Before the Board of Inquiry Waterview Connection Project

in the matter of: the Resource Management Act 1991

and:

in the matter of: a Board of Inquiry appointed under s 149J of the

Resource Management Act 1991 to decide notices of requirement and resource consent applications by the NZ Transport Agency for the Waterview Connection

Project

Third supplementary evidence by Amelia Linzey on behalf of the **NZ Transport Agency** in response to Board's request concerning wording of conditions

Dated: 1 March 2011

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THIRD SUPPLEMENTARY EVIDENCE BY AMELIA LINZEY ON BEHALF OF THE NZ TRANSPORT AGENCY IN RESPONSE TO BOARD'S REQUEST CONCERNING WORDING OF CONDITIONS

INTRODUCTION

- 1 My full name is Amelia Joan Linzey. I refer the Board of Inquiry (*Board*) to the statement of my qualifications and experience set out in my first statement of evidence in chief (EIC) (dated 13 November 2010).
- I repeat the confirmation given in that statement that I have read and agree to comply with the Code of Conduct for Expert Witnesses in the Environment Court.

PURPOSE OF THIRD SUPPLEMENTARY EVIDENCE

- This supplementary evidence responds primarily to the request on 17 February 2011 by Board member Mr Ross Dunlop seeking further clarification about the wording of the NZTA's proposed conditions.
- 4 Specifically, the request reads as follows:

The issue concerns the conditions which allow for work to be done in accordance with the documentation lodged. For example DC.1. The proposed consenting "scheme", as we understand it, is that work would be authorised in accordance with the documentation lodged without the need for further approval, including by the council. Generally it is only when there would be a departure from the documentation that council approval is required. The consenting scheme creates a tension between the flexibility that the applicant seeks and the certainty that a consent authority, with the environment and community in mind, would typically seek. Presumably it is for this reason, we find words like "in general accordance", "subject to final design" and "where practicable" proposed by NZTA.

To help the Board understand fully the implications of what it is being asked to consent, would it be possible for NZTA to undertake an analysis of whether sufficiently certain performance levels are proposed in the CEMP and other management plans, so that the council could perform a certifier function (properly understood) and for enforcement purposes?

Is that a feasible, albeit large task? If not, what are the implications of the issue for the Board discharging its function; including in a timely manner?

In response to the above query, I will address the specific elements of: "in general accordance", "subject to final design" and "where practicable" in respect of the proposed conditions.

- I have undertaken a further review of the proposed Conditions (10 February 2011). From my review I consider that there are essentially four reasons that the terminology "in general accordance", "subject to final design" and "where practicable" are appropriately used:
 - 6.1 Where the NZTA seeks to provide some subsequent design flexibility, while maintaining appropriate performance standards on the effects of the Project on the environment;
 - 6.2 Where the conditions proposed seek to provide for further stakeholder (particularly Auckland Council) input into the final or detailed design;
 - 6.3 Where there is a need for the contractor to respond to local conditions or specific environments at the time of works but these conditions or environments cannot be determined at this point; and
 - 6.4 Where there is scope for the detailed design to achieve better environmental outcomes than those predicted and assessed in the Assessment of Environmental Effects (AEE).
- 7 I will discuss each of these applications or uses in turn in respect of the questions put forward by the Board.
- 8 Notwithstanding these comments, I have also identified a number of areas where it is considered that the proposed Conditions can be revised to provide greater certainty on the outcomes expected and on this basis, I recommend changes to the proposed Conditions.
- 9 In addition to responding to the above direction from the Board, the NZTA Project team has also undertaken a more holistic review of the proposed Conditions, in light of comments and questions made at the Hearing to date.
- 10 A revised master set of proposed Conditions (green-line version) is provided as **Annexure B** of this evidence (provided as a separate booklet attachment).
- In addition to the four matters summarised above, my evidence will cover the following matters:
 - 11.1 Measurability of "where practicable";
 - 11.2 Review of proposed Conditions; and
 - 11.3 Further amendments to NZTA's proposed Conditions.

PROVIDING DESIGN FLEXIBILITY WITH APPROPRIATE PERFORMANCE STANDARDS

12 In proposed Designation Condition 1 (DC.1), provision is made for the works to be undertaken in general accordance with the information and plans as lodged by the NZTA:

Except as modified by the conditions and subject to final design, the works shall be undertaken in general accordance with the information provided by the NZTA...

- In my rebuttal evidence (planning) (paras 122 through to 131), I set out my opinion and response to the issues raised in the Section 42A report from EMS in respect of the NZTA's use of "in general accordance". I do not intend to repeat that evidence here, but rather will focus response to the specific question that has been asked by the Board in respect of whether, with condition DC.1 in place, sufficiently certain performance levels are proposed in the CEMP and other management plans, so that the Council could perform a certifier function.
- In my opinion, the answer to this question is "yes" with the proposed wording of Condition DC.1 retained. My principal reasoning for this conclusion is that throughout the AEE, the focus has been on confirming the scope of effects of the Project on the surrounding environment, taking a precautionary or conservative approach to the potential effects and focusing on the effects of the Project at its "edges" or at the interface of the Project and the community, and the natural and physical environment.
- On this basis, and generally speaking, providing the boundary **or** 'edge' effects of the Project do not change (e.g. that works are within the nominated footprint **and** meet the performance standards set by the proposed Conditions), then modifications on precisely how or where these works are undertaken are not a concern as they do not create any change in the 'environmental effects' of the Project.
- As a specific example, as long as the deep tunnels through Sector 8 are within the envelope of the designation and at the depth assessed, whether they are horseshoe shaped (as proposed in the Scheme Design), ovoid, round or square is not a relevant concern in terms of the overall environmental effects. It is sufficient that detailed plans are in "general accordance" with those lodged to ensure that the effects of construction and operation of this aspect of the Project are consistent with the effects assessed in the AEE.
- 17 However, it is acknowledged that this Project traverses a number of sensitive environments, and being located in an established urban area, there are cases where seemingly minor changes to the Project have the potential to create significantly greater impacts. I consider an example of this would be the Oakley Inlet Heritage Area, where

- considerable work has been undertaken in the design and assessment of the Project to avoid potential adverse effects on this regionally significant heritage area.
- For this area, the proposed Conditions of the designation have sought the specific performance measures that are expected to be delivered in both the final design and in the construction management (in particular I refer to proposed condition ARCH.5). Further, the level of specificity of this condition is sufficient that a subsequent review of the detailed design and management plans will enable that reviewer to confirm that the condition has been met. For example, the reviewer will be able to certify:
 - 18.1 That the plans, construction methodology and site accesses have avoided "sites R11/22022, R11/2203 and the main features of site R11/2191" (which are further detailed in the condition as "... the basalt walls, boiler, building foundations and platforms"); and
 - 18.2 That the areas of archaeological value are fenced off and that the method of fencing and its extent is sufficient to protect these areas from adverse effects.
- In a similar example, proposed Condition ON.3(a) also refers to in general accordance, requiring the detailed design of structural mitigation to include "...Noise barriers with the location, length and height in general accordance with Appendix E". This seeks to maintain flexibility in the detailed design phase of implementation (particularly acknowledging the works that will occur between now and final design of these mitigation measures). In this instance, I consider that the subsequent conditions, particularly proposed Condition ON.4 go on to provide specific direction on actions if the design of the Detailed Mitigation Options proposed are not considered "practicable".
- 20 Through proposed Condition ON.4:
 - 20.1 Auckland Council has a role in certifying that the performance standards of the mitigation are still achieving the environmental outcomes as assessed in the AEE (Condition ON.4(a)); or
 - 20.2 If that is not the case, there is an Auckland Council review process to confirm that this remains the Best Practicable Option, in accordance with the New Zealand Standard (NZS 6806:2010) (Condition ON.4(b)).
- In this respect, I consider there is a clear function for Council in certifying or confirming both the tests of "in general accordance" and whether the mitigation options being considered are "practicable".

- As a further example, in respect of lighting, proposed Condition L.1, which states that the lighting plans shall be in general accordance with the Plans, the Conditions similarly go on to detail the specific criteria that need to be met in the finalisation of the design. I consider these criteria provide a measurable performance criteria from which the Auckland Council can undertaken a certification function.
- However, while I consider there is scope for "general accordance" with design in the above cases, I do consider that other aspects of the Project need to be specified now. In particular this relates to setting appropriate performance measures and measurable standards for key elements of the Project, such as the ventilation buildings and stacks. It is for this reason, that I originally proposed that the height of the ventilation buildings be set by the requirements of the Conditions (for example DC.9(j)) and further why I support the further amendments to these conditions, being:
 - 23.1 To delete subclause DC.8(h), as I consider it implied the potential for the relocation of the stack in a manner not envisaged by the Conditions, as the area of the Outline Plan of Works is defined; and
 - 23.2 To amend subclauses DC.8(I) and DC.9(i) to specify the height of ventilation buildings within the Conditions themselves.

PROVIDING FOR FURTHER STAKEHOLDER AND COUNCIL INPUT INTO FINALISED DESIGN

- Given the scale of this Project and the extent of change that is proposed to the existing environment as a result of the works, I consider it is appropriate that some elements of work, particularly of the detailed mitigation design, are appropriately developed at a later stage. In my opinion, this is an appropriate, reasonable and realistic approach for the following reasons:
 - 24.1 It allows the community and stakeholders to have a phase of involvement in how such mitigation is implemented, irrespective of whether they support or oppose the Project. In other words, if all these considerations were to be finalised now, those in the community who are challenging the Project overall may feel excluded from being able to input into detailed design elements of mitigation, even though they are of specific interest to them;
 - 24.2 It allows the mitigation design to develop once there is a clearer understanding of the physical implications of the Project; and

- 24.3 It allows the mitigation design to develop appropriate to other changes, trends and innovations that may emerge during the timeframe of construction.
- In particular, I consider this applies to the mitigation design of open spaces affected by the Project. The use of the term "in general accordance" with the Plans and information submitted with the AEE reflects a deliberate intent to retain scope for further design and confirmation of the final works in consultation with the community and other stakeholders.
- While I consider this general accordance is appropriate, I do consider that certainty needs to be provided through the designation and consenting process on the scope of the work being proposed. For this reason, I consider that the wording of proposed Open Space Conditions, which state that "All Open Space Restoration Plans shall be prepared in general accordance with the UDL Plans (Drawing numbers...) and shall include but not be limited to..." (e.g. condition OS.3) provides for this. It indicates those elements of the Open Space Restoration Plans that are being committed to, but provides scope for further detailed design and planning of these areas.
- 27 Further, I consider the subsequent approval process with Auckland Council is appropriate in this case, as it is the ultimate land owner for most of the restored open space areas. I note that this approach is considered appropriate by the Auckland Council's planning expert, Ms Richmond.
- Other conditions which have been prepared on this basis include the terrestrial vegetation conditions, for example:
 - 28.1 Condition V.11 "...The location of recipient sites will be determined in consultation with the Department of Conservation and in general accordance with the Traherne Island Natural Heritage Restoration Plan (2009 2014)."

PROVIDING FOR CONTRACTOR INPUT AND RESPONSE INTO CONSTRUCTION AND "PRACTICABILITY"

- As a practical matter, and as is the case in all the large infrastructure projects I am familiar with, the contractor is required to consider what is "practicable" within the specific works that it is responsible for. This is, in part, because the contractor is in control of the construction site, the equipment to be used and activities to be undertaken. However, it is also because (particularly in a construction project of this scale), there are other variables that influence the ability to predetermine detailed design, construction sequencing and construction methodologies.
- For example, while investigation has been undertaken on the extent and depth of basalt rock within Sector 9, this is necessarily based on

a surveyed assessment rather than a complete census. The final extent and quantity of this material (particularly the depth and structure of this basalt) will not be known until works are progressed. As such, the extent of basalt that will need to be excavated is not completely understood at this stage, nor is the extent to which blasting or scraping of material may be appropriate. All these factors will influence the detailed design, the construction methodology, the machinery to be used and the timing and sequencing of these works. Similarly, these factors will in turn impact on the specific transportation requirements for this work and potentially on traffic management requirements on the local road network.

- On this basis, while the scope of potential construction effects of works on the basalt can predicted (as has been undertaken in the AEE, particularly the noise and vibration assessments), and the suite of mitigation options and the process of specific mitigation planning can be developed (as has been developed in the Construction Noise and Vibration Management Plan (CNVMP)), the specific details of what needs to be done and who is specifically affected will need to be confirmed on a site by site basis prior to each phase of construction activity, taking into account the local environmental conditions at that time. This will include broader considerations such as other construction projects, proximity to public holidays, or major traffic generating events.
- At the request of the Board¹, Ms Wilkening and I have undertaken a specific review of how the determination of what is practicable would be undertaken with respect to construction noise and in the case of an assessed non-compliance to the performance standards. The criteria are set by the proposed Conditions in CNV.2² and the step-by-step schematic or flowchart of this process is provided in **Annexure A**.³
- On the basis of this review, the NZTA now proposes an amendment to the CNVMP (as discussed in the evidence of Ms Wilkening) and to the conditions, to provide greater clarity in the process and the purpose of certification by Auckland Council of this process.
- 34 Specifically, the amendments proposed are to Condition CNV.1 as set out in the "green-line" version of the Proposed Conditions, **Annexure B**. Of note, this includes the requirement for Site Specific Noise Management Plans to be prepared to document the assessment of practicality in any non-compliance with the noise criteria of Condition CNV.2, CNV.3 and CNV.4.

See pages 402 – 405 of the Hearings Transcript, 16 February 2011.

It is noted that the process set out would also apply to other Construction Noise and Vibration Conditions, including CNV.3 and CNV.4.

This flowchart is also addressed in and attached to the Supplementary evidence of Siiri Wilkening (dated 28 February 2011), at paras 24-30 and Annexure C.

- On the basis of this review, and the process defined in the schematic (flowchart) in **Annexure A**, I consider that the CNVMP contains clear processes on how to assess construction noise and vibration over the construction period (to predict the specific effects), and to schedule works and equipment and implement mitigation in order to achieve the most effective and practicable outcome for all affected parties.
- The role of the Auckland Council in the certification of the CNVMP (as required by CNV.1) and the subsequent role in the certification of Site Specific Noise Management Plans (now proposed Condition CNV.1(xv)), will confirm that the contractor has appropriately applied the processes of the CNVMP (i.e. that the measures proposed are the best practicable). I consider this also provides clear scope to assess non-compliance with the Conditions (for enforcement purposes).
- 37 Similarly, I consider that the above process would be relevant in the application of proposed Condition SO.2. This condition provides a specific scheduling consideration, which is an element of the hierarchy of mitigation options considered in the CNVMP (as discussed in paragraph 27 of Ms Wilkening's supplementary evidence).

PROVIDING FOR "WHERE PRACTICABLE" AND "IN GENERAL ACCORDANCE" TO ACHIEVE BETTER ENVIRONMENTAL OUTCOMES FOR THE PROJECT

- Another instance where the use of "where practicable" is made in the proposed Conditions relates to areas where there is scope for improved environmental outcomes for the Project. For example, proposed Condition AQ.3 states that "... all emissions authorised by this consent are maintained at the minimum practicable level" (irrespective of the consent for discharge of contaminants to air from earthworks or from the construction, maintenance and repair of roads being sought).
- This philosophy is also embodied in the CEMP and its specific management plans. For example, the Construction Air Quality Management Plan has been developed on the basis that emissions from construction of the Project must comply with the "no nuisance policy" (consistent with the Ministry for the Environment's good practice guides for dust and odour management):
 - (a) beyond the boundary of the premises where the activity is being undertaken there shall be no noxious, dangerous, offensive of objectionable odour, dust, particulate, smoke or ash; and
 - (b) there shall be no noxious, dangerous, offensive or objectionable visible emissions; and

- (c) beyond the boundary of the premises where the activity is being undertaken there shall be no discharge into air of hazardous air pollutants that does, or is likely to, cause adverse effects on human health, ecosystems or property.
- This policy has been used in the formulation of the operating procedures of the Construction Air Quality Management Plan, including dust mitigation, odour control, response to monitoring alarms and trigger levels, control of vehicle exhaust emissions during construction and emergency action plans. As such, irrespective of the resource consents held for the Project, the NZTA's intention through the management plan, is to seek opportunities to reduce emissions to the greatest extent practicable (rather than solely to the limits of the consent).
- 41 It is noted that this matter is the subject of an unresolved issue with the air quality experts⁴. I agree with the position of Mr Fisher, that the Construction Air Quality Management Plan (section 1.2) already embodies the intent of the Conditions and that their inclusion is not necessary. However, I note that as the NZTA has already accepted in principle these conditions (through lodgement of the Plan), the only reason for not including them is the practicality of the bulk of the suite of Conditions, which will in large part sit within Council's District Plan Document (representing a significant proportion of its bulk).

MEASURABILITY ON "WHERE PRACTICABLE"

Similarly to the issue above, there are a number of other cases where the use of "where practicable" in the proposed conditions clearly indicates the process by which "practicality" will be assessed and confirmed. For example, proposed Temporary Traffic Condition TT.3(g) states:

Measures to maintain existing vehicle access, as far as practicable, or where the existing property access is to be removed or becomes unsafe as a result of the construction works, measures to provide alternative access arrangements in consultation with the Auckland Council and the affected landowner...

- In this example, the intention is to maintain existing vehicle access over construction except in two circumstances where provision of such access could not be considered "practicable":
 - 43.1 Where the accessway is removed as part of the construction works; or

Expert Caucusing Joint Report to the Board of Inquiry – Topic Air Quality (28 Feburary), paragraph 6.1.

43.2 Where the property access will be unsafe.

REVIEW OF PROPOSED CONDITIONS

- 44 Notwithstanding the considerations above, the Project team has carried out another full review of proposed Conditions and has identified a number of specific opportunities where there is the opportunity to tighten up the condition wording so as to provide greater certainty on the outcomes and processes.
- Based on the foregoing review and analysis, I am confident that the NZTA's proposed conditions will provide sufficiently certain performance levels in the CEMP and other management plans so that Auckland Council will be able to perform a properly understood certifier function (including for enforcement purposes).
- On the basis of that review, a number of amendments have been proposed to the Conditions, as provided in the "green-line" set of conditions contained in **Annexure B**. In summary, these changes include:
 - 46.1 Amendment to conditions where it is considered that the wording should read "in accordance" (rather than "in general accordance"). For example:
 - (a) CEMP.11 "The NZTA shall develop and implement a Waste Management Plan in accordance with the waste management principles, controls and methods set out in the CEMP. The Plan shall be provided to the Auckland Council and be implemented throughout the entire construction period"; and
 - (b) V.17 That the "realignment and riparian enhancements of Oakley Creek shall be undertaken in accordance with the Oakley Creek Realignment and Restoration Guidelines and in general accordance with the Urban Design and Landscape Plans".
 - 46.2 Amendment to conditions where the use of "practicable" had been in respect of timing for delivery. In these cases, the conditions have been amended to provide more detail on when the mitigation will be delivered (thus also improving the measurability of these conditions). For example:
 - (a) In respect of the open space provisions during construction (Conditions OS.8, OS.9 and OS.10) where further specific detail is now provided on when open space will be delivered;

- 46.3 Amendments to confirm the matters for Auckland Council certification in review of the CEMP and associated management plans, for example CMEP.6;
- 46.4 Amendment of conditions to provide clear definition of matters to be considered in the assessment of "practicable" so that such conclusions could be reviewed (e.g. for enforcement). Proposed Condition TT.3(h) is an example; and
- 46.5 Amendment to Conditions to more clearly confirm the NZTA's intent or commitment to works (Condition OT.1) in respect of the Network Integration Plan and to CEMP.7(o) and (p) in respect of Amenity Trees to provide improved 'measurability' of compliance with these Conditions.

FURTHER AMENDMENTS TO PROPOSED CONDITIONS

- 47 In addition to the amendments to the Proposed Conditions discussed above, the NZTA proposes further amendments to conditions in order to reflect the following work that has been undertaken since commencement of the Hearing.
- 48 This includes the following:
 - 48.1 Informal caucusing on the proposed Conditions has been undertaken between myself and Ms Tania Richmond (on behalf of Auckland Council). While specific wording of Conditions was not provided during these discussions, I have made the following amendments to the proposed Conditions following the caucusing:
 - (a) Inclusion of an "Explanation" to the Conditions (consistent with explanations in the Isthmus District Plan for Concept Plans);
 - (b) Clarification on those areas subject to a subsequent Outline Plan of Works and their inclusion as Figures DC.A and DC.B in the proposed Conditions;
 - (c) Clarification on the intent that the areas for Open Space Restoration Plans (within, but distinct from the Urban Design and Landscape Plans), be provided in Condition LV.2 and OS.1 OS.7; and
 - (d) Recognition of Council Guidelines in the preparation of Open Space Restoration Plans (OS.3);
 - 48.2 Inclusion of Schedule A for reference to all revisions to the relevant Plans referred to in the Conditions;

- 48.3 Amendment to Conditions DC.5 and CEMP.14 to provide for dispute resolution (following direction from the Board on 15 February 2011⁵);
- 48.4 Inclusion of a Condition (DC.10) to confirm that the NZTA will seek to pull back the boundaries of the designation following construction (following direction from the Board on 16 February 2011⁶);
- 48.5 Amendment to Conditions for the Communications Plan (PI.2) and Community Liaison Group (PI.5) to further establish the processes for communicating monitoring results (following questions from the Board on 16 February 2011⁷);
- 48.6 Inclusion of the geographic areas of the Waterview Estuary and Oakley Inlet within the scope of the Waterview Construction Liaison Group (following questioning by Mr McCurdy on 16 February 2011);
- 48.7 Inclusion of Conditions CNV.10 and CNV.11 in respect of 1510 Great North Road (following questions from the Board);
- 48.8 Inclusion of specific conditions in relation to the replacement of Amenity Trees (LV.10);
- 48.9 Recognition of historic trees (ARCH.9) and historic accessways (ARCH.5(g)) (following questioning of Dr Clough by Mr McCurdy);
- 48.10 Inclusion of consideration of CPTED principles in development of Open Space Restoration Plans (OS.3) (following questioning of Mr Little by Ms Devine);
- 48.11 Further amendments to reflect the outcome of joint expert caucusing reports which has been made available since commencement of the Hearing;
- 48.12 Inclusion of V.18 relating to the NZTA Traherne Island Natural Heritage Restoration Plan (2009-2014); and
- 48.13 Amendment of proposed Condition C.11 (following questioning of Mr Robert Bell).

Page 236 of hearings transcript, 15 February 2011

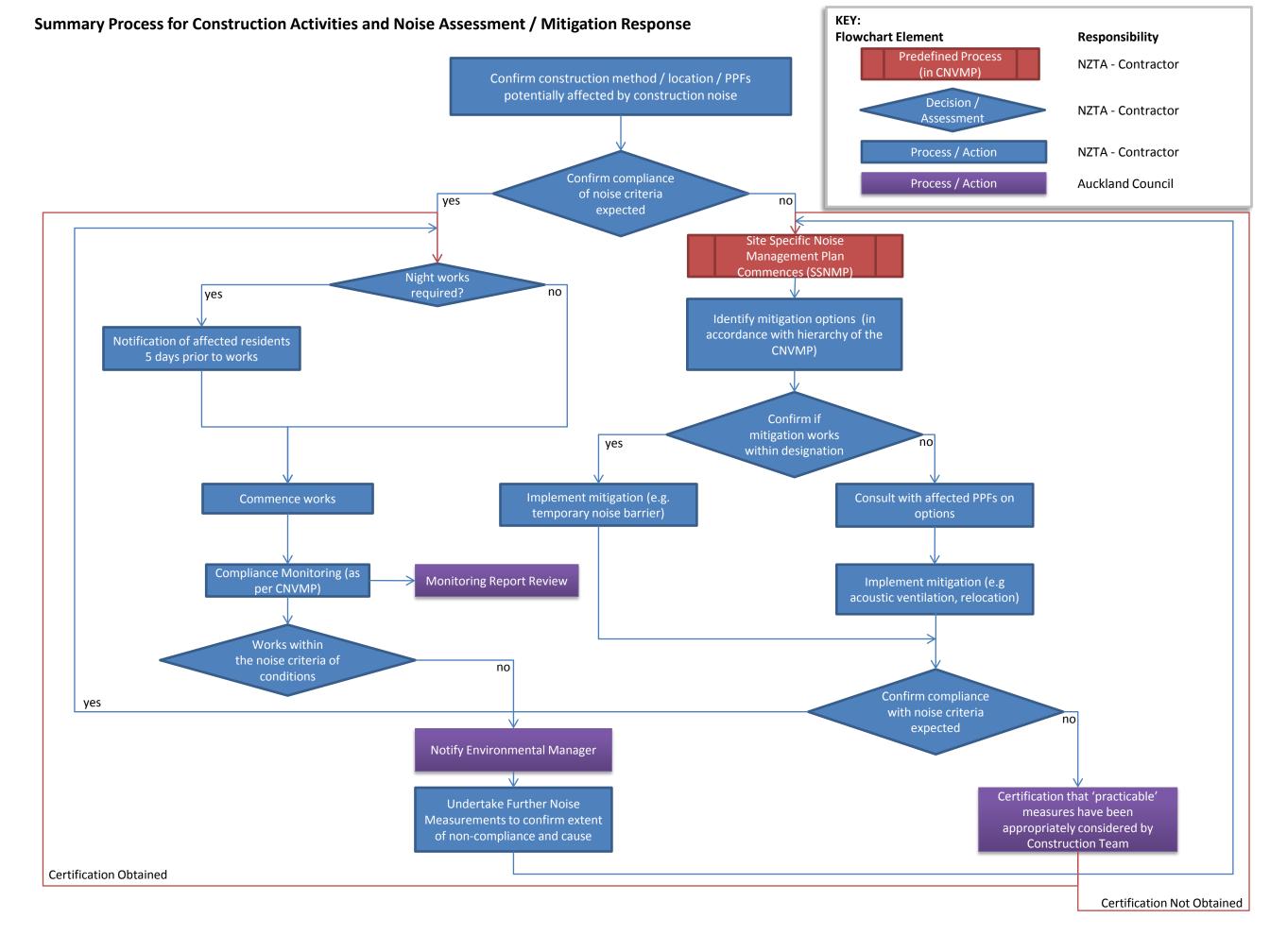
Pages 397-398 of hearings transcript, 16 February 2011

Pages 426-427 of hearings transcript, 16 February 2011

Dated: 1 March 2011

Amelia Linzey

ANNEXURE A – SUMMARY PROCESS FOR CONSTRUCTION ACTIVITIES AND NOISE ASSESSMENT/MITIGATION RESPONSE



ANNEXURE B – UPDATED SET OF NZTA'S PROPOSED CONDITIONS, AS OF 01 MARCH 2011 (AS SEPARATE DOCUMENT/CONDITION BOOKLET)