



COMMONWEALTH OF AUSTRALIA

**JOINT PARLIAMENTARY
COMMITTEE**

on

PUBLIC WORKS

Reference: Implementation of rockfall risk reduction strategies on Christmas Island

CHRISTMAS ISLAND

Thursday, 11 July 1996

OFFICIAL HANSARD REPORT

CANBERRA

WITNESSES

**BATE, Mr Brian Gilbert, Senior Architect, Works Australia, 207 Adelaide Terrace,
East Perth, Western Australia 6004 3**

**BAYNES, Dr Frederick John, Senior Engineering Geologist, Golder Associates Pty
Ltd, 441 Vincent Street, West Leederville, Western Australia 6007 3**

**CHAN, Mr Boo Hwa, President, Union of Christmas Island Workers, Poon Saan
Road, Poon Saan, Christmas Island, Indian Ocean 6798143**

**CHILVERS, Ms Merrilyn, Acting Administrator—Christmas Island, Christmas
Island Administration, Lower Administration Building, Christmas Island 3**

**EDWARDS, Mr Bryan Joseph, Civil Engineer, Works Australia, Site Office,
Canberra Place, Christmas Island 3**

**FRANKLIN, Mr Bruce, Project Manager, Works Australia, 207 Adelaide Terrace,
East Perth, Western Australia 6004 3**

**HART, Mr Roger Ian, Rehabilitation Officer, Australian Nature Conservation
Agency, Drumsite, Christmas Island 6798236**

**LAYTON, Mr Richard Edward Stacey, Senior Architect, Troppo Architects Pty Ltd,
31 Lindsay Street, Darwin, Northern Territory 3**

**LOW, Mr Jeffrey, Executive Member, Union of Christmas Island Workers, Poon
Saan Road, Poon Saan, Christmas Island, Indian Ocean 6798143**

**McLANE, Mr David Charles, General Secretary, Union of Christmas Island
Workers, Poon Saan Road, Poon Saan, Christmas Island, Indian Ocean 6798143**

**MOORE, Mr Hugh Malcolm, Director, Infrastructure Section, Territories Office,
Department of Environment, Sport and Territories, 25 Moore Street, Canberra City,
Australian Capital Territory 2601 3**

**NELLIGAN, Mr Ian Joseph, Construction Manager—Christmas Island, Works
Australia, Upper Administration Christmas Island, Indian Ocean 6798 3**

**PAYNE, Mr Russell David, Vice-President, Christmas Island Chamber of Commerce,
c/- Xmas Island Surveying Co Pty Ltd, Club Road Settlement, Christmas Island,
Indian Ocean 6798182**

**RUMPF, Dr Holger, Environment Officer, Australian Nature Conservation Agency,
Drumsite, Christmas Island 6798236**

SMOLDERS, Councillor Andrew, Shire President, Christmas Island Shire Council,

PO Box 63, Christmas Island, Indian Ocean 6798171

**TAN, Mr Won Kak, Chairman, Christmas Island Chamber of Commerce, Shop 1
and 2, Block 409, Kampong, Christmas Island, Indian Ocean 6798182**

**TURNER, Mr Edward, Vice-President, Christmas Island Chamber of Commerce, c/-
C1 Hardware, Poon Saan Road, Poon Saan, Christmas Island, Indian Ocean 6798182**

**WILSON, Mr Andrew William, Commodore, Christmas Island Boat Club, Flying
Fish Cove, Kampong, PO Box 414, Christmas Island 6798207**

**WOODMORE, Mr Frank, Managing Director, F.P. Woodmore Pty Ltd, PO Box 595,
Christmas Island, Indian Ocean 6798196**

JOINT COMMITTEE ON PUBLIC WORKS

Implementation of rockfall risk reduction strategies on Christmas Island

Christmas Island

Thursday, 11 July 1996

Present

Committee members

Mr Andrew (Chair)

Senator CalvertMr Richard Evans

Senator FergusonMr Forrest

Mr Ted Grace

Mr Hatton

Mr Hollis

The committee met at 9.00 a.m.

Mr Andrew took the chair.

CHAIR—I declare open this public hearing into the implementation of rockfall risk reduction strategies at Christmas Island. I am pleased to have the opportunity to be associated with this public hearing and to welcome all of those who are here either as witnesses or as part of the gallery. I am pleased that this opportunity has been presented to this recently elected Public Works Committee.

This is a rather unique hearing in that, to a degree that the Public Works Committee has rarely seen before, this inquiry will involve dealing with a number of intangible issues and a number of speculative issues and will be making what will largely be an assessment of risk.

The hearing has had an extended history. The project was originally referred to the previous Public Works Committee for consideration and report to the parliament by the Executive Council on 20 December 1995. The previous committee, under the chairmanship of my vice-chairman, Mr Hollis, planned to inspect the rockfall and a number of related components to the project between 30 January and 3 February this year. As we all know, an election was called shortly before that time and the reference lapsed. It was then referred to the committee by the House of Representatives on 17 June 1996.

In accordance with subsection 17(3) of the Public Works Committee Act 1969, in considering and reporting on a public work, the committee shall have regard to: firstly, the stated purpose of the work and its suitability for that purpose; secondly, the necessity for, or advisability of, carrying out the work; thirdly, the most effective use that can be made in the carrying out of the work of the monies to be expended on the work; fourthly, where the work purports to be of a revenue producing character, the amount of revenue that it may reasonably be expected to produce; and, fifthly, the present and prospective public value of the work.

Yesterday, as most of you are aware, the committee inspected the cliff overlooking Flying Fish Cove; a number of buildings in the Kampong; and the site proposed for housing at Poon Saan. The committee also held informal discussions with community representatives. Today the committee will hear evidence from the Department of the Environment, Sport and Territories; Works Australia; the Union of Christmas Island Workers; the Christmas Island Shire Council; F.P. Woodmore Pty Ltd; the Christmas Island Boat Club; the Australian Nature Conservation Agency; and the Christmas Island Chamber of Commerce.

[9.02 a.m.]

BATE, Mr Brian Gilbert, Senior Architect, Works Australia, 207 Adelaide Terrace, East Perth, Western Australia 6004

BAYNES, Dr Frederick John, Senior Engineering Geologist, Golder Associates Pty Ltd, 441 Vincent Street, West Leederville, Western Australia 6007

CHILVERS, Ms Merrilyn, Acting Administrator—Christmas Island, Christmas Island Administration, Lower Administration Building, Christmas Island

EDWARDS, Mr Bryan Joseph, Civil Engineer, Works Australia, Site Office, Canberra Place, Christmas Island

FRANKLIN, Mr Bruce, Project Manager, Works Australia, 207 Adelaide Terrace, East Perth, Western Australia 6004

LAYTON, Mr Richard Edward Stacey, Senior Architect, Troppo Architects Pty Ltd, 31 Lindsay Street, Darwin, Northern Territory

MOORE, Mr Hugh Malcolm, Director, Infrastructure Section, Territories Office, Department of Environment, Sport and Territories, 25 Moore Street, Canberra City, Australian Capital Territory 2601

NELLIGAN, Mr Ian Joseph, Construction Manager—Christmas Island, Works Australia, Upper Administration Christmas Island, Indian Ocean 6798

CHAIR—Would you please state the capacities in which you appear before the committee.

Dr Baynes—I am here to give evidence on the rockfall risk.

CHAIR—Perhaps you could elaborate a little on the capacity in which you appear, since that was a very modest introduction.

Dr Baynes—I am a chartered geologist with 20 years experience in dealing with the investigation of landslides and rockfalls. I have been involved in a number of studies similar to this, and I am currently a member of the Australian Geomechanics Society, assessing landslide risk.

Mr Moore—I am the Director of the Infrastructure Section for the Territories Office in the Department of the Environment, Sport and Territories. I am here to assist the committee in presenting evidence on which they can make a decision.

Mr Nelligan—I have been on the island since the start of the rebuilding program,

acting in the capacity of construction manager. My background is architecture. I have a Bachelor of Architecture degree, and I am here to assist.

Mr Layton—I am an architect with Troppo Architects, working for Works Australia, particularly in relation to the master planning of houses on a site in the Poon Saan area.

CHAIR—Thank you. The committee has received a submission from the Department of the Environment, Sport and Territories dated July 1996, a supplementary submission dated January 1996, a letter from the Attorney-General's Department dated 5 October 1995, a report from Golder Associates dated October 1995, the curriculum vitae of Dr Fred Baynes, a review of the Golder report by Mr David Stapledon dated 11 October 1995 and a summary of strategies prepared by the department. Do you wish to propose any amendment?

Mr Moore—No, Mr Chairman.

CHAIR—It is proposed that the submission and the associated documents be received, taken as read and incorporated in the transcript of evidence. Do members have any objections? There being no objection, it is so ordered.

The documents read as follows—

CHAIR—Would a representative of the Department of the Environment, Sport and Territories now read a summary statement please.

Mr Moore—Chair, members of the Parliamentary Standing Committee on Public Works, on behalf of the Executive Director of the Territories Office, Ms Sema Varova, I would like to introduce the department's submission on this matter. You will note the submission has been presented jointly by the Department of the Environment, Sport and Territories, and Works Australia.

To assist the committee, with me today are Ms Merrilyn Chilvers, the Acting Administrator for Christmas Island; Works Australia representatives Mr Bruce Franklin, Mr Brian Bate and Mr Ian Nelligan; Dr Fred Baynes from Golder Associates, our expert geological consultants; and Mr Richard Layton from Troppo Architects, who have provided architectural design input.

The background to the risk of rockfall on Christmas Island is well documented in the statement of evidence. There have been many recorded instances of rockfalls over the past hundred years of settlement, some of which have damaged property, but apparently there has been no serious injury to persons. The problem is not a new one so the question to ask is: why has it not been addressed before? To an extent it has. There is some evidence of earlier reports on the issue but none leading to much significant action. I can only speculate on why this was the situation before the Territories Office became involved. It is possible that the frequent turnover of management staff could have been a factor.

It is certainly curious that blocks 408 and 412 were constructed at the base of the cliffs, apparently without detailed assessment of the risks of rockfall in relation to persons and property. While the problem is not new, what is new is the level of investigation and analysis that has been undertaken. When the Territories Office became aware of the issue, at the inception of the Christmas Island rebuilding program in 1992, a firm of geologists, Golder Associates Pty Ltd, were commissioned to report on the risk. Their report highlighted some areas of higher risk and the Christmas Island administration took subsequent action, which included closing a restaurant in an area of perceived high risk.

Funds were also set aside within the Christmas Island rebuilding program for the construction of rock safety fences. At this stage there was no specific quantification of the level of risk. There had been no recent significant rockfalls and the views of local residents and others, such as those who patronise the Boat Club, varied widely on how dangerous the situation was and on their level of personal concern. When the 30-tonne boulder fell in February 1995 the then administrator, Mr Dan Gillespie, became most concerned and sought expert advice. Golder were then commissioned to undertake their comprehensive landslide risk assessment which Dr Fred Baynes can explain to the committee.

Following receipt of the Golder report in December 1995 the former government referred proposals to the Public Works Committee to relocate affected residents and to construct rockfall defensive measures. At that time, a January 1996 statement of evidence related to a proposed package costing over \$20 million. The package included a range of alternatives in relation to the relocation of residents into medium and high density housing in the Kampong and Poon Saan areas, as well as the construction of rockfall barriers.

Since the preparation of the 1996 statement of evidence, Works Australia commissioned additional risk evaluation analysis in relation to the range of alternative strategies that could be undertaken. Dr Fred Baynes carried out this work. The final results of this analysis have been incorporated into the July 1996 statement of evidence to the PWC. As a result, the statement of evidence which the committee is now considering does not recommend a particular alternative but instead seeks the committee's recommendation as to which is the most appropriate strategy. The task is not an easy one as a decision has to be made in relation to issues of risk where absolute certainty is not possible and where the social and financial consequences of the decision need careful consideration.

In terms of funding for the various strategies, I would like to draw the committee's attention to the summary of strategies document. This document indicates that no additional funds will be required for strategies 1 and 2, and only \$164,000 additional funding for strategy 3. Sufficient funds could be made available from within stage 1 of the Christmas Island rebuilding program to implement each of these strategies, none of which require the relocation of residents. Strategies 4 and 5 involve relocation of residents from block 408, or block 408 and 412 in the Kampong. As indicated in the statement of evidence, there is a range of options available as to where and how this could be achieved. Additional funds which would be required to implement these options range from \$5.1 million to \$20.7 million. Option 1 of strategies 4 and 5 is not favoured by the Territories Office due to the present lack of space in the Kampong area for parking and public amenity.

I would like to make the point that Christmas Island is unusual in terms of the Commonwealth's responsibilities. It is wholly dependent on the Commonwealth for funding for all three tiers of government. It is also unusual in terms of the problems facing the community, such as housing, as highlighted recently by the Commonwealth Grants Commission. It is important that a consistent response is made by the Commonwealth across all its responsibilities in relation to the territory.

The Territories Office invites the PWC to make recommendations as to the most appropriate longer-term solution to this unique problem. Through this hearing the committee can seek detailed explanation from the expert witnesses and members of the affected community so as to recommend a solution which meets the Commonwealth's duty of care responsibilities and is in keeping with the needs of the affected people. I now hand over to Ms Merylyn Chilvers, who will provide the committee with some introductory remarks from her perspective as the Christmas Island Administrator.

Ms Chilvers—Mr Chairman, members of the committee, I would just like to reiterate some of Hugh's remarks in terms of this being an issue that has not only technical problems that require technical solutions. It also highlights a social problem here on Christmas Island in relation to the pressure on housing. This is an unusual place in that there is very little rental housing available in the private market and there are high pressures on the Commonwealth to provide public housing and also housing for its employees.

When Dr Baynes has been here carrying out his investigations he has talked widely with the affected community, and there have been public meetings so that the community has been made aware of the problem. This has resulted in a high level of concern by some residents. I think the committee probably realised yesterday that it is not an even concern—some people are perhaps more fatalistic; some people relate it more to their other housing issues. So I do not think the community itself has one answer in mind.

I think also there is some difficulty in grasping that concept of risk, whether it is expressed in qualitative terms such as low, medium or high, or in the more quantitative terms that have now been presented to us. If I tried to explain to someone the difference between one in 50,000 and one in 500,000, when that could still happen tomorrow, I find that very difficult.

I would like to emphasise that 403 is being refurbished, not as a relocation option but to relieve the pressure on our waiting list for public housing. So that if in fact there was a decision to relocate families from 408 into 403 in the short term, we still need to look for alternative housing to relieve the pressure on our public housing.

Also, as well as the short-term issue of do we continue to put our tenants into 408 when we know there is a risk, there is the longer term issue of do we continue to refurbish those units, even when rockfall defences have been constructed, if that is the decision. When the risk has been minimised, do we continue to keep extending the life of those buildings? Do we want to think that that is the standard of housing that we provide both for our employees and for our public housing tenants? Those are all the comments I would like to make at the moment.

CHAIR—Does any other member of the panel from the department wish to comment at this stage? I will then open the proceedings to questions of the department of territories. Mr Moore, you said that you thought it was 'curious that blocks 408 and 412 were constructed at the base of the cliffs, apparently without detailed assessment of the risks of rockfall in relation to persons and property'. I would have said that was a very generous remark and that in fact it is scandalous and reflects very poorly on the department and—if not on the present administration—on former administrations of the department. As I understood from yesterday's inspection, there was not even a report of some of the rocks that fell close to those buildings.

Mr Moore—I would like to make a comment in response to that. The buildings were constructed by the mining company. It is true that it was a partially Commonwealth owned mining company, but that was certainly well before the current federal Department of the Environment, Sport and Territories assumed responsibility. But I am quite happy to accept Commonwealth guilt for not properly evaluating the situation before the buildings were constructed.

My comment was really to the point that, if an approach had been followed in line with the types of investigations that we undertook when we undertook the rebuilding program in 1992, we probably would not have built them there. That was not the approach that was taken by the then mining company. That was all I was trying to make a point about.

CHAIR—But surely the refurbishment of them in 1992 represents something of a scandal, given that I recall being part of that inspection and being reassured that the over \$1 million that was being spent was money well spent in refurbishing them without any reference to the potential hazard posed by the rockfall.

Mr Moore—The Golder's report, which we received in 1992, in relation to the rockfall risk situation was taken into account when decisions were made to refurbish those buildings. It is very easy to be wise in hindsight, particularly when we now have the detailed evaluation of relative risk from Dr Baynes which identifies 408 in fairly specific quantitative terms and 412 as at risk.

The evidence that we had in front of us in 1992 when we took the decision with the advice of Works Australia—and which was endorsed after consideration by the then administrator of the island after looking at the possibilities for construction of much needed housing—was in the form of a report which identified three levels of risk and strategies that we could take in relation to the rockfall hazards. I will just restate them briefly here.

They provided what was described as a minimal risk option, which was to cut back the cliffs. They indicated that that would cost some hundreds of millions of dollars. They provided a high risk option, which was to do nothing, which we at the time decided was not an appropriate strategy. But I must stress: they did not at any point in time quantify what was minimal and what was high.

In the middle they also recommended a low risk option, which was the option that we, on the advice of Works Australia, decided to pursue. That low risk option recommended relocating the Boat Club and the Fishermen's Landing Restaurant and the erection of short- to medium-term steel cable rockfall protection fences behind the potentially affected buildings. It also recommended the planting of trees and undertaking some monitoring.

When we refurbished blocks 408 and 412, we put in place measures to effect that low risk option. So it was in the context at that point in time that we in the Territories Office believed we were undertaking an appropriate response in accord with the documentation that was then available to us in relation to risk. The action we took was that we did shut down the Fishermen's Landing Restaurant. The then administration then and subsequently has sought to alert and do something about the Boat Club situation. But that has been resisted by the Boat Club itself. We also undertook with ANCA some planting of trees.

But, in keeping with the tone of this report, action was not taken to immediately do anything and it was believed that we could still refurbish blocks 408 and 412 and take these low risk option actions and undertake an appropriate response to the situation. It was only later when the 30 tonne boulder fell down that we became more alert to the problem and decided that we would take further careful investigation, which we then commissioned Fred Baynes to undertake. We have now arrived at this very detailed assessment of probability.

If we had not taken that detailed response and got that detailed information, we would still be in a position where we had the original report and we could have, within the existing rebuilding funding, proceeded along the path of that report and been completely clear in terms of having satisfied our obligations that we had met the requirements that were put in front of us to ensure that there was a low risk and still refurbish the blocks.

CHAIR—So, prior to the work that had been done by Dr Baynes, as far as you know there was no assessment made of the risk of the overhanging rock and particularly the hazard that Dr Baynes pointed out to us yesterday?

Mr Moore—There was an assessment of the situation behind 408. The response was that it should be monitored and that a rockfall defensive fence ought to be put in place. We had funding put aside for that purpose. It did not get a guernsey in the first highest priority rebuilding program items, but it was scheduled. If the rock had not fallen a year ago, it is quite possible that by now we would have probably had the fence in place.

When the rock fell, we asked for the further studies and did nothing until we had advice from Dr Fred Baynes as to what we should do. His advice was that, at that point in time, it did not warrant an immediate emergency response to evacuate people and that it was appropriate we consider the evidence he presented and come up with a measured response to the problem. So we took his advice. As soon as he became involved a year or so ago, we took his advice as to how we should act and put on hold the construction of the rockfall fence.

Mr HOLLIS—Mr Moore, you very generously accepted Commonwealth guilt

there for sins of the past. I think, again, that you or the department are trying to pass the buck onto this committee and I think that you are trying to put onto this committee a role that the parliament has not put on this committee itself. If you heard what the chairman read out in his opening statement, you would know that our role is to recommend.

You are the experts, you are paid the big bickies to come up with the recommendations, not us. As far as I am concerned, we are not going to play Russian roulette on this project and try to find the correct solution. You are the experts, you have got expert assistance. It is up to you to recommend to us and we will then in turn recommend to the government—whether they accept the recommendation or not. In a way, you may feel you have had your fingers burnt by past mistakes. I was part of the committee of 1992. I still feel that we were not given all the evidence that we should have been given. You say, ‘Oh, well, you were given the evidence that was available at that time.’ I have got my doubts about that.

I am just one member of the committee, but there is no way that I see this committee’s role as that of selecting between four or five options. In all the years I have been involved with this committee—close to 10 years—we have never had that option put to us before, at any hearing. I would be very surprised if my fellow committee members took up your kind invitation to make the recommendation. We will have a look at the various options, take your recommendation and decide whether it meets the guidelines that the chairman outlined at the beginning of the hearing. I do not know whether you want to comment on that or not.

Mr Moore—I might. I appreciated, when we put this approach together, that it is an unusual situation. We sought to get approval and endorsement for our approach. We discussed it with our minister and we also discussed it with the secretary of the committee. I do understand that it is not totally unique because of the situation, according to the advice I received from the secretary of the committee. In the case of the quarantine station, the committee was apparently given a choice as to which location the quarantine station would be on: Cocos, Christmas or Norfolk, I think—I am not an expert on the matter. But certainly the unusualness of this was not something that we went into lightly. I guess all I can say is that we thought we were doing the right thing and it is up to you to respond to our request.

Mr HOLLIS—I must say that the quarantine station was way before my time, so I do not know anything about that.

Mr Moore—And mine, too, I might add.

Senator CALVERT—There is a big difference between making a choice about where you are going to put a quarantine station and deciding on the element of risk. The element of risk is what you are asking us to come up with an answer on. I was very pleased yesterday in the informal discussions we had with the Islamic Council when the

question was put straight to Dr Baynes, 'Would you live there with your family?' He gave what I thought was a straight answer. That is what Mr Hollis is talking about. We want a straight recommendation, taking all the different criteria into account.

I think if you asked each of us, we might all have a different view. Some of us might look at it from the point of view of the cost, some of us who are gamblers might look at it as a probability of risk. You have had the benefit of being here, living here and knowing what goes on. I have got a few questions to ask the expert later about different things he has suggested. I agree with Mr Hollis: we can make a decision on the element of risk, the results of which might backfire on the Commonwealth, only when we have a proper, straightforward joint recommendation from you people who have been dealing with it over a long period of time.

CHAIR—We are about collecting that evidence right now.

Mr HATTON—Could I ask Mr Moore whether the department had available to it when it was making its decisions in 1992 the 21 March 1972 report on rockfall and landslip at the north end of Flying Fish Cove?

Mr Moore—Which one?

Mr HATTON—The 21 March 1972 report. I do not know whether you have that.

Mr Moore—I am not certain which document you are talking about.

CHAIR—The rockfall involved the police Land Rover that was damaged.

Mr HATTON—There was a geologist's report which is quite extensive in terms of the geological problems at the far end above the boatshed. The department provided that to us in response to our query. Were they aware of that report in 1992?

Mr Moore—I was not personally aware of that. I was aware of the May 1992 Golder report which was put together by Golder Associates as a consultancy to Works Australia. I took the recommendations of Works Australia based on the Golder report into account. I am not certain to what extent that Golder report was aware of the 1972 report, but I would be surprised if it was not aware of the 1972 report, because that 1972 report was available within the administration's records. I am pretty certain it would have been taken into account.

Mr HATTON—Two things are fairly clear to me from having looked at that report. Firstly, the geologist working on it did a pretty good job, and it worked out what the core problems were in relation to the slope and cliffs above the entire site. Secondly, in 1972 he had recommended the kind of flexible rock barrier that Dr Fred Baynes has now suggested as one of the options here. It was 1972 when that should have been put in

place behind the boatshed. From the attached pictures that are there—it was a pretty large rockfall in 1972—and when we went to have a look at it yesterday you could see part of the wall being knocked down, so one got no impression of the size of the rockfall behind the boatshed at that point in time.

That would link with simply this: whatever the Golder report said—and I have read that—my impression is that the work done on the refurbishment of 408 and 412 in 1992, if you look at what that report said, that would be enough evidence to give one great pause. The second thing is that a simple inspection of the site in 1992 should have given everyone associated with that great pause. And if you link that with the 1972 report, just further down the end behind the boatshed, I find it quite unbelievable that that refurbishment went ahead, given that there is not much distance between those two events and there was a substantial geological report on the record.

Mr Moore—The only comment I would like to make on that before perhaps handing over to Fred Baynes to make some comment is that the evidence we had at that time did not quantify risk. The subsequent evidence we got which does quantify risk suggests that, notwithstanding that 1972 occurrence at the Boat Club, the risk of fatality at the Boat Club is not in fact at a level of risk where you would be concerned now to vacate it, because it is identified in Dr Baynes's report as one in 450,000, which is safer than flying a plane.

It would appear that if we were to take action to do something in a case where it was already as safe as flying in a plane then that could be criticised as a waste of Commonwealth money, notwithstanding that big boulders did come down there. People have been killed on ovals from lightning strike. It does not mean that we then decide that people cannot frequent ovals. Similarly, in the case of the Boat Club, because there was a lightning strike at the Boat Club, or a rockfall, it does not necessarily follow that we need to take that as evidence that the problem is such that we have to do something draconian about it.

This is hindsight because at that point in time we certainly did not have this quantification that Dr Baynes has provided. I think the subsequent quantification does point to the fact that we are now in a situation where we have a lot better evidence of what the actual risk is likely to be, and we are in a better decision making mode than we were at that point in time. It is very difficult, as I said before, to wind back the clock and say, 'No, let us forget everything we have in this book and go back to the evidence we had before in 1992.'

Mr HATTON—It is clear and apparent there is an entire cliff face down the end above the boat shed. That cliff face there; parts of it have come down and other parts of it will come down over time. The 1972 report was entirely clear in terms of the basic geological problems in the wet. When you have a lot of water up the top, because the mud becomes very slippery eventually the boulders are going to roll out of there. So it is not

just a simple case of lightning struck once here, and it may not strike again. The report is entirely clear that we are going to continue to have problems there, and that was not addressed in 1972. I do not think it is a hindsight situation, I think it is a quite clear foresight situation, in terms of directly looking at what that problem is.

Obviously the problem was not addressed in 1972, even though there were direct recommendations to the island manager then, and it also was not addressed in 1992. We are still in a situation in 1996 where we are trying to make determinations about it. I would not think you would have to base it on just a straight risk assessment thing. But when this geologist looked at it, and when Dr Baynes looked at it, they found quite clearly that there is a massive problem. It is not one that is going to go away, and it is not one that is not going to re-occur. There have not been a lot of people killed previously, but if you look at the size of the boulders that rolled through in 1972 there is a clear and present problem there that has to be addressed, and not just on a question of risk assessment.

Mr Moore—Perhaps I could ask Dr Baynes to make some comment on risk assessment, because that is the issue that we are really moving into. I am not an expert on that.

Dr Baynes—The comment that I think I would like to make, at this stage, is that in my profession I consistently come across instances where the perception of geological problems is not always clearly made, in the first instance, and although there may be reports that indicate that there could be a problem it is only when that problem is clearly communicated to the decision makers that reality strikes home.

So, even though in the past there have been reports made and there has been information available, I like to think that it is now that we have got a map and we can actually see the spatial distribution of the problem, and the relationship of the problem to the community—and also now that we have got some idea of the actual level of risk and some comment by me saying that something has got to be done—that the problem becomes clearer and more apparent. Part of the 1972 report was bound into our 1992 report. I have quoted from it in my report, and I have certainly read it with great interest because it is a very important report.

CHAIR—Did you have a question at this stage, Mr Evans?

Mr RICHARD EVANS—Yes, I do. You said before, Mr Moore, about rockfalls not being reported in the past. I just wonder whether there is any procedure in place now about reporting rockfalls? Is there a set procedure to record rockfalls?

Ms Chilvers—We do not have any formal procedure but certainly we are, through Works Australia, taking note of what has happened. The community, now they are aware of the risk and are interested in it, let us know if there has been a rockfall. We do not have a formal mechanism, but I am confident that it is happening.

Mr RICHARD EVANS—That it will happen or it is happening?

Ms Chilvers—I am confident that in fact we are being told by the community when rocks come down now.

Mr Moore—For example, most recently, before the committee met, we were alerted by Works Australia to a small boulder that came down and actually punched a hole in the back of that heritage building we walked past yesterday. You might have seen that and we got a report from Works Australia on what had caused it. Obviously we are in a heightened alert about rockfall at the moment and it would certainly be appropriate that we put into effect a formal mechanism after this heightened period to make sure that we continue to be alerted to all of the rockfall events.

Ms Chilvers—And we have been looking at formulating an ongoing management strategy whereby we might have someone inspecting the cliff face at regular intervals to monitor changes. We have not put those into place, but we are certainly looking at ways that we can monitor the cliff face and be more aware of changes and potential rockfalls.

Mr RICHARD EVANS—So you anticipate this to be in place soon?

Ms Chilvers—I do not have a firm date.

Mr RICHARD EVANS—The other thing I wanted to ask you about was that, if you did have an incident where a rock or a boulder came down, do you have an emergency plan in place—a contingency or disaster plan.

Ms Chilvers—I am not really sure on that. Perhaps one of the Works Australia people who are here would like to comment on what happened when that boulder came down in 1995. Ian, were you here at the time?

Mr Nelligan—I was here at the time when that large boulder came down behind the bank. It was reported to Works Australia from administration at the time. We contacted our Perth office, which in turn contacted Fred Baynes. It was looked at in terms of the problems that it could cause to the community below that area. Fred advised on the method to remove that rock or to make that area safe, and subsequent action was taken to remove the rock.

Mr RICHARD EVANS—But my extension to that question is: if a boulder did go into 408, is there an emergency plan in place to handle that if there is risk to life or building damage? Is there a management plan in place?

Ms Chilvers—Not that I am aware of, but I notice that Mr Edwards is nodding.

Mr Edwards—Yes, I believe the services you have on the island—the services

such as the fire brigade et cetera—have a disaster plan in place.

CHAIR—Mr Edwards, you are not one of the sworn witnesses.

Ms Chilvers—Would it be possible to have Mr Edwards sworn in?

CHAIR—If the department would like Mr Edwards sworn in, we could arrange that to happen if it is the wish of the administrator.

Ms Chilvers—Yes, if that is possible.

CHAIR—Mr Edwards, would you like the question asked again for the purpose of the *Hansard* record?

Mr Edwards—Yes please.

Mr RICHARD EVANS—I am wondering whether there is a disaster or management plan in place to handle any emergency if a boulder were to hit 408 or 412.

Mr Edwards—I know for a fact that they have a workplace agreement with the Western Australian fire brigade administration. I believe they are in the developmental stage—if not already completed—of a disaster plan for the island and that included training and facilitating along those lines. Going back about eight months ago, I know they had dummy trials at the airport, et cetera. I believe that is the situation. With the coordination of the police force when the cyclone hit last year, there was a strategy in place for cyclone relief, et cetera. But I cannot directly comment on an actual rockfall proviso in that plan.

Mr RICHARD EVANS—So, since 1992 when we had become aware of the danger of these rockfalls, when we had been thinking about moving 408 and 412 and we had been thinking about putting up barriers, we are still actually thinking about putting a management plan in place to monitor any rockfalls. We have not got a management plan in place if we have a disaster or an emergency.

Mr Moore—Can I make a response on that? I am not aware of the detail, nor are the other witnesses here just at this point in time aware of the detailed arrangements for disaster response on Christmas Island. That is a matter which is coordinated by the Australian Federal Police, and I can arrange to provide a written response if you wish to the disaster response arrangements on Christmas Island.

Mr RICHARD EVANS—Fine.

CHAIR—Facetiously I cannot not help observing that if I were on Christmas Island and noticed a hole in the heritage building I would have checked the airline

schedule to see if Mr Forrest had been visiting. I hand over to Mr Forrest now to ask a question.

Mr FORREST—Thank you. Most municipalities in Australia, to follow up on Mr Evans's question, would have a disaster plan. What your response to Mr Evans's question just says to me is that there is really no great imminent risk here at all. Nobody has been motivated to prepare a disaster plan. For example, if a boulder took out that rising sewer main, what are the actions to get that into service within a short period of time? I mean, your response to that question says to me there is really no great inherent risk here at all. So how do you respond to that?

Ms Chilvers—The fact that perhaps we have not formulated responses does not actually change the risk. It is our reaction to it rather than the actual risk, because the risk is what has been quantified by Dr Baynes. The fact that we have not taken what would appear to be appropriate measures does not actually alter the risk that is there.

Mr FORREST—My point is that there has not been enough attention to a high risk to justify the preparation of a disaster plan. To me that says there really is not a major risk here at all. There are possibly some measures we need to take of a minor nature to arrest the problem, but it really is not a major risk. Nobody here on this island is responding in any immediate way to an imminent risk, so—

Mr Moore—Can I just respond? In relation to rockfalls, we have taken the advice of Dr Fred Baynes as to what we ought to do, which is that there is not a need to take immediate action but there is a need to raise awareness of the issue within the community, which has been done, because part of the response to the possibility of rockfalls is that, if people are aware of it, they can make sure that they pay attention when they are in areas of risk or they can avoid them at times when there is heavy rain which, as has been explained to people, is a higher risk period.

In relation to other disaster risk plans, as I have mentioned I will provide a written response, but there are a range of potential disasters on Christmas Island. Rockfalls is only one of them and arguably is less risky, depending on what type of incident might occur, than perhaps a disaster involving fuel supplies, for example, or even a natural disaster involving storm and tempest.

Mr FORREST—Could I ask if there is a disaster plan that everybody knows exactly what to do when there is a risk? I noticed some of these fuel depots around the place. Do those plans exist?

Mr Moore—Again, the witnesses here today are not briefed or across that particular issue, but I am aware that on the fuel side the people who we lease the fuel facilities to, Gaseng Petroleum, have risk strategies in place. They are required to under the legislation, as I understand it—their licensing requirements and so forth.

Mr FORREST—What is the probability of one of those disasters occurring in relation to some of the others?

Mr Moore—We are hoping that it is as little as possible. We are taking all the sorts of preventative actions that you need to take in those situations, such as making sure that all of the infrastructure meets the Australian standards, that the practices that are followed are appropriate and that there are provisions, for example, for firefighting. The various sorts of firefighting equipment have to be available to respond to an incident if it should occur.

Mr FORREST—To get it into context, in the submission before us it has been suggested that the individual risk of fatality per annum in building 408 is something between one in 11,000 and one in 63,000. What is the risk of a fatality if one of the fuel depots here explodes into flame? That was my question. How do those probabilities relate to those in which you already have a disaster plan in place?

Mr Moore—I cannot answer that because I am not an expert on probability.

Dr Baynes—I do not know what the assessed probabilities of an explosion in the fuel depot are.

CHAIR—I guess it is really of academic value, with respect to Mr Forrest. He is trying to ascertain whether we are ready for a disaster in any form as I understood.

Mr FORREST—Mr Moore said something about somebody having a chance of being struck by lightning or a higher chance of being killed in an aircraft. Those are positions in which people have a decision to make: whether they actually take a flight in an aircraft or not. We are talking about people here who are allegedly in an involuntary position where they have no choice. The question of probability was suggested by Mr Moore; it is relevant to the decision we are being asked to make. I am trying to get these probabilities in context with other events that are probably more likely to occur on the island. It is an important question. Travelling in aircraft is completely irrelevant because people who live in the Kampong probably do not make a choice to travel by air. To me an important question is how it fits into everything else that happens on this island.

CHAIR—I am going to ask Mr Grace and Senator Ferguson to question the department. Then I think we ought to draw the attention closer to the whole question of probability as Mr Forrest has indicated and perhaps direct some questions to Dr Baynes about what he sees as the real risk factor.

Mr TED GRACE—I think Mr Forrest has asked my question. I find it absolutely amazing that you are not aware. You people are on the ground here. You are the people I would imagine that the islanders look up to and are seen as the relevant administrators of the island. I am absolutely amazed that you are not aware of any procedures. Mr Evans

asked one of the questions I also had. You are aware of procedures if anything happened with the oil but you are not aware of what to do if a rock hits into 408 for instance, which would be a disaster immediately. There is apparently no procedure yet in place where those unfortunate people would be transported to hospital or immediate help given to them. I just find it amazing.

Ms Chilvers—We do have a St Johns Ambulance service which would be called out.

Mr TED GRACE—Would you just cross your fingers and hope that they get there tomorrow or something like that?

Ms Chilvers—No, we have a properly trained ambulance service staffed by volunteers and so there are procedures in place for that sort of thing. What I was saying is I am not aware of whether we have a document that says, in the event of rockfall, to ring Works Australia to bring geotechnical experts. Obviously—

Mr TED GRACE—Do they have dry runs, for instance, as part of the training?

Ms Chilvers—Yes.

Mr TED GRACE—But prior to that, with all due respect, you told us that you did not know of any procedures in place, am I wrong?

Ms Chilvers—I guess I was just not thinking of that detail. If there was an accident involving injury, you would naturally ring the hospital to get the ambulance.

Mr TED GRACE—The other question that Mr Forrest asked was the probability question, which has been adequately looked at.

Senator FERGUSON—We have heard a lot of people comment on the question of whether or not mistakes have been made in the past. That does not concern me much, as long as they are not repeated and we make the right decisions for the future. In your submission, and in talking about risks, you say:

Golder Associates suggested that a judgement should be formed as to what is an acceptable risk of fatality from rockfall . . .

In the next paragraph you said:

This places the responsibility for judging what is an acceptable risk with the Commonwealth Government.

I would have thought that it is very difficult for governments to decide what is an acceptable risk. In the work that you do in probability, is there a dividing line or a point at

which a risk is acceptable or not acceptable? I am asking Dr Baynes.

Dr Baynes—Normally, when you provide your client with advice, you present some analysis of the risks, but you suggest to the client that he should choose which risk he wants to take responsibility for. I perceive the problem with that to be that the client does not always understand the real nature of the risks involved and, therefore, he cannot make an informed judgment.

Senator FERGUSON—That is the point I am making. You, as an expert in the field, can assess the probabilities and the risks, and then you ask us, who have no expertise in the field, to make the judgment as to what is an acceptable risk and what is not. We need some recommendations from you as to what you think is the level of acceptable risk.

Dr Baynes—I agree that that is a difficulty which has come about, having put the report in.

Senator FERGUSON—Are you prepared to give us an assessment of what you think is an acceptable risk?

Dr Baynes—There is currently some research being done as to what are acceptable levels of risk, taking into account such factors as society's aversion to large numbers of people being killed as opposed to individuals being killed. There is research being carried out by ANCOLD, the Australian National Commission on Large Dams. They have recently published a paper on risk assessment in which they have indicated some idea of what acceptable risks might be deemed to be by society in general. The difficulty is that you have got to form judgments on behalf of the Commonwealth, which is an onerous responsibility.

Senator FERGUSON—The other factor is whether or not anything can be done to reduce that risk factor. In the case of a natural disaster, you cannot do anything about it: a cyclone either happens or it does not. Do you take into account how much you can reduce the risk by the various methods that you have recommended, such as fences, et cetera?

Dr Baynes—The reason for assessing the probabilities is to be able to compare them to some yardstick, and there are yardsticks that you can compare them to. But, behind all that, the numbers are there to present a framework in which you can make sound judgments. For instance, you might make what I think to be a sound judgment that it is important to protect places where people live from a perceived risk.

Senator FERGUSON—Depending on the probability of that risk?

Dr Baynes—Depending on the probability; but you might take into account the fact that you have got an inherent desire to protect places where people live, as well as the

number. So the number is there; but it is not, in my view, the only thing that should be taken into account in forming judgments as to what course of action you should take.

Senator FERGUSON—A lot of emphasis seems to have been placed on the event where a boulder came down in February 1995. How much wetter was that season than previous seasons? Was it an extremely wet season, one that only happens once every 20 or 30 years?

Dr Baynes—I do not believe it was an extremely wet season. It was one of a series of events which occur across the cliff with monotonous regularity.

Senator FERGUSON—When you talk about there being persistently wet weather, is that something that could happen in any one year? It was not because of the wet year?

Dr Baynes—There is a wet season here, in which it is persistently wet.

Senator FERGUSON—But this was not a season that was out of the ordinary.

Dr Baynes—I do not think it was a one in 100 year event or a one in 50 year event, or something like that; no.

Senator CALVERT—Mr Moore, you were telling us in answer to the former chairman that you were asking us to make a decision on the risk assessment. For instance, looking at the golf course, who made the decision to put that fence up, and for what reason?

Mr Moore—I understand that the decision to construct the fence was part of the briefing process which was undertaken to define the scope of works for that particular road, and that it involved a consultative process with the Shire Council and with the Christmas Island administration. I understand that the fence to protect from the possibility of golf balls damaging vehicles or persons was a briefed requirement in that process as a result of strong representations put by both of those parties, but particularly by the Shire Council who had at an earlier stage proposed closing the road altogether because of their concern at the risk of a \$1 million lawsuit type liability from an incident involving a golf ball.

Senator CALVERT—To your knowledge, had any incidents happened?

Mr Moore—Not on Christmas Island, but the issue of shire councils and golf balls is something that has occurred on mainland Australia we understand from what the Shire Council told us.

Senator CALVERT—So the department took the view that, because there was a risk, it made a recommendation and the work was carried out. It never even came to the

Public Works Committee. They can make a decision on that and yet here today, we cannot get a recommendation despite all the evidence that goes back to 1972, and with the extra evidence and supporting recommendations and information from Dr Baynes. If I were to ask you today at the conclusion of this hearing if you would be in a position, given all the information that you have, to make a balanced recommendation to this committee, could you do that?

Mr Moore—I personally would be willing to make a recommendation to the committee, but that is not the strategy that my department and my minister have endorsed to put before the committee.

Senator CALVERT—Do you have any idea how much that fence cost?

Mr Franklin—It cost \$93,000.

Senator FERGUSON—I used to play on a country golf course that hit across three main roads and there are no fences provided. I just wonder where they got their information that a fence was a necessary requirement.

CHAIR—I think that it would be helpful if we drew this back into the whole focus of what we are doing with rockfalls on Christmas Island, rather than golf courses on central York Peninsula. I would appreciate an opportunity to speak more directly to Dr Baynes about what he sees as the risk and the options of eliminating the risk that is threatened to the people on Christmas Island, in order to allow us to make that decision.

I am wondering, Dr Baynes, would it not be possible to identify the boulders that pose a problem above 408 or 412, or even over the yacht club area, and progressively remove those that pose the largest risk and so minimise the hazard that we are currently dealing with?

Dr Baynes—I did think about the possibility of doing that. Having walked all the way around the cliffs and having seen the large numbers of boulders there, I think that it would be an unlimited task. You would never be able to finish it. It would, in itself, pose a great danger to the operators doing it, and that in doing it, you would send a large number of boulders rolling down to the bottom which could cause damage and would certainly impact upon the usage by the community of the area. So, on balance, I do not think that it is an effective way of dealing with the situation.

CHAIR—If that is not an effective way, are there other risks that we need to be aware of that could precipitate a problem? Are vibrations from the phosphate mill, for example, likely to cause further cliff instability, and should we be looking at the operation of the mill, as a result?

Dr Baynes—No, I do not believe so. Vibrations from machinery or, indeed,

explosions out at sea are unlikely to create ground accelerations of a magnitude and duration which would dislodge boulders, in comparison with seismic risk. A minor earthquake is likely to precipitate a rockfall. There is nothing that we can do about that. That is far more likely to precipitate a rockfall than vibration from machinery or explosions out at sea.

CHAIR—And are we in an earthquake risk zone?

Dr Baynes—Everybody is in an earthquake risk zone. It is a matter of relative risk. I believe that the study that we commissioned suggested that Christmas Island was, within the Australian context, in relatively high seismicity and therefore a relatively high risk. I believe that there are more minor earthquakes felt here than in other places in Australia. But as happened at Newcastle, earthquakes happen throughout Australia.

CHAIR—Which means it would not matter what we did to minimise or eliminate the existing risk, the reality is that a seismic event or heavy rainfall is much more likely to cause a disaster than any of the present occupational industrial activity that occurs.

Dr Baynes—Yes, that is correct.

Mr FORREST—Just to follow up on that one: a major earthquake of that nature is likely to cause building damage as well. Perhaps some of the building experts could comment. An earthquake that is of a size to cause a rockfall is probably going to have caused some damage to buildings anyway and possible risk and casualties. Are the buildings we have been looking at designed for any earthquake activity?

Mr Bate—The more recent buildings are designed to take loads which will accommodate the seismic conditions of the type that we are discussing here. But some of the older buildings are designed on load-bearing brickwork which will not take those ground accelerations, so you could get some of the older buildings collapsing in the sort of seismic activity that we are describing here.

Mr FORREST—Are units 408 and 412 in that category?

Mr Bate—No, they are framed structures. They are actually concrete frames, so they are less likely to be damaged than load-bearing brickwork. You would get damage on the buildings, but they would not collapse.

Mr RICHARD EVANS—Dr Baynes, are you able to determine—with your expert knowledge—whether there is less, greater or no risk as compared to, say, 50 or 100 years ago with boulders coming down? Is there greater risk now than there was, say, 50 years ago?

Dr Baynes—A lot has happened in that 100 years. There has been some impact on

the vegetation through timber cutting and banana plantations. There has been human activity in terms of spoil being pushed over the bank. Those things probably tend to increase the risk. There has been construction activity in terms of building the chute, and those kinds of things tend to increase the risk. Human activity in general has, I think, increased the risk over the last 100 years. But I think that you want to know whether it has changed over the last 50 years.

Mr RICHARD EVANS—You were saying before about if you were up there marking rocks or whatever it might be that you may in fact cause a disturbance and therefore a rockfall. I guess there are rockfalls higher up that do not come all the way down. Therefore, are there more likely to be future movements? And because of all this so-called man-made disturbances we have had over the last 100 years, what I am getting to is whether there is a higher risk now than there was, say, 50 years ago?

Dr Baynes—I think there is probably a slightly higher risk now than there was 50 years ago because of construction activity on the slope.

Mr RICHARD EVANS—Therefore—I did not do much probability—I guess the probability would increase that there is going to be some increased risk the longer we go on.

Dr Baynes—There may be but it is not at a level you could attempt to quantify.

Mr HATTON—My first question is related to the cliff tops at the far end above the boatshed. There is quite significant overhang there and there have been considerable problems there in the past with a big fall in 1972 and so on. If the boatshed was to go, is there any way you could do a controlled reduction of that risk by actually getting rid of those boulders at the top or causing them to fall in that particular area to clear out future problems from the top of the cliff? We have not seen the top of that but you would have been along there. It is fairly sheer and overhanging.

Dr Baynes—It would be possible to do that. I would put that in the category of major civil works involving large quantities of money. In order to be able to actually lay the slope back to what might be regarded as safe, it would probably involve considerable excavation of the whole slope.

Mr HATTON—So it is not just one major overhanging section.

Dr Baynes—No. You could remove that and what you would find is that there would be a flake behind it and a block behind that. That underlies my concern about going up there and trying to do anything in that you try and deal with one problem and then you may uncover another problem. It is a never ending process.

Mr HATTON—The second thing is that if you remember when we walked in

yesterday there was that flat area and that went in part of the way behind 408 and 412—

Dr Baynes—The old railway line.

Mr HATTON—In terms of protecting 408 and 412, apart from using the fencing, is it possible to take that road in a certain way—not right through—basically to provide a soft bed for the upper boulders to hit into, particularly in front of 408 where there would be a major problem?

Dr Baynes—Yes, it would be possible to do that. I looked at it at an early stage in terms of alternative ways of trying to protect 408. I formed the view that the scale of the civil works required and the excavations required and also the fact that you would then be having to excavate on the slope beneath material that wanted to come down after you anyway could pose a greater risk and threat in itself and could trigger off some larger events through there. That is why, in terms of an engineered design solution, I felt more comfortable with a fence which you can sneak in and place without disturbing the existing system too much.

Senator CALVERT—Although we saw a video yesterday of a type of fence, are you satisfied that a fence similar to what we saw on the video would be the answer? What would you assess that as reducing the risk by? Would it be by half or three-quarters? I know you are on the record and I would like you to go on the record as saying that at the present time you would not feel like living with your family in 408 or 412 but, if there was a fence similar to the type you explained to us behind both of them, you would live there.

CHAIR—I do not know that Dr Baynes is on the record, in the *Hansard* sense, as having said that in private conversation yesterday.

Senator CALVERT—I know. I want to get him on the record.

Dr Baynes—With regard to living in 408, as an individual and partly because of my profession and my personal attitude, it would not really concern me to live there as an individual. With regard to my family, I would be most unhappy at the prospect of having to live in 408. I would less unhappy but still unhappy about the prospect of living in 412. If there was a fence there, I presented some probabilities in the documentation as to what I think the reduced probability of fatality would be as a result of building the fence, so effectively those figures are on the record, I guess. Such a fence could not stop all events, but it would stop probably about 99 per cent of events and the events that it would not stop are fairly unlikely. If such a fence was there, I would be happy to live in 408 or 412, although the rooms are a little small.

Senator CALVERT—Following on from that, according to your plan, the post and rail that was put up there, which is the old rockfall barrier, it does seem to have stopped

some rocks.

Dr Baynes—I believe it has. You can actually see the rocks that it has stopped.

Senator CALVERT—Even a very basic fence like that has some benefit. Obviously a proper constructed fence would be most beneficial.

Dr Baynes—The kind of fence that we saw in the video is relatively recent technology. It is a sophisticated design and it has basically been put together to deal with exactly this problem. There are a variety of manufacturers that produce fences of this kind. A colleague of mine, Alan Moon, who was the person who carried out the peer review of my report, recently went to the International Landslide Conference in Norway. I asked him quite specifically to approach some people about the uses of these kinds of fences. He reported back that yes, these fences were being used and yes, the kinds of approaches that we had talked about did seem to be generally accepted by the international community.

Senator FERGUSON—Following on from Senator Calvert's question, the statistics suggest that 99 per cent of the rockfalls would be stopped by the type of fence that you have suggested. To a layman, can explain why that only reduces the risk from one in 11,000 to one in 40,000?

Dr Baynes—The one per cent that it does not stop are the very big rocks. The very big rocks have got more energy and therefore, if they impact upon the structure, they are more likely to cause a fatality, because what we are dealing with here is the combination of probabilities. It is the probability that a rock will fall down a slope, combined with the probability that, if it does fall down the slope, it will kill someone. If you have a small rock and it hits a brick wall it might not even go through it. But if you have a rock of 20 tonnes and it runs into the side of the structure, it is likely to go through the structure and implant itself in the living room.

Senator FERGUSON—The only other question that I really wanted to ask, and probably it is addressed more to Mr Moore than to you, Dr Baynes. In calculating the cost of putting up this protective fence, are you confident that you have given us an accurate assessment of the cost, taking into account the terrain that it has to go through? I forget the actual cost of the fence, but I would like to be assured that that was a very accurate assessment of the cost of actually putting the fence in what seems to be pretty inaccessible terrain.

Mr Moore—Perhaps I could get Works Australia to comment on that? The costings that have been included in these documents relate to fences in specific locations. It is possible, depending on what recommendations the committee comes up with, that they could vary. But in terms of the rate per metre calculations perhaps Works Australia could comment?

Mr Franklin—Through Dr Baynes we approached a company called Geobruigg over in Switzerland who produced that video that you saw yesterday. We have approached them several times and they have given us several rates per metre for these types of fences. One of the problems is that Works Australia does not have the in-house expertise for this style of facility and so we do need to go to experts and talk to them about it. One of things that we are aware of is that they will really need to come to the island to assess the design and constructability of the fence. But we believe at this stage that we have enough fat in these prices to cater for the types of terrain they are going to need to put them into.

Senator FERGUSON—So, in other words, you would consider it to be a very conservative estimate?

Mr Franklin—We hope they are conservative, yes.

Senator FERGUSON—Should we go along that path I would not like to think we came back and found it cost twice as much.

Mr Franklin—I agree.

CHAIR—Particularly as the terrain is very different to the terrain, as Senator Ferguson said, that we viewed yesterday, where at least you could stand up while you constructed the fence.

Mr Franklin—Yes.

CHAIR—As Mr Forrest and I can attest, with the help of Dr Baynes, it is fairly difficult to stand up, let alone dig a hole.

Mr Franklin—I agree.

Mr Moore—I would just like to make a comment that Works Australia has indicated that they do not have expertise in the construction of those fences. That is correct, but they do have some experience in construction on Christmas Island, including in terrain of a very steep nature. For example, the sewerage line that went up the incline around past Smith Point involved putting concrete footings in on a slope in very inaccessible conditions, which precluded people using mechanical equipment. That sort of experience has been taken into account in putting together their estimates.

Mr TED GRACE—It is always a little bit difficult to explain to the layman and even show him on television a certain test—and we saw yesterday the test of your proposed recommended netting—and I also note that you said it is recommended by other organisations throughout the world. Is there any actual evidence of a real test on this netting? In other words, has it been tried out through a disaster or through a rockfall in

any part of the world that you are aware of, other than the testing?

Dr Baynes—It has been used extensively, as I understand it, in Europe and the United States, and the tests that we saw were in a field trial. They also conduct tests by placing the net horizontally and lifting up large rocks with a crane and dropping them. I have seen pictures of that. As far as I am concerned, the design is a verified design in the same way that any other structural design can and should be verified.

Mr TED GRACE—But is there any evidence where you can say, ‘This stopped a 20-tonne rock’, for instance?

Dr Baynes—I cannot tell you a specific instance, but I can show you the pictures in the promotional brochure which are of operational fences with large rocks restrained by the fences. I am quite sure that if that information were required, it could be provided.

Senator FERGUSON—How long has the design been used for?

Dr Baynes—I have come across references to the people who designed Geobruigg’s stuff as early as 1977. It is fairly well referred to in the literature from about 1990 onwards. When I thought that I had come across something that was not well known, after I made a few inquiries to a few people in the international consulting community, they said, ‘Yes, we are aware of these fences.’

Mr TED GRACE—So they have been used since 1977?

Dr Baynes—I believe so, yes.

Mr TED GRACE—But that goes back to my question. Surely, if you were trying to convince somebody that these fences are a genuine deterrent, you would be showing clients, not only a test situation, which since 1977 is a lot of years, but there must be a situation where a good salesman would say, ‘This netting has been between California and San Francisco and this is what happened two years ago. Here’s the rock that went into it and here’s what happened to it.’

Dr Baynes—I am sure that evidence of those instances does exist but I have not pursued it.

Mr TED GRACE—But it would have helped this committee—that is what I am trying to get at, Dr Baynes. I am always sceptical of test situations.

Dr Baynes—I accept that.

Mr FORREST—Perhaps I could help the committee. Rockfall mesh fences like this are throughout Europe. However, my question is related to the situations that I have

seen them used in. Usually they are beside a highway where there is ready access. In fact, it is important for the function of the fence that any debris be removed fairly quickly. It worries me a little bit about access to such a mesh fence up on that terrain. Has anybody given any thought, when the fence has collected boulder debris, to how it is going to be cleared? I did note in the video that it suggested heavy equipment needed to be used. Is there going to be some sort of access road constructed? Has anyone given any thought as to how the debris that gets collected in such a fence is going to be removed?

Dr Baynes—When I discussed the possible use of these fences with Works Australia, one of the things I did was to go up with Bryan Edwards and try to make an assessment of the constructability based on what we saw in the video. You can see what level of vehicular access is required and although it looks steep up there, there are some flat spots. In fact, there is an old dozer track that goes through the area. I believe that the fence could be constructed on that track. Boulders that collect behind it may have to be removed by a variety of methods and that might include going up there and drilling and popping them, if necessary, or manhandling them, or leaving them where they were. My attitude is that if the fence stops a big boulder then removing the big boulder is the least of your problems. The fence has done its job and that is the main issue.

Mr FORREST—I was concerned that if there is disturbance to be created then that creates all the problems of a new risk of freshly disturbed rock, that is all.

Dr Baynes has talked a lot about the size of these boulders, and that worries me. The design of the fence is recommended to 1,000 kilojoules. I am having difficulty in my mind of trying to assess what sized rock that is because it will depend on its velocity. I heard 17 tonnes mentioned yesterday by one of the people we spoke to and I have heard Dr Baynes talk today about a 20 tonne rock. What is the size of the rock in layman's terms that this 1,000 kilojoule fence that is recommended will stop?

Dr Baynes—Kinetic energy is $\frac{1}{2} mv^2$, it is half the mass times the velocity squared. It is not just the mass of the boulder, it is the speed at which it is travelling. You have to take that into account. In the report I have actually provided some examples. One tonne travelling at 10 metres per second—and 10 metres per second is about the kind of speed that boulders get up to when they bound down hillsides because I have been through the literature and looked at the kinds of velocities that they get up to—is 50 kilojoules. Ten tonnes at 10 metres per second would be 500 kilojoules and 20 tonnes at 10 metres per second would be 1,000 kilojoules. So 20 tonnes at 10 metres per second would be the fence design capacity. That is the nominated design capacity. It is also acknowledged in the literature that it has excess capacity in there that may well work.

Mr FORREST—With that terrain and vegetation up there, surely 10 metres per second is a fairly high velocity. It would be much slower than that as compared with the video we saw yesterday.

Dr Baynes—If it was slower than that it would have less kinetic energy as a function of the square root by the amount that you had reduced it by.

CHAIR—Which has little to do with vegetation, I gather, and I am showing how little I know about mathematics.

Mr FORREST—But to the layman you could confidently say you could stop a 20 tonne rock. Is that correct?

Dr Baynes—Yes.

Mr RICHARD EVANS—Following Senator Ferguson, he was talking about the capital cost being about \$2.2 million to put up three fences. Has there been any estimate for ongoing maintenance costs involved? If so, what are they? With the rapid growth of jungle around the place, would the growth of jungle reduce the impact of a fence and would there be ongoing maintenance to reduce the jungle around the fence?

Dr Baynes—In general terms the jungle assists in that boulders crash into trees and are slowed down.

Mr RICHARD EVANS—At the fence, though, if it started to overcome the fence.

Dr Baynes—It would only improve it in my mind. In terms of maintenance, I do not believe that we have really addressed the issue of long-term maintenance. At this stage this is, if you like, a concept design.

CHAIR—I propose a break here for morning tea. I suggest we might reassemble at about 10.45 a.m. While I am happy to continue this risk assessment with the department for as long as is necessary, I would also like to look then at some of the housing options that we face prior to calling other witnesses.

Short adjournment

CHAIR—I reconvene this hearing into the rockfall risk reduction strategies on Christmas Island and invite other questions from committee members to representatives of the Department of the Environment, Sport and Territories.

Senator FERGUSON—Could I just follow on from the other question we had about risk. The one question that I was going to ask before, which was associated, is: have you assessed the possibility or probability of a rockfall being caused by the construction of the fence, the disturbance of the land where you are going to put the fence up? How likely is that to cause a rockfall? This is surely something that must be taken into consideration.

Dr Baynes—It is. I have looked at it not quantitatively but qualitatively in terms

of constructability. By walking through the area and thinking about how you might construct the fence, I have made an assessment as to whether or not it can be done in a safe and reasonable manner. I believe that it could be done in a safe and reasonable manner, but that is a judgment.

Senator FERGUSON—So it is possible that disturbing the landscape where you are putting the fence through could actually cause a rockfall in the areas that you are trying to protect, although obviously it might be at a lower level so it would not gain as much force by the time it got down.

Dr Baynes—There are two aspects to it. There is the actual construction of the fence which would have to be done in a supervised manner and areas would have to be cordoned off to allow for the possibility that a rock might be dislodged. But the fence itself is a minimum intrusion into the landscape in terms of moving dirt around and therefore I do not believe it would increase the likelihood of rockfall.

CHAIR—I would like the focus at this stage to be on the rockfall risk reduction and then we can look at some of the housing options while we have the departmental witnesses with us. Do other members of the committee have any other questions on the rockfall risk? I do not want to preclude any questions, so people can ask them again later if they wish, but can we now turn to the issue of what the department sees as the viable life of blocks 408 and 412, since they are the focus of the concern we have about any human tragedies in rockfall risk. Could I ask, through Mr Moore, any one of the departmental witnesses what you see as the long-term life of those two units.

Mr Moore—Perhaps I could start. I might need to draw on the advice of some of my Works Australia colleagues, but blocks 408 and 412 were refurbished to provide urgently needed accommodation as quickly as possible. Their refurbishment cost was approximately \$1.2 million or \$1.3 million each. That works out at a cost of about \$36,000 per unit. It is useful to put that cost into perspective. The alternatives that the Commonwealth has for providing housing on Christmas Island—if we were not to refurbish units but were to build new units on a site, wherever that would be—would be in the order of at least \$200,000 per unit. That is our experience.

I will simplify it and say that a reasonably accurate projection of unit life span is, I understand, something like 20 years in the very testing Christmas Island environment. That means that we are talking about a capital cost, if you spread out that \$200,000, of approximately \$10,000 per year. The units that we constructed cost \$36,000. In comparison, we can expect a life expectancy out of them of something like 3½ years. We have now had about 3½ years out of those units. So I think it is useful to put that in perspective, in terms of the value for the money that we have expended on them.

Units 408 and 412 were not refurbished for a long-term life cycle. The minimal work was done to keep the cost down. For example, the plumbing systems were not

replaced. The cast-iron sewers were left in place and they are deteriorating. There perhaps is something like—Ian might correct me—three to five years left in those blocks.

Mr Nelligan—That is correct; before any major expense is due. The cast-iron plumbing, in places, is paper thin. It was at the time, but it was going to be extraordinarily expensive to replace it at the time that the refurbishment initially was carried out. So the plumbing will certainly require replacement in some of the units now, and in some it will last another three to five years.

Mr Moore—Assuming a best outcome scenario, being optimistic, let us say five years. We could have five years life out of them, and then we would have done extremely well in dollar value for the investment in refurbishing these buildings. At that point in time, we will need to make a decision as to what to do with those units: whether we spend the large amount of money which would be required to completely refurbish them; whether we did another, similar sort of job of \$1½ million or \$2 million in today's costs; or whether it is desirable to vacate the area because of a possible rock risk situation.

We need to look at that also in the context of the design life and the effectiveness of a fence—if a fence were to be constructed—and the cost of that fence. Again, to put that in perspective, the cost of putting a fence behind one of those units is in the order of three-quarters of a million dollars, on the Works Australia estimates. We need to make some decisions, from our own perspective, of the short-, medium- and long-term housing future of the Kampong area and of the Commonwealth assets that are within it. Because we have not invested a proportionately large amount of money and because we are getting, if you like, value for our investment already, we are not constrained, in my view, by that previous investment from doing other things with it. We have the chance now to make an open decision as to what to do with those particular buildings. The important thing to consider in that is cost and social issues and risk in relation to the rockfall defences. If we were to put up a rockfall fence, its design life would be obviously subject to the materials that it was made out of, but it would certainly last five years without any significant difficulties.

Dr Baynes—Something like that would normally have a design life between 25 and 30 years I would imagine.

Senator CALVERT—I will ask the obvious question. What have you got in mind for these units? If there was not any rock problem or any other problems what, in five years time, would you do?

Mr Moore—Sell them.

Senator CALVERT—Sell them?

Mr Moore—Or even earlier.

Senator CALVERT—Just sell them?

Mr Moore—Ideally, the Commonwealth position on housing is that it wants to be as much out of housing as possible, particularly out of older stock housing. For example, we have currently got the old hospital site up for auction. We previously had a hospital there; we have moved out and built a new one. We are seeking to sell off that. Other people could do something with it. They could completely refurbish it, for example. They could turn it into housing accommodation or they could turn it into resort accommodation, or whatever was appropriate within the town planning and social constraints. But the Commonwealth would prefer, if it had a requirement for housing, that it built modern housing to modern mainland standards.

Senator CALVERT—That leads me to the next question. If you did sell it in five years time to, say, a local group, would you have to survey the land and convert it to real title or something? What is its status at the moment? Is it Commonwealth land?

Mr Moore—It is Commonwealth land, correct.

Senator CALVERT—So you would have to subdivide it and then sell it with the buildings?

Mr Moore—Yes, correct, strata title.

Senator CALVERT—If your private company bought it and they filled it up with people and then a couple of rocks came rocketing down the hill, who is liable? We are still liable, aren't we?

Ms Chilvers—We still own the cliffs and the rocks.

Mr Moore—We are liable because the Attorney-General's advice is that, whatever we do, we have to take all reasonable steps to prevent damage to people because we own the cliffs. We own the problem.

CHAIR—We have to be seen to have taken a duty of care.

Senator CALVERT—So the fence option remains, whether the buildings are there or not. You would reduce the risk by taking the buildings out completely in five years time, but it is still a risk of sorts for the other units, so therefore you would still need a fence?

Mr Moore—I did say we would sell if there was no risk when you asked the question. If there is a risk, it depends on the level of risk. We have to then consider what is an appropriate response to it. We have a range of options. One of them could be to demolish, put up a personnel fence and stop people going in there. Another could be to

retain, but to have a rockfall barrier fence.

Mr HATTON—I have a question for Dr Baynes. If we demolish 408 and 412, would we still need the rockfall fences there? The personnel fence would have to be well in, I would imagine, close to 409 and 411? You would still get rockfall running down into that area.

Dr Baynes—If you were to demolish the structures and replace them with, for instance, gardens with trees and soft soils, it is my opinion that that would sufficiently impede the progress of any rocks, so there would be no threat to people in the community outside that zone. The areas themselves would still be prone to rockfall risk, but a fence and some understanding by the community that they were entering an area at risk into which it would be unwise to go during periods, for instance, of heavy rain would seem to me to provide a reasonable approach to the problem.

Senator CALVERT—Getting back to the sale of these units: you say that in five years time you would sell them—that is in the normal course of events. So, in the meantime, you would be building other houses somewhere else to relocate those people or whatever, would you? You have still got your housing problem, haven't you?

Mr Moore—Yes, we have a housing problem that we have to address. Outside the context of this committee we have a report from the Commonwealth Grants Commission on housing problems on Christmas Island which the government is currently considering.

Senator CALVERT—But if you did that, then you would not have this cost of relocation built into these particular options that we are looking at this morning, would you? It would be in the normal course of events rather than this particular event we are looking at now. You have built into some of these options the cost of building new buildings to take those people from. In five years time, in the normal course of events, that would be happening anyway, wouldn't it?

Mr Moore—If funding had been provided to construct those new buildings.

Senator CALVERT—And that is the administrator's problem, I suppose.

Mr Moore—It is the government's problem.

Ms Chilvers—It is the government's problem.

Senator CALVERT—On the set-up of the housing, the Commonwealth builds it, and it is public housing, and then you rent it to the tenants. When you were saying that you get good dollar value out of this particular refurbishment—\$36,000 or whatever you spend on it—do we ever get our money back really? Do the returns you get from the rental really cover the total costs of on-costs and the cost of refurbishing these buildings?

Ms Chilvers—Not in every case because, in fact, a lot of the tenants are public housing tenants and do not pay the full commercial rate. But one of the obligations of the administration in its state level role is to deliver public housing.

Senator CALVERT—It is the same in every state; I realise that.

Ms Chilvers—That is right.

Senator CALVERT—But it is still the same argument, but the cost to actually build these particular buildings is a lot higher because of where you are.

Ms Chilvers—Yes.

Senator CALVERT—You quoted \$200,000. In Sydney or Melbourne it would be half that, wouldn't it?

Mr Moore—Yes. The building costs on Christmas Island are between 1½ to two times that on the mainland, depending on the type of building.

Mr TED GRACE—How competitive is the tendering process?

Mr Moore—Works Australia has been responsible for letting tenders for housing and has attempted to get the very best tender prices for housing. That has involved, on occasion, calling tenders twice because the prices that were originally received were considered to be too high but, in the end, that resulted in no significant savings. I guess the assessment is: how competitive? It has been made as competitive as it can be made. Works Australia has also sought to get prices from locally based builders as well as bigger project home builders and kit home builders.

It is probably not as competitive as we would like because a lot of people have decided that Christmas Island is an expensive place to build and they do not see themselves as making good returns, but we have sought to make it as competitive as possible. Works Australia has taken all possible steps to make it as competitive as possible.

Mr TED GRACE—So normal home builders on the mainland would not be interested in coming here to build? Is that what you are trying to tell me?

Mr Moore—They are not.

Mr TED GRACE—They are not?

Mr Moore—No.

Mr TED GRACE—They have been approached? They know the tendering process?

Mr Moore—Brian, do you want to speak at all to that question?

Mr Bate—Yes. We have a number of builders that are prepared to come from the mainland to Christmas Island. They do not always tender at particular times because of their particular workloads, so we have some difficulty getting tenderers at particular times. But, generally speaking, there are a number that will come to the island and there are builders on the island who give us tenders for the work as well.

Mr TED GRACE—At some time I would like the committee members to have a look at the tender documents. Has it ever been suggested that, for instance, tenders be let out to non-Australian companies? It would seem to me that you would have to stretch the friendship a little bit here. Has it been considered that materials could come in from Indonesia?

Mr Bate—No. There has been no consideration of taking other than Australian—

Mr TED GRACE—If not, why not? It seems to me that \$36,000 to renovate one of those little blocks is an exorbitant amount of money in any terms.

Mr Bate—We generally operate under the Commonwealth government's policy that we accept only materials from Australia and New Zealand.

Mr TED GRACE—Has it ever been suggested to government that we change it for this particular reason up here? After all, it is the Australian taxpayer who is footing the bill.

Mr Bate—We have not suggested it to the government.

Senator FERGUSON—Ms Chilvers, you said initially that block 403 was going to be used to relieve the pressure on waiting lists. How long are the waiting lists?

Ms Chilvers—We have got approximately 20 single people waiting for accommodation and 38 applications in for family accommodation.

Senator FERGUSON—Where are they living now?

Ms Chilvers—Currently it is a mixture of living with friends, with parents or renting privately. But through financial hardship they could actually want to be considered as public housing tenants.

Mr TED GRACE—I would like that problem in my electorate.

Ms Chilvers—Yes. So it is a mixture. Some of the families are currently squashed into single quarters and they want to have more suitable accommodation. Someone might have been originally allocated a one-bedroom unit as a single person. The person has since married, and the first or second child is on the way and so the family is now on the waiting list for more suitable family accommodation.

Senator FERGUSON—It just seems that if the option were taken to remove blocks 408 and 412, it would only exacerbate an already dreadful problem.

Ms Chilvers—Yes.

Senator FERGUSON—What is the current population of the island?

Ms Chilvers—Around 2,000, I believe. It is a fluctuating population. The ABS figures last year were around 1,800.

Mr Moore—The Commonwealth Grants Commission quoted 2,200, but it does vary.

Ms Chilvers—Yes.

Senator FERGUSON—The figures that we had in some of our papers were that there could be as many as 3,000.

Ms Chilvers—I would think that that would be a rather high figure at the moment.

Mr Moore—I think it was higher at one point. It is actually lower just at the moment than it was perhaps a year ago.

Senator FERGUSON—It has gone up from 1,300 at the last census?

Ms Chilvers—Yes.

Senator FERGUSON—And how much more housing has been developed since the last census?

Ms Chilvers—I do not have the answer to that.

Senator FERGUSON—You have nearly doubled the population, it would seem.

Mr Moore—It would have been fewer than 20 units in total, I would have thought.

Senator FERGUSON—It is just that if the population has possibly nearly doubled, or close to it, there must certainly be an extreme amount of pressure on availability of any form of housing.

Mr Moore—That is correct. There was a situation though where Christmas Island originally had a higher population—when it was a mining town—and accommodation that was used then was allowed to become derelict. That occurred to 408 and 412 and some others. Some of those derelict blocks have been refurbished by us and some others were refurbished by the casino to provide accommodation for the people it brought here.

Senator FERGUSON—They were the ones that we saw at Poon Saan?

Mr Moore—That is right.

Mr HATTON—Following up from what Mr Grace asked: in terms of the building costs here, the normal process that has been followed would be that we use Australian contractors and Australian materials. It would seem to me that the location factors in relation to Christmas Island would mean that there should have been submissions put in that we got materials and sourced those in Indonesia or Singapore. If you followed that course of events, the freight costs that we have got from Perth seem to be extraordinarily high. Freight costs from Indonesia and so on would, I imagine, be relatively little. We would also be able to put pressure on the people who are doing the freight from Perth up to here to give them some competition in relation to providing that material. It would mean that we would be able to build a great deal more for a great deal less if we took that kind of approach.

Mr Moore—There have been some occasions when some materials have been sourced from other than Australia for some of the projects in situations where they have not been readily available. It also needs to be put in perspective, and perhaps the Works Australia people could comment on this. The extent of potential savings from going down that track are perhaps not as much as might be imagined.

Certainly, there is an issue of quality as well as the actual source of the materials. The materials that have to be bought have to meet certain quality standards for Commonwealth government construction and we would not be suggesting varying from those. And to provide equivalent quality materials from the north is not always much cheaper. As for heavy materials such as sand, for example, which is required for concrete construction, it is not possible to import that at all, that has to be crushed on the island here, and it is a cost that you will have to bear regardless of where you source your materials generally.

We also have situations where the Commonwealth is precluded by other policies, for example, from using rainforest timbers which precludes material from the north. Taking all those factors into account means that the potential for savings is perhaps not in

the same category as might at first case appear.

Mr HATTON—May I ask how closely we have looked at it?

Mr Moore—We have not gone down that track because it has been contrary to Commonwealth policy, but we have looked at those options and we are aware of some of those factors. Perhaps Works Australia might like to comment?

Mr Bate—We simply had to source certain materials from Asia where they have not been immediately available on the island, and contractors have found that they cannot get the materials from Australia quickly enough. There has been permission given to use those to continue the building process. But we have not, specifically, gone to Asia to look at particular components to see whether they are cheaper than Australian components.

We know from our very first studies of costings on the island before we started the program that the only building that we could use as a guide was the casino which was being built at the time, and the costs compared with Perth costs were sitting about 1.9 times the cost of Perth for the casino. A lot of that material was sourced from Jakarta. When we first called tenders on the island for the work that we were doing we got rates of around about 1.4 to 1.5 times the cost of Perth prices, and that was using Australian materials. So that is the only guide that we have had to Asian sourced materials.

Mr HATTON—Could I ask a follow-up question in relation to freight rates. They seem to be exorbitant from what I have heard. Is there any competition in relation to the freight rates? How would you compare the freight rates out of Perth to here or to London or whatever in terms of moving those materials?

Mr Moore—I would like to make a comment on that. Freight rates have varied over the period of time that we have been using freight for the rebuilding program. At this present time there is competition. There are two services: there is one via Perkins and one via the Clunies Ross ship to both Christmas and to Cocos, and I understand that the freight rates at this point in time are lower than they have been for some considerable time. How long that competition will stay I am not certain because there is no doubt that Christmas and Cocos are very small markets, they are very small volumes.

The issue of freight has been the subject of a separate Commonwealth parliamentary inquiry which provided a report a little while ago. The government's response to that was basically to allow the market forces to determine the freight situation. That is what is currently happening but we, in the rebuilding program, have had to deal with the cost of that freight, which has not been inconsiderable and is a major component of the cost, bringing our costs above that of the mainland.

CHAIR—Any other questions from committee members to the Department of Environment, Sport and Territories?

Mr RICHARD EVANS—You said before, Mr Moore, that if it were safe you would sell the properties 408 and 412—the ones considered at risk. Do you consider that if the fences went up they would be likely to reduce the risk and therefore you would be selling in five years?

Mr Moore—I am not an expert on risk and I am not able to provide a personal opinion because I am representing the department's position on this matter rather than my own. It is clear from the evidence that has been provided, which is based on the information provided by our consultants, that if you were to put up safety fences, you would reduce the risk in relation to both of those buildings to levels which in one case, 412, appear to be safer than flying in a plane and, in the other case, are safer than being hit by a car as a pedestrian. I merely draw the attention of the committee to that evidence that we have presented on the basis of our expert.

Mr RICHARD EVANS—On the assumption, then, that the government department would consider it to be safe enough to sell, and therefore the relocation of the families and people within 408 and 412 would be required, are they likely to be relocated into the Kampong or up to Poon Saan?

Ms Chilvers—I think that is something that we would still need to determine. We have not actually planned that far ahead and it would become a process that will be developed through the town planning process in consultation with the shire council.

Mr RICHARD EVANS—So there is space in Kampong to build some new—

Ms Chilvers—No, I do not think I said that. I said that we actually had not developed a position on that and it would be something that we would need to work through with the council in terms of town planning requirements, and with the community in terms of the amenity that was required.

Mr RICHARD EVANS—I understand what you are saying to me, but that is not the question I am asking. Is there available space if, in fact, all the town planning requirements were met? Is there available space in the Kampong to build more units, or would you have to demolish units to in fact put up more new units, if town planning was all equal?

Ms Chilvers—I do not have the answer to that because I have not actually examined that. I do not know if anyone from Works Australia has looked at that in terms of densities.

Mr Bate—No, we have not looked at it. We know that the council is looking at the planning aspects of the cove. They recommended knocking down one of the buildings to produce a reasonable balance between open space and the density of the buildings, but we have not taken any position on it.

CHAIR—Can I just interject and say that it struck me that it is not the sale that would force the relocation of families, it would be the demolition that would force the relocation of families.

Mr RICHARD EVANS—Either/or.

CHAIR—The property would still be occupied if it were sold. That was my point.

Mr RICHARD EVANS—Yes. The point that I am making is that if it were sold, those families would not necessarily still be living there, so there would be a demand for public housing. What I am trying to get to is whether there is available space in Kampong for new housing.

CHAIR—I understand that.

Mr RICHARD EVANS—If there is not, therefore the assumption is that the community in the Kampong would have to be split between Poon Saan and the Kampong.

Mr Moore—As you would have seen in your inspection yesterday there are two blocks, 401 and 402; 401 is occupied at the moment but 402 is not occupied whatsoever. As mentioned previously by witnesses, the preferred option from the Territories Office is not to refurbish or use all of those blocks in that area. It is considered that the density of living there is higher than desirable and affecting the requirement for public amenity and car parking spaces. That is a view which is consistent with the position put to us by the Shire Council.

Senator FERGUSON—That is for both of those blocks?

Mr Moore—Not necessarily both; the desirability is not to have all three.

Senator FERGUSON—So you could perhaps have 401 and 403 or 402 and 403?

Mr Moore—Correct.

CHAIR—Are there any other questions to the Department of the Environment, Sport and Territories? If not, could I just ask one question of the acting administrator. What consultation procedure do you have on Christmas Island to allow you to be in touch with the Christmas Island community? Clearly, you would be in touch with the council in whose chambers we are now meeting, but is there any regular consultation with other community groups, or do they come to you as need dictates?

Ms Chilvers—There is a mixture of processes. There is a community consultative committee as part of council, with which I meet regularly. I have recently undertaken to meet with the chamber of commerce. I will attend all of their meetings so that I can

actually report to them on what is happening in terms of development proposals, land issues, and economic development. But very much it is an open door. People ring and come in and make representations. If there was a particular issue that affected one group specifically, certainly there would be a direct contact made with that group.

Mr Moore—Could I perhaps just add a comment on that? In respect of infrastructure works and the Christmas Island rebuilding program, we do have a process in place whereby the rebuilding program project management team, which includes myself and representatives from Works Australia from Perth and some based on Christmas Island, including Ian Nelligan and Brian Bate, consults with the community on approximately a three- to four-monthly basis. We visit here and talk with a range of groups representing a cross-section from the community, including the Shire Council and its officers, the chamber of commerce, the Union of Christmas Island Workers, the mine and whoever else has a particular interest in any projects that we might be pursuing.

CHAIR—Regardless of whether or not blocks 408 and 412 are removed or renovated in the long term, clearly—as has been acknowledged—the Commonwealth recognises there is a need for public housing on Christmas Island. I assume, therefore, that that public housing would be built to what are regarded as acceptable Australian standards and cyclone proofed as necessary for the island environment. What sort of return on the investment does the Commonwealth expect from public housing as a proportion of the cost?

Mr Moore—We have not done precise calculations because public housing is a community service obligation which we do not have a choice about—or we believe we do not have a choice about. But we did carry out a business plan in relation to this particular rockfall relocation exercise previously when it was proposed to relocate residents to the Poon Saan development. The results of that business plan show that the Commonwealth is incapable of getting a commercial return out of its development, if the estimates that were put together by Works Australia are the ones that actually would be the cost of the building works. Those estimates might be a bit conservative but even if they were cut down it is unlikely that the Commonwealth would get a return for its investment at a commercial rate. We did some sums in those business plans, looking at what might happen with the value of the construction works that were undertaken because options needed to include a building renting for a period and selling again. It would require an increase in property values outside the probability that is going to occur on the island to make a commercial return.

Mr HATTON—Could I ask Fred Baynes about the area around the old administrator's house. That area seems to be quite stable and does not have a problem with rockfall and so on. How extensive is that area and what has basically been planned for it? To me, that could be a housing area as well and not just a community facility area because from the house at the back it looked like there was quite a bit of land. In terms of the stability of the area—

Dr Baynes—Is that the area that is to the south of the Christmas Island Club?

Mr HATTON—Yes, right up to the end where there is a double-storey house. I do not know whether you have been able to look—

CHAIR—The old administrator's house.

Dr Baynes—I am sorry. My study did not actually extend around that far. From a casual look at it I did not think there was a problem there.

CHAIR—The administrator's was seen as disposable, one presumes.

Mr Moore—I do not think there is as much space as you might be envisaging in that particular area. I know that in that particular area the administrator's residence and the gun emplacements, for example, which is most of the flat area there, are heritage listed. From there onwards around to the sewage treatment plant the cliffs come in a bit closer to the access road and I know that, for example, we have to consider issues beyond rockfall when you start thinking about building on the terraces. For example, the fuel farm site has two sections where there are fissures. That particular area around the cliff and the lower terrace often has fissures and you have to have a geotechnical investigation of the underlying conditions, as well as consider the overhanging conditions.

Mr Edwards—If I might add to that, the prohibitive point of actually going out there as well is that it is a single-lane access to the site of the administrator's residence. If you have large traffic flows via housing up there then you are going to be prohibited by that access.

Mr Moore—The Shire Council does use that as a general access. In fact, they use it for accessing works to maintain the sewage treatment plant but at one stage it was considered that the narrowness of that road and the traffic flows warranted possibly shutting it off altogether and putting a boom gate across it for everything other than maintenance traffic.

CHAIR—Two more questions, remembering that the witnesses will reappear at the concluding part of the day.

Mr RICHARD EVANS—You mentioned before about the need to review 412 and 408 in five years time because of sewerage breakdown. Is that the same for the other buildings in the area as well: 413, 410 and 409? Would that be the same condition?

Mr Nelligan—I am not sure. I have not looked at those buildings. I have not been involved in the upgrade of those buildings.

Mr Moore—They are privately owned buildings so it is not an issue for the

Commonwealth to concern itself with.

Senator CALVERT—At the land you showed us yesterday at Poon Saan where you may have future housing, what would the all-up cost be for two-bedroom and three-bedroom units up there? You mentioned a figure of \$200,000.

Mr Bate—We have looked at a range of housing on that particular site, and that impacts on a particular density of the site. If you are looking at two-bedroom and one-bedroom units, it does not make a lot of difference if you are talking about the number of units. So, in broad terms, the sort of total cost that we have suggested for the 72 units, which is the total number of units on that site, is around the \$20 million mark.

Senator CALVERT—So it is bit more than \$200,000 per unit, is it not?

Mr Bate—Yes. On that particular site.

Mr Moore—Does that include servicing costs? My \$200,000 is the construction cost; I was not worried about land costs.

Senator CALVERT—That is what I was clarifying because \$200,000 by 72 is \$14 million, not \$22 million, and I thought that there had to be some other costs in there somewhere.

Mr Moore—I was trying to round it off for simplicity.

Senator CALVERT—Yes.

Mr FORREST—I am just wondering when we are going to actually assess the different strategies that have been recommended to us. Will we do that later? I have some questions about that.

CHAIR—This is the opportunity to ask those questions. When the witnesses reappear, it will be largely to respond to the evidence that has been given by other witnesses and, while it is appropriate to ask questions then, it would be in the interests of the hearing to pose the strategy questions now so that other witnesses can also refer to them.

Mr FORREST—Strategy 1, as suggested, is straightforward; so is strategy 2. But strategy 3 includes rockfall barriers, but also includes the vacation and demolition of the Boat Club, and landscaping. It does not say what would happen with an alternative for the Boat Club. There is no strategy which says, for example, that there would be rockfall barriers to protect 408 and 412, leaving the Boat Club in its place. There are, perhaps, two points to the question: what is suggested for the Boat Club if that strategy occurs and why is there not a strategy which retains the Boat Club but takes measures to protect 408 and

412 with rockfall fencing?

Mr Moore—The strategies that have been put together were designed to be roughly according to risk. In other words, the early strategies are the most risky. Number 1 is the most risky strategy; strategy 5 is the least risky strategy. On reviewing that material recently since we prepared it, I have taken the view that the Boat Club demolition really belongs in a later strategy. It really belongs probably in strategy 5, not in strategy 3 because, if you relate the sequence of strategies to risk, its level of risk is such that it belongs in the last of the strategies if you were to do something about it in terms of demolition.

I believe that, on the other hand, there are other ways that you can deal with the problem at the Boat Club and minimise the amount of risk in that area. Notwithstanding that Dr Fred Baynes has identified a relatively low level of risk, there is certainly, as he pointed out yesterday, a possibility that that risk could be increased if you have large congregations of people there frequently. And so I would like to now add to this submission a supplementary view that the appropriate approach to the Boat Club should concentrate, certainly in the initial strategies, on a management approach to it rather than a demolition approach to it.

I would also like to make the point that these strategies are a summary version of the range of strategies and alternatives that are possible. When Dr Baynes and Works Australia were putting them together, they got up to 60 strategies, and then they decided that, for the purposes of presenting material, you needed to home in on particular groups. There are a very large number of permutations and combinations possible within the strategies, not all of which have been identified, necessarily; and this is a guide to making the decision.

We would suggest that the decision needs to consider all of the evidence that we are presenting today, and that it is possible that, as a result of the evidence that is given by ourselves and others, there may be a need to finetune the combinations of strategies here, beyond what I have just mentioned in relation to the Boat Club. I appreciate Mr Hollis's comment that it would be easier for the committee if we were to recommend something, but I suggest that this is an unusual situation. If it would assist the committee, the Territories Office and our advisers are happy to have some advice from the committee which recommends some principles or some guidance in solving the problem and which seeks for us, on the basis of that guidance in relation to risk, to put to you a firm proposal based on those principles.

Mr FORREST—I could condense that by saying that there could be an option—call it 3(a)—which instead said something along the lines that you have just said of proper management, instead of vacating and demolishing the Boat Club. If it is bad weather and you do not have public gatherings—or whatever you might include in the management plan—what would be the cost for that? What I am trying to determine is how much has

been allowed in what you are suggesting as strategy 3 to relocate the Boat Club.

Mr Moore—It would be less. The cost of the demolition of the Boat Club was mostly to do with the demolition works, and the figure is \$35,000; so you would save the bulk of that amount of money.

Mr FORREST—\$35,000?

Mr Moore—Say \$30,000.

Senator FERGUSON—Were you also planning on putting up something for them somewhere else or not?

Mr Moore—No.

Senator FERGUSON—So, in other words, it just no longer exists?

Mr Moore—Correct.

Senator FERGUSON—Is that why they did not want to shift last time?

Mr Moore—Undoubtedly. I can say that there are a lot of issues outside this committee's consideration, outside this particular rockfall issue, which could impact on the way we manage the results of this investigation. If, for example, it were to be considered desirable to relocate the Boat Club or any other community facilities, it is possible, for example, that the Boat Club or others could put a submission to the community benefit fund—which is established for community purposes as a result of casino revenue—to seek support for new facilities in an alternate place. That is not something that we have a power of decision making over, but at the moment it is certainly a Commonwealth owned facility which the Commonwealth allows the Boat Club to use.

CHAIR—As there are no other questions to the departmental witnesses, I will comment on Mr Forrest's very valid concern by saying that there is, of course, no reason why we could not, at a normal meeting in Canberra, seek further evidence from the department about the options we face as well, if that were in the committee's interests.

On behalf of the committee, I thank Mr Layton, Mr Nelligan, Mr Franklin, Mr Bate, Ms Chilvers, Mr Moore, Dr Baynes and Mr Edwards for appearing before us. We will call you later in the day to add supplementary evidence.

[11.40 a.m.]

CHAN, Mr Boo Hwa, President, Union of Christmas Island Workers, Poon Saan Road, Poon Saan, Christmas Island, Indian Ocean 6798

LOW, Mr Jeffrey, Executive Member, Union of Christmas Island Workers, Poon Saan Road, Poon Saan, Christmas Island, Indian Ocean 6798

McLANE, Mr David Charles, General Secretary, Union of Christmas Island Workers, Poon Saan Road, Poon Saan, Christmas Island, Indian Ocean 6798

CHAIR—Welcome. The committee has received a submission from the Union of Christmas Island Workers dated 23 January 1996. Do you propose any amendments?

Mr McLane—One amendment is on page 5, in the summary. The position of the Department of Environment, Sport and Territories has changed since this submission was made. In their original submission they were making a very strong recommendation as to what should be done for the consideration of your committee. That position has now changed to one of a number of options and no recommendation. So we can no longer say that we welcome and commend the proposal of DEST, as we could before.

CHAIR—Thank you, Mr McLane. It is proposed that this submission as amended and the response of the Department of Environment, Sport and Territories to it, dated 25 January, be received, taken as read and incorporated in the transcript of evidence. There being no objection, it is so ordered.

The document read as follows—

CHAIR—Do you wish, Mr McLane, to make a short opening statement before the committee proceeds to ask questions?

Mr McLane—Just a very short one, Mr Chairman. I think that the nail was hit on the head with the comment that the department was trying to pass the buck which was made by Senator Calvert or yourself—I am just not sure which one it was.

CHAIR—I am sure we will both claim the credit.

Mr McLane—Their initial submission of last year was a very strong one and the union found itself in the very strange position of, for once in our history, being able to say, ‘We believe that the department has got it right on this occasion and we support what they are doing.’ It is disappointing that they moved from the very strong practical position that they had before in our view to a very wishy-washy one of presenting five or six options to have a look at and absolving themselves of responsibility and leaving it up to the committee.

We do not think that that is the way to go and we are very disappointed about that. We very strongly believe that the needs of the Malay community need to be taken into account in regard to housing now and in the future in the Kampong. In a way, it is a tragedy that this housing was refurbished in Kampong blocks 408 and 412, because housing is at such a crisis level on this island and it is just a disaster to have to look at possibly another 72 or 76 units just to maintain the status quo. In our submission, that is a tragedy.

We go further and say that it was absolutely negligent that, in 1992 when that refurbishment was commenced, people did not look up and say, ‘Gee; this is a pretty steep sort of a cliff. I wonder what’s up there, and I wonder what the possibilities of things falling down are.’ This is especially so when you only have to drive along the front of the Kampong to see the huge rocks that have fallen out a long time ago. Some have even got substantial trees growing out of them.

Unfortunately, it is just a bureaucratic bungle. It is sad, because that accommodation is quite livable. It is not the flashiest around, but it is suitable. The Kampong is a good place to live; it is a very good community. I do not know if now is a good time to take issue with some of the things that were said by the department, or whether that should come later; I will be guided by you.

CHAIR—It is quite appropriate for you to take issue now. In fact, you can make it part of your opening statement, to which we will respond with questions, Mr McLane.

Mr McLane—Thankyou, Mr Chairman. We take issue with the comments that were made about disaster plans. There is no disaster plan, whether it be for cyclones or, in this particular case, rockfall. For example, if there are seven days of solid rain during the

wet season, there is no plan in place for what steps are to be taken to safeguard the people who live in blocks 408 and 412. There is not even that sort of basic plan. For the department to simply say that there is a fire brigade and an ambulance is pretty rough. Yes, there is a fire brigade and, yes, there is an ambulance and a hospital, as there is in pretty well every other place in Australia.

However, there would be very few remote Australian communities in this day and age that do not have disaster plans in place. There is not one here, and I do not think anybody in authority has asked the questions, 'What would we do? What would be our response if a rock were to fall from the cliff face and partly demolish block 408? What immediate steps would we take, and how would we get people to the hospital? Where could we access machinery from to dig people out?' I am sure that those basic sorts of things have not even been considered.

The cost of housing is quite frightening, when you first look at it. I am sure that, if it were looked at in a bit more detail, costs could be reduced. Housing can be built that is more cost effective. I do not think it is absolutely necessary that everybody should have a quarter-acre block and a nice big house with a verandah. In our submission, townhouse types of developments are the way to go, and we believe that the department had it right when they suggested Poon Saan. It is an ideal place for that type of development.

I have to say that it is encouraging to see the department start to ask the question and to consider building for the tropics. These proposed unit developments in Poon Saan certainly take into account living in the tropics. They are designed on an open plan to take advantage of the breeze, to get away from airconditioning, and all of that sort of stuff; and that is a very welcome step in the right direction. You only have to look at the houses that were recently built in Silver City to see that no consideration was given to those aspects; they are plastic looking ones that have cost an absolute fortune.

They are, basically, supermarket houses that you buy and stick on a stump. They have small windows, no shading and no verandahs. They cost an absolute fortune, but they are a very basic suburban house design. You would think twice about building them in Perth, to be honest; but certainly there has been no consideration whatsoever of taking advantage of the breezes that prevail up there. As a result, they had to have airconditioners stuck into them. But we commend the department for addressing that issue and taking into account that type of design.

I will just go back a little. There was some discussion previously about the amount of rainfall on Christmas Island in 1995, when the rock fell and triggered this whole thing. Our information is that there was nothing unusual about the rainfall in that particular year. In fact, we get two metres of rain, on average, every year in tropical downpours; and it pretty well rains solidly for three or four months. There is nothing unusual about that. For the department to say that everything is quite safe as long as there are not huge amounts of rainfall is quite impractical. There are huge amounts of rainfall and constant heavy

downpours every year.

We were encouraged to hear the comments of Works Australia, in particular from Mr Nelligan, and from the department when they spoke about the cast-iron plumbing in those blocks being paper thin and the fact that it is not unusual to have sewage leaks and that sort of stuff. We just say that, if a fortune is going to be spent on building a fence to stop rocks falling, it needs to be looked at with more of a long-term view rather than being just a short-term fix. We would say that it may be a waste to spend a lot of money on building fences, and that that money may well be better spent kick-starting some housing development on the island by relocating some people.

If we are going to spend a fortune just to have the same problem in two or three years time, when these blocks have outlived their useful life, that would seem a waste to us. We say that there should be an open mind kept and some thought given to the long-term future rather than to just the short-term immediate effect. But we understand that it is pressing. It is dangerous here, and the problem needs to be addressed; but it would be better to have a long-term approach to it than a short-term one.

We are absolutely astounded to hear that a decision on managing the risk at the golf club was capable of being made by the department and that a decision was made to protect that risk at an astronomical cost of \$93,000 for a fence. Really, all it does is destroy the beauty of the place and make it look like a prison. It is just amazing; but that is the sort of bureaucratic bungling that I would hate to say we have come to accept on Christmas Island, but we have certainly come to expect it.

In our submission, we rely heavily on what the Commonwealth Grants Commission had to say, and they identify housing as the number one social problem on Christmas Island, and it is; but it is also a very big economic problem. We are saying very strongly to government that they do have a responsibility in relation to housing. I do not know if we had the prophecy right or not but, when we put this submission in, we said that housing on Christmas Island is generally substandard and that any government, Labor or Liberal—or, for that matter, any person—who believes that people should live in housing that is dangerous or of the standard of block 401 or the Poon Saan single quarters, should, in our submission, seriously reassess themselves.

We do not distinguish whether it is a Labor government, Liberal government or whatever. We believe that any Australian government does have a responsibility in the area of public housing. However, we are not saying, 'Give us all this beautiful housing!' Our submission says that there is a need for private ownership and public ownership. There is a pressing need for first home ownership schemes or for home ownership schemes where people can go in and buy the property back. We believe that the Commonwealth owns a lot of property that could be sold and would readily be taken up. That money could be put back into more and more housing. We are not saying, 'Give us, give us, give us!' We are saying, 'Give us an opportunity to do something for ourselves.'

That money could be self-generating.’

We need to touch quickly on freight rates. There is competition at the moment. How long that lasts, nobody knows; but it is quite interesting. There has always been a debate, not just on this island but also certainly within Australia, about the high cost of Australian manned shipping compared with the cost of South-East Asian crews or crews of convenience or on flags of convenience ships. We have one shipping line currently that is Australian manned and Australian flagged. The other one is a Danish registration with a foreign crew. Their rates are very competitive with each other.

It is not the case that the foreign service is cheaper than the Australian service. Quite often, there is argument that, if you can just get away with cutting Australian wages and conditions and using foreign workers, it is cheaper. That is not the case. If it is practical to bring in materials from South-East Asia, we do not have a hardline ideological objection to that, as some unions would. We simply say we want to maximise as best we can, but not at the cost of people having to work for slave wages. We do not say, ‘We can get carpenters from Indonesia to work for 2,000 rupiah per day, so let’s bring them in.’ It has to be balanced up.

I believe that it must be possible to get some cheaper housing on this island. It would be beneficial to have a good look at that; but we commend the planners for the foresight in their design. We say that Poon Saan is the place to develop initially, but not at the cost of not doing more in the Kampong. The only real difference that we had with the department’s initial submission and recommendation was that they did not take any consideration of the Kampong. Our submission was, and is, to look at developing either block 401 or 402 as well as 403. We see that that has been picked up, probably for economic reasons, and we do not argue with that. We would just say that those developments need to be big enough for families to live in and not be pigeonholes. We think that that is possible. It might mean that there are three or four units less in a block—or half a dozen maybe—but it does not mean that it cannot be accommodated.

CHAIR—Mr Chan or Mr Low, do you wish to make any comment at this preliminary stage?

Mr Chan—I will respond to questions later on, thank you, Mr Chairman.

Mr Low—I would just like to add to the opinion of Dave McLane who has just stressed the government or the Christmas Island administration providing more new public housing. In block 408 and 412 the risk of rockfall is noted. As we know, public housing is managed to assist the needs of the people. It is the duty of care of the government to see that. But, on the other hand, if this new housing is built, as Dave has stressed quite clearly, there should be something put in place within the administration to look at family size for public housing while they live there for a number of years and pay rent based on Homeswest model. There should be steps taken in offering direct ownership while tenants

continue paying rent for the house. If tenants agree, this is the sort of issue that could be looked at. It would not burden the Commonwealth in injecting money all the time, and at the same time it could sell the house or flat to the existing tenant who wants it.

I believe from my contacts—including tenants in 408 and 412—this solution would work for the Commonwealth. I am trying to stress the needs of ownership offered. In the first place, they come in as a tenant occupying public housing and later—some two years or more—intend to buy the unit. Steps should be taken to look into offering the unit at a reasonable price as long as the Commonwealth is seen not to be losing. That is what I wanted to stress.

CHAIR—Just an incidental matter, Mr McLane, which is no fault of yours, I understood you to say that you would like blocks 401 and/or 402 considered for refurbishment, is that right? I just need to identify the blocks.

Mr McLane—Yes, either 401 or 402 as well as 403.

CHAIR—That is the point the department made. I should point out to committee members that in the dot points there has clearly been a typing error. In dot point 4 from the bottom you will find that we have ‘412’ and it should be ‘402’. I would like to clarify that for the record. It did not make sense that it should be 412 and I can understand how the typing error could occur.

In yesterday’s conversations with representatives of the Malay community, I came away quite convinced that the Malay community liked living in the Kampong, both because of its proximity to its mosque and its proximity to the sea. I can only presume that the Malay community would be reluctant to move to Poon Saan and would prefer to remain in the present location.

Mr McLane—Yes. I think you have that right. Obviously there are people in the Malay community who would love to live in a house and would love the opportunity to move to Silver City or to Poon Saan, but I think that the majority of people are very happy living in the Kampong—not necessarily in the housing they are in at the Kampong but happy living in the Kampong—for those sorts of cultural and religious community reasons.

CHAIR—There would therefore be a reluctance among a number in the Malay community, as you have indicated, to move to Poon Saan?

Mr McLane—Yes.

CHAIR—Do you assess that the majority there would prefer to remain in upgraded blocks, rather than move to what I will call suburban style housing in Poon Saan?

Mr McLane—Yes. They would prefer to stay in the Kampong.

CHAIR—In renovated blocks?

Mr McLane—Yes. Of course, everybody would like a nice house, but there is not space in the Kampong to do that. There is space in the Kampong for adequate, good quality unit type housing.

Mr RICHARD EVANS—I have a bit of an extension of that. Approximately what percentage of the population of 412 and 408 would be Islamic or Malay communities?

Mr McLane—In block 408 there are five Malay communities living there, 13 non-Malay communities and three single Malay units are occupied. So in 408, there are five Malay family units and three Malay individuals in single units. In block 412 there are 13 Malay families and two single Malay.

Mr RICHARD EVANS—How many non-Malay people are there?

Mr McLane—There are 18 non-Malays in 412 and three non-Malay singles.

Mr RICHARD EVANS—I have a general question about the Islamic community living outside the Kampong. Would there be people of that particular faith outside of the Kampong? If that is the case, what percentage would be living elsewhere?

Mr McLane—Perhaps Mr Low would have a more accurate guess than I would. There are Malay families living outside the Kampong, but not too many.

Mr Low—At this point in time the percentage is very low. However, there are few Malay families living in Silver City, and one in the settlement. It is only in the last five to six months that these families have moved out. There seems to be keenness within some Malay groups to live outside the Malay community. In the past the people in Kampong could apply for upgrading of houses on Christmas Island in locations like Silver City, Drumsite and the settlements. The Malay community would prefer to stay within their Malay community, and this has been the case for a long period of time.

Mr RICHARD EVANS—But the demand for bigger and better housing is outside the Kampong, so they are being forced out.

Mr Low—The trend with the Malay people for options to better housing outside Kampong locations is slowly building up, as we have seen in the last few months, whereby some Malay families have moved out and extended. They buy private housing for approximately \$100,000 and off they move. There are other Malay people who cannot afford it and who obviously have to live in a closed community. I believe there is a possibility within the Malay community now to upgrade into better public housing, and a

big portion of the Malay community would want to do that. They are quite ready to move rather than stay living in 408 and 412 with the risk of rockfall.

Dave says he is quite happy to be there, but the majority of the Chinese community I am sure want to be moved somewhere like the alternative site in Poon Saan. That is what they are aiming for. The Malay community, as I said, if there is no risk, are quite happy to stay put, but if the risk is there they would think twice, and there is a possibility for them to move away.

CHAIR—I have to make the point, though, Mr Low, that the whole object of this inquiry is, of course, to minimise the risk. We have no other brief than to minimise the risk.

Mr Low—Yes, but on the question of minimising, how do you measure it? It goes from this big risk to a small risk, but there is still a risk.

CHAIR—I think we have been through that for the last two hours. The whole object of this exercise is, as I said, to minimise the risk so that the risk that applies in living anywhere else in Australia is recognised as being the risk that applies in living on Christmas Island. It is not eliminated, but it is minimised. I interrupted Mr Evans to make that point.

Mr Low—Yes, but the risk is still there, because living in 408 and 412 is putting people off with the risk of rockfall in their mind, which has been mentioned.

Mr RICHARD EVANS—But, if there was no risk at all, the plan of the department is to sell the buildings anyway in five years. So therefore the people who are living there now would have to consider moving anyway, wouldn't they?

Mr Low—Going to that point, I think the Malay community is quite concerned. We had a meeting with one of the committee members and the majority of them said that they did not want the risk to those places to be seen to be reduced—then they have to get out of the block and someone else comes in. This would be a concern. My opinion is that if you are going to close up the block, close it up—do not reduce the risk or whatever—and then sell it later.

That is of concern to the Malay community because they really stressed it in the meeting yesterday. They do not want to be moved out and then other people moved in, or it sold off to private enterprise. So you have to be aware of their comment on this in making a judgment.

Mr RICHARD EVANS—We are not considering that, as the Chairman has said. But to answer that response, though, if they were to move out into better accommodation, whether it is in the Kampong or Poon Saan, that would have to be a consideration for

them as well, wouldn't it?

Mr Low—Yes.

Mr RICHARD EVANS—But we are not considering that.

Mr FORREST—I am interested in the question about the need for accommodation for families. I have heard it a few times over the last two days, and Mr McLane has made reference to it. I would like to get a bit of a fix on what is meant by that. Yesterday, I heard somebody define it as accommodation for not only their five children but their grandparents, as well. What do you mean when you say there is a need for accommodation for families? What is your feeling on what the mix of the possible development of units 401, 402 and 403 might be?

Mr McLane—They need to be bigger than they are now. I do not know how many units there are in 413 but, if there are 30, that might mean that you get only 20 units. You actually make the units bigger, so there is room to swing a cat in them.

Mr FORREST—How much bigger: four bedrooms, or five?

Mr McLane—No, three. I think that, for people with families, any fewer than three is inadequate. A lot of single people who would go and rent a unit in Perth, for example, would rent a two-bedroom unit. We do not have those options here. There is a very small private sector. If you could get one, which would be substandard, you could expect to pay \$200—maybe \$300—a week.

To answer the first part of your question, the families generally are extended families. It is not what we consider an Australian family: mum, dad and two children. It could be mum, dad, four or five children, grandparents, maybe some aunties and uncles and, in some cases, their children, as well.

Mr FORREST—Do you mean three-bedroom units? Accommodating all those people in that is a task. But do you really mean that there is a need for three-bedroom units in the Kampong?

Mr McLane—Yes. There is a need for three- and four-bedroom units.

Mr FORREST—Numerically, out of those three, how many have you suggested?

Mr McLane—Are you referring to families?

Mr FORREST—Yes.

Mr McLane—In block 408 there are five Malay families. In block 412 there are

13 Malay families.

Mr FORREST—But they are not currently living in three-bedroom units, are they?

Mr McLane—The majority would be living in two-bedroom units.

Mr Low—Two families are currently in a duplex unit. What we have done is cut a wall partition between two units for the big family. It cannot accommodate them in a two-bedroom unit. Three units of those with a wall partition are in block 408. The rest are a two-bedroom type.

Mr FORREST—Are the majority two-bedroom units, currently?

Mr McLane—Yes.

Mr Low—Many big families are currently staying in 412. The majority of them have two to four children. So, when looking into alternative accommodation, there is a need to construct units with three or four bedrooms, based on information provided. You would also need two-bedroom units for couples and single people, so there was a mixture.

Mr HATTON—This is quite curious. Are you actually saying that, if you have got an extended family, everyone has to live in the same unit?

Mr McLane—Yes, in some cases.

Mr HATTON—To me, it is not a situation where half the family is here on Christmas Island and the rest is on the mainland. If people are living in the Kampong together, and if they are living in units that are next to each other, if there are grandparents and so on, is it so unusual that they would be in a unit next door where they have a one-bedroom place—

Mr McLane—They would be in the same unit.

Mr HATTON—That is what I find quite curious, the expectation that it should have to be that—you have to knock all the internal walls out to make it one single space.

Mr McLane—No, that is how it is currently.

Mr HATTON—So people are not used to having one part of the family live next door. It is not up the other end of the island or anything. We have still effectively got a village atmosphere where people can live in individual units and yet still interact directly all the time.

Mr McLane—Yes, that does exist and there is a need for more of that to exist, but it is not unusual for people currently living in 412 or 408 to be living with three generations in one unit—one two-bedroom unit.

Mr HATTON—But is that because of pressure of space?

Mr McLane—Yes. There is nothing available.

Mr HATTON—There are not the available flats, rather than the question of having to put everyone together in the same one.

Mr McLane—Yes, the housing is not available.

CHAIR—I am happy to deal with any questions because the information we are gathering is very valuable in parliamentary terms, but I would remind both the witnesses and the committee that the focus is on the rock risk reduction strategy, 408 and 412. Senator Ferguson.

Senator FERGUSON—I will try and keep to that, Mr Chairman.

CHAIR—It is valuable to accumulate knowledge, but in the interest of the number of witnesses that we have, we need to be focusing our attention a little.

Senator FERGUSON—I have two questions because of things that you said in your opening statement. You were rather critical of the department—the administration—with regards to disaster management plans. Whose responsibility do you think it is to have those management plans in place?

Mr McLane—This island and Cocos must be pretty well the only two Australian communities that have the equivalent of an administrator. That is not criticism of the current administrator or her predecessor but, where the administration basically runs everything and looks after everything, and the administration is run by a department that is specifically set up to run that community in Canberra that overrides the council and everything else, it is a responsibility of the relevant authorities to start to put that sort of thing in place, and I would say that there is a big responsibility on the police. Generally they set up state emergency services.

Senator FERGUSON—The reason I asked the question is that I live in a community much smaller than Christmas Island where disaster management was done on a

voluntary basis by the community. It was not started off by an administrator or a police force or any other particular body, it was done by the community itself, and I do not see any reason why the Christmas Island community could not do exactly the same thing.

Mr McLane—The Christmas Island community would handle itself in a disaster, and did when the cyclone threatened. The point is that there is no proper procedure in place.

Senator FERGUSON—The point I make is that I do not see why you should have to wait for the administration to take action before a disaster management plan can be put into place.

Mr Chan—Can I add to that one. The thing is that the Christmas Island community does not own a lot of things; they own very few things. For example, if anything happens at all, if people are missing, we rely on the administration to provide us with a barge to go out to search for the people, and then the responsibility has been pushed onto the police, the police go back to the harbourmaster and come back to the community and say, 'We can't provide a service.' Do you expect the community to buy the barge? No, they do not have the money. So everything has been run through Canberra, whatever they say; it does not go through the people. They have already made up their minds when they come here. They set up a public meeting and say, 'This is what we propose,' but they have already approved it up there in Canberra; they have already signed a paper.

So everything has been approved before they come up here, before they even get on the plane. So that is what happened. We cannot do it; we do not have the resources. We do not have the equipment to run it. We have got the manpower and we are willing to do it. We have leadership and organisation. If we have got a person to organise it, provide us with resources and we can do it for sure; I guarantee you.

Senator FERGUSON—Before the Chairman pulls me back into line, I will proceed to the next question. Mr McLane, you mentioned that money that might be used on the building of a fence would be better spent on kick-starting new housing projects. I will put two things to you. Firstly, that would not alleviate the immediate problem, because there is a shortage of housing anyway. In talking to the department, they said there was still a requirement for 408 and 412, otherwise it exacerbates the housing problem.

Secondly, you are looking at an amount of \$1.7 million or thereabouts, as against a \$20 million project for the new housing. The kick-start process is really less than 10 per cent of the required funds, anyway. It still does not alleviate the problem of the probability of rockfall or the risk that might be associated with the current situation. I cannot see the practicality of saying, 'We won't build a fence or use one of the other options; we will put that money elsewhere,' when in fact you are going to need an additional \$18 million to start building housing somewhere else.

Mr McLane—Yes; you are certainly going to need additional money. It was more a matter of additional money that goes with starting a development at Poon Saan that gives a kick-start to the economy, rather than just some money for the fence at the golf club and the money for the fence on this one.

Senator FERGUSON—We had better leave the golf club aside, I think.

Mr McLane—\$93,000 is not going to buy much of anything, but it is a hell of a lot of money to spend on a fence.

Senator FERGUSON—It would amount to about a half of a unit.

Mr McLane—There is a real problem. You cannot buy land. If you were to decide, ‘I like Christmas Island; I wouldn’t mind building a house here,’ where are you going to build one? Tell me: I would be very interested. Who do you approach? The government owns all the land. Until very recently the government has owned all the housing. It is recognised, and there is no dispute in the Commonwealth Grants Commission, that 75 per cent of the existing housing stock is substandard. There needs to be a mix of private development and government development to alleviate the absolute housing crisis that exists on the island. That is the point we make.

The unfortunate part about the danger posed with blocks 408 and 412 is that maybe people have to be relocated from there. The good point arising out of that tragedy is that there is an opportunity to develop some housing of a decent standard and to get some land opened up that can be further developed by the private sector. It presents an opportunity: that is the point that we make. We say that there are good reasons to seize the opportunity and do something that produces a good standard of housing and gets things happening, by opening up some land and maybe attracting some developers who might be prepared to develop housing and sell it on the private market.

Senator CALVERT—I had quite a list of things to ask you, but that was my major query about private housing, as you did mention it. I was going to ask if there is a market and what the cost of a block of ground is, but there is none available.

Mr McLane—It is not available. The only land available is in Silver City, where some blocks were developed, but the cost of development has pushed those blocks out of reach of everybody. I think only one or two private blocks have been sold.

Senator FERGUSON—What was the cost?

Mr McLane—I do not have those figures. I believe it was somewhere in the vicinity of \$60,000 or \$70,000 to develop just a standard block.

CHAIR—We can ask that question of the department when they return as

witnesses. I should say, in fairness, that the acting administrator volunteered yesterday in conversation to a number of us that this was a major concern that the administration felt and that they were in fact anxious to make more land available.

Mr McLane—I accept that. It is not a problem with administration but it is a problem with Canberra, which controls the land. To very briefly answer Senator Calvert's question: as soon as a unit or house becomes available on Christmas Island it is snavelled up very quickly. Those basic Silver City houses, the old original silver ones, are \$150,000 and \$160,000. They sell like hot cakes.

Senator CALVERT—If there was land available you obviously have the expertise on the island with tradesmen because some of the local tradesmen's work was pointed out to us yesterday, and it was very good. That may be one way of alleviating any housing shortage and perhaps some people could move out of the Kampong and allow more room for those who are in there.

Mr McLane—Yes. I have no disagreement with that at all. That is what we are saying, in a nutshell.

Senator CALVERT—Do you, as a union, have an active involvement with apprenticeships and traineeships of tradesmen on the island?

Mr McLane—Not as much as we would like. We push it at every opportunity. You can see in our submission that we have given it another push along. We say that if there is housing development that this originally proposed development at Poon Saan presents great opportunities for apprentices to be taken on and trained. We have seen bugger-all apprentices taken on—we have seen some taken on, but they have not concluded. We have seen very little skills being transferred to the local community, for example, arising out of the rebuilding program.

Senator CALVERT—You were critical of the department for not being able to make a recommendation. If, for instance, a recommendation came forward to build protective fences behind 408 and 412 and, given your concerns for the Malay people, more alternative housing was made to do exactly what we were talking about, would you see that as a reasonable option?

Mr McLane—Yes, as long as there is extra housing.

Senator CALVERT—That goes without saying. You were very critical of the standard of the houses up at Silver City.

Mr McLane—No, not critical of the standard of those.

Senator CALVERT—You say that they are of poor quality and are unsuited to the

climate.

Mr McLane—Yes, certainly. The new houses that were just built by the department in the last few years are those plastic looking ones as you drive down the hill—

Senator CALVERT—The ones on stilts?

Mr McLane—Yes.

Senator CALVERT—We had a look at those.

Mr McLane—I do not know how much they cost but I am sure that something with a bit of foresight—

Senator CALVERT—That is what I was going to ask you. Do you know how much they cost?

CHAIR—We will find that out.

Mr McLane—The style of housing proposed in this, I am sure, could have been utilised in that development.

Senator CALVERT—You are impressed with the Troppo architecture.

Mr McLane—I am. I have lived in the tropics for quite some time and it is unusual. The mining companies in the north-west have not thought about it. They have built brick houses and you need a tractor parked outside to run your airconditioning unit. The new style developments in Broome are going back to the old-fashioned way and building for the tropics. It just makes sense to build for the tropics.

Senator CALVERT—There is some evidence in Darwin of these sorts of houses.

CHAIR—We may have to have another hearing into this located in Darwin, I suspect. As there are no other questions to Mr McLane, I thank Messrs Chan, McLane and Low for appearing and indicate that we would be happy to discuss their submission further with them.

[12.30 p.m.]

**SMOLDERS, Councillor Andrew, Shire President, Christmas Island Shire Council,
PO Box 63, Christmas Island, Indian Ocean 6798**

CHAIR—Welcome, Councillor Smolders. The committee has received a submission from the Christmas Island Shire Council dated 22 June 1996. I understand that you do not propose any amendments. Is it the wish of the committee that the submission and the department's response dated 28 June 1996 be incorporated in the transcript of evidence? There being no objection, it is so ordered.

The documents read as follows—

CHAIR—Mr Smolders, there are some things that I might mention. I am going to invite you to make a short statement to the committee and I want to reassure you that we have no wish to constrain you to the time between now and the 20 minutes which *Hansard* have indicated that the tape will run out. In fact, it would be my proposal to break for lunch at that stage. If there are further questions to be answered, we will allow you to return after lunch.

Mr Smolders—Certainly. With your permission, Mr Chair, I would like to read out the formal submission that the council has put forward to your committee because I believe it does warrant revisiting and it does represent my summary statement. Essentially, in order to determine objectively the necessity of any work for reducing the risk of rockfalls in the Kampong and adjoining areas on Christmas Island, there are two factors that need to be considered.

Firstly, an accurate probability assessment of the risks associated with physical damage to people and property resulting from a rockfall needs to be carried out. Secondly, a position needs to be adopted with regard to an acceptable level of risk associated with physical damage to people and property resulting from a rockfall. Achieving an accurate probability assessment of the risks associated with physical damage to people and property resulting from a rockfall requires the use of historical data and perhaps a correlation needs to be identified in relation to the number of fatalities and the dollar value of property damage.

Since adopting a position with regard to an acceptable level of risk associated with physical damage to people and property resulting from a rockfall is entirely subjective, it is crucial that such an adoption does not create a precedent for the Commonwealth of Australia. The most logical means of identifying an acceptable level of risk is to use historical data and risk levels inherent in other public housing facilities in areas prone to natural disasters such as earthquakes and cyclones.

The report prepared by the Department of the Environment, Sport and Territories and Works Australia titled *Christmas Island Rockfall Risk Reduction Strategies, July 1996* outlines five broad strategies for risk reduction. Objectively, there are a multitude of risk reduction strategies incorporating various combinations of work options and it would be too cumbersome to identify and analyse each one. Therefore, it is imperative that the work undertaken to reduce risk is entirely driven by an accurate probability assessment and the determination of an acceptable level of risk.

Furthermore, there are a number of specific issues that need to be considered. A significant amount of money has recently been spent by the Commonwealth on the refurbishment of blocks 408, 412 and the marine building. The report identifies that overcrowded conditions and a lack of parking and outdoor amenities already exist in the Kampong area and that new accommodation has been master planned in the Poon Saan area.

Any work strategy selected needs to take into consideration the draft town plan. A risk management plan should be established as soon as possible, and the council is receptive to a high level involvement in that plan.

Lastly, there is a need for ongoing monitoring of the cliffs in the Kampong and adjacent areas to identify changes to risk assessments, as well as continued assessment of the seismic conditions on Christmas Island. In order to determine the necessity for carrying out work to reduce the risk of rockfalls and to determine the most effective use that can be made of moneys to be expended on that work, the council is of the opinion that a probability analysis of the risk of damage to people and property from rockfalls needs to be fully examined.

An acceptable level of risk associated with physical damage to people and property from rockfalls then needs to be adopted in light of risk levels of public housing in other areas prone to natural disasters. This information should be applied, taking into consideration other specific issues that I have just detailed, as a formula for carrying out the necessary work to be done.

I just have some brief additional comments. Firstly, the council has already taken the initiative to form a disaster plan committee. That happened about two months ago. It acts as a subcommittee of council. As yet, I do not believe that the committee has met, but its intention is to draw upon those persons with the expertise in disaster management. This includes the police and the hospital, and perhaps there is the possibility of tapping into the state energy services so that we are prepared for such an occasion.

Finally, whatever decision does result from this committee, I certainly believe that it needs to be compatible with council's long-term identity of the Kampong area as a community area which is friendly to tourism. That can be derived by depopulating the current ghetto to some extent.

One final point I would like to comment on is that, because strategies of risk reduction are entirely subjective and can only draw on other experiences in relation to disasters such as cyclones to a certain extent, then it would seem very prudent that a conservative approach be applied to this matter.

CHAIR—Thank you, Councillor Smolders. That is, in my view, a very objective appraisal of the situation that this committee faces and of the decisions that we need to take.

Could you perhaps for the record and for the illumination of each of us tell us something of the situation of this council? I understand that you are incorporated under the Western Australian Local Government Act and that elections are held under that act. Could you just comment on the number of councillors elected and on the way in which the community at large on the island is represented on the council?

Mr Smolders—The Christmas Island Shire Council comprises nine councillors. It was conceived on 1 July 1992 and we are currently operating under the local government act which applied on 1 July 1996. We have a shire clerk and eight officers of council. Our total number of employees is 26, not including councillors.

CHAIR—Of the nine councillors, are most of the communities on the island represented?

Mr Smolders—I believe that there is a fair representation of the various community groups on the island amongst the councillors.

CHAIR—While this is not directly related—I run something of a risk here—to the immediate risk of rockfall, can you make a comment or two on the town plan as council sees it and on the impact in the Kampong area of overcrowding? How do you see the town plan being modified to accommodate the reasonable demands that are being made by people in the Kampong area, particularly if there is a need to relocate people out of any of the existing blocks?

Mr Smolders—The draft plan identified the need to take people out of Kampong in some way, to depopulate the area essentially because it does target the Kampong area as being a foreshore development for tourism as well as community housing. Originally they targeted depopulating a building towards the east end of the Kampong area, towards the boatshed area, so that there would be room for boat parking and those sorts of facilities related to water activities.

In light of the reports on rockfalls, the council is of the opinion that in relation to that line which represents negligible damage due to rockfalls where it covers 408 and 412 this committee should be prudent and take a conservative approach to it. I guess the worst-case scenario for this committee would be, for instance, if rockfall barriers were put in place immediately and then a week later a 30-tonne rock did fall down and it did kill people. You would then have to justify the reasons for your decision. It is our belief that a conservative approach needs to be taken such that 408 and 412 would be demolished and those people housed elsewhere. In light of the town plan, that would be consistent with the council's view of the Kampong area.

Mr FORREST—In the statement you say that there is the need for an accurate probability assessment. I see the plan that Dr Baynes has prepared as that plan. We have a comprehensive document up there on the wall that you have referred to. We have got as accurate as you can get in the circumstances on the probabilities and danger of accidents. What more are you suggesting needs to be done when you say that there needs to be an accurate assessment?

Mr Smolders—We are not suggesting more needs to be done at all. We are just suggesting that, if the council were in your shoes and were to make a decision on this,

that is the sort of information we would require. I do believe that this report is a good report. It does cover that area to a great extent, but we believe that perhaps further studies need to be done in relation to public housing elsewhere where there are areas prone to natural disasters. I realise it is not exactly the same as a rockfall situation, but risk levels from those areas could be used in making an acceptable level of risk.

Mr FORREST—In other words, you are talking about comparisons with as near as can be a similar community.

Mr Smolders—Certainly. Whatever risk assessment is accepted will need to be justified in an objective manner so that you could at least turn around and say that all reasonable steps had been taken to gather information so that that acceptable level of risk assessment is justified.

Mr HATTON—Andrew, while you are relating it to public housing and public housing elsewhere, given that the Commonwealth owns the hill, if the rocks fall it does not really matter whether it is running onto public housing or private housing.

Mr Smolders—It is just where that line has been drawn over 408 and 412. Those are the public housing buildings. There are no private houses that fall behind that line.

Mr HATTON—In terms of looking at comparisons, you have said that we should be looking at where there is other public housing prone to cyclones or whatever else. I simply think it would be a question of housing. I would agree with Mr Forrest that this really lays the comparative basis. There is enough data here for us to do that.

Mr Smolders—Yes.

Mr RICHARD EVANS—As a matter of interest, Mr President, are you employed by the Shire Council, employed elsewhere or what?

Mr Smolders—I run my own business, which is a pub-restaurant facility labelled the Rumah Tinggi. It has very nice meals.

Mr RICHARD EVANS—We will be there later!

Senator FERGUSON—We have heard from Dr Baynes, who suggested that a restraining fence would decrease the probability of damage being caused by rockfalls. We have heard from the administrator and the department about the fact that, if 408 and 412 were demolished, it would exacerbate the current housing shortage. In your position as chairman of the council, wouldn't the pressure on public housing caused by the demolishing of those two blocks—bearing in mind that the restraining fence produces the risk—be counterproductive in the best interests of the island, considering the housing shortage that already exists?

Mr Smolders—Certainly. What we are talking about here is a long-term solution. I guess I would put the question back to the chair: what is the role of your committee? Is it to find a short-term solution to the risk from rockfalls or is it to find a long-term solution that is going to be compatible with the views on long-term strategy held by the various organisations on the Island?

CHAIR—The committee has the immediate responsibility to minimise the risk of rockfall. That is the purpose of the hearing, but I do not intend to chair a committee and none of these members intends to be a member of a committee that can be judged in five or 10 years time as having seen only a short-term solution. So, without avoiding your question or reinforcing the popular view of what politicians do with questions, we actually have an immediate and urgent—as you have indicated in your evidence—short-term solution to entertain. We have to decide whether to retain blocks 408 or 412—whether they are safe, whether housing is so pressing and whether they can be renovated to such a standard that they will meet Australian standards. If they do not, then they will be removed in the longer term. Any committee member is welcome to dispute my summation, but that is as I see it.

Mr Smolders—In the light of those comments, my answer to your question, Senator Ferguson, would be that a rockfall barrier is a short-term solution to the problem but the long-term strategy that the council would look at addressing would be the moving of people from the Kampong. The rockfall barrier would be a means to an end so that, whilst housing does go ahead in other areas to accommodate those people who will be moved out, a rockfall barrier could be in place.

Senator FERGUSON—Would you remove people from the Kampong against their wishes? There is a community there, many of whom have said they would like to stay.

Mr Smolders—I guess that is a case of meeting up with the individuals and it would be a case of negotiations; a case of talking to them; a case of—essentially over time—educating them as to the risks that they are opening themselves up to and the reasons for the need to move them out of that area. So it is an education process over time and I believe that is how you would address it.

CHAIR—Let me be sure about this: you did not intend to move people from the Kampong so that it is a totally depopulated area; you just intended to move them from the risk area?

Mr Smolders—I am just talking about blocks 408 and 412.

CHAIR—Are there any other questions? Could it be that Murphy's law applies as lunchtime draws near?

Mr FORREST—If there are other areas on the island where it could be

demonstrated that there is a higher risk of injury to people, would council adopt the same position? I am talking about fuel supply tanks that are within close proximity to public areas. There is one up the road here near the pharmacy that is only, I think, 40 metres from where people congregate. What would council consider to be appropriate action in places like that? In terms of your suggestion, we need an accurate assessment on the probability of risk.

Mr Smolders—We would address it in exactly the same way. You need to understand that the council and organisations on the island have always been reactive to these sorts of issues. It is just an inherent problem on the island. However, since we were conceived in 1992, one of the charters of council is to become a bit more pro-active about these things. To answer your question: we would address it in the same way as it came to light that there were high risk factors in relation to other developments on the island—fuel, housing or whatever.

CHAIR—Do people wish to ask any other questions? If not, Councillor Smolders, I thank you very much for your attendance and for your participation in this hearing.

Luncheon adjournment

[1.50 p.m.]

PAYNE, Mr Russell David, Vice-President, Christmas Island Chamber of Commerce, c/- Xmas Island Surveying Co Pty Ltd, Club Road Settlement, Christmas Island, Indian Ocean 6798

TAN, Mr Won Kak, Chairman, Christmas Island Chamber of Commerce, Shop 1 and 2, Block 409, Kampong, Christmas Island, Indian Ocean 6798

TURNER, Mr Edward, Vice-President, Christmas Island Chamber of Commerce, c/- C1 Hardware, Poon Saan Road, Poon Saan, Christmas Island, Indian Ocean 6798

CHAIR—I welcome the representatives of the Christmas Island Chamber of Commerce. The committee has received a submission from the Christmas Island Chamber of Commerce dated 8 July. Do you propose any amendments?

Mr Tan—Yes. We expressed our major concern to the local council and we were told by the shire president that the PWC was on Christmas Island, so we were advised by him to express our major concern direct to the PWC. So that is why the letter is addressed to the shire president.

CHAIR—Thank you. So your submission is addressed to the shire president. But I am proposing, and I think the committee will agree, that the submission be incorporated in the transcript of evidence, which I would have thought was what Mr Tan would want. Do any members have any objections? There being no objection, I will allow that course to be taken.

The document read as follows—

CHAIR—Mr Tan, Mr Payne or Mr Turner, do you wish to make a short statement to the committee before we proceed to questions?

Mr Tan—As we say in our submission to the shire president, the chamber strongly recommends that DEST should not have any development in the Kampong area. The point is strongly clear that we need a new site for development because of the rockfall issue. We really think that the rockfall protection fences are not a good idea. That is my point of view.

Mr Turner—Could I make a brief statement covering a number of issues?

CHAIR—Yes, my invitation is to do just that.

Mr Turner—I think—and this is from a personal point of view and from the chamber's point of view—the decision that the committee is going to make is far more significant than what is just concerned here with this major issue, which is the rockfall development. The decision you ultimately make with this is probably going to have an enormous impact on Christmas Island in the next couple of years. Christmas Island, at the moment, from a small business perspective, is tottering on the brink of falling over the cliff, in that certainly most small business at the moment is in a very tenuous position.

In terms of the risk—and that was the major point that was raised—the committee is in a position that if it does not take a very conservative position in this the events of a significant rockfall could be quite horrific, both on life and on property. For that reason, taking Mr Smolders' point of view, the decision that is ultimately made by this committee should be very, very conservative. That is part of the reason why we have indicated that 408 and 412 would be removed.

I lived my early life in a place called Coalcliff, which is a suburb of Wollongong and is right on the edge of a cliff. The problem with rockfalls there became so serious that not even Wollongong City Council could handle the problem. It was handed over to the state government. Ultimately, the engineering efforts to prevent rocks such as the ones here—some of these stones that fell last year were approximately the size of this room—from falling and causing loss of life or loss to property would have involved rockfall fences absolutely enormous in design and cost. Ultimately, that particular city council, through the department of main roads, ended up putting up a loose cyclone wire fence. When rocks of a large nature fell, they had to be removed—and there was some loss of life in that case because the road is right on the edge of the cliff face.

The problems with rockfalls are serious. I have been coming back and forth since the 1970s and these rockfalls have been continuous. They have certainly been continuous during the heavy rains that we have had. A significant engineering cost would be involved in putting up fences that would be capable of stopping those rocks, if it were possible.

What is closely interlinked with this is that if those blocks are removed we have got a significant housing problem. The problem that has been submitted by most people today is a hangover of the paternalistic attitude from BPC days. I was here in those early days of BPC, so I can speak with some authority. The influences are still here.

What we are talking about there is, 'We'll solve the housing problem by getting the government to go and spend another \$20 million on a development at Poon Saan.' That would be very costly to the government and very inexpensive for the community, because we would all get new homes. But, as every speaker has highlighted, we do not have any land for development. There are no blocks of land for sale. The Chamber of Commerce has been crying out for the government to make some land available. Russell can speak more properly on that.

But if we did not take the paternalistic view of, 'We'll remove these premises and then we'll go and hopefully expend another \$20 million of the Commonwealth's funds,'—and that can be very easily done—you could take another solution and probably spend \$3 million or \$4 million somewhere up near the airport. Russell might speak on the new town plan as well. We do not know where that is, but it is going on and on around the mill and we do not have a town plan.

If that is the area where a town plan can be put, there is electricity there now and there is water there now, but it will need a sewerage connection. Telephone cables are up there now. For probably a few million dollars we have the opportunity of giving some inexpensive land to people in the Kampong who, quoting Mr Jeffrey Low—Jeffrey is a very influential person in our ethnic community—would move. They would prefer housing. They would prefer blocks of land and for some little expenditure to create a normal sort of environment that we have got in mainland Australia; a lot of these people would move. They would not have to be forced; they would buy those blocks and they would build their own homes. It would not cost the Commonwealth another \$20 million for housing.

Getting away from the paternalistic attitude, I will make one other statement. There has been no assessment made of any of the people living in the Kampong, but one of the things I can tell you is that a lot of those people have their own homes. I can personally quote one person who moved out recently who has not just got one home in Australia but has got four. He has been very happy living in the Kampong, paying the Commonwealth rent and buying up property in Australia. Most of those people have properties in Australia, Singapore and Malaysia. I am not saying that all of them do, but a lot of them have more than one home in Australia. They would have a home here if they had a bloody opportunity, and that cost would not be falling back on the Commonwealth. That is the essential element.

Another thing that you might be interested in is shipping. I run a hardware business, and some of the senators here have raised this issue. Shipping costs from here to

Singapore or from here to Jakarta, as against Perth, are about \$3,500 for a landed container. The shipping costs from Perth are about \$5,700. There is a significant cost reduction between the north and the south.

Also of interest are material costs from Perth—and I am talking about building and construction materials—which are 20 to 40 per cent less than Australian costs. So there are some significant cost savings in a lot of the materials. You do have to be very careful, as Hugh Moore pointed out, with quality; you have got to demand quality. Funnily enough, all the major companies that you would wish to name—BHP, CSR, Boral, ICI, Hardie's, Humes—are all in Indonesia and in Singapore. If you put the demand on for a quality product, you will get it. I just wanted to make that point.

That is about all that I would like to say. Finally, the committee, as I indicated, has got an opportunity to put some leadership responsibility back on the community and to save the Commonwealth a lot of money with the right decisions. Certainly, it is our viewpoint that the right decision is to provide some suitable low cost land and let the people get on and build their own bloody homes without having to bludge on the Commonwealth.

CHAIR—Mr Payne, did you want to comment?

Mr Payne—If you will bear with me, I will read through a section of the chamber's recommendations.

CHAIR—This is the letter with the recommendations to the shire president?

Mr Payne—Yes; our recommendations for the shire, outlining our view on the rockfall fencing. They are the chamber's recommendations to this committee. At one stage we did not think that we would get a hearing here, so this is why we did this.

CHAIR—Let me hasten to reassure you that you would never have been denied a hearing by the committee, so there must have been some other reason for that.

Mr Payne—There was a breakdown in communications along the line. We did not think we were going to make this juncture. Basically, there were five recommendations made. The letter in part reads:

The Chamber recommends that

- 1) the option of rockfall protection fencing should not be considered.
- 2) a buffer zone, exclusive of dwellings, be created around the base of the cliff. The size of this buffer zone must satisfy the requirements of the Commonwealth's consultants, Golder Associates Pty Ltd.
- 3) buildings 408 and 412 should be demolished and the residents provided alternative housing elsewhere.

- 4) this alternative housing be provided in a manner that benefits the whole community in the long term.
- 5) no further Commonwealth development of the Kampong should be accepted until a development strategy has been implemented under a properly legislated town plan.

In summing up, the Chamber feels that the Commonwealth's liability in respect to loss of life and damage to property because of rockfall in the Kampong is untenable. The most beneficial solution would be to demolish those buildings at risk and provide the residents accommodation on a subdivisional development created under a properly legislated town plan.

That is the chamber's view, if you like, on this.

CHAIR—I thought you might want to comment on some remarks Mr Turner had made about land availability.

Mr Payne—That is what I am referring to here, under a properly legislated town plan. In the five years that the Chamber of Commerce has been in operation, and in the length of time that both Ed and I have been on it, we have been trying to get a town plan going so that we can have things like light industrial areas. What we have been faced with here is the Commonwealth having quick fixes on accommodation problems on the island. That is why 408 and 412 were redeveloped. They were sitting there vacant and nobody wanted to live in them so they revamped those as a short-term solution. Now we are doing 403, and there was a subdivision in Silver City that provided a limited amount of blocks, of which 80 per cent have been taken up by Commonwealth housing requirements, anyway.

If you take the present situation, where we asked for 408 and 412 to be demolished, you are taking away 60 dwelling units. As we heard from the administration this morning, there are over 30 families requiring houses and over 20 single people requiring houses. So you are looking at over 100 dwelling units that are required right now. The Poon Saan development, as nice as it is, can only give us 70 to 80 of those. The Commonwealth will spend \$20 million providing that, and that is not enough. As soon as the money is handed over, we will be back at your door again, saying, 'We need some more money because we have got another housing problem.'

What the chamber has been trying to do for years is to get a strategy of broadacre land release on the island so that local businessmen or even off-island businessmen can develop land and sell off blocks. Believe me, a lot of people come here and then leave, because it is too hard; you cannot set up a business and you cannot buy a house. There is a very limited local private market in land sales, and they are at a premium. If you buy a prefabricated home and it costs you \$30,000 to put it on your farm, you buy it here, 25 years old, for \$160,000. That is the real problem. That is the chamber's point of view.

Having listened to the evidence earlier this morning, it is my opinion that the rockfall protection fences should go ahead as the short-term plan. But in allowing the

rockfall protection fences to be built, it should also be stipulated that instead of having a quick-fix solution to this, the Commonwealth should bankroll or kick-start this broadacre development, not in Poon Saan, but up in the Irvine Hill area, where it has been recommended in the town plan. That is basically it. Once you satisfy your housing needs up there, if it is properly developed, there is enough scope there for private entrepreneurs to create their own blocks of land and sell them off at a profit or whatever. The thing about developing on top of Irvine Hill or on Phosphate Hill is that it has been proven that you are off the hard limestone areas and it is an easier, less costly place to develop.

So from the chamber's point of view, that is what we would like the outcome to be. I think the answer will be that we will get our rock fences; that is my personal opinion. But in doing that, we must also urge you not to take another quick fix solution to our housing problems, but instigate the start of a broadacre development that we can operate without interference, without coming back to you guys for the next 50 years. This is ridiculous. Like I said, if we go to Poon Saan, we will be straight back to you because in two years or so, our housing needs will develop further and we will want another \$20 million. And then we will want another \$20 million. If we keep infilling here and infilling there, we will have gone nowhere. All we are actually doing by spending this Commonwealth money is satisfying the Commonwealth's needs and not the needs of the community of Christmas Island and its potential for economic growth.

Mr Tan—You probably hear a lot from UCIW, the administration and also the shire. The chamber, UCIW and the shire actually come to a very similar recommendation—that we need more land for this development, for the long term. While we had lunch with Senator Paul Calvert and others, we said that for the big picture, for Kampong, it is the only area on Christmas Island that actually has one-minute access to the beach.

If we can have a long-term picture for Christmas Island and a safe solution for this rockfall and shift people somewhere safe, you not only solve the rockfall problem, you actually solve a lot of problems such as dangerous roads where rocks easily fall down. But if you have somewhere which is a suitable site for safe development, we can actually solve a lot of problems, not only the rockfall problem. The Kampong area can be developed for the big picture, such as for big investment later on, if that area can be shifted to somewhere else.

That would be a bigger asset for the Commonwealth down the track which could be developed for the major projects such as a hotel or resort or other big project. But it is a big asset for the Commonwealth, and the Commonwealth probably should not spend so much money and not get any return. But if the Commonwealth is prepared to have a new site set up it would solve a lot of problems for the long term, not for the short term. The union, the shire and the chamber urge that the committee to have solutions for the long term. That site could create so much money for the Commonwealth for the next 10 or 15 years. I cannot say the time limit, but it is a great asset and a nice site for the Commonwealth.

CHAIR—In my response to the Christmas Island Chamber of Commerce, before I open to questions, I have to say that I hear just what you are saying about land release, and the comment has been made, as Mr Turner said, by everyone who has appeared before the committee. It has even been readily recognised, I believe, by the administration and by the acting administrator, and no-one would dispute your comment about the need for there to be land available for either light industrial or housing development at an appropriate site on Christmas Island.

Beyond that, however, gentlemen, I find myself a little bit perplexed by what you have put to me. I will ask other committee members to respond. I may have had more difficulty than them, but I was surprised that both Mr Tan and Mr Turner said that option No. 1 was that we should not consider a rockfall fence. Mr Payne spoke to the same letter without even referring to that, and then in the end said, 'But I think there ought to be a rockfall fence.' So that seemed to be a very duplicitous approach to the way in which we are going to go about dealing with this rockfall exercise.

Also, in words that were music to my ears, Mr Turner has indicated that he felt that it was quite wrong for the Commonwealth to go on pouring money into Christmas Island when it could be generated by private enterprise. Obviously, I warm to that. But he then proposed in recommendation 3 that blocks 408 and 412 be demolished, which would instantly oblige the Commonwealth to find \$20 million.

I would have thought as businessmen on the island and someone who, I would have thought, had some empathy with what you were trying to achieve, a much more objective view would have been the one mentioned by Mr Payne at the end where he acknowledged the need for the rockfall fence, with the retention of 408 and 412, having been renovated, and the proposal then that there be additional housing so there would be an opportunity for there to meet some of the housing demands rather than creating an enormous housing shortage here by demolishing 408 and 412, which would be unnecessary, given the advice that Mr Payne has recommended, with the construction of a rockfall fence.

So if you understand my confusion, I would appreciate just a little clarification, and then other committee members might like to ask a question or two.

Mr Payne—I will just elaborate on what you said, if you like. I have been sitting in on the meetings this morning and listening to the evidence given by other witnesses to the committee. Having heard that and gleaned a little bit more information on it, there is no way that we can move the bulldozers in tomorrow and knock down 408 and 412. So as an interim thing we need to build the rockfall fences to protect those two buildings. But as I said there, with the Kampong, the chamber thinks that the Commonwealth's liability right now is untenable, unanswerable.

There is a scientific plan there saying that these people are at risk, and you have

got to come up with a quick fix solution to save that. When you make the decision of putting the rockfall fences in, you should consider the broader aspects of what the community needs as far as their housing requirements are concerned and not make another quick fix to do it. I still stand by the recommendation of the chamber that 408 and 412 should go, but not tomorrow and not by kicking people out in the street. There is a need for the rockfall fences. That is my personal view. We do not have time to race off and have a meeting and get a quick thing from the chamber now. But in making that decision to finance the rockfall fences you should also keep in mind that 408 and 412, as Works Australia has pointed out, have only another three or four years left in them anyway. What we are talking about is a subdivisional estate being developed and the Commonwealth meeting its public housing commitments. You are not looking at something that is going to be done in six months time or 12 months time but at least a strategy can be put into place and we can work from there. I still advocate that 408 and 412 should be knocked down as the chamber has suggested.

CHAIR—I simply indicate that, given your experience both as entrepreneurs and as people accustomed to looking at balance sheets and contracts, I am surprised that when I asked for any amendments, someone did not respond by saying, ‘Yes, we actually believe we ought to amend recommendations 1 and 3.’

Mr Turner—Mr Chairman, can I explain that? When I made the statement about what the Commonwealth would do I was making the point that probably some loose fencing is required to stop small stones which might prevent injury, primarily, or some property damage.

CHAIR—Which in fact is happening—I am sorry to interrupt you if I am doing that—now as part of a restriction on people entering the risky zone.

Mr Turner—I do not believe that there is an engineering solution to stop boulders of the size that came down last year. They were larger than this room. It would be an engineering feat in itself to devise a wall which was going to stop rocks of that size and that tonnage. For that reason I guess I have got a half-way vent. I do not believe that type of expenditure is going to solve the problem. When stones of that size are moving at speed, it would be horrifically expensive for the Commonwealth to devise fences to prevent those stones going into those flats. But some type of fencing is needed. From my own early experience of 10 or 15 years living in that area on the coast that is what I observed. The city council could not solve it and they gave it to the state government in New South Wales to solve who, ultimately, did not solve it. It is still not solved.

Mr HATTON—Mr Turner, it is a pretty big room. Are we talking about the length of the room or the width, in terms of the size of the rock? The evidence we have got is there was a 30-tonne boulder, right? That 30-tonne boulder went part way and then stopped and was broken up afterwards. Are there other rocks that we do not know about?

Mr Turner—The only one that I observed last year landed on the road behind Westpac Bank and covered the whole road. I do not know how much it weighed. If somebody has estimated it was 30 tonnes I accept that figure, but it could have been 100 tonnes. It was enormously large.

CHAIR—We will have the opportunity to have Dr Baynes back and perhaps ask him about that at the appropriate time. It would seem to me to be the appropriate way to deal with that speculation.

Senator FERGUSON—Mr Turner, did you hear Dr Baynes's evidence?

Mr Turner—No, I didn't.

Senator FERGUSON—You have made some comments, I think, which are contrary to what he said and I could just fill you in. The Commonwealth will not be devising the fences, somebody else will. We are not into fence construction. When I say construction, certainly not devising how it should be built. He had evidence that suggested that 99 per cent of the rocks that are likely to come down would be stopped by the fence, which has been tested in other parts of the world. If you were aware of that evidence it might allay some of your fears, because we can only accept that evidence of a professional person giving us that sort of advice.

You made one other comment which concerned me a bit. Why is small business on the brink in CI? What has caused it to be on the brink?

Mr Turner—We have got very little development here at all at the moment. In the last couple of years most of the small business activity was generated out of Commonwealth public works programs. That has come to a standstill. We have had great difficulties with airlines stopping and starting, which has been a really savage interruption to business activity. I guess the third factor is the manner in which the Commonwealth controls the island.

A simple example: a developer came in here last week from Broome, brought his construction engineer with him; he was quite serious. He went away with the decision that this is too hard. There is no light industrial area for him to place any containers for material, there is no property that he can go to the Commonwealth and buy. The process at the moment is that he goes to Canberra. He does not go to the shire, he does not go to the local administrator, he has got to go to Canberra. Then the policy with Canberra, if there is any interest from any developer, they then put it out to tender and ultimately, 12 months later when it goes out to tender, he puts up his hand and hopefully wins the property that he wanted to do. So he said he has not got 12 months to wait around for that process, so he has gone away. Those people go away all the time, so we cannot really have any proper development. There is not a house for him to buy. He can place his men in the accommodation camp that Works Australia built. But the normal sort of things that

people can do they cannot do here.

Senator FERGUSON—The reason I asked the question is that I just wonder why you say small business is on the brink here. I wonder why it is any different than it was at any stage in the last five years—to use any sort of time span—when since 1991 your population has apparently nearly doubled.

Mr Turner—It has nearly doubled? There have been people leaving the island every week for, I guess, the last six months.

Senator FERGUSON—With 1,300 in the census of 1991 and we hear there are possibly 2,200 now.

Mr Turner—I do not know what the population is, but there has been a significant decline. There are businesses closing. There are some of our local businessmen putting their businesses up for sale, and we are just in a savage decline. Most business activity has declined about 50 per cent in the last six months.

Mr Tan—Before 1991 the resort is not even operating yet.

Senator FERGUSON—Which resort is not running?

Mr Tan—Christmas Island resort is not in operation. So, obviously you have another 500 to 700 employees added on to the population. There was a rebuilding program coming up, everything was going quite nicely. Now the rebuilding program is coming to the end of stage 1 and stage 2 has not been guaranteed because of the budget problem. Certainly from a chamber point of view we do need some project coming up in order to keep Christmas Island moving. I think that government is not preparing to spend more money on Christmas Island, not as yet, due to the budget problem. So that is why you can see the population increase.

The population increase does not mean that the Christmas Island economy is going up. We agree with what Ed says. I dropped by 30 per cent, and I am lucky. Ed Turner and his wife have got a duty free shop which has dropped by 50 per cent. We have three or four businesses on sale. Even our local supermarket operates at a loss. So you can see how it has actually affected the whole economy of Christmas Island. Most of the population are employees. Only 10 to 15 per cent are employers. Of that 10 to 15 per cent, maybe 12 per cent represents local small businesses. So we are hurting.

We need some more big projects to come up on Christmas Island, in order to keep everyone going. There were actually three or four investors from mainland Australia interested in one site. For some reason, the Commonwealth held back. There must be some reason for the Commonwealth to consider those four tenders, anyway. But there is just no other site where, and no other way that, any other investor can invest on Christmas

Island. Where else can they develop or invest in a property on Christmas Island? There is no land that they can buy and no other area where they can invest in and build, or buy, a business.

The business that we have down there is fine; the Commonwealth leases it to us, and we build it and we repair it. Five years down the track, they may take it back. There is no guarantee. But we would be more prepared to invest in our own property if there were land or property available on Christmas Island.

Senator CALVERT—Thank you for putting forward an alternative that had not been put to us before: that is, involving private enterprise and private money. Having said that, it has highlighted a shortcoming of Christmas Island that was identified to us last time we were here: that is, the lack of a plan. It seems that there has been very little attempt to get it a long-term plan, just as there does not seem to be a long-term disaster plan, as Mr Forrest pointed out this morning.

Another thing concerns me, and Eddie highlighted it at lunchtime. It is about the Malay community in the Kampong, and I think it was highlighted yesterday by some members that spoke to us. If reasonable, bigger housing were available outside of the Kampong, would they be willing to move out? That raises a question about the long-term plan for Flying Fish Cove, which is something that needs to be settled pretty quickly. Do you believe there should have been a referendum held among the Malay community in the Kampong, to ask them whether, if reasonably-sized housing were available elsewhere on the island, they would be willing to move? Would that be something that would be an advantage to the whole situation?

Mr Tan—I understand the Malay very well. Later on, I will answer your question. I own a business down in the Malay Kampong and I can speak Malay very well. I cannot make decisions on behalf of Malays, but I certainly have a strong belief that they will move out if there are better facilities available to them. As for your question, yes, I think it should be. It should be considered. It is hard for me. The majority of the members of the Malay community whom I talk to agree. But I have not asked all of them, so I cannot make such a decision at this table. But I think there should be a referendum among the Malay community.

Senator CALVERT—Mr Payne, you talk about Irvine Hill. It seems to have almost everything up there, except for sewerage. It would also raise the question of public transport.

Mr Payne—In reality it is a short haul. Anything on Christmas Island in the developed areas is a short haul from anywhere. The town plan that has been recommended has the light industrial area up on Irvine Hill, up on the top, in a mining field just on the right-hand side. It is the current light industrial area.

What you have got to look at when you do a development up there in isolation,

because it is not tacked onto anything, are the services, the outfall of the stormwater and the sewerage. There is nothing really to stop us building another sewerage treatment plant up there if we had to. But if you wanted to run down and use the one that we have here and improve facilities down there to handle the capabilities, the thing is that you have got to channel a whole lot of headworks to the area. So when developments go ahead, it becomes an endless thing. We need to have enough headworks available at the site to keep adding on cells of 30 houses, 20 houses or another 10 industrial blocks or this sort of thing; or even, as the town plan ultimately has it, a town centre up there, with the courthouse and police stations. We are talking maybe 50 years down the track, but at least that sort of planning goes into it now.

With regard to the headworks that are required, you could pick a figure of 10,000 people or units and just run it with that, and then, as the economy drives the island, we just add more and more to it. If there is nothing, we just leave it where it is and it is adequate to suit the needs of what is there.

Senator CALVERT—You have lived here for a while. Do you think if private land was available it would solve all problems—if not all problems, certainly it would be an improvement?

Mr Payne—Absolutely. As I said, I am a local surveyor here. When people come around looking for land, they come and see me and they come with ideas. I would hate to list the millions of dollars of business investment that has left this island, simply because they have had to take on the inertia of the Commonwealth government in providing these basic things for a business to do. I think at our last meeting I went through the thing about the boat developer who came up here straight after the mine was shut. He is making sales; his first sale was \$70 million worth of these boats, which could have been a Christmas Island idea. I think they went to Sydney and did it over there.

That was a big one. We had a big one last year that went west. That may come back again now. There are other little things, like hydroponic farms and things like this. People have been coming up and showing interest in it. They say, ‘This is great, let’s get on with it,’ and they hit this brick wall because there is nothing to go on. They cannot walk up and get a block of land.

CHAIR—I genuinely do not want to compress what you wish to say, but we do have to focus on a rockfall fence and rockfall risk reduction strategies, without dismissing the valid point that has been made by a number of individuals, none more persuasively than you, about the shortage of land. Mr Tan, you are welcome to address the shortage of land, but I then want to get back to the rockfall and the risk reduction strategy.

Mr Tan—On the rockfall issue, if we have available land on Christmas Island, any investor who comes up here, as long as they can have available space for them, they are prepared to invest any money in it. It is up to them to develop and build themselves. So

the problem now—and it is the same problem for the PWC—is that if we are going to shift these two properties away, where are we going to place them? Our recommendation is to have available land up there, somewhere safe, for a long term and automatically leave some land available for other investors. You do not have to do other things, just make sure the services and the headworks are in place. Otherwise the investor will go to Indonesia, Singapore or anywhere in the world. They are prepared to put money in here, for Christmas Island, and it will solve a lot of problems and generate a lot of money for the economy of Christmas Island.

CHAIR—If there are no other questions, can I thank you, Mr Turner, Mr Tan and Mr Payne, for appearing and for the evidence you have presented.

[2.30 p.m.]

WOODMORE, Mr Frank, Managing Director, F.P. Woodmore Pty Ltd, PO Box 595, Christmas Island, Indian Ocean

CHAIR—Welcome. The committee has received a submission from Mr Woodmore, dated 24 June 1996. Would you wish to propose any amendments?

Mr Woodmore—Yes. It may not be on your copy, but if you refer to page 2, I have inadvertently put in the two unit numbers as wrong numbers. Right on the top line of page 2, units 401 and 402 should be 408 and 412. It does not alter the meaning of the content, though.

CHAIR—We had a similar correction earlier in the day—you may not have been here. It is proposed that the submission be received, taken as read and incorporated in the transcript of evidence. Do members have any objections? There being no objection, it is so ordered.

The document read as follows—

CHAIR—Mr Woodmore, do you wish to make a short statement, before the committee proceeds to questions?

Mr Woodmore—Yes, thank you. I am aware that the report is really addressing the rockfall problem, with housing as a possible consequence of the way in which that is addressed. I must say that when I first read the report I wondered whether it was two parts—one about housing and one about the rockfall—because it is fairly heavy on the housing part which may mislead some of the people who appear here today.

My personal view is that the least-cost solution is desirable, provided that it is in line with safety, and I will just refer to the summary of comments that I have made. Basically, in my opinion, the rockfall barriers are essential and, provided those rockfall barriers are put into place, the risk to the Boat Club—and I speak as a member of the Boat Club—would not warrant its demolition. I think they are prepared to live with that risk.

Despite the installation of barriers, the risks to the residents of block 408 would not be reduced to an acceptable level. I define from the main report that level as being the same risk which a person would have of fatality from flying in a private aircraft. I often fly in private aircraft and I would not like to think that I live with that risk every day. So, for me, that is the bottom line. The barriers would bring the other block of units under that risk, but the risk to block 408 could not be reduced to an acceptable level.

There are some social considerations, as you have already heard from other persons, in relation to the desire of residents of Kampong to remain generally within Kampong. As a result, in my opinion, the renovation of the two blocks—401 and 402—not only provides the least-cost solution but also provides the housing in the area where it is most needed. Furthermore, it does produce some surplus units which could be sold on the local market and would help to defray the overall investment.

With regard to the comments that the report has made about housing generally: we are acutely short of housing and I know that the whole community would welcome any projects which your committee might want to advance in relation to the development of housing. But I must say that I felt that some aspects of the report were a little bit too flamboyant and went beyond what was intended in a rockfall protection strategy.

I then make a comment in my report that some alternative areas for housing in the longer-term are available at Irvine Hill, as you have just heard from the Chamber of Commerce. That is an area where private development can get involved. But in the short-term there is the possibility of infill of Poon Saan and also a site at Poon Saan which I looked at some years ago which is bounded by bitumen roads and probably would not cost as much to develop as the alternative that is now proposed for Poon Saan.

CHAIR—As someone who has an interest in Christmas Island and who has been

involved in property development, would you care to comment on what you see as the scope for private investment in rental housing on Christmas Island if land were available?

Mr Woodmore—There is a huge demand in the private sector and public sector for rental housing, and housing rents are somewhat excessive, in my opinion. That is purely a product of supply and demand, and if plenty of land were available, private investors would, I am sure, buy land and build duplexes or quadraplexes and housing suitable for rental. That would take a great deal of pressure off both the government and the local community. There is no doubt that there is a huge demand, probably for at least 100 dwellings either to rent or to buy.

CHAIR—Other questions from committee members?

Senator CALVERT—The chamber raised the important matter of the lack of a town plan. Being a developer yourself I presume you would support their comments. What do you see as the long-term future? All things being equal, and if we did not have the problem of the attachment to the area by the Malay community, what would you see, as a developer, being the outcome for Flying Fish Cove?

Mr Woodmore—Flying Fish Cove would have been a very good potential site for complete redevelopment, but the lack of a town plan and an ad hoc measure to address issues as they arise has rather locked it in to its present mode because there has been strata titling and sale of most of the ocean front blocks. Once you have done that, you have basically taken the demolition of those blocks off the agenda for at least 20 to 30 years, because you are dealing then with a whole series of different owners.

So the fragmentation of ownership down there by virtue of strata titling—and right on the foreshore as you drive along is the prime area—means there is a commitment for at least 20 to 30 years for high-rise blocks which would not allow proper landscaping of buildings or zonings behind it. I am sorry to say that Flying Fish Cove really is not an option for major development in the future by virtue of that fact. Therefore, you might as well take the least-cost option and renovate the blocks that are there and let the people who want to live there live there.

Senator CALVERT—And sell them off?

Mr Woodmore—Yes, I think it is beyond redemption. It has happened in other parts of Australia. Once strata titling takes hold in that mode it becomes impossible—it is entrenched—and you then have individual bodies corporate made of 36 or 24 individual owners. You are locked into a long-term plan whether you like it or not.

Senator FERGUSON—On page 5 you mention the detailed costings. Firstly, do you think that the cost of the buildings is excessive? We have had some suggestion that by tender the cost of building these units ought to be less, or could possibly be less. You

talk about the overall cost being reduced by selling off nine surplus units at \$70,000 each to raise \$637,000. Because it is below development cost, it increases the cost per unit.

Mr Woodmore—Yes, it does.

Senator FERGUSON—Why \$70,000? Is that a fixed figure or market value?

Mr Woodmore—It is a very relaxed market value. Most people would buy them at \$70,000 sight unseen, at that price. They are probably worth more, but I have been conservative on that estimate. It certainly increases the average cost, but to the Commonwealth's actual outlay it reduces it.

Senator FERGUSON—But I would have thought if the demand for housing is what you say it is, and if you are looking at a cost above that, that perhaps the market value might be more than \$70,000.

Mr Woodmore—It is. The sale prices of renovated Kampong units on the waterfronts, the highest price that I am aware of, as recorded through the titles office, is \$87,000. That is almost absolute waterfront. Based on that, and bearing in mind that these units are tucked away behind the hill with a road coming down alongside, \$75,000 is probably not a bad guess. But we do not know the extent to which they are going to be renovated or done up. They might be renovated to a much more comfortable size, and in that case it might be possible to recover the actual cost.

Senator FERGUSON—Have you seen what they are doing in 403?

Mr Woodmore—Yes.

Senator FERGUSON—What would they be worth?

Mr Woodmore—Probably about \$85,000, maybe \$90,000. So there might be scope to get a bit more back, but the purpose of the exercise is really to illustrate the potential there to reduce the outlay to the Commonwealth rather than to be too precise about the exact figures.

Senator FERGUSON—And did you hear the evidence this morning—you may not have—where it was suggested to us that to refurbish 401, 402 as well as 403 would place too much strain on the density of the housing in that area, that it should be either 401 or 402 as well as 403 that should be refurbished in that area.

Mr Woodmore—It would look better, it would be more aesthetically pleasing if that were to be done. I have given some calculations there which I have taken from plan measurement of the buildings, and in terms of zoning the density is not excessive, but in terms of proximity—

Senator FERGUSON—Is this your R80 and R70?

Mr Woodmore—Yes.

Senator FERGUSON—What does the ‘R’ stand for?

Mr Woodmore—Residential. It is just a development code that architects and planners use. They are certainly close to each other. Under the R codes there is required to be greater separation and usually greater height. Here you have got it squat, and therefore they are close. Anyone can see, if you walk around there, it is a bit crowded.

I have heard today the suggestion of a referendum, that sounds like quite a good idea, or even just an audit of the people who would be prepared to relocate. If you could find sufficient to relocate that you did not need to renovate the second block and you could demolish it, that would probably have a productive effect on the island’s economy because there is more building happening and so forth and it would improve the aesthetics of that little corner down there.

Senator FERGUSON—It may also mean more Commonwealth money.

Mr Woodmore—That is right. No question, it is going to be more expensive.

Senator FERGUSON—That might be the difficult end of the bargain.

Mr Woodmore—That is for your committee to decide.

CHAIR—You have expressed concern about block 408 because of what you see is the perceived risk being comparable with the occupancy of a passenger seat in a private aircraft, something I also do frequently. We may invite Dr Baynes to comment on that relative to what he sees as the effective nature of the rockfall fences. But you stand absolutely by your summary point 2 that the barrier fence construction is essential regardless of what happens to building 408.

Mr Woodmore—Yes. I believe that to be definitely the case, for protection of the community down there.

CHAIR—In terms of the Commonwealth’s duty of care I suspect you are probably right.

Mr Woodmore—Yes, that is right.

Mr FORREST—I would like some feedback, just from a general point of view, on the assessment of the one in 110,000 flying in an aircraft. You would also accept the

much higher risk of being a pedestrian walking out here straight after you have given your evidence and being run over, which is something like probably one in 5,000, or even driving a motorcar is a much higher risk than that. So, just as a member of the community, how do you make that assessment about what is an acceptable risk? Flying in an aircraft is a choice you make. You could go by sea. I do not know what the probability is there but there is bound to be one. What information do you use as a member of the community to make that determination?

CHAIR—I suspect Mr Woodmore does not sleep on an aircraft.

Mr Woodmore—That is right. It is a permanent residence. I think there is a psychological aspect as well as a real risk aspect. I am not a risk expert from the statistical point of view. But, if you had to sleep on a road, I think that is more dangerous than walking across it.

CHAIR—If there are no other questions, I thank Mr Woodmore for his evidence.

[2.45 p.m.]

WILSON, Mr Andrew William, Commodore, Christmas Island Boat Club, Flying Fish Cove, Kampong, PO Box 414, Christmas Island 6798

CHAIR—Welcome. The committee has received a submission from the Christmas Island Boat Club dated 25 January 1996. Do you wish to propose any amendments?

Mr Wilson—No, there are no amendments.

CHAIR—Is it the wish of the committee that the document, along with the Department of the Environment, Sport and Territories response, be incorporated in the transcript of evidence? There being no objection, it is so ordered.

The documents read as follows—

CHAIR—Mr Wilson, do you wish to make a short statement before the committee proceeds to questions?

Mr Wilson—Mr Chairman, the Boat Club was built in May 1958 with materials and site developed and supplied by BPC. It is incorrect to state that the Christmas Island Boat Club is on Commonwealth land. The Christmas Island Boat Club is a Christmas Island community asset, as are many other already established buildings on the island.

After the rockfall in 1972, the Christmas Island Boat Club was rebuilt over what is now deemed a heritage site. It was rebuilt by members and funded by them at that time. The Christmas Island Boat Club has been enjoyed by the community and members on various calendar occasions and is and has been an essential part in the unity of the island from then up until now in keeping the tradition alive.

Territory Day is the biggest celebration on the calendar for Christmas Island, and the final day of celebrations is held at the Boat Club on Cove Day. It has always been there to my knowledge, and I hope it will continue to be at the Christmas Island Boat Club in the future. With some 300 people enjoying the club's atmosphere and the events last year, with an additional 600 or more on the foreshore, the day was a great success to the community and visitors and also to the international yacht crews who frequent the island annually on their migration westward.

The Boat Club has a membership of 150. With the liquor licence hours between 6 a.m. and 2 a.m. being the best on the island for clubs, this ensures that everyone on the island, whether working in shift work or in normal hours, can enjoy the club and the atmosphere that is there. The newly formed game fishing club has joined with the Boat Club, which I feel has an important role in the management of our waters for the future potential of international game fishing events, including participants from overseas, of course.

In closing, on behalf of the Boat Club and members and the community, I make a proposal for a potential lease entitlement of the grounds to the Christmas Island Boat Club and, with that, the support of the Commonwealth with the construction of a rockfall fence barrier behind the club; as opposed to the costs of relocation and inconvenience that the club and community will incur.

CHAIR—Can you clarify for me the status of the land title you have? I understand from the brief that was given to the committee that the land was donated by the British Phosphate Company, but I am not sure what happened on the Commonwealth's acquisition of it—and I use the word 'acquisition' loosely. For example, when I was a member of a local governing body we had sporting bodies that were on council land. If it was the local golf club, they still saw the golf club house as theirs, even though it was located on Commonwealth land. What is the status of your land title?

Mr Wilson—I think it has become that way only because of the heritage listing of the site because of the pillbox used during the war.

CHAIR—So the land is actually vested in the Commonwealth now?

Mr Wilson—I understand that the site is under heritage listing and that would probably be under Commonwealth management. I am not really sure exactly what the entitlement of the land is, but it was given to the community by the British Phosphate Company.

CHAIR—I understand the sentiments. We may be able to clarify the land title with a question to the acting administrator.

Mr Wilson—I cannot take that any further.

CHAIR—Mr Hatton may have some information.

Mr HATTON—No. Mr Wilson, you probably were not there in 1972—you are probably a bit young for that—and so you probably have not seen the 1972 report.

Mr Wilson—I have seen it.

Mr HATTON—So you would know of the extent of the size of the boulders that rolled through that place. Are the people using the Boat Club completely aware of the danger that is there now, particularly in periods of high rainfall?

Mr Wilson—That is right.

Mr HATTON—They still want to use the Boat Club in those circumstances?

Mr Wilson—There was a rockfall that came down a couple of years ago. A small boulder came down, bounced through the lean-to pergola, walked down the stairs and ended up on the road.

CHAIR—It did not touch the bar though, did it?

Mr Wilson—No, it did not touch the bar. We have a rockfall plan if it does come. But on occasions like those, the Boat Club is vacated. You are talking about torrential downpours that have been going for three days. These are the rocks that are in the area that are stuck in the mud and are eroded by consistent rainfall and then nudged on. As to the cliff face, that is part of the island and it would take a lot to shift that.

CHAIR—Just to clarify that: you have an arrangement where in times of heavy

rainfall or lightning storms you vacate the club?

Mr Wilson—Basically the club is vacated. There is no point in staying down there because the water does come in as the club is an open plan. If there is any wind involved, the area becomes quite small, so it is uncomfortable as well as unpleasant.

CHAIR—We can take it for granted that it is vacated between 2 a.m. and 6 a.m., but it was 6 a.m. to 2 a.m. that we were more concerned about.

Mr Wilson—Depending on the night and what is happening, I suppose, yes.

Mr FORREST—I would just like to clarify the position with respect to the status. If the building is listed under the heritage—

Mr Wilson—Not the building, the site.

Mr FORREST—What basis are you able to justify that that is fact—that it is listed accordingly?

Mr Wilson—That has been in reports that have been passed around. With heritage listing of the existing buildings around the island, the Boat Club was included as the site. We later found out that it was not actually the club, it was the site that was used in the war as a pillbox and its strategic location in the cove for defence.

Mr FORREST—I had a second question, but you probably answered it in response to a previous comment. I was going to ask whether there were certain restrictive requirements on members of the club in certain situations not to use the premises and whether your membership would accept that. But I think you answered that in your response to an earlier question.

Mr Wilson—Yes.

Mr FORREST—I do not mean in terms of what is happening in the surf, but in terms of what is happening up above and numerically restricting the number of people that might congregate in the area. Would your membership accept that?

Mr Wilson—Most definitely, as opposed to what they have done over at the marine building. They have overlooked that because of its low occupancy, and that was stated in the report. Building a rockfall fence behind the marine building will have only a marginal reduction of risk after erection of the barrier. But the marine building is in a more primary rockfall location than the Boat Club in terms of risk factor. It is one in 450,000. That is like one death in 180 years to one in 1,800 years as to the workings of this plan.

Mr RICHARD EVANS—On the basis that you do have a disaster plan and it was decided that the demolition of the Boat Club was to proceed, what would happen to relocation plans?

Mr Wilson—The club would have to be relocated in an area that is suitable for the activities that happen in the club throughout the year and in a location in the cove. There is no point in putting a boat club in the middle of the island or somewhere like that.

Mr RICHARD EVANS—Sure; but there have been no preliminary talks?

Mr Wilson—There have been preliminary talks just amongst the committee and other people involved as to sites that are available. There are no allocated sites available. These ones we will have to look at and try to obtain. There are sites, but they are not available.

CHAIR—The development that rightly is being sought by the Christmas Island Chamber of Commerce is not of much value to you?

Mr Wilson—Not really, no.

Senator FERGUSON—You said people leave or vacate the club in times of torrential rain et cetera. Is the club used a lot less in the wet season than it is in the dry season?

Mr Wilson—Not so much. During the day it is quite good during the wet season. The rainfall comes every three or four hours and then we get a heavy torrential downpour. It very seldom rains for any longer than that. Half a day of consistent rainfall is very rare. I have seen it, but it does not happen all the time. So we get short, intense downpours of torrential power. We have had mud slides out the back which the members have curtailed by putting log barriers around to stop them.

The club is in need of repair. We have been asking for community grants that have been offered to every other club around the island, but in the last few years they have been refused to the Boat Club because of this pending rockfall story. Our roof is leaking and the open plan, as I said, means that if there is any wind involved the rain just comes straight in and makes the location not so nice. It is a good place to go, stop, get your drinks and then leave and take them home to where it is nice and dry.

Senator FERGUSON—Would there be any objection, do you think, from members of the Boat Club if, for instance, there was a restriction placed on the use of it during torrential rain?

Mr Wilson—I think that is mostly commonsense. Everyone is very well aware of

the dangers there and the conditions at the time. It is not safe. If there was a condition made, I do not see that there would be any problem with the members abiding by that.

Mr TED GRACE—Did you say that there were sites present but not available? What would those sites be used for at the present time then?

Mr Wilson—There is only one really—and I am not supposed to tell anyone about this—which is lower admin adjacent to the fuel farm on the top of the point. There is the old storage of gas bottles. That is a refilling area and that area is just not being used. It is 10 metres above sea level, right on the outcrop of the cove. It is on your right before you come down the hill.

Mr HATTON—Correct me if I am wrong, but even though it is adjacent to the cove there are not any boats launched from there at all. Basically it is a place where people have a grog close to the cove. It would seem to me that nearly \$400,000 is a big amount of money for the Commonwealth to put up for a rock retaining fence behind a club that is visited only from time to time.

The times we have been there we have not seen any evidence of people using it. If they do it on a continuing basis in the wet, it is extremely dangerous. That would be my particular concern with the club staying there. If you did not put the rockfall fence behind it, you have then got an open situation with the Commonwealth's hill and the Commonwealth's rocks in a club area where you could have a lot of people at particular times. When do those major festivity days occur, during the wet period or the dry period?

Mr Wilson—During the dry. They are not during the monsoons—at Christmas and after that. It does rain, but not every day as some of the reports may state. It is quite stable. It is only in torrential downpours that the erosion occurs and the mud loosens the rocks.

Mr HATTON—So members of the club have been looking at alternative sites?

Mr Wilson—We have been, but as the cove is already quite developed there are not that many sites available to accommodate the club, overseeing the boat ramp and the management of boating and safety on that point.

CHAIR—Are you aware that among the risk reduction strategies presented to us by the department, and particularly by Dr Baynes, the fact that the Boat Club was not permanently occupied meant that it was seen as a relatively low risk area and demolition was not necessarily the only option this committee faces. Are you aware of that?

Mr Wilson—Yes.

CHAIR—Thank you for appearing before us and thank you for the evidence you have presented in your response to questions.

[3.05 p.m.]

HART, Mr Roger Ian, Rehabilitation Officer, Australian Nature Conservation Agency, Drumsite, Christmas Island 6798

RUMPF, Dr Holger, Environment Officer, Australian Nature Conservation Agency, Drumsite, Christmas Island 6798

CHAIR—Welcome. The committee has received a submission from the Australian Nature Conservation Agency dated 23 January 1996. Do you wish to propose any amendments?

Mr Hart—No.

CHAIR—It is proposed the submission and the Department of the Environment, Sport and Territories response dated 2 July 1996 be received, taken as read and incorporated in the transcript of evidence. There being no objection, it is so ordered.

The documents read as follows—

CHAIR—Mr Hart or Dr Rumpff, do you wish to proceed to make a short statement before the committee proceeds to questions?

Mr Hart—Yes, thank you for the opportunity. The submission I wrote was in relation to trying to enhance other measures to defend the cove against rockfall, but I would just like to say that that area in general is a valued part of the Christmas Island environment. Although it is not in the park, we still have responsibilities for the environment outside of that and its wildlife habitat for nesting seabirds. ANCA has a holistic obligation as far as the wildlife goes under the Wildlife Protection Act.

It is also important aesthetically, the cove being one of the most important—if not the most important—tourist site on the island, having ready access to the water and having a number of important aesthetic factors that come together in that region. So we are certainly trying to emphasise the importance of that area from that perspective and also, in my submission, trying to assist with some measure of using natural vegetation to assist in defending against rockfalls. My colleague Dr Rumpff has some further statement to make in relation to specific development.

Dr Rumpff—As my colleague Roger mentioned, the Australian Nature Conservation Agency has obligations under the National Parks and Conservation Act 1975, which applies to the entire area of Christmas Island, not just to the national park. Under this act, wildlife is protected and therefore in order to follow our brief we tried to maximise the protection of native habitat.

Concrete in this case, this specific problem, there was some concern expressed before whether the construction of a rockfall defence fence may in fact reduce the natural protection that is there in the guise of natural vegetation. We have examined the site and found that in fact by utilising an existing powerline easement which is overgrown by secondary growth, but also has secondary plantations in the neighbourhood, it is possible to construct this defence structure without impacting upon the primary vegetation. This was one of our initial concerns when the first ideas of constructing such a structure was mooted. This relates to the area behind 408 and 412.

In the case of the marine building it is also possible. In fact, the area is wider and would yield itself to importing of a soil layer which also would dissipate energy of rolling boulders. That is one aspect. From our point of view it is feasible and the impact upon native vegetation would be either totally negligible or minimal.

The other aspect is the scenario of whether housing which is considered too dangerous to live in would have to be replaced. In this context, one has to look at Christmas Island in general very closely and even closer at the existing urban precincts. By looking at the map of Christmas Island or an aerial photograph, it may appear that there is ample room for further development in this narrower urban precinct of the existing settlements on Christmas Island. There is scope for infill attempts for the construction of

housing in infill situations. However, there may be areas which may appear suitable because the topography lends itself to easy construction. It is not too steep; it is not too rocky. However, each and every proposal would have to be examined under our act, so to speak.

An example is the vegetation in this loop between Murray Road as it goes up the hill and Poon Saan, Silver City. I was absent when Mr Woodmore proposed this area. We have known about this proposal for about four years and, although this vegetation appears from the road verge as scrubby and secondary, the core of it is primary vegetation. It is certainly disturbed. As you walk through it, there are chook pens all over the place and rubbish. But, basically, it is primary forest. It has not been cleared for the purpose of mining, for example, or for the purpose of erecting chook pens, except possibly to a limited extent in the undergrowth.

So the message is that the infill potential on Christmas Island is lower than it appears to be. In every case it would have to be assessed as to what vegetation is there from our viewpoint.

Another scenario is the removal of blocks 408 and 412—one of them or both. That scenario would open up a highly valuable conservation option for revegetating that area, reintroducing native trees, which would in turn enable the expansion of the nesting area of the Christmas Island frigate bird, of which there are only 1,900 pairs left. It is endemic and it is classified as endangered.

At the turn of the century the bird was described as being present in the cove. It has most likely been displaced by construction of human settlement. There is a chance then, under this scenario, that one could rehabilitate that area in order to facilitate the return of this endangered species.

CHAIR—Dr Rumpff, I just want to pick up your last comment about the revegetation of an area to provide some sort of home for the frigate bird species. I can assure you that the secretary, on my right, would be much better qualified than me to ask the questions, since he has a particular interest in migratory birds.

Mr Hollis—Birds in general!

CHAIR—I would have thought that blocks 408 and 412 would occupy at most a hectare of land. Surely it cannot be that hard to find a hectare of land to revegetate to provide a homing area for a species that is threatened?

Dr Rumpff—That appears to be so. However, this species, like many others, seems to have a very selective preference for certain areas. The Christmas Island frigate bird has only ever been known to nest in the area around the golf course—that is, about 60 per cent of the population. The so-called ‘cemetery colony’ extends above the Chinese

Islamic Christian cemetery along Gaze Road into Settlement, below the dryers, and, as I said before, in the area of Flying Fish Cove and north of Flying Fish Cove.

For some reason this bird wants to be in only certain areas. It is not found at South Point or Smithson Bight, and it is not found above a certain contour line of something like 80, 90 or 100 metres for reasons that we do not know. Therefore, this one or two hectare area may be a very valuable addition to the nesting habitat, which is naturally very restricted. The frigate bird does seem to prefer the lower altitudes. When you look at a cliff situation, which is what we have on Christmas Island typically, it prefers the shore terrace.

CHAIR—You can understand, though, what one could almost say was my cynicism at this being the area that they would necessarily propose, given the number of other hectares of land available for some sort of reforestation that they would find attractive?

Dr Rumpff—Yes, I understand that. It is not so that we, ANCA, are proposing to bulldoze for one or two—

CHAIR—No, I understand that.

Dr Rumpff—All we are trying to do is give you some additional means that may help in the decision making. I believe that, so far, we have been talking about scenarios, the different strategies from Nos. 1 to 5. What I am saying is that, should this strategy be implemented, this would be an additional benefit.

CHAIR—I have one other question for you, particularly from a conservation point of view. You mentioned that behind the marine building there could be some soil brought in to provide a buffer zone through which rocks would not easily move, because it would not be compacted, and so it would provide an area where the kinetic energy would be used up. I would have thought—and I seek advice on this—that in a climate like this, with 80 to 100 inches of rain in a year, there would be enormous compaction simply as a result of the driving rain and the torrential downpours that have been referred to by other witnesses.

Dr Rumpff—No. Christmas Island soil is exposed to this kind of rainfall everywhere, and it does not seem to get compacted in natural conditions at all. In fact, it is very absorbent and in only very few places on Christmas Island do you have water run-off in natural conditions. The area behind the marine building has been disturbed and—in contrast to the areas behind 412 and 408, which are relatively steep, except for the artificial easement—it provides scope to maybe do a combination of importation of soil and growing and nursing extra trees such as ficus, as was suggested by Roger, with or without a fence: that remains to be seen. That is not our brief.

Mr HATTON—Firstly, do you think the golf course fence might have frightened the frigates away from nesting there?

Dr Rumpff—I do not think so, no. Frigate birds, except for their fussy nesting habitat preferences, actually do not seem to mind. They drink water from the resort pool and they manage with other kinds of human interference very well. No, I do not think that is the case.

Mr HATTON—Secondly, in regard to the soil proposal behind the depot, could the same sort of thing be done behind the boathouse as well? Is the area there capable of having soil done in the reverse hill so that the impact could then be behind the boathouse and also behind the depot and stabilise the situation?

Dr Rumpff—I believe not. In my opinion the situation behind 408 and 412 on the one side and the marine building on the other is different from the Boat Club section. At the Boat Club the slope is fairly steep. There is no already man-made easement and any construction or importation of soil or cut or fill would, in my opinion, and I am sure that Dr Baynes would agree with this, exacerbate the problem rather than alleviate it. But, for the area behind the golf club, that is different from the other three sections.

Mr FORREST—It has been suggested that the success rate of the plantings of this variety has not been very good—with a very appalling strike rate, in fact. What have you learnt out of that exercise that could convince us that you can get a better strike rate in the future if this is a possibility?

Mr Hart—The plantings that occurred three years ago were undertaken with the requirement of expediency, so we had to produce the stock in the nursery with limited notice. Therefore the trees that we planted out were not very advanced. We have subsequently been able to plan for ongoing operation and have been able to focus on producing a lot of ficus trees. We have approximately 3,000 trees in stock and we have already trialled planting out 20 advanced trees, which some members of your committee observed yesterday. Those trees seem to be performing well. They have all survived and it indicates that when they are planted out at a more advanced stage they have a much better survival rate. I should also hasten to add that we have given them some level of maintenance. We have watered them several times through the dry season and that would be part of an ongoing operation to ensure a better survival rate.

Mr RICHARD EVANS—These trees, do they deflect or stop rocks coming down?

Mr Hart—Depending on the size of them and the size of the rock, they would have the capability to stop rocks because of their habit of spreading out with horizontal growth, casting out horizontal branches that then send down vertical shoots which become aerial roots. They have the ability over a longer term period to stop rocks. Of course, it depends on the size of the rock and the size of the tree. It is all relative.

Mr HATTON—If we knocked out 408 and 412, in the long term are you suggesting that it could be reforested? Dr Baynes suggested that an area there where you did gardening and so on provided a good growing area. Could you incorporate both of those things together? If that is going to be a fall zone, you would need to take that into account in terms of your planting.

Mr Hart—You could have a rearguard action of planting ficus that hopefully would be able to be planted into very suitable conditions and grow rapidly in a raised mound of soil that would provide a backdrop to such a parkland environment, yes. Perhaps several rows would be desirable, but it would not necessarily have to occupy the whole site.

Dr Rumpff—Looking at this scenario, there are a range of options available. Certainly gardens would do very little in terms of stopping rock from rolling even further. But a revegetation with the aim of providing nesting habitats for Christmas Island frigate birds could be certainly combined with the use of that area as public open space—as parkland. It would not have to be a zone which would exclude people. In fact you could use the shade to have picnic spots incorporated. That, by the way, also goes for those areas elsewhere in the urban precincts of Christmas Island which we try to conserve because they are small pockets of remnant primary forest.

It does not mean that they are going to be excluded from the public, because they are already disturbed. People have used these areas and have accessed them as chook farms. It is absolutely impossible to use as parkland these areas such as the smallish patch of primary forest that is situated in this housing proposal in lower Poon Saan. There is, in fact, a small pocket of what we believe is undisturbed primary forest, in that it has never been cleared. Rather than making artificial landscaping, thus creating public open space, this clump of trees could be used as such and the housing density increased at the other end of this development. We have discussed it with Troppo and we believe they are quite ready to incorporate such ideas and allow for this maximisation of primary habitat.

Senator CALVERT—Do you believe that, given the submission you have made to us about changing the ways of growing these microcarpa trees, by using the new system you have devised—I presume you use a dripper system when watering and all the rest of it—if you can establish those in these areas at the back, would it also be possible to establish them at the top of these gullies where the rocks are identified as moving down? In other words, if you get establishment at the head of the gullies you would stop the rocks before they got anywhere.

Dr Rumpff—I believe not. There are areas of this cliff face that have been touched before by man, such as the areas where there used to be a chute in the early days for conveying phosphate down the hill. There are other areas of man-made disturbance which have been excellently mapped by Dr Baynes. Apart from those areas the existing vegetation is native. That means naturally with the existing competition between species

there would already be a maximised vegetation cover based on the harsh environment that the trees find. For example, in that area you do not find the huge trees that you find on the central plateau; it is more those species that can put up with the conditions.

To come back more specifically to your question: the maintenance of, say, planted ficus trees uphill would, of course, be a daunting task. You would have to walk up there and manually water them. The installation of a watering system, again, would be an impact. So our view is wherever there is grown primary vegetation to leave it alone.

Mr Hart—Another factor would be the incidence of rockfall in such a site, and a lot of these active sites are bereft of vegetation for that very reason. Any plant that does begin to grow there is destroyed by ongoing rockfalls.

CHAIR—If there are no other questions, I thank Dr Rumpff and Mr Hart for appearing and for their evidence.

Short adjournment

[3.45 p.m]

CHAIR—I reconvene the Christmas Island rockfall reduction strategy hearing and recall the witnesses from the Department of Environment, Sport and Territories and Works Australia. Mr Moore, do you want to open with a remark or is someone else from the department wanting to comment on some of the evidence we have heard and we will follow up with questions from the committee?

Mr Moore—I would like to take this opportunity to dispel the suggestions that have been made by various witnesses that the Commonwealth government, through the Territories Office, does not have plans. The Commonwealth government has plans in a number of areas that have been covered this morning. It has been alleged that it does not have planning in place. It has plans in relation to economic development for the island, it has plans in relation to land release, it has a process in place for town planning and it has a disaster plan. I would like in the first place to ask Ms Merrilyn Chilvers to explain the situation in relation to the disaster plan.

Ms Chilvers—I must apologise to the committee for, in effect, misleading them when I said that I was not aware whether there was a disaster plan. In fact there is one which was actually formulated in January 1995 or published in January 1995. It does not specifically mention rockfalls, but it lists the main Christmas Island emergency service organisations and spells out their primary roles. It goes on to say that emergencies not the responsibility of any other emergency service organisations are the responsibility of the AFP, who in fact often do take a lead role in coordinating events that could be classed as a disaster. It goes on to say:

The handling of an incident is a routine matter for each of the emergency service organisations. Where appropriate, they operate on internal plans produced to cope with particular situations. In the event that the **incident** develops into an **emergency**, thus involving assistance from other services, emergency plans or co-ordinating arrangements have been developed between emergency service organisations.

So we are adequately covered to deal with an emergency such as a rockfall.

Mr Moore—Economic development and land are very much tied up together. The Commonwealth government has put in place arrangements to ensure that land is more readily available on the island. Before 1992 Singapore law applied to this island. We have made a lot of progress so far but there is still, in relation to both the bureaucratic rules and the condition of the infrastructure, a fair way to go before we get to mainland standards. With land, it is no different.

The Territories Office has commissioned and just received a full ground audit report which has reviewed the ownership of land and the procedures for release of land. It has established within the Territories Office a task force which is to take on the job of implementing an improved land release strategy for the island. The minister is currently being briefed on that.

Ms Chilvers—When the minister was here the week before last this issue was raised with him by concerned groups. He tasked me and the Shire Council to work together from the island point of view to look at the steps involved in development and land release and to coordinate with the task force in the Territories Office to produce a better process.

CHAIR—The urgency of that has been fairly evident from the evidence given to the inquiry.

Ms Chilvers—Yes.

Senator FERGUSON—Is land becoming more readily available?

Mr Moore—The objective is to make land readily available. The difficulty at the moment is that land has not been surveyed. If someone comes up and says, 'I want to have some land,' it is not even possible to define what it is legally at this point because most of it is Commonwealth land which has not been surveyed or put onto the register so it could be disposed of. The issues of easements have not been resolved. So there is a long and complex process that involves legal and registration type issues. It is not, unfortunately, my field of expertise, but I am aware of these issues in relation to land.

Senator FERGUSON—You say that prior to 1992 it was not possible.

Mr Moore—Prior to 1992 there was a Singapore regime of law on this island. The

Commonwealth owned all the land, but at that point in time the laws that applied were not those of mainland Australia.

Senator FERGUSON—But this is four years down the track and obviously people have been looking for land within that last four-year period. Why has it taken so long?

Ms Chilvers—We have come to a blockage. Sometimes people forget that land has been released. A large number of properties have been sold through a direct housing scheme, so people do have ownership of properties. There has been a strata titling process with a lot of the units which Mr Woodmore referred to. There were auctions where land was sold. Some of these have been built on by private builders. Next to the supermarket there is a development going on by someone private.

Some of the land was bought. The Commonwealth sold it with a proviso that if it was not developed within a certain time it would revert to the Commonwealth in order to avoid land speculation. Some of those blocks have not yet been built on, and the clock is ticking with those. There has been land release. It is just that the initial parcels that were identified have largely been taken up.

Senator FERGUSON—But if only a very limited amount of land is released it will be so expensive that it will be out of the range of people who may want to use the land not only for private dwellings but also for businesses.

Mr Moore—That issue is currently being addressed. Lots of properties have been passed over from Commonwealth to private ownership since 1992. Prior to 1992, practically everything on the island was Commonwealth owned. There has been a major shift from the Commonwealth owning everything to the Commonwealth owning only some of the residential and business infrastructure.

Now there is a need to construct new buildings on land that has not got buildings on it, and that is the issue that we are now addressing. The effort previously, as indicated, has been put into this release of properties that are currently occupied by people who want to use them for businesses. Our resources now need to be directed into this land release strategy.

Senator FERGUSON—How long will it be before any significant amounts of land become available for purchase? Is it a six-month time frame, 12-month time frame? What is the likelihood of land being released in the next 12 months?

Mr Moore—I am not involved personally in the task force or their plans, or in the consultations with the minister on the process. But I am aware that it has now been given the highest priority within the office to address it and to release land. It is not true to say that there is no land. In fact, I was going to talk about economic development which is very closely linked with land release, as has been drawn to attention by other witnesses,

particularly this Chamber of Commerce.

It is not true that there has been no opportunity for economic development. A number of sites have been advertised for expressions of interest, including a light industrial area, the old hospital site and some land out at Lily Beach. That has gone through a public tender process to ensure probity, because whilst the Commonwealth is committed to economic development it is committed to development which allows equal opportunity.

The Commonwealth is not in a position where it is going to do special deals with any particular people. It wants an open process. That process which has provided these sites for development is now at the stage where negotiations are being held with those bidders. There is no final outcome for those as yet.

Senator FERGUSON—You say that consultations are going on in the minister's office. How much consultation has gone on with the people of Christmas Island?

Mr Moore—Extensive consultation has gone on with the people of Christmas Island over a long period on both the release of the properties that have been bought by people and the potential land release strategies.

For example, under the Christmas Island rebuilding program the Silver City land was developed. In the end mostly government housing was constructed, although it was also used to construct council houses and some private houses. That site, for example, was the result of a study of possible infill sites within the urban area. That particular site was recommended and chosen after consultation with the shire council. A consultative process produced that land for release.

There has been a consultative process with the Shire Council on town planning, which I also mentioned. As a result, the light industrial area site has been settled. The consultative process has not always been easy. For example, for a long time the light industrial area has been dear to the heart of the Chamber of Commerce. It has been dear to the Commonwealth's heart for a long period of time as well. In fact in 1992 we had a site identified in our 1992 statement of evidence showing where the light industrial area should be placed. As a result of representations from within the community, including from the Chamber of Commerce, that potential light industrial area site has changed to about five or six locations. We believe it is now settled in a site which we have now advertised for expressions of interest.

I make that point; that the consultative process has been continued but it has not been an easy one. That consultative process has involved town planning issues which are the joint responsibility with the Commonwealth, the Shire Council and, through the Shire Council, the community obviously. But under the Western Australian Local Government Act model that applies on the island, responsibility for the initiation of town planning rests

with the Shire Council.

Over a period of time since 1992, the Shire Council has put some effort into developing a town plan, but that plan has not yet been finalised. It is currently at a stage where, with the assistance of the Commonwealth, there is a consultancy being let to review the draft town plan that has been produced, because the plan that was produced did not adequately or properly do the job. For example, initially it identified a town site in close proximity to the airport and studies by the FAC, which we commissioned, showed that would put it within aircraft noise zone limits which are inappropriate. As a result of that, it was put to the Shire Council that they needed to rethink that aspect of it.

Also for various reasons it involved potential developers showing an interest in a golf course up at the top of the hill. Ultimately it has involved a proposal for the use of the Irvine Hill area for either a golf course or residential development. Basically that leaves a very difficult situation because we believe it is not possible to do both. That makes it very difficult to pick up the ball and run with it in relation to the Irvine Hill planning proposals, for example, that the Chamber of Commerce has put forward.

I will not go on any longer, but I mention it just to indicate that these problems, whilst they are not directly involved with the rockfall issue, have been raised by others. They do need to have some sort of response and the matters are not simple. There has not been a case of inaction on the Commonwealth's part. There has been a lot of action and a lot of resources put into these issues and there are continuing efforts put in to solve them.

CHAIR—I would like to conclude on a note that I feel obliged to make as the chairman and that is that, while these are not directly related to the task that the committee has before it right now of rockfall risk, they are related to how we house people and they appear to be a matter of major moment to those who have appeared. Thank you for that detailed explanation. I have at least two questions on the subject, but I would appreciate if we can try and keep our answers reasonably compressed. I am conscious of the time constraints that Ms Chilvers is facing, for example, and I would like to be dealing with some of the rockfall issues as well.

Mr HATTON—I have a prefatory remark picking up the last thing that you said in terms of making a decision between housing and light industrial versus the golf course. The most pressing problem on the island would seem to be housing and future housing at a reasonable cost. I just make the point that putting that as a higher priority than the golf course is fairly important in terms of consideration of the town plan.

I want to ask about title—what the Commonwealth government has title to and what community groups have title to. I understand from some information that was given to me that we have a lot of crown land, but the situation of title has not yet been worked out.

Ms Chilvers—Yes, that was what Mr Moore was alluding to when he said that, if someone comes along and sees a piece of land that they want, there is not always title to it at this stage because the land has not all been surveyed. One thing we are hoping to develop is a priority for surveys so that we can, in conjunction with the town planning process and talking to the Shire Council, identify the sites that are a priority to be surveyed so that the Commonwealth can get title to it and so that we can then go through that title exchange—the transfer of title—whether it be leasehold or freehold.

Mr HATTON—There is no title for the Boat Club and the mosque?

Ms Chilvers—I would not be able to say with any certainty whether there is title to any of those, but it is certainly all crown land or Commonwealth land.

Senator CALVERT—Would it be an advantage, given the discussions we had yesterday with the Malay community and the Islamic Council, to do a survey of the Malay people in the Kampong to see whether, if better and larger housing were available outside that area, they would be willing to move? That leads me to the second question. Given the chronic shortage of housing on the island and what was said by the Chamber of Commerce, Mr Woodmore and others, including the union representative, would the private enterprise alternative take some pressure off the government as far as costs are concerned? I know it is detailed, but if for argument's sake 50 or 60 new home units built by private enterprise became available and there were people willing to rent or buy them surely that would take the pressure off and allow you more freedom in the redevelopment work you are trying to do in the Kampong?

Ms Chilvers—I think the answer is yes. If they were available and people were willing to move, it would certainly take pressure off the Kampong.

Mr Moore—You would find no argument from me personally in developing land on the top of the hill with a proper town plan in place which provides for the way that should be done, but it will require funds for head works, as mentioned before, and there is the issue of resources. There are scarce resources at this point in time.

Senator CALVERT—The developers have been known to fund head works in the past if they are serious.

Mr Moore—We are quite happy to test the market and see whether they would do something.

Senator CALVERT—That is all I am asking. Would a survey of the residents in the Kampong be an advantage?

Mr Moore—Again, I am quite happy to take those questions on notice. It is not my particular responsibility, but it sounds a sensible idea.

Senator CALVERT—From the comments last night, we had the feeling that the people did not want to leave because of their religious and natural ties to the water. On the other hand, it seemed that some of the younger generation with families would have gone if they had bigger homes.

Mr Moore—My only proviso on that would be that it would have to be done carefully so as not to raise expectations as to what the Commonwealth would provide.

Senator CALVERT—For instance, you could say that private enterprise was going to build it.

Mr RICHARD EVANS—Is there evidence of a percentage variation in rockfalls between wet season and dry season? Does it happen more often in the wet season? If so, what percentage would be wet season?

Dr Baynes—I have not been able to derive detailed enough records to make such an assessment, unfortunately.

Mr RICHARD EVANS—Would the assumption be correct then, as the commodore was saying, that with heavy rains the mud obviously shifts and therefore rocks become exposed and are more likely to fall?

Dr Baynes—Yes. Generally you would assume that you would have a higher proportion of rockfalls during the rainy season.

Mr RICHARD EVANS—And the ones that we have on evidence, when did they happen? Was the 30-tonne rock a wet season incident or was it in 1995?

Dr Baynes—In March 1995.

Mr RICHARD EVANS—So it was soon after the wet season?

Dr Baynes—Yes.

Mr Moore—I understand it was an unseasonably wet period, not necessarily in a season, but it was a specific wet period.

Dr Baynes—In my report I have tried to document those kinds of things as much as I can, but unfortunately my short-term memory is not such that I can recall these things.

CHAIR—Can I intervene here. You may have another question, Mr Evans, but I had hoped that we might deal with this summary—I think Mr Moore is anticipating this—by dealing with the issues as he raised them. The issue he raised was one of land title,

which clearly was of some moment. It was the questions on land title that I wanted to deal with before he moved onto the next issue. Are there any other questions on land title? It has been fairly extensively dealt with.

Mr Moore—There are other points I wanted to make. There is in fact an interim development order in place so the town planning is not totally stalled in any case. There is an issue as well of access to services if development were to be carried out on the top of the hill. It is not far to anywhere on Christmas Island, but they do say that we should have access to a shop within walking distance and access to a school, if possible. So you end up with a requirement for not just some head works, but a number of particular government funded or government required services in that particular area.

In relation to an earlier statement of mine which was picked up subsequently, I would just like to say that I was quoted as saying that the department plans to sell buildings 408 and 412. I am not actually a decision maker who can make that decision. The committee should be aware that what I was saying was that it is not inconsistent with the policy direction of the Territories Office.

Mr TED GRACE—During all the investigations this morning and remarks made by the panel we have in front of us now, a lot of emphasis was put on the town planning and the advice of the council. A couple of questions arising of that would seem to me to be a bit of duck shovelling. Who is responsible for town planning?

Mr Moore—The Shire Council is responsible under the act for proposing a town plan. They employed a team of consultants, Whelans, who came out and visited the island and who were involved in an extensive community consultation process before they put together a document which was a draft town plan. It is their responsibility to bring that town plan to a point where it is submitted to the planning commission. Under the act it is the Western Australian Planning Commission. The administrator on Christmas Island is delegated with the power.

This is under our arrangements here on the island. We have a Western Australian look-alike act, but the significant powers rest with the Commonwealth. The planning commission is the administrator and persons can appeal to the minister and the minister's role in the act is the minister for the territories, not the Western Australian minister. You have a situation where, to get a town plan in place, the process requires the Shire Council to prepare a draft town plan; submit it to the planning commission, which is the administrator; and the administrator, as the planning commission, then recommends to the minister, who is the Commonwealth territories minister, to put the plan on public display for a period of three months. At the end of that period the publicly invited comments that are made during that period are considered by the minister, with the advice of the planning commission, and the plan is then actually formally set in place.

The process we have got to so far in the period since 1992 is that the Shire

Council put a plan to the administrator as the planning commission with deficiencies and shortcomings. There has been discussion between the administrator and the Shire Council. This involved the Shire Council's lawyers who contested the power of the Commonwealth under the act to do certain things. There has been a change of councillors, a change of shire clerk and a change of approach between the Shire Council and the Commonwealth in relation to town planning.

There is now agreement on a way to resolve the issue of the town plan. A consultancy is being let, with the agreement of both parties, to redraft the plan to meet the deficiencies which have been identified. I should mention that the deficiencies or shortcomings that were identified followed a review of the draft town plan that was prepared by the Shire Council and conducted by the National Capital Planning Authority on behalf of our minister to review its validity in a planning sense. It was also as a result of comments which have been received from the Western Australian Department of Planning which we have arrangements with to get advice on the application of the Western Australian planning legislation.

Mr FORREST—Can I just interrupt here. The question was very simple. Mr Moore has said the shire is responsible. The shire prepared a town plan, but the Commonwealth overruled it. Surely it is the Commonwealth's responsibility. That does not make sense. That is a long answer, but essentially the shire has no responsibility; it is the Commonwealth's. Why don't we just get on with it?

Mr TED GRACE—Perhaps you do not understand why I asked the question. I think it was you specifically, Mr Moore, who made the remark that several decisions were made on where the light industrial area would be. That is what prompted my question; it was not a smart alec question. I am at sixes and sevens to know where the responsibility for town planning lies.

Mr Moore—I see that town planning rests with the Shire Council, frankly.

Mr TED GRACE—I have another question leading on from that.

CHAIR—Do you want to ask your other question?

Mr TED GRACE—No, I would like to hear the answer to this one first.

Ms Chilvers—Under the legislation, the Shire Council has the responsibility to prepare a town plan, but the minister—and in this case the minister is the Commonwealth minister—has the responsibility to tick it off and to say, 'Yes, this is an acceptable town plan. Go back to your constituents and put it on public display.' It is modelled on the Western Australian legislation. The difference would be that in Western Australia a shire would prepare its town plan and would take it to the state minister for planning. But, because this is a territory and we have applied legislation which is Commonwealth

legislation, the minister for territories has the powers that a state minister for planning would have. The Commonwealth is also the state in the territory, if that is a clearer explanation.

Mr TED GRACE—There is nobody on the island qualified to inform the council of their rights or advise them on subdivisions, land release or anything like that?

Ms Chilvers—The council employs experienced shire staff. The council has access to solicitors for advice as to the legal ramifications and their legal responsibilities.

Mr TED GRACE—The \$64,000 question I wanted to ask, Mr Moore, was: in view of the remarks you heard this morning and the fears and suggestions made by the rest of the community, are you now prepared, with your colleagues, to recommend an option to this committee?

CHAIR—Are you talking about an option for town planning or an option for retaining things? I am quite happy to allow that question, but I would prefer us to deal with these issues one at a time and get town planning out of the way if we might.

Mr TED GRACE—I am finished with town planning, Mr Chairman.

CHAIR—I am not sure that Mr Forrest is, because he was still unhappy that the delay had in fact been in the Commonwealth's court and wanted to know whether it was being addressed.

Mr FORREST—I am aware of the way the local government acts work, but in reality here we have a situation where a local community is trying to get on with it, but big brother is coming in and saying, 'Well, you've got it wrong. We're going to do it ourselves.' It must be very frustrating for the community to operate in an environment like that, so why don't we do it anyway with them on side? It should be the Commonwealth providing the resource development professional plan. Why don't we do it that way?

Ms Chilvers—The Commonwealth is jointly funding the development of the town plan, so we are accepting responsibility in a funding sense, which I am not sure would happen in a state. I do not think we have the legal right, as the Commonwealth, to say that we are going to do a town plan because there is a piece of legislation that says that the Shire Council prepares the town plan. I do not think we can step outside those bounds.

Mr FORREST—As long as it is done the way we want it.

Ms Chilvers—I would have difficulty recommending to the minister a town plan that I was not convinced was a sound town plan and that, for instance, was going to allow the development of a residential area in close proximity to an airport where in five or 10 years time if the economic development that is hoped for for this island proceeds suddenly

people were to say, 'There is too much aircraft noise so we want to relocate the airport' or 'We want insulation in our housing.' We are all very mindful of the Sydney experience.

CHAIR—A little more mindful than this committee.

Ms Chilvers—I and my predecessor Mr Gillespie would be derelict in our duty in exercising the delegations that we have been given if we steamrolled the process before we were convinced that it was a sound town plan. I am sure that any town planning commissioner would act in the same way.

Mr FORREST—In view of the evidence that we heard from the local Chamber of Commerce they are obviously frustrated by this process. They ought to be made aware that this is what is going on.

Ms Chilvers—They are.

Mr FORREST—I heard immense frustration from them in their evidence earlier today.

CHAIR—The call has been for an extra shovelful of coal in the steamroller, as it were. I invite Mr Moore to move to the next issue that the department wished to address.

Mr Moore—The next issue is in relation to the Boat Club. Partly we have covered that one. In relation to heritage classification I understand that the cove area, the cove district basically from the marine building around and including the administrator's residence and the gun emplacements, has been heritage listed. I think that is what he was referring to. That whole area has a heritage category on it. But the Boat Club building is not specifically heritage listed. It is Commonwealth owned, as was indicated.

Mr HOLLIS—On that point, I am absolutely confused by what I have read and heard. What is the situation with the heritage listing of the land or the building on which the yacht club is located?

Mr Moore—The Heritage Commission has an approach whereby, under the act as well as listing particular buildings, it is able to list a precinct as having heritage significance. In relation to Christmas Island it has listed a number of precincts. That is one of them. It has identified specific precincts.

The Settlement area is a precinct that it has identified. The intention of their listing is that, through decisions that the Commonwealth makes, we need to make sure that the heritage value which is the current appearance, look, feel, shape of that Settlement area is retained. This means that we cannot go in there and build higher storey housing and we cannot remodel the houses in different materials that do not fit in.

Similarly they have heritage listed as a precinct the Flying Fish Cove area and the administrator's residence. That precludes development which would change the current character of that particular area. That is the way that they express it.

Mr FORREST—Obviously the members of the Boat Club hang their hat on whatever their status is. Is there a precinct from the Boat Club up to the administrator's—

Mr Moore—That would preclude us from changing the nature of the foreshore by putting in, for example, a marina. Unless there is no prudent or feasible alternative, under the Heritage Commission Act we as the Commonwealth are not allowed to take actions.

Mr FORREST—I do not understand what all this means. We could take action to remove the Boat Club building, but what else could we not do?

Mr Moore—We cannot construct anything there that would be out of character.

Mr FORREST—Could we build gardens and barbeques?

Mr Moore—Yes. We could do things in character with the existing arrangements. Whatever we proposed for that area we would have to run past the Heritage Commission and get their endorsement. That is the way the process operates.

Ms Chilvers—In fact the approach that we have been taking is to get heritage management plans prepared by specialists that actually set down guidelines for the development of the area. We are getting those approved by the Heritage Commission. Then the Shire Council, in approving building proposals, will take into account those heritage management plans.

So each application to put on a verandah or a carport does not actually have to go to the Heritage Commission. But the shire, in its building approvals role, will look at the heritage management plan that has been prepared for the area and say, 'Yes, these materials are acceptable', or 'This window treatment is acceptable', or 'This level development is acceptable.' So it does not always have to go back to the Heritage Commission, because we are following that process of getting management plans approved by the commission.

Mr FORREST—Why could we not incorporate that into the town planning process? Why does there have to be another bureaucracy running that?

Mr Moore—It will be incorporated into the town planning process, but it is a requirement under an act which is the problem. It has to be met. It is a requirement on us by a Commonwealth act by the parliament.

CHAIR—Which applies equally in all of our electorates.

Mr Moore—The last point I just wanted to make in relation to the previous evidence that was given was in relation to 401 and 412. ANCA indicated that and Dr Rumpff said that public access could be allowed for this area if the decision was made to remove 408 and 412 so there could be public access and people could have picnics et cetera there. The Territories Office would not favour that option. We would prefer that access to areas exposed to rockfall risk were minimised.

Mr FORREST—What does that mean?

Mr Moore—We would put up a fence and we would discourage people going there unless they had a reason to do so.

CHAIR—As I understand Mr Moore's response, if we were to remove 408 and 412, it would be because we saw them as hazardous. Therefore, allowing people access in that area would in some way counter the very decision we had taken.

Mr Moore—Yes, it would be exposing them to risk.

Mr FORREST—Are you saying that you favour a fence line on that heavy black line as the limit, or a fence line where that personnel fence is being put now? What is actually there?

Mr Moore—I would propose extending the personnel fence around the sites of the buildings that have been demolished, if they were to be demolished. So we would go in front of where the buildings are now.

Mr FORREST—Are you saying that the area south of the heavy black line, which Dr Baynes has outlined, would be prohibited? That is flat country.

Mr Moore—We have a personnel fence which follows much of that line at the moment, which we are constructing; but it goes around the back of the buildings because the buildings are currently occupied. If the buildings were to be unoccupied we would move the fence forward to the front of them. Those sites would be revegetated. I think it would be an appropriate response to revegetate them with ficus or something that would assist as a barrier to any stray rocks that might still come down there.

Mr FORREST—That is super conservative.

CHAIR—Mr Grace had a matter that was raised earlier in the day that he wanted to deal with, under what I will loosely call general business.

Mr TED GRACE—I thought it would generate a final discussion.

CHAIR—I was not sure that everyone else had got to the point of final discussion, but I was happy to have your point raised now.

Mr Moore—Can I present one further piece of information which I just omitted? I wanted to draw the committee's attention to a comment made by Dave McLane of the UCIW about the cost of the Conclad houses being exorbitant. These were the sites that we visited yesterday, amongst others in Silver City. I made the comment then, and will restate it for the purposes of *Hansard*, that not all the people who live in such houses are unhappy. In fact there are some who are quite happy. The superintendent of police is extremely happy and he has expressed that personally to me.

The houses are airconditioned. This is a requirement under the standards that we apply, the GEHA—government employee housing standards from Western Australia. These standards are applied to government employee housing because some of the people who are housed in such residences are Western Australian government employees, such as teachers. I would like to flag that Works Australia has just done a check on the costs, to indicate the costs of both the Conclad houses and the alternative houses which were designed in a way that Dave McLane approved of. I approved, too. They are designed for a tropical environment and they are certainly a better design for a tropical environment, because they do allow you not to use airconditioning if you do not wish to.

Mr Franklin—The 12 houses in Silver City that have already been constructed, we calculate, worked out at \$185,000 each. The Troppo style houses, which we have now verified with Mr Layton, are \$224,000 each, as an estimate.

Mr Moore—Both of those were exclusive of land. So it does not matter where you put them.

Senator CALVERT—Are they the same size?

Mr Franklin—Basically they are the same.

Mr Moore—The first cost includes the cost of additional works, such as airconditioning and landscaping which were not provided initially because we were trying to do a very cheap job, the cheapest we could. We were shocked with the cost of the project overall, notwithstanding the fact that we had tendered it twice, and had done our best to get the cost down. What it does indicate is that to provide better quality livable housing costs you more money on Christmas Island.

Mr FORREST—I would like to follow up on that point. The concept of the Troppo approach is to reduce operating costs like airconditioning. There is a power problem on the island, so that approach has obviously got advantages. You have got to weigh up the higher capital cost with some sort of assessment of the benefit, of not spending so much money on power. The equations meet somewhere. I would be interested in that kind of assessment if it is available. That is just really a minor point.

There are a couple of things that have occurred in evidence that I want to get

cleared up in respect of the definitions of where these rocks are. We had evidence that there were rocks as big as this room. We have got to make sure that this is kept in perspective. I assume that that is the rock we looked at along the old tram track, a rock which had been broken down. I assume that is the same rock that has been referred to as being near the Westpac Bank. It needs to be perfectly clear that that is a rock that fell one metre and was collected.

CHAIR—If I could interrupt: Ms Chilvers has to get away. So if there is another issue you want to raise that the acting administrator should respond to please do so and, if not, then those two points you have raised can be addressed in her absence. What is the other question?

Mr FORREST—I am happy to do that.

CHAIR—No, sorry. You had a second point apart from the rock.

Mr FORREST—I think I have made my point. One was the comment about the operational costs of housing. But I want that rock identified.

CHAIR—We will come back to the rock question. I am assuming that you will be leaving soon, Ms Chilvers.

Ms Chilvers—I have another 10 minutes.

CHAIR—I am anxious that if there are questions that people wish to ask the acting administrator they should be asked as a priority over Mr Forrest's rock question, without eliminating it altogether.

Senator CALVERT—We were talking about planning earlier and I did omit to ask this question: as part of your planning process, I presume you will have a plan of some sort for Flying Fish Cove which will be amended from time to time for whatever reasons?

Ms Chilvers—Again, the Shire Council has been managing the development of a plan for Flying Fish Cove. That was under way last year. I am not quite sure what the final stage of it is, but that was certainly something that the Shire Council took the running with, used consultants, community consultation. Because it is a difficult area, because of that—

Senator CALVERT—It is a very sensitive area. It is probably the most sensitive area on the island; that is why I am making the point.

Ms Chilvers—Because it is one of the few places that the island people can actually have easy access to the water. It is also our port. There are a lot of demands on

it, so it does need to be handled carefully.

Senator CALVERT—And a long-term strategy perhaps?

Ms Chilvers—Indeed.

CHAIR—Any other questions to the acting administrator? Ms Chilvers, before we address Mr Forrest's question to Mr Moore or Dr Baynes, to allow you to get away at an appropriate time—Mr Moore may be in full flight at the time and therefore I will not have the opportunity to rise and make a comment—may I simply say how much the committee particularly has appreciated, as I indicated to you last night, the hospitality. It is always difficult for the committee, because one does not want to feel in any sense compromised by generous hospitality. But in your case, and I wish you to be perfectly aware of the fact, quite apart from the hospitality which was appreciated, you have made us feel welcome on the island. We are grateful for that. That applies to the entire community.

The other thing you have done that has been almost unique is that you have devoted the entire time we have been here to accompanying us and seeing that we were both cared for and looked after. We appreciate that in your busy schedule you have made so much time available. I am aware that the acting administrator is now leaving to officiate at a wedding, so she has little choice about the time that she chooses to depart. For that reason we just want you to know that we are grateful for the time you have made available to us. Thank you.

Ms Chilvers—Certainly, Mr Chairman, I have really enjoyed meeting with you. I think it is always a bit intimidating to meet a new committee and to know what their expectations are going to be. I think, though, as I said last night, the community welcomes the opportunity to talk with the decision makers and to get the chance to put their views. In terms of the hospitality, it is our pleasure as much as yours. Thank you very much, and I hope you do not mind me sneaking out in about 10 minutes.

CHAIR—We trust it will be a very successful officiation.

Mr TED GRACE—It is always intimidating for us to meet the new administrator!

CHAIR—Mr Forrest, do you want to rephrase your question, or does Dr Baynes or Mr Moore wish to respond and then we can develop on the response?

Dr Baynes—I believe what we are talking about is a rock that fell down in February 1995. It is the one that we looked at and which had been broken up, the one behind the Westpac Bank. I estimated the mass of that to be 30 tonnes. On the scale of things, I think it would probably fit into that room over there rather than occupy this room here.

Mr FORREST—That is the same rock that is behind the Westpac Bank?

Dr Baynes—That is the one that we looked at, yes.

Mr FORREST—Is anyone prepared to comment on my question about capital costs of energy efficient housing?

Mr Franklin—We will need to take that one on notice and get some actual comparisons.

Senator FERGUSON—I have a couple of questions in relation to the proposed fence. If that were to be the option that we took up, how long would it take after approval was granted for it to go ahead with that restraining fence? How long after approval had been granted would it be able to be put into action, and how long would it take to build? I ask that because it would seem crazy, if that were the option that the committee went along with, not to have it in place before the next wet season.

Mr Moore—We had in fact thought about that, and we were very keen to resolve that point through the committee. We have done some exploratory work—Works Australia has already talked to the people—but we got to a point where we could not make any more progress without committing funds. We did not feel that we were able to commit funds until we had a direction from the committee as to whether it was appropriate, because under some strategies it might be possible that you relocate all of the residences, for example. It is perhaps unlikely, but you could relocate all those residences and the PWC could say to us we should not build a rockfall fence, in which case we would have wasted Commonwealth money. We have discussed that and, if we can get a very quick answer, I understand you should be able to get it done in time.

Mr Franklin—Yes. We have prepared a document ready to go to tender to a number of companies we have identified, basically of international origin, on a design and construct basis. As I said earlier this morning, they would actually need to come and look at the environment they have to build it and design it for. But in effect we anticipate possibly a four-week tendering period, two to three weeks to assess tenders and possibly an 18-week construction period. It is that length because we have also built in a six-week shipping period to get the materials onto the island.

Senator FERGUSON—That would run you pretty close, wouldn't it, in that time frame?

Mr Franklin—Yes, it would be getting pretty close.

Senator FERGUSON—How many other companies are there that build the type of fence that Dr Baynes talked about, apart from the one that we saw the video of? Are there a number of companies who are building or would be providing that identical type

of restraining fence?

Dr Baynes—We have identified three very firmly, and received provisional quotes from them on a meterage basis. I have also identified another one tentatively and, if we were to continue the process, I am sure that we could identify some more.

Senator FERGUSON—And was the figure that you have quoted for the cost of the construction of the fence done on the basis of the preliminary quotes that you got from those people?

Dr Baynes—I believe so, yes.

Senator FERGUSON—So you are quite confident that any tender would not go over the amount that you have specified in this submission?

Mr Franklin—As confident as we are, given that we are not experts in that particular field. To get an expert to the island to actually look at what has got to be done, there is an element of risk with the pricing.

Senator FERGUSON—Particularly with the nature of the area that we would have to put it in, that is what I am thinking of. All that we saw on the film were clear open areas where it was easy to get access with vehicles. To me, this looks like it would not be a very easy proposition to put the fence up.

Dr Baynes—On the other hand, if I might say, these fences are designed to be built in awkward places.

Senator FERGUSON—Yes, I understand that.

Mr TED GRACE—The tender documents, do they specify or eliminate any costs associated with the tender itself? You talk about experts coming here; we are assuming they are going to do it for—

Mr Franklin—We have had discussions with DEST on the basis that, if contractors do firmly want to tender in this environment, they actually wear the costs to come here and look at the facilities.

Mr Moore—I was just going to say that we wondered whether we might be able to get someone to come on the chance that they might tender, but they wanted some certainty.

Mr HATTON—This proposal indicates three rockfall fences. What I am interested in putting up in the committee is the possibility of doing one fence behind 408 and probably, as well, another behind 412. After those people move out to other

accommodation, 408 and 412 could be progressively demolished. We could then relocate those fences, which look as if they are about half the size of this one, and that would go behind the marine building. We would then have the one complete fence behind there.

Is it possible to relocate them in that way and, therefore, significantly save money on that fencing? If we took that approach, and after we had done away with 408 and 412, I would think that we could hold with the marine building for a few years and just use those first two lots of fencing to make one complete lot of fencing in the end.

Dr Baynes—I guess I would like to approach the matter with some commitment to doing something, and then with every step that you made the risk to the community would be progressively reduced. How much you reduce the risk to the community depends on how much you want to spend. You need to have a cost envelope with time within which you stay, but within which you ensure that everything that you do reduces the risk to the community and meets some long-term aims. If a plan along the lines of what you were talking about could be put together and if it met those objectives, then that would seem to me to be a reasonable approach.

Mr HATTON—So it is from a broader conceptual basis that you are approaching this instead of just looking at the small elements of it?

Dr Baynes—Yes.

Mr Moore—Could I just make a comment on that? How much money you saved from that approach would depend on what component of that construction cost of the fence was a labour content and how much was materials. Certainly, in the nature of the building of this fence and in the activity that would be involved in decommissioning and moving it, it would be very labour intensive.

Mr Franklin—It would be a case that would have to be looked at on its merits. Obviously, over time, there is degradation of the material also which we talked about earlier. So, if it were a long-term thing, you would have to seriously consider that it would not be viable to erect a new one.

Mr HATTON—Yes. If there is a 30-year life to the fence, it would not make much sense to put fences up and later demolish 408 and 412. We would have wonderful rockfall fences sitting there for a full 25 years afterwards, stopping the rocks coming down onto the Garden of Eden at the bottom. The Garden of Eden may as well do the job, rather than having us putting the money into permanent rockfall fences behind there, given that that is beyond our direct zone there. So it is a question of looking at another way of actually making a more cost-effective approach to it, so that you were not committed to three separate rock fences, two of which may be entirely unnecessary in five years time. So it is a question of looking at that in that way.

CHAIR—I would remind Mr Hatton that we are more worried about Adam and Eve than we are about the Garden of Eden!

Mr HATTON—They would not be allowed into it according to the approach we have had to take.

Senator CALVERT—This is something that I do not recall being talked about, Dr Baynes, and it might be like one of those questions I asked earlier today where an intelligent answer was better than a stupid question. But, particularly in the case of the boatshed, and given the evidence from ANCA, has the fact been looked at that this phosphate soil does not compress? Would it have been possible to build a big heap of dirt behind these buildings and block it with heaps of dirt?

Dr Baynes—Yes. What we would actually do is build a gabion structure—that is, a wire mesh basket filled with rocks. You could build such a structure behind the marine building, perhaps, if that is what you wish to do. That is a design option.

Senator CALVERT—Right.

Dr Baynes—At the moment I think we are looking for some kind of policy approach within which the most effective design options can then be worked out. But, yes, that could be done.

Mr HATTON—That is behind the marine building but not behind the boatshed because of the incline?

Dr Baynes—Behind the marine building you said?

Senator CALVERT—No, the boatshed.

Dr Baynes—There is room behind the marine building. It is a lot steeper behind the boat club and you run the risk, if you build an earth structure on steeply sloping ground, that the earth structure might fall over and kill someone. But, again, that could be assessed.

Senator CALVERT—You could strengthen the roof on the boatshed.

Dr Baynes—When I approached Maccaferi, which manufactures gabions and also nets, and talked to them, they immediately came out with a sort of commercial ploy, ‘Have you thought about using gabions?’ I think that that is a very relevant comment. We have to look for the most cost-effective solution.

Mr FORREST—Would gabions stop a 10-tonne truck at whatever kilometres an hour?

Dr Baynes—It comes down to Newton's balls—if you don't mind my saying so.

Mr RICHARD EVANS—Just referring to some of your strategies—strategies 2, 3, 4 and 5—you said that you wanted to vacate and demolish the Boat Club and the restaurant. You do not say 'relocate'; you say 'vacate and demolish'. According to evidence from the commodore today, he was concerned about that. What is the plan?

Mr Moore—As indicated in earlier evidence, I would like to put to the committee that we have had a change of view on that particular recommendation. We do not see that as an appropriate strategy now in that order of the sequence. We suggest that the demolition of the Boat Club is not necessary. The issue of the Boat Club could be better dealt with by a management strategy rather than a demolition strategy.

Mr RICHARD EVANS—Therefore the management strategy would be inclusive of the \$57,000, or would you see that price going up? Does the \$57,000 cover item 6 under the plan here—the risk reduction management strategy?

Mr Moore—I believe it could be incorporated within that figure.

Mr RICHARD EVANS—Does the \$57,000 cover what is listed here under 6, or is there additional stuff?

Mr Moore—No, that is a best estimate. But I would have to say that it is only an estimate and, with these estimates, Works Australia has been fairly conservative.

Mr RICHARD EVANS—Is that a one-off cost or is it an ongoing cost?

Mr Moore—There are some ongoing costs in that.

Mr RICHARD EVANS—So all the costs you have here really are initial capital costs. We have not got a breakdown of ongoing costs.

Dr Baynes—No, not at this stage.

CHAIR—Are there any other questions?

Mr FORREST—There has been a little bit of uncertainty created about the construction of this mesh fence. Is it possible for anyone on the committee to walk the proposed sites for these fences so we can get a bit of a feel for the terrain and so forth and the construction difficulties that are likely to occur? Is anybody able to do that?

Dr Baynes—I have walked it with Bryan and I took Holger there yesterday so that he could actually see what was going on. I would be delighted to take you there tomorrow, if you wish.

Mr FORREST—I would like to do that, thank you.

Dr Baynes—And anybody else who wishes to go for a walk in the scrub.

Mr FORREST—Rather than go and watch that bird—

CHAIR—Although in fairness to ANCA, Mr Forrest, you may wish you had done both, and that option may exist, too.

Mr TED GRACE—If you could just bear with me, Mr Chairman: I did mention before about the role of the council. I was not being facetious when I asked who was responsible here and who was doing what as far as planning was concerned. But the shire president this morning did mention that a number of professional officers were employed by the council. Am I right or wrong?

Mr Moore—A number of employees, he mentioned.

Mr TED GRACE—Yes. One of them was a chief executive officer—that is, a town clerk.

Mr Moore—Yes, there is a shire clerk.

Mr TED GRACE—I am just surprised that, in view of the questions to be asked of the council, the town clerk was not here today.

Mr Moore—I understand that the shire clerk and some of the other key people who may have given evidence are actually absent from the island as a result of prior arranged commitments.

Mr TED GRACE—I just find it strange because everybody is saying, ‘Well, the council, the council, the council,’ yet we have nobody here from the council. Apart from the evidence given by the president this morning, we do not even know what stage the council is at. The administrator herself does not know what the process arrangements are with the council or how far they have got. It just seems surprising to me.

Having been a shire president myself and knowing something about the procedures of council, I know you always ask the top bloke. He is the bloke who is paid to do the job, and we have not got him here today.

CHAIR—He was asked; that was the point of it. He was invited.

Senator CALVERT—He has been in for only two weeks, though; he is probably working.

Mr HOLLIS—We have the president here and we have got councillors in the room. One of them has been here all day.

Mr TED GRACE—Normally the person who answers questions on behalf of the council is the senior executive officer. I am completely at sixes and sevens. I am not particularly keen on winding up the committee's hearings, so do not get me wrong. I do not feel that I have got the professional qualifications, unless you want me to put an electric fence around it. I cannot advise you on it. I have not got the professional qualifications to make my mind up and therefore I agree with the comments and concerns of my committee colleagues and other people this morning. I pose as an open question: are you and your colleagues prepared to recommend to us one of your options and say, 'This is what you should be doing'?

Mr Moore—I would like to answer that on behalf of the department. I am not in a position to make a personal recommendation. I speak on behalf of the department and on behalf of the minister. There are financial implications of the recommendations which have to be taken into account and I am not able to make recommendations which would bind the appropriate decision makers, ultimately the minister and the government.

I did indicate earlier that a way in which the matter could be approached to ensure that maximum expert input was put into the exercise was if the committee were to provide some guidance to DEST in relation to levels of risk. In which case we would be happy—if you were to provide us with some principles and guidance—to provide you with a firm recommendation after we have got authority from our minister.

CHAIR—Did you want to follow up, Mr Grace?

Mr TED GRACE—No, I just find that strange. Are you asking us? You are going to get permission from the minister whom we have to advise eventually? I cannot see the process there; forgive me. We are not going to make a decision whether to build; we are going to advise the government of the day and that is your minister. You are coming back the other way at us. You are really confusing me now.

Senator FERGUSON—You have employed a professional person to assess the risk and you are asking us, who are non-professional, to decide which is the best option that you have put forward. It just does not make sense.

CHAIR—I am sorry, but as chairman of the committee I have to disagree with the committee members. My view is that we are the committee and we are charged with the responsibility of making a decision like this. We have had presented to us professional advice from a range of sources over the last two days and on record today we have had access to Dr Baynes and all of the objective advice that he has given. I think we now have a task and that is to make a recommendation as we would whether we were building a building or constructing a rockfall fence.

Mr TED GRACE—We have big problems, Mr Chairman, I hate to tell you. Do you see what I am talking about? Even if we agree with the chairman—which I do not—and we give a recommendation to our government minister, you are telling us that he is the one who is going to advise you on the proposition.

Mr Moore—No, he is not going to advise me. He is the decision maker in relation to budgetary matters. I am not the decision maker.

Mr TED GRACE—I cannot agree with you. You are the person who has the professional advice given to you. I can delegate you, as far as I am concerned, to give us that advice.

Mr Moore—Which is what we have done. We have gone through a process where we have tried to muster the best advice from a professional point of view and also in relation to the social and other implications. We have tried to present that evidence to the committee to the best of our ability so that the committee is fully aware of the facts. The only difference between what we are doing now and what you would normally do is that we have not picked out one point on that spectrum.

If we had picked out a point on the spectrum, your decision making process would be identical, except you would have something of a benchmark to look at. All we have done is remove the benchmark. You still have to make a decision with the same facts. You have to sit in judgment on professional advice and social evidence. You have to make that decision as politicians and recommend that to the government. All we have done is take away the benchmark.

Mr FORREST—I am just trying a different tack. Mr Moore, you have already said that you are prepared to modify one of the options and I understand that that is about the yacht club. Is that the only thing that you are prepared to modify?

Mr Moore—All I am saying is that it does not fit in the sequence. That sequence of strategies is meant to have a logic which relates from progressive risk. The way the evidence was presented it was in the wrong spot; it needs to be out back at the far end rather than in the middle. In other words, if you were going to do something about the Boat Club, it is not one of the last things that you would do something to mitigate risk against about because it is not very risky in relation to other matters.

Mr HATTON—It is not very risky if there is no-one there and nobody uses it. You have a question of risk if people sleep in a place and they are there 10 hours a night—then 408 is more risky than the Boat Club. But in terms of where most of the rocks have come down in the past—because the most active part is over the Boat Club—it is quite possible that we are going to get a major incident involving a lot of people at that Boat Club if we leave it there. It is as simple as that.

Mr Moore—That is correct if we do not stop the people congregating there. Obviously it precludes the use of the Boat Club as sleeping accommodation.

Mr HATTON—As a gathering place.

CHAIR—I think the intent is the same.

Mr FORREST—This is another tack on the question Mr Grace has raised about this decision we are supposed to make. Before I am involved in that decision, I want to see the relative risk of other events around this island. I have spent two days here and it is quite obvious to me that there are other things happening on this island probably of equal risk to what we are talking about here. If there is an expectation for me to make a decision on this, I would like to see that in context. All the evidence submitted has not been relative. People have spoken about flying in aeroplanes and other things when they are blissfully unaware there are other hazards on this island. This thing has to be kept in context.

I think it was the shire president who asked the question about comparability with other communities where there are other hazards. We really need this information if we are going to be able to make that decision. Mr Moore, if it is not available can it be made available to assist us in the decision that we have to make?

CHAIR—The answer to your question is that any information that is available can be made available to us. I think Mr Grace asked me a question that required some further elaboration about what the council's attitude was. There is absolutely no reason why we cannot, as a committee, write to the shire clerk and ask for an explanation as to where he was today, if you wish, or other issues concerning council, which would not be his opinion of course but council's opinion. We can do the same thing in accessing Dr Baynes independently or the department independently, any one of the witnesses independently or anyone else we choose. But ultimately the decision rests with this committee and I will not have the role of this committee usurped by bureaucrats, and that is what some committee members are seeking right now to have happen.

Mr TED GRACE—I totally disagree, Mr Chairman. I resent that remark because I assume it is directed at me.

CHAIR—No.

Mr TED GRACE—I am not doing that. All I want is for a professional man who is paid professionally by the Commonwealth and who has explored and taken professional advice himself to give us a decision or at least to pass some remarks in favour of one of the decisions. That is all I am asking. I have no intention of usurping—you know me better than that—the conditions of the committee by allowing the bureaucrats to dictate to

me, but I think they have a mandate to tell us which option they favour. What is going to happen when we make a decision is that these guys over here are going to say in a couple of months time, 'That mob of drongos picked that option. We did not need that one.' That is what they are going to say. If something happens in two years time, I do not want to get the blame by adopting a proposal that has not been favoured by the professional people who brought it up.

CHAIR—With respect, Mr Grace, if I had directed it at you I would have named you. I was not directing it at you. I simply make the point that we have a responsibility to make a decision which I do not wish to shirk or about which I do not wish to appear to be reluctant, but I do intend to have all the facts available to the committee before that decision is made.

Senator CALVERT—I want to show support for my chairman and say that I am quite willing to make a decision eventually but I would like a bit more information, if I could.

CHAIR—My point is that we are not making a decision now in public. We will call an in camera hearing for that. I merely want to indicate where I think the committee should be going.

Senator FERGUSON—I do not want to shirk making a decision either. I followed Mr Grace's question because I agree that you are the people that have more information at hand than any of us. Mr Moore, you adverted to the fact that, because it involves expenditure et cetera, you have to seek the approval of the minister before you give us an answer. I guess what I really want to know is, if there weren't any dollar signs at the end of all of these options—in other words you were just presenting to us a range of options which might or might not be suitable for the problem on the island—if it was not for the fact that it involved expenditure, would you have any preference?

Mr Moore—I have to be very careful here because—

Senator FERGUSON—You have been careful all day.

Mr Moore—I do not have professional indemnity insurance—

CHAIR—Neither do we!

Mr Moore—And I am not empowered to make financial decisions that bind the Commonwealth.

Senator FERGUSON—I understand that.

Mr Moore—We do have a situation here where I am bound by rules that apply to public servants, but I have a consultant who is not bound by rules that apply to public servants and who indeed may have professional indemnity insurance. It is possible that you could ask Fred Baynes what his view is and that he may answer—I am not answering for him and I cannot say whether he will or will not answer. But you could direct that question to him a little more readily than you can direct it to me.

CHAIR—May I interrupt here and say that I would have thought Dr Baynes would comment as he feels fit. I would have thought that yesterday, and again indeed today on the *Hansard* record, Dr Baynes has indicated—and this is why I do not understand, frankly, what has been going on for the last 20 minutes—that he would be a reluctant occupier with his family of blocks 408 and 412 in their present condition but happy to be there himself, because of his philosophy of life; but were the rockfall fences in place he would then be happy to have his family there. I thought that was a generous endorsement on his part of the program formally before the committee, that is why I remain a little astonished at the current level of apprehension. If I have misrepresented Dr Baynes, I invite him to say so.

Mr TED GRACE—I would be happy if somebody else also agreed on that proposition.

Dr Baynes—You have not misrepresented me. I am personally and professionally more than happy to assist, or support or help in the decision making process. My original brief was to provide a landslide risk assessment. I guess one of the mistakes that I made was that, in providing that assessment, I suggested that you sought legal advice.

Mr RICHARD EVANS—That was a problem.

Dr Baynes—I am acutely aware that one of the ways in which I feel that I have failed this committee is that I did not provide you with the right kind of referential framework for you to be able to support decisions, or perhaps I have failed my client in that respect.

The problem that I have is that I am not party to all of the pieces of relevant information in the decision making process, because it involves social issues, financial issues, government policies—and the government has changed. So bearing all that in mind, I now feel, having sat through these proceedings, that I am reasonably in tune with most of the issues. I would be quite happy to say that this is what I think you ought to do. But I will not do it here and now. I will sit down and write it out and present it to you, if you wish me to do that. I do not have any problems doing that kind of thing.

CHAIR—Thank you, Dr Baynes.

Mr Moore—The only thing I would say in conclusion is that, as a public servant

representing the department, I am not willing to commit myself in answer to the question that Ted Grace asked. I can envisage a situation, if the committee were to insist that I answered such a question, where I appear as a sworn witness in my own right, and I would seek legal advice before I answered. But I would prefer not to go down that track.

Mr HATTON—In 1992, when the decision was made to refurbish 408 and 412, who made the decision? Given that it cost government money, how was the decision capable of being made then, if advice cannot be provided now?

Mr Moore—The process involved Works Australia, me and the government.

Mr HATTON—So what is the difference between 1996 and 1992—apart from the level of money involved and the fact that we had a big boulder come down a little while ago?

Mr Moore—We are at a step in the process here where the PWC has come in at a step before the decision has been made by government; whereas, in 1992, the PWC came in after the government had made a decision on a recommendation by me and others. Once government has made a recommendation, I will fully support that recommendation. At this point in time, I do not have the authority of the government.

Mr HOLLIS—Just on that point, and agreeing with Mr Moore on that, having been a member of that committee, the 1992 hearing was a very wide ranging hearing. In fact, it was called rebuilding Christmas Island facilities or something. The cliff was a small part of it. There were things like the hospital, there was a whole wide ranging lot of issues examined that day. I think that was the difference. This one is a very specific and much more technical hearing than the one in 1992. The one in 1992 was very wide ranging.

CHAIR—Are there any other questions to the department?

Senator CALVERT—Just a small matter. In my decision making process—I flagged this earlier—I would find helpful a survey of the Kampong residents to see whether a majority, or a minority or how many of them would be willing to move into bigger or better housing if that opportunity arose. I just think that it would clarify things somewhat for me, given the conflicting evidence we had yesterday where some people said yes and some said no. If we had a little bit more than that, I think I would find that a bit more helpful, if that is possible.

Mr Moore—I can take that on notice. As Merrilyn Chilvers indicated before, we will take that on notice.

Senator CALVERT—I do not mean being moved to subsidised housing; I mean being given the opportunity to buy privately, as was talked about earlier by the Chamber

of Commerce—if a private estate was established, whether they would be interested in renting privately and buying privately. I am not talking about Commonwealth subsidised accommodation.

Mr Moore—If the committee would find that helpful, we are keen that a decision be made on this matter. If that would be helpful, then we will proceed to do that.

Senator CALVERT—I think it is something you should do down the track anyway, not just on this project.

CHAIR—I also think it important, as the acting administrator pointed out, that the survey be so worded that the residents of the Kampong do not feel that the closure of 408 and 412 is in some way inevitable.

Senator CALVERT—That is not my intention.

Senator FERGUSON—I think that, should option 3 be the option this committee decided on, the decision would need to be made fairly quickly in order that this fence could be put up prior to the next wet season.

CHAIR—The secretary and I were talking about that and we will convene a meeting of committee members shortly. Are there any other observations from the Department of the Environment, Sport and Territories?

Dr Baynes—Two things. Firstly, I would like it to go on the record that, whatever we end up doing, there will always be some risk and everybody must appreciate that. Secondly, a year ago I recommended that there should be prompt and considered action. We have had the considered bit but we really do need to have the prompt bit now. I think that is a very important facet—that time is running out. We need to do something.

Mr HOLLIS—The election did intervene, which delayed things a little bit.

Dr Baynes—The rocks did not know that.

Mr HOLLIS—No, I know that. That is the democratic process.

CHAIR—I think it was due to the fact that an election was called. Are there any other questions that people wish to ask the representatives of the department? If not, can I thank the Department of the Environment, Sport and Territories and Works Australia for their contribution to today's deliberations.

Before closing, there are some submissions and departmental responses to those to be incorporated in the transcript. Is it the wish of the committee that those documents be

incorporated in the transcript of evidence? There being no objection, it is so ordered.

The documents read as follows—

CHAIR—I would like to thank all witnesses who appeared before us today and I would also like to thank all those who assisted in our inspection yesterday, a number of whom are in the room and a number of whom are sitting before me now. Particularly, may I say that we are grateful not only to the department for their assistance but also to the Christmas Island Shire Council for the use of this facility and for the way in which we have been freely able to use all of the facilities available to us in this room.

Can I also thank my committee members for their forbearance. I express my thanks to Hansard and to Sound and Vision for the way in which they set up the meeting room, which was not, as you will appreciate, easily done. My thanks also and the thanks of all the committee members to the secretariat, Peter and Mike, for the support that they have given not only through the two days of hearings but also in preparation for this hearing.

Resolved (on motion by Mr Hollis):

That, pursuant to the power conferred by section 2(2) of the Parliamentary Papers Act 1908, this committee authorises publication of the evidence given before it and submissions presented at public hearing this day.

Committee adjourned at 5.08 p.m.