

## Aspects of Being an Expert Witness

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### ABSTRACT

*Surveyors are regularly being called on to be an Expert Witness on many civil litigation, boundary, planning and development issues and often in the Land and Environment Court (L&EC) for a multitude of interrelated development matters. The professionally independent activities of a surveyor generally equips the individual with the basic skills required for the role and with some additional training, the opportunity to act as an Expert Witness provides increased professional avenues to explore and enjoy. Responsibility to act professionally, impartially and portray confidence and skill in a chosen field makes surveyors ideal expert witnesses, and the right to be an expert is a privileged position. The role of the Expert Witness in the L&EC is to assist the Court impartially, as against an advocate for one side or another, on matters relevant to the expertise of the individual. It is paramount that the expert understands that they have a duty to the Court and not to the party who engages the expert in the first place. This paper looks at the role of the Expert Witness in the L&EC and provides a summary of considerations and fundamentals that an Expert Witness needs to provide to the Court. A specific case study for understanding how this role was executed provides some understanding of how a surveyor, as an expert in development matters, can be utilised to untangle relative complex issues so that the Court can critically examine logical findings and recommendations. The training provided by the Institute of Arbitrators & Mediators, Australia was critical to the understanding of how the L&EC utilises Expert Witnesses in both hearings and conciliation meetings and utilising these acquired skills was fundamental to a successful appeal. The expectations of what a surveyor does are fundamentally not changing but these new areas of activity are slowly developing the profession into a more complex entity that ultimately displays the professional training and skills that are well recognised within related professions.*

**KEYWORDS:** *Expert witness, Land and Environment Court, legal.*

### 1 INTRODUCTION

An expert is a person who has specialised knowledge based on training, study or experience and that an opinion expressed by an expert must be wholly or substantially based on the person's training, study and/or experience.

Expert evidence is now a role that can be undertaken by surveyors. Fundamentally the duty of an **expert witness is to assist the court impartially** on matters relevant to an individual's area of expertise **and not to the party by whom they are retained**. The principles are now set out in Schedule K to the *Supreme Court Rule* which has tried to eliminate opportunities for an expert to perform as an advocate for a specific position rather than impartially for the court.

Concern has increased about the role of experts in recent years based on issues relating to:

1. The use of experts in every form of civil litigation.
2. Areas where the court has difficulty in understanding abstruse or obscure areas of expertise.
3. Perceptions that expert witnesses are hired guns and opinions can be bought.

There is a great opportunity, and with that goes responsibility, for surveyors to play this role as an expert witness in many areas that are now the subject of legal action.

## 2 HOW DO YOU GET AN IMPARTIAL OPINION?

Opinions expressed by the expert in a tendered report must be the opinion of the expert and not of the engaging lawyers or client. This does not mean that the lawyer and/or client have no role to play, and in complex cases, advice from both of these people is fundamental to understanding the extent of the problem. Note, however, that a meeting with a client should always include the advising lawyer.

The advice and assistance that a lawyer provides includes:

1. Identification of the issues to which expert evidence is required. In complex cases, the client is often mandatory as they have the detailed working knowledge of the issues.
2. Identification of one or more experts who are qualified to express opinions on these issues. Here the lawyer needs to ask a simple question, “*do we need an expert to give us this sort of answer/advice?*”
3. Clarification and limiting the issues on which an expert can express an opinion. Note that here the expert may help redefine the issues to provide clarity.
4. Clearly specify and detail the assumptions of fact that an expert is to make.
5. Supplement the assumptions with primary factual material that the expert is to consider.
6. Assisting the expert in drafting a report to ensure that, whilst the opinions remain those of the expert, the report meets the relevant levels of formal admissibility and persuasive value. The potential for influence to be bought to bear in this final stage of a report needs to be understood and resisted. This review process ensures that the report does not allow the expert into areas outside their expertise, and in the end the report will **only** express opinions that are fully justifiable and prepared by the expert.

The outcome that the court requires is that the purpose of expert evidence is to persuade the tribunal of fact and to resolve a particular matter. A court, tribunal or judge will hardly reject an expert report that clearly sets out:

1. The expert’s qualifications on the subject before the court.
2. The issues.
3. The relevance of expertise used to assess and provide an opinion.
4. The facts, including assumptions of fact on which the opinion is based.
5. The expert’s considerations of relevant facts.
6. The analysis of facts in relation to the expert’s expertise or relevant literature or materials that support the opinion.
7. The conclusions that are logically reached.

In technical issues that are considered before the Land and Environment Court it is often a matter that a meeting of experts is scheduled prior to the hearing, so that the real areas of dispute can be identified and the respective arguments can be put forward against each dispute item. This meeting is referred to as a conference and whilst lawyers do not usually attend (a technical conference), there is a clear understanding of the role of the conference to define real areas of dispute and to resolve, where possible, all areas including those matters that are often considered to be peripheral to the main arguments. Note that in this conference all issues are considered in an endeavour to have them resolved. A joint report will then be prepared which will then specify matters that are agreed, matters that are not agreed and the reasons for the disagreement. A successful conference will save time at the hearing and will lead to earlier resolutions.

### 3 RULES FOR THE BEHAVIOUR OF EXPERTS

The courts have rules for the use of experts, the use and admissibility of their reports, the way in which the court wants to receive the expert's report and the way that the court wants an expert to behave, i.e. an effective code of conduct for experts.

The list of legal advice on the relevant behavioural codes of conduct includes:

1. Uniform Civil Procedure Rules 2005 (New South Wales). Generally provisions from rule 31.18 to 31.54 are relevant. These rules give direction for conferences, the way that an expert can be appointed as a court expert, a joint expert (for both sides before the court). Specifically rule 31.23 requires that the expert **works with the court impartially... and with other court witnesses** and that the expert witness must exercise independent professional judgement in relation to any conference and joint report. There is also advice that an **expert must not act on any instruction or request to withhold or avoid agreement**.
2. Uniform Civil Procedure Rules 1999 (Supreme Court of Queensland Act 1991).
3. Evidence Act 1995, part 3.3. Clause 79 permits evidence in the form of an opinion from a person having "*specialised knowledge*" provided that the opinion is "*wholly or substantially based on that knowledge*". The emphasis here is that the expressed opinion that is being admitted must be shown to be within the "*expert's*" own field of specialisation.
4. Supreme Court (General Civil Procedure) Rules 2005, S.R. No 148/2005 – Order 44.
5. Federal Court Rules – Order 34 Court expert, Order 34A Evidence of expert witnesses and Order 34B Expert assistant. The Federal Court has also prepared "*Guidelines for Expert Witnesses in Proceedings in the Federal Court of Australia*" and in this guideline the requirement is clearly stated that the expert witness is **not to be an advocate** for a party.
6. Land and Environment Court – Practice Direction: Expert witnesses – No 22. Schedule 1 relates to the expert witness code of conduct, duty of care to the court and the content of a report. Schedule 2 clarifies the requirements for joint conferences of expert witnesses. The court has considered having a single expert on specific areas that include noise, traffic, parking, overshadowing, engineering, hydrology and contamination, heritage, urban design and general planning. Mutual agreement between all parties before the court is usually obtained for the appointment of these single experts.

On other occasions, the L&EC requires that a full conference will result in a better result and accordingly in these cases, joint reports with details of agreements and disagreements are prepared and lodged.

#### **4 PREPARING A REPORT**

The content of a report is to include:

1. Executive summary.
2. Introduction that includes the person preparing the report, CV, case, parties involved, briefing party, general scope and header/footer.
3. Copy of original and any amended brief/clarifications.
4. Compliance with the Expert Witness Code of Conduct.
5. Facts, matters of assumptions on what your opinion relied on.
6. Documents and literature that was used in your assessment.
7. Description/chronology – this is to be short, precise with dates and plans in order.
8. Opinion.
9. Summary – usually bullet points and kept short.
10. Signage of the report.
11. Attachments or annexure that includes detailed CV, calculations and any documents referred to in the report.

Additional training for expert witnesses can be obtained from the Institute of Arbitrators and Mediators Australia (IAMA), Level 9, 52 Philip Street, Sydney NSW 2000, ph. (02) 9241 1188, fax (02) 9252 2911, or email [nsw.chapter@iama.org.au](mailto:nsw.chapter@iama.org.au).

#### **5 CASE STUDY: ISSUES RAISED FOR RESOLUTION AT L&EC**

This section gives an example based on a case study, i.e. the Land and Environment Court matter no. 10634/2008 – 52 Cove Boulevard, North Arm Cove. In this case, the Council refused the development application on the basis of three (3) fairly simple reasons that were generally based on the disposal of waste water and the character of the surrounding development.

The legal team for the Council then proceeded to expand the matters for which they sought the Court's endorsement for refusal. These reasons included some 50 individual items that needed to be reconsidered and in part engaged multiple government agencies to also lodge objections on specific matters that came under their jurisdiction.

In the end, the matters before the Court became extremely complex, interrelated and needed the use of experts to sort it out.

Figures 1-4 provide some background information in regards to this case study.





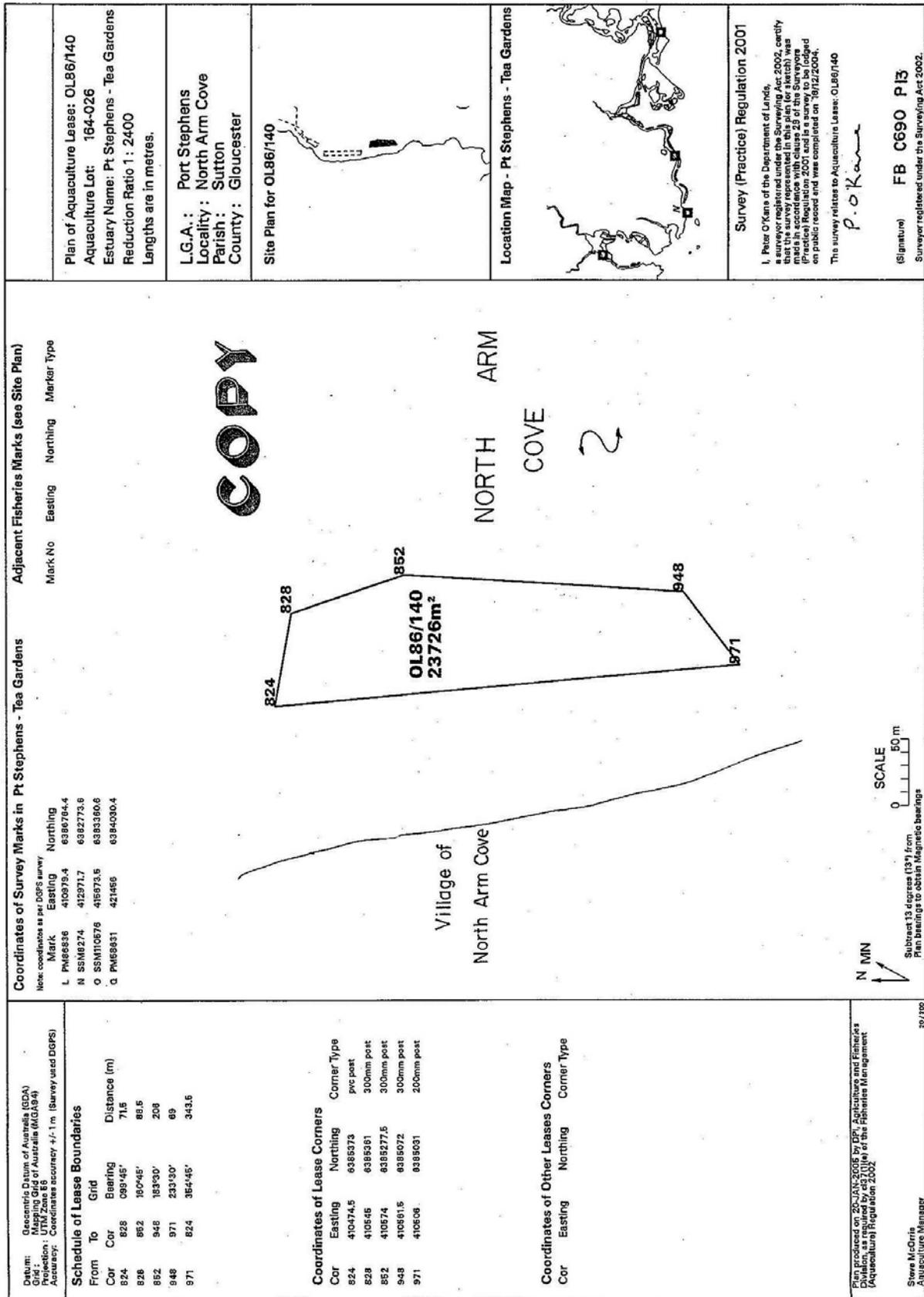


Figure 3: Plan showing aquaculture lease.

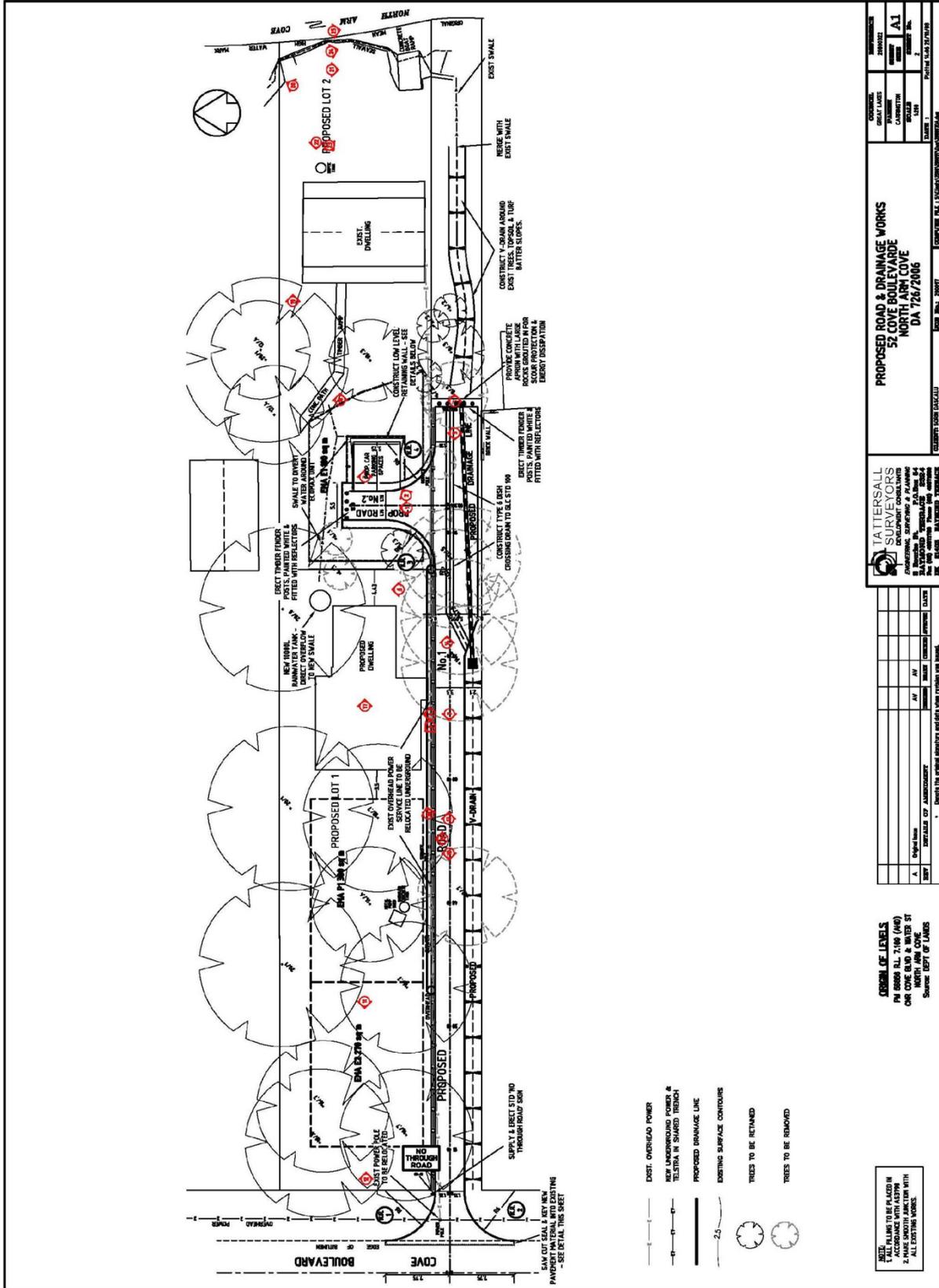


Figure 4: Plan showing proposed road and drainage works.

## 5.1 Original Reasons for Refusal by Council

1. Non compliance with clause 8(3) Great Lakes LEP 1996.
2. Non compliance with 8(m) and (p) of SEPP 71.
3. Non compliance with Council's On-site Sewer Management Policy.

## 5.2 Contentions raised by Council's Legal Advisors for Resolution at L&EC

### Great Lakes Council

1. The applicant has not made any arrangement with the respondent pursuant to clause 12(b) of the Great Lakes LEP 1996 (GLLEP), for the provision of an adequate water supply and for facilities for the removal of sewage from and the drainage of the land.

*Particulars: To satisfy clause 12 of GLLEP 1996, the applicant in this instance, because of the absence of a reticulated water supply and sewerage services in the locality, has to satisfy the respondent in respect of compliance with Council's rainwater tanks domestic policy and Council's OSM strategy. The applicant must also obtain approval under Item 5 in Part C of the Table to S.68 Local Government Act 1993.*

- 2.1 The development is unlikely to meet the zone objective of compatibility with the general character of the North Arm Cove village area because of the extensive removal of trees for the development (GLLEP cl (8) and Zoning Table).

- 2.2 The development is inconsistent with Aim cl 2(1)(b) GLLEP being:

*(b) to protect and enhance the environmental qualities of the area;*

because of the extensive removal of trees and the effects of the on-site sewerage management system set out in the following paragraphs.

3. The development does not have adequate facilities for the removal of sewage and drainage from the land (cl.12).
4. The on-site sewerage management system (OSMS) proposed for the development is unsatisfactory for the following reasons:

(a) SEPP 71 – Coastal Protection

The use of the proposed OSMS:

- (i) Is unlikely to meet aims of the SEPP in clause 2, namely its uses will not result in appropriate management of the coastal zone in accordance with the principles of ecologically sustainable development within the meaning of section 6(2) of the Protection of the Environment Administration Act 1991; and is unlikely to protect and preserve the marine environment of the State (cls 8 (a) and 2 (h) and (j)),
- (ii) is likely to pose an unacceptable risk to the water quality of Port Stephens, a coastal waterbody by the entry of inadequately treated domestic effluent into that waterbody (cl 8 (m)),
- (iii) is likely to have a cumulative impact on the marine environment of Port Stephens by increasing the density of OSMS's in the village zone of North

Arm Cove (cl 8 (p)(i)) and thereby increasing the total pollutant loading to the detriment of the sensitive waterway of Port Stephens.

(b) Marine Parks Act 1997

The proposed development, involving the use of a type of OSMS, is likely to have an effect on the plants or animals within the marine park because there may be discharge of inadequately treated effluent into the Port Stephens – Great Lakes Marine Park (s.20).

(c) SEPP 62

The proposed development, involving the use of a type of OSMS is likely, because of its nature and location, to have an adverse effect on oyster aquaculture development and a priority oyster aquaculture are in North Arm Cove (cls 15B and 15C).

(d) Hunter Region Environmental Plan

The impact of the proposed development on the amenity of the waterway is likely to be adverse to the water quality of Port Stephens by reason of the operation of the proposed OSMS (cl 6).

(e) NSW Coastal Policy and Coastal Design Guidelines

The use of the OSMS will not protect the natural values of the coastline, specifically, water quality and therefore the development is not in-keeping with the principle of ecologically sustainable development (Part A 2.1 Ecologically Sustainable Coast).

(f) Great Lakes Subdivision Development Control Plan 31

The proposed development does not have adequate sewerage service and that the proposed OSMS is non-complying with the DCP principal aim to protect and enhance the environment (s1.1.2).

The DCP requires “Subdivision in unsewered areas may be permitted only where allotment sizes and layouts are adequate to allow on site disposal of effluent. A report from a suitably qualified geotechnical engineer is required to verify that the land (and proposed allotment sizes and topography) is suitable for the on-site disposal of effluent” (s1.3.4).

The DCP further states “Council may reject an application requiring on site disposal of sewerage effluent where it considers there may be an impact on ground water quality or adjacent waterways” (s2.9.2).

The OSMS is likely to have an adverse impact on groundwater quality and the adjacent water of Port Stephens.

(g) Great Lakes On-Site Sewerage Management Strategy

The proposed OSMS is unsuitable and cannot provide a satisfactory on-site sewerage management service because of soil types, slope, *and* aspect combined with insufficiently treated ground and surface waters being likely to enter Port Stephens.

The proposed subdivision will limit the *opportunity* for the *existing* OSM system on proposed lot 2 to be up-graded to meet Council’s OSM policy.

(h) Department of Local Government: Environment and Health Protection Guidelines On-Site Sewage Management for Single Households January 1998

The OSMS proposed for lot 1 will not meet the required buffer of 100 m from Port

Stephens, and that buffer, being a minimum, should likely be of greater dimension given the sensitive of the Port Stephens waterway and the nearby oyster farms.

*The proposed lot 2 is of insufficient dimensions to provide a satisfactory site for an on-site sewerage management system when the existing system servicing the dwelling house has to be replaced. The current system on the land is septic tank and a disposal trench, approximately 15 m from the Port Stephens waterway and is classified as high risk. The system was licensed by the respondent, but on 31 July 2008 an inspection of that system by the respondent showed that it was not operating properly. An application under s68 Local Government Act 1993 to replace the system is likely to be refused as it will not meet the required minimum buffer distances in respect of the waterway, thereby rendering the habitation of the proposed waterfront lot 2 impossible.*

The respondent's policy does not allow pump out systems for 'new' lots created by subdivision and pump out systems should only be used as a last resort for existing allotments.

(i) Generally

The dwelling proposed to be constructed on the subdivided allotment lot 1 will utilise and OSMS 'equal to' an 'Ecomax' system. However, although the Ecomax system claims to be a contained system, the system still utilises absorption trenches for effluent disposal and the cells will eventually fill up and then overflow into trenches surrounding the cells. This is likely to result in potential adverse impacts on the water quality of the receiving waters of Port Stephens, particularly in time of saturation of soils on the lot.

The Ecomax system uses *blast furnace* tailings. Their effect on the effluent as to pH is not known to the respondent and may adversely affect the waters in Port Stephens. The specifications for the proposed OSMS are based on rainfall readings from Cessnock, well inland from the coastal strip, and the specifications are therefore unreliable given the propensity for the location to receive far greater rainfall over a period than Cessnock.

5. Precedent and effect on water quality of Port Stephens

The proposed development may set a precedent for owners of properties remaining in DP 9939 and capable of subdivision into similar sized allotments as proposed within North Arm Cove. An increase in the density of on-site disposal systems within the North Arm Cove area can potentially have health impacts and a detrimental effect on the quality of the receiving waters of Port Stephens. The Murray Darling Commission found in 1993 that significant levels of bacterial and nitrate contamination in groundwater were due to high density of on-site disposal systems. It concluded that areas with densities greater than 15 tanks/km<sup>2</sup>, groundwater is considered to be vulnerable to nitrate and microbial contamination.

A study conducted by Whitehead and Associates in 2001 concluded that elevated nitrate concentrations (exceeding ANZECC water quality guidelines for protection of estuarine waters of 0.1mg/l) of surface waters sampled at North Arm Cove were most likely attributed to on-site sewage management systems. The study also concluded that the clay rich soils of North Arm Cove have "*low hydraulic conductivity so readily become waterlogged... they have... little capacity to absorb nitrates. The slopes are steep and distances to the shoreline are short, runoff is rapid and in particular after rain, with*

*saturated soils, absorption trenches will readily contribute at best only partially treated effluent to the waters of Port Stephens.*“ (p18)

The proposed subdivision is out of character with the predominant subdivision pattern in this part of North Arm Cove and may set an undesirable precedent for subdivision in a like manner.

6. Public interest

The proposal is not in the public interest as there is uncertainty as to the effect of the proposed OSMS, both on its own and cumulatively with other OSMS's at North Arm Cove upon the adjoining waters of Port Stephens and the oyster farms in that waterbody.

7. Suitability of the site

- (a) The site is unsuitable for subdivision as no reticulated sewerage services are available and the proximity of the Port Stephens waterway to any on-site sewerage system on the land is unlikely to be of risk to the water quality of that waterway by reason of the likelihood of discharge of *partially treated* effluent, into that waterway.
- (b) More than half the area of proposed lot 2 is within the 1% flood prone area and the subdivision, if approved, will result in the creation of a lot that will be significantly affected by the effects of climate change, namely sea level rise and increased rainfall intensities. The effectiveness of an OSMS and its relationship to water quality would be adverse, particularly on proposed lot 2. The entire area of footprint of the existing building is below RL 2.1 m and the lower floor level is not habitable given its relationship to High Water.
- (c) The proposed dwelling house on lot 1 encroaches onto the narrow public road between Cove Boulevard and the waterway.
- (d) The development does not propose access in accordance with the Rural Fire Service's authority conditional S100B Bushfire Safety Authority, specifically section 4.3.2(a) "Planning for Bushfire Protection 2001".
- (e) ***Future improvement and retro-fitting of the existing OSM system on lot 2 will not be able to achieve the buffer distances required by Council's OSM strategy being 100 metres from receiving waters.***

8. Cumulative impact

The respondent says that without appropriate studies on the potential cumulative impact by subdivision of the foreshore allotments at North Arm Cove for residential development, the future water, vegetation, biodiversity and scenic qualities of the locality may be adversely compromised. The respondent contends that no further consents for subdivision development should be granted until the respondent has considered a risk assessment report on the likely hazards and cumulative impacts of the use of OSMS's in the locality.

## 9. Public submissions

Public objections to the proposal, specifically to site sewerage disposal and water quality; its effect on the waterway; perceived loss of access to the waterway by use of the public road for the purpose of the development; and the loss of coastal amenity. The submissions also raise precedent and the cumulative impacts that may be generated by any approval to this proposal.

## 10. Further information

The respondent requires:

- (a) A plan of proposed subdivision showing clearly and simply all dimensions and proposed lots,
- (b) the finished floor level of lower floor of the existing building on proposed lot 2,
- (c) as the site is within 50 m of MHW and falls within Category A of the Port Stephens Foreshore (Floodplain) Management Plan, the submission of a Flood Planning Level Study.

## NSW Food Authority

11. SEPP-71: Page 10 of the development application states that the development “*will not create potential conflict between land and water-based coastal activities*”. This statement is incorrect; the increase of housing densities in proximity to oyster harvest areas has the potential to create conflict between oyster farmers and residents.
12. The incremental increase in the density of on-site disposal systems within close proximity to shellfish harvest areas creates public health risks that must be managed. To ensure adequate public health outcomes appropriate controls need to be implemented to effectively manage these risks including:
  - (a) A vegetated buffer from any water course or drain of at least 100 m from on-site disposal systems,
  - (b) sufficient lot size to facilitate on-site disposal,
  - (c) disposal system design commensurate with site limitations, particularly soil type and water table level.
13. The 2001 study by Whitehead and Associates highlighted particular issues with the on-site disposal of sewage in North Arm Cove. The application does not address the issues raised in this report.
14. There does not appear to have been an assessment of the impact that the proposed development will have on the hydrology of the site, in particular:
  - (a) The application proposes the installation of a drain to channel storm water down the side of the property. The effect of this drain on the transport of pollutants to the waterway needs to be considered.
  - (b) The impact that any changes to the hydrology of the site have on the performance of the existing on-site disposal system (in proposed lot 2d).
  - (c) The impact that any changes to the hydrology of the site will have on the performance of on-site disposal systems of neighbouring properties.

## Department of Primary Industry

15. A detailed plan showing: the proposed lots and dwelling; the location and dimensions of the proposed disposal area and all other wastewater system components in relation to the high water mark; adjacent POAAs, the 1:100 and 1:20 flood contours.
16. The above plan should show the new high water mark. This is discussed on page 5 of *Development Application for Proposed Subdivision of Lot 479 in DP 9939, Cove Boulevard, North Arm Cove*. The *Development Application Plan* attached to this document only identifies the “Original Mean High Water Mark”.
17. The plan should also show the location and design of necessary soil berms, uphill diversion drains, and upslope subsoil drains (refer to page 8 of the *Effluent Disposal Investigation Report*).
18. More information about the preferred wastewater system Ecomax, how it works, and an analysis of the potential impact on water quality in the adjacent POAAs (with reference to the OISAS water quality objectives). For example, is disinfection included in the proposed system? If not, the exclusion of disinfection should be justified given the extreme sensitivity of the adjacent waterway to faecal coliform pollution.
19. The dimensions of the proposed disposal area. While a number of effluent disposal calculation methods have been utilised in the *Effluent Disposal Investigation Report*, the report does not specify which of the calculations will be utilised.
20. Specifications of actual buffer distances, not just recommended buffer distances (as provided on page 7 of the *Effluent Disposal Investigation Report*). Although not clearly marked on the plans provided, it would appear that the proposed disposal area is significantly less than 100 metres from permanent water, the minimum buffer distance in *On-Site Sewage Management for Single Households*.
21. Proposed mitigation methods to prevent any adverse or cumulative impacts to the sanitary water quality of POAAs.
22. The proponent has failed to provide sufficient information to demonstrate that the proposed use of Alumina Bauxite tailings in the proposed on-site wastewater management system would not have adverse impacts on the waters of Port Stephens.
23. Riparian Buffer Zone: NSW DPI recommends the maintenance of a riparian buffer zone for developments directly adjacent to estuaries. The buffer zone should be composed of native vegetation and be at least 50 metres in width. While there is insufficient area for a 50 metre zone on the subject lot, the proponent should be encouraged to establish a riparian buffer zone that is as wide as possible.
24. Stormwater Management: The applicant has not demonstrated that the proposed development will have a neutral or beneficial impact on the quality of stormwater runoff and ensure the protection of the adjacent oyster aquaculture industry. A detailed plan of the requirements of the drainage systems and design specifications of the system should be prepared. The OISAS water quality objectives should be referenced in demonstrating that there will be no adverse impact on water quality in the adjacent POAAs.

25. Erosion and Sediment Control: The applicant has not demonstrated that the proposed development will result in no significant impact on water quality in the adjacent POAAs as a result of construction activities. A comprehensive erosion and sediment control plan for the construction period should be prepared prior to the commencement of any works that disturb the ground. This plan should include a detailed site and soil assessment of the proposed development area. It should also reference the OISAS sanitary water quality objectives.
26. Visual Issues: The proponent should be made aware that the oyster aquaculture leased directly adjacent to the proposed development have existing use rights and will not be removed or altered as a result of subsequent residential development.
27. Consultation with Local Oyster Farmers and the NSW Food Authority: NSW DPI notifies the potentially affected sector of the oyster industry for all applicants referred to NSW DPI under SEPP 62. In this case the relevant oyster industry sector is the Port Stephens (Zone 2) Local Shellfish Program. The proponent should consider direct consultation with the Port Stephens oyster industry to ensure that all relevant issues are identified and addressed. The Local Shellfish Program also has water quality monitoring data (faecal coliform and salinity) for North Arm Cove and other areas in Port Stephens that may be relevant to the assessment of this application. The proponent should also contact the NSW Food Authority (NSW Shellfish Program) for advice regarding potential impacts to the classification of the North Arm Cove oyster harvest area.

## **6 CASE STUDY: THE CONFERENCE OF EXPERTS**

A compulsory conference was ordered by the L&EC Commissioner to have the matters significantly reduced and tabulated. This conference was attended by representatives of all objecting Agencies on the day of the on-site hearing with an agreed position to attempt to resolve all matters.

The Appellant had provided additional information prior to the conference:

- Plans of proposed subdivision.
- Engineering plans.
- Water quality report.
- Flood level contour plan and report.
- Plan of POAA and location of development.
- Letter from Whitehead & Associates addressing NSW Food Authority issues.
- Letter from Whitehead & Associates addressing NSW DPI–Fisheries issues.

During the conference conclave the issue of time constraints limited the ability of the experts to resolve all issues. This meant that only marginal issues were able to be agreed with a general statement that attempted to resolve the main on-site sewer management systems. The report that was handed to the Commissioner ended with the following paragraphs.

### **Points of Agreement**

Note that these points are the only fully discussed and agreed matters from the Experts Conference. As part of a final report to the court, these agreed matters only receive a cursory

review from the Court to ensure that their agreement is in accordance with the overall Court ruling. The final paragraph however, does indicate that agreement on the waste water management issues (the main contention) could be achieved and from this position the Court considered its position on the Appeal.

7. Suitability of the site

- (c) The proposed dwelling house on lot 1 encroaches onto the narrow public road between Cove Boulevard and the waterway.

10. Further information

The respondent requires:

- (a) A plan of proposed subdivision showing clearly and simply all dimensions and proposed lots,  
(b) the finished floor level of lower floor of the existing building on proposed lot 2,  
(c) as the site is within 50 m of MHW and falls within Category A of the Port Stephens Foreshore (Floodplain) Management Plan, the submission of a Flood Planning Level Study.

16. The above plan should show the new high water mark. This is discussed on page 5 of *Development Application for Proposed Subdivision of Lot 479 in DP 9939, Cove Boulevard, North Arm Cove*. The *Development Application Plan* attached to this document only identifies the “Original Mean High Water Mark”.

22. The proponent has failed to provide sufficient information to demonstrate that the proposed use of Alumina Bauxite tailings in the proposed on-site wastewater management system would not have adverse impacts on the waters of Port Stephens.

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26. Visual Issues: The proponent should be made aware that the oyster aquaculture leased directly adjacent to the proposed development have existing use rights and will not be removed or altered as a result of subsequent residential development.

27. Consultation with Local Oyster Farmers and the NSW Food Authority: NSW DPI notifies the potentially affected sector of the oyster industry for all applicants referred to NSW DPI under SEPP 62. In this case the relevant oyster industry sector is the Port Stephens (Zone 2) Local Shellfish Program. The proponent should consider direct consultation with the Port Stephens oyster industry to ensure that all relevant issues are

identified and addressed. The Local Shellfish Program also has water quality monitoring data (faecal coliform and salinity) for North Arm Cove and other areas in Port Stephens that may be relevant to the assessment of this application. The proponent should also contact the NSW Food Authority (NSW Shellfish Program) for advice regarding potential impacts to the classification of the North Arm Cove oyster harvest area.

On matters of water quality and waste water management subject to any of the contentions in matter 10634 of 2008, it is agreed that a solution in terms of an alternative treatment and disposal approach which meets Government Department requirements in terms of waste water quality and potential for environmental and public health impact is achievable.

### **Outcome of the Hearing**

- (a) Joint Experts Conference: 50 matters considered in 2 hours, general agreement that all issues could be resolved but time became a constraint.
- (b) Site Inspection by the Commissioner and Hearing on Site: Commissioner requested that the Court receive draft Conditions of Consent and the Court would determine the relevance of the matters raised and not resolved.

### **Decision of the Court**

The Appeal be allowed.

## **7 CONCLUDING REMARKS**

This paper has presented a case study that clearly indicates the role that a surveyor can play as a land professional in providing a professional service to a client. The role as an expert witness is an extension of the professional skills that training and experience have provided. The ability of a surveyor to be able to handle, discuss, interpret and present concepts involving coordinates, areas, contours, engineering designs, flood levels and logical land development processes together with an understanding of the roles of arborists, waste water engineers and planners ensured that the outcome in the Court was in favour of the Appellant. In fact, the surveyor in this case was the only expert inside the Conference that could get across all of the issues and untangle the interrelated matters to the satisfaction of the other experts.

The experts in this Conference were all intending to adopt their Agency's position as contained in the contentions as being absolute, but when the directions encompassed within the Code of Conduct were distributed, the flexibility to negotiate a reasonable position was then accepted by the Agency representatives. In all, this Conference was a very successful apparatus for the resolution of nearly all of the matters that the Court needed advice on. The Court then only had to consider the merits of the Appeal knowing that the technical matters had been generally resolved.

Surveyors' professional development can, with some additional training as provided by the Institute of Arbitrators and Mediators Australia, be extended to include acting as an expert witness. The ability of surveyors to understand coordinates, distances, areas, contours and land matters generally makes them an ideal candidate to assist the Court in the resolution of

complex development matters. The guidance provided by the Institute on what the Court expects allows the surveyor to improve their professionalism.

The skills of surveyors are enhanced by the avenues to which we seek to increase our involvement and the opportunities offered by the current processes in the Land and Environment Court are an ideal area that should not be ignored by the wider profession.

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## **REFERENCES**

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Relevant legislation is available in NSW at [www.legislation.nsw.gov.au](http://www.legislation.nsw.gov.au) (accessed Jan 2012).