THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS MET IN COMMITTEE ROOM 2, PARLIAMENT HOUSE, HOBART, ON MONDAY 23 AUGUST 2010

ROYAL HOBART HOSPITAL CAMPUS UPGRADE - PHASE ONE PROJECTS

Mr MICHAEL PERVAN, CHIEF EXECUTIVE OFFICER, **Ms LARRAINE MILLAR**, EXECUTIVE DIRECTOR CONTINUING CARE, **Mr LES BURBURY**, MANAGER INFRASTRUCTURE INVESTMENT, **Mr PETER ALEXANDER**, DIRECTOR ASSET MANAGEMENT SERVICES, **Ms KARLENE WILLCOCKS**, NURSING AND SERVICES DIRECTOR - MEDICINE SERVICES, **Ms FELICITY GEEVES**, NURSE UNIT MANAGER, **Mr SIMON BARNSLEY**, CEO BUSINESS SERVICES NETWORK, **Ms MARIANNE HERCUS**, CHIEF RADIATION THERAPIST AND **Mr MARC BESTER**, ACTING ASSISTANT DIRECTOR OF NURSING WERE CALLED, MADE THE STATUTORY DECLARATION AND WERE EXAMINED.

CHAIR - (Mr Harriss) - Welcome. We have always been fairly flexible on this committee in terms of interaction by members of the committee with the witnesses, so if you do not mind, if it does not interrupt your flow of presentation too much, we might have that interactive process. We have always found that productive in the past. But if there are specific matters that you want to keep ploughing on with to make a particular point, then that is understandable as well.

Les, are you going to lead off?

Mr BURBURY - We came before you in September last year shortly after we had been given the $100 million to start the redeveloping of the Royal to get approval for the total program because, as you can appreciate, it is a very interconnected program, so it is very difficult to have it in neat little packages of over $5 million necessarily. That has enabled us to get under way with many of the smaller projects. But now we have a suite of projects before you that are over the $5 million and we did undertake that when we came to those sized projects, we would come back and effectively report to you saying what we are up to.

Two other projects have come into the mix in that time since preparing the report and requesting a hearing. One is the cancer centre which is the result of the Commonwealth-State agreement and the other is the kitchen which is not overly big but it is a commercial opportunity that came for us and we are desperate to take it up. So we also note those.

What we were hoping to do today was not so much argue the merits of the program, because we believe we have put that to you on a precious occasion, but consider the value for money, basically, on each of the issues and each of the projects as they come through. The way to start that, I think, is probably with Mike Pervan giving an overview from the hospital's perspective and then to start on the projects. In terms of your reference to the order of process, our only thoughts were to assist the committee and

more or less tick through the same sequence that we took you through this morning and we are quite able to add changes and expansions you want.

CHAIR - Just before you do, Mike, if I might, the message we have from the Governor identifies the expenditure for the consideration of this committee of $25 million. Please point me to a page if I have missed something, but the budget summary which we have identifies $81.6 million. Can somebody give us the heads-up of exactly what we are looking at today? We certainly have had references in the past where the Governor's message is for a certain amount but then when the project has been re-worked post the Governor's message it comes in more than that so we need to be aware of exactly what we are considering today in terms of the submission before us and His Excellency's message. Can somebody give us the heads-up on that, please?

Mr BURBURY - It is as per the table you have in front of you the $80 something million -

CHAIR - $81.6 million?

Mr BURBURY - and it is because of the two events. One is the Commonwealth offer to us to proceed with the cancer centre which in turn creates opportunities around that which we will be happy to explain. The other is the commercial opportunity of the kitchen so it is that sum that we are seeking your approval of.

CHAIR - I will take some advice if I can, Shane. We have certainly had this before but this is a substantial difference from a $25 million reference. I guess it just raises a question as to whether the submission might not have been withdrawn and re-submitted in an expanded manner. There is no detriment in us proceeding because if we consider the submission or the reference and approve it then we will be approving this amount and there is nothing in the act which tethers us or fetters us in any way in that respect.

SECRETARY - No, I don't think so.

Mr ALEXANDER - Mr Chairman, the difficulty we have is the act has been really established to deal with this group project and the Royal Hobart Hospital on one hand is a work in progress. It is always doing things and separating these out and being able to schedule them in a way that meets the operation of the hospital and takes advantage of the opportunities has made it extraordinarily complex for us to try to comply with the act and put together a program of works. So we apologise for that.

CHAIR - No, that is fine, Peter, and I think that is a reasonable observation as well because of the work in progress.

Shane has reminded me, of course, that the committee has already, as Les indicated in his introductory comments, considered the notion of $100 million expenditure so this is just confirming, as Les has indicated. I think it was appropriate to at least raise that matter because that is the message from His Excellency.

Mr BURBURY - I could add to that clarification too that the cancer centre money - and we have brought Simon along to detail how that is put together - in actual fact is only about $10 million additional State money. The other money is Commonwealth money and the

remainder of the difference is in fact within the $100 million that you have previously considered so it is not a new thing in a big scale.

CHAIR - That is right, and the table earlier on in that report indicates that as well, Les, within the $100 million.

If everybody is happy with that prelim, we will proceed. Back to you Mike, thanks.

Mr PERVAN - Thank you, Mr Chairman.

I think it is always good to reflect back on the context of the $100 million and the original purpose for the money in that it was first raised by the department some three years ago that while a new Royal Hobart Hospital was being built, some works would be necessary at the current site to keep the facility and the hospital safe and operational for the five years it would take to build a whole new hospital on a greenfield site.

Some preliminary work was done by the asset management branch of the department and came back with a series of works and a tentative value of around $100 million, just to keep the site safe and operational to current building and health standards. Following the announcement that the new hospital was not going to be proceeding, we re-examined the priorities within the original $100 million and that was the nature of our last presentation to this committee, that we identified a series of projects which we thought were going to get us the greatest clinical impact for the investment that we would put into it. It would be easy to think about building extensions to things and additional floors for ward space, but a few more beds for a $100 million would not get us anywhere near the clinical impact that this set of projects would get us.

Expanding the ICU has been discussed and considered for around 15 years. Even when we complete those works and effectively double the current size of our intensive care unit, Tasmania will still only have about half the intensive care beds per head of population that the College of Intensivists recommend you should have. It will give us greatly increased capacity and certainly will help us increase throughput on cardiothoracic surgery and handle people who are critically ill, but it is by no means an oversupply or over-resource. It is quite literally a consideration of what we can get out of the space we have available.

The access and patient flow unit similarly provides a discharge lounge and more efficient processing of patients. Some of that work currently is being done while the patient is still occupying a bed. We will be able to do more with them prior to admission onto a ward and be able to move them off the wards faster and into a discharge lounge.

The Department of Medical Imaging is currently one of the great obstacles we have to patient throughput because of its size and its configuration. There is very limited space down there; putting patients who are waiting for scans in beds; things like that. It slows down the movement of patients into and out of the hospital. We need to modify that facility to house a PET scanner, and make changes so that we can improve the efficiency of the department itself.

The APU, the Assessment and Planning Unit, as Karlene told you this morning, is around having an intensity of assessment and the early commencement of treatment for

particular cohorts of patients who we take through the Emergency department. The alternative is what we have currently: work is either done in the Emergency department and slows down the processing of patients there, or the patients go to the wards and wait anything up to a day to see a physician on a general round. This way, that assessment and the commencement of treatment can begin within the first hour that they are with us. It increases the speed and the intensity of care that people get and, if it is well modelled, well planned and well operated, you can get people a higher quality of care and get them home much sooner than if you just put them into a general medical ward in the model that we currently have.

The cancer centre, of course, is part of the State Cancer Plan and the most likely last round of Commonwealth HHF funding. We have needed to seriously invest in cancer services in southern Tasmania for a number of years and we were successful in the application to the Commonwealth and in doing further with the State to get $22 million towards a substantial redevelopment of the cancer services we have. Once again, that is an opportunity that has just come up and will enable us to improve both the quantity and quality of care we currently deliver in a building that is largely around 50 years old. The kitchen, as Les said, is a commercial opportunity that came up at the airport. The alternative would be to try to rebuild and redevelop the production kitchen where you saw it operating this morning, while still needing to produce 2 000 meals a day out of the same site. So, much to the intense frustration of both Les and Peter and our food services staff at times, at one point we were seriously talking about finishing cooking at the end of the day, clearing the kitchen and pouring concrete overnight and then having to have it all set and able to take work in the next day.

We have managed to install the new carts using that model, but we went for days with ceilings patched with gaffer tape and plastic bags and all sorts of things to stop dust from falling in on the food. That part of the operation was successful. I would not like to try to take the risk of dismantling our production kitchen and rebuilding it on site.

The site at the airport is made for the purpose. It is large, all the cool rooms work, it is quite simple to move walls around inside and it will enable us to offer a bit of service to other potential customers within the public sector such as Corrective Services or even from the private sector in the hospitals and nursing homes.

Far from this being just a series of projects identified to keep us safe and operational for five years, we have spent a great deal of time, in fact 12 months' full planning and discussion with 10 user groups made up of clinical staff, to extract absolute maximum value in terms of clinical services and patient care out of the original $100 million which had slightly different purposes. Thanks to collaboration with the department, we have also managed to address some long-outstanding fire safety risks and other issues with plant and equipment, air-conditioning chillers and so on at the hospital. The ring main that goes underneath the hospital was put down in about 1935. We have addressed the safety issues and we have managed to come up with a series of projects which, within the bed stock that we have, will maximise our potential for patient care.

CHAIR - Thanks, Mike. Are there any questions of Mike at this stage or are members happy to go on to further presentations and bank the questions?

Mr HALL - I presume, Mr Chair, we will probably go through the six projects within the whole thing and do them one at a time with questions?

CHAIR - That could be the way to go with that overview from Mike. It was Les's proposal, that we now address them one by one.

Mr BURBURY - I think we will start off with the APU; we do have Karlene here. I think we established in the introduction and in your visit this morning that the current site of the APU is not an ideal location for patient care. It has always been where medical records are but it is prime real estate of which there is no equivalent on the Liverpool Street campus. It is a large area and there are no other large areas like that. It is adjacent to the Emergency department so there is no other location that we could possibly have that would be better. We moved a large quantity of digital medical records over the past three years and the remaining paper records to other locations around the campus. So we are clearing that space so that it can be turned over to patient care. It would be far better with a lot more natural light but the works that are planned are modest and will enable us to open a 26-bed APU, and hopefully eventually a 28-bed APU which will accommodate a large number of the patients who would otherwise be in ED cubicles for a considerable period of time or put onto the wards where they would be waiting up to 24 hours to commence diagnosis and treatment.

Karlene, is there anything you would like to add?

Ms WILLCOCKS - We have a significant amount of bed block in the hospital at the moment where patients are kept for prolonged periods of time in ED and what this model proposes is that those patients will be able to move over to the APU immediately and clear that bed block which will also clear some of the ambulance ramping issues we have for the State. It is a huge concern if we have ambulances ramped in a tertiary hospital or at any hospital. The aim is really about patient flow, initial treatment and planning for the stay.

Mr HALL - In the executive summary you talk about 20 beds. So what are they? You just said 26 and you hoped to have 28?

Mr PERVAN - We are still finalising the design on that.

Mr HALL - Right, so that is not quite squared away, is it?

Mr PERVAN - Twenty beds plus the HDU beds is my understanding of the summary. Not high dependency units but high dependency beds.

Ms WILLCOCKS - Twenty beds plus the high dependency area beds is what is on the plan at this point in time.

Mr BURBURY - So that number is incorrect in the summary. It should be 28.

Mr PERVAN - It is 20 general beds, although assessment and planning units, as common as they are around the world - they are known by different names, but the same principle - will have a far higher quantum, if you like, of clinical resources dedicated to them than a general medical ward would do.

CHAIR - This component of the project would seem pretty central to a whole range of other things that are going to flow from the efficiency of the place. I then look at page 7 of your submission, right at the top, which talks about the case which was being put together for the new Royal, and the fact that the volume and acuity of patients has risen sharply, clearly this suggest to me that with the new Royal there was going to be, by 2015, a demand and 730-odd beds would be needed to accommodate that.

Mr PERVAN - Yes.

CHAIR - How do the other changes which we will talk about as well affect that rising volume and acuity? If that is continuing to be the case, which I presume it is, then this new entry point for everybody is fundamental to it all. So where are we sitting with the volume and acuity?

Mr PERVAN - The figures quoted from the new Royal business case are quite correct for that business case, but what we have seen actually is demand increase faster than it was predicted for the business case. We have gone from a hospital that hovered between 85 per cent and 90 per cent occupancy to a hospital that now hovers between 95 per cent and 100 per cent occupancy, and there is an increasing number of days where it is the work of Karlene and her peers, and specific clinicians who are brilliant at fast assessment and sometimes discharge, in the case of Dr Tolman, that keep the beds moving, if you like, keep the flow going.

The move to things like the assessment and planning unit at the front end and a discharge lounge at the other end were not actually envisaged in the new Royal business case. It was very much a traditional model hospital of having an emergency department, wards and normal discharge from the wards. This enables us to get people's treatment commenced sooner with a view to giving them a discharge sooner. So these are very much coping strategies around the current bed stock that we have got.

CHAIR - On to the next paragraph of that submission then where you identify the demand projections showed a need for 400 acute and so on it goes.

Mr PERVAN - And they did.

CHAIR - But you were currently meeting them from the 353 overnight bed capacity at the Royal, which you had historically for the last 20 years. Has there been any improvement in that? You are operating at pretty much capacity, Mike, as you say, right up to 100 per cent and that is sort of crisis point, is it not?

Ms WILLCOCKS - The APU will add 28 additional beds to what we currently have, so this will be 28 additional beds. We have to staff the beds, obviously, but that will add 28 extra beds to our current pool of beds. The patients that we talk about now are currently being managed within the stock we have got. We have significant numbers of patients that stay in our Emergency department longer than our KPIs suggest they should and part of the APU, and other parts of this business case, will support the moving of patients out of the ED and into appropriate bed spaces earlier which will meet that demand to that degree.

CHAIR - And that addresses, clearly, one of the matters that Mike mentioned in his contribution where he indicated that the alternative is to continue doing what you are doing. And that is that a patient comes in and they are hived off to a bed somewhere and might wait for some period before they are assessed, whereas this unit will facilitate a much more practical approach to that entry of patients.

Mr PERVAN - Yes, and the work that Karlene has done with Professor Bell goes to patients with very, very specific conditions where we know if we commence treatment on them early enough, we can get them out within 36 hours. If they get to the 36 hours and fail, they are not ready for discharge, then we can transfer them onto a ward. But for these sorts of wards it is very much a process of maintaining that discipline of getting them in and treating them as quickly as we can and at 36 hours making an assessment of whether they go onto a different part of the hospital or they are ready for discharge home if not earlier than that.

It is a model of care that goes to very, very careful data analysis and streaming of patients that is something that we learnt from queuing theory but if we could make it work we can actually - I would not say be a lot more comfortable with the bed stock we have but it is a survival strategy which is far more intelligent and sustainable than just putting 26 or 28 general beds into the stock that would not actually help us a whole lot.

CHAIR - No, it is the better management of the whole process, not just 28 beds.

Mr PERVAN - Absolutely.

CHAIR - Karlene, you mentioned both at the site visit this morning and now in your evidence that this will help address the undesirable ambulance ramping. Is any of that still occurring at the hospital now?

Ms WILLCOCKS - The ambulance ramping?

CHAIR - Yes, because that has certainly been reported in the media over an extended period of time, notwithstanding the new DEM and the better facilities which we have there. If it is, can you explain the reasons for that, please?

Ms WILLCOCKS - Certainly. Yes, we do have an issue with ambulance ramping at present and certainly in the last month it has been relatively increased from what we had seen in the previous few months and that is due to the occupancy level in the hospital which has been over 100 per cent. So not only is the hospital at 100 per cent but DEM has been at 100 per cent as well so our cubicles have been full and there has been no room to move the patients into the DEM environment.

CHAIR - Then the snowballing effect of that, of course, is the inefficiency of the ambulance services because of being ramped and having to drag ambulances from another area in the event of an emergency.

Ms WILLCOCKS - Yes, and obviously significantly that affect the State as a whole, so from a tertiary perspective whether you would rather move the patients through and have the ambulances out and working than looking after patients for us in our back corridor.

CHAIR - Thank you.

Mr HALL - Following on from what the Chair mentioned on page 7, you have these three new ICC centres coming on at Clarence, Glenorchy and Kingborough. Obviously, as you say, that is going to take some pressure off the hospital itself. Have you worked out what sort of quantum of pressure that will take off? Have you done any figures on that at all?

Mr PERVAN - We have not done any figures on it at the moment because we are still working out exactly what services we are going to deliver there but they would be more the services which would reduce demand on our outpatient clinics than on the ED and the bed stock.

Mr HALL - Yes, I understand that.

Mr PERVAN - It still goes to contributing to the end result which is less pressure on the Royal but if there are people out there who do require health services, not just medical but other health services beyond that which a general practice can provide to them, if they do not get access to those services then they end up becoming sicker and fall into the Royal. So it is a matter of keeping people well enough so that they do not require an acute admission.

Certainly around the chronic conditions, around the management of people with diabetes and other conditions, that is really what we would be looking to handle a lot of in the ICCs at Clarence, Glenorchy and Kingston.

Mr HALL - In regard to models in other jurisdictions has that shown to be the case? Have you some good data on that?

Mr PERVAN - There is not a lot of data around because they are models that are quite flawed and change all the time but certainly there is an indication from Victoria around the Hospital Admission Risk Program and other initiatives like that, that they have had a significant impact on demand on the outpatients services in the central hospital locations. So it is keeping people out of Melbourne basically and keeping them in the periphery, accessing services that otherwise they could only get at a hospital.

Mr HALL - I only raise it because as your submission points out, you are almost full to the gunnels and it concerns me a bit unless there are these three assumptions that you made there that will help mitigate some of that pressure that the hospital us under. Even though we do not have a population which is increasing greatly, we have this ageing population, obesity and all those issues that go with it.

Ms MILLAR - That would be one of the other advantages of the APU, there will be time then for the geriatricians to come down and provide an assessment of those patients and then potentially have direct transfers to our southern non-acute offsite campuses.

Mr BROOKS - You will have to excuse my ignorance if I am not understanding or following something. I am up north so we do not get involved with the hospitals down south too much. The original plan was to build a billion dollar hospital somewhere. Once they spent a truckload they realised that probably was not the best idea, but that

would have provided more beds, I suppose. You are at capacity now. How many more beds are we going to get from this? It appears to be around 28 or 38.

Mr PERVAN - Twenty-eight.

Mr BROOKS - How long is that going to last until that is full and when are we going to run out of room?

Mr PERVAN - The approach that we have taken on this was that the Government's allocation at the time they decided not to proceed with the new hospital was $100 million, so we have gone about designing a set of projects within that maximum budget that we get the biggest bang for the buck from. This combination of the assessment and planning, or APU beds, plus the intensive care unit beds, plus the discharge lounge are what we determine will get us the greatest relief from the pressure that we are getting at the moment.

Mr ALEXANDER - You said it was not the best idea, but I have to take issue with that. A new hospital on a new site that met our expected demand, wherever the site is - and I think the site was probably played up in media and other places as an issue - is really the best option. But because of the global financial crisis and the State's financial position, this project has been driven really by affordability not need. Cabinet allocated us an amount of money and the hospital and the clinicians have worked extraordinarily hard to squeeze the best value out of that. But it is not going to solve our problems long term. We always new that even if the new Royal occurred, there would be a number of years before it opened its doors and we were already working on some projects to meet that incremental demand, and what we have done is extended that with the available money.

Mr BROOKS - So it is not going to fix the root issue of not having enough beds, but it will certainly take some pressure off.

Mr ALEXANDER - It will stop people being in the streets this time next year.

Mr BROOKS - Yes, but maybe not in three years' time.

Mr ALEXANDER - Or five years' time.

Ms WILLCOCKS - Over the last two weeks if we had had these beds open, plus all the other beds we currently run, at times we could still have been at capacity, but there would be more leniency than we have currently, so this morning I would have had 10 beds free across the hospital, if we had done exactly the same work.

Mr BURBURY - Can I add to that; on page 23 there is a diagram which almost plots that deteriorating bed circumstance and it was a set of scenarios that were valid earlier this year that shows you that as the demand increases we need to take some action, and the more you delay the action the harder it is to, in fact, take it because you are sitting in the space you need to clean up and change. So short of getting a brand-new hospital across the road that you just pop up one morning and walk across to, it is dependent on all of those actions and we are in that first part of the step.

Ms WILLCOCKS - We have clearly articulated that the model of care needs to change with the unit, not just looking at bed numbers, but looking at the way we deal with our clientele and our patients, and the best outcomes for them. Health has significantly understood now that we get patients put in the wrong wards and we leave patients in EDs longer. Those things significantly increase patient length of stay, so it is about getting the patient to the right place at the right time to get the right care and that improves outcomes and decreases the stay for patients.

Mr HALL - In terms of the big picture, are you seeing a lot of increased referral from the LGH and the Mersey and Burnie at this stage? You do, it is somewhere in the notes there that in some cases they are referred. There are upgrades going on at the LGH at the moment, so will that help mitigate some of those people coming down? That is on one side of the equation. On the other side, on page 9 you say 'Insufficient clinical capacity can only be met by sending patients interstate.' How often does that occur? Are we talking about a lot of people?

Mr PERVAN - The increased referrals are happening for a variety of reasons. We are the State's referral centre, the only service in the State that provides cardiothoracic surgery, neurosurgery and a number of other clinical specialties and because of the north and north-west's challenges with recruiting staff - a replacement for Dr Siejka in the north and having no neurology service at the moment, in particular cancer specialties, gynaecology and paediatric oncology. All of those things are being increasingly referred to us. So the capital works at the LGH, in particular, will not necessarily overcome the problems they have with recruiting and retaining staff.

Mr HALL - Specialist staff.

Mr PERVAN - And particularly since they are single practitioner services. Stan was the only neurologist that they had. It makes it very, very fragile. Even now Tasmania has one paediatric surgeon, Mr Ed Fenton. There are not sufficient paediatric surgery cases to justify more than two. We are about to recruit a second one, but Ed has been our only paediatric surgeon for a couple of decades now. Similarly, we have one paediatric oncologist and he is a registrar, Dr John Daubenton. These services are quite small as they are and so the referral rates as the population grows will increase, because we also have Dr Tolman and some other specialists who handle things like Parkinson's disease and that complex relationship between the geriatricians and the neurologists. So we are seeing an increase in rate of referral. We are also seeing an increase in collaboration with Dr Tolman spending a lot of time in the north-west and working with clinicians up there to try to improve their services. But at the end of the day, we are the State's referral centre so they do come down here.

Interstate referrals, for a variety of reasons, are right down in the south. We have done a lot of work to retain the patients here. It is a far better outcome for the patient and of course for their family. The investments that successive governments have put in to the NICU and other services like that, mean that we are not transferring paediatric patients interstate as much as we used to. There are particular neurosurgical and cancer treatments that we still have to refer interstate for, but they are highly specialised. Generally we are retaining the patients here now. There are particular types of brain injuries, aneurisms and things that probably only two or three specialists in the entire country will operate on, and they are the people who we are currently transferring, but

even a transfer from us to Calvary costs many tens of thousands of dollars. The more patients we can retain within the Royal, and provide a sustainable service for, the better the return on the tax dollar for the health investment.

Mr HALL - As you know, there are some visiting specialists who come across from Melbourne anyway. Do they have the capacity to perform surgery here in the State or do they usually want to take them back and do them in Melbourne?

Mr PERVAN - There is a combination of all of the above. What has been a problem in the past and could be an issue in the future, and it is not related to the capital infrastructure, is that the new national registration requirements are quite specific. We are going through a strange process at the moment where a doctor from Launceston wants to come and operate at the Royal Hobart. Launceston want that doctor too, we want them too, but we have to have them re-registered because under the conditions of their registration they can only work in Launceston. So even though they are moving between two hospitals in the same State, we have to go to the Australian Health Professional Registration Authority to have them re-registered. The administration involved with moving doctors around is getting more complex with the new national scheme than it was with our old State scheme.

Mr HALL - I thought when we passed it that it was meant to make things simpler.

Mr PERVAN - We were hoping for that.

Mr BROOKS - I have one last quick last one to get it on the public record if that is all right. I briefly mentioned the helicopter landings. I could not see anything on the plan that allows for a helicopter in this refit and it was highlighted that it goes either to the airport or to Centenary Park, was it?

Mr PERVAN - No, the Cenotaph.

Mr BROOKS - Do you use it very often or is it something that is not used much at all?

Mr PERVAN - It is not used much at all. The problem with us including a helicopter at this point is that the Government's feasibility study into having a helicopter retrieval service in the south has not concluded yet so we do not know if we are going to have a dedicated helicopter. It also really depends on the size of the helicopter they get. If it is a current one then my experience is that if you build them on top of a building you already have, it comes in between $5 million and $10 million. So that is not providing a single additional bed or improving anything other than the time it takes to get a patient out of the helicopter and that is for a helicopter around the size of what the police have now but if it was any heavier than that, there is nowhere on the current campus you could land it; you would have to demolish something and rebuild it. If it is a large vehicle then it looks like the Cenotaph and if the patient has been properly retrieved so they probably have either a paramedic or a paramedic and possibly even an emergency doctor with them then they are going to be quite stable at that time change from getting out of the helicopter and down the hill to the ED as opposed to from the roof of the A block building and down into the ED. It will not impact on the outcome for them.

Mr BROOKS - Can you give me a rough number? Is it 10 a year or five a year or 100 a year?

Mr PERVAN - At the moment it averages out around one a week. Sometimes we get two, sometimes we get none but it is about one a week.

In terms of how the ambulance response times are currently panning out as the population in the south continues to rise, that might go up but then it will be a decision on what is going to be the best patient outcome, putting additional paramedics and ambulances on the ground or buying a rotary-wing vehicle and having all of the flight crews, the flight nurses, the flight doctors and so on.

Mr BROOKS - I thought I saw the Premier in one before the election but I might be mistaken.

Mr PERVAN - You may have.

Mr BROOKS - I will not take any more of the committee's time on that one. It was just more from an interest point of view.

Mr ALEXANDER - From a building perspective and landing a helicopter on a roof, the building regulations have to cover the worst-case scenario which is a fuel tank bursting into flames, which means you have to be able to contain all that burning fuel and channel it through all the stormwater systems and things like that and that is what puts the cost of it up beyond the pad.

Mr PERVAN - Mr Chair, I am not going to correct Peter but I have personal experience from Western Australia where we did build one on the roof of an intensive care unit of a WA teaching hospital. The original landing pad and the wind sock cost us $400 000 and then the CASA safety assessment of it resulted in $5 million worth of additional works. All of the windows in the surrounding buildings had to have remote-controlled steel-roller shutters, the stormwater had to be diverted so that if there was a fuel spill, a switch was thrown and all stormwater drains diverted into a holding tank that could be ventilated and all that sort of thing. It was a massive undertaking and it was used once a month, if that.

Mr BROOKS - Was that a new hospital or was that an existing hospital?

Mr PERVAN - That was an existing hospital.

Mr BROOKS - How long ago was that?

Mr PERVAN - That was five years ago.

Mr BROOKS - So they didn't really plan it properly?

Mr ALEXANDER - No, I think that they were so attracted by the idea of a helicopter being able to land on the roof of the hospital and the patients and the staff in blue overalls run out and deliver the patient that they did not approach it thinking about it all the way through.

CHAIR - May we have the next component of the project, please.

Mr JOHN De VRIES, BUSINESS CHANGE MANAGEMENT CONSULTANT, DEPARTMENT MEDICAL IMAGING, ROYAL HOBART HOSPITAL, WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED.

CHAIR (Mr Harriss) - Welcome. As Mike indicated, in medical imaging you seem to be the guru.

Mr PERVAN - Yes. You met the head of the department, Dr Michael Carr, this morning. Unfortunately he is feeling unwell and has had to go home. John is very, very familiar with the detail of both the works that are being undertaken and the order of those works. I might have mentioned to some members of the committee this morning that the redevelopment of the Royal is very much an exercise of rebuilding a Rubik's cube from the inside out, and I do not think there is a greater example so far than what we are doing in the DMI with moving some registrars to the basement and others to other buildings, and trying to clear a space big enough so that we can begin demolition and rebuilding something which is desperately needed for the hospital. H block, I think, goes back to 1968 and there has been really not a significant investment in it since that time. As you have noticed from all of the little waiting areas and multiple administration areas through H block, its design actually predates computers and only after the event was wired up for telephones. So it is a building that was not designed for the way we deliver care, and certainly was not designed for large pieces of machinery like MRIs and the larger CTs and in fact the PET machine that are coming in. So it requires a substantial amount of work.

If the Department of Medical Imaging is not working really well, then you will be holding patients in the Emergency department or on the wards when they do not need to be. You will be delaying diagnosis, delaying treatment. It is critical to the hospital that Medical Imaging is upgraded, updated with contemporary equipment. Dr Carr pointed out the bone density machine this morning, the bone densitometer. That is 17 years old and still runs on DOS. I think one of the committee members asked us if we were using a Commodore 64, or something like that. It is very much that kind of vintage of equipment. So we need to have it more focused around how we deliver care now and have a design such that we can move the patients in and out of the department far more easily than we currently can - not just the ambulatory patients in those funny little waiting areas but also patients in beds where we currently have to put them in corridors or go and fetch them from the ward just before we can do their imaging, which means once again a safari of beds and orderlies moving through the hospital constantly. Is there anything you would like to add, John?

Mr De VRIES - No. That is a good summary.

Mr ALEXANDER - Medical imaging per se is a much more important part of the process in an efficient hospital as the years go on.

Mr PERVAN - Absolutely, and more and more you are finding at the same time doctors in the Emergency department, and even in some cases nurses, are ordering pathology tests, blood tests and so on. They are wanting not just X-rays but an MRI or a CT of a specific site. The German radiologist who you met this morning is not just a radiologist but he coils aneurysms and does all sorts of other interventional radiology, so it is one of the

strategies that we have, once again, to live inside the bed stock that we have. The difference between having an aneurysm coiled and having it physically operated on by a neurosurgeon is the difference between a 20-minute light anaesthesia and a couple of days in hospital, and major brain surgery and weeks of rehab and all sorts of other things. Clipping an aneurysm is extremely complicated and very specialist surgery. Having Professor Froelich there able to coil many of them will result in far better and far faster outcomes for patients in Tasmania, but all of that currently is happening in that Department of Medical Imaging.

Mr De VRIES - If I may add to that too, one of the issues we have faced in the past is about retaining qualified radiologists. We have had quite a bit of turnover and we recently lost one a couple of months ago. One of the key strategies in retaining people like Professor Froelich is having upgraded facilities. You probably saw this morning the reporting room. The facilities are substandard. Professor Froelich was surprised by that. It is about upgrading these facilities so that these people are working in to the appropriate standard so that we can retain the staff.

Mr PERVAN - Once again, there is nothing overly ambitious about the plans for medical imaging; it will not give us anything above Australian health facility guidelines but it will be functional and at the moment it is not quite functional.

CHAIR - Is that an understatement, Mike?

Mr PERVAN - Very much. Professor Bell likes to tell people that H Block won the Royal Australian Institute of Architects award for the worst-designed public building in Australia three years in a row and at the end of it they gave us a perpetual award because they realised it was so bad that we would win it every year. I'm not sure when that happened but it was a very colourful anecdote.

Notwithstanding that, you have seen yourself how we had to sort of squeeze around filing cabinets of X-rays and all sorts of things that you probably have not seen in a teaching hospital anywhere in Australia for five to 10 years. We are getting an online medical imaging system - PACS - which should be going in shortly. That will move all those filing cabinets of X-rays off into archives and people will work straight off the computer at their desk. Even then, when I came in as acting CEO we had three radiologists sharing one workstation; they had to stand around and wait. It has been an area of the hospital that has been quite neglected for about 15 years, for all manner of reasons, and it needs serious investment to get it back online so it can enable the other clinical functions of the hospital.

Mr HALL - Has it been the case, Mike, that you have been so constrained in the past that you have had to outsource? Can you send people next door to Hobart Private? There are quite a lot of medical imaging areas around so is that what you have had to do in the past? Can you do that or is it what you have had to do?

Mr PERVAN - We can do that but we have kind of used up all of our goodwill in the private sector as well. There is plenty of private work for the various imaging companies in southern Tasmania and they are clearly well occupied on an inpatient basis anyway with Calvary and Hobart Private patients. We do occasionally call on them for help. We do

outsource some work but you cannot outsource the work without outsourcing the patient as well. If they are an inpatient we do not want to put them in an ambulance and send them to Lenah Valley for imaging, although we have done that when our infrastructures failed. Similarly, when our current PACS system - the picture archiving system - fails we have had to print images, and you walked past boxes of filing cabinets of those today, but printing out X-ray films is very antiquated now.

Once again, it is not just that it is antiquated; this is not about fashion, it is about efficiency. It takes five to 10 times longer to print the films, put on a light box for a doctor to dictate the report, have the typist typing it up than to put the image straight onto a computer and have the radiologist type their report straight into the system to go straight to the treating doctor. That is where we need to be.

Mr De VRIES - We should be providing a service to GPs and specialists around Hobart and Tasmania but because of the lack of facilities and reporting services we do not provide that service and that goes to private providers. Certainly when we get this new equipment we will be providing a greater service to the GPs and specialists around town.

Ms WHITE - Dr Carr mentioned this morning that it cost $50 000 a month with the printing.

Mr PERVAN - That is just the X-rays.

Ms WHITE - He also mentioned that you had to put the data into two computers rather than one and that they do not talk to each other.

Mr PERVAN - That is correct.

Ms WHITE - He also mentioned a document with the department that you are still waiting to get it back?

Mr PERVAN - A contract.

Ms WHITE - A contract that needs to go -

Mr PERVAN - Yes, the successful tenderer of the contract for the radiology information and picture archiving system - the RIS/PACS - was determined just over a year ago and since that time the contract has been bouncing between the successful tenderer and the State Solicitor. I am not sure what the agony is but clearly it has slowed things down. That, combined with the changes to the infrastructure, will make it a vastly different department and an asset to the hospital instead of one of those things we continually identify as an obstacle to patient flow - not because of the staff in it, especially John who is wonderful, but simply because the systems just do not allow anything other than what sometimes feels like stone-age processes.

Ms WHITE - Is that something that you are pursuing yourself, or is that Dr Carr's role to see where that contract is at?

Mr PERVAN - I am pursuing it pretty vigorously and all the doctors are ringing the minister about it. It has been identified by the entire clinical staff as a major risk to clinical care

because of the length of time taken to get things into the system, read and reported on. The RIS/PACS, as I said, vastly increases the speed of that. When you are dealing with particular brain injuries and things like that, you need those images as quickly as you can possibly get them. So they are all taking that up.

CHAIR - Like Rebecca, I was concerned when Dr Carr mentioned that to us this morning, this $50 000 per month extra cost. It was further alarming, I think, when he indicated, probably in passing and Mike you have addressed the issue somewhat, that the contract or the tender was let, I think he said about November last year, but you said over a year ago.

Mr PERVAN - Yes, I think it is over a year.

CHAIR - We could have had a new piece of equipment to deliver a better service, avoid duplication and do all these good technical things which you have referred to, and yet we still do not have it, notwithstanding that there has been an identification of the successful tenderer.

Mr ALEXANDER - If I can make a general comment, and I have been tied up in that particular contract. The Government's procurement process is through the Treasury and Crown Law and requires some adherence to a range of criteria, and the sort of thing that is required generally is terms and conditions that are in the Crown's favour, to the extent that ideally the Crown Solicitor's Office says they want unlimited liability, and those sorts of things. Over the past few years - and I am talking about other contracts but I am assuming that it is a similar type of issue - industry is not prepared to accept that anymore. It is pushing back. It is requiring its own terms and conditions. It is limiting warranty, it is limiting liabilities and pushing risk back to the Crown.

That has created a situation which a lot of legal issues in the Crown have not fully dealt with and the people who are dealing with it on a legal side see the contractual risk, not the actual practical risk. We are working in a number of areas to balance the acceptance of some contractual risk to mitigate a real practical risk on the ground. So it is being actively pursued, but it comes down to some of those legalistic things around terms, conditions, warranties, risk profiles and things like that.

CHAIR - Clearly Crown Law is in that difficult position of ensuring that the State's interests are being well addressed, but a 12-month delay in something which will assist medical care seems alarming. From a purely health point of view, Mike, as the CEO that must be a huge frustration to you, when the equipment has been identified by specialists as being what you needed a year ago.

Mr PERVAN - It is not just an issue for the Royal, it is actually a statewide contract. When it comes in and is up and running, it will enable an image to be taken at the Royal Hobart and to be available online, within moments, in Burnie and Launceston, to have people reporting on it. We could even be using international specialists to report on these things. At the moment it is a complex process to move the documents around. An MRI scan requires a massive amount of memory to do that.

For the record, can I say that in line with what Peter Alexander has just said, the delay, I gather, has been around the specific legal concerns of the State Solicitor in the form of the contract and the specific clauses of it. Why it has taken so long to resolve I cannot say. It may be a question of the resources the State Solicitor has to put to it, I really would not know, but the department has been very attentive in terms of the concerns being raised by the clinicians and certainly we have been very grateful for their assistance. I am aware that the information services area of the department is already gearing up to roll the RIS/PACS out but the contract delay has been quite monumental in my experience.

CHAIR - Is there any indication of a closure?

Mr PERVAN - I have not had an update recently but it is something I intend to pursue again this week.

Mr De VRIES - For the record I can add a bit of detail to that.

The tender was awarded in November last year. We have been through contract developing since then. We had the unfortunate situation of the project manager becoming ill for three or four months, which delayed the process, and then there were four to five months, which was too long, for the contract to be developed. The initial copy of the contract was handed over to Phillips, the successful tenderer, last month and they have come back; obviously with a significant contract, they have come back with a number of changes so we are working through those at the moment and that involves the Crown Solicitor's office.

CHAIR - Back to you John, you said earlier that recently you had lost a radiologist and professional retention has been a problem. Do I read into your comments that professional retention has been a problem because of the less than desirable circumstances within which people work in the Imaging department?

Mr De VRIES - Yes, and that would be fair. That would range from the actual physical condition of the buildings, to the support provided to the radiologist, to the processes around them. They are used to, for example, working with electronic RIS/PACS programs. Their efficiency and output is a lot better and more professional. The service that they are providing they feel is substandard because of the equipment around them and the conditions they are working in. Some are like Professor Froelich. In the past he would have been much more efficient than he can be in the Royal Hobart Hospital. With these new redevelopments and the new equipment coming in, he can work to his capacity.

CHAIR - But as Mike said earlier, he is going to boost what you can currently do anyway notwithstanding the challenges of equipment.

Mr De VRIES - Yes.

CHAIR - Then I suppose, Mike, that leads to a broader question. John has identified this issue in his department. What about professional retention in the hospital generally?

Mr PERVAN - There is no doubt that the condition of the hospital does not act as an attractant. It is always a good reality check to speak to particularly some of the locums that we get from the mainland in terms of the facilities that they are used to working in and what we have to offer them. But the hospital that we've got is the hospital that we've got and without wanting to play the infrastructure card too high, there are things that are happening within the hospital which balance out, if you like, the effect of the infrastructure. We have things like the Patient Assessment Program that was developed in-house with the nursing staff and with our own little innovation unit which we are in the process of selling to the NHS. We have work under way with our own electronic patient record or virtual electronic patient record, if that is not a contradiction in terms in itself, using our digital medical record and some other things that have been developed through the department's information services which give us 80 per cent of the impact of a full electronic health record and could lead to paperless wards at the Royal within the next one or two years. These are things that other hospitals travel to Tasmania to see in place at the Royal, including Hunter, New England, and Flinders - places like that which are renowned nationally for innovation and improvement.

So there are things happening at the Royal which, while it is not the newest of facilities, certainly make up for it but for reasons which probably will take me another five years to fully understand medical imaging has probably the greatest example of neglect in terms of commitment, development and just maintenance really right across the hospital. Our operating theatres have largely been rebuilt and redeveloped in the last how many years - D Block - 10?

Mr ALEXANDER - Yes.

Mr PERVAN - That is still not bad, 10 years. The B Block wards, while challenging in themselves, are relatively new. It is not good infrastructure but it is not the worst infrastructure and certainly one of the things that we are quite proud about, although in a typically southern Tasmania way, is that the new Royal business case said that you could not do any innovation or reform to patient care or improvement of patient flow on the current site because the infrastructure just would not allow it. We have actually proven that that is not the case. According to the original new Royal business case, we would not have been able to sustain the demand pressures that we are currently dealing with at that site, but we are and we are, by all standards, quite well. So the impact of the infrastructure is significant. It would be great to have a whole new hospital on a new site that was properly designed and did not have the feel of a coral reef, which is the current site. But, notwithstanding that, it is a very high quality of care that we deliver.

CHAIR - I would concur. I raised those comments based on what John had indicated, but the attitude and the approach of everybody who I have ever seen at the hospital in all the visits we have had there as the Public Works Committee is nothing short of commendable because that is just the attitude of the people. They have just got a job to do and they do it. An imaging centre could be appropriately described, could it not, as being a bit of a nerve centre or the heartbeat of the hospital because there is so much which goes on there and flows from it?

Mr PERVAN - It is absolutely critical and it is interdependent with every other clinical function. Without it, you are not doing anything. There is a limited amount that you can

move off site in that respect, whereas with things like pathology there are services which you can have provided by external providers. But with imaging it has to be on site and it has to be preferably very closely located to operating theatres, to your Emergency department and APU and things like that. Its current location on campus is probably the right location. It just would have been better if it had been designed in not quite such a 1968 style. If the corridors had been wider, if the rooms had been bigger, it would have been a lot more flexible, but it is just not flexible space at the moment. Certainly in 1968 no-one envisaged machines like MRIs and things. Even though you will get two generations of machine every year at the moment, five years ago PET scanning was something that was being talked about as like arising technology. Now, given the volume of invoices I am getting from I-MED, it is being regarded as the kind of benchmark standard in commencement of cancer care.

Mr De VRIES - I think it is fair to say, too, that increasingly medical imaging is becoming more widely used within the hospital. When you look strategically over the last five or 10 years, and look forward to the next five or 10 years, when you have things like CT and PET coming in, and the new services that Professor Froelich's doing, like intervention radiology, it becomes an increasingly more important area of the hospital.

Mr ALEXANDER - There are a number of reasons for that, too. I am only aware of some of them, but the actual quality of the image allows it as an alternative and much better diagnostic tool. But I think also the medical legal liability issues mean that the doctors are going to that service a lot more and demanding a higher standard of image and diagnostic response that they can get. In state-of-the-art hospitals, it is more and more allied to the extent that they have real-time imaging within operations at the same time. Rather than take a picture of something that was yesterday, you actually have it as a video thing. So it is certainly a horizon that is going to continue to grow faster than most parts of the medical scene.

CHAIR - Thank you.

Mr PERVAN - That takes us to the Department of Critical Care Medicine and the expansion of the ICU by 11 new beds. I think it has been identified both before this committee and before the last five or six Estimates committee hearings that I am aware of that the current size of the ICU has been not only a profound impact on the capacity to provide critical-care medicine in southern Tasmania, it has also been a major obstacle in the delivery of cardiothoracic surgery and surgery generally to highly complex patients.

So what we are talking about in this concept and, once again, making the best use of the available workforce that we might have, is: rather than establishing satellite ICU or critical-care beds around the hospital to extend the floor outside the existing ICU and expand the current ICU by 11 beds; it is not just around the expansion of the beds but the expansion of the size of the cubicles. As I think you would have probably heard this morning, at the moment it is not easy to work on a highly complex patient and if there is something going on at the moment because of the way the place is set out, the staff almost as second nature now will pull the curtains around the other beds, move any visitors out and get on and do it. To be honest, words fail me that the department of critical care medicine and the ICU staff have been able to survive with the capacity that they have for so long and produce such brilliant results. This is a unit which has not only

provided a brilliant service to southern Tasmania but has also published multiple articles in the *New England Journal of Medicine* and has taught countless numbers of nursing staff in terms of delivery of critical care medicine. It is an amazing unit in terms of infection control and other issues that are problematic in every ICU around Australia except at the Royal Hobart Hospital.

If we are to make serious inroads into things like cardiothoracic surgery, we desperately need additional beds. Also, the population is getting older and the acuity of the patient is increasing. They are sicker, they are more complex to manage and so the requirement for ICU beds is immediate. This is our second-highest priority in terms of the services we can deliver and the maintaining of the sustainability of those services.

Ms WILLCOCKS - I think you have said it all, Mike. I suppose I would see this as another recruitment and retention strategy as well. When I first came to the organisation and walked through I failed to see how we would retain staff in this area and it is to the credit of Felicity and her team and Andrew and their team that they do recruit staff and train them to the utmost level. We do grow our own and we grow nurses that people want to take elsewhere. It really is to their credit that they keep their staff.

When we walked through I described the confidentiality issues we have in the unit. Those are ongoing; there is nothing we can do about those due to the environment and it is to the credit of the Tasmanian population that we can continue to run the unit in the way we do because I think everyone respects the situation that you are in when you go in there. It is a difficult place to work and when you have a particularly unwell patient in one of those cubicles the other patients and their families suffer through not being able to go into the unit readily. So it is not just one person you end up restricting visitors to, it is the whole unit.

As we noted in the walk around this morning, this does not give us the guidelines size bed but it certainly in some cases doubles what we are using now. I think the staff are looking forward to that so much and I think if this project does not go ahead, we would be in significant strife, Michael - you and I -

Mr PERVAN - Yes.

Ms WILLCOCKS - in that the staff very strongly feel that this has been talked about in every other reform process and it has never happened. They just cannot keep to the brilliant services they deliver with what they have now.

Mr HALL - How many beds are in ICU currently?

Ms WILLCOCKS - We have 15 in the main part of the unit plus three over in the cardiothoracic but actually only two that are viable because of monitoring systems.

Mr HALL - So when the new deck is done and we have the new 11 beds they will be integrated into that?

Mr PERVAN - There will be 25 in total.

Mr HALL - Will that require an increase in staff?

Mr PERVAN - Yes, it will.

Mr HALL - By how many? Do you have a rough figure on that?

Mr PERVAN - No, we are still in the process of developing a business case up for that because we are going to have to train them.

Ms WILLCOCKS - ICU patients are one-to-one nursing. If there are 10 additional beds we will need to increase per shift 11 nurses, because we need a float per shift as well for that many beds.

Mr HALL - Just as a matter of interest, how long are the shifts in ICU here?

Ms WILLCOCKS - Felicity's staff do eighteen 12-hour shifts and 10-hour overnight shifts, so we do that as a form of recruitment and for retention for our staff. They want to do the 12-hour shifts. It certainly does not make Felicity's job easy in rostering.

Ms WHITE - With the beds that you have, obviously the space is much smaller and you are still maintaining that number of beds, so how will you meet the standards that you need to?

Ms WILLCOCKS - We are losing two of our least functional beds in this process, so in having to give up some of our bed spaces, we are actually lucky that it takes out the two least-liked beds. The staff are all cheering loudly. We will be looking at how we manage patients and that will be in the model of care work that goes with this unit, but I can see that we would need to put the higher-acuity patients into the bigger bed spaces and manage it carefully.

Ms WHITE - So you cannot really increase the existing spaces around the beds to meet what you have with the new development?

Ms WILLCOCKS - This is a stage 1 and stage 1A process so what we have said is that for the next two to five years this work will suffice. If we are going to be in this unit for five to 10 years, we will need to look at re-jigging the old part of the unit and that would be the next phase we go into. So should we not get any movement on further works in the Royal then, yes, there will be a push to redevelop that other side. We cannot survive like this for much longer than five years once it is built.

Mr ALEXANDER - I make the point that the Health Facility Guidelines are guidelines not standards. I have been involved in the development of those.

Ms WHITE - Sorry.

Mr ALEXANDER - It was very clear, particularly when the smaller States did this as a national initiative, that they were not standards, so that we would be seen to be substandard if we could not comply. There are guidelines for an awful lot of things in the hospital, but they are really looking at the best design that is happening across

Australasia and saying: this is what we think is the ideal guideline. What we are doing here is not substandard. With regard to the increase over time, again the clinicians will never tell you about it, but you need more equipment around the beds and you need more people around the beds, so that is why over time it has grown. But what we are doing is fine as far as standards go.

Ms WILLCOCKS - In our case, the bariatric population of Tasmania is predicted to grow and that is a significant issue for us in managing those patients at this time in those bed spaces.

Mr HALL - Just to clarify that generally, following on from Rebecca's question, in the notes we had it says that the facility is substantially undersized with less than half of the beds required. That is at 11. We are now going to 25. Are you saying that in five years' time you are going to need more than 25, or is that a reconfiguration of the old part?

Ms WILLCOCKS - What we have said is that if we are going to be here longer than five years we will definitely be pushing to reconfigure the other side. With the equipment we are using for these patients, those bed spaces just cannot suffice. You saw for yourself this morning that we had patients' feet out in the middle of the corridor when we were walking through. What we would be pushing for after five years is the redevelopment of the other side to make the bed spaces suitable to work in. The numbers of beds, I know in the new Royal documents were greater than 25 and that is going to be something we focus on. However, we are looking at new models of care and trying to manage patients more effectively at the beginning of this stage, so they do not require HDU care. Often we see patients deteriorate rather than get managed early on. That is not something that is purely the Royal, that is actually a health care phenomenon.

Mr HALL - Yes, and it is outside the scope of this project. What is the capacity of ICU in the other hospitals in the Hobart metropolitan areas? For example, Calvary has an ICU unit, I know that for sure.

Mr PERVAN - That is it.

Mr HALL - That is it, that is the only other one.

Mr PERVAN - In the current partnership agreement with Hobart Private, they can have access to up to two beds in the ICU, if they are available, but given the complexity of patients that they prefer to deal with, they don't make that frequent a call on those beds.

Ms GEEVES - Calvary doesn't take the very acutely unwell patients; we will quite often get their patients who need a lot more care.

Mr PERVAN - It is one of the issues that we have in Tasmania that you don't get in other capital cities in Australia in that there is nowhere else for really sick people to go. Private hospitals, for very good reasons, don't want to keep them and will try to transfer them to us. But similarly, one of the reasons that we are so keen on having the Assessment Planning Unit is that unlike emergency departments in other capital cities, I can't go on bypass because that two or three hours on bypass gives you that time to clear out your cubicles and get things back to normal. We are 24/7.

Ms GEEVES - Certainly having the only neurosurgery down here, even if we are full we still have a time critical transfer that we will do from the north of the State. If somebody desperately needs neurosurgery in order to save their life, they will come down and we will just find a bed somewhere in the interim. They will come down and have their surgery and somewhere between when they arrive and have their surgery, we have found an ICU bed for them.

Ms WILLCOCKS - We do have occupancy problems. On Thursday night Felicity ended up doing the night shift for us to meet the needs of the unit plus we transferred a patient to Calvary, who wasn't a private patient, because we didn't have the capacity to manage that patient and the time critical that was in ED.

Mr HALL - On page 13 you say that the existing ICU would be unable to manage a significant infection outbreak or pandemic and it goes on to say, 'the open ward configuration' et cetera. Sorry if I missed something there but that will be addressed if there is - what is the current flu at the moment? I've forgotten. I've had a shot for it.

Ms WILLCOCKS - H1N1 or H3N1.

Mr HALL - Whatever it is. With the new configuration, if there is a pandemic, you will have more capacity to handle it, I suppose, but not necessarily total.

Ms WILLCOCKS - We will be better able to manage it than we are currently. On the plans of the new unit, one side of those plans all have closing doors. The other side is able to manage a contact precaution outbreak which at the moment we cannot manage effectively. Today we went through the same position as when I did a walk-through last week where we had an isolation patient in the bed space directly in front of the nursing station because that is where the patient could best be managed due to their acuity and the clinical staff are trying to get undressed out of contact-precaution gear in the corridor without touching anything else, and it is just ineffective.

So in the new unit we have a class Q room, which is an isolation room able to deal with an embola-like illness, which we require for the State. We have one room currently but it is not ventilation proof - so that's on our respiratory ward. I think we now have five cubicles down that side with closing doors and the other side are all able to manage contact-precaution isolation.

Mr BROOKS - The project I am on is November 2010 to September 2011, theoretically for the ICU upgrade. We will get a four- to five-year usage out of it, I suppose, with that capacity. Is there a plan for anything beyond that five-year time frame? We know we are going to be at capacity and as I am a maintenance planner I am looking at what we are going to be doing now so that we will be ready for this in four or five years. It looks as though we are using up the remaining footprint of the hospital.

Ms WILLCOCKS - Can I just say that the five-year time frame is where we would be happy to manage that without changing the other side over to have rooms that are the size of the other size. So we don't know that we will be at capacity, and I think we need to measure that as we go. The growth that we have had in ICU doesn't necessarily - and, Mike, you

might be able to fill me in more - match what the new Royal project made a stab at, and we are looking at our planning more and more around that.

Mr PERVAN - It is still -

Ms WILLCOCKS - Tight.

Mr PERVAN - Yes, it is still ultimately around half of the critical-care beds in the new Royal plan but that includes HDU and ICU and others.

There is further planning under way. Once again, this was a kind of reverse process. Normally you identify the need, you make a plan around that, build your business case up and go to government. This time it was, 'You have $100 million. Do what you can'. So we sort of went about it backwards at this stage, so this is the most we can squeeze out of the money and the footprint that we have. Even with that, we are doing some clever things with building concrete in thin air really.

Mr BROOKS - Certainly we saw today the need to make those spaces bigger, but I suppose while we are here, we might as well at least ask if there is going to be a further need into the future. Then we will at least know about it now, too.

Ms WILLCOCKS - The best option for this ICU would be a new hospital and a new ICU at the right size, purpose built, contemporary built.

Mr ALEXANDER - When Cabinet decided not to go ahead with the new hospital, the need for it did not go away. We are in a real state of flux now, particularly with the pre-election Federal Government's changes for funding of health infrastructure and those sorts of things. So out of the new Royal project we still have the demand that we need to meet and we have some of the answers of how we could do it. But we really cannot take that much further until we know who we have to convince and who is going to provide some funding.

Mr BROOKS - I do not think anyone knows that yet. I did have another question, but I might wait for the next section because it is more that one anyway. You mentioned briefly about your prevention of infection and keeping it contained. Whilst I was up in the oncology ward, up in that section you have your respiratory ward next door with a door with a tape across it. That sometimes does not work, from the information I have. Is that in another section or can we cover that now, through the Chair?

Mr PERVAN - We are happy to take it now.

CHAIR - It is really when we get to the cancer area, I guess. Are there any more questions on ICU? No. Does that lead us into the cancer care centre, Mike?

Mr PERVAN - We could do food next.

CHAIR - Yes, that is fine. We can do that.

Mr PERVAN - Okay. As I said in my introduction, it might be due to the comparative location, but along with medical imaging, food services at the Royal has not really received any significant amount of funding or attention for 15 to 20 years. With a growing demand for the production of food from that site and with failing infrastructure, we needed to do something and do something seriously. There has been a number of reviews done, both through the new Royal planning process and otherwise identifying the need to improve the production capacity and general facility of food services. This morning when you were going around with Rob de Sallis, you would have seen the loading dock areas and all the other alleyways and things that we are currently dealing with. We have been putting a lot of time into a redevelopment plan that would have made an attempt at rebuilding and redeveloping the kitchen on site, but then another opportunity has come up recently which will probably work out significantly cheaper, in my view, but offers a better result for everyone, ultimately, in terms of having a contemporary production kitchen area.

Mr ROB de SALIS, MANAGER, FOOD SERVICES, ROYAL HOBART HOSPITAL, WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED.

CHAIR (Mr Harriss) - Welcome, Rob.

Mr PERVAN - We had a kitchen, and the submission before you makes it quite clear that we have basically been in the good graces of the Hobart City Council and other authorities in terms of occupational safety and health issues, compliance with local by-laws for our food production area and just generally having staff who have been willing to continue working in what are very, very confined spaces for the equipment that we use. So we have now a process under way where we can lease a commercially designed facility, the Alpha building at Cambridge, and turn it into our main production facility with the on-site services being confined to plating and dishwashing, basically.

Mr De SALIS - That is correct. That would leave the new meal delivery system at the Royal Hobart Hospital - distribution of patient meals would remain where it is. We are currently redeveloping the wear/wash area and the dishwashing area. The production area is probably moving off-site. As Mike has said, there were several issues - anything from meeting the Food Standards Code. There was a workplace standards issue with space, work clothes and hazards; they have all been identified. There are also the issues of failing equipment and the loading dock. It is not just the goods in and out, it is the access and the number of trucks that we have coming in with food in and out of the hospital area. So we would lighten that load in the loading dock.

The Alpha building is a new exciting project that we are currently working towards and we have concept design layouts at the moment. We are now working on how to refit that building so that it will become what we need to meet our needs.

Mr HALL - You are spending quite a lot - $1.9 million in capex out at Cambridge on a lease facility. I presume that you have a pretty long-term lease and a good arrangement out there over that time?

Mr PERVAN - That is what we are currently in the process of negotiating.

Mr HALL - Okay. So you have not actually teed it off at this stage but you have committed yourself to $1.9 million of capex?

Mr PERVAN - We have not committed to the capex until such time as the lease is agreed.

Mr HALL - Okay.

Mr PERVAN - At the moment Asset Management Services are negotiating that lease for us.

Mr HALL - Okay. So what happens if you cannot get a successful negotiation at this stage?

Mr ALEXANDER - We are pretty sure we can. It was slightly on again, off again and we have already been through one iteration of what you are saying.

The kitchen out there was built, I think, for Qantas and then not used and I think we became aware of it with the real estate agent trying to use us to get someone else to sign the lease when they had the pen in the hand because 24 hours later it disappeared. We were annoyed by that but went ahead with the design of trying to rebuild the kitchen within the Royal, which was the only option we had. The lease through there fell through and the real estate agent came back to us more genuinely now and we have a memorandum of understanding which gives us a lead position to commence that lease and the cost of that lease is extremely favourable.

Melbourne is using off-site kitchens all the time now because you can supply different facilities, you can change the way you do business, you can change the scope and capacity of your business much more easily. As Mike said this morning, trying to produce meals and rebuild in the same space at the same time is not something you would want to do at home, and far less with the sort of quantities we are talking about.

We went partly down the track of doing a design and a process within the existing kitchen. It would have been really expensive because we would only have been able to work during periods of the night for some days of the week. We jumped at this opportunity when it reinvented itself and we have gone down the process of developing a design and an indicative cost. There is nothing locked into this cost until we have this committee's approval and until we have signed the lease.

Mr HALL - I am certainly not arguing with the concept but there is a slim chance that it may not work out at Cambridge in terms of the lease and everything else and then you would have to go back to square one - back to the on-site job again. Is that possible?

Mr ALEXANDER - I suppose anything is possible. We were as confident as we can be that the lease will go ahead, but anything is possible. If it did we have done investigations into other options -

Mr HALL - That is the next question I was going to ask. Are there any other options? Not specifically?

Mr ALEXANDER - Not that we can afford.

Mr HALL - I suppose by having it off site you have an additional recurrent operational cost in transferring tucker backwards and forwards. Is that huge or is it fairly inconsequential in the whole scope of things?

Mr PERVAN - As it stands, with the exception of the capex around some new equipment, the cost of the lease and the transport are almost insignificant. As Peter said, it is a very favourable lease that we are talking about, in return for which Hobart Airport Corporation get a longstanding tenant in a facility that they have had enormous difficulty finding any tenant for at all. There has even been an approach to food services from the Airport Corporation for us to put a window on the side of the kitchen to sell coffee to taxi drivers who are queued up, so they are very keen to welcome us into the facility. Also, as we have said, it provides us somewhere to have a properly designed, properly fitted out production kitchen that is compliant with various regulatory and occupational safety and health codes that we have to comply with.

Mr HALL - Is that just a blank space there at the moment, and when Qantas moved did they take all their equipment with them, basically?

Mr PERVAN - By and large. It is a very flexible interior space with a large number of cool rooms and fridges and freezers and other things in there, and I think five loading docks, or at least four.

Mr De SALIS - There are three or four loading docks there. As you say, the structure is a simple structure that can have walls moved around; you can redesign, reconfigure, the structure is there. There is some work done on the walls and flooring. It is ready to go. It is far better than a vacant block of land and building a new kitchen on. The structure is already there.

Mr BURBURY - The kitchen design is perfect in the sense that it is a slab off the ground, about 1 200 off the ground, so all the plumbing travels underneath. It is basically built of coolroom biscuit panels with a tin roof over the top, so the biscuit panels can be moved in any direction you want. If you set off to design the perfect kitchen that is exactly the formula you would use. And it is precisely the formula that we inspected. I came to two of them in Melbourne, where they have these major production kitchens. So you could not ask for better as a starting base.

Mr HALL - You might be able to get a contract to supply Virgin with their food, or something like that.

Mr ALEXANDER - There are certainly revenue opportunities.

Mr PERVAN - There are lots of revenue opportunities, not the least of which is we could probably pay the rent just by selling coffee to cabbies. But it is more that the facility does give you that flexibility. You can seriously consider providing food to nursing homes, Meals on Wheels, far beyond what we already do, which is quite a significant part of the business.

Mr ALEXANDER - Overall, as you know, we were on a very constrained site. Anything non-core that we can take off site just releases that pressure on the space that we need. There still has to be a large part of the existing kitchen that is there for plating, washing, fresh food, et cetera, but otherwise it would have to take up yet more space which we do not have.

Mr De SALIS - You mentioned transportation from an off-site facility, which is not really an issue because the food that we do for the Royal Hobart Hospital is just 55 per cent of what we do. We are already on the road delivering to the other 45 per cent of the people that we serve food to.

Mr BROOKS - It is a bit further out, though.

CHAIR - Does Mr Brooks have any questions about potatoes or anything else?

Mr BROOKS - No, no. I like food, everyone needs it. No, I was just having a quick chat with a couple about the travel distance, whether it is considerably more out there or not, and I have been informed that it is not really an issue.

Mr De SALIS - We do the eastern shore now as well as the western shore.

Mr BROOKS - I do not really have any questions but I think it is good looking at other opportunities and other options.

CHAIR - It seems to me there is nothing else on the kitchen. What would you like to address next?

Mr PERVAN - Marianne and Larraine are sitting there very patiently. I think we should move straight into the integrated cancer centre.

This was, as I said, a stand-alone application under the specific cancer centre funding, the last piece of the HHF pie that the Commonwealth advertised. A collaborative bid was put in that included ourselves and Calvary for a comprehensive cancer centre in the south, but before I hand over to Larraine and Marianne to go into more detail, when you look at what we applied for with the outpatient centre, day oncology and improvements to radiation oncology they were the same themes that have come up with all the other major projects. Services that used to be provided on an inpatient basis we now provide on an ambulatory or outpatient basis. But out of a facility that was never designed to deliver facilities in that way or to the volumes that we now deliver at, what we are heading towards is a service that is purpose built for cancer patients, that is far more sensitive around their needs and does not require for them to have to negotiate through, as when you entered wing 3 and 4 today, what appears to be a rabbit warren of old offices, clinic rooms and all sorts of things to get to a waiting area that is too small with patients who are going to be feeling particularly unwell. If they are going through chemo at the same time, as many of them are, the surroundings, the environment and the general layout of the place makes a profound difference to the care that they experience, not the least of which is in the space that we currently have to deliver it in we are queuing people up.

So, once again, what we are trying to do is move the infrastructure towards enabling a more contemporary model of care, one that is going to enable us to see more patients in that outpatient ambulatory model that is inpatients, the way they used to be, as well as looking to the future. It is no small credit to the people sitting to my right that after, I won't say how many years, but after having separate medical and radiation oncology services at the Royal Hobart Hospital since there have been such things as oncology services they are now being brought together under Dr Rosemary Harrup as a single southern Tasmanian cancer service. So we are getting a collaborative joined-up model of care in southern Tasmania with the Holman Clinic and medical oncology all working collaboratively. So it is quite a significant step forward in the way we manage patients that will be reflected in the infrastructure once these works are completed.

Would you, Marianne or Larraine, like to add to that?

Ms HERCUS - Yes. One of the barriers, I guess, to the total integration is the fact that the services are not collocated so once the collocation eventuates then the services will be truly integrated and patients will have a very coordinated, multidisciplinary journey through the system. That has been shown nationwide and worldwide to produce better outcomes for cancer patients, that there is no repetition of services, there is no duplication and there is no confusion amongst who is the carer and who is caring for that patient and what services they are being provided with. That is the biggest outcome that comes with an integrated cancer service. The patient care is totally efficient, effective and coordinated.

Ms MILLAR - We also have multiple entry points at the moment and these capital works will enable us to have one entry point for all our patients. As Michael said, it comes at a time when we are working organisationally to have cancer services under the one structure and also working with surgeons in terms of having closer links with surgeons in terms of cancer streams.

Ms HERCUS - The other part which is most important and needs to be addressed and has not been over a number of years in most cancer centres is the actual patient support areas, that we need to be looking after the total patient care including their psycho-social needs, their dietary needs and things like that, and having support areas for their ongoing care. Patients do survive now and they do need to be supported through the whole of their life as survivors of cancer not just for the time they were having the treatment, and that is something that no services really have had the capacity to do. We believe with the new service and the new space that will be provided we will be able to provide a support service within the hospital for the ongoing care of patients after they have completed their active treatment.

CHAIR - Thanks. On page 33 of the submission, the second dot point indicates that there have been some delays in ratifying. I do not know that you covered that, Mike, in your introductory comments. Is that still a difficulty which you need to address?

Mr PERVAN - No, Mr Chairman, I expect that we will have that resolved in the next couple of days. What happened after our submission went in, of course the State's original application was for a significantly larger sum of money, so we had to modify our application to, once again, match the money that we have got as opposed to the service demand that we know that we are going to get. So that required some changes to the application and that is what is tied up in that as well as some discussions with the Menzies around opportunities there. So it was a matter of discussing with the Menzies and Calvary what the options were for meeting that original business case that went up, and the service outcomes that we were planning on delivering, and what we can now do for the money that we have got ahead of us. Not just for the money, but a real focus on, in terms of collaboration with other sites, what it meant for the patient, what were the clinical considerations that we had moving forward with the options in front of us around alternative sites or splitting the service over two sites and various other things that came up. The clinicians have been through an assessment process in that regard and we should be able to ratify that agreement within the next few days.

CHAIR - Simon, do you have anything to add?

Mr BARNSLEY - Just to clarify on that one, with the way that the HHF is working, the application went in and was approved with a policy commitment. The agreement that Michael is referring to is the formal piece of paper that says when they will make the progress payments and what stage will the work be at. It will be slightly more than a couple of days, Michael, because it needs a Health minister to sign it and I do not know if they can sign in caretaker mode in Canberra. They have been doing all of the work in Canberra to have it ready to sign and in fact I sent the draft back up this morning to Canberra. We will iterate that with Canberra, so it will be ready for a minister to sign, but I think they need a government.

CHAIR - Just phone Bob Katter, he'll see to that.

Laughter.

Mr BARNSLEY - If you can do some introductions, Paul, we would really appreciate it. I think that from the point of view of this project there is no doubt that the funding is there in the HHF. It was a statutory fund. It is approved. The planning time frame is quite lengthy as it stands and the agreement will be well and truly ratified for the works to keep going.

CHAIR - Before you go, Rebecca was questioning something with Les.

Mr BURBURY - I was just explaining the colour on the plans. On the third page of the sheet I have just handed out to you is a cost structure. The colours unfortunately have not reproduced perfectly so you cannot stake your lives on it, but essentially we had a quantity surveyor go through the available funds, which is the left-most column of the core unit, and then a series of scenarios and it is the option going up to the fourth or the option to the sixth floor which are the ones we are referring to. So the colours are actually the extent of upgrade involved.

Ms WHITE - That makes sense. There was not a legend in this document.

Mr BURBURY - Yellow means complete upgrade to blue meaning a light touch.

Mr BROOKS - My question was more based around the oncology, I think. I think it was upstairs, I cannot remember. Anyway, wherever we were there is a couple of doors with a big 'Do Not Enter. Police.' sign taped there and the feedback I had was that it did not always work -

Mr PERVAN - That may have been where we got that tape from. I can't remember where we lifted it from.

Mr BROOKS - I was informed that there was not any scope to improve that or alarm it or to change the system somehow and I suppose they are the sorts of things that, if we have the opportunity, we should look at. Is there anything within the plans to do that?

Mr BURBURY - I am not quite sure where the tape was.

Mr PERVAN - Separating the two halves of 1B North and 1B South.

Mr BROOKS - From the respiratory ward, disease ward, into the oncology area.

Mr PERVAN - That's right.

Mr BURBURY - I cannot give you a precise answer to that because I am not really familiar with the tape and unfortunately I did not walk with you.

Most of the money we are spending is back in the Holman Centre in the A Block and the next floor up generates the new out-patient area. It will decrease the pressure on that end of the show but I cannot precisely answer you on the question about that tape.

Mr BROOKS - Okay. I think you know what I mean. It is things like that we can try to get included.

Ms WILLCOCKS - The longer-term plan is to address the co-location of the wards. Ideally, if we had all the money we would have liked for the cancer centre we would have co-located the cancer ward into the cancer centre but alas there is a limited pool. We think it is most important that we get it all but unfortunately we can't so at the moment we are stuck with that. But as for the hospital plans forward and especially with acute operations and across the executive, there is a clear focus on looking at where those co locations best are and the longer-term planning around services certainly interests us. We talked a little bit about the possibility of alarming those doors. There are significant challenges for us from an operational perspective if we do alarm those doors which would then impact on other places. One of the key things is to get professionals to understand they should not go through the tape that looks like crime scene tape. The grieving room is outside those doors and when you have a family that is grieving, walking them around is not always an option, so we do have issues with alarming those doors as well.

Mr BROOKS - Okay.

CHAIR - Thank you very much, ladies, for your patience. The final one is the Access and Patient Flow Unit.

Mr PERVAN - As I said, these sets of projects aren't just about push, getting people into the hospital such as the Assessment and Planning Unit but about pull and the Access and Patient Flow Unit. This helps us not only sort out a whole lot of administrative services which have been in office spaces designed and largely fitted out in 1938 but also enables us to have a proper discharge lounge where we can clear beds earlier. If people are just waiting for pharmacy or dispensing or something like that, they can go somewhere that is comfortable and physically appropriate, not the plastic chairs that we have just inside the front doors currently but something that is designed for patients to sit comfortably and safely while they are waiting to go home or be transferred to another facility.

At this point I will hand over to Marc who has much more detail around what is planned for the area.

Mr BESTER - I think probably we have covered most of it. What we were talking about this morning was integrating the discharge and the admissions area, which would provide a focal point at the front of the hospital that we do not have at the moment. People coming in for admission are dispatched down the corridor to that small room we were all piled into. Patients being discharged have historically waited in their bed or sat in a chair on the ward with not necessarily direct care and supervision. We have the temporary discharge lounge in operation, which is great, and that is moving patients off the ward much faster and is then helping in the Emergency department to cut ambulance ramping - all of those things that we are talking about to improve our patient flow.

The new facility locates all of the key components in one space. At the moment some of the offices were up on the eighth floor, other areas of the staff are on the ground floor. It is bringing everybody together so we can communicate and coordinate our patient flow, our staffing, to make sure that we have the staff in place, patients moving as efficiently and effectively as possible.

Mr PERVAN - The other benefit, of course, and we have discussed it several times today, is that where you have a hospital that is not expanding in terms of bed numbers significantly, having a very tight co-located team running bed management is absolutely critical. Currently we are having two to three bed management meetings a day, which requires people to come from all over the campus to talk about which beds they have open, which beds they have closed, which ones they need to move patients from and all these sorts of issues, which if they were all co-located could be dealt with in a moment.

This is as critical for us as the APU in terms of just the more efficient management of a hospital that is a legacy of buildings designed, developed and occupied over almost a hundred years now, all joined together by the old C Block, which has become more or less four levels of corridors for us with all the other major buildings plugged on the outside of it, and patients, beds, food, everything, moving up and down those corridors all day every day. So having a central planning unit and all those patient administrative functions around it actually enables us to manage that traffic flow, if you like, much more efficiently.

CHAIR - Thanks, Mike. Thanks, Marc. You have done a good sales job, Marc, with your tour this morning and we appreciate the cramped circumstances there. As you observed, a GP's waiting room is bigger than that waiting area.

Mr BROOKS - It was built in 1938 for 11.

Mr BESTER - I walked past five minutes after we left and there was an ambulance in there with a trolley trying to get somebody off the trolley onto one of those chairs, and so: two ambulance crews, a trolley, the patient, it is just really, really difficult. Plus, they had to come in through the hospital down the corridor. With the new structure they do not actually come in through the foyer. There is a better entry point.

Mr BROOKS - I don't think you will get many arguments here on that.

CHAIR - Any closing contribution, Mike, from any of your team?

Mr PERVAN - I will invite them to speak. Everyone is happy.

Mr HALL - I have one quick question. In regard to leased premises, we talk about the MBF Building and the Telstra Building, and you talked about admin, which I can understand, and you also talked about clinical services. Briefly, what is happening there?

Mr PERVAN - Very briefly, we have been negotiating through Asset Management Services for lease of space at the Telstra Building for pain management.

Ms MILLAR - Diabetes educators and a cystic fibrosis team, and some administrative staff from the renal unit.

Mr HALL - And that all fits okay off site?

Mr PERVAN - Yes.

Mr HALL - There are no problems there.

Mr PERVAN - Yes, they are services that do not require on-site access to imaging or pathology or those sorts of things.

Mr HALL - It makes sense.

Mr PERVAN - So very much ambulatory services.

Mr HALL - Thanks, Mr Chair.

CHAIR - Thanks for the comprehensive tour of the facility this morning. There were parts of that that I do not think Greg or I have seen in our previous visits, and thank you for the comprehensive nature and the presentations today from the team.

I think it would be more than appropriate for me to observe that Sue Napier made an incredible contribution to this committee over the years. Mike, Peter and Les, you have certainly been in attendance when Sue cross-examined you as witnesses and she was always incredibly thorough. She made a significant contribution to the committee and we will have our opportunity, of course, when Parliament resumes to be more expansive about that. We are going to miss Sue on this committee because of her fairness and also the very detailed way in which she always assessed any public works project.

Thank you for your assistance today.

THE WITNESSES WITHDREW.