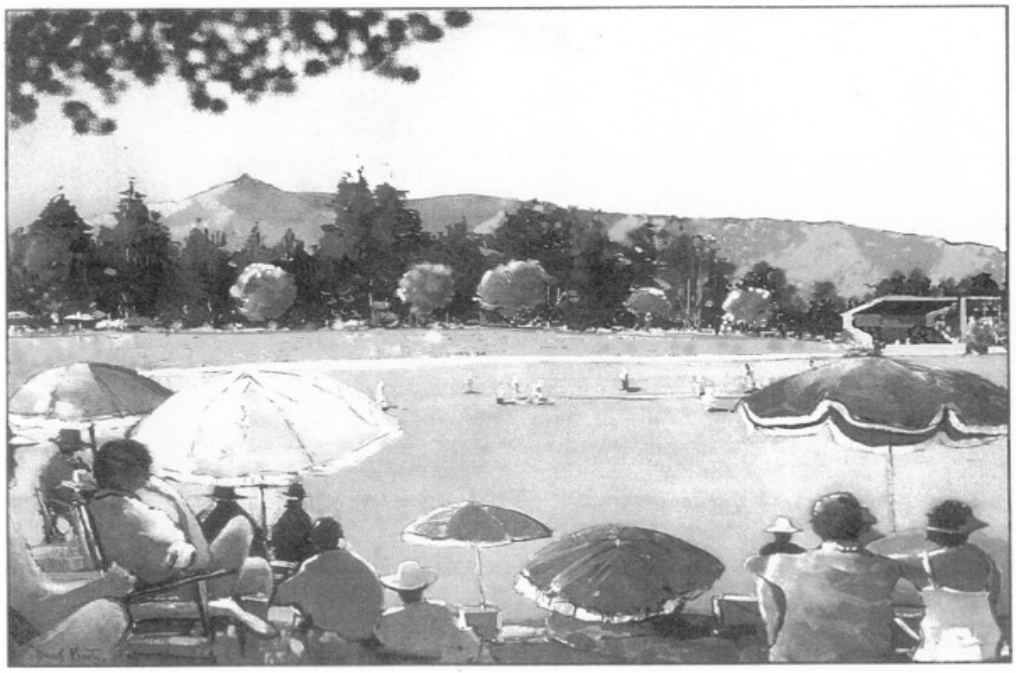
Nelson City Council
Tasman District Council
Saxton Field Concept Plan and Report



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November 2003

Saxton Field Development Concept Plan and Report , November 2003

Contents

Index
Status of Report
Executive Summary
Vision Statement

Part One :
Introduction
- 1.1. Purpose
- 1.2. Study Area
- 1.3. Research Methods Used
- 1.4. Topography
- 1.5. Planning Constraints
- 1.6. Resource Consents
- 1.7. History of Saxton Field
- 1.8. Land Ownership
- 1.9. Design Criteria
- 1.10. Reports and Plans Consulted

Part Two:
Demand
- 2.1. Future population growth in Nelson / Tasman District
- 2.2. Future population growth in the Saxton field Catchment,
- 2.3. Previous Studies on Demand
- 2.4. Summary of Recreation Users
- 2.5. Current use and Future Demand
  - 2.5.1 Netball
  - 2.5.2 Softball
  - 2.5.3 Soccer
  - 2.5.4 Hockey
  - 2.5.5 Archery

Part Three:
Consultation and Layout of Site
- 3.1. General
- 3.2. Results of Consultation-Sports Field including numbers, usage, location orientation

Part Four:
Landscape Form
- 4.1. Planting Regime
- 4.2. Boundary and Entry
- 4.3. Park Environment
- 4.4. Watercourses
  - 4.4.1. Saxton Creek Esplanade
  - 4.4.2. Orphanage Creek Esplanade
  - 4.4.3. Cultural Studies on Watercourses

4.5. Lake
4.6. Land for Walkways
4.7. Buildings
4.8. Signage
4.9. Fencing

Part Five:
Research Existing Infrastructure
5.1. Existing Pavilion
5.2. Existing road into site, lighting, car parks
5.3. Existing Stormwater
5.3.1. New Stormwater Infrastructure
5.3.2. New Land Drainage
5.3.3. Effect on Stormwater Infrastructure Network
5.4. Existing Sewerage
5.4.1. New Sewerage and Infrastructure
5.4.2. Effect on Sewerage Infrastructure
5.4.3. Alternative Pump Station Facility
5.5. Existing Water Supply
5.5.1. New Water Infrastructure
5.5.2. Irrigation
5.5.3. Analysis of effect of irrigation to level of service to surrounding area
5.5.4. Alternative sources of irrigation

Part Six:
Pedestrian and Vehicle flow paths
6.1. Access off Main Road Stoke
6.2. New Road onto Champion Road (below Garin College)
6.3. Entry From Saxton Road
6.4. Saxton Main Road Intersection
6.5. Hill Street
6.6. Internal Road Layout
6.7. Cycleway Layouts
6.8. Pedestrian Movement
6.9. Crossing Points

Part Seven :
Supporting Infrastructure
7.1 Power
7.2 Radio NZ Mast
7.3 Telecom
7.4 Car Parking
7.5 Lighting and Miscellaneous

Part Eight:
Management Structure
8.1 Joint Management Plan
8.2 Development Timetable and indicative costs
8.3 Funding

Part Nine:
9.1. Conclusion

9.2. Recommendations

References
Appendices

Status of Report

This report is based on the work and findings of the Saxton Field Extension working group. The working group was formed to develop a plan for the extended Saxton Field as a regional facility. The extension of Saxton Field is a joint initiative between Nelson City Council and Tasman District Council. The proposed layout has been developed through joint workshops and in consultation with user groups. A public submission process was carried out on the draft plan. The draft plan was presented to the April 2003 Community Facilities and Services Committee of Nelson City Council, and the May Community Services Committee at Tasman District Council.. .

Executive Summary

As the region's population grows there will be greater pressure on existing recreation facilities. To meet the recreational needs of the community this report outlines the proposal to extend Saxton Field to become the major regional area for participation in outdoor sports. It is well located close to the centre of the regional population. Population growth is drifting to the south of the city with growth in Stoke, Richmond and surrounding areas.

A large Hagley Park (Christchurch) type green space between Richmond and Stoke is envisaged. The suggested distribution of facilities is based on outdoor sports that do not require large buildings and is consistent with retaining a green, open area. The major regional facilities for oval field sports, such as cricket, cycling and athletics, would be located at Saxton Field. The report contains a ten year plan to implement the extension and development of Saxton Field.

Saxton Field represents a major recreation asset to the people of Nelson, Richmond, and the wider region. The planned development allows for approximately 40 playing fields including cricket, soccer, softball, netball, hockey, archery and athletics.

The proposal also provides for a number of 'passive' recreation amenities including a regional playground, play equipment located throughout the park, , a picnicking and play area adjacent to a large recreational pond, a 1 km exercise and fitness circuit, a cycling/roller skating circuit.

This report contains the following:

1. A plan to accommodate the recommendations of the Nelson City Council/Tasman District Council Regional Community Facilities Plan
2. Results of consultation with sporting groups and identification of future needs
3. A landscape design concept for an extended Saxton Field
4. Identification of what additional infrastructure is required to support the facility
5. A realistic development timetable and costing covering a 9 year period
6. Recommendations

The facilities plan for the Saxton Field Extension contained within this report identifies the best use of the available land for recreation. This report adheres to the recommendations set out in the
Regional Facilities Plan and includes a development timetable for funding considerations.

The cost of implementation of the plan is summarised in the following table:

TABLE 1

			04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	Total
Indicative Estimates Infrastructure ($ 000)			1430	1540	1905	810	428	410	-nil 100	90	200	6,7913

- **NOTE:** Projected costs will need to be adjusted to reflect cost increase by use of Construction Cost Indices.

The previous report had the following recommendations:

> ***THAT**, conditional on Tasman District Council resolving similarly, the Committee agrees to release the Saxton Field Extension Concept Plan and Report for public submission.*
>
> ***THAT** a working party of the two Councils and the Saxton Field Extension working group hear public submissions and report back to both Councils on the submissions received and proposed amendments to the plan.*
>
> ***THAT** the working party recommend to both Councils the adoption of the (revised) Saxton Field Development Plan, and implementation timetable and annual cost forecasts, for inclusion in each Council's LTCCP, to be operative from 1 July 2004.*

Vision Statement: "Sport in the Park"

The focus for the park is sporting recreation, with a strong emphasis on retaining green open space for passive recreational activities.

The desired landscape effect for Saxton Field is park land and woodland, open space and areas of large trees that are not normally grown on smaller reserves. This will serve to generate a Hagley Park style with open woodland and will reflect plantings on the Raine property behind the site. The resulting effect will be a green belt between Stoke and Richmond.

Figure 1

The Vision - Saxton Field
'Hagley Park' like Woodland plantings - Picnic at the waters edge

Avenues of trees will be planted to frame sports grounds, roadways, walkways and cycle ways. Large trees will be planted around the cricket pavilion and oval to create a 'Village Green' area. Sports fields will be bounded by specimen trees to provide shade, shelter and give grounds a park like character. Groves of specimen trees will provide an infill in some areas.

The plantings will help to provide shelter and reduce the scale of open spaces. They will provide shade and amenity and botanical interest. Different themes will be evident in different areas.

Saxton Creek along with the lake will form strong landscape features. Monet style ponds could be introduced into the stream.

Saxton Field is intended to cater to recreational needs of the whole community. It is a place to exercise for health and vitality, or to socialise with friends and family. It is a place to be competitive, as well as a place to play, or simply sit and relax to enjoy the environment.

Figure 2

The Vision - Saxton Field
'Sport in the Park'

All park users will benefit from a park that is visually appealing, functional and efficient in its facilities and services, and environmentally well managed. Extensive landscaping, limited use of barriers, and consolidation of change room structures will emphasise an image of "Sport in the Park".

These measures will make areas more attractive for passive recreational use when not in use for training or competitive matches.

Part One: Introduction

1.1 Purpose

The Nelson City Council and the Tasman District Council initiated this project with a brief to complete a plan for the extension and development of Saxton Field as a Regional Recreation Asset.

1.2 Study Area

The study area includes the land bounded by Saxton Road, Main Road Stoke and Champion Road and the surrounding area for lanes and linkages to the site. The land is located between two growing urban areas, Nelson and Richmond.

1.3 Research Methods Used

The working group consulted with the sporting codes currently using the field and those intending to use the field in the future. It also consulted with sporting codes that were unlikely to use the field in the future for completeness. When drafting the plan the working group made use of the experience and knowledge of Council staff from NCC and TDC who had many years of experience in developing and maintaining recreational facilities.

1.4 Topography

The Department of Conservation landscape classification (Nelson, 2001) for the site is an area categorised as "*coastal flats and alluvial terraces*". The flat land of the site lies between coastal hill country to the east, and the Waimea Estuary to the west.

The land is generally sloping towards the estuary away from foothills that rise behind the site. The existing land in Saxton Field is well used by sporting groups, the remainder of the land under consideration is orchard or is being grazed by livestock. Three sets of overhead transmission lines traverse the site in a NW-SE direction. The land has good natural drainage qualities. Two creeks run through the site, Saxton Creek and Orphanage Creek. There is a large radio mast located in the centre of the site.

The surrounding land around the site is rapidly being subdivided for housing.

Landscape planting has been established in areas controlled by NCC, these plantings are approximately six metres in height with some relatively young shelter and shade tree plantings. Vegetation is a mix of exotic trees (mostly oak) and native shrubs. There is a concentration of native plantings in the vicinity of the waterways and associated man made ponds. A large irrigation lake is partly located within the site.

1.5 Planning Constraints

Approximately 30ha of the land within the site is Open Space and Recreation Zone, under the Nelson Resource Management Plan. The remaining 45ha is under the

Rural zone. Tasman District Council and Nelson City Council will need to progress the planning applications for re-zoning from rural to open space and recreation. The proposed management plan for Saxton Field will address the planning requirement.

1.6 Resource Consents

No resource consent will be required if the land zoning changes are made from Rural to Open Space Reserve under the Nelson Resource Management Plan. All activities under this plan are permitted under open space and recreation zoning

1.7 History of Saxton Field

The first parcel of land at Saxton Field was purchased by NCC in 1977. Work started at the site to develop a recreation facility in 1983. The site now has extensive tree and shrub plantings . There is a buffer area along the Main Road Stoke of native trees whereas Saxton Field is planted with deciduous trees including Oaks, Liriodendrons and Liquidambers.

1.8 Land Ownership

The land within the boundary of the Saxton Field Development site is owned by four parties. Total land in the site is 72.84 ha.

Owner	Area	Status
Nelson City Council	47.72 ha	Recreation and leases as Grazing
New Zealand on Air	7.2 ha	The land is leased by NCC and currently under negotiation with New Zealand on Air.
Tasman District Council	4.72 ha.	Recreation
Tasman District Council	12ha	The 12 ha has been bought and leased back to the previous owner. The land will return to TDC in two blocks. The front block located next to Salisbury Road will be available in 07/08 and the back block in 2012/2013. See Note below.
Adjacent Land Owners	1.2ha	This block includes the top portion of the lake.

Note:

The above timeframes are the latest dates the land can be leased. After these dates the area will revert to recreation reserve. If the lease holders choose to release themselves from the agreement then the land will revert back to TDC sooner and the timeframes for developing linkages through to Champion Road reduced.

Garin College is outside the study area but has committed to allowing the public access to its playing fields.

1.9 Design Criteria

Safety - Areas where children and spectators may congregate are away from the internal road network. The internal road network will feature traffic calming measures to limit vehicle speed. It will if necessary be subject to partial closure at nights to prevent vehicles using it as a through road. A new entrance is proposed off Saxton Road to remove through traffic from the Netball courts and proposed playground area. Dogs may only be permitted in the designated area at the site. . Safety issues also need to be considered in relation to planting density and layout. The final design will take account of crime prevention through environmental design (cpted) principles, and the November 2003 CPTED report that was commissioned for Saxton Field.

Security - Spaces for recreational use will be open and well lit at night. Cameras may be incorporated around some car parks

Amenity – Facilities will be spread throughout the site. Toilet facilities, drinking water and rest areas will be located so that users will not need to travel to other parts of the site. Playgrounds will also be positioned throughout the site.

Multiple Use – The majority of the grounds have been designed for multiple use by sports codes to take into account seasonal use. The internal road network and car parks can be used for cycling, and roller skating. The passive recreational areas as well as the site as a whole could be used by cross country running.

Flexibility – There are playing areas that have not been designated for particular sporting codes. This builds in some flexibility as some sports will grow more popular than others in the future.

Zone of use – Sports grounds have been clustered together into fields of like use to limit the amount of travel throughout the site and provide a focus for events.

Landscape - Landscape design should establish, maintain or enhance view lines into the Park. Where practicable visual barriers that prohibit views across the park should be eliminated. A suitable barrier, planted or otherwise, is required along Main Road Stoke to prevent cricket and soccer balls reaching the road. Extensive overstory planting programmes should be undertaken to strengthen planting themes, enhance view lines, and improve overall appearance and character of the Park. Landscape design should facilitate conservation. Where practicable landscape design and use of materials should reflect unique regional identity by making reference to original habitats and historic land use. Where possible off-site views to hills or estuary should be maintained.

1.10 Reports and Plans Consulted

- Draft Regional Community Facilities Plan 2002
- Saxton Field Land Acquisition Report by Boffa Miskell Ltd, 1999
- Statement of Evidence for the Designation of Recreation and Open Space Reserve for Saxton Field Extension by David Allen, 1999.
- NCC Parks and Reserves Asset Management Plan 2002

- NCC Cycle Strategy 2001, Cycle Safety and Route Options by Neil Jorgensen.Saxton Field CPTED Report 2003, by Anna Scott.
- Cawthron Surface Water Quality in the Nelson Region report, May 2002.

Part Two: Demand

Demand will be governed by population growth. "Overall participation in organised sport and informal recreation should remain consistent with current levels. The projected increase in population will see commensurate growth in the numbers of users of recreation open space". – **Ref 2,** Boffa Miskell

"The Nelson / Tasman area is experiencing rapidly increasing population in relation to the national average. The attractive climate, outdoor lifestyle and slower pace of life in Nelson is generating significant migration from other parts of the country and from overseas. This trend looks likely to continue for the foreseeable future and generates demand for more provision of recreation open space and reserve areas, particularly those close to urban residential areas. – **Ref 3,** Dave Allen

On discussing the land available for development the report said "land will be fully utilised by 2021 on the low population growth projection and could be needed as early as 2008 on the high growth projection scenario." – **Ref 2**, Boffa Miskell

2.1 Future Population Growth In Nelson / Tasman District

The Statement of Evidence report by David Allen **– Ref 3** studied the census data for the Nelson Tasman district as a whole and predicted growth rates in the area. The following are extracts from that report:

The 1996 Census data as supplied by Statistics New Zealand shows projected increases for Nelson and Tasman by 2021 in three scenarios:

- Low 17%
- Medium 26%
- High 35%

Current demographic forecasts suggest that growth will remain high in the Tasman District, and will be medium in Nelson. These assumptions are highlighted in the two tables below:

Table 2

Local Authority	**Base Population 1996**	**Low Projection 2021**	**Medium Projection 2021**	**High Projection 2021**
Nelson	41,000	47,970	51,660	55,350
Tasman	38,600	45,162	48,636	52,110
TOTAL	79,600	93,132	100,296	107,460

Since that report, the 2001 census data has become available. This data can be used to check the growth predictions. The data is shown in Table 3:

Table 3

Local Authority	**Base Population 1996**	**Base Population 2001**	**% increase**	**Projected over next 20yrs**
Nelson	41,000	42021	2.43	12.1
Tasman	38,600	42855	9.93	39.7
TOTAL	79,600	84876		

Comparing these actual growth figures to those in the David Allen report– (**Ref 3),** Nelson is given a low growth scenario and Tasman a high growth scenario.

If these rates of growth are then applied to the 2021 population projections for the following 25 year period to 2046 we can appreciate the substantial scale of urban growth that will develop in the Nelson region.

Table 4

Local Authority	**Base Population 2001**	**Base Population 2021**	**Predicted Projection 2046**
Nelson	42021	47,970	64,760
Tasman	42855	52,110	70,349
TOTAL	84,876	100,080	135,109

2.2 Future Population Growth In The Saxton Field Catchments Area

Catchment area for Saxton field development has been assumed. By analysing the census data between 1996 and 2001 in this catchment area a comparison of growth figures can be made to those of the regional figures previously discussed.

The catchment population in 1996 was 59,940 and in 2001 was 63,837. Projected over a 25 year period this would give an overall growth in the Saxton Catchment of 26%. This gives an overall medium growth scenario.

2.3 Previous Studies on Demand

Existing work has been undertaken into identifying the demand for additional recreational facilities in the area. This is outlined in the: "Statement of Evidence" for Recreational and Open Space Reserve - **Ref 3** , and the Saxton Field Land Acquisition Report, - **Ref 2** .

2.4 Summary of Recreation Users

Current Saxton Field Usage - Soccer, netball, softball, Kiwi cricket, hockey and archery, with informal use as a hang-glider/paragliding landing pad. Events such as the summer festivals Opera in the Park, circuses and fairs.

Future Saxton Field Usage - Recommended users other than those listed above are cricket, athletics (an all-weather track), cycling and roller sports . Other informal family activities could include cycling, and model yachting on the pond and use of playgrounds and picnicking

Other Possible Future Users. Basketball and Volleyball have discussed the possibility of sharing the proposed new Netball Stadium. Roads around the site could cater for road speed skaters. Table tennis was also being considered as a possible partner in the new Stadium plans. Radio controlled car club activities could potentially be based near the other modellers activities.

Unlikely Future Users - Rugby league and union was not included in the proposed plan, as there were other site opportunities available to them. There was to be no accommodation for horse riding in the park.

2.5 Current use and future demand

2.5.1 Netball

"Netball is the largest female participation sport in the region and is facing increasing pressure at the 13 outdoor courts at Saxton Field. The Nelson Netball Association has been proactive in recognising the need for an indoor netball facility to enable evening leagues to reduce peak Saturday demand." – **Ref 1**

"The Association has completed a pre-feasibility study including a needs analysis, market research, site identification and an outline of the function and scale of indoor facility required to meet the needs of netball and other sports. Netball has a strong preference to co-locate the outdoor and indoor courts to enable integration of activity at the one hub. The research undertaken by the Netball Code in their pre-feasibility study has proven the need for a three-court indoor centre with limited spectator seating."- **Ref 1**

2.5.2 Softball

The Nelson Softball Association currently uses an all-weather diamond located beside the pond at Saxton Field. The orientation of the diamond results in balls being lost in the water and presents a safety risk for young children attending games. The lack of storage and toilet facilities close to the diamond causes security and hygiene problems. The Association prefers to be located at Saxton Field with the main all-weather diamond and grass diamonds all in one area.

2.5.3 Soccer

Soccer has a clear preference to develop Saxton Field as its home venue for regional league and national fixtures. There is an intensive use of current facilities with grounds having only four weeks in any one part of the year to rejuvenate. The field is home to the Suburbs AFC.

A breakdown of Soccer's use, as provided by Suburbs Soccer is listed in Table 5 below,

Group	**Period**	**Time of use**	**Users**	**Number of teams**
Midgets (4-6 yrs)	Apr - Sept	Saturday 9-10 am	50 children with parents	N/a
Juniors (7- 14yrs) Junior practice	Apr - Sept	Saturday Weekday evening	Mixed girls and boys, generally accompanied by parents	27
Youth League (15-18yrs) Youth Practice	Apr – Sept Home and away	Saturday Weekday evening	3 teams based at Saxton Field in local league	3
Senior League Senior League Practice	Apr – Sept Home and away	Saturday Sunday Weekday evening	3 teams based at Saxton Field in regional 24 team league. Catchment is Waimea, Motueka and Marlbrough. First and last game on season **all 24** teams play at Saxton Field.	3
Federation League "Suburbs"	Apr – Sept Home and away	Saturday	Play on the Oval, League consists of ten teams, mainly based in Christchurch	1
Women's League	Apr – Sept	Sunday	Number of teams, children and parents attend.	N/a
Rep trials and training for Nelson Tasman Region.	Apr – Sept	Twice a week	120 Players forming rep sides	N/a
Summer Soccer	Nov - Feb	Monday Wednesday	Attended by large cross section in community	60 plus

2.5.4 Hockey

"The Nelson Hockey Association has been operating a sand-based artificial turf at Saxton Field since 1993 and has set aside funds for the replacement of the sand carpet within 3-5 years. Membership has grown and pressure on the single ground is forcing the Association to consider reducing training time on the artificial turf. The Association is planning for a second turf at Saxton Field with the preference for a water-based facility and a new pavilion at an estimated capital cost of $1.5 million. A water turf is the international standard and is preferred by most associations. A second turf would also enable the Association to host national tournaments. The Association would consider a compatible out-of-season user of the proposed pavilion." – **Ref 1.** Hockey has indicated that Softball may be a potential out of season user.

2.5.5 Archery.

Archery currently enjoys an informal use of Saxton Field. The club, which presently has 12 regular participants, is experiencing a resurgence in levels of interest.

Part Three: Consultation and Layout of Site

3.1 General

The working group wrote to the sporting groups early in the process to gauge interest in the Saxton Field extension. This progressed the previous consultation with sporting groups undertaken by David Allen of Strategic Leisure when drafting the Regional Facilities Plan.

General feedback from the groups was positive. A preliminary layout plan was developed by the working group showing numbers of playing fields and their location in the extended Saxton Field. A user group meeting was held on the 16th October 2002 to discuss the preliminary draft concept plan.

This meeting was well attended by the following groups:- Nelson Softball, Nelson Netball, Nelson Football Association, Suburbs Soccer, Nelson Cricket Association, Nelson Hockey Association, Athletics Nelson. Representatives from Garin College also attended the meeting. The draft layout plan was accepted by all user groups with some minor amendments.

Comments from the Sports Code meeting on 16 October 2002 are listed in Appendix 1.

3.2 Results Of Consultation - Sports Field Including Numbers, Usage, Location And Orientation – See Fig 4

Table 6

Sports Code	Request from Sporting Code, through Consultation	Facility proposed under plan
Cricket	Cricket Association advised that the aim was to have all premier senior teams in one area, with children's cricket in the morning. Kiwi cricket is currently held at Saxton Field, and they would like to add primary hardball. Second and third grades would remain at Greenmeadows. Artificial wickets were also desired at Saxton Field.	Cricket will be established at Saxton Field over the next three years, with shared pavilion facilities. The representative oval will have a grass wicket block. It shall comply with New Zealand Cricket requirements for one-day international and first-class games. Three artificial wickets to be located on the North of Saxton Creek, with a further two available South of Saxton Creek. Cricket will share grounds with Soccer. Junior wickets to be placed on Ovals. Toilets servicing the two Ovals that border Main Road Stoke required.

Sports Code	Request from Sporting Code, through Consultation	Facility proposed under plan
Soccer	Soccer did not want to use the field closest to the Saxton Road / Suffolk Road corner. Soccer suggested that they could make use of the centre of the athletics track in winter. The soccer representatives confirmed that they would need 12 fields for a national tournament, and did not want to drop below this number. Soccer wanted to upgrade and double the size of their training area, Suburbs Soccer requested development of a 15m removable training wall, Lighting Required for training grounds Subsurface drainage would be needed on the proposed soccer fields next to hockey.	The main area for soccer will be on the land immediately adjacent to Main Road Stoke. The No. 1senior soccer field will be located adjacent to their proposed pavilion site. A further four dedicated standard soccer fields are nearby. Up to 14 seasonal standard soccer fields are available. . Two of these grounds would be available for year round training. Seven Junior Fields are provided for . Potential expansion of junior soccer beyond this point is catered for South of Saxton Creek. A junior soccer facility is proposed on the existing TDC land early in the timetable. Soccer may choose to develop seating at the main oval. Large Soccer fixtures may well be held at Trafalgar Park Provision for lighting the grounds will be required. Sub-surface drainage to be provided
Softball	Softball confirmed its interest in remaining in Saxton Field Requested permanent fencing for the two synthetic diamonds to allow year round use. Softball added that the world series would be held here in 2004 so permanent facilities for elite players would be needed and used.	There is potential for five softball diamonds on the top terrace, of which two could be set up as permanent facilities. It is intended that at least two softball diamond need to be up and running before the 2004 season..

Sports Code	Request from Sporting Code, through Consultation	Facility proposed under plan
Netball	Nelson Netball commented that the proposed facilities would cater for the next five to ten years, but did not believe they were sufficient for the next ten to fifteen years. Provision for more car parking close to the proposed new stadium to reduce security risk at night time. Initial proposed location of netball stadium was not favoured.	Existing thirteen Courts to remain. Shift of entrance off Saxton Road to promote safety and Netball hub. Infrastructure for three indoor court Stadium. Provision for additional four to seven external courts. Location of Stadium adjusted to accommodate Netball and Soccer.
Hockey	Nelson Hockey Association commented that the proposed fields placed side to side were excellent, and the administration facility in between provided good viewing and easy lighting. Hockey added that if they developed water turf as proposed, there would be more opportunity for sharing of facilities with softball.	The existing artificial surface will be supplemented by a second artificialsurface.. Additional grass warm up hockey area which can be used for junior hockey. Plan to have spectator and changing facilities between fields.
Athletics **Cycling**	Athletics expressed concern at the initial orientation of the proposed track, as it would result in the 100m track and final stretch to the finishing line running into the prevailing wind. It is noted that the development of an all weather track at Saxton Field with shared pavilion facilities will bring the facility closer to the centre of the regional population. Consideration for all weather track Cycling requested a cycling track at Saxton Field.	Athletics oval with 400 metre track, synthetic surface track is proposed with internal area for field events. Track orientation changed as result of consultation to a NE-SW orientation to prevent 100m track and final stretch to the finishing line running into the prevailing wind. Secondary use by soccer of internal area on special occasions. Pavilion located between athletics and cricket oval to service both sites. A cycling track could be incorporated within the oval.
Archery	None	Proposed Archery lawn on SE corner. Area set up for target shooting, reasonably secluded to prevent people crossing archery

		range.

Sports Code	Request from Sporting Code, through Consultation	Facility proposed under plan
Roller Skating	A 1000 metre skating circuit was requested.	There is potential for a 1000 metre circuit for both recreational and competitive skating.
Passive Recreation		To have an area for skateboard/play area with swings etc for young children whose parents are playing/watching the sport, and items of equipment all round the park. Also the opportunity to develop a regional playground. This will be a regional "destination" play area. It will be located next to a general picnic area which is also adjacent to a large recreational pond. Exercise area and fitness circuit will follow adjacent to cycle/roller skating circuit. Fitness circuit length will be approximately 1Km. Other passive recreation opportunities include watching sport and other events, bird watching, picnicking, and appreciation of the environment and gardens.
Major Events		Opera in the Park is likely to relocate to the Cricket Oval on its completion which will eventually have substantial embankment seating in the shade of specimen trees. The layout of lighting in the oval should be sufficient to provide lighting at exit points during major events such as Opera In the Park. Access to power around these points would also be desired.

Part Four: Landscape Form

4.1 Planting Regime

- Variation in style of plantings eg formal and informal plantings denotes orientation points and cues appropriate activity levels.

- Provide landscape interest by employing subtle changes of planting character and densities to create contrasting sense of enclosure (woodland) or expansiveness (sport fields or water bodies).

- High contrast light effects eg between shaded picnic area and open expanse of water provide excellent opportunities for silhouette forms. This is an ideal situation for positioning artwork in the landscape.

- Placement of artworks throughout the landscaped areas adds another dimension to the passive recreation experience for visitors.

- Enhance natural values of the area by creating "ecological corridors" from hills to estuary via Orchard and Saxton Creeks.

4.2 Boundaries and Entry

Boundary treatment should reflect the character of the park and should be well defined. Use of low staggered hedges define boundaries but retains some permeability between spaces. See Figure 5. A suitable planting barrier is required along Main Road Stoke to prevent cricket and soccer balls reaching the road.

NCC has an agreement with Alliance Meatworks which calls for a 10m development buffer strip to be maintained along Main Road Stoke. The buffer should not contain buildings, but utilities, mounding and landscaping are acceptable within the buffer.

The boundary treatment along Main Road Stoke will not be as dense as the existing stage one planting. It will have an open aspect which will not block off views of sports grounds. It will however provide a sense of enclosure. There will be varied areas of space between the trees. Pedestrian and street lighting is recommended to increase security along this corridor.

Figure 4 – Proposed Sports Field Layout

4.3 Park Environment

The vision statement at the start of the report outlines the overall feel of the park. Avenues of trees will be planted to frame sports grounds, roadways, walkways and cycle ways. Large trees will be planted around the cricket pavilion and oval to create a 'Village Green' area. Sports fields will be bounded by specimen trees to provide shade, shelter and give grounds a park like character and reduce the scale of the open spaces. Groves of specimen trees will provide infill in some areas. Variations in the planting character will create interest and provide visual cues for appropriate activity levels.

Figure 6

The Vision - Saxton Field
'Allee' plantings alongside the roadway
- View from beneath the tree canopy to open Sports field

The area bounded by Orphanage Creek, adjacent to Saxton Road is fairly well developed with an existing detention pond which currently supports ducks , eels and other aquatic life. The nearby house will eventually be moved during the construction of the new roundabout at the Main Road Stoke and Saxton Road intersection. The 'Green' could be retained for Gipsy shows, carnival and circus events.

The land TDC has recently purchased will be developed in the same style as the rest of the park with green open spaces. Corridors in the plantings will be left for the existing Transpower 55KV overhead transmission lines. The existing Orchards on the site would be removed with the possibility of maintaining some fruit trees.

Car parking areas will be well planted with specimen trees to give shade to cars. Car parking is generally designed as long and linear to avoid having large areas of asphalt dominating.

Large scale earthworks will be required through out the site to develop flat areas for playing fields. Terraces will be formed between playing surfaces, particularly on the cricket and athletics ovals. Embankments are proposed to aid spectator viewing around the two main ovals. The height of the embankments around the ovals will be

approximately 1-2 metres. These will also give a sense of enclosure around the ovals . Terraces between the soccer fields will provide opportunity for landscape planting with feature trees.

Sub-surface drainage will need to be constructed at an early phase to control surface and sub-surface water.

4.4 Water courses - Saxton and Orphanage Creek.

The two streams through the site generally have narrow channels and shallow pools . The stream banks are eroding and generally devoid of riparian vegetation apart from long grass. The banks will be battered back, landscaped and replanted under this plan . The banks are hazardous in their present form. The riparian planting will provide shade and help to lower water temperatures. Removing grazing from the land which may have attracted the use of chemical fertilisers will also assist in lowering nutrient concentrations in the stream.

A study carried out by the Cawthron Institute in May 2002 on the Surface Water Quality in the Nelson Region – **Ref 6** was referred to. Extracts from the report are summarised below and a table illustrating the stream environmental quality is listed in Appendix 5.

"The streams constitute a highly impacted, poor quality group of waterways. Physical stressors, such as deposition of fine sediments in the stream bed and lack of shade in the lower reaches of the streams, combine with chemical stressors, such as high conductivities, low dissolved oxygen, low water clarity and high temperatures, to severely impact on the biological communities that live there. Levels of bacteria are extremely high and high nutrient levels allow abundant growth of periphyton in un-shaded streams."

4.4.1 Saxton Creek Esplanade

"The flow statistics for Saxton Creek give a low quality ranking due to the relatively low mean flows of 24 l/s. The pH of the water has tested as neutral. High levels of E.coli were recorded in Saxton Creek. Water turbidity was high and nitrate concentrations were extremely high. High summer water temperatures are likely to be a factor limiting aquatic life in Saxton Creek. Periphyton communities that are indicative of nutrient enrichment were found at Saxton creek. The stream had low levels of shading."- **Ref 6**

4.4.2 Orphanage Creek Esplanade

"The flow statistics for Orphanage Creek give a good quality ranking due to the annual median flow of 96 l/s but has more pronounced low flows. The stream generally has narrow channels and shallow pools. The riparian zone is dominated by long grass and low scrub vegetation. The pH of the water was tested as neutral, high levels of E.coli were recorded. Water turbidity was high and nitrate concentrations were also high. Periphyton communities that are indicative of nutrient enrichment were found at Orphanage creek. This stream also had low levels of shading."- **Ref 6**.

4.4.3 Cultural Studies on Watercourses

There have been no cultural studies undertaken on the watercourses.

4.5 Lake

The lake has a surface area of approximately one hectare, and has been developed for irrigation supply by excavating a hole and damming the waterway. A pontoon structure is proposed for the lake for Model Boat operators. On release of the Sutton block the

lake will be extended to include Saxton Creek and landscaped with water side plants and specimen trees for bird and fish habitat. Some existing pine trees may need to be removed.

4.6 Land for Walkway Linkages

In the neighbourhood a network of open space has been developed with walkways being progressively linked together, such as the Whakatu Drive esplanade. A future access for walkers and cycleway into the recreation area is proposed along the Saxton Creek from Hill Street. This route would extend down along the creek to the lake.

The site will be accessed from Champion Road by forming a new road linkage through land which TDC has recently purchased. The link will be adjacent to Garin College . Linkages to other existing cycleways and walkways, including the proposed regional pool and the area around the Craft Habitat need to be considered further.

4.7 Buildings

Buildings will be located to reduce visual impact, take account of seasonal usage, and proximity to services. It is recognised that the facilities can be shared by different codes in and out of season to make best use of the site. .

Shelters will be located around the larger playing areas. Changing rooms and toilet blocks will be strategically located. Satellite toilet facilities are also proposed for the park.

The size of the possible Soccer, Hockey/Softball and Cricket/Athletics pavilions will depend on their ultimate use and availability of funding from the sports codes and any contribution from the Councils.

4.8 Signage

A large entrance sign will be required on the main access off Main Road Stoke with two smaller entrance signs for entrances off Saxton Road and Champion Road. Internal signage showing location of facilities will be required. Standardised signage will be provided, with an integrated system of signage and information boards throughout the park.

4.9 Fencing

Main fencing will be minimal with some post and rail fencing being used for traffic control. On full development of the Cricket and Athletics Ovals a fence would be erected to segregate the charge grounds. The boundary fence between the site and the Raine property will be maintained. The post and wire fence along Main Road Stoke will be removed once existing grazing is removed from the site. Where fencing is required adjacent to areas of future subdivision for housing it should be board and batten. The boundary between the Garin College and the Saxton Extension should be open to allow free movement subject to any security requirements that the School may have.

Part Five: Research Infrastructure

5.1 Existing Pavilion

The existing pavilion was built in 1992. It has an insurance valuation of approximately $1.9 million. The pavilion is managed under a combined sports committee of Netball, Soccer and Nelson City Council. This committee was formed when the building was built.

The pavilion will continue to be used by Netball, as well as soccer, in the short to medium term.

5.2 Existing Road Into Site, Lighting and Car parks

The site is currently serviced by one entrance from Saxton Road. The TDC land adjacent to Garin College is served by an access off the college grounds. There is a large car park facility off the entrance to Saxton Road that includes lighting.

5.3 Existing Site Storm Water

The existing storm water in Saxton Field and the area to the southwest is channelled into Saxton Creek and Orphanage Creek which run from the South East to the North West. Two large swale drains run from the South East to the North West through the site.

Both overland swale drains transfer stormwater from the Raine property at the rear of the site down towards Main Road Stoke. One of these swales drains into Orphanage Creek near to the junction of Main Road Stoke and Saxton Road, the other issues into an open ditch at the side of Main Road Stoke, before running into Saxton Creek. A swale drain runs NE between the existing playing areas and the Raine property which assists in intercepting overland flow and channelling it into the two main swale drains that run through the site.

Saxton Creek and Orphanage Creek pass through culverts under the road towards the Waimea Inlet. In previous studies both Culverts have been identified as being inadequate in size for fifty year flood capacity as set out in the Nelson City Council Engineering Standards. The Saxton Creek Culvert changes shape under the road and regularly blocks with debris at this point.

The stormwater from the existing pavilion and surrounding hard court playing areas issues into Orphanage Creek. The open ground adjacent to the Orphanage Creek culvert, also acts as storm detention area.

Stormwater from the Garin College site is piped via a 375mm diameter pipe into an open ditch on Main Road Stoke.

5.3.1 New Stormwater Infrastructure – See Appendix 4

Wherever possible, storm water will be channelled into Orphanage Creek, Saxton Creek and the two existing overland swale drains. An additional interceptor drain is proposed at the rear of the new development to intercept flow from the Raine and Suttons property which will issue into Saxton Creek. Car parks are drained by sumps and buried concrete pipes and issue into overland swales. The existing swales will need to be culverted under the new internal road network. Where required, additional swale drains will be formed and built into the landscape to provide additional drainage for the fields.

5.3.2 New Land Drainage - See Appendix 4

An extensive network of land drainage is required through the new playing areas. This will be set out in a herringbone pattern and will then be channelled into concrete pipes before issuing into the existing swales and creeks. The land drainage will be formed by drain coil pipes or similar buried in a drainage medium. Particular attention will be paid to providing effective drainage under the main cricket oval, athletics track and supporting cricket grounds. Some areas will not need additional drainage as the gentle slope of the land will actively drain these sites.

Land drainage from the 4.53 ha block owned by TDC adjacent to the college would be channelled into this line and directly into the ditch along Main Road Stoke. Stormwater control on the two Sutton blocks of land would follow the existing path and be channelled into Saxton Creek.

5.3.3 Effect on Stormwater Infrastructure Network

The effect of the Saxton Field development on storm water flow into the two creeks will be negligible. The two creeks currently serve the existing area and there is no significant change in catchment area to any one creek. The run-off from hard surfaces, such as car park and building roofs will cause an increase in flow concentration. However, it is felt that this will only be a minimal increase.

5.4 Existing Sewerage Infrastructure

Saxton Field is relatively flat and the new pavilions and toilet blocks proposed in this plan are a significant distance away from existing sewer services. The sewer that services the existing soccer/netball pavilion joins the sewer main in Saxton Road. This sewer crosses the Orphanage Creek via a connection to the existing footbridge. The existing sewer that services the smaller hockey changing and toilet block to the East is regularly flushed by NCC to prevent it from blocking before issuing to the main on Saxton Road.

5.4.1 New Sewerage Infrastructure - See Appendix 4

The area North of Saxton Creek will be served by the sewer main located in Saxton Road, and the area South of the creek will be served by the Champion Road sewer main. This would prevent any special structures being required to support sewer mains over the Saxton Creek.

The contour of the ground to the North of Saxton Creek and location of existing services, is such that it is unlikely a gravity sewer system will be effective and that a small pump station may be required. This pump station would be located towards the lower centre of the site. Further detailed design is required to confirm the location of the pump station and size of pump. At this time a detailed investigation could also confirm that a gravity system serving the whole site is not feasible.

The proposal includes a network of 150mm diameter gravity sewer pipe transporting sewerage from the toilet and changing facilities to a new pump station. The pump station will cater for low sewage flows. Suitable odour minimisation technology is now available to counter any odours caused by the low sewerage flow being held back before the pumps are activated.

The sewerage is then pumped in a dedicated pressure main, probable diameter 100mm, in a NE direction for approximately 380 metres before it issues into a manhole on the existing gravity system. The sewage then flows on through the gravity system into the Saxton Road main. The existing gravity sewer main in Saxton Road is 200 mm in diameter at the junction with the service from Saxton Field. Sewer manhole access points have been located to avoid playing areas.

The location of the sewer main serving the South of Saxton Creek is governed by the flat surrounding land. There is a narrow corridor of land which runs West to the intersection of Champion Road and Main Road Stoke which is capable of running a gravity sewer. Sewerage from the toilet blocks located in this area as well as from any possible future subdivision on the remaining Suttons block will utilise this sewer. This corridor of land will have an easement for this use. The sewage from the site will connect into the existing sewer near the roundabout on the Champion Road and Main Road Stoke intersection

5.4.2 Effect on Sewerage Infrastructure

The existing sewer main in Saxton Road is a 200 mm diameter pipe at the intersection with Main Road Stoke. A recent investigation has shown that on completion of sub-division in the area this portion of the sewer main will not manage the flow and would need to be upgraded. Consideration needs to be given to the flows from the new Saxton Field development when upgrading the line. The sewer along Saxton Road beyond the Main Road Stoke intersection is able to accommodate the future load in the area as well as the sewerage from Saxton Field.

The Champion Road sewer has sufficient capacity to accommodate the sewage generated from the area south of Saxton Creek.

The proposed sewer layout also connects the small toilet and changing block to the East of the site, used by the Hockey sports code, to the new network. This will remove the current maintenance cost of flushing the existing line. The existing line will be redundant at this time and should be grout filled.

5.4.3 Alternative Pump Station Facility

The group investigated the possibility of utilising the recently constructed sewerage pumping station at Whakatu Industrial estate to serve the Saxton site. This pump station was funded by the private developers. The possibility of using this pump station is unlikely due to development issues. The pump station was designed to cater for wet

industry development at the industrial estate and can accommodate twice the predicted flow from the industries that are likely to set up on the site in the near future. A connection by NCC/TDC may not be looked on favourably by the private developers but could be investigated further.

The group as part of their investigation confirmed that there were no sewer services planned to run through the Saxton Field as a result of sub-division on the foothills behind the site (Raine Property)

5.5 Existing Water Supply

The existing water supplies to the site include a 100mm diameter main from Saxton Road to the Soccer/Hockey Pavilion, and a 100mm diameter main to the existing toilet block which serves Hockey, again from Saxton Road. There is a 100mm main that extends from Main Road Stoke in a SE direction for approximately 400 metres to the existing soccer field south of the existing pavilion. This main is currently used exclusively for irrigation.

5.5.1 New Water Infrastructure - See Appendix 4

Water would be supplied from the Saxton Road and Main Road Stoke water mains to serve the area to the north of Saxton Creek and from Champion Road water main to serve the area to the south of Saxton Creek. This will allow for individual water billing by both Councils.

The network shown on the plan provides a combined potable and irrigation water supply. The network will supply all pavilions, toilet blocks and buildings as well as provision for irrigation. A number of fire hydrants are shown on the network to provide water for travelling irrigators, particularly around the soccer area. The network shown will have two connections into the Saxton Road watermain and the existing connection into the NCC main on Main Road Stoke. There will also be a connection into the water main in Champion Road, beyond Garin College.

5.5.2 Irrigation

The feasibility of water supply to the site during times of sports field irrigation was investigated using the NCC water network model. This was done to check fire fighting capabilities around the pavilions and to ensure water supply to surrounding residents would not be affected at times of irrigation.

During dry summers, such as experienced during this year 02/03, irrigation will be typically applied over a ten week period. Two methods of irrigation are used. Firstly, the travelling irrigators, using 5 l/s and fed from a Fire Hydrant. Secondly, the pop up irrigation system which is fed directly from the water main. One hectare of playing field being irrigated simultaneously by a pop-up system demands 27 l/s for a 20 minute period. The pop up water system can be managed so that the area to be irrigated is split into quadrants. Irrigation would be rotated through the quadrants until the full area is covered. The time required to irrigate one hectare is increased but the demand for water is spread over a longer period.

The areas that would require irrigation are generally on the Northern side of Saxton Creek. Each of the three areas was assigned an irrigation scenario based on their use under the site concept plan, demand of irrigation and locality to the internal water supply network. Annual water usage figures for playing areas such as Trafalgar Park, Tahunanui and the Greenmeadows playing fields were used to estimate the likely amounts of water usage for irrigation.

5.5.3 Analysis of effect of irrigation on level of service to surrounding area

The three scenarios A, B and C were run through the NCC network model. The acceptance criteria for each irrigation scenario was that fire fighting flows would be maintained and that a drop in pressure not exceeding 10 metres head is experienced in the network.

Scenario A – Area, adjacent to Main Road Stoke, includes 7 standard soccer pitches, softball and 2 cricket ovals. Demand - four travelling water irrigators fed from Main Road Stoke, 4 times 5 l/s giving 20 l/s over ten hours.

Taking large flows of water out of the main in Main Road Stoke reduces the pressure for TDC in Champion Road water main by the following:

Flow Taken from Node 2535 (l/s) at Orphanage Creek culvert over 10 hr period	Reduction in Pressure at Champion Rd (m)
5	10
10	15
15	21

Unless a reduced pressure can be agreed with TDC for the Champion Road main then flow taken from Main Rd Stoke should not exceed 5 l/s. This main is fed by the Roding supply. Due to resource consent conditions there are limits of flow extraction from the Roding supply. Should TDC cease taking water from the Nelson City Council reticulation there would be increased scope for using water for irrigation from the Main Road Stoke main. It is possible that once water treatment is implemented and the price of water supplied form NCC increases to TDC that TDC may reduce their consumption of Roding water or stop taking this flow. If this happens then taking a flow of 20 l/s from Main Rd Stoke would be acceptable from a pipe capacity view. As a result of the investigation, Scenario A is limited to one travelling irrigator over 10 hours.

Scenario B Area, includes senior cricket, soccer and athletics track, three standard soccer and junior soccer fields. Demand - Two pop up systems and two travelling irrigators fed from Saxton Road, 27 l/s for each of the two pop up system. Each travelling irrigator requires 5 l/s over ten hours.

The limiting factor for taking large flows from Saxton Road is achieving sufficient fire flows at the top of Clairmont Heights. Currently 15 l/s can be taken. In the 2003/04 financial year the low pressure link along Main Rd Stoke to Saxton Road is due to be completed. Once this is done, 20l/s will be available. In addition to this, if the 30m section of 100 diameter pipe on Suffolk Rd between Huria St and Clairmont Heights was upgraded to a 150 diameter pipe, 27 l/s would be available from Saxton Rd. As a

result of the investigation it is clear that not all Scenario B irrigation can take place simultaneously. This area will need careful management to ensure that irrigation is staggered. An available flow of 20 l/s should be considered.

Scenario C Area, includes standard cricket, soccer training, hockey one and two. Demand - Two travelling irrigators fed from Saxton Road. Each travelling irrigator requires 5 l/s over ten hours.

The required 10 l/s is currently available for this option.

The above A, B and C scenarios cannot be used at the same time. Irrigation would have to be managed and rotated around the site as a whole. The purpose of the analysis is to show that the given flows can be delivered. Irrigation of this nature will however be subject to water restrictions from time to time due to low levels in the Maitai and Roding supplies.

5.5.4 Alternative Sources Of Irrigation

Irrigation water may be sourced from the lake adjacent to Suttons Land. This will depend on the timeframe for TDC taking possession and any other agreement or condition of land sale. A power source adjacent to the lake to drive pumps may be required to utilise the lake water for irrigation. The group was advised that the Suttons currently use reticulated water to top up their irrigation requirements. With this in mind it is not expected that there would be readily available water on a continuous basis from the lake.

A reservoir could be built on site to store water for irrigation. The reservoir could be topped up during low demand. To provide storage for the use of four travelling irrigators at 20 l/s over ten hours would require a reservoir with 720 cubic metres capacity. The estimated cost for this reservoir is given as $450,000. The reservoir would be gravity fed and supply the site via a small pump station.

Part Six: Pedestrian and Vehicle Flow Paths

6.1 Access off Main Road Stoke

A new entry to the site is proposed from Main Road Stoke. (See Fig 7). This will be the main entry to the site. The entry will have Redwood groves set back from the road and will have a feature entrance wall with signage incorporated. The signage will have up lighting and new street lighting on the main road and adjacent to the entrance to help illuminate and highlight the entrance. The entrance will also feature a link into the cycleway.

The type of intersection proposed for the link into Main Road Stoke is an Austroads "Seagull". See Appendix 6. A feature of the seagull intersection is the raised islands that differentiate between lanes. Further investigation should be carried out into the suitability of this intersection type. It may be that a roundabout would best serve the location. Main Road Stoke has approximately 22,000 vehicles a day and is a major route.

6.2 New road onto Champion Road (below Garin College)

A simple T intersection is proposed from Champion Road

6.3 Entry from Saxton Road

The existing main access from Saxton Road is to be closed off under the plan and a new access formed approximately 150 metres up the road. This will remove through traffic from the Netball court area and other passive recreation areas. A cycle way access will be maintained at the current entry point.

The current access on the corner of Suffolk Road and Saxton will need to be reviewed in the detailed design phase.

At the new entrance point a landscaped roundabout is proposed. The new entrance will have a similar appearance as the proposed entrance on Main Road Stoke, with redwood groves, feature walls, signage and lighting. The existing chain link fence that bounds Saxton Road will be removed. From the entrance point an avenue of trees will follow the internal road. Tree spacing will generally be every 15 metres with the trees placed approximately 4 metres back from the road

6.4 Saxton/Main Road Stoke Intersection.

A new roundabout intersection is proposed at the junction of Main Rd Stoke and Saxton Rd, which includes provision for a cycleway crossing. NCC proposes to remove the existing house from 793 Main Road Stoke, and have the site landscaped. The house is owned by NCC. The roundabout was programmed for construction in the 2003/2004 year however due to Transfund funding criteria this will not be proceeding. There is now no definite timetable for the construction of this roundabout.

Figure 7 - Entranceway Proposal

6.5 Hill Street

The future zoning of this land is the subject of planning studies being undertaken by Tasman District Council and Nelson City Council by Boffa Miskell. The reports were considerat by the respective councils earlier this year. These studies included recommendations on the appropriate boundaries between any proposed residential areas and Saxton Field as well as the Raine land.

As discussed in the cycleways section of the report, a link to Hill Street is desirable. A vehicle link to Hill Street is dependent on the rate of subdivision of adjacent land currently under orchard. Further subdivision development would provide an excellent opportunity to install a vehicle access. Any future link to Hill Street would need to be closed at night time to deter through traffic.

6.6 Internal Road Layout - Design Criteria

- Provide coherent circulation routes to facilitate easy navigation through the park using a well-defined hierarchy of entry, roadways and paths, and nodal points.
- Continuity in use of signage will aid legibility of park circulation.
- Good visual connection between various spaces of the Park enhances expansive character and aids visitor orientation.

The road link over Saxton Creek will be located on top of a weir. A secondary weir will be required to augment the size of the recreational pond.

A typical cross section of the internal road layout is shown in Fig 7. The road layout is proposed as 6 metre carriageway, 1 metre grass berm, 2 metre cycleway, 1 metre berm then tree planting. Standard signage is located 1 metre back from the kerb. Kerb and channel is felt appropriate for the site as it will have a suburban theme rather than a rural theme.

Most road surfaces will be chipsealed. Asphalted surfaces will be provided for sporting usage, such as the proposed roller skating and cycling circuit. Surfaces shall be uniform throughout the site to provide flexibility for use throughout the year. Paths on cycleways will be either asphalt or another medium such as crushed lime.

The central drive shall incorporate sweeps to provide an attractive route through the park and to link all the major activity areas. The new Saxton Road access will sweep in past the stadium along a tree lined drive. The area between the athletics and cricket oval will be hard paved and enclosed. The hard paving will serve both permanent and re-locatable spectator seating. Both ovals will be enclosed by a 2 metre chain link fence to form enclosed charge grounds.

Vehicle barriers should be placed strategically through the site to prevent the area being used as a through road. Barriers could be opened for major rollersports/cycling events if required.

Figure 8 - Avenue Proposal

6.7 Cycleway Layouts

The existing cycle way that meanders along side Main Road Stoke between Champion Road and Orphanage Creek will be maintained within this plan. On the extension of the Orphanage Creek Esplanade Reserve to Whakatu Drive a cycleway link will be formed from the Railway Reserve into the site.

The NCC Cycle Strategy 2001, Cycle Safety and Route Options by Neil Jorgensen identified options for a cycle crossing point at Main Road Stoke. They included a new underpass in conjunction with an upgrade of the existing culvert which is undersized . This option is costly and no decision has been made to date on its funding. Another option was to include an uncontrolled priority crossing with central islands. This option has been adopted in the new cycleway design.

The report recommended that the above crossing point be put in place and that the existing 1.2 metre cycleway located within Saxton Field that runs along Main Road Stoke is widened to 3 metres wide.

The report gives an estimate of a new culvert under Main Road Stoke as $150,000 and the cost of widening the existing 1300m cycleway along main Road Stoke to be $150,000. It is noted that street lights would also be required along the Main Road Stoke to illuminate the cycleway at an estimated cost of $60,000.

It is proposed that a cycle route be defined along Saxton Creek which would extend through the site and a small portion of the Raine property before entering Hill Street. There is no other link to Hill Street available at the present time. It is acknowledged that if portions of the Suttons property are subdivided into residential areas in the future then a road link from Hill Street into the site may well be achieved . The adjoining Raine property to the south east of Saxton Field was unlikely to be subdivided in the future. Land for cycleway link would need to be acquired through any future subdivision process, or alternatively purchased or an easement negotiated w ith Raines.

6.8 Pedestrian movement

Suitable signage will be positioned to show pedestrian connections between Nelson City Council Walkways and Tasman Council Walkways through the site.

6.9 Safety at Crossing Points

Suitable traffic calming measures and raised paved crossing points need to be incorporated into the internal road layout.

Part Seven: Supporting Infrastructure

7.1 Power

There are existing power cables serving the Radio NZ site. These could be utilised to supply the proposed new sewer pump station to serve the site. The suitability of the supply needs to be investigated further to ascertain whether a larger transformer is needed. Power supply would be fed into the site as the internal road networks are developed. Power will be required for associated street lighting. Facilities such as the cricket/ athletics, soccer and netball pavilions would require power supplies. The working group has not investigated the size of the transformers serving the site, however with the relocation of the Radio NZ mast it is assumed that this service would be sufficient. Consideration needs to be given to laying ducts during construction to accommodate future development.

The working party identified early in their investigation that one of the three existing overhead transmission lines running through Saxton field needed to be put underground. Due to its current location the overhead Network Tasman 33kV line would have a major impact on future use of Saxton Field, as it would pass through the proposed cricket and athletics ovals. NCC is currently negotiating with Network Tasman to have this work done. Network Tasman has indicated that this work will be carried out in the 2004/05 financial year.

The two other southern most lines crossing Saxton Field are 55KV Transpower lines. No negotiation has taken place with Transpower to under ground these lines as yet as they are not critical to developing the plan, and would be very expensive to relocate underground.

7.2 Radio NZ Mast

The removal of the mast is pivotal to the further development of Saxton Field. It is a high priority to remove the broadcasting mast to free up space for soccer grounds and allow development of other sports.

NCC is currently in negotiation with Radio New Zealand with the aim of moving the mast from its existing position on Saxton Field. These negotiations are advancing with feasibility and technical studies being undertaken for alternative sites. The mast and anchor system currently occupies a circular area of approximately 200 metre diameter.

7.3 Telecom

There are no major telecom services effecting this proposal or affected by the proposal.

7.4 Car Parking

Car Parks have been located to blend into the landscape using plenty of tree planting. Large expanses of asphalt will be minimised. The provision of car parking is based on

one space per fifty square metres of court area with a minimum fifteen spaces/ha of pitch area as outlined in the Reserves Asset Management Plan.

Car parks need to be well lit for security. Security cameras may be given consideration at a later stage when facilities become established.

This plan allows for the development of car parks adjacent to usage areas. Car parks are serviced by the internal drive. They will be sealed and line marked. Free parking is suggested for the site including those areas servicing the enclosed grounds.

7.5 Lighting and Miscellaneous

Lighting for sports grounds and training will be to a high standard using oclyte or similar type poles and modern lantern types. Similarly the goal posts, and other sporting equipment used shall be of a high standard. These shall be provided for by the sporting codes. Drinking fountains shall be provided in high use areas. Park furniture and rubbish bins will also be provided around higher use areas.

Part Eight : Management Structure

8.1 Joint Management Plan

A management plan is required for the site under the Reserves Act. This act sets out a framework for consultation with the public and interest groups before the management plan is adopted. The management plan will set out the constraints of the site, what effect the site will have on neighbouring land as well as addressing the likely issues and operational requirements of the plan. The management plan will set out the objectives of the reserve and how it is to achieve them. A joint management plan will need to be developed between TDC and NCC. This report on Saxton Field will form the basis of such a plan.

8.2 Development Timetable

The table below shows the development timetable for playing areas & park infrastructure.

Indications are that three years is needed to establish a wicket block to a first-class standard. Therefore it is recommended that as soon as concept planning for Saxton Field is completed, a wicket block is established in the area designated for the cricket oval.

Provision of land for a second artificial hockey turf and pavilion would be needed in the concept planning for Saxton Field. The pavilion is intended for development in conjunction with the second turf. In relation to the other facility needs this project has been placed in the 3-5 year phase of the Plan.

NOTE: Projected costs will need to be adjusted to reflect cost increase by us e of Construction Cost Indices.

8.4 Funding

The cost for implementation of this plan is summarised in Table 1 below.

It is envisaged that the following infrastructure will be funded by NCC and TDC:

- roading
- car parks
- paths
- lighting
- stormwater
- sewerage
- power
- telecommunication
- changing/toilet facilities
- turf playing fields
- playgrounds
- boundary fences
- furniture/rubbish bins
- signage
    - **NOTE:** Projected costs will need to be adjusted to reflect cost increase by use of Construction Cost Indices. .

Part Nine

Conclusion

The facilities plan for the Saxton Field Extension contained within this report makes best use of the available land for recreation. It balances the requirements of the sporting codes and the general public who benefit from access to such a site. The development timetable is realistic and is driven by an existing and future demand for recreational facilities in the district. The infrastructure surrounding the site is capable of supporting the development when existing planned upgrades are completed. This report adheres to the recommendations set out in the Regional Facilities Plan.

Recommendations

The report has the following recommendations:

- ***THAT** the Draft Saxton Field Concept Plan be adopted conditional on Tasman District Council resolving similarly;*

  ***AND THAT** both Councils adopt the (revised) Saxton Field Development Plan, and implementation timetable and annual cost forecasts, for inclusion in each Council's LTCCP, to be operative from 1 July 2004.*

  ***AND THAT** all necessary resource consents/planning approvals be obtained prior to work commencing.*

  ***AND THAT** a joint management plan be developed for the site and as part of this process the planning applications for rezoning from rural to open space and recreation be progressed.*

  ***AND THAT** the joint working party continue to manage the infrastructural development of Saxton Field until this issue is considered in the proposed Saxton Field Management Plan.*

References

This report references the following previous studies

Ref 1 Draft Regional Community Facilities Plan (RFP),
Ref 2 Saxton Field Land Acquisition Report, Boffa Miskell
Ref 3 Statement of Evidence for the Designation of Recreation and Open Space Reserve for Saxton Field Extension by David Allen.
Ref 4 Reserves Asset Management Plan 2002
Ref 5 NCC Cycle Strategy 2001, Cycle Safety and Route Options by Neil Jorgensen.
Ref 6 Cawthron study, Surface Water Quality in the Nelson Region, May 2002. Rep No 685

Appendices

Appendix 1 Comments from Sports Code meeting on the 16th October 2002.

Appendix 2 List of tree plantings

Appendix 3 Main Tree Layout

Appendix 4 Facilities Layout Plan A1, Including Utilities.

Appendix 5 Cawthron study, Surface Water Quality in the Nelson Region, May 2002.

Appendix 6 Austroads Seagull Intersection Layout

Appendix 7 List of figures and Tables

Appendix 1

Comments From Sports Code Meeting on the 16th October 2002

Hockey

Two additional fields were proposed for hockey. One field would be located next the existing field with a new administration facility in between. The other new field would be for training. Diane Proudfoot (Nelson Hockey Association) commented that the proposed fields placed side to side were excellent, and the administration facility in between provided good viewing and easy lighting. She added that if they developed water turf as proposed, there would be more opportunity for sharing of facilities with soccer.

Cricket

Gordon Davidson (Nelson Cricket Association) advised that the aim was to have all premiere senior teams in one area, with children's cricket in the morning. Kiwi cricket is currently held at Saxton Field, and they would like to add primary hardball. Second and third grades would remain at Greenmeadows. Artificial wickets were also desired at Saxton Field.

Soccer

Alf Cosgrove (Nelson Football Association) commented that they would need to be re-lighting training grounds, so would look at lighting the grounds closest to hockey for reduced infrastructure costs. He added that subsurface drainage would be needed on the proposed soccer fields next to hockey.

Andrew Petheram, (NCC), advised that it was proposed to move the embankment closer to the field, on the one closest to Saxton Road. The stand had been placed central to the field, and drive-on access would be retained to service the building.

It was proposed that the field closest to the Saxton Road / Suffolk Road corner would be reallocated for soccer, and parking be provided at a different site. It was suggested that this be allocated closer to the Saxton Road / Main Road Stoke corner, with a lot of support for parking to be located around a central grass space at the village green area.

Gordon Davidson advised that cricket did not use that field as the surface was not suitable. Barry Hunt suggested that soccer could use the centre of the athletics track in winter.

Tony Gowans asked whether relocation of the third soccer field would result in it being positioned hard up against the proposed netball stadium. Andrew Petheram commented that options were still being investigated for location of the netball stadium.

Stephen Alder pointed out that Suburbs Soccer was a co-owner of the netball pavilion, and did not want to be blocked off by a 3-story stadium. The soccer representatives were asked to tick on the concept plan which of the fields they would like to use.

Stephen Alder added that Suburbs Soccer had approval from the Council for development of a 15m training wall, but this would be movable if required. He added that they wanted to upgrade and double the size of their training area, so when this would be done was dependent on the timeframes for the wider development. It was agreed that it was a high priority to remove the broadcasting mast to free up space for soccer, and the impact of this on the other sports.

Softball

Softball confirmed its interest in remaining in Saxton Field. Andrew Petheram advised that the concept plan included two synthetic diamonds, and the opportunity for grass diamonds in the same area. Admin building and toilet facilities for softball were also required.

Don Glennie asked whether the two synthetic diamonds could be permanent and fenced, so they could be used for the full year. He added that the world series would be held here in 2004 so permanent facilities for elite players would be needed and used.

Permanent fencing would impact on the use of the grounds for soccer. The maximum distance for the nets is 75m, so this could be done by changing the orientation of the soccer fields, and losing two soccer fields. The soccer representatives confirmed that they would need 12 fields for a national tournament, and did not want to drop below this number. It was agreed that at least one softball diamond needs to be up and running as soon as possible.

Netball

Priyani de Silva-Currie (Nelson Netball) commented that the proposed facilities would cater for the next 5 to 10 years, but she did not believe they were sufficient for the next 10-15 years. There was also, in her view, not enough parking close to the complex, which would be a security risk at night time.

Tony Gowans commented that if the field closest to the Saxton Road / Suffolk Road corner remained available for soccer, this would be the number 3 ground, and the field that is across the road from netball, and closest to Saxton Road/ Main Road Stoke corner, could become a future site for netball. This ground was used for soccer training, but did not have good grass, and would be an ideal flow-on for netball in the future. Roading and other access would need to be planned accordingly.

Priyani de Silva-Currie commented that from a netball point of view, the stadium was too close to the courts, and was not good for soccer. She suggested the pavilion be moved over, this was recorded by the group. Tony Gowans suggested locating it on the southern side of the courts, which would block the wind. In case of further development towards the south, the outcome would be the stadium sited between two blocks of courts. It was noted, however, that spreading the facilities out would lose the strengths gained from co-location.

Tony Gowans suggested that the stadium could be located on some of the proposed carpark area, and then put in more car parking elsewhere. He also asked why the stadium was not put over the courts. It was agreed that soccer and netball needed to get together to talk further.

Athletics

Barry Hunt expressed concern at the orientation of the proposed track, as it would result in the 100m track and final stretch to the finishing line running into the prevailing wind.

Andrew Petheram explained that Opera in the Park had been in support of this proposed orientation as it would mean that the audience or performers did not have to look directly into the late afternoon sun.

Barry said the ideal was to have the prevailing wing blowing at the back of the grandstand. He would be happy if the grandstand was on the other side of the track. Andrew Petheram undertook to talk to Opera in the Park about the orientation. Barry pointed out that there was an opportunity for a soccer field inside the track.

Archery

No representations given

Appendix 2

List of Tree Plantings

Suggested Tree List for Saxton Field

Acer saccharinum	Sugar Maple
Alnus cordata	Alder
Alnus glutinosa	var. 'imperalis'
Betula paperifera	Paper Birch
Betula nigra	Black Birch
Cedrus atlantica	Atlantic Cedar
Cedrus deodar	Deodar Cedar
Calodendron capense	Cape Chestnut
Cinnamomum camphora	Camphor tree
Cornus capitata	Himalayan Dogwood
Cupressus lusitanicus	Mexican Cypress
Fagus silvatica	European beech
Fagus silvatica 'purpurea'	Copper beech
Ficus carica	Fig
Ginkgo biloba 'Autumn Glory' (male form)	Ginkgo
Juglans regia	Walnut
Larix kaempferi	Japanese Larch
Liquidamber styraciflua 'Worpleston' & 'Lane Roberts'	
Liriodendron tulipifera	Tulip Tree
Magnolia cambellii varieties 'Star Wars' 'Vulcan' etc.	
Magnolia grandiflora	Southern Magnolia
Metasequioa glyptostroboides	Dawn Redwood
Nyssa silvatica	Tupelo
Paulonia tomentosa	Paulonia
Platanus acerifolia	London Plane
Platanus orientalis	Oriental Plane
Podocarpus totara	Totara
Populus yunnanensis	Yunnan poplar
Prunus yedoensis 'Awanui'	Yoshino Cherry Hybrid
Pterocarya stenoptera	Wing nut tree
Quercus cerris	Turkey oak
Quercus coccinea	Scarlet oak
Quercus ilex	Holm oak
Quercus palustrus	Pin oak
Quercus rubra	Red oak
Quercus robur	English oak
Quercus suber	Cork oak
Rhododendron varieties	Rhododendron
Salix babylonica	Weeping willow
Salix chrysocoma	Golden weeping willow
Sequioa sempervirens	Redwood
Sequioa sempervirens 'Pendula'	Weeping Redwood
Taxodium distichum	Swamp Cypress
Tilea x europaea	Common Lime
Ulmus americana	White Elm
Zelkova serrata	Keaki

Appendix 3

Main Tree Layout

(available only in hard copy from Nelson City Council, 03 546 0200)

Appendix 4

Facilities Layout Plan A1

(available only in hard copy from Nelson City Council, 03 546 0200)

Appendix 5

Cawthron study, Surface Water Quality in the Nelson Region, May 2002.

(available only in hard copy from Nelson City Council, 03 546 0200)

Appendix 6

Austroads Seagull Intersection Layout

(available only in hard copy from Nelson City Council, 03 546 0200)

Appendix 7

List of figures and Tables

Table 1	**Ten year Cost Summary**
Table 2	**Population in Region**
Table 3	**Percentage growth of population**
Table 4	**Population projection 2046**
Table 5	**Soccer Usage Breakdown**
Table 6	**Consultation Summary**
Table 7	**Development Timetable with Physical Works Estimates**

Figure 1	**Woodland Planting**
Figure 2	**Sport in the Park**
Figure 3	**Saxton Field Catchment Area**
Figure 4	**Facilities Layout Plan A3**
Figure 5	**Perimeter fence proposal**
Figure 6	**'Allee' plantings along roadway**
Figure 7	**Main Entrance proposal**
Figure 8	**Avenue Proposal**
Figure 9	**Main Tree Layout**

The Team

Richard Jones (Team Leader; Projects Engineer NCC), Grant Reburn (Community Assets Adviser NCC), Andrew Petheram (Manager Recreation and Community Services NCC), Peter Coubrough (Project Adviser NCC), Lloyd Kennedy (Manager Community Services TDC), Beryl Wilkes (Reserve Manager TDC), and Glenn Thorn (Reserve Officer TDC) Kath Inwood (Administration Adviser NCC) Aaron Feast (Engineering Officer NCC)-

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