

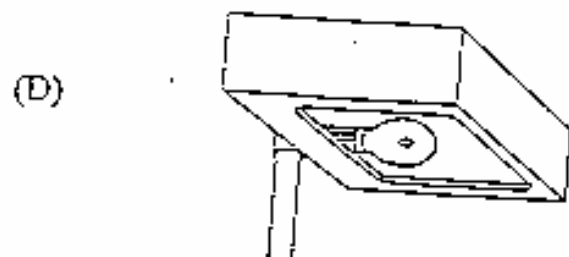
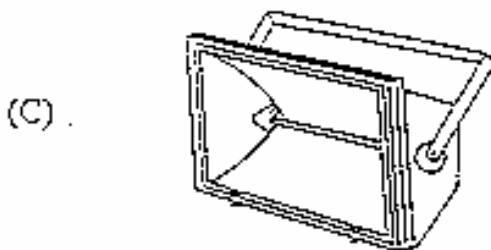
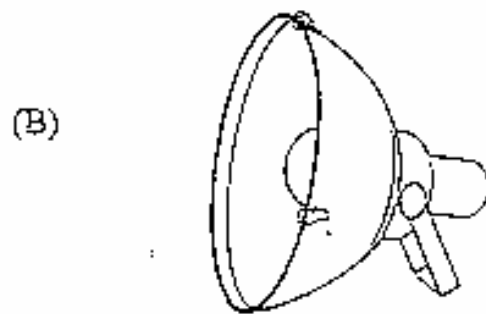
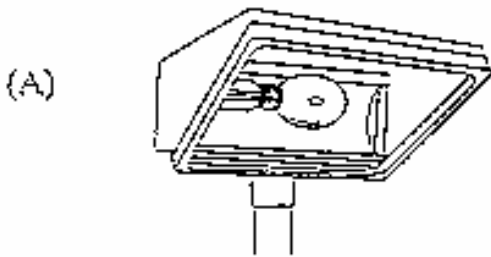
6.1 Types of Approved Floodlighting Available for use on Recreation Reserves

Type (A) Floodlight - Produces a fan-shaped beam with a non symmetrical beam

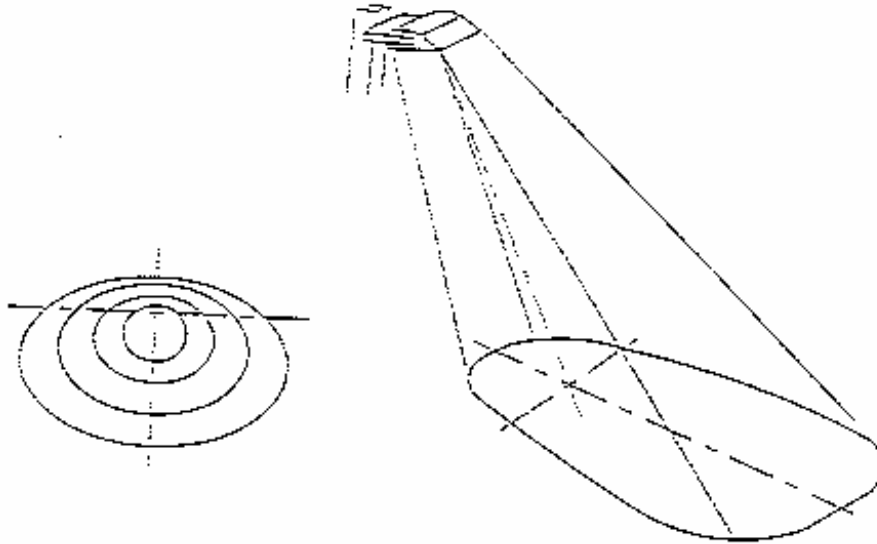
Type (B) Floodlight - Produces a symmetrical beam of light

Type (C) Floodlight - Produces a fan shaped beam of light

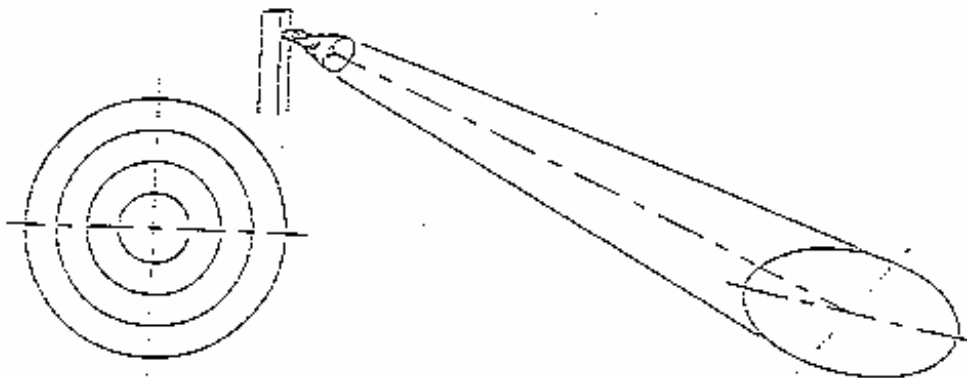
Type (D) Floodlight - Produces cut of flood lighting also referred to as “environmental” floodlights.



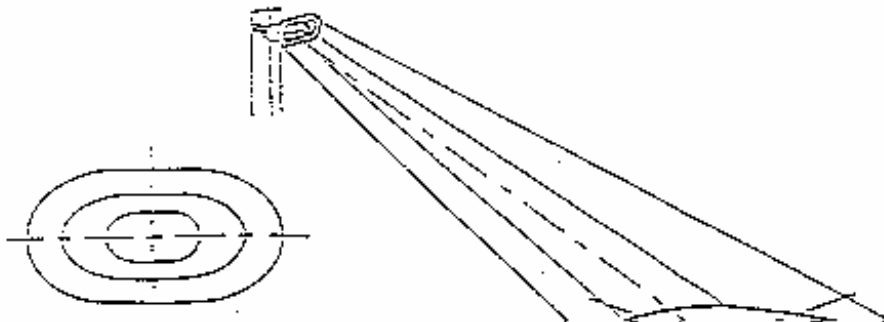
- (A) Directional light pattern and beam cross-section produced on a horizontal surface by type (a) floodlighting.



- (B) Lighting pattern and beam cross-section produced on a horizontal surface by type (b) floodlighting.



- (C) Lighting pattern and beam cross-section produced on a horizontal surface by type (c) floodlighting.



6.2 Minutes from Public Meeting on the Preparation of a Draft Management Plan (30 November 1999)

MINUTES
HATEA-A-RANGI RESERVE MANAGEMENT PLAN
PUBLIC MEETING

Meeting started 5:30, 30 November 1999
Tokomaru Bay United Sports Club

Attendance; De-Arne Gibson (Reserves Planner, Council), Andrew Sutherland (Assisting Planner), Mary Kukurangi, Flora Kukurangi, Bill Williams, Nelson Truman, John Ingoe, R.J. Pohira, B Mulligan, Sam Lewis, P Milner, Hone Manuel, R.Chaffey, J Jones, Kody Pewhairangi.

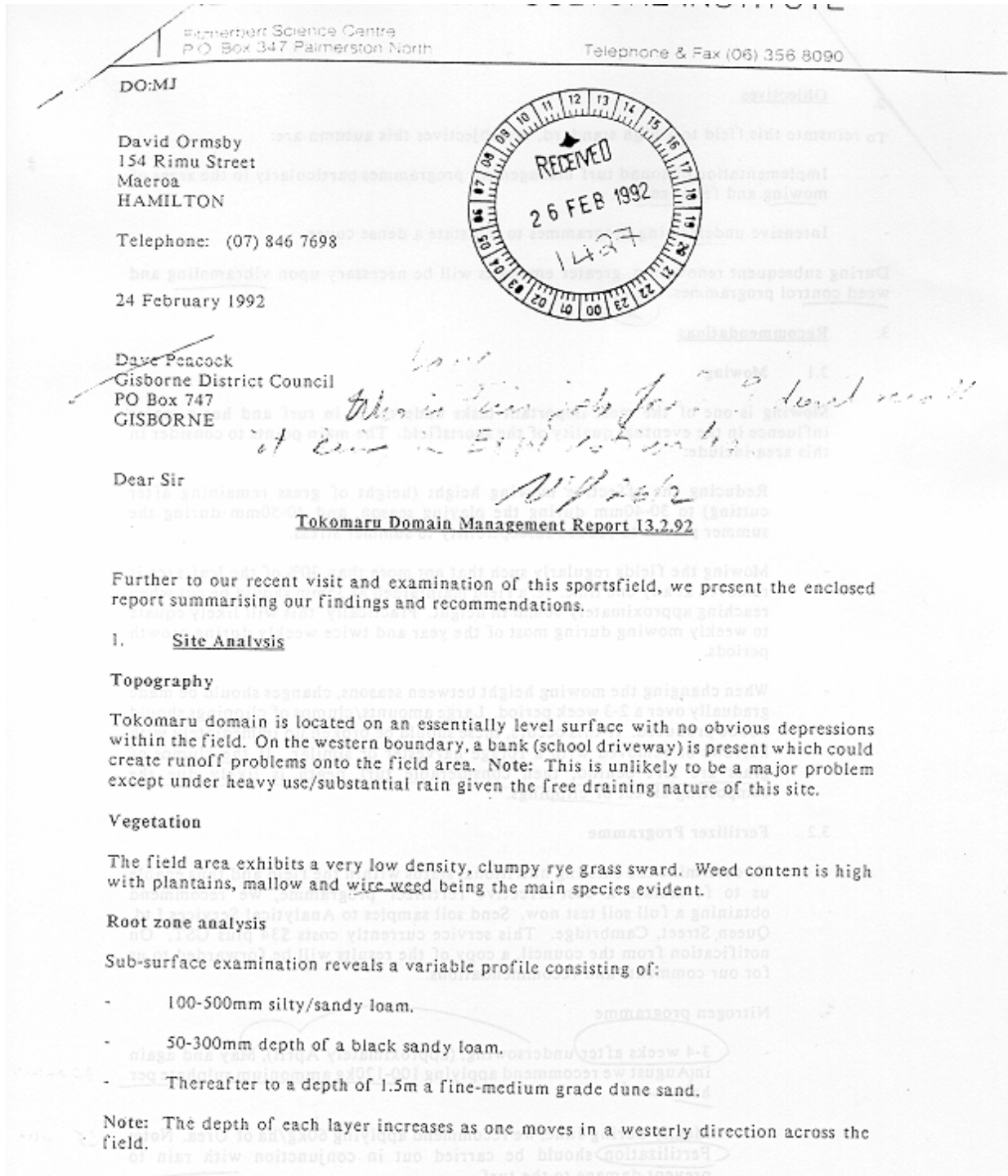
Development suggestions made by those who attended;

- Resow both playing fields (not ploughing though)
- Fencing (even if bollards are placed along the side of the drive only - this would stop vehicles driving over the playing fields)
- Driveway and carpark area sealed
- Planting around the perimeter of the reserve
- better seating provided (under shade for during the harsh summer months)
- sewage tank is overflowing, needs to be seen to.
- Toilets need a revamp (basic maintenance issues such as no toilets seats and not being cleaned by Council).
- Changing rooms need work.
- No. 2 field is under utilised. The community would benefit from a cricket pitch (preferably concrete/asphalt), hockey field lines and perhaps a softball diamond painted on too.
- Skateboard bowl

The Reserve is used by a wide range of the community (including the youth). It is also used by the School adjoining for physical education purposes. The community are concerned that the reserve does not have the basic facilities (referring to the toilet block) to be able to cope with the influx of tourists during the 99/2000 millennium summer period. The toilets need to be restored to a satisfactory standard and be maintained at this standard.

The meeting closed at: 6:30pm

6.3 Mowing Standards - Turf Group



2. **Objectives**

To reinstate this field to a high standard, the objectives this autumn are:

- Implementation of sound turf management programmes particularly in the areas of mowing and fertilization.
- Intensive undersowing programmes to reinstate a dense cover.

During subsequent renovation, greater emphasis will be necessary upon vibramoling and weed control programmes.

3. **Recommendations**

3.1 **Mowing**

Mowing is one of the most important tasks undertaken in turf and has a major influence in the eventual quality of the sportsfield. The main points to consider in this area include:

- Reducing the effective mowing height (height of grass remaining after cutting) to 30-40mm during the playing season, and 40-50mm during the summer period to reduce susceptibility to summer stress.
- Mowing the fields regularly such that not more than 30% of the leaf area is removed at any one time, ie. a field maintained at 35mm should be cut when reaching approximately 50mm in height. Practically this will likely equate to weekly mowing during most of the year and twice weekly during growth periods.
- When changing the mowing height between seasons, changes should be made gradually over a 2-3 week period. Large amounts/clumps of clippings should not be produced. If this occurs, these should be broken up immediately with harrows or removed with a forage harvester or similar. If the clumps of grass are left behind, then considerable turf death is likely due the composting effect of clippings.

3.2 **Fertilizer Programme**

To determine the existing nutritional status within the field and thus enable us to formulate a cost-effective fertilizer programme, we recommend obtaining a full soil test now. Send soil samples to Analytical Services Ltd, Queen Street, Cambridge. This service currently costs \$34 plus GST. On notification from the council, a copy of the results will be forwarded to us for our comments and recommendations.

Nitrogen programme

- 3-4 weeks after undersowing, (approximately April), May and again in August we recommend applying 100-120kg ammonium sulphate per ha.

Ideally during June, we recommend applying 60kg/ha of Urea. Note: Fertilization should be carried out in conjunction with rain to prevent damage to the turf.

3.3 Autumn Undersowing

In conjunction with anticipated autumn rain (approximately late February/March) we recommend:

- Reducing the effective mowing height to 30mm.
- Lightly harrowing the fields to create some soil movement.
- Broadcasting potassic superphosphate (rates will be determined by the soil test) and 25kg/ha of a high endophyte turf rye.
- Undersow the field in 3 passes with a high endophyte turf rye (25kg/ha/pass). During the final pass with the undersower employ a non-scarifying screed (such as a drag mat/chain harrows/reinforcing mesh) to ensure good seed/soil contact. Alternatively the fields can be lightly rolled with a Cambridge roller or similar after undersowing.

Suitable turf ryes include:

- Coronet, Duet - Carr Poutney Ltd, Ph Akld 09 597 4571.
- Saturn, All Star - Smiths Horticultural Distributors, Ph Akld 09 275 9219.
- Saville - Prebble Seeds Ltd, Ph Akld 09 645 761.
- Vintage, Commander - Nuturf Ltd, Ph Hamilton 07 8430 208.

3-4 weeks after undersowing commence nitrogen fertilizer practices as discussed above.

Given the weak condition of the sports field and also to better enable the rye grass to establish, we recommend where possible avoiding active use/play on the field for 3-6 weeks after undersowing.

3.4 Usage Control

Using sports fields when they are excessively wet will inevitably lead to a deterioration in the quality of turf cover and a reduction in the drainage capability of the soil. This increases the cost of maintaining the fields in a good condition.

Usage control should be an integral part of the management of any sports field and is the least expensive management practice that can be implemented. The benefits of an otherwise sound management programme can be quickly lost if the fields are played on when they are too wet. Points to note with respect to usage control are:

- Avoiding playing under excessively wet conditions which is especially important early in the winter. Once damage to the turf cover and soil has occurred the field is more susceptible to further damage.
- Field closure is unpopular and communication/education are essential when implementing usage control programme.

4

Practice is one of the most damaging activities and where possible any suitable off field areas should be utilised. Practice should be evenly spread over all fields and goal mouth areas, and areas in close proximity to changing rooms should be avoided.

Closure of the field should apply to both play and maintenance machinery.



I trust this report will aid you in this year's management programme. Please do not hesitate to contact our Hamilton office with any queries you may have concerning your greens management.

Yours faithfully



D Ormsby
SPORTS TURF AGRONOMIST

6.4 Crimson Project Application Information

<p>Information Required</p> <p>Following points should be used as a guide in writing your application. Please answer those that are relevant to your project. The more complete the information you supply, the easier it will be to consider and process your application. If you have any questions please contact the Trust's office.</p>	
<p>PLEASE PROVIDE THE PROJECT FOR WHICH YOU ARE SEEKING FUNDING:</p> <p>Project title.</p> <p>Approximate all project costs.</p> <p>What is the land tenure?</p> <p>Where is the project located?</p> <p>How long will the project run?</p> <p>What are you trying to achieve?</p> <p>What expertise/advice is needed?</p> <p>Who will be involved in the project?</p> <p>What is the total cost of the project?</p> <p>What is the conservation significance of your project?</p> <p>How will you ensure the plants are watered in summer?</p> <p>Provide the project leader's name, address, phone number.</p> <p>How does the project involve and/or encourage community input?</p> <p>How will you maintain the area around the plantings to minimise pest damage?</p> <p>How much funding is sought from Project Crimson?</p> <p>What other agencies/organisations are supporting the project either through services or money?</p>	<p>Applications to the Project Crimson Trust should be made in writing and addressed to:</p> <p>Executive Director Project Crimson Trust PO Box 34 214 Birkenhead Auckland</p> <p>Ph 09 480 8864 Fax 09 480 8865</p> <p>The closing date for all applications is 30 April.</p> <p>For more details on the trust and its activities visit our website: www.projectcrimson.org.nz</p>
<p>Project Crimson Trust</p> <p>Guidelines for Applicants</p> <p>Carter Holt Harvey in partnership with the Department of Conservation</p>	 <p>PROJECT / CRIMSON</p> <p><i>Protecting Pohangakona o Kaitiaki</i></p> <p>Project Crimson Trust</p>

6.5 Maintenance Budget and Proposed Development Costings

Maintenance

Operation	Actual Costs : 1992 - 1999
Grounds Maintenance	\$5,306.64
Maintenance	\$3,687.85
Mowing	\$16,551.30
Surrounds Maintenance	\$2,185.50
Total	\$27,731.29
Yearly Average	\$3,466.41

Proposed Developments

	Estimated Costs Total	Additional Maintenance	Depreciation Costs
Signage	\$2,000.00	\$100.00	\$100.00
Play equipment	\$8,000.00	\$400.00	\$400.00
Fencing	\$1,000.00	\$50.00	\$50.00
Cricket wicket	\$4,000.00	\$200.00	\$0.00
Tree planting	\$2,000.00	\$100.00	\$0.00
Seating	\$1,000.00	\$50.00	\$50.00
Prepare & seal entrance & carpark	\$50,000.00	\$2,500.00	\$1,000.00
Total	\$68,000.00	\$3,400.00	\$1,600.00

Programmed Costs Developed Over Ten Years

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Capital	\$200	\$2,000	\$2,000	\$8,000	\$4,000	\$0	\$25,000	\$0	\$0	\$25,000	\$0
Depreciation Increase	\$0	\$5	\$52	\$99	\$287	\$381	\$381	\$969	\$969	\$969	\$1,557
Maintenance	\$3,466	\$3,471	\$3,518	\$3,565	\$3,753	\$3,847	\$3,847	\$3,847	\$4,435	\$4,435	\$5,023