PROPOSED LIMESTONE EXTRACTION: RESERVE C39584
COCKBURN ROAD, HENDERSON

CLUB HEAD AUSTRALIA

Report and Recommendations
of the
Environmental Protection Authority

Environmental Protection Authority
Perth, Western Australia

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Club Head Australia has submitted a proposal to the City of Cockburn to extract 400 000 tonnes of limestone from Reserve C39584. The proposal includes plans for the quarried area to be recontoured and rehabilitated to an 18 hole golf course, funded by the sale of the limestone.

Reserve C39584 is located on Cockburn Road, Henderson. The Reserve is situated within System 6 Report recommendation area M92, and is part of the proposed Beeliar Regional Park.

In considering the proposal by Club Head Australia, the Environmental Protection Authority determined that the proposal would be formally assessed as a Notice of Intent (NOI) under Part IV of the Environmental Protection Act 1986.

This assessment report was prepared following consideration of the NOI and information sought from other government agencies and committees, the City of Cockburn and the Conservation Council of WA.

The Environmental Protection Authority has assessed the proposal as described in the NOI, and considers the major environmental issues to be the impact of the proposal on a) System 6 recommendation area M92; b) the proposed Beeliar Regional Park; and c) native vegetation in the Reserve, in particular the tuart forest. The Authority also considered the availability of limestone in the region.

The Environmental Protection Authority considers that the significance of the impacts of the proposal by Club Head Australia is their cumulative capacity to affect the area rather than their individual impacts. The Authority considers that the cumulative impacts are such that the proposal is environmentally unacceptable.

RECOMMENDATION

The Environmental Protection Authority concludes that the proposal to extract limestone from Reserve C39584 and rehabilitate to a golf course is environmentally unacceptable and recommends that it not proceed.

1. INTRODUCTION

In August 1988, Club Head Australia submitted to the City of Cockburn a proposal to extract limestone from Reserve C39584. The proposal included plans for the quarried area to be recontoured and rehabilitated to a golf course. At the time of submitting the company's proposal to the City of Cockburn, Club Head Australia also referred the proposal to the Environmental Protection Authority to determine the environmental acceptability of the proposal.

Reserve C39584 is located on Cockburn Road, Henderson. The Reserve is situated within System 6 Report recommendation area M92, and is part of the proposed Beeliar Regional Park (Figure 1). The area is reserved for Parks and Recreation under the Metropolitan Region Scheme.

In September 1986, Reserve C39584 was gazetted as a C Class Reserve for Recreation and vested in the City of Cockburn with power to lease for 21 years. The City of Cockburn considers Reserve C39584 to be a suitable site for a golf course and has previously called for expressions of interest for such development.

In considering the proposal by Club Head Australia, the Environmental Protection Authority determined that the proposal would be formally assessed as a Notice of Intent (NOI) under Part IV of the Environmental Protection Act 1986.

2. THE PROPOSAL

The proposal as described in the NOI involves the extraction of 400 000 tonnes of limestone from Reserve C39584. The quarried area would be recontoured and rehabilitated to an 18 hole golf course, funded by the sale of the limestone.

The Notice of Intent includes information on proposed access to the limestone recovery area, on-site drainage, visual impact, noise and dust suppression, fuel storage and intention for rehabilitation. Details on the grassing, reticulation and fertiliser requirements for the golf course are also included in the proposal. The development is to include a car park and facilities for a shop and kiosk, toilets and showers, and maintenance buildings.

3. ENVIRONMENTAL IMPACTS

The Environmental Protection Authority has assessed the proposal as described in the NOI, and considers the major environmental issues to be:

- the impact on System 6 recommendation M92;
- the impact on the proposed Beeliar Regional Park, and
- the impact on native vegetation, in particular the tuart forest.

The Environmental Protection Authority also considered the proposal in terms of the availability of limestone in the region.

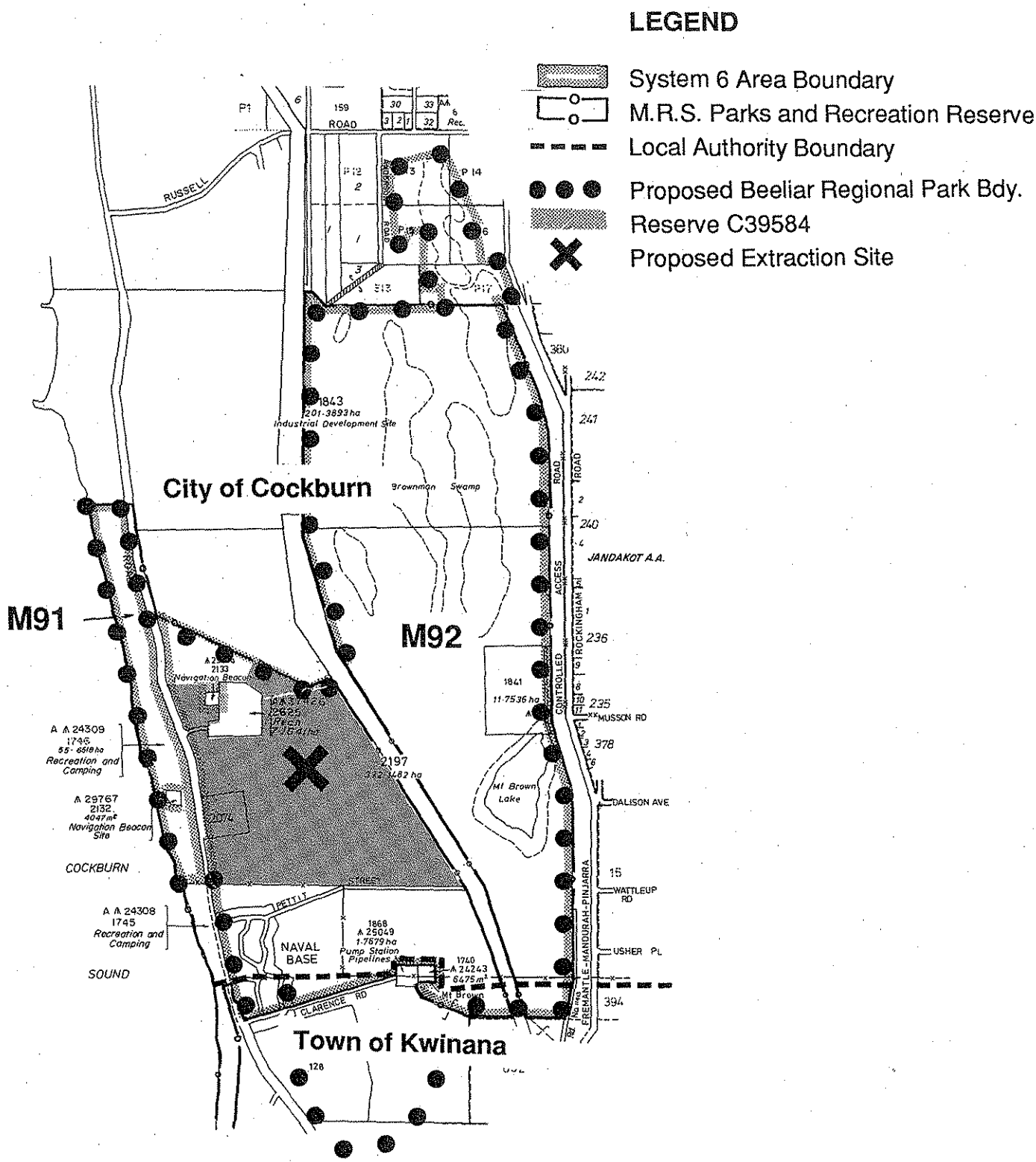

Figure 1 : Approximate location of proposed extraction site

3.1 SYSTEM 6 RECOMMENDATION M92

Reserve C39584 is located within System 6 recommendation area M92 - Cockburn Wetlands, Western Chain. The intent of the System 6 M92 recommendation is for the area to be designated and managed as a Regional Park due to its regional importance in terms of conservation and recreation. Native flora and fauna in the area should be retained as much as possible. Recreational use of the area should be compatible with the intent of the System 6 recommendation.

It is considered important for a vegetation link to be maintained between the vegetation communities which occur in the adjacent System 6 area M91, and the communities which occur in System 6 area M92. Developments planned for Reserve C39584 should thus take into account the importance of this linkage.

The Authority concludes that the proposed extraction of limestone from Reserve C39584 would compromise the regional conservation values of the area. Furthermore, it considers that the clearing of vegetation required for the project is sufficient to endanger the vegetation link between plant communities in System 6 areas M91 and M92.

3.2 PROPOSED BEELIAR REGIONAL PARK

Reserve C39584 is located within the proposed Beeliar Regional Park. The State Government announced its intention to establish the Beeliar Regional Park in 1986, and the Beeliar Regional Park Consultative Committee was established to prepare a draft land use plan for the park.

The Environmental Protection Authority sought comments from the Beeliar Regional Park Consultative Committee on the proposal for Reserve C39584 (Appendix 1). The Committee noted two land use decisions in their draft land use plan which would mitigate against the proposal in its present location. These are:

1. the passive recreation zoning over much of the area; and

2. the location of a Controlled Access Highway (the Cockburn Road Deviation) through the northern half of the golf course.

The Committee considers that limestone extraction would need to be undertaken in conjunction with the construction of the proposed Controlled Access Highway, and that it would need to be demonstrated that final levels after limestone removal would not seriously degrade landscape values of the Beeliar Regional Park.

The Committee suggested that other options for a golf course site be evaluated including public (particularly degraded areas) and private lands. The Committee considers that other areas within the proposed Beeliar Regional Park could provide a suitable site for a golf course to service community needs.

The Authority concludes that the proposed extraction of limestone and the proposed siting of the golf course in Reserve C39584 would compromise the recreational and landscape values of this area of the proposed Beeliar Regional Park.

3.3 IMPACT ON NATIVE VEGETATION COMMUNITIES

Reserve C39584 has limestone near the surface and the ridge is covered by open heath. The area carries an upper storey of Banksia with occasional jarrah and limestone marlock, and an understorey of woody shrubs. The eastern part of the Reserve comprises woodland of tuart forest.

At the Authority's request, the Department of Conservation and Land Management (CALM) undertook a survey of the environmental quality of the vegetation in Reserve C39584 (Appendix 2). Following this survey CALM advised the Authority that the area is typical of the Cottesloe Complex - Central and South in terms of landform and vegetation and is relatively undisturbed. The Reserve shows little evidence of dieback disease and has not been degraded by recent fires.

Although Reserve C39584 has been subject to some public mis-use, particularly along the up-slope margin off Cockburn Road, CALM advised that the area generally has high flora values.

CALM further advised that while improved moisture and nutrient relations associated with the golf course would promote plant growth, increased access and soil moisture content may increase the risk of the introduction, spread and severity of dieback disease if parkland clearing of natural areas is undertaken. E. marginata and Banksia sp. would be particularly at risk.

As a general principle, vegetation is harmed by salt air. On-shore winds close to the coast carry salt and can reduce the height of vegetation. In the Cockburn area the limestone ridge to the east of Cockburn Road shelters from the salt wind the vegetation to the east of the ridge. The increased exposure of the tuart forest to salt wind as a result of the proposed development for Reserve C39584 could increase the effect of the salt on the foliage of the trees, causing them to die back.

The Environmental Protection Authority concludes that the proposed limestone extraction and development of the golf course on Reserve C39584 would affect the native vegetation of the Reserve, and adjacent reserved land, and could thus reduce the environmental quality of the area.

3.4 AVAILABILITY OF LIMESTONE RESOURCE

The State Planning Commission's draft Basic Raw Materials Resource Protection Strategy (November 1987) shows Reserve C39584 to be a part of the limestone resource which extends from Kwinana northwards to Spearwood (ie Yangebup Road). However, it is not within the area designated by the State Planning Commission as a key resource and does not contain high grade cement limestone. The quality of limestone in Reserve C39584 is not considered to be in short supply.

Furthermore, the draft Statement of Planning Policy for Basic Raw Materials (paragraph 3.3.4) states that extraction on reserved land is to be discouraged in the first instance and should only be permitted when considered to be in the community interest and/or when supplies are otherwise unavailable.

The Environmental Protection Authority considers that in the context of the SPC's draft Basic Raw Materials Protection Strategy and Policy that the need to extract limestone from Reserve C39584 has not been demonstrated.

4. CONCLUSION

After consideration of the NOI and information sought from other government agencies, the City of Cockburn and the Conservation Council of WA, the Environmental Protection Authority has concluded that the proposal by Club Head Australia to extract 400 000 tonnes of limestone from Reserve C39584 and rehabilitation to a golf course is environmentally unacceptable.

The Environmental Protection Authority considers that environmentally acceptable alternative sites for a golf course to service community needs may exist within the Cockburn area. Such sites could include areas within the proposed Beeliar Regional Park, particularly degraded public areas or areas of private land.

RECOMMENDATION

The Environmental Protection Authority concludes that the proposal to extract limestone from Reserve C39584 and rehabilitate to a golf course is environmentally unacceptable and recommends that it not proceed.

APPENDIX 1

COMMENTS FROM THE BEELIAR REGIONAL PARK CONSULTATIVE COMMITTEE

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

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Enquiries: D Haswell
Phone: 364 0717

ENVIRONMENTAL PROTECTION AUTHORITY
29 AUG 1988
File No. 67/88 Initials FK

Mr R Sippe
A/Director
Evaluation Division
Environmental Protection Authority
1 Mount Street
PERTH WA 6000

Dear Sir

PROPOSED GOLF COURSE : RESERVE C39584
COCKBURN ROAD, HENDERSON

PP23

I refer to your letter of 12 August 1988.

The Beeliar Regional Park Consultative Committee met on Monday 22 August 1988 to discuss the issue. In doing so the Committee again endorsed the **draft** Landuse Plan of Beeliar Regional Park and the relevent sections of the Planning Study concerning the area. These documents were prepared by the State Planning Commission to provide a framework for the subsequent preparation of a management plan by the Co-ordinating Agency. In particular the Committee noted that the following landuse decisions would mitigate against the golf course proposal in its present location:-

1. the passive recreation zoning over much of the area; and

2. the location of a Controlled Access Highway (the Cockburn Road Deviation) through the northern half of the golf course.

The Beeliar Regional Park Consultative Committee notes the intention of the Cockburn City Council and the Kwinana Town Council to site a golf course in the area to service community needs. We therefore suggest that other options be evaluated including public (particularly degraded areas) and private lands. One alternative is an area south of the proposed Highway Deviation but west of the limestone ridgeline within Beeliar Regional Park and contiguous with other public and private lands (ALCOA Australia Pty Ltd) outside Beeliar Regional Park to the south of Mount Brown (see attached Plan).

020551 INFO

The Committee supports a golf course in this location provided that:-

1. a vegetation linkage is maintained from the eastern wetlands through to the coastal heaths. This would mean (i) the conservation management of natural areas between fairways so that values are maintained or enhanced where necessary and (ii) the restriction of plant species established anywhere on the golf course to those that are endemic to the area.

2. a system allowing east/west access for the public enjoyment of Beeliar Regional Park is established and maintained by the proponents;

3. the proponents can demonstrate that water abstraction for course reticulation will not degrade water quantity, quality or alter wetland levels within the Beeliar Regional Park; and

4. limestone extraction is undertaken in conjunction with the construction of the proposed Controlled Access Highway. The proponents should provide plans showing final levels after limetone removal that do not seriously degrade landscape values of Beeliar Regional Park.

The Beeliar Regional Park Consultative Committee would be pleased to advise on environmental criteria addressing items (3) and (4) above.

Yours faithfully

D A Haswell
CHAIRMAN
BEELIAR REGIONAL PARK
CONSULTATIVE COMMITTEE

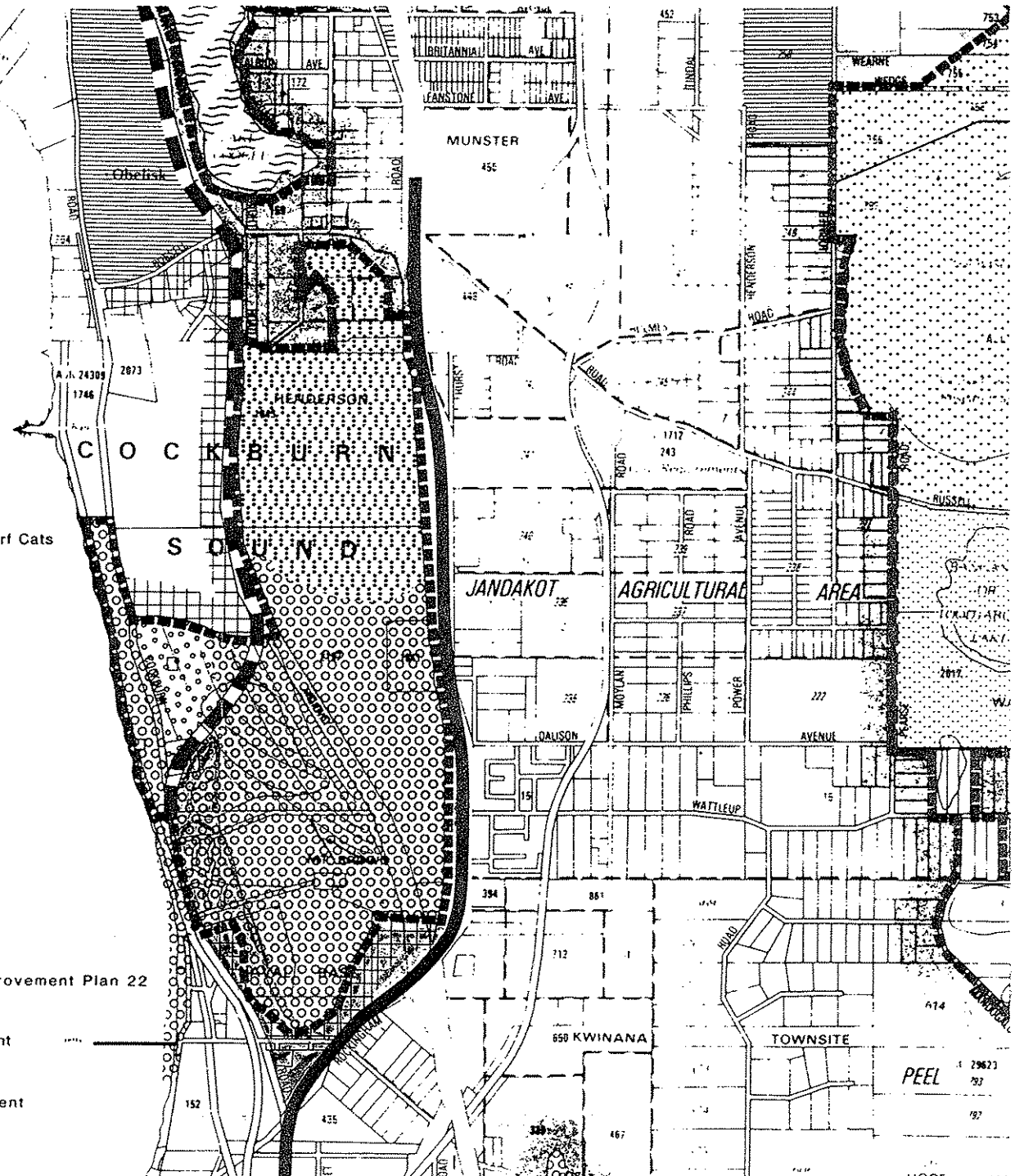
24 August 1988

Proposed Golf Course

Alternative area for Golf Course location

LAND USES WITHIN THE PARK

- Recreation – Leisure & Sports
- Recreation – Lake Surface i.e. Boating, Sailing/Surf Cats
- Recreation – Passive
- Natural Environment Uses
- Natural Environment – Wildlife Management
- Natural Environment – Education
- Special Management Area – Pollution Control
- Urban
- Potential Uses Being Investigated Under Improvement Plan 22
- Controlled Access Highway – Suggested Alignment
- Important Regional Road – Suggested Alignment



APPENDIX 2

ADVICE FROM THE DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

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Enquiries: D Haswell
Phone: 364 0717

Mr R Sippe
A/Director
Evaluation Division
Environmental Protection Authority
1 Mount Street
PERTH WA 6000

Dear Sir

PROPOSED GOLF COURSE : RESERVE C39584
COCKBURN ROAD, HENDERSON

I acknowledge receipt of you letter of 12 August 1988 and attachments from the proponents (Club Head Australia) and the Department of Land Administration. The area was inspected on Wednesday 17 August 1988 and my comments are as follows:-

Environmental Quality. The area is typical of the Cottesloe Complex - Central and South in terms of landform and vegetation (Anon 1980 ; Havel 1968) and is relatively undisturbed. Environmental degradation has occurred principally from Cockburn Road with heavy rabbit infestation, the intrusion of noxious weeds, rubbish dumping and the siting of a partially cleared SEC easement. Other significant disturbances noticed was a cleared aeromodelling circuit (ca. 1 hectare), an occupied feral beehive site and 4 wheel drive tracks. The area does not appear to have been burnt by wildlife for some years ; there was evidence of isolated Banksia sp. deaths associated with disturbance but it is not possible to link these observations with the presence of Phytopthora cinnamoii (jarrah dieback disease).

Impact of Fairway Clearing and Management on Adjacent Woodlands and Open Forests. The regular watering and fertilizer application on grassed areas will impact upon the health and vigor of natural vegetation fringing the fairways. On the positive side improved moisture and nutrient relations will promote plant growth ; alternatively increased access and soil moisture content may increase the risk of the introduction spread and severity of dieback disease (E. marginata ; Banksia sp. particularly at risk) if parkland clearing of natural areas is undertaken.

General Comments

Although Reserve C 39584 has been subject to some public mis-use, the area generally has high flora values. I do not agree with the proponents comment that "the existing environment is degraded coastal heath." Except for the small cleared aeromodelling area, most disturbance is confined to the upslope margin off Cockburn Road. The fact that the Reserve shows little evidence of dieback disease and has not been degraded by recent fire enhances the biological quality of the area.

Fauna values were not assessed because of the short appraisal time. However rabbit infestations are likely to displace some populations of small herbivorous native mammals but only again immediately off Cockburn Road. Invertebrate and avifauna population are probably intact.

The proponant claims that "visual impact will be virtually nil." Although I have not sighted the Earthmoving Plans, limestone yielding hills are clearly visible from Cockburn Road.

Syd Shea.

Syd Shea
EXECUTVIE DIRECTOR
per .....

18 August 1988

REFERENCE

1. Anon (1980). Atlas of Natural Resources Darling System Western Australia. Explanatory text. Department of Conservation and Environment Western Australia.

2. Havel, J.J. (1968). The potential of the northern Swan Coastal Plain for Pinus pinaster Ait. plantation. Bull. for Dept. W. Aust. 76.