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APPROVAL OF DISTRICT PLAN CHANGE 22: HAZARD (FAULT LINE) AREAS RE- ALIGNMENT AND RULES

1. Purpose of Report

To report to Council the recommendations of the District Plan Hearing Committee concerning District Plan Change 22 – Hazard (Fault Line) Area Re-alignment and Rules.

2. Recommendation

- 1. That Council approves the recommendations of the District Plan Hearing Committee in respect of District Plan Change 22 – Hazard (Fault Line) Area Re-alignment and Rules as set out in Appendix One to this report.*

3. Background

Proposed District Plan Change 22 was publicly notified on 6 September 2003. The purpose of Proposed Plan Change 22 was to amend the position of the Wellington Fault Hazard (Fault Line) Area on the Planning Maps in accordance with information gathered by the Institute of Geological and Nuclear Sciences (GNS) for the Council.

A Plan Change was prepared to fulfil the Council's obligation under the Resource Management Act (RMA) to ensure the District Plan contains accurate information and because the RMA outlines an explicit function regarding the management of the effects from natural hazards (s31).

The Plan Change primarily included amendments to the fault hazard zones on the Planning Maps, but also included changes to the rules that apply in the zones to provide greater clarity and effectiveness. Proposed rule changes included:

- € Clarification of the explanation to policies for the earthquake hazard;
- € Amendment of Permitted Activity condition to replace reference to NZS 4203:1992 with a reference to definitions of light roof and light wall cladding;
- € Reduction of the number of permitted residential units per site to one;
- € New assessment criteria for discretionary activities, including the requirement to provide geotechnical and engineering reports;
- € A new rule for assessing multi-unit developments;
- € A new rule for the Suburban Centre zone as the hazard area did not previously pass through this zone; and
- € Changes to other hazard rules to maintain consistency across the Plan.

The Hearing for Proposed District Plan Change 22 was held at Council Offices on 26 February 2004 following distribution of the Officer's Report to all submitters and further submitters.

4. Discussion

Eleven submissions and four further submissions were received on Proposed Plan Change 22. There was some clear support for the Plan Change (particularly from the Greater Wellington Regional Council), but the majority of submitters opposed aspects of the Plan Change.

Three submitters attended the hearing and spoke to their submission:

- € Martin Sidoruk
- € Brian Hasell (also represented by Ian Brown)
- € John Welch of VECTOR Limited

A further submission from the Greater Wellington Regional Council was tabled at the hearing.

The Committee considered all the issues raised by the submitters, including issues raised by submitters at the hearing. The additional scientific evidence brought before the Committee at the hearing by one submitter proved to be a valuable addition to the information before the Committee and resulted in some changes to the Proposed Plan Change as recommended by the Officer. In coming to a decision, the Committee largely endorsed all the recommendations in the Officer's Report relating to the rules that apply in the hazard zones (with the exception of one change relating to utilities), but made two changes to the position of the fault rupture hazard zone.

Once approved by Council, the decision will be publicly notified and served on the submitters. Submitters then have the option of appealing the matter to the Environment Court within 30 working days. If no appeals are made the plan change will become operative.

Report from: Ian Hutchings

Chair of the District Plan Hearings Committee on Plan Change 22 – Hazard (Fault Line) Area Re-alignment and Rules

APPENDIX ONE REPORT OF THE HEARING COMMITTEE

WELLINGTON CITY COUNCIL REPORT OF THE HEARING COMMITTEE

SUBJECT: PROPOSED DISTRICT PLAN CHANGE
22: HAZARD (FAULT LINE) AREA RE-
ALIGNMENT AND RULES

COMMITTEE MEMBERS: CRS HUTCHINGS
FOSTER
GILL

DATE OF HEARING: 26 FEBRUARY 2004

1. RECOMMENDATIONS

- 1) *Approve Proposed District Plan Change 22 – Hazard (Fault Line) Area Re-alignment and Rules subject to:*
- € *a change to the position of the fault rupture hazard area in the vicinity of the former Thorndon Bowling Club on Goring Street and Rarora Road near the Karori Tunnel;*
 - € *changes to the depiction of the hazard zones in the re-formatting of the Planning Maps, in accordance with the specific recommendation outlined in section 3.1 of this decision report;*
 - € *changes to various rules to clarify that the hazard rules only apply to that portion of a site covered by the hazard area, not the entire site. These changes are set out in section 3.2 of this decision report;*
 - € *a change to section 3.2.2.13 in accordance with the specific recommendation outlined in section 3.4 of this decision report; and*
 - € *changes to assessment criteria 17.3.2.9 and 19.4.1.6 in accordance with the specific recommendation outlined in section 3.5 of this decision report, in response to a submission by the Greater Wellington Regional Council.*

A copy of the revised plan change is set out in Attachment One to this report.

- 2) *Accept or reject all the submissions and further submissions to the extent that they accord with recommendation (1) above.*

2. INTRODUCTION

This decision relates to Proposed District Plan Change 22 – Hazard (Fault Line) Area Re-alignment and Rules.

Proposed District Plan Change 22 is a Council initiated plan change to re-align the Hazard (Fault Line) Area for the Wellington Fault, and amend rules in the Plan relating to Hazard (Fault Line) Areas. The plan change was developed after the Council became aware that the mapping of the Wellington Fault in the District Plan did not fully correlate to the fault line as identified by GNS. Also, recent reports by the Parliamentary Commissioner for the Environment and the Ministry for the Environment provide guidance on planning for developments across known active faults. Those reports informed the proposed Hazard (Fault Line) Area rules.

Eleven submissions and four further submissions were received on Proposed Plan Change 22. There was some clear support for the Plan Change (particularly from the Greater Wellington Regional Council), but most submitters sought changes or opposed aspects of the Plan Change.

Three submitters attended the hearing and spoke to their submission:

- € Martin Sidoruk
- € Brian Hasell (also represented by Ian Brown)
- € John Welch of VECTOR Limited

A further submission from the Greater Wellington Regional Council was tabled at the hearing. The Regional Council reaffirmed its original submission and noted support for the recommendations in the Officer's report to the hearings committee.

The Committee considered all the issues raised by the submitters, particularly the issues raised by submitters at the hearing. The additional scientific evidence brought before the Committee by Mr Hasell proved to be a valuable addition to the information at the hearing and resulted in some changes to the Proposed Plan Change as recommended by the Officer. In reaching its decision, the Committee largely endorsed all the recommendations in the Officer's Report relating to the rules that apply in the hazard zones, but made two changes to the position of the fault rupture hazard zone.

The following discussion sets out the key issues and the Committee's reasons for its decisions.

3. SUBMISSIONS AND DISCUSSION OF ISSUES

3.1. Position of the Fault Rupture Hazard Area and the 'Buffer Area'

The main issue discussed at the hearing was the alignment of the hazard zones as proposed in Plan Change 22. GNS was on hand to answer several questions about the work it carried out to determine the extent of the hazard areas and to explain the purpose of the fault rupture hazard area and the need for an additional buffer zone.

The Committee considered submissions from a number of submitters in respect of this issue, specifically from Martin Sidoruk and Brian Hasell who spoke at the hearing.

Mr Sidoruk

Mr Sidoruk presented a number of concerns to the Committee regarding the depiction of the fault hazard zones, including the accuracy of the information, lack of 'observed' evidence, and how information about hazards should be communicated. The submitter considered that further investigative work was required before the

Council adopted the hazard zones, but was unable to clarify how much further work was necessary to be satisfied with the accuracy of the zones.

Mr Sidoruk sought that the buffer area be reduced to 5 or 10 metres as this would remove his property from the hazard area.

Mr Hasell

Mr Hasell noted his support for the definition of a Fault Rupture Hazard Zone, but considered that the present proposal was excessive in width and was not supported by the evidence. He also requested that the Committee delete the buffer area, commenting that the application of a buffer zone in some specific areas (Karori Tunnel East and Thorndon Bowling Club) is not warranted as the fault is clear in these locations and the expected rupture area allows extra width already. Mr Hasell was accompanied by Dr Ian Brown, a consulting engineering geologist based in Wellington, who provided technical evidence to support Mr Hasell's submission.

Dr Brown acknowledged that precise mapping of an active fault in an urbanised area is difficult, particularly to a scale showing individual property titles. Regarding the depiction of the Fault Rupture Hazard Area, Dr Brown focused on two areas, being the former Thorndon Bowling Club on Goring Street and Raroa Road.

Fault Rupture Hazard Area

In relation to the former Thorndon Bowling Club site, Dr Brown noted that the fault (based on extensive trenching investigations) was found to be 4.2 metres wide in this area. This was also noted in the GNS report. Dr Brown concluded in his evidence that a fault rupture hazard zone of 5 metres would therefore be more appropriate in this area rather than 25m as *mapped* by GNS. With respect to Raroa Road (the area that primarily concerns Brian Hasell), Dr Brown's evidence raises inconsistencies in the GNS report relating to the description of the extent of the fault and the subsequent mapping of the hazard zones in this area. Dr Brown recommends that the fault rupture hazard area could be reduced to 10 metres at this location.

Dr Brown's evidence led to much discussion between the Committee, submitters and the Council's technical expert (Mr Perrin of GNS). Specifically, there was considerable discussion about the mapping of the hazard zones at the former Thorndon Bowling Club site and the Raroa Road site.

The Committee noted that the Fault Rupture Hazard Area narrowed to a neck at Premier House based on the accepted position of the fault in this area. Also, the Committee heard evidence that Council, had, on the basis of expert evidence of the fault location, agreed to a specific development at the former Bowling Club site.

In coming to a decision on this issue the Committee was greatly influenced by the scientific evidence put before it, rather than perceptions about the impact of hazard zones on property values and LIMs. The Committee agreed with both experts that it is preferable to more closely define the fault rupture hazard area where the evidence provides for this, rather than arbitrarily reducing or deleting the buffer area in response to submitters' concerns. The Committee considered that there was convincing evidence to narrow the position of the fault rupture hazard area at the sites specifically identified by Dr Brown. This decision was supported by the Council's expert and the hazard zoning maps were redrawn on Mr Perrin's advice.

The Committee heard that various future geotechnical investigations at other specific sites could be expected to more precisely define the fault in those areas, and that a

necking zone in the Fault Rupture Hazard Area could be anticipated around each such site. In due course as more information was compiled a further District Plan change might be considered to incorporate the Fault necking zones at these sites.

Buffer Area

Dr Brown also queried the necessity of the buffer zone. He considered that the fault rupture hazard area already included room for uncertainty and therefore it was unnecessary to have an additional buffer of 20m. Furthermore, another justification provided by GNS for the buffer zone is to provide for secondary ruptures. Dr Brown did not consider that the effect of secondary ruptures was well understood in relation to the Wellington Fault and subsequently concluded that there were other earthquake related hazards that would impact more severely than secondary ruptures. Dr Brown concluded that the fault mapping be simplified by having one zone to map the primary fault rupture hazard.

Some submitters sought the reduction or deletion of the buffer zone. The Committee noted the recommendation in the Officer's report for a 20 metre buffer zone and considered the requests to reduce or delete the buffer zone by Mr Sidoruk and Mr Hasell. It was the buffer zone rather than the fault rupture hazard zone that affected these submitters' properties. Both submitters argued that they were concerned about the impact on their property values and re-sale potential. As noted above, the Committee did not place considerable weight on those issues and relied more on the scientific advice of both experts at the hearing regarding the necessity of a buffer zone based on geological impacts.

There was some discussion about adopting the precedent set in California of a 50 feet (15 metre) buffer zone (outlined in the Alquist-Priolo Earthquake Fault Zoning Act). While certainly an option, the Committee did not consider this appropriate as the California faults are different in nature to the Wellington fault. Specifically, Californian faults are typically described as creeping faults that continuously move in small amounts. This is in comparison to the Wellington Fault, which, in a large earthquake centred on the fault, may move up to 1 metre vertically and 5 metres horizontally with little warning. Given these differences it is not appropriate to simply adopt the Californian model.

The necessity and extent of the buffer zone is a finely balanced issue, but ultimately the Committee agreed with Mr Perrin (of GNS), deciding the primary purpose of the buffer zone was to provide against possible deformation, secondary ruptures and other effects associated with the strong forces created during a fault rupture event. The buffer zone also acts as an added margin against uncertainties about where the fault will rupture. This decision is founded in best practice set out in Ministry for the Environment guidelines on planning for fault rupture hazards.

Summary

Hazard awareness and risk reduction are resource management issues that the Council is required to manage in its District Plan (eg. Objective 4.2.7 and related policies 4.2.7.1 – 4.2.7.4) and ultimately by the Resource Management Act. The Committee considers that the redefined fault rupture hazard area and a 20 metre buffer area will ensure that the Council continues to fulfill these obligations.

Name of the 'buffer area'

Having decided that a buffer area is to remain, the issue of what that area is called needs to be considered. Mr Sidoruk did not believe the Officer's proposed

descriptions were sufficient. Mr Sidoruk noted that there were distinct differences in terminology used in the GNS report, the MfE guidelines and the Proposed Plan Change.

The Committee acknowledges the difficulty surrounding such terms, but considered that the recommendation in the Officer's report was sound and would provide for consistency throughout the District Plan. Consistency throughout the Plan is of paramount importance because (assuming the Plan Change is adopted) it is the District Plan that will be the common source of hazard information on the Wellington Fault, rather than the GNS report or the MfE guidelines.

Recommendations

Alignment of Fault Rupture Hazard Area: That the maps be adopted as notified in Proposed Plan Change 22 with two amendments in the vicinity of the former Thorndon Bowling Club on Goring Street and Raroa Road. These amendments are depicted in Attachment One to this report.

Alignment of the Buffer Area: That a 20 metre buffer area be adopted as proposed either side of the Fault Rupture Hazard Area.

Map formatting: That the main maps in the Plan (eg. maps 11, 15, 17 and 18) show one hazard zone comprised of the fault rupture hazard area and the buffer area combined to form the *Hazard (Fault Line) Area*. Those maps will direct people to refer to a set of additional maps at the rear of the Plan for more detail. These additional maps will be specific to the Wellington Fault and will show the two hazards areas, one being called the *Fault Rupture Hazard Area* and the other being called the *Buffer Area*. These maps should be at a scale of approximately 1:4000.

3.2. Application of the hazard rules to properties partially affected by a hazard zone

Several submitters queried how the rules for the hazard zones would be applied to properties partially affected by a hazard zone. Both Susan Peacock and Timothy Arbuckle submitted that their properties were minimally affected by the buffer zone but were unclear about whether the rules would apply to their entire site. In his oral submission, Mr Sidoruk also sought clarity over this issue as well. The Wellington City Council made a submission on this issue in an attempt to clarify the intention of the rules.

The Committee agreed that Rule 5.1.3.1 as currently drafted does create uncertainty about whether it applies to proposed new residential units on a site affected in part by the hazard area, when the residential units will be built outside the hazard zone. In that respect, the Committee agrees with all submitters that greater clarity is required in how the rule is to be applied. Consequently, as the Wellington City Council submission provided specific detail on the changes required to enhance clarity in the rules it is considered that the relief sought in that submission be adopted.

Recommendation

That the relief sought by submitters be granted. Specifically that the suggested wording provided by the Wellington City Council submission be adopted as outlined below:

1. **Rule 5.1.3.1:** That the words in the fourth bullet point in Rule 5.1.3.1 are deleted and the following words inserted:

“no more than one household unit shall be permitted on any part of a site that is within the Hazard (Fault Line) Area”.

2. That the following **changes** be made to rules 5.3.4, 5.3.6, 5.3.10 and 5.4.9 as outlined below:

§ **Rule 5.3.4**

Insert the words “in the circumstances where rule 5.4.9 applies” at the start of the third bullet point

€ **Standard and Terms for rule 5.3.6**

That the words “one site” in the third line be deleted and replaced with the words “any part of a site in the Hazard (Fault Line) Area”.

€ **Assessment criteria for rule 5.3.6**

That the word “site” in the first line of assessment criterion 5.3.6.4 be deleted.

€ **Italicised explanation for rule 5.3.6**

That the last sentence of the italicised explanation (“Rule 5.3.6 only applies to single units on one site.”) be deleted.

§ **Rule 5.3.10**

After the word “except” in the sixth line of the rule, insert the words “in the circumstances where rule 5.4.9 applies”.

€ **Rule 5.4.9**

That the words “any site in” in the third line of rule 5.4.9 be deleted and replaced with the words “any part of a site within”.

€ **Assessment Criteria for rule 5.4.9**

That the word “site” in the first line of assessment criterion 5.4.9.3 be deleted.

3.3. Rule 5.1.3.1 – Number of residential units permitted on site reduced to one in the Hazard (Fault Line) Area.

There were two specific submissions on the proposal limit the number of permitted residential units to one per site in the Hazard (Fault Line) Area. Both submitters, Mr Clode and Gillian Fastier considered it would disadvantage them as both had intended to construct at least two units on their sections that are partially affected by the Hazard (Fault Line) Area.

During his oral submission at the hearing, Mr Sidoruk queried the wording of the provision and requested that the word ‘any’ be replaced with the word ‘the’ to make the rule more specific, as outlined below:

Rule 5.1.3.1

.....

€ *No more than one household unit shall be permitted on ~~any~~the part of a site that is within the Hazard (Fault Line) Area.*

The Committee accepted the analysis and recommendations in the Officer’s report on this issue. This rule, in combination with the changes recommended in section 3.2 above, will help to limit intensification of development in the areas affected by the hazard zones. The Committee accepted that the rule only has a ‘new’ effect on properties at the Northland/Kelburn end of the fault, as much of Thorndon is already restricted to one residential unit per site by another rules in the Plan.

The Committee did not consider that a change to the wording of the rule (as suggested by Mr Sidoruk) was necessary as all Committee members considered that the rule, as drafted, was clear.

There was one particular concern expressed by the Committee relating to the possibility that developers may choose to subdivide a section first and then build several units – one unit on each newly subdivided section. The Committee was concerned that this ‘loophole’ would have the potential to undermine the intent of the policies and rule 5.1.3.1 specifically.

The Committee accepted the Officer’s advice that the assessment criteria in the subdivision rules (eg. Rule 5.4.5) referring to s106 of the RMA (Consent authority may refuse subdivision consent in certain circumstances) is adequate and would trigger any concerns about subdivision in a hazard prone area. The Committee agrees that this alleviates its initial concerns that people may use subdivision and rule 5.1.3.1 as a means of developing multi-unit apartments as a series of individually permitted activities. The Committee also noted that due to many of the other rules in the Plan for this area, most large scale developments require some form of consent. This then provides the ability for the Council to have good information about the potential hazard impacts for those proposed developments.

If time shows that people are indeed using the subdivision rule and rule 5.1.3.1 to avoid a land use consent to construct a large number of dwellings on a site, then the Council should consider a change to the subdivision rule to prevent this.

Recommendation

That the forth bullet point in Rule 5.1.3.1 be adopted as proposed in Proposed Plan Change 22 (subject to the wording changes recommended in 3.2 above).

3.4 Section 3.2.2.13 – requirement to provide geotechnical and engineering reports.

The original submission and further submission from the Greater Wellington Regional Council supported this concept of providing geotechnical reports and engineering design reports, but did suggest a change to the wording of the provision. VECTOR Ltd had concerns about this requirement relating to its proposed utility infrastructure and, as a result, the Officer’s report sought to provide an exclusion for resource consents sought for utilities under this section.

The Committee questioned the logic behind the broad exemption for utility operators. The Officer’s report argued that the exemption is appropriate as the main purpose of the rules was to protect people in the places where they live, work and play. The Committee however, considered that ongoing supply of key services via the utility infrastructure is also important in the event of a fault rupture. John Welch, representing Vector, noted that the small berm stations it may need to install (as outlined in their submission) are 3m long x 1.5m wide x 1.8m high. Furthermore, each one serves a small number of houses each – not a large portion of the population. Therefore, should an individual berm station become disrupted the effect will be contained to those individual properties until repaired.

Mr Welch explained that Vector does have larger structures but these are almost always contained within a building and would certainly not be placed in a hazard area.

Following questions from the Committee, Mr Welch accepted that it was appropriate for those larger structures to be captured by the proposed information requirement, but was adamant that the smaller berm stations should be exempted from the information requirement.

The Committee considered that an exemption was appropriate for a certain size of utility structure. Based on the dimensions supplied by Vector, it is considered that section 3.2.2.13 (as re-drafted in the Officer's report) should be further amended to provide an exemption for smaller scale utilities rather than all utilities. Also, it is considered necessary that a cross-reference be made in the utilities section to this information requirement to aid clarity within the Plan. This is possible because statements that outline a cross reference within the Plan are not a formal part of the Plan.

Recommendation

That section 3.2.2.13 is re-worded (as outlined below) to accommodate the submissions from VECTOR Ltd and the Greater Wellington Regional Council:

3.2.2.13 Except for utilities less than 6m² in area and a maximum height of 2m,
~~Where~~ an application for a Land Use Consent is for a development within a Hazard (Fault Line) Area, ~~that does not comply with the conditions of a permitted activity,~~ the applicant must provide a geotechnical report and an engineering design report.

A geotechnical report will include, to Council's satisfaction, the results of relevant geotechnical investigations. The Council will determine the relevance of undertaking geotechnical assessments on a site by site basis in recognition that hazard related risks and the ability to investigate the hazard, vary within individual properties.

The engineering design report must detail additional engineering measures that will be adopted to mitigate potential adverse effects from a fault rupture hazard event.

Add the following words in bold italics in the right hand margin next to the following assessment criteria 23.2.1.13 and 23.4.1.8:

Refer to section 3.2.2.13 for further information.

3.5 Other Matters

Rules 17.3.2 and 19.4.1

The Committee agreed with the submission of Greater Wellington Regional Council that the assessment criteria under these rules (specifically 17.3.2.9 and 19.4.1.6) need to be amended. This was to provide more certainty and clarity to consent planners who are required to process resource consent applications against the assessment criteria.

Recommendation

That the relief sought by the Greater Wellington Regional Council for Rules 17.3.2 and 19.4.1 be accepted and Assessment Criteria 17.3.2.9 and 19.4.1.6 be reworded as follows:

17.3.2.9 ~~Whether the activity, structure or building is located in a Hazard (Fault Line) Area.~~ Where a structure or building is located within a Hazard (Fault Line) Area, the degree to which measures have been adopted to mitigate the potential adverse effects from a fault rupture hazard event.

19.4.1.6 ~~Whether the activity, structure or building is located in a Hazard (Fault Line) Area.~~ Where a structure or building is located within a Hazard (Fault Line) Area, the degree to which measures have been adopted to mitigate the potential adverse effects from a fault rupture hazard event.

Accuracy of GNS report with respect to 196 Glenmore Street

Rosemary Collins (7) raised concerns regarding the accuracy of the GNS report in relation to 196 Glenmore Street. The Committee noted that GNS have defended their explanation of this site, but as a result of amending the Fault Rupture Hazard Area at Raroa Road, the effect has been to narrow it in this vicinity as well. There was no specific relief sought from this submitter in relation to this issue, but it is assumed that the amended fault rupture hazard area will provide some relief.

Recommendation

That no further changes be made to Proposed Plan Change 22 as a result of this submission.

Effect of Proposed Plan Change 22 on LIMS, house values, and insurance premiums

The Committee acknowledges the perceptions held by some submitters regarding the potential impact of this Proposed Plan Change on house prices, LIMs and insurance premiums. However, having considered the Officer's report and as no further information was provided at the hearing to support these claims, the Committee considered that no change was required to the Plan Change. The Committee acknowledged the concerns expressed by Mr Sidoruk at the hearing surrounding how hazard information is communicated. The changes already made to the summary of hazard information in the LIMs (a process quite separate from this Proposed Plan Change process) are considered adequate relief.

Recommendation

That no changes be made to Proposed Plan Change 22 as a result of these submission.

4.0 CONCLUSION

The key issues raised in written and verbal submissions on Plan Change 22 have been considered in this report.

Support for the Plan Change was mixed, but concerns about the Plan Change were largely focused on the individual impact the Plan Change would have on submitters. Where reasonable, these concerns have been addressed. The fault rupture hazard area has been amended in two areas as a direct result of evidence presented at the hearing. The Committee considered that the notified plan change could be amended in some areas. A revised plan change, incorporating these adjustments, is set out at Attachment One to this report.

The Committee is confident, taking into account both oral and written submissions, that the amended Proposed Plan Change 22 achieves the purpose of the Resource Management Act 1991 and provides a more effective method of achieving the objectives and policies of the District Plan. This is because the Plan Change provides more accurate information about the location of the fault hazard areas and clarifies the rules that apply in the Hazard (Fault Line) Area.

Ian Hutchings
Chair, Hearing Committee

Attachment One to Report of Hearing Committee

District Plan Change 22 – Hazard (Fault Line) Area Re- alignment and Rules

(as amended in accordance with recommendations in the
Report of the Hearing Committee)