BEFORE INDEPENDENT HEARINGS COMMISSIONERS APPOINTED BY THE TIMARU DISTRICT COUNCIL

IN THE MATTER of the Resource Management Act 1991 ("RMA")

AND

IN THE MATTER of submissions by NZ Transport Agency Waka
Kotahi (submitter S143) on Hearing Stream F of
the Proposed Timaru District Plan

PLANNING EVIDENCE OF STUART PEARSON
ON BEHALF OF NZ TRANSPORT AGENCY WAKA KOTAHI

16 April 2025

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1. INTRODUCTION

- 1.1 My full name is Stuart John Pearson. I have the qualifications of Bachelor of Environmental Management and Planning and a Master of Applied Science (Environmental Management) from the Lincoln University.
- 1.2 I have been employed by the New Zealand Transport Agency Waka Kotahi (NZTA) for 8 years and currently hold the role of Senior Planner, which I have held since 2022.
- 1.3 Through my role with NZTA I have experience with the effects of noise from state highways on nearby sensitive activities and have previously presented evidence on this matter in other districts within Canterbury and Wellington City. I also have experience with signs adjacent to and/or directed towards roads and managing potential effects of them.

Code of Conduct

1.4 I confirm that I have read the Code of Conduct for Expert Witnesses set out in the Environment Court's Practice Note 2023. I have complied with the Code of Conduct in preparing this evidence and will continue to comply with it while giving oral evidence at the hearing. Except where I state that I am relying on the evidence of another person, this written evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed in this evidence.

Scope of evidence

- 1.5 NZTA made submissions on several of the chapters within Hearing Stream F.
 My evidence is primarily focused on the Noise Chapter and the Signs Chapter of the Proposed Timaru District Plan (PTDP).
- 1.6 In preparing my evidence I have considered the Section 42A Hearings Report (S42A) for Noise and Signs, along with supporting technical reports.
- 1.7 My evidence is limited to those matters within my planning expertise related to noise and signs. My evidence should also be read in conjunction with that of Dr Stephen Chiles and Terry Church as technical experts on noise and signs, respectively.
- 1.8 Specifically, my evidence focuses on the following provisions:

Noise

- (a) NOISE-R9 Increase the distance from 80m to 100m to which the noise standards apply for State Highway 1 (SH1) where the speed limit is greater than 50km/h.
- (b) NOISE-R9.PER-1 / NOISE-S3 to remove the fixed sound insulation requirement and instead require the use of an indoor road noise criterion and to amend the matters of discretion to effects of the exceedances.
- (c) NOISE-R9.PER-2 to increase the distance from the road from 20m to 50m as part of the alternative compliance pathway.
- (d) NZTA made a further submission opposing relief sought by Rooney Holdings Limited [174.72] to remove existing habitable buildings from NOISE-R9. The S42A has subsequently amended NOISE-S3 to remove alterations where the floor area of the habitable room increases by 20% or more.
- (e) NOISE-S4 to amend the ventilation standards to require compliance for all habitable rooms where windows need to be kept closed to meet the standards in NOISE-S3. Amendments were also sought to meet thermal comfort by ensuring that temperature does not exceed 25°C.

Signs

- (f) Supporting the recommendations to amend SIGN-P1, SIGN-S1.3, SIGN-Table 27, and to include traffic safety as a matter of discretion in SIGN-S2, SIGN-S5 and SIGN-S6.
- (g) SIGN-S1.4 opposing the recommendation to delete this standard along with Table 28.
- (h) SIGN-S2 opposing the recommended amendments to clauses 2 and 3 as set out in the S42A.
- 1.9 Whilst NZTA made a submission on other chapters within Hearing Stream F, I have reviewed the S42A and consider this has addressed the matters raised by accepting, accepting in part or rejecting, and I agree with these recommendations. Therefore, no further comment is made on these other chapters.

2. STATUTORY CONTEXT

- 2.1 In preparing this evidence I have considered the following:
 - (a) The purpose and principles of the RMA;
 - (b) Provisions of the RMA relevant to plan-making and consenting; and

(c) Canterbury Regional Policy Statement.

3. NOISE - NZTA SUBMISSION AND FURTHER SUBMISSION

- 3.1 NZTA made a submission and further submission on several of the noise provisions in the PTDP. My evidence is focused on NOISE-R9, NOISE-S3 and NOISE-S4 as described in paragraph 1.8 above.
- 3.2 Where I have not made further comment on noise provisions raised in the NZTA submission, I consider those matters to have been addressed by the S42A and I agree with the Council's recommendations.

NOISE-R9 – State Highway Distances

- 3.3 NZTA sought amendments to NOISE-R9 to increase the distance from the State Highway 1 (SH1) corridor from 80m to 100m for which the noise standards would apply where the speed limit is greater than 50km/h on noise sensitive activities.
- 3.4 Alternate relief was also sought in the form of modelled noise contours that could replace the fixed distance approach in NOISE-R9. NZTA has sought this relief across the country as it is a more practical approach to managing noise effects on noise sensitive activities in close proximity to the state highway where it is 100m or less from the sealed carriageway as per the model. While these modelled noise contours have been prepared, given that these were not provided at an earlier stage in the process and based on the relief sought by NZTA in the original submission, I consider that introducing these now without further modification could be out of scope. Therefore, NZTA will not be pursuing this relief.
- 3.5 The S42A report has recommended to reject the relief sought to increase the distance to 100m based on the recommendation of Mr Hunt. He considers that there is no evidence or reasoning provided to offset the additional compliance costs that may be experienced at such locations distant from the highway.
- 3.6 Dr Chiles has addressed the increased distance from 80m to 100m in Paragraph 5.2 of his evidence. He considers that based on the modelling work taken to determine the noise contours, that the increase to 100m is warranted as there are many instances where effects are up to and beyond 100m along SH1.
- 3.7 I agree with the reasoning of Dr Chiles in his evidence. Additionally, I note that this is consistent with other districts within Canterbury where the modelled

noise contours have not been used, such as within the Christchurch District Plan (Rule 6.1.7.2.1) and the Selwyn District Plan (NOISE-R3).

3.8 Therefore, in my view it is appropriate so increase the distance from 80m to 100m where the speed limit is greater than 50km/h along SH1 as this would ensure sufficient noise mitigation is provided for to avoid effects of long term exposure to noise.

NOISE-R9.PER-1 / NOISE-S3 - Indoor Noise Criterion

- 3.9 NZTA sought amendments to PER-1 within NOISE-R9 to remove the requirement of the fixed sound insulation requirement and instead rely on an indoor road noise criterion. Subsequent relief was also sought in NOISE-S3. The relief sought is as follows:
 - (a) Road traffic is removed from NOISE-S3.1
 - (b) Matters of discretion from NOISE-S3.3 are deleted and replaced with a single matter of discretion being the effects of exceedances.
- 3.10 The S42A report has recommended that the relief sought be rejected as the internal noise level criteria is difficult to assess and therefore enforced and considers that the current proposed approach can be checked against the ISO 140-Part 5 field test method. Mr Hunt has stated that this method is being widely adopted.
- 3.11 Dr Chiles has addressed Mr Hunt's position on this matter in paragraphs 5.7 and 5.8 of his evidence. He states that the use of an indoor noise criterion requires a site-by-site assessment and ensures that tailored mitigation is required by each development. I consider this to be a practical approach as it ensures that appropriate insulation is required for each habitable room containing a noise sensitive activity and becomes more of an effects based approach compared to the fixed insulation that is preferred by Mr Hunt.

 Therefore, I agree with the position of Dr Chiles on this matter.
- 3.12 In my opinion, this approach is also supported by its use in other districts within the Canterbury region, such as within the Partially Operative Selwyn District Plan. Also, as touched on by Dr Chiles, the Christchurch District Plan has recently undertaken Plan Change 5E which sought the removal of the fixed insulation approach as the site-specific assessment was the preferred approached.

3.13 Overall, I consider that the effects based approach of a site specific assessment and subsequent insulation to be the more efficient option to mitigate road noise on habitable rooms used by noise sensitive activities.

NOISE-R9.PER-2 – Alternative Compliance Pathways

- 3.14 NZTA sought an amendment to PER-2 within NOISE-R9 to require a 50m separation distance from any road in addition to noise screening as an alternative compliance pathway.
- 3.15 The S42A report has recommended that this relief sought by NZTA to be rejected as there isn't sufficient evidential basis for the increase and that the current approach indicates that road noise effects would be reduced to acceptable levels at these screened locations.
- 3.16 It is of the opinion of Dr Chiles, as described in Paragraphs 5.4 and 5.5 of his evidence, that the preferred approach by Mr Hunt and as originally proposed may not sufficiently address effects associated with noise on noise sensitive activities. He considers that this alternative pathway can result in highly variable outcomes and should be designed to be slightly conservative. It is his view that the proposed 20m setback may not provide equivalent protection that that of the mitigation required by PER-1. Based on Dr Chiles assessment that increasing the setback from roads to 50m and with the use of realistic screening that in most instances similar outcomes should be achieved.
- 3.17 I agree with the recommendations of Dr Chiles that the setback from roads should be increased from 20m to 50m to ensure that effects on human health are appropriately realised and addressed. The proposed 20m setback could result in some noise sensitive activities being exposed to higher levels of noise as appropriate mitigation has not been utilised. A 50m setback will ensure similar outcomes to that of PER-1 can be achieved as an alternative pathway for compliance.

Alterations to Habitable Areas

3.18 A further submission in opposition to the relief sought by NZTA was made by Rooney Holdings Limited [174.72] which sought to remove existing habitable buildings from being subject to NOISE-R9. The S42A report made recommendations to NOISE-S3 to address this by only requiring compliance to this standard where the floor area of an existing habitable room increases by 20% or more.

- 3.19 I consider that existing habitable buildings should not require retrofitting to ensure compliance with NOISE-R9. However, I do consider that it is appropriate for alterations to dwellings, such as extensions, conversions or additions of new habitable spaces used by noise sensitive activities, to require compliance with the standards.
- 3.20 It is my view that 20% is not a practical or equitable measure of an alteration, as larger rooms and/or buildings will be allowed greater increases than that of a smaller habitable room (i.e. small bedroom) and are likely to result more exposure to noise effects. The 20% increase is also not limited by any timeframes and could lead to accumulated growth without any form of noise mitigation.
- 3.21 Dr Chiles also supports this view as outlined in Paragraph 5.9 of his evidence in that alterations should be captured but does not agree that it is appropriate to set arbitrary thresholds based on floor area increases.
- 3.22 While I consider it appropriate for alterations to be subject to noise mitigation, I understand that it has also been accepted in other parts of the country to allow for fixed areas of increase over a set time. For example, in the Waikato District Plan allows alterations of a habitable room of 5m² every 10 years without requiring noise mitigation. I consider this to be a more reasonable and equitable approach for allowing alterations of existing habitable areas.

NOISE-S4 Ventilation Requirements

- 3.23 NZTA sought amendments to NOISE-S4 to require compliance for <u>all</u>
 <u>habitable rooms</u> where windows need to be kept closed to meet the standards set out in NOISE-S3. Additionally it was sought to amend the standard to include thermal comfort by ensuring that temperatures do not exceed 25°C.
- 3.24 The S42A report has recommended that both amendments sought by NZTA for NOISE-S4 be rejected. The reasoning from Mr Hunt, supported by Ms White, is that most types of habitable rooms, open windows during the daytime would not likely undermine the functions carried out within these rooms, particularly in regard to Timaru's climate. It is recommended that the ventilation requirements as proposed are to remain.
- 3.25 Dr Chiles disagrees with the reasoning of Mr Hunt set out in his evidence and states that occupants should have a genuine choice to leave windows closed as necessary to achieve healthy indoor noise environments. It is also discussed that Christchurch and Timaru are both within the same climate zone

and the guidance recommends that Christchurch should have cooling requirements.

3.26 In my opinion, considering that Timaru can experience hot summer days, it would be reasonable to specify a maximum temperature to provide thermal comfort. I support the relief to require that temperatures do not exceed 25°C as a reasonable and pragmatic approach when windows are required to be closed.

4. SIGNS

- A.1 NZTA made a submission and further submission on several of the sign provisions in the PTDP. While the submissions were generally in support, some relief was sought to recognise official signs in the policies; to recognise traffic safety as a matter of discretion; and to ensure consistency with the NZTA Traffic Control Devices Manual for Advertising Signs (TCD Manual). Further submissions were made to reject amendments, specifically to SIGN-S2, to reduce the dwell time of digital signs.
- 4.2 My evidence on the signs chapter addresses the relief sought by NZTA that was not accepted by the S42A reporting officer, which includes deletion of SIGN-S1.4, and amendments made to the standards on digital signs in SIGN-S2 as sought by other submitters and accepted by the reporting officer.
- 4.3 Where I have not made further comment on the sign provisions raised in the NZTA submission, I consider those matters to have been addressed by the S42A and I agree with Council's recommendations.

Reporting Officers Position of NZTA Relief Sought

- 4.4 NZTA sought the following amendments which have been accepted or accepted in part by the S42A reporting officer:
 - (a) Amendments to SIGN-P1 to include official signs that are not consistent with the zone purpose or qualities. This submission point has been accepted in part by the reporting officer and a new policy, SIGN-PX, has been created to recognise official signs.
 - (b) Amend SIGN-S1.3 to apply to all signs visible from a road rather than signs within 10 horizontal metres. The reporting officer has recommended that this relief be accepted in part by requiring only signs that are designed to be read by motorists to meet the standards set out in SIGN-Table 27.

- (c) SIGN-Table 27 should be amended to ensure that the lettering height standards are consistent with table 6.2 of the NZTA Traffic Control Device Manual – Advertising Signs. The reporting officer has accepted the relief sought.
- (d) To include traffic safety as a matter of discretion where signs cannot meet the standards set out in SIGN-S2, SIGN-S5 and SIGN-S6. The reporting officer has accepted the relief sought.
- 4.5 I support the recommendations of the S42A reporting officer on the above provisions and agree with the amendments to the provisions as proposed.
- 4.6 I do not support the position of the S42A reporting officer for standards SIGN-S1(4) and SIGN-S2. I discuss these two standards below.

SIGN-S1(4) & Table 28 – Separation Distances

- 4.7 NZTA supported the inclusion of SIGN-S1(4) as it required that signs needed to meet separation distance between signs as set out in SIGN-Table 28.

 Amendments were sought to Table 28 so that it was consistent with Table 5.3 in the TCD Manual, which is less onerous than what was proposed and consistent with industry guidance.
- 4.8 The S42A has recommended that both SIGN-S1(4) and SIGN-Table 28 be deleted as Abley Limited considers that the separation distances between signs are impractical and unreasonable, especially in areas where advertising is generally anticipated (paragraph 11.5.14). They consider that the proliferation of signs is best captured under SIGN-S5 and SIGN-S6.
- 4.9 Mr Church has supported the use of requirements for separation distances between signs in higher speed environments, being 70km/h or greater, as set out in paragraph 8.4 of his evidence. It is his view that drivers should not be subjected to visual clutter, have sufficient time to process the information, and are not distracted from the driving task in an environment where the consequence of distraction can be fatal. He considers that SIGN-S1(4) should be retained, that SIGN-Table 28 apply to roads with a posted speed limit of 70km/h or more and be consistent with Table 5.3 of the TCD Manual.
- 4.10 In my view, I consider that it is appropriate to minimise the distraction of road users in higher speed environments, as the consequence of being distracted (crossing the centre line and head on collisions) is much higher. Having appropriate separation of signage in these higher speed environments can reduce the potential for distraction to occur and therefore reduce the risk to other road users. Therefore, I agree with the position of Mr Church on this matter.

- 4.11 I accept that it can be inappropriate to prohibit signs in low speed, urban environments as these areas are more accepting of signage and are less likely to result in risks of deaths or serious injuries if distraction occurs compared to that of a higher speed environment. In my opinion, it would be best that this standard only applies to signs with a posted speed limit of 70km/h or more.
- 4.12 The original proposed wording of SIGN-S1(4) attempted to only capture signs within 10 horizontal metres of a road. I am not familiar with where the rationale for this has come from, but I consider that this standard should only be subject to signs that are intended to be read by motorists. This would be consistent with the recommendations also made to SIGN-S1(3).
- 4.13 Mr Church has suggested that SIGN-S1(4) be reworded as follows:

SIGN-S1 [....]

- 4. All signs designed to be read by motorists on a road with a posted speed limit of 70km/h or more must comply with the minimum separation distances in Table 28.
- 4.14 I support the wording as proposed by Mr Church in relation to SIGN-S1(4).

 Additionally, I consider that Table 28 should be included as follows:

Table 28 – Separation Distances

Posted Speed Limit (km/h)	Minimum spacing (m)
<u>70</u>	<u>60</u>
<u>80</u>	70
100	<u>80</u>

4.15 I recommended that the amendments to SIGN-S1(4) and Table 28 be accepted to address risks to road users in high speed environments.

SIGN-S2 – Digital Signs

4.16 NZTA made a support in part submission on SIGN-S2 as it sought the matters of discretion should include traffic safety, as described above. However, NZTA specifically supported Clause 8 of SIGN-S2 as it resulted in all digital billboards adjacent to a state highway, being a restricted discretionary activity and they would therefore be subject to the associated matters of discretion. It was considered that this approach, along with the other standards within

- SIGN-S2, would be a good starting point to manage the potential effects on the state highway as regionally significant infrastructure.
- 4.17 The S42A reporting officer recommended that the NZTA submission be accepted in part in relation to clause 8, as further amendments were made as sought by Go Media Ltd (submission no. 18.5), which sought the deletion of Clause 8 in its entirety. The reporting officer recommended that clause 8 (hereon referred to as Clause 9) be amended as follows:
 - <u>9</u>. No digital sign is to be located adjoining a State Highway <u>with a speed limit</u> of 70km/h or more.
- 4.18 The amendment as proposed now provides for a permitted activity status pathway for digital signs to be established adjacent to a state highway where the posted speed limit is less than 70 km/h, subject to the other standards within SIGN-S2. I note that a large section of state highway through Timaru has a posted speed limit of 50 km/h, with a number of priority controlled (Give Way and Stop) intersections, some of which are complex as set out in the evidence of Mr Church at Section 1 of his evidence.
- 4.19 While I consider the above amendment to be generally acceptable as digital signs are more appropriate in urban environments, appropriate standards will still be needed to ensure that they mitigate effects on road users even in lower speed environments. Without sufficient standards in place I consider that the amendment to SIGN-S2(9) is not appropriate, as I discuss further below.
- 4.20 The S42A reporting officer has recommended to accept other relief sought by Go Media Ltd to amend standards within SIGN-S2, which are as follows:

SIGN-S2 [...]

- 2. Any illuminated, flashing or digital display sign must only display still images, and where multiple still images are displayed, each still image must be displayed for a minimum of 30 10 seconds each before changing to a different still image, and there must be no transitions between still images apart from cross-dissolve of a maximum of 0.5 seconds.
- 3. No illuminated, moving, flashing or digital display sign must be visible to vehicles travelling on a legal road within <u>100–50</u> metres of an <u>signalised</u> intersection, <u>measured in accordance with Figure 15 in the TRAN chapter</u>. [...]
- 7. Illumination levels of any sign must not exceed <u>25</u>000 candelas per square metre between sunrise and sunset.

- 8. <u>Illuminated signs must incorporate a lighting control to adjust brightness in</u> line with ambient light levels.
- 4.21 In my view the proposed amendments to the above clauses in SIGN-S2 have changed the overall direction of this standard in relation to the state highway as there is now a permitted pathway with standards that are less stringent than what was originally proposed. I consider that SIGN-S2, especially in relation to Clause 2 and Clause 3, may result in adverse safety effects on the state highway network and I will touch on these below.

SIGN-S2(2) - Dwell Time

- 4.22 Go Media Ltd sought to reduce the permitted standard for dwell time for digital signs from 30 seconds to 8 seconds. NZTA made a further submission in opposition by stating that the permitted threshold of a 30 second dwell time is appropriate and that if a reduction in dwell time is sought then this should be subject to a resource consent process to manage potential effects. The S42A reporting officer subsequently reduced the dwell time to 10 seconds.
- 4.23 My Church has outlined in section 9 of his evidence why a 10 second dwell time is not a sufficient permitted standard for all digital signs. He suggests that, based on his experience as a reviewer of digital signs, that display times from 8 seconds (where considered safe to do so) and 30 seconds (for complex intersections) can be supported. Mr Church also considers that higher display times are required where there is a greater need to ensure drivers are not distracted from the driving task, and if accepting a minimum display time it is critical, that the standards in SIGN-S2 captures sites where the safety of all road users may be compromised.
- 4.24 I agree with Mr Church that it is appropriate for higher dwell times to be applied to digital billboards to ensure the safety of all road users, specifically if there are higher risks of vulnerable road users in close proximity. I consider a higher dwell time is sufficient to retain the safety of road users and lower dwell times should be subject to an assessment to determine the transport and safety of all road users.
- 4.25 The reporting officer, Ms Willow, does state that higher dwell times can be imposed as a condition of consent to mitigate effects in higher risk environments. I generally support this statement, but I note that the lower permitted standard dwell time as proposed may result in some higher risk environments not being captured and it can also set a precedent for digital signs along the state highway where the speed limit is 70km/h or greater. The

10 second dwell time would become the de-facto permitted baseline, and it would be for NZTA as an affected party to negotiate higher dwell times and reliant on Council agreeing and imposing such a condition. Therefore it is important to have sufficient standards in place to address this, such as ensuring that digital signs within close proximity to all intersections are appropriately considered if lower dwell times are acceptable, which I touch on further below.

SIGN-S2(3) – Intersection Standards

- 4.26 Out of Home Media sought the deletion of Clause 3 under SIGN-S2, which required that no digital signs are to be located within 100m of an intersection. The S42A reporting officer did not support the deletion but instead recommended to amend the standard so that it was only related to signalised intersections and reduced the distance from 100m down to 50m.
- 4.27 While NZTA did not specifically make a further submission on Out of Home Media for the deletion of Clause 3, as I have mentioned above in paragraph 4.11, the amendments recommended by the reporting officer have changed the intent of SIGN-S2. Therefore, it is my view this standard also needs to be considered to ensure that effects are appropriately managed.
- 4.28 Mr Church has provided clarification on why the change from 'intersection' to 'signalised intersection' in this instance is not appropriate in section 9 of his evidence. While it is important to ensure that traffic control devices, such as traffic signals, should be protected, there are also risks at uncontrolled intersections especially if there are vulnerable road users, high traffic volumes, high crossing volumes and a high percentage of trucks.
- 4.29 In addition to the above, Mr Church has outlined in his evidence why he does not support the reduction from 100m down to 50m. He states in paragraph 9.10 that using a 100m separation from intersections is preferable to manage distractions as it improves the awareness of the surroundings, vehicles entering the roadway, pedestrians and cyclists. The 100m distance is consistent with the safe intersection sight distance requirements for priority controlled intersections and is therefore relevant as a trigger for considering matters of discretion. Applying this trigger ensures sign applications are assessed on an as needed basis to determine acceptability. This also aligns with the industry guidance in the TCD Manual.
- 4.30 Overall, I agree with the evidence of Mr Church that the standard should remain as originally proposed so that it applies to digital signs within 100m of

all intersections. I also support the use of a consenting pathway to consider the matters of discretion within SIGN-S2 to determine whether a reduction in intersection separation can be supported with or without mitigation.

4.31 In summary, it is my view that if the amendments to both Clauses 2 and 3 are reverted to what was originally proposed and consistent with the advice of Mr Church, then I would support the amendments to SIGN-S2(9) in relation to the standard only applying to the state highway where the speed is 70km/h or greater. However, if NZTA's amendments to Clauses 2 and 3 are not supported then I do not consider the change to Clause 9 to be appropriate, which is also the position of Mr Church as outlined in Paragraph 9.12 of his evidence.

5. CONCLUSION

- I recommend that the Hearings Panel should consider and accept the amendments proposed by Dr Chiles and myself in relation to NOISE-R9, including PER-1 and PER-2, NOISE-S3 and NOISE-S4. I consider that these amendments are appropriate to ensure that the health effects related to long term exposure to noise from the state highway are minimised and consistent with NOISE-P5.
- 5.2 In relation to signs, I consider that it is necessary to have sufficient standards in place to ensure that the effects of digital signs can be appropriately captured. In my view, it is important that these types of activities go through a robust consenting process, subject to the matters of discretion, to ascertain whether additional mitigation measures if the standards are breached.

 Therefore, I recommend that the Hearings Panel accept the amendments proposed by myself and Mr Church in relation to SIGN-S1 and SIGN-S2.
- 5.3 If the above matters are included in the Proposed Timaru District Plan, then I consider that this will address the matters raised in NZTA's original submission and further submission.

Stuart Pearson

16 April 2025