes a description of key milestones and issues that need to be addressed drawn from the experience of associations. The purpose of the Template is to assist associations in the planning for turf developments and in securing funding support from external parties. The Business Plan should be written with the external funders (Council, granting bodies and sponsors) as a key audience.

This Guide is fundamentally an accumulation of knowledge of associations around the country that have been through a turf development process. Collectively we have a lot of expertise and need to bring together the learning we have done in our own regions to enhance the future planning and development of turfs across the country. The intention is for both the Guide and the Template to be living documents that will be updated as new information comes to hand through the submission of Business Plans by associations to Hockey NZ for endorsement.

The information required to complete your Business Plan in accordance with this Guide and the Template may on first inspection appear "over the top". We urge you to treat these requirements seriously. You will not only be seeking funds from a limited resource but you will also be competing against many other organisations. It should be your intention as it is Hockey NZ's to be seen as a professional, well-resourced and reliable organisation with whom to do business.

Each association's situation is unique and the Template provides a generic structure which will need to be interpreted for the local situation.

The intention of the Template is to try and save associations time and money in the planning their development by doing as much as possible from within the association itself. The Template and Guide documents can supplement the skills and knowledge of the people involved in steering the development project. It can help to plug gaps in knowledge. However, some associations may need to purchase some skills and knowledge from appropriate consultants in preparing their Business Plan. The bottom line is that the association through its champion for the project will still need to drive the process through to completion. Hockey NZ is intending to provide guidance and a peer review service to assist associations with the development of their plans.

Local Government is a critical partner in the development of turfs and the implications of the Local Government Act, the community outcomes approach and the Long Term Council Community Plan in terms of turf development are addressed in this document.

Technical issues are addressed in the appendices including issues and options regarding types of turf, the base structure, lighting and water systems.

TIPS:

Tips about your approach to planning a development:

1. Identify where you can get advice by contacting Hockey NZ for the list of advisers
2. Invest time and money in visiting at least 2-3 other associations to learn from their successes and mistakes first hand.

Tips about your plan:

3. Keep it simple
4. Keep it straight forward
5. Ensure that that any section is not contradictory to any other,
6. Make sure that every section in the Template is taken into consideration,
7. All of the information in the Plan should not necessarily go into a submission to a council or potential funder although it could be included as appendices. The Business Plan is more comprehensive with the submission a subset of the Business Plan.

1. Executive Summary

A short and punchy executive summary of no more than 1 to 1.5 pages needs to be distilled from the Business Plan or funding submission for the audience such as politicians (on information overload) or hockey players.

- Why needed [bullet point key needs or drivers]
- Number of players who will benefit and growth projections
- Type and scale of development
- Location
- Partners supporting the project
- Summary of capital costs and net operational cost/surplus [just totals]
- Amount of financial support sought [if a funding submission]
- Highlight the high cost of playing hockey in comparison to other field sports
- Close with economic and social benefits to wider community [if a funding submission]

2. Introduction

This should contain who is proposing the development, what is the purpose of the document (a Business Plan or a funding submission) and who is the intended audience.

3. What is Proposed

3.1. Vision and Objectives

Vision statement

Inclusion of a vision statement is not essential but if the association has a vision statement then this could be included with a brief statement as to how the development of artificial turf contributes to the vision.

Objectives

An objective needs to be specific and measurable (states clearly what is to be achieved and when) and be realistic. There could be one objective or several particularly if there are several projects that are being staged over time and can be seen as separate projects. For example a new artificial turf could be followed by a pavilion and then a 2nd turf.

TIPS

At some stage in association needs to ask itself three important questions:

8. Can we afford to fund the turf in the first place?
9. Can we afford to maintain it?
10. Can our players afford to play on it?

3.2. Site Selection and Future Planning

The long-term aim for associations should be to site turfs where there is space for at least two turfs and a supporting pavilion. The experience of other associations indicates that it is extremely short-sighted to use a site that does not have a minimum space noted above.

For additional turfs beyond the first two the association needs to consider implications of sustainable communities/ cities policy within the Local Government Act and councils have to consider sustainability in all aspects of their work including provision of sports facilities. A centralised facility requires higher levels of travel than dispersed facilities where players can practice locally (and possibly play locally) and this means less travel time, vehicle costs and less fuel use and cost. This will make hockey more attractive to families.

Site selection can have significant downstream effects on the effective operation of the turf. Some of the unforeseen factors encountered by some associations include:

- Glare from construction of a building on neighbouring property
- Vegetation on neighbouring properties causing maintenance and cleaning costs from leaf drop and pine pollen. A similar problem with dust and dirt from an adjacent quarry.
- Shading of turf by vegetation or buildings causing delays to accessing the turf from icing.
- Lighting, noise, parking and traffic congestion causing problems for neighbours
- Low lying sites may have construction and on-going drainage and soft-soil issues.

TIPS

11. Site should be large enough to mitigate or avoid issues from neighbouring activities
12. Trees are needed for shelter. Seek advice about low leaf drop trees to plant on site.

3.3. Description of Development

Describes how the association will meet projected demand and any current shortfall/ gaps in provision (type and geographic location).

Could be provision of more full size artificial surface fields

Could be provision of more practice/ training capacity through artificial turf overlays on hard court at schools, public courts and current or former tennis/ netball club courts

3.4. Technical Aspects

Technical aspects should be put into an appendix and not in the main body of the Business Plan itself or in the submission to Council. These technical elements need to be well covered in an appendix to strengthen the credibility of the planning undertaken by the association and the case being put forward in any funding submission. Please refer to section 13 Appendix: Technical Information and Key Questions for more information and key questions to address in your planning.

Briefly summarise the key elements so that readers are aware of the planning issues that have been dealt with by the association.

3.4.1. Type of turf

Selection of turf type (water, wet dressed or sand) is a critical decision. There are significant cost implications of selecting a water turf. Some of these are easily identifiable such as water charges, provision of irrigation and drainage systems but other can often be less evident such as the staff costs of turning on and off the water irrigation.

3.4.2. Type of Base for Turf

Care is needed in the selection of the base because there is a high cost of changing the base if type of turf is changed in future e.g. from sand to water

3.4.3. Type of flood lighting and LUX Levels

Make provision for heavy vehicle access to the light poles for maintenance of the lights - this may not be necessary if climbing rungs or fold down poles are used.

3.4.4. Type of water system and drainage

Selection of the water and drainage system will be determined by a combination of factors that in some cases will be unique to the location of the turf.

- Type of turf
- Climatic factors
- Ground water table
- Run off efficiency
- Recycling of water (particularly if water charges are in place or anticipated in near future)

4. Why is the Development Needed

4.1. Growing the sport

This section should cover topics on both the positive and negative impacts of artificial surface fields on the sport.

4.2. Staying competitive

Describe how artificial surface fields impact on player development and enable your association to compete at the national level. Also reinforce the need for the appropriate artificial surface field to attract international games and national tournaments.

4.3. Economic benefits

4.3.1. *Reduced costs for Council*

Hockey is somewhat unique because it has moved from grass turf fields with high Council subsidisation of operational costs to artificial surface fields meeting part of the costs of capital to develop new fields and renew them and almost all operational costs of artificial surface fields. There is an issue of fairness that has potential to gain greater support from external funders such as councils.

Detail costs to hockey before and after introduction of artificial surface fields in a table to show costs and savings to Council since artificial surface fields were introduced.

Develop the argument that Council will need less land used for hockey/ reallocation of existing fields to other codes. Reduced capital and operational costs and alternative use to meet other demand for fields from other codes especially soccer

Each artificial turf is estimated to replace 10-12 natural turf sports fields. Check with your own Council if you do not have the number of fields that the artificial turf is replacing or were replaced when artificial surface was established (if renewal or replacement). Try and identify which codes use the fields now and put in the number of fields for each and list the names of the parks as this is more meaningful. Seek an amount or estimate from Council regarding the annual maintenance costs of grass fields (such as mowing and fertilising).

Artificial hockey turfs therefore provide significant economic benefits which increase over time. A model has been developed in an attached spreadsheet to help you identify potential savings over the useful life of your artificial turf (assumed to be up to ten years for water filled and up to 15 years for sand filled surfaces).

You will need to check with Council on the number of additional fields needed per year to meet growth in demand and/ or increasing quality expectations requiring lower use of existing fields during the winter season)

The model is outlined in an attached spreadsheet for your use with an example table below:

Capital cost of land purchase

Modelled on 1 field per 1 hectare of parkland [confirm this with Council as the margins around a field vary from park to park and from council to council]

Cost of purchase per field [seek data from your local Council]

Cost of development of field with irrigation and drainage In one local authority this was estimated at \$100,000 in 2005 [seek data from your local Council]

Maintenance and Care Costs of Natural Turf Field

Maintenance cost per field per year (seek data from your local Council). Example table below.

One additional field needed per year

Year	Number of additional fields needed	Land cost per 1 hectare field	Development cost to establish each field	Capital Cost	Annual maintenance cost per field	Annual cost to maintain additional fields
1	1	\$700,000	\$100,000	\$800,000	\$7,500	\$7,500
2	2	\$700,000	\$100,000	\$800,000	\$7,500	\$15,000
3	3	\$700,000	\$100,000	\$800,000	\$7,500	\$22,500
4	4	\$700,000	\$100,000	\$800,000	\$7,500	\$30,000
5	5	\$700,000	\$100,000	\$800,000	\$7,500	\$37,500
6	6	\$700,000	\$100,000	\$800,000	\$7,500	\$45,000
7	7	\$700,000	\$100,000	\$800,000	\$7,500	\$52,500
8	8	\$700,000	\$100,000	\$800,000	\$7,500	\$60,000
9	9	\$700,000	\$100,000	\$800,000	\$7,500	\$67,500
10	10	\$700,000	\$100,000	\$800,000	\$7,500	\$75,000
TOTALS	12	\$7,000,000	\$1,000,000	\$8,000,000	\$75,000	\$412,500

You should highlight that in most cases the existing fields are located within established areas of an urban centre and land is usually unavailable or prohibitively expensive to purchase in these desirable locations to create new sports fields.

TIPS

13. Care is needed in structuring supporting arguments and quantifying costs in a submission under this section. Use council supplied data where ever possible.
14. Your council may only be able to give you an estimate on cost per field because costs are often bundled across all parks in bulk budgets and contracts with service providers. However, most parks managers have a good feel for the costs per field.
15. Hockey turfs are high quality grass fields so make sure that you get an estimate based on premier quality fields not lower grade fields.
16. Please note that although there are savings in capital costs for a council in the use of turfs as opposed to grass fields, councils still need to be prepared to contribute similar maintenance amounts that can be put aside for regular turf replacement.
17. The wording also needs to make it clear that the provision of additional grass fields is not what hockey is seeking; it is artificial surface fields that are needed
18. This section should also include:
 - A comparison of the difference in maintenance costs between grass and artificial turf
 - Highlight the ability for turfs to be used in between times for other sports and the capacity for out of season use (e.g. twilight business house and Masters) because of floodlighting

4.3.2. Attract visitors to city/ district

Seek any data available from your local Council or tourism organisation or other associations regarding the value of sport tournaments. Outline the benefits to local businesses and local communities from attracting tournaments. Hockey NZ has an electronic copy of an economic impact analysis study report for a Masters Hockey Tournament hosted in March 2003 by the Waikato association.

4.4. Contribution Towards Community Outcomes - Local Government and Your Project

Local Government is a critical partner in achieving the objective of developing a new or replacement turf. Developing a strong relationship as early as possible and maintaining it at the political, senior management and officer levels is crucial to the success of the current development project and the on-going health of hockey in your region. The importance of building a partnership with local government cannot be over emphasised.

The Local Government Act 2002 has required territorial authorities to identify community outcomes and develop a Long Term Council Community Plan (LTCCP). This now means that any project seeking financial or other support from Council will need to position the turf development within this context to make a case for funding. The LTCCP is a ten year plan with a higher level of detail and certainty for the first three years. There is still an Annual Plan process for final approval of financial commitments by a council.

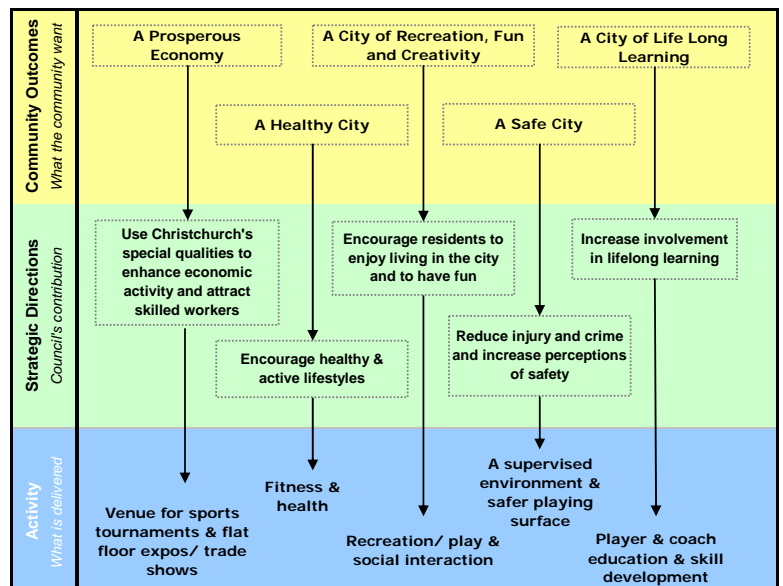
4.4.1. Future Commitments to Hockey in the LTCCP

Development of LTCCPs is well underway with Councils around the country developing these plans for the 2006-2016 period. It is critical that your association informs Council as early as possible about your plans for future capital projects including the scale of Council funding needed and when it will be needed. It appears that if your Council has not already made provision for your project in the first three year period (2006/07 to 2008/09 financial years) then it will be unlikely that Council will consider funding for your project until the next review of the LTCCP due in the 2008/09 year.

4.4.2. Contribution to Community Outcomes

The Business Plan needs to clearly state how the artificial turf will contribute to the community outcomes and assist Council. Highlighting the benefits the turf will deliver is suggested as an approach. A sample statement is provided in the Template. A simple chart can assist with demonstrating the linkages, an example of a chart to show linkages.

Example: Linkages for an indoor sport facility to Christchurch City Council LTCCP and Community Outcomes.



4.4.3. Regulatory Planning and the RMA

This approach could also help with dealing with any resource consent issues under the Resource Management Act that may arise regarding the location of the turf. These often focus on the effects of flood lighting of the turf and increased traffic flows to the site. The positive effects of benefits to the community versus the negative effects to neighbouring residents are a balancing act and clearly stated positive effects are needed. (Noise and hours of use are important issues in the granting of resource consents.)

TIPS

19. As a starting point associations should ascertain the timeframes for their local council approval process and get information to the council early - approval processes can often take a much longer time than people appreciate.

4.5. Description of Need

This section is focused on proving the need for a new or replacement turf. The section will show the association has done the analysis to provide a factual basis to validate the need for the development of the turf.

4.5.1. Geographic area of catchment

Description of the catchment area of the turf should describe the boundaries of the association and identify the territorial authority (or authorities) that are within the catchment. Where ever possible work to the Statistics New Zealand area units if only part of a territorial authority is in the catchment. This will help with population analysis.

A map is useful if available

Some consideration needs to be given here about the impact of a centralised turf killing the sport in outlying areas - this has happened in a number of instances. This information should not be in a submission to Council but should be considered by the association as a downside and taken account of in their planning, particularly if the association already has two water turfs at the central location. There could be a case for dispersing additional artificial surface fields in other parts of the region.

4.5.2. Population Size and Growth

Current catchment population and growth projections are needed. Projections are important to show likely growth in demand and the need for additional capacity. Most of the data should be in an appendix with summary statement here. Source the data from either your local council or from the Statistics NZ website www.stats.govt.nz (the data is free) and look for community profiles (this link should take you there http://xtabs.stats.govt.nz/eng/statsbyarea/area_main.asp).

Place all detailed data into an appendix so that it can be reviewed by funding agencies.

A comparison with another association or two with a similar sized catchment population could be an advantage if this is strengthens your case.

4.5.3. Hockey Participation and Fields

Most of the data should be in an appendix with summary statement here. Most of this data should be readily available from your records. Need to outline the impact of artificial surface fields on playing numbers with some player statistics from before and for at least 5 years after the completion of the turf.

association statistics and trends

Profile of last 5 years of player numbers broken down by categories (open, college, primary, mini)

The number of clubs and the number of registered players. If playing on grass fields at present state the location and number of fields

Number of schools with hockey teams, the number of teams at each school and school locations

National statistics and trends

Include comparison with other associations of similar catchment population (especially if advantageous to your association). A statistical analysis based on 2003 data is available in the Hockey NZ National Facilities Strategy Stage 1 report.

Another resource is the SPARC FACTS publication on hockey in New Zealand available on the SPARC Website www.sparc.org.nz

4.6. Summary of Need

Summarise the key drivers of why the turf is needed.

TIPS

20. What are the drivers (future growth in the region, coping with existing player numbers and the growth in player numbers that are attracted to turf hockey - other regions have experienced a change from weekend play to weeknight play, competition with other sports)
21. Is it growth effects of increasing population? (If it is then there is an argument to access development levy funds from Councils for development of additional turf capacity)
22. Is demand for more turf time for game play or practice/ training?
23. Is it a timing issue need for more peak time capacity?
24. Is it demand to host more national and international events? (Refer to HNZ Tournaments Policy)
25. Is it to remain comparable and competitive with other hockey centres?

5. Current Capacity

This section needs to include all assets such as the artificial surface field, the flood lighting, the water systems, the ancillary facilities such as your pavilion (social, toilet, change, food and beverage), parking and spectator seating. Each asset should be identified separately as they have varying renewal and replacement requirements.

5.1. Current association/ Turf Trust Assets

For each identified asset some description is needed under following headings. Preferably this information would be contained in a report prepared by an engineer.

5.1.1. Condition assessment/ description

Preferably there is a condition report for each asset that can be referred to and key points highlighted. We suggest you identify these reports as reference documents.

5.1.2. Programmed Maintenance

Preferably an extract from a condition report on the asset listing programmed works and cost estimates.

5.1.3. Renewal/ Replacement Programme

This is an absolutely essential component of the description of each asset. Again preferably an extract from a condition report on the asset.

5.2. Current Occupancy Levels

Summary of current levels of occupancy of existing artificial surface fields and grass fields. Show stress points in occupancy and anticipated growth in demand.

The full statistical profile would be an appendix. The profile should include the levels of occupancy of existing turfs and grass fields over the calendar year and identify peak occupancy periods. Include occupancy profiles of standard week in winter and in summer showing use per day and type of use (competition, team training/practice by representative squads, schools and clubs, others).

5.3. Non-association Turf Assets

Description of any school and club turf assets and their effects on current association turf or new turf

Should ensure access for hockey is assured or otherwise (through a legally binding long term agreement or short term hire)

5.4. Regional Context

Other artificial surface fields in the wider region, list of turfs and their locations. State what impact these artificial surface fields have on the proposed development.

Use extracts from regional hockey turf plan or regional sport facilities plan (if they exist) as well as the Hockey NZ National Facilities Strategy Stage 1 report

6. The How

Follows on from demand analysis where key drivers were identified.

6.1. Ownership and Operational Structures

6.1.1. Ownership Options

The key factors to balance are the level of desired control and the level of liability for the costs of operating the turf and the capital costs of development (and subsequent renewal) of the turf. A clear message from the consultation with associations was that control of the primary turf (or turfs) used for association hockey competitions needs to be in the hands of the association. The mechanism by which control is assured was either through direct association ownership or indirect ownership through a hockey controlled trust.

A majority of feedback preferred a trust structure with trustees charged with sustaining provision of the turf and associated facilities for the ongoing benefit of hockey. This arms length arrangement was seen as the best way of ensuring the true cost of provision is provided for. If an association retained direct ownership and control then the bottom line was that the turf needed to be a separate cost centre to maintain transparency regarding costs and revenues. In addition, that the funds set aside for renewal or development of new turfs should be held in a trust fund with funds only able to be used for this purpose.

An additional benefit of a trust is that other parties such as school and local government can be included as part of a partnership. A trust provides a mechanism for shared ownership and importantly shared liability for the costs of sustaining the turf facilities. A trust can obtain tax free status for donations more readily than an association. A trust can also invoice the association for use of the turf and this can be an advantage when applying for grants from Gaming Machine Societies.

Key questions your association needs to consider are:

- What level of control is desired? Do you already have sufficient turf capacity or is this turf essential to operate your competitions? What level of control do any partners want?
- Does the association need to share the use and the operational and capital costs of the turf to make it viable? What level of shared liability is needed or desired?
- Do you need partners to develop and sustain the turf?
- What is the best mechanism to ensure the true costs of operation and renewal of the turf are charged to users over the projected life of the turf?
- What is the best mechanism to ensure the funds set aside for turf renewal are retained for this purpose?

TIPS

26. Contact a few associations and turf trusts to seek their views in relation to your situation.

27. If a trust is used there needs to be some shared membership on the trust board and the association board to ensure that both bodies are aligned in their vision and direction at all times.
28. If a trust is used then the aim and objectives in the trust deed need to explicitly state that the trust manages and operates turf facilities (that are sustainable, accessible and affordable) for the benefit of hockey activity administered by the association.
29. A professional should be employed to undertake the Treasurer function because of the high value of the asset.

6.1.2. Partnership options

Partner with schools, Council or clubs

Partnership details with schools etc must be clearly set out in the plan and be based on written agreements covering legal rights of access, obligations of the parties to fees, maintenance etc. Personnel change and where one school principal/BOT may be very happy for the local association to have access under a certain set of criteria, a change of principal/BOT could change all that if it is not clearly set out in writing and legalised.

Ministry of Education now has policy manual developed by the Property Division for community-school partnerships which includes various types of partnership. The local Property Office of Ministry should have this manual. (GLG also to source web link)

Section on need for clarity in partnership arrangement (GLG to source this)

TIPS

30. Strongly recommended that there are Hockey association appointed personnel on any management committee or trust that controls the operation and access to the turf.
31. A legally binding agreement documents is developed that ensures the on-going access rights to the turf for association are clearly specified and an arbitration process is included.
32. Ensure that any agreements with councils or schools include permission for the hockey association to earn income from the hiring of the turf and from hoardings or other sources.

6.1.3. Project Management Options

There are several options for project management of the turf development. Self managed by the association was seen as a lower cost option by associations consulted but the association is carrying the risk if problems occur. If this option is used there must be a suitably skilled person in the local association who has the time available to adequately manage the project. An independent project management contractor was seen as a higher cost option and careful selection is needed to ensure the project manager has previous experience in developing and constructing hockey turfs. Inexperience was identified as a major risk. A project manager who resides in the local area is preferred as they are available to effectively manage investigations and consent applications, discuss design details with association officials and supervise construction on a day today basis. Of course some of these activities can, and should be, contracted out to appropriate expertise (e.g. field designer, irrigation designer, floodlight designer, contractors and construction supervisor). The project manager may have some of these skills or he/she may arrange to contract them all.

In some instances an association stalwart can fill this role on a voluntary basis. Take care – this is a time-consuming and onerous but rewarding role, and to maintain enthusiasm and passion the voluntary project manager needs support from the association.

TIPS

33. It is strongly recommended that regardless of the option chosen for managing your project it is essential that one person from your association is appointed as the overall project manager or controller, otherwise contractors can cite conflicting or confusing instructions or authorities given by different people as a means of avoiding their responsibilities.

7. Financial Plan

The aim of this section is intended to provide a detailed planning guide for associations to look at short term through to long term financial implications of artificial surface field provision. This section should specify the financial policy and outline:

- The expected useful life of the assets
- The estimated cost of renewal
- Any established partnership with council such as Council to make annual contributions to a replacement fund (Canterbury amortised funding approach as example)
- Integrate any outside funders contributions but need care not to be overly reliant on external sources
- The savings plan of the association for turf renewal
- The protection of the renewal trust fund for association savings, Council and other funders contributions

7.1. GST Implications

Need to consider the effect of GST on the cash flow in the development. This will depend on whether the association or Trust is registered on a payments basis or invoice basis and whether returns are completed on a monthly, 2 monthly or 6 monthly cycles.

An organisation in a 'development phase', where expenditure exceeds income could gain a cash flow advantage from being registered for GST on an invoice basis – whereby a claim is made for the GST on the expenditure prior to it having been paid out. Also at times when GST refunds are to be received having a one (or at most, two) monthly return cycle will offer better cash flow.

The appropriate choice of return basis and timing may be different in a 'development phase' from normal trading and therefore we recommend seeking professional advice prior to registering for GST, or seeking to change current basis.

TIPS

34. Keep the balancing of GST in mind when planning the financial side because most planning is done on a GST exclusive basis and the bills will have to be paid on a GST inclusive basis so that cash will have to come from somewhere

35. It is recommended that the association gets professional tax advice regarding the handling of GST.

7.2. Insurance of Assets

The risk of damage to turfs and ancillary facilities varies with the unique local situation and type of turf. Threats can be from natural events such as high winds, flooding and earthquake as well as man-made such as vandalism or arson. You need to consider the risks to your planned turf. Options for insurance to cover the identified risks include:

- Self-insure i.e. association covers own risk and would have to fund remedial works itself
- Seek assets to be included as part of the portfolio of assets of your local Council and be covered under its policy
- Become part of a group insurance scheme through Hockey NZ as has been done for public liability

7.3. Current financial position of association

Should outline whether association has any cash reserves from savings held in trust for capital renewals and new developments. A proven savings record is critical as it shows the association is operating in a prudent manner with a self-help ethos that is highly valued by funding bodies.

Describe the current financial performance of any existing artificial surface fields in terms of generating a surplus after expenses. Any payments made to council for grass fields and artificial surface fields.

7.4. Contribution by Council

This section will describe any historical support by Council with the capital and/or operating costs of existing turfs or natural turf fields.

Describe other funding sources currently available and their history of support

This section should contain a table with a financial plan showing where funds will come from including Council and other providers.

7.5. Pricing Policy

If a new artificial surface field is being developed then a pricing policy needs to be set to ensure that there is sufficient revenue so that assets are well maintained and able to be replaced in a programmed way at end of their useful life. If there is one (or more) artificial surface field in operation you may need to review the pricing of user charges as part of developing this plan.

The association may be able to use a split between user charges and other revenue streams (Council grants or subsidy, non-Council grants) to minimise the user charges.

A significant degree of variance in charges across the following could be used:

- Category of users (open, college, primary, mini)
- Type of use (game or practice/training).

- Timing (peak time, shoulder and off peak).
- Winter/ summer seasons.

7.6. Operating Costs and Revenues Plan

The cost of operating different types of turf will vary as there will be variations between locations. This section of the Guide is designed to provide some basic Templates. Each situation is unique and it is recommended that you seek advice from other associations regarding costs and revenues.

True cost of turfs is often distorted by association staff undertaking turf tasks when this time is not identified as a cost against the turf. Volunteer input can also distort true cost as well and if the volunteer input is withdrawn then the association needs to be able to cover the cost of a paid employee to undertake the task or tasks. The volunteer time input should be quantified and a value equivalent to a paid employee is added to the spreadsheet.

TIPS

36. Invest time in consulting with other associations who are operating a similar type of turf and discuss their expenses and revenues, and any likely variations because of the different locations and operating environments.
37. Include staff costs for turf supervision and care as line item in your budgets, if it volunteer based retain the line item with a small amount for gifts for recognition of these volunteers contribution to hockey

7.6.1. Operating Cashflow Covering Planned Useful Life of the Artificial Surface Field

A cash flow is needed for the useful life of each artificial surface field. This will be based on the annual expenditure and revenue but will need to include any costs and revenues that may occur occasionally rather than annually during the life of the turf including programmed maintenance and minor renewals such as replacement of light globes.

7.6.2. Annual Expenditure and Revenue

A table of annual costs including all direct costs related to turfs is provided in the Plan Template as a guide and will need modification. A Template for revenues is also included. Both have been derived from a small sample of associations who forwarded information to the Committee (see table below).

Looking to the future the Committee hopes to have data to provide an indicative range of cost per line item across a wider sample of associations if not the majority of associations, this will provide an enhanced guide for local judgements if costs and revenues are not already known.

Below is a table of sample operating expenses and revenues from Wanganui and Nelson.

Hockey Association name	WANGANUI	NELSON	NELSON	Nelson Notes
Turf type	Wet dressed	Water turf	Sand turf 1	
Expenses				
Power standing charges/ electricity charges	\$20,000	\$3,000	\$3,000	Estimated based on previous sand turf history
Wages - Turf supervision	\$3,000		\$0	
Wages - Turf management			\$0	
Wages - Turf administration		\$1,500	\$1,500	Estimated based on previous sand turf history
Wages - Coaching	\$3,000		\$0	
Wages - Umpires	\$2,000		\$0	
Accident compensation	\$400		\$0	
Staff training/ professional development			\$0	
Freight/ courier			\$0	
Signage expenses	\$500			
Wage reimbursements				
Insurances/ licenses	\$3,500	\$500		
Repairs & maintenance - buildings	\$3,000			
Repairs & maintenance - turf	\$3,500	\$500	\$1,000	Estimated based on previous sand turf history
Repairs & maintenance - lights	\$500		\$1,000	Estimated based on previous sand turf history
Repairs & maintenance - other	\$2,000	\$600	\$600	Estimated based on previous sand turf history
Cleaning - buildings	\$2,000			
Cleaning - turf				
Land rental or lease costs	\$0	\$2,300	\$200	Council grounds lease
Property rates	\$4,500			
Water rates/ charges		\$2,000		Estimated
Safety & security				
Vehicle expenses	\$1,200			
Telecommunication expenses & Internet	\$4,387			
Advertising & promotion	\$300			
Staff/ volunteer rewards		\$500	\$500	Lawn mowing, turf cleaning and general maintenance
Rubbish Removal		\$300	\$300	Estimated based on previous sand turf history
Audit fees		\$500	\$500	Estimated based on previous sand turf history
<i>For a Trust entity</i>				
Accountancy	\$200			
Audit fees				
Bank fees				
Admin & Office expenses	\$25,000			
Depreciation				
Finance/ Interest fees				
Consultancy				
Legal expenses	\$300			
Disposal of assets - loss/ surplus				
Other				
Total	\$79,287	\$11,700	\$8,600	
Turf renewal fund				
Total	\$79,287	\$11,700	\$8,600	Including depreciation
Income				
Turf hire/ user fees	\$75,000	\$35,000	\$25,000	Estimated based on previous sand turf history
Bar - net profit	\$3,500			
Food - net profit				Excluded from Turf account
Pavilion hire	\$750			
Coaching revenue				
Signage fees	\$1,250	\$3,000		
Sponsorship				Excluded from Turf account
Council operating grant/subsidy				
Interest income	\$500	\$2,000		Estimated based on previous sand turf history
Other? E.g. Gaming grants	\$65,000			Excluded from Turf account
Total	\$146,000	\$40,000	\$25,000	
Annual operating surplus/ deficit	\$66,713	\$28,300	\$16,400	
Council annual capital grant for turf renewal (Amortised over useful life of turf)				
Annual surplus/ deficit (depreciation included)	\$66,713	\$28,300	\$16,400	Excluding Depreciation

Below is a table of sample operating expenses and revenues from North Harbour with some variation in line items from the previous table.

Hockey Association name -	North Harbour	North Harbour	North Harbour	EXAMPLE
Turf name - Crown Relocations Stadium				
Turf type - 2 x TT, Balsam, Desso sand	Water turf 1	Water turf 2	Water turf 3	Sand turf 1
Expenses Pavilion power/water	14,052			
Power standing charges/ electricity charges	\$11,010	\$11,009	\$6,969	\$10,703
Wages - Turf supervision)				
Wages - Turf management)	\$123,986			
Wages - Turf administration)				
Wages - Coaching	\$49,284			
Wages - Umpires	\$18,317			
Accident compensation	\$2,080			
Staff training/ professional development - audit	\$1,600			
Coaching expenses	\$15,939			
Signage expenses	\$17,893			
Player costs - reps, turf, equipment, prize-givings	\$240,704			
Insurances/ licenses	\$506			
Repairs & maintenance - buildings	\$21,788			
Repairs & maintenance - turf	\$5,073	\$3,656	\$355	\$863
Repairs & maintenance - lights)				
Repairs & maintenance - other)	\$12,180			
Cleaning - buildings and operating building	\$17,999			
Cleaning - turf	\$14,290			
Land rental or lease costs - hire Rangitoto turf	\$19,147			
Property rates				
Water rates/ charges - Interest	\$19,251			
Safety & security	\$6,060			
Vehicle expenses & Sundry	\$3,513			
Telecom expenses & Internet & all admin/accting	\$72,564			
Advertising & promotion	\$5,180			
Staff/ volunteer rewards	\$3,710			
NZHF Affiliation Fees	\$58,512			
For a Trust entity				
Accountancy				
Audit fees	\$600			
Bank fees - Insurance on major assets	\$12,410			
Admin & Office expenses				
Depreciation - turfs, pavilion, assets	\$225,514			
Finance/ Interest fees	\$140			
Consultancy	\$6,019			
Legal expenses				
Disposal of assets - loss/ surplus				
Other - land lease	\$2,000			
Total	\$865,155	\$14,665	\$7,324	\$11,566
Turf renewal fund	\$19,000	\$19,000		
Total	\$884,155	\$33,665	\$7,324	\$11,566
Income				
Turf hire/ user fees	\$145,256	\$119,854	\$96,607	\$29,234
Bar & Food - net profit	\$2,349			
Sundry	\$7,456			
Pavilion hire	\$1,516			
Coaching revenue	\$42,428			
Signage fees	\$13,330			
Sponsorship	\$45,679			
Team subscriptions	\$272,086			
Interest income	\$4,475			
Other? E.g. Gaming grants	\$120,490			
Total	\$655,065	\$119,854	\$96,607	\$29,234
Annual operating surplus/ deficit	-\$210,090	\$105,189	\$89,283	\$17,668
Council annual capital grant for turf renewal (Amortised over useful life of turf)				
Annual surplus/ deficit (depreciation included)	-\$229,090	\$86,189	\$89,283	\$17,668

7.7. Capital Plan

The planning for capital expenditure is in two parts the cost of the initial development of a turf and then a long-term plan showing several cycles of the renewals required to provide sustained provision of operational turfs for the association.

7.7.1. Development Cost Estimate

A cost estimate is needed to forecast the likely capital expenditure for the development of a new turf. The table below lists a sample the major cost components for turfs of various types that have been completed recently in Hawkes Bay, Nelson, North Harbour and Wanganui.

Hockey Association name	NELSON	HAWKES BAY	NORTH HARBOUR	WANGANUI
Year completed	2006	2006	2004/05	2006
Turf name	Water turf 1	Water turf 3	Water turf 3	Wet dressed turf 1
Turf type	Water	Water	Water	WDT
Additional turf	Yes	No	Yes	No
Carpet (New or conversion?)	New	Conversion	New	New
Shock pad (new or reused?)	New	Reused	New	Reused
Base (new, upgraded or reused?)	New	Reused	New	Reused
Drainage (new, upgraded or reused?)	New	Reused	New	Reused
Lighting (none, new, upgraded or reused?)	New	Reused	New	Reused
Pavilion (none, new or refurbished?)	None	None	None	
Project cost	\$1,406,000	\$520,000	\$1,140,000	\$320,000
Capital costs				
Project management and design	\$102,000	\$15,000	\$28,520	Nil
Civil works & drainage	\$577,000	\$200,000	\$466,400	Nil
Shock pad & carpet	\$332,000	\$255,000	\$349,220	Nil
Spectator and security fencing	\$80,000		\$58,910	Nil
Dugouts	\$22,000		\$16,700	Nil
Lighting	\$204,000		\$155,210	Nil
Watering system	\$89,000	\$50,000	\$65,040	Nil
Total	\$1,406,000	\$520,000	\$1,140,000	\$320,000
Capital sources				
Association capital	\$150,000	\$60,000	\$102,000	
Council grant	\$1,250,000	\$300,000	\$250,500	
Council loan				
Other grants	\$188,000	\$160,000	\$567,500	
Other loans			\$220,000	
Total	\$1,588,000	\$520,000	\$1,140,000	\$0
Contribution Split				
Hockey Association %	11%	12%	9%	35%
Council %	89%	58%	22%	0%
Other %	13%	31%	69%	65%

Capital split

Cash	\$1,588,000	\$520,000	\$920,000	\$320,000
Debt	\$0	\$0	\$220,000	\$0
% Cash	113%	100%	81%	100%
% Debt	0%	0%	19%	0%

Council grant: Total sum for Nelson was for the new turf (completed) and a new pavilion (yet to be built)

TIPS

38. Invest time in consulting with other associations because the costs can vary significantly depending on local conditions. Make sure you include a contingency item of 10% to cover unforeseen costs.

7.7.2. Long-term Capital Plan for Renewal/ Replacement of Turfs

A 30 year timeframe is recommended for the long term plan showing capital costs, Council contributions and the savings requirement or debt requirement for planned new developments and renewals/ replacements. The first 10 years should have a relatively detailed capital plan that can be used as part of a submission to the local authority for inclusion of financial support for hockey in the Long Term Council Community Plan. Particular care needs to be taken with a capital plan where the association has multiple turfs so that the sequencing of carpet replacement is spaced out appropriately. In the model plan the Committee has worked on the assumption that a base should last for the useful life of two carpets before needing replacement or major refurbishment. A model plan is included in the plan Template. Wanganui has supplied an example using the model in the table below.

Capital Plan for Hockey Wanganui Inc

Year	Project Name	Project Cost	Assn Funds	Council Grant	Other Grants	Shortfall	Balance
2006	Renew wet dressed turf	\$320,000	\$120,000	\$0	\$200,000	\$0	\$0
2007	Upgrade Pavilion	\$60,000	\$120,000	\$0	\$60,000	\$0	\$0
2008			\$60,000	\$0		\$0	\$0
2009			\$60,000	\$0		\$0	\$0
2010			\$60,000	\$0		\$0	\$0
2011			\$60,000	\$0		\$0	\$0
2012			\$60,000	\$0		\$0	\$0
2013			\$60,000	\$0		\$0	\$0
2014			\$60,000	\$0		\$0	\$0
2015			\$60,000	\$0		\$0	\$0
2016	Renew wet dressed turf (+ Base)	\$500,000	\$60,000	\$0	\$280,000	-\$160,000	-\$160,000
2017			\$60,000	\$0		\$60,000	-\$100,000
2018			\$60,000	\$0		\$60,000	-\$40,000
2019			\$60,000	\$0		\$60,000	\$20,000
2020			\$60,000	\$0		\$60,000	\$80,000
2021			\$60,000	\$0		\$60,000	\$140,000
2022			\$60,000	\$0		\$60,000	\$200,000
2023			\$60,000	\$0		\$60,000	\$260,000
2024			\$60,000	\$0		\$60,000	\$320,000
2025			\$60,000	\$0		\$60,000	\$380,000
2026	Renew wet dressed turf	\$360,000	\$60,000	\$0	\$200,000	-\$100,000	\$280,000
2027	Upgrade Pavilion	\$70,000	\$60,000	\$0	\$60,000	\$50,000	\$330,000
2028			\$60,000	\$0		\$60,000	\$390,000
2029			\$60,000	\$0		\$60,000	\$450,000
2030			\$60,000	\$0		\$60,000	\$510,000
2031			\$60,000	\$0		\$60,000	\$570,000
2032			\$60,000	\$0		\$60,000	\$630,000
2033			\$60,000	\$0		\$60,000	\$690,000
2034			\$60,000	\$0		\$60,000	\$750,000
2035			\$60,000	\$0		\$60,000	\$810,000
	TOTAL	\$1,310,000	\$1,920,000	\$0	\$800,000	\$810,000	

Notes No interest costs on loans is included

TIPS

39. All turfs would need to be shown that are needed to operate the association competitions whether they are in ownership of the association, a turf trust or a school.

8. Implementation Plan

Outline programme showing tasks and timetable with critical milestones and decision points. These could be a combined plan or separate plans for each project covering programmed renewals and/or upgrades and new turfs.

LTCCP timings included such as annual plan budget timing and 3 yearly reviews of LTCCP (opportunity to have Council capital and operational contributions to turfs included in LTCCP). Provide standard timings but suggest association confirm with their contributing Council or Councils within association or turf catchment

An example of the format for the implementation plan is provided in this section.

Year	Action	Cost estimate

TIPS

40. Experience shows that most artificial surface field projects take at least 2 years and often 3 years or more from the start of planning to completion.
41. The association needs to include timing of application rounds of philanthropic trusts that fund capital and operational costs of facilities.
42. Specify who (committee or officer or co-opted member) in the association is responsible for each action.
43. The association may need to include a summary table of actions required against a timeline that will provide more detail on the action required than is included in the capital plan or operating plan in the financial plan section.

9. Communications Plan

A separate communications plan should be developed that describes the key issues and options/ tactics to deal with positively promoting the turf project and effectively defending its relative merits. Elements that need consideration include:

- Relationship building and maintenance including: Council, neighbouring property owners, other sporting bodies, schools, media and the hockey playing community
- RMA and impact mitigation
- Preparation of PR resource materials such as pamphlets and website or pages on association website
- Public launch of project

- Recognizing and celebrating achievement of significant milestones
- Recognition of supporters and their contributions
- Organisation of the official opening to gain maximum mileage for supporters

TIPS

44. Reduce the risk of over selling and under delivering. You need to have matured your concept planning before you go public so that what you are confident that what you are projecting to the community will be what you will be actually delivering.

10. Information Plan

An information plan attached as an appendix could specify the ongoing data that needs to be collected and how the collection is done so that the association and turf management have reliable and useful data to analyse performance. Hockey NZ will need to specify the data needed and have a standard methodology for collection in a Template so it is consistent over time and comparable across the country.

11. Operational Management Plan

The management plan for how your association operates its facilities is important. However, it is beyond the scope of this Guide to deal with the issues relating to operational management. A Guide and Template may be developed by Hockey NZ in the future.

12. Health and Safety Plan

A Health and Safety plan is an essential element in your association's planning. However, it is beyond the scope of this Guide to deal with the issues relating to health and safety. A Guide and Template will be developed by Hockey NZ in the next 12 months.

TIPS

Some hazards have been identified by the Committee as follows:

- 45. Dangers when water guns are operating therefore place the guns with nozzle above head height.
- 46. Wind drift from guns can create slippery surfaces in areas surrounding the turf such as grates, bleacher seating and access-ways to seating. There is often a need for prominent warning signs.
- 47. Seek advice about effective treatment of water that is recycled to prevent risk of infections from grazes.

13. Appendix: Technical Information and Key Questions

The association will need to describe the technical details of the proposed development. Below are some suggested headings.

13.1.1. *Type of turf*

Selection of turf type (water, wet dressed or sand) is a critical decision. There are significant cost implications of selecting a water turf. Some of these are easily identifiable such as water charges, provision of irrigation and drainage systems but others were less evident such as the staff costs of turning on and off the water irrigation. In some situations the costs of staff are

Tuft material varies between polypropylene, polyethylene and nylon (in order of increasing expense). Wet-dressed carpets use polyethylene as it is slippery dry but may get too slippery when wet. Suppliers claim nylon tends to last longer. Stitch rate per meter and yarn density needs to be checked. These factors influencing carpet density and longevity. Backing materials also vary.

The choice of shock under-pad is between a roll-out pad and a pad laid in-situ and the type of pad will need careful consideration by your association. Some of the features identified by the Committee for the two types are listed below:

The roll-out pad has the following features:

- Better control in manufacture
- Provides consistent thickness and height of bounce
- Is accepted that the pad will last the life of a replacement carpet and provide consistent performance
- Better for conversion from a sand turf to a water turf
- Is expected that up to 10% of pad will need replacement when carpet is replaced
- Pad is now commonly glued to the base and the carpet glued to the pad. Manufacturers and installers have given assurances but not guaranteed that easy glue separation to renew carpet is expected
- Gluing of pad will be delayed by wet weather.
- Is manufactured in a factory controlled environment.

The pad laid in-situ has the following features:

- Is able to provide a flatter surface by absorbing imperfections in base
- More variation in thickness and this can generate inconsistent bounce performance
- Not proven that it can be successfully re-used when a carpet is replaced to provide consistent performance for the life of the second carpet.
- No successful conversion from a sand turf to a water turf are known to the Committee using in-situ pad
- Construction will be delayed by wet weather
- Requires appropriate quality control on site when mixing materials.

The association may wish to insert a table in an appendix that compares capital and operating costs over useful life of each type that had been considered.

TIPS

48. Invest time and money to consult with other associations that have installed similar types of turf and shock pad.
49. Beware of new technology, use caution with 'new' or 'improved' technology. The committee recommends that you are not the 'guinea pig', if there is a problem it will be a long time before you can replace the turf.
50. The supplier and installer guarantees are only as good as the performance in any remedial work required. Need caution to make sure the installer guarantee is underpinned by the supplier. Need to check with other associations who have purchased the same turf.
51. The quality of sand used in sand turfs is a critical issue. The Committee recommends you select the recommended sand even if it means transporting it a considerable distance.
52. Have adequate run-off areas around the playing field. A curved shape will enhance viewing for spectators and advertising hoardings will be better seen by spectators and TV viewers.
53. Sown in lines removes time spent painting lines. Use dotted lines in different colour for marking practice circles. Ensure the straight line at the top of the circle, where intense use occurs during corners, is sown into the middle of a carpet roll during manufacture.
54. Purchase a small cleaner for regular use and book suppliers machine for 2-3 cleans per year
55. Shock pads are an on-going saga. A 10mm thick shock pad is recommended as it is the accepted standard thickness in New Zealand.

13.1.2. Type of Base for Turf

association data about the type selected and reasons inserted here. There are several factors that impact on the design of the base, these include:

- Type of carpet selected – wet, dressed or sand.
- Geotechnical – what will be required to provide a stable and durable base to provide a level surface for at least the life of the carpet? Will you need to raise the turf above the surrounding land to provide for effective drainage?
- Construction loads. These are often the most demanding, especially if the base is to be asphalted.

TIPS

56. The performance of the base needs to be clearly specified. Make sure you have good technical advice from an engineer experienced in designing both road foundations and turf bases as well as advice from other associations with similar sites to yours.
57. The turf is only as good as the base so make sure you have a project manager or engineer closely monitoring and testing the performance of the base as it is constructed. Make sure any remedial work is carried out to meet the performance specifications.
58. If the base has a variable fall you will need a good technician to get it right.

13.1.3. Type of water system and drainage

association data about the type selected and reasons inserted here. The main types are vertical or through drains, turtle back with a camber or a hybrid of both. There are several factors that impact on the selection of drainage system these include:

- Climate - do you have heavy downpours placing high peak load on the system? Do you have high humidity with risk of algae clogging your drains?
- Cost of water – are you charged for water? Will this make a recycling system worthwhile?
- Geotechnical – is the land free draining? Do you have a high water table? Is it significantly affected by the tide or river levels?

If a water recycling system with treatment plant is planned then investigate viability of capturing the rain run-off from roofs of ancillary buildings to reduce operational costs from water charges. A suggested minimum water storage capacity of 40,000 litres is suggested as a guideline. Relatively regular rain is needed to make this a worthwhile option.

TIPS

59. Some suppliers specify the type of drainage system but it is actually your decision as you know the unique mix of factors that are present at your selected locality. It's recommended that you take a 'horses for courses' approach. Ask the supplier for written information on aspects such as the risks of algae clogging the drains.
60. One size does not fit all – look at similar situations to yours and research the system type and how effective it has been.
61. If considering recycling irrigation water, be certain you can get enough water return to make this worthwhile. Debate continues on the effectiveness of recycling water.

13.1.4. Type of flood lighting and LUX Levels

association data about the type selected and reasons inserted here. The advances in lighting technology have been significant since the first turf was developed. Again it is suggested you avoid being the 'guinea pig' for a new technology. There is a balancing act between capital cost, operating cost and light effectiveness (LUX). The aim is to achieve a uniformity of light (LUX) across the entire field surface as well as at head height.

The installation of floodlighting of fields can be a sensitive issue with neighbours and the height of poles may be constrained by resource consent issues and planning rules. There is a trade off regarding the location and height of light poles – the further set back from the field the higher the poles need to be, the more power required and more glare for neighbours. However, poles closer to the field can impair spectator viewing and generate more intense glare for players on the field. An optimum pole height of between 18 and 20 metres was suggested by the Committee, although 16 metre poles do work.

Pole design has an impact on maintenance with hinged poles not requiring a cheery picker but with higher capital cost. Standard poles require access for a cheery picker or crane to manoeuvre to be able to reach the top of the pole, this may not be possible. Again you will need a geotechnical engineer to design the foundations.

TIPS

62. Plan for a decline in flood light performance over the life of the globe (reducing by 20-25% in light output - intensity)

63. Flood lighting switching system should have a delay on a lamp on each pole to enable players to safely leave the field when lights are switched off
64. Locate the kill switch for floodlights out of reach of children and in prominent place that is easily supervised to minimise malicious use of switch.
65. Plan for floodlighting to have annual pre-season maintenance and cleaning including tightening of all anchor points
66. The committee recommends the programmed renewal of all globes when they are approaching their designed life and the installation of meters to accurately monitor their use.

13.1.5. Safety Fencing

Planning for appropriate fencing is an important safety measure to prevent injury and property damage. Effective fencing will also help with keeping good neighbourly relations by containing balls on the hockey side of the boundary!

Fences also provide the opportunity for exposure of sponsor signage. However, these need to be kept well presented and be durable. Canvas banners usually have an effective life of three years and are suitable for the fence around the turf. A more durable but more costly option is to have billboards of marine plywood with a tin skin.

TIPS

67. Double the thickness of boards and halve spacing of reinforcing wire in chain fences behind goals to increase durability.
68. Take care to be generous with catch netting behind practice goals as well as game goals.
69. Fishing net is expensive but very durable as catch netting.
70. Protection of property also needs to be considered including parking areas.
71. Cover all boards with carpet off cuts and under-felt to reduce ball noise.
72. Watch out for wind effect on fences especially when advertising hoardings and temporary banners are attached to a fence.
73. 'Less is more' with regard to words on signage (both sponsor and directional), also care with colours especially if televised and good spacing of signage to reduce clutter effect.

13.1.6. Security Fencing

Planning for appropriate security fencing is important to protect the turf and also help with keeping good neighbourly relations by containing balls and hockey users on the hockey side of the boundary!

Security fences also provide the opportunity for exposure of sponsor signage to the general public. However, these need to be kept well presented and be durable. Canvas banners are more vulnerable to damage, a more durable but more costly option is to have billboards of marine plywood with a tin skin.

TIPS

74. Solid board security fences or sponsor hoardings attract graffiti where chain link doesn't. If you need to have solid fences to block viewing then use a recessed pattern and leave unpainted to make less attractive to graffiti artists. Consider placing advertising hoardings inside the chain link security fence if vandalism is a significant risk.
75. Watch out for wind effect on fences especially when advertising hoardings and temporary banners are attached to a fence.
76. Check on Council restrictions regarding signage and design a fencing plan that provides for the maximum exposure for sponsors advertising within the rules.
77. 'Less is more' with regard to words on signage (both sponsor and directional), also care with colours especially if televised and good spacing of signage to reduce clutter effect.

13.1.7. Team dugouts

Team dugouts are an essential ancillary facility that help make the turf work effectively. Dugouts generated significant debate and some suggestions on dugout design include:

- Safety from flying balls is a major factor in design and a solid board front wall to approximately 600mm with netting to 1,200mm is recommended as adequate protection
- Weatherproof construction and a Coloursteel roof with plywood side and back walls is an effective and durable solution.
- Protection from prevailing winds is desirable
- A slightly raised floor for effective viewing by seated players and officials is desirable (400mm above the field level is recommended)
- Sufficient head height for players to stand inside the dugout is essential
- Direct access to turf and to the rear area is needed from dugout
- Lights in the dugout are essential safety and security measure (these lights need to be switched independent from the floodlights)
- Water, power and a telephone point in a dugout are desirable but not essential

TIPS

78. Dugouts should be located on opposite side to main spectator facilities to reduce congestion and reduces their negative effect on spectator viewing
79. A generous floor area is needed to reduce congestion in the dugout, especially if only 2 dugouts.
80. Consider the number of dugouts carefully as having 2 dugouts can cause significant congestion in the short time between games. Consider having 4 dugouts.
81. Using a gear storage system that enables team managers to keep their team gear separate from the arriving team helps reduce congestion. In one association the manager places gear bags on hooks above the seating and the arriving team place their gear under the seats and vacate the dugout to warm up.

13.1.8. Planning the site layout

Site selection is covered under section 3.2. Planning the internal layout of the site has drawn comment from associations about the location and orientation of the turf and the various ancillary facilities on the site, for example:

- The location of parking to minimise the risk of glare on the field from car windscreens and minimise the risk of damage to cars from mis-hit balls
- The location of pavilion buildings to minimise glare and shading of turf
- The distance to site boundaries to minimise effects for hockey and neighbours from each others activities
- Location of fencing to maximise exposure of sponsor signage
- Paved pathways should minimise the “need” for shortcuts across unpaved areas
- Care with plantings can provide an effective visual block for entry charge games without the need for board fencing
- An allocation of land for water storage tanks may also be required
- Indoor and outdoor viewing options needed in the pavilion facility
- Security lighting provides effective lighting when field floodlights are off

TIPS

82. Sun angles change dramatically through the seasons so make sure factor in the seasonal variation.
83. A well designed paved path network and extensively paved entry areas will reduced the amount of dirt being tracked onto the field itself.
84. Access to a public entrance to the pavilion and parking should be possible without having to enter the area enclosed by security fencing that is protecting the turf. This will enable the pavilion to be used for non-hockey hires.
85. Easy direct access from change facilities to the lounge rather than the exit gate will improve retention of players after match
86. Having a step or two down to outdoor deck from lounge with seating on deck will improve viewing from lounge when deck is in use

14. Appendix: Resource Documents Available from Hockey NZ

Several documents used in developing this Guide and the Business Plan Template are able to be supplied by Hockey NZ on request from associations. Hockey NZ wishes to thank the associations who have made these documents available. The documents are as follows:

14.1. Development Planning, Project Management and Critical Paths

14.1.1. Northland Critical Path Analysis

14.1.2. Central BOP Hockey association Development Plan

14.2. Funding Cases and Submissions

14.2.1. Report on Waikato Masters Hockey Tournament economic impact analysis study (electronic copy)

14.3. Health and Safety Plans

14.4. Trust Deeds and Partnership Agreements

14.5. Maintenance Plans and Schedules

14.6. Operational Management Plans
