

Lockyer Valley Regional Council: Inland Rail EIS Review – Helidon to Calvert (H2C)

| # | EIS section and topic | Comment <i>What is the issue or what is suitable within the EIS</i> | Recommendation <i>What changes to the EIS or additional information is required?</i> |
|------------------------------------|-----------------------|---|--|
| Draft EIS Executive Summary | | | |
| 1 | Executive Summary | As described in the Submission (and summarised in Attachment 1) it is considered that the impacts of the project are not able to be mitigated on the current alignment. The cumulative impacts particularly on the towns of Gatton and Forest Hill are simply too great. | It is recommended that the proponent be required to: (a) re-evaluate the proposed alignment through the Lockyer Valley townships of Gatton and Forest Hill and provide a revised alignment which deviates around these major townships and in order to reduce the impacts of the project on the respective communities (b) undertake appropriate community consultation on the alternate and revised alignment in accordance with a community consultation plan which is to be approved by the Coordinator-General and developed in consultation with the Lockyer Valley Regional Council. (c) update and submit to the Coordinator-General the draft EIS to reflect the revised alignment. |
| 2 | Executive Summary | Council is required to make submissions on the current EIS on the current reference design alignment. As such the following comments and recommended conditions are made around that alignment despite Council concluding impacts cannot be mitigated on that alignment. | That the proponent be required to engage with Council on revised alignments to address the concerns described in this attachment now that the impacts are better understood. |
| 3 | Draft EIS (in total) | Inappropriate assessment of potential impacts –the draft EIS consistently states that the proposed rail corridor will be constructed to accommodate up to 3,600 m (or 3.6 km) long trains in the future, with the potential for substantial increase in train numbers and frequencies based on market demand. However, the technical assessments, most of which require the input of train length and/or numbers to accurately determine actual project impacts, only consider the proposed initial 1,800 m (or 1.8 km) | That the draft EIS requires update to appropriately identify the significant and adverse impacts which will be experienced by local communities through the proposed future increase in train length and frequency. It is not acceptable to LVRC that the draft EIS only considers mitigation for 1.8 km trains when the project will be designed and constructed to allow for the doubling of train length to 3.6 km. To fail to appropriately assess proposed future train length results in: |

| | | |
|--|---|---|
| | <p>train length and projected rail traffic numbers. For example, with regards to train length:</p> <ul style="list-style-type: none"> - Chapter 1, Table 1.2 states that the project will include ‘future expansion to accommodate 3.6 km trains.’ - Chapter 6, Section 6.2 states the project will be constructed and operated to ‘accommodate double-stack container freight trains up to 1,800 m long’ ... ‘<i>the design does not preclude future accommodation trains up to 3,600 m long.</i>’ - Chapter 12, Section 12.5.4.2 (Emissions inventory) states that ‘the assessment has been conservatively undertaken for 1,800 m long train sets.’ - Chapter 15 is silent on train length, which is only stated in Appendix P (<i>thereby failing to meet the requirements of TOR 12.2</i>). Section 1.2 of Appendix P (Operational Noise and Vibration Technical Report) states that the project design includes ‘infrastructure to accommodate possible future augmentation and upgrades of the track, including a possible future requirement for 3,600 m long trains. The impacts of the increased train length have not been included in this study...’ <p>The purpose of the draft EIS’s technical assessments is to <i>appropriately identify</i> the potential impacts the proposed project will have on the surrounding environment (and local communities). This then enables the development of appropriate mitigation measures and commitments to manage these impacts in a way which ensures that there is <i>no significant residual impact</i>.</p> <p>Appropriate assessment also ensures the development of a response which meets the requirements of the Office of the Coordinator-General’s (OCG’s) Terms of Reference (TOR). The use of only the initial train length for these assessments, and the dismissal of the potential and <i>significant</i> increase to train lengths and numbers, results in the draft EIS failing to meet the requirements of the OCG’s TOR. At the minimum, the draft EIS fails to meet the following TOR for the project:</p> <ul style="list-style-type: none"> - TOR 5.1 – ‘ensure that all relevant environmental, social and economic impacts of the project are identified and assessed...’. | <ul style="list-style-type: none"> - The intensity of adverse and substantial impacts (such as noise levels for just one example) to be even further underestimated, dismissed, or ignored more than already done so by draft EIS. - An inability to identify and commit to appropriate mitigation measures. - A lack of suitable commitments from the proponent. - Regulatory conditioning which does not consider the proposed future use of the project. - Permanent adverse impacts to the surrounding environment and communities. <p>As such, LVRC strongly recommend that the COG require the proponent to re-assess all impact assessments based on a 3.6 km train length and to update the draft EIS to include the correct length and numbers of trains.</p> |
|--|---|---|

| | | |
|--|---|--|
| | <ul style="list-style-type: none"> - TOR 5.3 – ‘the detail at which the EIS deals with matters relevant to the project should be proportional to the scale of the impacts on environmental values...’ - TOR 6.2 – ‘cover both the short term and long term and state whether any relevant impacts are likely to be irreversible...’. - TOR 6.6 – ‘each matter assessed in the EIS should include a concise summary and suitable assessment of the nature, magnitude and duration of the potential direct and indirect and cumulative impacts of the project...’. <p>The potential use of 3.6 km long trains is noted repeatedly by ARTC throughout the draft EIS as well as there being numerous references to future proofing the design by accommodating these significantly longer train lengths into the project design. Therefore, it is reasonable to assume that trains up to 3.6 km long are a viable prospect and will potentially be used on the H2C section of the Inland Rail project. Trains that are 3.6 km in length will have significantly greater impacts to the community and environment. However, the impacts of 3.6 km trains are not considered by the draft EIS which is misleading for the affected community and does not meet the requirements of the TOR.</p> <p>Assessing only 1.8 km long trains has resulted in the failure to appropriately identify adverse project impacts on the community and surrounding environment. The wording used in the TOR listed above, specifically ‘all relevant,’ ‘long term’ and ‘suitable assessment’ indicates that any potential future expansion <i>should have been assessed</i>. Should the draft EIS be approved based on impacts from only 1.8 km long trains, this may result in the project receiving regulatory conditions which are not appropriate to effectively manage the adverse impacts of longer and more frequent trains.</p> <p>The draft EIS clearly states that construction is proposed <i>to include the ability to expand</i> what will then be pre-existing infrastructure. It is not clear what level of assessment this ‘expansion’ will require. Will it too be subject to an EIS or some lesser form of assessment? What level of input</p> | |
|--|---|--|

| | | | |
|---|----------------------|--|---|
| | | <p>involvement would the community have in the assessment of greater train lengths and frequencies?</p> <p>If the project is approved and constructed based on 1.8 km long trains, this will effectively allow any future increase to occur more easily as the impacts from the shorter trains will distort the current baseline conditions thereby making the impacts from the 3.6 km long trains seem more acceptable. In short, ARTC’s draft EIS does not meet the TOR as it does adequately assess the impacts of the project because it does not consider future train lengths of 3.6 km (even though the draft EIS indicates that trains of this length are a very real possibility). Therefore, the true impacts of the project are not known, and the required mitigation measures have not been determined.</p> | |
| 4 | Draft EIS (in total) | <p>Lack of quantifiable commitment – the draft EIS does not meet the requirements of TOR 5.1 as it consistently fails to provide any specific detail regarding mitigation measures and proponent commitments. Rather, the document mostly either uses language which is open to interpretation, such as ‘mitigation measures will be adopted,’ which provides no specific detail. In addition, the document also provides commitments which are, for the main, like the ‘mitigation measures provided’ is mostly unmeasurable and lacking in any real provision to mitigate. The document consistently states that these matters will be decided during ‘detailed design’. Stating that these matters will be decided during ‘detailed design’ is not acceptable as this is effectively an avoidance of the OCG’s EIS assessment process and subsequent conditioning. Further, without any commitment by ARTC to mitigation measures in the draft EIS and by making this a part of detailed design means that the potential impacts of the project have not been adequately assessed and understood. If the mitigation measures have not been decided there is no way for the COG or the community to understand what is proposed and how effective any mitigation measures will be. Also, without any detail on mitigation measures in the draft EIS, the subsequent impacts cannot be assessed. For example, how will the acoustic, flooding, social and visual impacts of noise barriers be assessed if the height, style, materials, length, location etc will not be known until</p> | <p>In its current form, the draft EIS leaves the determination of what, how and when mitigation is required completely open to interpretation, and as a result, poses a very real risk of the project being inappropriately mitigated, conditioned, and regulated. The purpose of the COGs EIS process is to ensure the proponent has appropriately identified and committed to minimising impacts to ensure there will be <i>no significant residual impact</i> on the community or the environment. As such, the document should not state at any time that these decisions will be made during detailed design (i.e., <i>post approval</i>).</p> <p>As a result, the draft EIS is deficient and does not accurately assess the impacts or mitigation measures required for the project. By providing mitigation measures and commitments which are not measurable and quantifiable, the draft EIS fails to meet the requirements of the COG’s TOR. As such, the document requires update to provide appropriate mitigation measures and commitments.</p> <p>It is recommended that the proponent be required to revise the draft EIS to ensure that any commitment to provide mitigation includes definitive wording and is addressed and detailed and not simply deferred until detailed design. All mitigation measures and proponent commitments should be measurable and quantifiable. This should include the provision of specific details to allow the mitigation measure or commitment to be appropriately implemented, managed, and regulated. The draft EIS also</p> |

| | | | |
|--|--|--|---|
| | | <p>detailed design? Who will assess the adequacy of mitigation measures if these commitments are allowed to be delayed until detailed design?</p> <p>For example, on many occasions, the draft EIS provides wording such as (from Table 8.31): ‘the overall disturbance of construction areas has been <i>limited where possible</i>’ ... and... ‘intensive livestock operations, including feedlots and poultry farms, have been <i>avoided where possible</i>’. However, these are not definitive commitments and specific detail provided regarding exactly how these statements have been or will be achieved is missing from the document. ‘Where possible’ is not a commitment to mitigate.</p> <p>In short, ARTC’s draft EIS has failed to meet the TOR as it does not demonstrate a clear understanding of the potential impacts of the project or of the required mitigation measures. There is no way for the COG or community to know if the impacts of the H2C project will be acceptable. This is because fundamental elements of the environmental impact assessment process such as impact identification and management are absent from the draft EIS. This is alarming given the scale and nature of the project.</p> | <p>needs to consider how effective proposed mitigation measures will be and what impacts the mitigation measures themselves may have.</p> |
|--|--|--|---|

Executive Summary

| | | | |
|-----------------|---|--|---|
| <p>5</p> | <p>Executive Summary (Justification) (Assessment Approach) (Land Use and Tenure) (Economics)</p> <p>Chapter 2 (Project Rationale)</p> | <p>Perceived community benefits – the draft EIS makes broad, and often unsubstantiated claims regarding community benefits and yet manages to remain silent on benefits specific to the LVRC region and its community. For example, in the Executive Summary:</p> <ul style="list-style-type: none"> - The ‘Justification’ section states that the proposed project will ‘connect regional Australia to markets more effectively.’ - The ‘Assessment Approach’ section states that ‘opportunities to maximise the economic and social benefits of the project have been identified and include local employment, local industry participation, and opportunities for complementary investment with continued community benefits.’ | <p>That the draft EIS should be updated to acknowledge that there are no benefits for the local communities in the LVRC region. The draft EIS should remove all misleading references which allude to benefits that simply will not occur. All claims to local benefits in the LVRC region made in the draft EIS should be removed where they cannot be justified as they are factually incorrect and misleading.</p> |
|-----------------|---|--|---|

| | | | |
|---|---|---|---|
| | <p>Section 2.4.1.1 (Improved access to regional markets)</p> | <ul style="list-style-type: none"> - The 'Land Use and Tenure' section states that the project will 'result in a number of benefits to land use, including the support of future industries, improved access to and from regional markets'... and that the 'project will act as a catalyst for development in the area, including the Gatton West Industrial Zone (GWIZ)...' - The Economics section states that the proposed project 'may offer opportunities to support local agricultural industry by driving savings in freight costs, improving market access and redirecting the volume of freight vehicles on the regions road networks.' <p>Section 2.4.1.1 of the draft EIS further cites benefits from the proposed project such as 'improved linkages to regional areas for inter-capital freight' and 'agricultural areas and regions have improved access to key local and international markets...' Wording of this nature is repeated throughout the document.</p> <p>In the case of the Helidon to Calvert (H2C) draft EIS and its impact on the LVRC region, all of these statements are exceptionally misleading given that the proposed project is a <i>rail line which traverses the region and provides no tangible commitment or ability to provide any regional benefits</i> as the project will not provide facilities to stop and load/unload in the LVRC region. Local Growers have advised existing road links are preferred and rail transport will be slower, require triple handling, and place the quality of produce at risk.</p> | |
| 6 | <p>Executive Summary (Assessment Approach)</p> <p>Chapter 2 (Project Rationale)</p> <p>Section 2.6.2.1 (Options Identified)</p> | <p>Inappropriate alignment assessment – the Assessment Approach section of the Executive Summary states that Multi Criteria Analyses (MCA) were 'undertaken as part of the EIS and design development processes to refine the alignment <i>within the EIS investigation corridor</i> and consider refinements outside of the protected G2GFSDC, as well as optimise road-rail interfaces and interfaces with the existing WMSRC. The analysis included consideration of environmental and social impacts and construction efficiencies. The resulting project design and disturbance footprint was assessed in the EIS.'</p> <p><i>Inland Rail's Route History 2006 – 2020 Report</i> also notes that route selection was determined using MCA to address a range of issues including social and community impacts. Based on the findings of LVRC's review of the draft EIS, the MCA did not give sufficient weighting to the</p> | <p>The draft EIS requires update to include greater transparency on the route and alignment selection process and to ensure there is balance between social and amenity impacts on urban areas and impacts on other matters such as agricultural land, project costs for example. Given that the process used to 'identify' potential feasible alternatives to the proposed alignment was limited to a very narrow tract in the vicinity of this alignment, LVRC do not consider the alignment assessment, with its exceptionally narrow and pre-determined study area to be appropriate to safeguarding the communities in the region in a way which ensures that there is <i>no significant residual impact</i> because of the proposed rail alignment.</p> |

| | | | |
|--|---|---|---|
| | <p>Chapter 4 (Assessment Methodology)</p> | <p>impact on local affected communities of the Lockyer Valley as the social impacts to communities in the LVRC region from the proposed alignment will be severe.</p> <p>Given this, the process was not considered by the LVRC to be an appropriate method for identification of the alignment, particularly as the EIS investigation corridor was identified first, and then the MCA was conducted to refine the corridor. As stated in the draft EIS, this EIS investigation corridor was a pre-identified 'approximate 2 km wide study area, 1 km either side of the proposed rail alignment.' As a result, the proponent has considered only a very narrow area for the location of the proposed project, thereby denying the opportunity to identify potential feasible alternate alignments which may allow a more appropriate alignment with significantly less impact on the LVRC community to be identified. Given this, the draft EIS fails to meet the requirements of TOR 6.7 which states 'present feasible alternatives of the project's configuration...'</p> <p>Further, Section 2.6.2.1 cites the findings of the <i>Melbourne-Brisbane Inland Rail Alignment Study</i> (2010) were used to analyse route options. This 11-year-old study is not considered to be appropriate for such an analysis given the changes which have since occurred in the LVRC area (including housing developments which are significantly closer to the proposed alignment). The section goes on to state that two alternate alignment options from Moree to Brisbane, one a greenfield route through Warwick (which was dismissed due to cost) and '... a new alignment down the Toowoomba range ... then proposed to use the protected G2GFSDC from Gowrie through to Grandchester.' The document has clearly failed to consider any alternatives to the pre-determined alignment which either cuts townships in half or is located on the outskirts of townships (such as Laidley).</p> <p>Chapter 4 goes on to state that 'during the alignment selection process, MCAs and comparative cost estimates were used to assess the potential impacts associated with a range of alignment options for the project.'</p> <p>However, the Chapter fails to mention that the MCA process was limited to a pre-determined EIS investigation corridor, as stated in the Executive Summary, and as a result, a robust consideration of alternative alignments</p> | <p>To meet COG's TOR, LVRC strongly recommend the COG require the proponent to abandon the current alignment and to undertake further and more comprehensive and accurate assessments of alternate alignments that comply with the TOR to identify alignments that will adequately avoid, minimise and mitigate the potential project impacts.</p> <p>It also recommended that any further review of alternate alignments allow the active participation and inclusion of Council and other relevant parties who should not be limited to a role of 'observer'.</p> |
|--|---|---|---|

| | | | |
|---|---|--|--|
| | | has been completely dismissed. Critically the MCA was conducted in the absence of the EIS outputs and without meaningful community input given the absence of information on likely impacts of alternative options. | |
| 7 | <p>Executive Summary (Assessment Approach)</p> <p>Chapter 5, Section 5.5.1.1 (Community consultation commitments), Section 5.8 (Consultation Outcomes), Table 5.9</p> | <p>Ineffective community consultation – the Executive Summary (Assessment Approach) states that the MCA were ‘undertaken as part of the EIS and design development processes to refine the alignment within the EIS investigation corridor <i>and consider refinements outside of the protected Gowrie to Grandchester Future State Rail Corridor (G2GFSDC).</i>’ Section 5.5.1.1 states that community were ‘informed’ about the project and that ‘views were heard and addressed,’ yet there is no tangible evidence in the draft EIS that this occurred.</p> <p>Table 5.9 of Section 5.8 states that in 2018 the EIS team developed and tested options to bypass Gatton and Forest Hill, but these options were rejected due to community feedback and preference to stay in rail corridors. However, Section 5.8.1 goes on to state that the EIS project team was committed to assessing options to bypass Gatton and Forest Hill and to improve the alignment through Grandchester. Clearly these assessments were done with no understanding of the community impacts which have only recently been released in the EIS.</p> <p>During a recent presentation by ARTC to LVRC (12 May 2021), and in response to Council’s concerns regarding the proposed alignment, representatives of the proponent stated to Council that ‘they have been tasked to stay within the G2GFSDC’ and that they ‘aren’t allowed outside it’. A review of the draft EIS (including mapping) clearly indicates that this is not the case with many examples of the proposed alignment being located outside this corridor (especially in the G2H section). In addition to this, the proponent’s representatives also verbally stated incorrectly that Council ‘and others’ were involved in the MCA for route selection. The ARTC PowerPoint presentation on the day however, disagreed with this claim by stating that Council were ‘observers.’ LVRC would like to confirm this is correct and wish to make clear to the COG that Council ‘involvement’ in the MCA process was <i>not an opportunity the proponent extended to the LVRC</i>. Council was only invited to ‘observe’ this process, which effectively blocked Council from providing either input or feedback. This meant that there was no opportunity for LVRC to inform or provide</p> | <p>LVRC consider that community consultation has not meaningful or appropriately managed, and this has resulted in a lack of understanding by the proponent of the very real impacts of the project on the local community, poor alignment selection and a lack of any real commitment to minimise impacts to ensure that there will be <i>no significant residual impact</i> to the community as a result of the proposed alignment.</p> <p>To meet the COG’s TOR, LVRC strongly recommends the COG require the proponent to abandon the current alignment and to undertake further and more comprehensive and accurate assessments of alternate alignments that comply with the TOR to identify an alignment(s) that will adequately avoid, minimise and mitigate the potential project impacts. It also recommended that any further review of alternate alignments allow the active participation and inclusion of Council and other relevant parties who should not be limited to a role of ‘observer’.</p> |

| | | | |
|---|---|--|---|
| | | <p>any input to the alignment assessment process. No community engagement process was utilised that specified the relative merits and disbenefits of alternatives as this information was either not available at that time or was withheld.</p> <p>LVRC have repeatedly communicated alignment concerns to the proponent but these concerns have not been appropriately considered or addressed by the draft EIS. As a result, the document fails to meet the requirements of TOR 7.8 as it fails to describe <i>'how the responses from the community and agencies have been incorporated into the design and outcomes of the project.'</i></p> | |
| 8 | <p>Executive Summary (Community and Stakeholder Engagement)</p> <p>Chapter 5 (Stakeholder Engagement) Table 5.12</p> <p>Chapter 8 (Land Use and Tenure) Section 8.5 (Methodology) TOR 7.7 TOR 7.8 TOR 7.9</p> | <p>Lack of Consideration of Community Consultation – TOR 7.8 requires the draft EIS to <i>'describe the consultation that has taken place and how the responses from the community and agencies have been incorporated into the design and outcomes of the project.'</i> Further, TOR 7.9 requires the draft EIS to <i>'include, as an appendix, a public consultation report detailing how the public consultation plan was implemented, and the results of the implementation.'</i></p> <p>While the draft EIS makes broad, repetitive, and mostly unsubstantiated claims regarding community and stakeholder engagement, actual information provided by the document indicates that engagement was very high level and has not been converted into changes to the project which consider community concerns. The document fails to provide any specific detail regarding how consultation was <i>'incorporated into the design and outcomes of the project'</i> or the <i>'results of the implementation'</i>. Given this, the document has not met the requirements of TOR 7.8 or 7.9.</p> <p>Further to this, LVRC's experience and understanding of the consultation undertaken with the community was that information regarding project details and impacts were extremely limited, as the advice from the proponent was that this would be available in the draft EIS or detailed design. The technical studies in the draft EIS are clearly dated, suggesting that the proponent would have understood project impacts well in advance of the draft EIS being released. It is not a fair, equitable and meaningful consultation process to withhold details for several years and only release it in the draft EIS. The draft EIS is highly technical and</p> | <p>LVRC consider the lack of consideration of any community inputs by the proponent, and how these inputs may affect mitigation, to be a significant issue which should be discussed in the draft EIS. Until the release of the draft EIS there has been no opportunity for an informed community to understand the potential impacts of the project.</p> <p>Furthermore, LVRC's review of the draft EIS found that many impacts have either not been identified, dismissed or grossly underestimated and there is no detail regarding mitigation measures. Therefore, even with the draft EIS it is not possible for the community to understand the true impacts of the proposed alignment.</p> <p>To meet the COG's TOR, LVRC strongly recommend COG to require the proponent to abandon the current alignment and to undertake further and more comprehensive and accurate assessments of alternate alignments that comply with the TOR to identify an alignment that will adequately avoid, minimise and mitigate the potential project impacts.</p> <p>It also recommended that any further review of alternate alignments allow the active participation and inclusion of Council and other relevant parties who should not be limited to a role of <i>'observer'</i>. Further reviews must also consider and incorporate community concerns and feedback and this should be clearly demonstrated in any subsequent EIS.</p> |

| | | |
|--|--|--|
| | <p>cumbersome document that cannot be understood by the public in the timeframes allowed for comment on the EIS.</p> <p>The Community and Stakeholder Engagement section of the Executive Summary makes numerous claims relating to community consultation. Those that are of particular concern for LVRC (and remain unsubstantiated) include, but are not necessarily limited to:</p> <ul style="list-style-type: none"> - ‘Stakeholders and members of the community have helped to shape the scope of this EIS.’ - ‘Consultation allowed the project to: - Identify community values and local conditions in proximity to the project. - Appropriately assess potential impacts and identify key benefits of the project’s construction and operation. - Propose measures to minimise or avoid potential project impacts. - Recommend strategies to maximise or enhance potential project benefits.’ <p>These statements may only be general comments, as the document provides no detail to back up these claims, and the draft EIS provides no clear commitment for the inclusion of appropriate mitigation in response to community concerns. When reading certain parts of the draft EIS, the impression given is that the community does not have any concerns regarding the project, which is <i>not the case</i>.</p> <p>In the case of Table 5.12 (LVRC Consultation Outcomes), regarding impacts to populated communities, the table makes no real mention of any community concerns (with the exception of two very general statements, namely community concerns regarding the ‘removal of vegetation’ and the ‘creation of new infrastructure’). The table then refers to the visualisations provided in Chapter 10. The table is silent on providing a response to the multiple concerns the LVRC have communicated to the proponent throughout the consultation process on many occasions, including locating the alignment either on the outskirts or through the middle of townships.</p> <p>Section 8.5 clearly illustrates a clear lack of concern regarding community impacts, with the only reference relating to this to be a ‘review of landowner and community consultation to understand their feedback on</p> | |
|--|--|--|

| | | | |
|---|--|--|--|
| | | the potential impacts and issues associated with the project'. Note, this is not a commitment to consider any landholder or community concerns, just to 'review' and 'understand' their concerns. | |
| 9 | <p>Executive Summary (Project Description)</p> <p>Chapter 8 (Land use and tenure), Section 8.1 (Summary)</p> | <p>Not a preferred alignment - the 'preferred alignment' identified in the draft EIS fails to meet the requirements of the COG's TOR, as it does not appropriately consider the adverse impacts on LVRC's communities. As a result, LVRC do not consider this alignment to be a 'preferred alignment'. This is especially true given that the draft EIS only considers impacts from assessments which have only addressed initial train lengths and numbers, therefore failing to assess the true potential future impacts of the project. In particular, in relation to the proposed alignment, the draft EIS fails to meet TOR:</p> <ul style="list-style-type: none"> - 5.1 'the objectives of the EIS are to ensure that all relevant environment, social and economic impacts of the project are identified and assessed...' - 7.8 'the EIS should describe the consultation that has taken place and how the responses from the community and agencies have been incorporated into the design and outcomes of the project.' - 7.9 'include, as an appendix, a public consultation report detailing how the public consultation plan was implemented, and the results of the implementation.' <p>Given the proposed location of the alignment either through or on the outskirts of townships, the draft EIS also fails to meet the OCG's objectives for Land which states that the '<i>development should be designed and operated to:</i></p> <ul style="list-style-type: none"> (a) Improve environmental outcomes (b) Contribute to community wellbeing (c) Contribute to social, economic and environmental sustainability (d) Minimise impacts to the natural landscape and visual amenity.' <p>The Project Description overview provided in the Executive Summary cites that 50% of the current proposed alignment will run 'parallel' to existing Queensland Rail (QR) West Moreton System Rail Corridor (WMSRC) or use the Gowrie to Grandchester Future State Rail Corridor (G2GFSDC). The text then goes on to state that this decision has been made by the</p> | <p>The adverse and permanent impacts the proposed alignment will have on the townships of the Lockyer Valley region is completely unacceptable to LVRC. The selected alignment does not demonstrate any understanding or comprehension by the proponent of the severe and permanent adverse impacts to safety, lifestyle, wellbeing and function of these small urban communities. The social impacts from the proposed alignment are significant, and it is LVRC's position that this alone should be enough for the route selection process to be revisited by the proponent.</p> <p>To meet the COG's TOR, LVRC strongly recommend that the COG require the proponent to abandon the current alignment and to undertake further and more comprehensive and accurate assessments of alternate alignments that comply with the TOR to identify an alignment that will adequately avoid, minimise and mitigate the potential project impacts.</p> <p>The OCG should also require the proponent to include assessing areas which are <i>outside the EIS investigation corridor</i> (as previously mentioned).</p> |

| | | |
|--|---|--|
| | <p>proponent to 'minimise conflicts between local communities and the rail network,'. The draft EIS fails to describe how this can occur when the current proposal is to co-locate the alignment (including additional infrastructure such as crossing loops and crossovers) next to a rail corridor which already adversely impacts these communities. The proposed rail alignment will significantly and permanently increase the scale and nature of the adverse impacts already experienced by Lockyer Valley communities, and therefore will also significantly increase the 'conflicts between local communities and the rail network.' As such, the current proposed alignment cannot possibly be a positive outcome for the already adversely affected communities.</p> <p>The document fails to consider the significant increase in adverse impacts from this co-location as the significant increase in total corridor width (including additional infrastructure) is not adequately identified or described and will only further increase the already existing divide these communities currently experience. The adverse effects the proposed alignment will have on the community will be permanent and significant and should not be so easily dismissed by the proponent.</p> <p>The document states that the corridor width will be 40 – 62.5m wide however this figure is in addition to the existing corridor and does not include additional infrastructure (such as crossing loops and crossovers). As a result, the stated 40 – 62.5m wide is not considered to be an accurate representation of the total corridor width and may only be a minimum width.</p> <p>Section 8.1 states that the project 'traverses through, or near to, several townships including...' in the Lockyer Valley...'Helidon, Grantham, Placid Hills, Gatton, Forest Hill, Laidley.' This is six of the nine urban areas (i.e., towns or villages) in the LVRC region and is not acceptable to Council. Further, there is no real justification provided for why the proposed alignment should permanently and adversely impact so many of the urban areas in the LVRC region (other than cost saving, which is not considered by LVRC to be an appropriate reason to adversely impact the region in such manner). The document also repeatedly alludes to the community</p> | |
|--|---|--|

| | | | |
|---------------------------------|---|---|---|
| | | preferring the current alignment, although this remains unsubstantiated and is misleading at best. | |
| Chapter 1 – Introduction | | | |
| 10 | Scope TORS 10.9 | <p>Passenger rail and route selection concerns</p> <p>As pointed out in Council’s Submission to the Senate Inquiry, Lockyer Valley Regional Council has been advocating for improved public transport for many years. This has included seeking the introduction of passenger rail. Such services would be of substantial benefit to the broader region and the transport network in SEQ.</p> <p>On the basis of future passenger rail Council has been supportive of the protection of the Gowrie to Grandchester Rail Corridor that was planned by the State Government in 2002/03. The associated Study at that time envisaged both freight and passenger services.</p> <p>A fundamental flaw in the route planning for Inland Rail has been the requirement for ARTC to utilise the Gowrie to Grandchester alignment- for an Inland Rail that is categorically a freight only railway. It is understood that ARTC have been required by the State Government to make provision for future passenger rail, but passenger rail is not ARTC’s core business and passenger rail services are specifically excluded from the EIS. (Executive summary page 8)</p> <p>It should be noted that the alignment proposed in the current reference design <u>does</u> extend outside the Gowrie to Grandchester alignment in both Gowrie to Helidon (G2H) and H2C sections. Accordingly, this lends weight to the argument for the dual gauge Inland rail alignments to bypass Gatton and Forest Hill with any future passenger rail able to utilise the existing alignment through the towns.</p> | Recommend that the COG ask proponent to demonstrate how future passenger rail has been appropriately catered for and what capacity passenger trains can be accommodated on the rail corridor. |
| 11 | Chapter 1 Section 1.2 (Proponent) | <p>Environmental record - Section 1.2 notes that the proponent has incurred penalties for the discharge of sediment-laden water and sediment and erosion issues in NSW.</p> <p>The section goes on to further state that the proponent has previously entered into a Voluntary Enforceable Undertaking with the Department of</p> | In light of the proponent’s pre-existing environmental penalties, the draft EIS should be updated to, at an absolute minimum, communicate clearly how the proponent intends to ensure that the proposed project will be constructed and operated to minimise environmental impacts. |

| | | | |
|----|---|---|---|
| | | <p>Sustainability, Environment, Water, Population and Communities (now the Department of Agriculture, Water and the Environment (DAWE)) under the EPBC Act in 2011.</p> <p>The fact that the proponent has incurred penalties in the past as a result of adverse impacts to the environment from their activities is concerning for LVRC, particularly when combined with the lack of detailed mitigation measures and/or commitments in the draft EIS.</p> | <p>Presently, most mitigation measures are of limited detail as the proponent proposes to address impact mitigation during detailed design.</p> <p>The draft EIS should also include detail regarding the Voluntary Enforceable Undertaking.</p> |
| 12 | <p>Chapter 1 Section 1.3 (The Project) Section 1.5 (EIS Objectives)</p> <p>Chapter 6 (Project Description) Section 6.3 (Project Objectives)</p> | <p>TOR Objectives not met – TOR 5.1 states that ‘the objectives of the EIS are to ensure that <i>all relevant environmental, social and economic impacts of the project are identified and assessed, and to recommend mitigation measures to avoid or minimise adverse impacts. The EIS should demonstrate that the project is based on sound environmental principles and practices.</i>’</p> <p>The draft EIS provides numerous ‘objectives’ including Section 1.3, which states that the objectives of the project are to:</p> <ul style="list-style-type: none"> - ‘Provide rail infrastructure that meets the Inland Rail Specifications, to enable trains using the Inland Rail corridor to travel between Helidon and Calvert, connecting with other sections of Inland Rail to the east and west - Minimise the potential for adverse environmental and social impacts.’ <p>Section 1.3 also provides ‘Inland Rail Objectives’, none of which align with the requirements of the COG’s TOR as they completely fail to mention any minimisation of adverse impacts. Section 1.5 provides further detail, citing further objectives of the draft EIS including:</p> <ul style="list-style-type: none"> - ‘Provide information to stakeholders and the public on the need for the project, alternatives to the project and proposed construction methods. - Document the potential impacts to the natural, social and economic environment. - Describe the expected benefits and opportunities associated with the project. - Demonstrate how adverse impacts can be avoided, mitigated and managed...’ <p>Interestingly, Section 6.3 provides a further list of different objectives for both the project and Inland Rail. Again, those stated for Inland Rail fail to</p> | <p>The draft EIS requires update to appropriately consider the requirements of TOR 5.1 and the proponent’s own stated ‘EIS objectives.’ This should include, but should certainly not be limited to:</p> <ul style="list-style-type: none"> - The re-assessment of the adverse impacts the project to appropriately consider 3.6 km long trains and the significant increase in numbers. - The integration of community concerns regarding the current proposed alignment. - The identification and commitment to an appropriate alternative alignment which is away from all LVRC towns and strikes a fair balance between impacts to all matters of concern. |

| | | | |
|----|--|--|---|
| | | <p>mention the consideration of any environmental, social or economic impacts. The closest the text comes is to state that Inland Rail will 'act as an enabler for regional economic development along the Inland Rail corridor.' This statement does not however apply to the LVRC region as the project will not provide any tangible or real opportunities or benefits.</p> <p>The EIS objectives quoted above at Section 1.5 appear to be in line with the requirements of TOR 5.1, however, the document has failed to meet the requirements of this TOR as these objectives have not translated to real, appropriate and effective impact assessments, or the development of appropriate mitigation and/or commitments. As such, the draft EIS has not met the requirements of TOR 5.1 because it has not:</p> <ul style="list-style-type: none"> - Identified and assessed all relevant impacts; nor - Detailed mitigation measures to avoid or minimise impacts of the project. | |
| 13 | <p>Chapter 1 Table 1.2 (Key Features)</p> <p>Chapter 6 (Project Description)</p> | <p>Missing construction footprint – TOR 5.3 states 'the detail at which the EIS deals with matters relevant to the project should be <i>proportional to the scale of the impacts on environmental values...</i>'</p> <p>The draft EIS fails to meet the requirements of TOR 5.3 as it is silent on the subject of the proposed project's total construction footprint. Further, the operational footprint has been provided as a total area (488.4 ha) without defining any of the elements used to identify how the operational footprint was calculated. Instead, the draft EIS merely provides an arbitrary number with no data which will enable the reader to identify how the proponent arrived at the quoted figure. As a result, both construction and operational footprint data have not been appropriately addressed.</p> <p>Further, Table 1.2 states that the rail corridor 'is expected to comprise a width of 40 m to 62.5 m and extending wider where earthworks, structures and other associated infrastructure are required...' the table provides some detail regarding footprint areas, however it consistently fails to provide many of the maximum impact areas and is silent on an actual total anticipated project construction footprint. The table also remains silent on the footprint size of crossing loops and other infrastructure currently proposed to be located in townships (namely</p> | <p>The lack of provision of a maximum construction footprint size combined with the lack of information surrounding the details which determined the stated operational footprint size raises concerns regarding the actual impact the proposed project will have on the surrounding environment.</p> <p>It is recommended that the COG require the EIS to be amended to meet the requirements of TOR 5.3 by providing the appropriate level of detail regarding construction and operation footprint sizes and to appropriately describe and illustrate the regional and local context of the project's footprint (as required by TOR 10.1(f)). This should include the provision of the proposed width of all infrastructure, and the total proposed width of the corridor (including this infrastructure).</p> <p>It is further recommended that all technical studies be updated to ensure that the proposed project footprint (including temporary and permanent footprint areas) has been accurately assessed as it is not possible for the regional and local context of the project's footprint to be determined if actual footprint areas (including maximum sizes) are not provided in the draft EIS.</p> |

| | | | |
|--------------------------------------|---|--|--|
| | | <p>Helidon, Gatton, Laidley and Calvert), simply stating that this infrastructure will be a 'minimum of 2,200 m (or 2.2 km) in length'. There is no mention of the total width of the corridor the proponent intends to construct either through, or on the outskirts of townships.</p> <p>Chapter 6 also remains mostly silent on the matter, with Figure 6.4 the only indication provided of the potential footprint, showing the location of the 'project footprint' (note, whether this is construction or operation is not stated), before referring the reader to Volume 3: Drawings (an appendix). TOR 10.1 requires Chapter 6 to '...describe and illustrate at least the following specific information... (f) regional and local context of the project's footprint...' however as the document remains mostly silent on the matter, the draft EIS fails to meet the requirements of TOR 10.1(f) and TOR 12.2, which requires the document to include such information in the main body of the text.</p> | |
| Chapter 2 – Project Rationale | | | |
| 14 | Chapter 2 TOR 11.73 | <p>Ill-considered alignment – Both the <i>Melbourne – Brisbane Inland Rail Alignment Study (July 2010)</i> and Chapter 2 of the draft EIS state that the co-location of the project alignment within the existing rail corridor has been designed to minimise conflicts between local communities and the rail network, minimise visual intrusion in the area and allow coordination of service lines with existing rail networks. One of the objectives of the project design is to 'minimise the potential for adverse environmental and social impacts.' The significant increase in both the volume and size of trains as well as the considerably elevated embankments, noise barriers etc associated with the line through small urban precincts such as Gatton and Forest Hill will not achieve these design intents.</p> | <p>The current proposed alignment is unacceptable to LVRC. Given the lack of a robust assessment for alignment options, LVRC request the COG require the proponent to appropriately consider alternate alignments which are located outside the vicinity of local townships.</p> <p>To meet the OCG's TOR, LVRC strongly recommend the COG to require the proponent to abandon the current alignment and to undertake further and more comprehensive and accurate assessments of alternate alignments that comply with the TOR to identify an alignment that will adequately avoid, minimise and mitigate the potential project impacts.</p> |
| 15 | Chapter 2, Section 2.7.3.2 (Gatton), Figure 2.4 TOR 11.73 | <p>Gatton Alignment Options - Section 2.7.3.2 states that the decision to co-locate the proposed alignment beside the existing WMSRC, thereby further and significantly increasing the already sterilised land which currently divides Gatton in two, was made despite the fact that the document acknowledges that 'concerns over potential traffic impacts at level crossings and noise, air quality and amenity issues associated with</p> | <p>The current proposed alignment is unacceptable to LVRC. Given the lack of a robust assessment for alignment options, LVRC request the COG require the proponent to appropriately consider alternate alignments which are located outside the vicinity of local townships.</p> |

| | | |
|--|---|--|
| | <p>the operation of the railway were raised during community and stakeholder engagement.’</p> <p>The section goes on to discuss three alternative options (shown on Figure 2.4), some of which had the potential to minimise the current proposed adverse and substantial impacts to Gatton township. However, it is impossible to determine whether these alternatives were appropriately considered by the proponent before being dismissed. Further, as previously stated, the analysis of the alignment in a narrow and pre-determined study area is not considered to be an appropriate consideration of alignment options.</p> <p>From the draft EIS, reasons for the dismissal of the stated alternative options were:</p> <ul style="list-style-type: none"> - Option 1 – to the north of the township between the existing WMSRC and the Warrego Highway ‘results in unnecessary severance to community properties’ and ultimately discounted ‘mainly due to cost’. - Option 2 – further north than Option 1, further away from Gatton and close to the Warrego Highway, was considered to determine whether a ‘reduced cost differential could be achieved...’ but the option crosses ‘major floodplains and is undesirable considering the possible environmental impacts.’ - Option 3 – follows the preferred alignment but considers an elevated rail bridge through Gatton. This was dismissed as it was considered to ‘...cause significant potential disruption to the local community during construction and operation without adding addition value to the alignment option.’ <p>Given the inadequate identification of alternate alignments (having been limited to a pre-determined narrow corridor), the draft EIS fails to meet the OCG’s objectives for Land which states that the ‘<i>development should be designed and operated to:</i></p> <ul style="list-style-type: none"> (e) Improve environmental outcomes (f) Contribute to community wellbeing (g) Contribute to social, economic and environmental sustainability (h) Minimise impacts to the natural landscape and visual amenity.’ <p>LVRC provide the following in regard to the stated options:</p> | <p>To meet the COG’s TOR, LVRC strongly recommend the COG require the proponent to abandon the current alignment at Gatton and to undertake further and more comprehensive and accurate assessments of alternate alignments that comply with the TOR to identify an alignment that will adequately avoid, minimise and mitigate the potential project impacts. Further it is recommended that meaningful community engagement on alignment options be undertaken with an engagement plan endorsed by LVRC to ensure a representative response and a preferred alignment is identified.</p> |
|--|---|--|

| | | | |
|----|--|--|--|
| | | <ul style="list-style-type: none"> - Option 1 – the claim that this option should be dismissed as it ‘results in unnecessary severance to community properties’ is not considered to be a robust enough reason to dismiss this option given that this option may be amended to limit property severance, and that the ‘preferred’ alignment will sterilise one side of Gatton from the other. - Option 2 – the claim that the proponent considers the crossing of major floodplains to be undesirable is dismissed by LVRC given that the proponent has no issue, and in fact has been very insistent upon, crossing the Condamine Floodplain in the Border to Gowrie (B2G) section of Inland Rail. Further to this, scrutiny of flood mapping provided in the draft H2C EIS reveals that most of the preferred alignment is also located entirely in areas which experience flooding. - Option 3 – given that Council do not accept the proposed alignment in its current form, simply raising the alignment, which may also result in a substantial increase to adverse impacts to these townships, is also not considered an appropriate option by LVRC. <p>Chapter 2 Section 2.7.3.2 simply concludes that the proposed alignment through Gatton was selected because it will require less earthworks, less structures, and less impact to agricultural land. It seems that despite the community concerns about the proposed alignment which are clearly documented in the draft EIS, the proposed alignment was selected because it will be the cheapest to build. There appeared to be no consideration of the community concerns or impacts associated with the proposed alignment.</p> | |
| 16 | Chapter 2 Section 2.7.3.3 (Forest Hill) and Figure 2.5 TOR 11.73 | <p>Forest Hill Alignment Options – As previously stated, the analysis of the alignment in a narrow and pre-determined study area is not considered to be an appropriate consideration of alignment options. Section 2.7.3.3 states that the ‘early alignment option’ runs straight through the town of Forest Hill (Figure 2.5). Two alternatives were developed to ‘determine the feasibility of bypassing the town... or elevating the track as it runs parallel to the existing QR WMRSC through Forest Hill.’ From the document:</p> <ul style="list-style-type: none"> - Option 1 – located on the outskirts of the township (to the north-west) was dismissed due to ‘an increase in required earthworks and | <p>The current proposed alignment through Forest Hill is unacceptable to LVRC. Given the lack of a robust assessment for alignment options, LVRC request the COG require the proponent to appropriately consider alternate alignments which are located outside the township.</p> <p>To meet the COG’s TOR, LVRC strongly recommend and urge the COG to require the proponent to abandon the current alignment at Forest Hill and to undertake further and more comprehensive and accurate assessments of alternate alignments that comply with the TOR to</p> |

| | | | |
|--|--|---|---|
| | | <p>potential significant impact to farming and cropping land as it will sever a number of existing fields.’ The text goes on to state that this option was ‘presented at a community engagement session with feedback showing that the alignment was not preferred due to the impact on farming land.’</p> <ul style="list-style-type: none"> - Option 2 – considered the construction of an elevated track as per Gatton’s Option 3 and citing increased costs for the proponent and increased environmental and social impacts. <p>Given the inadequate identification of alternate alignments (having been limited to a pre-determined narrow corridor), the draft EIS fails to meet the OCG’s objectives for Land which states that the <i>‘development should be designed and operated to:</i></p> <ul style="list-style-type: none"> (i) Improve environmental outcomes (j) Contribute to community wellbeing (k) Contribute to social, economic and environmental sustainability (l) Minimise impacts to the natural landscape and visual amenity.’ <p>LVRC provide the following response to these options:</p> <ul style="list-style-type: none"> - Option 1 – should be seriously considered rather than dismissed given that this option may be amended to limit severance of properties, and that the preferred alignment completely sterilises one side of Forest Hill from the other. - Further, the text states that this option was only discussed at one community engagement session. This is not considered effective or robust consultation as this was discussed on one night with few community members present. There is also no detailed information provided regarding whether the community was made aware of the sheer scale and nature of the proposed alignment at the time. Clearly the findings of the EIS were not available. LVRC’s experience is that the proponent has provided limited detail to this point on impacts, instead preferring to wait for the release of the draft EIS or indicating that would be dealt with in detailed design. - Option 2 – given that Council do not accept the proposed alignment in its current form, simply raising the alignment as it passes through town is not considered an appropriate option as there is no proof that | <p>identify an alignment that will adequately avoid, minimise and mitigate the potential project impacts.</p> |
|--|--|---|---|

| | | | |
|----|--|---|--|
| | | doing so will effectively decrease adverse impacts and may very well increase them in a significant and permanent way. | |
| 17 | <p>Chapter 2 Section 2.3 (Justification) Section 2.4.1.1 (Improved Access to and from Regional Markets)</p> <p>Chapter 8 (Land Use and Tenure) Section 8.1 (Summary) Section 8.7.5 (Opportunities to support future industry development)</p> <p>Chapter 17 TOR 11.153</p> | <p>No Local Benefits –TOR 5.1 states that ‘the objectives of the EIS are to ensure that <i>all relevant</i> environmental, social and economic impacts of the project are identified and assessed...’</p> <p>Section 2.3 of the draft EIS is thorough in its provision of <i>perceived benefits for capital cities</i> but makes <i>no mention</i> of local benefits for the LVRC region. As previously discussed, given that the draft EIS fails to identify any benefits for the LVRC region, it is considered accurate to state that the document fails to meet the requirements of TOR 5.1 in that it fails to discuss all <i>relevant</i> environmental, social and economic impacts.</p> <p>Benefits to capital cities are not considered to be relevant to the LVRC region.</p> <p>Further, TOR 7.6 states that the draft EIS should ‘describe the expected benefits and opportunities associated with the project.’ Section 2.4.1.1 provides detail relating to benefits for ‘some regional markets’ including:</p> <ul style="list-style-type: none"> - Improved linkages. - Improved mine accessibility. - Improved access to key local and international markets. - Improved drought resilience. - Improved ability to move greater volumes of grain via rail. <p>However, none of these presumed benefits will be available to the LVRC region as the proposed project is simply traversing the region. There will be no opportunity for any of these proposed ‘improvements’ to occur, rather, the effect the project currently proposes for the LVRC region is a significant and permanent adverse impact. As such, the draft EIS also fails to meet the requirements of TOR 7.6 as there are no expected benefits and opportunities for LVRC because of the proposed project.</p> <p>Section 8.1 also claims a ‘potential for beneficial impacts, including supporting future industries, improving access to and from regional markets and acting as a catalyst for development in the region.’ The section goes on to further state that ‘where impacts cannot be avoided, the extent of impacts will be carefully managed through the implementation of mitigation measures.’</p> | <p>The draft EIS should be updated to meet the requirements of TOR 5.1 and 7.6 and to accurately and appropriately consider how the project could provide any real or tangible opportunities and benefits to the local communities and industries of the LVRC region. LVRC consider the current claims made by the draft EIS to be factually incorrect and misleading.</p> |

| | | | |
|---|--------------------------------------|--|--|
| | | Section 8.7.5 repeats Inland Rail’s benefits for the more built-up areas along the east coast, particularly capital cities. It then goes on to again claim that it will ‘act as an enabler for regional economic development along the Inland Rail corridor’, and then further claims that it ‘... <i>may</i> support future industries, such as the GWIZ project at Gatton’ ... and will ‘likely be a catalyst for the construction of industrial uses and development in the GWIZ (among other areas).’ The section remains silent on how this would happen given there will be no opportunity for any industry at Gatton (or anywhere else in the LVRC region) to access the railway locally. | |
| Chapter 3 Project Approvals | | | |
| 18 | TOR 11.69 | Transport Infrastructure Act – refer to S260 (c) It is understood recent court proceedings have helped to clarify the responsibilities of railway manger with respect to ‘neighbouring land’. For example, the legislation provides that sufficient works must be carried out to ensure neighbouring lands’ drainage is as good, or nearly as good, as it was before construction of the railway. | It is recommended that the COG require new rail corridor land to mitigate neighbouring land impacts . This is in light of recent court proceedings that found for railways the TIA term of ‘neighbouring’ to be “lands lying near”. |
| 19 | Chapter 3 TOR 9.7 | The approvals listed do not make it clear what approvals the proponents will require from local government. | That the proponent be required to provide details of all anticipated local government approvals and clarify the approving authority(s) for development such as concrete batching plants. |
| Chapter 5 – Stakeholder Engagement | | | |
| 20 | Chapter 5 TOR 11.69 TOR 11.146 | LVRC concerns over consultation at critical times. Concerns have been raised about the level of meaningful community engagement that has been achieved throughout the Lockyer Valley. At an ARTC officer level there have been strong efforts made and there is responsiveness and genuine concern for impacted communities. However, it appears that the community engagement at a strategic level for the project has not been successful. There has been a lack of information available at key times leading to poor community | That the COG require the MCA to be reviewed in light of the findings of the EIS and of revised costings to better reflect community views on alignment. Recommend that the proponent be required in future EIS work to genuinely engage the community with appropriate information provided to community prior to decision making. Further it is recommended that meaningful community engagement on alignment options be undertaken with an engagement plan endorsed by |

| | | | |
|----|---|---|--|
| | | <p>engagement outcomes. This has been acknowledged by the CEO of ARTC Inland Rail.</p> <p>A further concern to Council has been the application of the Multi Criteria Analysis (MCA) by ARTC during concept design. As discussed above, it is understood this tool is used by ARTC to assist in selecting preferred alignments out of a number of alternative concepts. The tool is used to try and quantify options based on a range of criteria with assigned weightings. It is understood criteria utilised include technical viability, safety, operations, constructability, environment and community impacts. Concern is raised that respective weightings appeared to heavily emphasise technical aspects with a corresponding small weighting to community impacts. Clearly the MCA is not informed by the EIS (which has only now been drafted). Further, there was no community input to these processes although it is understood some community engagement session results were used as a proxy for community impact. While some limited prior community engagement had been undertaken on the alternative options this was far from representative. Accordingly, the utility of such input and of the MCA process is questioned</p> | <p>LVRC to ensure a representative response and a preferred alignment is identified.</p> |
| 21 | <p>Chapter 5 Section 5.4 (Method)</p> <p>TOR 11.69 TOR 11.146</p> | <p>Two-way conversations – Section 5.4 establishes a commitment for ‘two-way conversations’ but it is unclear how such conversations have resulted in appropriate consultation occurring. Two-way conversations may only lead to appropriate stakeholder consultation if there are real and appropriate changes made to the proposed project as a result of such engagement. If such conversations were effective for the proponent, then the result should have been the re-alignment of the project well away from all LVRC townships. However, this has not happened. The draft EIS is silent on making any real commitment to appropriately mitigate the adverse community impacts the LVRC region will experience as a result of the current alignment. As a result, the draft EIS fails to meet the requirements of TOR 7.8 as it fails to describe <i>‘how the responses from the community and agencies have been incorporated into the design and outcomes of the project.’</i></p> | <p>There is no evidence of effective consultation for the project and how community concerns have been considered and incorporated by the proponent.</p> <p>The alignment requires appropriate reconsideration and the draft EIS requires updating to meet the requirements of the OCG’s TOR 7.8. It is recommended that the OCG require the proponent identify and assess a more appropriate alignment for the project that includes appropriate mitigation measures to prevent <i>significant residual impacts</i> on the receiving environment, businesses and communities.</p> |
| 22 | <p>Chapter 5 Table 5.14</p> | <p>Noise and vibration – Table 5.14 states that for rail alignment noise in Gatton and Forest Hill ‘reasonable and practicable (or feasible) measures</p> | <p>The draft EIS requires update to appropriately consider ultimate train length and number and the World Health Organisation (WHO) (2018)</p> |

| | | | |
|--|--|--|--|
| | | were 'outlined'... and cites 'a key component in reducing potential noise impacts is expected to be at-property controls such as architectural property treatments and upgrades to property fencing.' However, the text provides no clear commitment to provide real mitigation for impacted properties. In fact, the noise and vibration assessment has failed to appropriately identify the <i>thousands</i> of properties which will be adversely and permanently impacted by rail noise emissions the current proposed alignment (even at the initial proposed train length and numbers). For properties which will be affected but have failed to be identified in the draft EIS as adversely impacted by noise and vibration, the cost of the stated proposed 'architectural treatments' and property fencing 'upgrades' to help mitigate the constant and intrusive noise from the project will be at the property owners cost. This is unacceptable to LVRC. | noise levels for sleep disturbance by rail which is stipulated in <i>Environmental Noise Guidelines for the European Region</i> . This is to ensure the accurate assessment of impacts to sleep from rail noise and the appropriate regulatory conditioning of the project, so the burden of mitigation is on the proponent, and not adversely affected residences. (See comments on Ch 15 below). |
| Chapter 6 – Project Description | | | |
| 23 | Chapter 6 | General chapter outline: There is no assessment as to this Chapters compliance with the TOR document. | Amend the draft EIS to include a table demonstrating how this chapter complies with the TOR 10.0 and associated TOR items. |
| 24 | | Operational impacts: TOR 10.1 requires the draft EIS to provide a project description. | Amend the EIS so that the operational aspects of the project are captured in the relevant sections, so these impacts are then able to be considered by the reader when reviewing the remainder of the chapter. For example, the project description should draw the operation of the inland rail and the direct impacts together i.e. maximum number of trains travelling through townships including the maximum noise and speed. |
| 25 | Chapter 6 Section 6.2.1 (Capacity for Future Passenger Rail Services) | Future Passenger Rail – TOR 10.9 requires the draft EIS 'describe the ability and capacity of the proposed rail corridor to support future passenger rail services between Brisbane and Toowoomba.' Section 6.2.1 states that 'the alignment does not preclude either the duplication of the Inland Rail freight line and/or passenger lines' but fails to provide any further information. In its current form, this statement is | In accordance with the TORs - That the EIS demonstrate how the design will enable future passenger rail services between Brisbane and Toowoomba. |

| | | | |
|----|---|---|---|
| | TOR 10.9 | <p>vague at best and does not include any of the detail required by TOR 10.9. The draft EIS explicitly describes the project as being for freight purposes and provides no detail regarding future passenger train opportunities. There is one reference at 20-27 which states “The rail alignment and overbridges may also provide a route for passenger trains of up to 72 passengers”.</p> <p>This seemingly would limit the use of the corridor to passenger trains carrying 72 people. Clearly that is inadequate in terms of capacity for a passenger train and would prevent use of the corridor for any meaningful passenger rail option.</p> | |
| 26 | Chapter 6 Section 6.2.4 (Anticipated Timing) | <p>Commencement of construction prior to assessment completion and project approval – Section 6.2.4 states that ‘a number of factors could potentially impact the project and delay the start of construction to 2022, such as successful procurement of contractor’. The section remains silent regarding issues such as regulatory requirements post public notification of the draft EIS, or the fact that the current Inland Flood Study findings will not be released prior to the end of 2021. Rather, the timing for the start of construction suggests that it will commence regardless of whether or not all impact assessments have been completed to the satisfaction of the assessment agencies. This is a misrepresentation of the requirements of the COG’s EIS process. Further, it assumes there will be no issues with the proposed alignment and fails to consider the proposed significant and permanent impacts on the local LVRC region and its communities.</p> <p>In addition to this, the proposed timing indicates that the proponent is assuming that the draft EIS, which is considered inadequate by LVRC, will be approved in its current form.</p> <p>The risks of going to the market with the RFP process prior to consideration by the COG was pointed out to ARTC on numerous occasions over the last 2 years. The decision to proceed to RFP was taken by ARTC and should not frustrate LVRC’s request regarding a change to alignment. Delay to the project and the potential need for a supplementary EIS was raised with ARTC and should have been factored into their decision. No doubt ARTC will adopt a stance of ‘no delay’ but delay should be considered in light of impacts to communities- that will be felt for a century.</p> | <p>The draft EIS requires updating to provide an appropriate and realistic project timeframe to adequately meet the requirements of TOR 10.1(k). This should include, but not be limited to, consideration of the following:</p> <ul style="list-style-type: none"> - The appropriate consideration and incorporation of the findings of the Flood Panel review. - The timeframes for approval of the draft EIS (assuming the OCG allow the approvals process to proceed based on the current standard of the draft EIS). - Any supplementary EIS requirement. - The timing required for ancillary approvals. - Any further studies or updates to existing studies required to accurately assess the actual and potential impacts of the proposed project. - The development of appropriate mitigation measures (currently missing from the draft EIS). - The development of commitments which are appropriate to the scale and impact of the proposed project in order to ensure there is <i>no significant residual impact</i> for either the LVRC communities or environment. |

| | | | |
|----|--|--|--|
| | | <p>The draft EIS was issued for public consultation on 31 March 2021 with responses due by 23 June 2021. In relation to the required Inland Flood Study, the OCG's website states that the 'findings of the Expert Panel Inland Flood Study Group will be finalised by the end of 2021'. The draft EIS further suggests that construction will commencing in Q4 2021, prior to the finalisation of the Study Group findings.</p> <p>The draft EIS does not address how construction is expected to commence when the Flood Study findings have not been finalised, considered or incorporated into proposed project activities. Further, the timeline provided in the draft EIS is considered by LVRC to be unrealistic at best as given the time which will be required to appropriately address draft EIS submissions, complete any further investigations and reviews required, gain subsequent regulatory approvals, finalise design in accordance with those approvals etc.</p> <p>Given this, the draft EIS does not adequately described the proposed timing of the works, thereby not meeting the requirements of TOR 10.1(k).</p> | |
| 27 | <p>Section 6.7 (project location and land use)</p> <p>TOR 11.114</p> | <p>Shared cycle path construction: TOR 10.11 (q) requires the draft EIS to provide information about proposed upgrades to other infrastructure.</p> <p>The proponent states in sections that the project design includes space for a 'future' shared cycle path between Placid Hills and Laidley, with a 'dedicated' shared path incorporated from Lockyer Creek to Forest Hill which runs parallel to the corridor. The proponent does not state if it will be constructing the 'future' or 'dedicated' shared path, and neither is it implicit from the design drawings if this is to be the case.</p> <p>See also Ch 19 comments below.</p> | <p>It is recommended that the proponent be required to develop the detailed planning for the shared pathway between Lockyer Creek at Gatton to Forest Hill generally parallel to the corridor and including appropriate connections to the University of Queensland campus.</p> <p>Given the impacts to LV communities the proponent should specify what proportion (up to 100%) of the cycleway they will deliver as part of the project.</p> |
| 28 | <p>Section 6.8 (description of the project)</p> | <p>The Draft EIS focuses heavily on the construction impacts of the project, including in section 6.2 & section 6.8, however this section(s) and indeed this chapter does not outline the operational impacts of the project (ie. 47 train services @ 1,800m long – potentially up to 3,600m long - per day in 2040) until section 6.12.</p> | <p>That the EIS be amended so that the operational aspects of the project are captured in the relevant sections, so these impacts are then able to be considered by the reader when reviewing the remainder of the chapter.</p> |

| | | | |
|----|---|---|--|
| 29 | Chapter 6 Section 6.8.1 (Design Criteria) Section 6.12.2 (Train Operations) | <p>Impacts to townships – Section 6.8.1 specifies that the design criteria for the line is to cater for an initial train length of 1.8 km and a maximum train length of 3.6 km, double stacked (i.e., 7.1 m above rail height). Section 6.12.2 (states that it is anticipated that an average of 33 trains per day will travel through the Lockyer Valley, including urban communities such as Gatton and Forest Hill, commencing in 2026. This will increase to an average of 47 services per day in 2040.</p> <p>Up to 47 double-stacked trains at 3.6 km long through urban areas such as Gatton and Forest Hill will have a significant impact on the environmental, social and amenity values of these small urban precincts.</p> | <p>The draft EIS requires update to include further detailed investigation into the adverse social and amenity impacts of the proposed alignment on urban areas such as Gatton and Forest Hill. In addition, greater transparency on the route and alignment selection process is required to ensure the balance between social and amenity impacts on urban areas and impacts on agricultural land has been achieved.</p> <p>LVRC do not consider the alignment assessment, with its narrow and pre-determined study area to be appropriate to safeguarding the communities in the region in a way which ensures that there is <i>no significant residual impact</i> as a result of the proposed alignment. Particularly given the (unassessed) significant increase in train size and frequency.</p> <p>To meet the COG TOR, LVRC strongly recommend that COG require the proponent to abandon the current alignment and to undertake further and more comprehensive and accurate assessments of alternate alignments that comply with the TOR to identify an alignment that will adequately avoid, minimise and mitigate the potential project impacts. That the COG require the proponent to include assessing areas which are <i>outside the pre-determined EIS investigation corridor</i> (as previously mentioned).</p> |
| 30 | Section 6.8.2 (summary of key components) | <p>Gatton station foot bridge: TOR 10.11 (q) requires the draft EIS to provide information about proposed upgrades to other infrastructure. The proponent states in sections that the existing pedestrian foot bridge at Gatton station is to be replaced.</p> | <p>Council recommends that the COG require safe and secure pedestrian and cycling access across the alignment to be provided. This may be by under or overpass and should be done in conjunction with the local area planning required at detailed design.</p> |
| 31 | | <p>Water treatment plants and concrete batching plants: TOR 9.5 requires the draft EIS to identify the approvals to enable the project to be constructed and operated. The proponent states that the project will require environmentally relevant activities including the potential establishment of water treatment plant and concrete batching facilities however provides no details on what further approvals (if any) are required for these facilities.</p> | <p>The proponent should clearly outline if further approvals are required to operate the concrete batching plants and/ or water treatment plant/s. Despite the proponent identifying potential locations for concrete batching plants the future approval regime for such development should be specified in the EIS. Early engagement with Council for any further required development approvals is required. This is required whether or not the concrete batching plants and/ or water treatment plant/s will only be operational for the life of the inland rail project. Any engagement</p> |

| | | | |
|----|---|---|---|
| | | It is noted the location of these potential concrete batching plants is then identified in section 6.13.15.1. | should also address site remediation if the facilities are be removed once the rail line construction has been completed |
| 32 | | Laydown areas: Approximately 32 laydown areas are proposed across 47 km of railway track (in locations identified in figure 6.4 (a) – (h)). This equates to a laydown area approximately every 1.5km. This is an excessive number of laydown areas resulting in unnecessary environmental disturbance. This excessive number of proposed laydown areas fails to meet the requirements of TOR 5.1, particularly ‘...to recommend mitigation measures to avoid or minimise adverse impacts...’. | That the draft EIS should be amended to reduce the excessive amount of laydown areas to mitigate environmental impacts. |
| 33 | Section 6.8.4 (tunnel infrastructure) | Tunnel ventilation: TOR 5.1 requires all relevant environmental and social impacts of the project are identified and assessed. This section identifies the tunnel will have a ventilation building <u>above</u> each tunnel portal to a height of 23m. The actual location of the ventilation building is not identified (to confirm if it will protrude above the landscape) and similarly it does not appear the impacts of the ventilation buildings have been assessed because chapter 16 (social) states “no ventilation outlets are required”. | That the draft EIS be amended to: <ul style="list-style-type: none"> • Confirm or otherwise if ventilation buildings/ structures/ outlets are required by the project and confirm their location within the landscape; • Properly assess the impacts of the proposed tunnel infrastructure including the impacts of any proposed ventilation infrastructure on the community and environment. In addition to the visual and noise impacts on the broader locality, the local impacts of residences along Range Crescent requires careful consideration. |
| 34 | Chapter 6 Section 6.8.5 (Crossing Loops) Section 6.8.6 (Crossovers) | Crossing Loops, maintenance sidings, and crossovers – Sections 6.8.5 and 6.8.6 state that crossing loops, maintenance sidings and crossovers will be co-located in townships (namely Helidon, Gatton, Laidley), resulting in a significant increase in the width of sterilised land experienced in these towns as a result of the current proposed alignment (whether the alignment is on the vicinity of, or straight through, the town). The draft EIS states that crossing loops (including maintenance sidings and turnarounds) are proposed to be ‘constructed as new sections of track parallel with the new track’ ...and goes on to say that ... ‘the project will be wide enough to accommodate the new crossing loops.’ This second statement is not clear enough for the reader to determine whether the draft EIS is referring to the previously quoted 40 – 62.5 m width, or if this infrastructure is in addition to this width. Further, the lack of definition surrounding the provision of a total corridor width (including the existing rail line) has not been provided in the document. | To meet the COG TOR, LVRC strongly recommend the COG require the proponent to abandon the current alignment and to undertake further and more comprehensive and accurate assessments of alternate alignments that comply with the TOR to identify an alignment that will adequately avoid, minimise and mitigate the potential project impacts. It is also recommended that additional infrastructure such as crossing loops, maintenance sidings etc are distanced as par as possible from townships. |

| | | | |
|----|--|--|---|
| | | <p>Given the fact that the current proposed alignment can only increase the already significant amount of sterilised land which either cuts through or skirts the townships of Helidon, Gatton and Laidley, LVRC do not consider that the draft EIS has appropriately considered the impacts the current alignment will have on these communities and therefore does not meet the requirements of TOR 5.1 or 7.8. The draft EIS is required by the TOR to demonstrate how impacts to communities have been avoided and minimised to ensure that there will be no significant residual impact to local communities, and to incorporate community concerns ‘into the design and outcomes of the project’.</p> <p>Co-locating the proposed alignment and its associated infrastructure in or on the outskirts of six of the nine LVRC townships illustrates that the appropriate consideration of these impacts has not occurred. If the requirements of TOR 5.1 and 7.8 had been appropriately considered, the proponent would have identified an alternative alignment which minimises adverse and permanent impacts to Lockyer Valley townships.</p> | |
| 35 | Section 6.8.9 (level crossings) | <p>Provision of level crossings: in addition to the Gatton station pedestrian foot bridge discussed above, level crossings are proposed to be provided by the proponent at Gaul Street for cyclists and pedestrians, Dodt road, and Hunt Street. Gaul St is part of the PCNP.</p> | Council recommends that the COG require that the level crossing at Gaul street remain in place for cyclists and pedestrians. |
| 36 | Section 6.9.3.1 (construction water) | <p>Water source: TOR 11.55 - 11.57 requires detailed information about water usage for the project.</p> <p>Table 6.8 in the draft EIS outlines ‘potential sources’ for various parts of the construction phase which includes priority town mains water, and dam water.</p> <p>LVRC is concerned about the use of these water sources for the project particularly given the information provided in the draft EIS is “approximate” and “subject to future updates”.</p> <p>Water usage in time of drought is critical and agricultural producers do not want additional competing uses for water.</p> | <p>The draft EIS should be amended to meet the requirements of TOR 11.55 to 11.57 and account for a proper assessment of the impacts of the project on the region’s water supplies.</p> <p>Council requests a condition be imposed on any approval requiring the proponent to reach agreement with relevant water users including local government to water supply arrangements prior to commencement of construction activities.</p> |
| 37 | Chapter 6 Section 6.9.3.3 (Corridor) | <p>Footprint and Co-location –Section 6.9.3.3 states that the permanent operational disturbance footprint will be some 488.4 ha and that the alignment has been chosen to reduce ‘potential property impacts’, having</p> | That the COG require the draft EIS to include correct footprint sizes for both construction and operation activities. Both should be clearly identified and include all relevant areas (such as additional infrastructure, laydown and other construction areas). |

| | | | |
|----|--|--|---|
| | acquisition and access) | <p>been ‘deliberately designed to use the existing WMSRC for approximately 50% of the proposed alignment’.</p> <p>The text further states that 86.7 ha of the operational footprint will be in ‘the existing corridor’. Using the stated operational footprint size of 488.4 ha, this is only 18% of the current alignment located in the WMSRC, not 50%. The text goes on to further state that the parts of the alignment which are not in the WMSRC predominately follow the greenfield G2GFSDC, with approximately 80 ha (or only 16% of 488.4 ha) of the permanent operational disturbance footprint proposed to be located in this corridor.</p> <p>The text further states that the project was ‘deliberately designed to use these existing and protected rail corridors, minimising the extent of new properties to be acquired.’ However, using the draft EIS’s stated areas, there will only be some 34% of the operational corridor actually located in these areas. These figures are clearly incorrect.</p> <p>Further, the reference to a focus to reduce ‘potential property impacts’ results in the draft EIS not meeting the requirements of TOR 5.1, which requires the document to ‘to ensure that <i>all relevant environment, social and economic impacts of the project are identified and assessed...</i>’. The draft EIS shows no regard for the significant and permanent adverse impacts the proposed co-location of the project in areas which are either on the outskirts of local townships, or completely and permanently divide them in two.</p> | |
| 38 | Section 6.9.8 (Construction workforce and hours) | <p>Local jobs: the draft EIS notes the estimated construction period is likely to generate 730-750 FTEs. This is less than half of what was originally anticipated by the Initial Advice Statement in 2017 when up to 1,800 FTEs were estimated. The reduced number of FTEs anticipated across the project makes the provision of employment to locals even more important as the scarcity of these jobs is now increased.</p> <p>TOR 11.152 requires workforce management plans and a review of the broader EIS identifies these management plans will include indigenous training partnerships and employment pathways, and targets for local employment.</p> <p>To ensure the community and Council has certainty on construction hours - No work on Sundays or public holidays be allowed.</p> | <p>With the reduction in expected construction jobs, the requirements for local workforce participation and training pathways must be an emphasis for any successful contractor. It is recommended a condition of approval require the construction contract to employ above 85% of locals and a targeted % from within the LVRC local government area.</p> <p>That a condition on any approval that no work be undertaken on Sundays or public holidays.</p> |


| | | | |
|------------------|--|--|---|
| <p>39</p> | <p>Chapter 6 Section 6.12.1 (Land Use and Workforce) Section 6.12.2 (Train Operations) Appendix P (Operational Railway Noise and Vibration Report), Section 6.2.2</p> | <p>Inconsistent train numbers – Section 6.12.1 states that ‘operation will be 24 hours a day, seven days a week’. Section 6.12.2 goes on to cite an ‘annual average of ‘about’ 33 train services per day ... in 2026’ ... ‘which is likely to increase to up to 47 train services per day ... in 2040 with current proposed infrastructure’.</p> <p>Based on the stated 24 hours a day, 7 days a week operation, this is one train every 44 minutes in 2026 and one every 30 minutes in 2040. The draft EIS does not indicate if the trains will run at this frequency or not.</p> <p>Other areas of the draft EIS, and other Inland Rail documents quote different train numbers and operations, for example:</p> <ul style="list-style-type: none"> - Section 6.2.2 of Appendix P quote a 2026 projection of 22 day-time, 18 night-time (40 trains per day), and in 2040, 28 day-time, 21 night-time (49 trains per day). - Border to Gowrie (B2G) Draft EIS – quotes an average of 14 trains/day by 2026 and 20-25 by 2040. - Narrabri to North Star (N2NS) EIS (NSW) – quotes an average of ‘about’ 10 trains per day in 2024 and 40 by 2040. - Kagaru to Acacia Ridge (K2AR) Initial Advice Statement (IAS) – a ‘peak’ of 45 trains by 2040. - Appendix K refers to a peak of 402 per week in 2040 over 57 a day? <p>If there is a reason for these inconsistencies, the draft EIS should include this information. If not, this issue needs to be addressed to ensure that appropriate mitigation measures can be identified, and appropriate commitments made. The lack of clarity regarding train numbers, combined with the consistent differences in train numbers causes confusion and indicates that such details are not considered of relevance when considering impacts, mitigation and/or commitments.</p> <p>With numbers unsubstantiated and unconfirmed, the draft EIS fails to meet the requirements of TOR 5.1 as it does not ensure that ‘<i>all relevant environmental, social and economic impacts of the project are identified and assessed...</i>’ as it remains unclear to the reader just how many trains will be impacting the LVRC region on a daily basis.</p> | <p>The draft EIS requires updating to confirm actual train numbers and to provide a justification as to why there are differences in train numbers between different Inland Rail documentation.</p> <p>Technical impact assessment studies used to inform the draft EIS require updating to appropriately assess the maximum proposed train numbers, not the minimum. LVRC request the COG require the proponent to re-assess the potential impacts and mitigation measures for the project based on the proposed maximum number of trains.</p> |
| <p>40</p> | <p>Section 6.13.3 (fencing)</p> | <p>Fencing: TOR 11.81 requires the draft EIS to identify mitigation measures on land values.</p> | <p>It is recommended that the draft EIS should be amended to address the following:</p> |

| | | | |
|--|--|--|---|
| | | <p>A variety of fencing outcomes are discussed in the draft EIS including three or four strand barbed wire fencing (for stock and people), acoustic fencing, fauna friendly fencing. However, the draft EIS lacks clarity about the physical location and extent of the varied type of fencing which provides no certainty to landowners about the outcomes anticipated adjacent their properties.</p> | <ul style="list-style-type: none"> • include a detailed fencing plan for the extent of the rail corridor to identify the fencing outcomes proposed; • In accordance with the requirements for noise outlined in Section 15 below more appropriate noise criteria should be defined and appropriate mitigation put in place; • Where possible innovative acoustic mitigation measures should be employed to facilitate the ongoing visual connectivity within urban communities • Where any solid acoustic fencing is proposed over 1.5m high, screen landscaping should also be provided to a minimum width of 3m for the full length adjoining the solid fencing to screen it from public view. • Any solid fencing that cannot be visually screened by landscaping must consist of graffiti resistant materials unless otherwise agreed to through engagement with Council and the community. • Screen landscaping must use native species endemic to the locality. <p>The impact of any solid acoustic walls must also be considered with any revised flood hazard assessment the corridor to provide certainty to landowners.</p> |
|--|--|--|---|

Chapter 8 – Land Use and Tenure

| | | | |
|----|---------------------------|--|---|
| 41 | Section 8.5 (methodology) | <p>TOR 11.72 & 11.73 requires the draft EIS to outline existing land values and then discuss the compatibility of the project with those land values.</p> <p>The proponent has identified it has undertaken a land use assessment based on desktop mapping (QLD Land Use Mapping Program) verified by a 'project drive through' combined with consultation feedback.</p> | <p>Council is in the process of preparing a new planning scheme which may alter the zoning of certain premises, result in new or different development approvals, and ultimately change the land use operating on a site.</p> <p>That the proponent should be required to undertake a revised land use assessment prior to detailed design and construction to ensure there are no new or increased impacts as a result of any changed circumstances on the ground or as a result of the new draft planning scheme.</p> |
| 42 | Section 8.5 (methodology) | <p>TOR 11.79 requires the proposal to be discussed in the context of applicable planning schemes.</p> | <p>Council is in the process of gaining approval to undertake public consultation on its draft new planning scheme. The draft new planning scheme has been being developed now for a number of years.</p> |

| | | | |
|----|---|--|---|
| | <p>Section 8.5.2 (Impact assessment methodology)</p> <p>Section 8.6.3 (Future land use intent and development activity)</p> | <p>The H2C draft EIS has identified a range of negative impacts that will be experienced and for which, prior to release of the draft EIS, Council has not had complete visibility over. The impacts identified pose the potential for a fundamental rethink of Council's planned growth and settlement pattern.</p> | <p>On this basis, the draft EIS should be amended to include:</p> <ul style="list-style-type: none"> • consideration of Council's new draft planning scheme when released and identify any new impacts as a result; • a collaborative working approach with Council's strategic planning unit to identify impacts to Council's new draft planning scheme and strategies to address any required changes; • based on a revised land use audit assessment reflect any potential zone changes anticipated by the Lockyer Valley Regional Council draft planning scheme. |
| 43 | <p>Section 8.6.2 (Land use)</p> <p>Section 8.6.3 (Future land use intent and development activity)</p> | <p>TOR 11.79 requires the proposal to be discussed in the context of the applicable Regional Plan.</p> <p>The South East Queensland Regional Plan identifies Gatton as a Principal Rural Activity Centre and Laidley as a Major Rural Activity Centre.</p> <p>The draft EIS has failed to adequately capture the important role these townships play in accordance with their status in the Regional Plan.</p> | <p>That the draft EIS should be amended to reflect these townships status and assess the impacts on the only Principal Rural Activity Centre and Major Rural Activity Centre in the region.</p> |
| 44 | <p>Section 8.6.2.1 (Agricultural uses and activities)</p> | <p>TOR 11.73 requires the proposal to be analysed having regard to the Agricultural Land Audit in the project area.</p> <p>Because the alignment seeks to utilise part of the Gowrie to Grandchester future State transport corridor, the assessment has dismissed undertaking an assessment of the agricultural land values within this corridor.</p> <p>Example of area not analysed by draft EIS but which is mapped as containing good quality agricultural land by the SPP:</p> | <p>The draft EIS should be amended to properly consider the impacts on agricultural land uses or potential agricultural land uses within the future State transport corridor because:</p> <ul style="list-style-type: none"> • This land is identified in the State Planning Policy as containing <i>Important agricultural areas</i> and <i>Agricultural land classification - class A and B</i>; and • This land could be used for agricultural and farming practices under the current planning scheme today without requiring any development approvals. |

| | | | |
|------------------|--|--|--|
| | |  | |
| <p>45</p> | <p>Section 8.7 (Potential impacts)</p> | <p>TOR 11.80 requires the draft EIS to discuss the potential impact of the construction and operation of the project on existing land uses along the preferred alignment and adjacent areas.</p> | <p>This chapter of the draft EIS should be amended to synthesise the amenity impacts resulting particularly from the operation of the project.</p> |
| <p>46</p> | <p>Section 8.8.2 (Change in land use)</p> <p>TOR 11.72 TOR 11.73</p> | <p>Amenity, a core principle of land use planning, has not been appropriately discussed in chapter 8. Three (3) sentences in the 114-page chapter are related to amenity.</p> <p>Council considers the amenity impacts on existing land uses a priority area of concern resulting from the impact of construction and operation of the preferred alignment. However, this chapter fails to critically analyse the impacts of such.</p> <p>It is understood the project may ultimately result in up to 47 train movements where each train is 1.8km long. On average across a day this could result in a train movement through Gatton and other townships every 30 mins or so.</p> | <p>Council recommends that the alternative alignments be thoroughly investigated and presented back to the community as a part of a comprehensive revised supplementary EIS.</p> |

| | | | |
|----|------------------------|---|--|
| | | <p>For example, as a Principal Rural Activity Centre the township of Gatton can expect to be irreversibly affected by impacts associated with rail noise, loss of connectivity between parts of the township, changes to the location of community uses (ie. Caravan park, place of worship), etc. Critical analysis of these aspects is likely to identify that this may result in an inability to attract new resident and businesses (who may prefer other townships), a loss of the free enjoyment of the central business area by users, a loss of sense of identity and community cohesion amongst the town, and a potential for displacement of existing residents and businesses. Collectively, these impacts are likely to fundamentally change the identity and operation of Gatton. This has the potential to undermine its status as a Principal Rural Activity Centre within the region. Amenity impacts must be critically analysed in consideration of the impacts to existing land uses.</p> <p>Logically, potential mitigation options must then involve consideration of an alternate alignment. TOR 6.7 requires the draft EIS to present feasible alternatives to the project configuration. Chapter 2 – project rationale briefly discussed alternative options for rail alignment which avoid the townships of Gatton and Forest Hill by deviating around them. These alternative alignments have been determined unsuitable due mainly to the associated increased construction costs. Council suggests that for a project of this size, scale, and operational impact the balance between costs and community impacts weighs in favour of community impacts. In this respect, it is grossly inadequate to dismiss alternate alignments due to cost factors (especially considering the EIS regularly promotes the state and national economic drivers which underpin the project).</p> <p>The revised alignments would go some way to ameliorating the majority of impacts the townships will experience from the construction and operation of this project.</p> | |
| 47 | Chapter 8 TOR 11.97 | Fencing has been inadequately considered throughout the document | It is recommended that the proponent be required to provide a detailed fencing plan for the extent of the corridor to identify the fencing outcomes the proponent proposes adjacent the corridor. The fencing detail is to include as a minimum information on fencing height, |

| | | | |
|--|--|---|--|
| | | | materials and finishes, and the purpose of the fencing (ie. Acoustic, fauna friendly, stock, etc). Any fencing over 2m in height and which will be visible from a public space of a township is to consider architectural elements, features, and finishes to reduce visual impacts. |
| Chapter 10 – Landscape and Visual | | | |
| 48 | Chapter 10 Appendix H (Landscape and Visual Impact Assessment Technical Report) | Flawed Assessment – Chapter 10 and Appendix H are in general, an excellent ‘textbook’ significance-based visual impact assessment of a 47 km long linear infrastructure project. It is obviously a standard 'template' approach, and necessarily so ... the Visual Impact Assessment chapters of all Inland Rail EIS documents need to have a consistent methodology and fit the EIS impact assessment matrix 'model'. However, this ‘template’ approach has flaws, as discussed in the comments below. | The draft EIS requires update to appropriately address and focus more on the visual and character impacts likely to be experienced by the communities most affected; and in that respect and remove the flaws in the study methodology. |
| 49 | Chapter 10 Appendix H (Landscape and Visual Impact Assessment Technical Report) TOR 11.89 | Viewpoints missing photomontages – TOR 7.2 states the ‘assessment and supporting information should be sufficient for the Coordinator-General and administering authorities to decide whether an approval ... should be granted’. The project impacts on character (LCTs and LCAs), impacts on visual receptors, impacts of lighting and impacts during construction, and cumulative impacts and mitigation measures (those built-in to the project plus additional recommendations) are all thoroughly addressed with respect to a 20 km wide study area. However, some viewpoints are not accompanied by photomontages, which makes it hard for some affected stakeholders (and the reviewers) to appreciate the probable impacts on their particular visual amenity. Although Appendix H section 4.9.5 states ‘visualisations have been selected on the basis of those illustrating key infrastructure elements likely to be of interest to the community and/or the most sensitive viewpoints, such as from regionally significant scenic lookouts,’ some critical viewpoints have not been visualised. For example, Viewpoint 5 which is in the middle of Gatton, is most likely to have one of the highest numbers of viewers and receptors impacted by | The draft EIS requires update to include photomontages for additional key viewpoints to enable affected stakeholders to appreciate the probable adverse and significant impacts from the proposed alignment, particularly in potentially severely affected townships such as Gatton and Forest Hill. |

| | | | |
|----|--|---|--|
| | | the proposed alignment, however a visualisation was not provided for this viewpoint. As a result of these missing viewpoints, the draft EIS fails to meet the requirements of TOR 7.2. | |
| 50 | <p>Chapter 10</p> <p>Appendix H (Landscape and Visual Impact Assessment Technical Report)</p> <p>Appendix P (Operational Railway Noise and Vibration Technical Report), Section 15.4 (Review of Noise Barrier Options) and Figures 37, 39; 40</p> <p>Section 15.4.5 (Summary of the Concept Noise Barrier Mitigations)</p> <p>Inland Rail - Helidon to Calvert fly-through - YouTube</p> | <p>OCG's Land Objectives not met – the 'Land' objectives provided in the OCG's TOR states that the proposed project should be designed and operated to:</p> <p><i>(a) Improve environmental outcomes; and</i></p> <p><i>(b) Contribute to community wellbeing; and</i></p> <p><i>(c) Contribute to social, economic and environmental sustainability; and</i></p> <p><i>(d) Mitigate impacts to the natural landscape and visual amenity.</i></p> <p>This implies that the visual impacts of the proposed alignment should be comparable to the existing visual amenity. The draft EIS does not consider the significantly greater visual impacts of the proposed alignment and its trains and infrastructure such as noise barriers, compared to existing rail corridor.</p> <p>The visual impact assessment appropriately conveys the scale and visibility of landscape change associated not only with the static infrastructure but more importantly the impact of trains each up to 1.8 km long and 7.1 m high ... and future trains may be up to 3.6 km long and significantly increased in numbers. The draft EIS states that approximately 50% of the proposed 47 km alignment is parallel to the existing railway line, and the analysis of visual impacts at each viewpoint mentions whether or not it will be within view of the existing rail (the visual appearance and effects of the 'new' Inland Rail is generally considered to have less impact where it is adjacent to the existing railway line). There is however little transparency regarding this aspect of the assessment – some viewpoints may be within view of the existing railway, but the proposed alignment will cause significantly greater visual impacts (e.g., higher embankments, more trains per day, 7.1 m high stacked containers, night-time train lights, extent of casting of shadows and moving shadows due to combined train and embankment heights etc.). Importantly, the visual impacts of probable noise barriers at least 4 m tall have not been adequately addressed (and they have not been modelled in the 'fly-through'). Likewise, the extent of the length of the proposed noise walls</p> | <p>It is recommended that the COG require the visual impacts of the proposed alignment to be systematically compared to those of the existing rail corridor.</p> <p>However, these comparisons are currently not appropriately addressed or assessed by the draft EIS. Importantly, the visual impacts of the proposed alignment will be considerably exacerbated (especially though towns) if noise barriers are installed; but these impacts do appear not to have been addressed in detail.</p> <p>That further assessment is needed of the visual and character impacts of the proposed noise barriers, including their probable barrier obstruction of rural vistas which are likely to be important to town character and sense of place.</p> <p>That the COG require proposed heights and length extents of proposed noise barriers be provided by the proponent prior to the detailed design process to enable stakeholders to understand the full extent of the potential adverse impacts on landscape and visual amenity. For example, some walls may need to be up to 6 m tall as identified in Appendix P.</p> |

| | | | |
|----|--|--|---|
| | | <p>each side of the track are not shown in any visualisations for the regional towns most affected.</p> <p>In addition, Section 15.4.1 of Appendix P states that 'whether noise barriers would be a reasonable and practicable noise mitigation will be determined by ARTC during the detailed design and construction of the project... in particular will need to carefully consider aspects such as ...visual amenity...' The detailed design and construction phase of the project is too late for those most affected by the potential noise barriers to understand the potential impacts and to be able to be involved in engagement on likely heights and extents of noise walls proposed as well as potential acceptable solutions for these issues, as by this time project budgets will have been finalised. Planning and costing for solutions that address visual and character impacts and potential solutions potentially more acceptable to the community needs to be completed early and in a more appropriate manner.</p> <p>As a result, the draft EIS therefore fails to achieve the requirements under 'Land' objectives (b) and (d) in the TOR and requires update to meet the requirements of the OCG's TOR.</p> | |
| 51 | Chapter 10 Appendix H (Landscape and Visual Impact Assessment Technical Report), Figure 12 | <p>Dynamic Movement of Trains through the landscape – the methodology used for this visual impact assessment does not adequately address the dynamic aspect of train movement frequency. The draft EIS states that the proposed alignment will be used by 33 trains per day (and up to 47 per day eventually). Although Figure 12 in Appendix H purports to distinguish between static and dynamic visibility, it just shows the visibility of permanent fixed infrastructure compared to what is 'moving through'. The length of trains also needs to be appropriately assessed by the document. A high proportion of the study area is a fairly flat landscape, so there will be many viewpoints within view of at least one moving train for a high proportion of the day and night. We note that 33 trains per day represents (on average) one passing any one point every 44 minutes, and in future 47 trains per day will equate to (on average) approximately one every 30 minutes ... although Section 6.2.2 of Appendix P indicates that trains may be evenly spaced in time but will be more frequent in daytime.</p> | That the COG require the draft EIS be updated to address the impacts of dynamic aspects of train movement frequency combined with length (1.8 km and 3.6 km) and speed of trains. This should also include a definition of what is total time per day and when any part of the long trains will be visible within the full arc of view as seen from each viewpoint. |


| | | | |
|----|--|---|---|
| 52 | Chapter 10 Appendix H (Landscape and Visual Impact Assessment Technical Report) | Impacted viewpoints – Viewpoints 5 and 7 to 10 will suffer the greatest visual impacts. These five viewpoints are rated as likely to suffer ‘High’ visual impacts (or ‘Major’ if noise barriers are constructed in Gatton and Forest Hill). Four of these viewpoints are within 20 – 80 m of houses. A sixth viewpoint (VP12) is also assessed as likely to suffer ‘High’ visual impact, but in terms of sensitive receptors likely to be affected, the ‘High’ rating for VP12 is disputed. LVRC do not consider the ratings of ‘High’ or ‘Major’ to be an appropriate outcome for the community. | The draft EIS requires update to demonstrate how viewpoints that will experience a high or major impact will be mitigated. |
| 53 | Chapter 10 Appendix H (Landscape and Visual Impact Assessment Technical Report) TOR 11.89 | Visual Impact methodology - the ‘high’ visual impacts likely to be suffered by some residents in Gatton, Laidley and Forest Hill are highlighted by Chapter 10 and Appendix H, but the piecemeal approach tends to underestimate the severity of impacts. - Table 6 (Sensitivity) rates only the landscape being viewed, not the receptor; and this flows through to the significance of impacts provided in Table 8. - The VAM is based on visual exposure i.e., strongly influenced by the number of viewers. As a result, where a small group of houses is within view of a development, the VAM tends to under-report visibility. - Section 4.9.2 (Visual Sensitivity) and Table 10 do not value the private views of small numbers of residents. | The draft EIS requires update to re-examine visual impact significance ratings for residential receptors. |
| 54 | Chapter 10 Appendix H (Landscape and Visual Impact Assessment Technical Report) | Devaluation of rural vistas – the standard visual impact assessment methodology used accords high ratings and sensitivity to forested uplands, and low sensitivity to flat cropping land. Together with the above-mentioned ‘underestimating’ flaws, the combined effect is to devalue the views enjoyed by residents of the surrounding rural scenery ... which in some cases may have been at least part of the reason for residents’ choice to live in towns like Laidley, Gatton and Forest Hill. Note: Cropping land may also be recognised as part of the ‘iconic’ character of some areas. This is especially the case for the Lockyer Valley that brands the region as a green and sustainable agricultural production centre. | The draft EIS requires update to re-examine visual impact significance ratings for residential receptors. The criteria for rating rural views should be re-calibrated to recognise the value placed by residents on their characteristic rural outlook. |

| | | | |
|----|--|---|--|
| 55 | <p>Chapter 10 Appendix H (Landscape and Visual Impact Assessment Technical Report)</p> <p>Appendix P (Operational Railway Noise and Vibration Technical Report), Table 41</p> | <p>Mitigation measures – the draft EIS makes a number of recommendations for mitigation which are reasonable and should be supported, even though these measures do not appear to make much difference to the severity of visual impacts (see Table 67). It is clear that the construction of noise barriers (however well designed) may be at least 4 m tall which will worsen the visual impacts on townships ... especially if views outwards into rural scenery were considered (which the assessment fails to do). Further, there is a potential issue where high steep compacted embankments do not allow sufficient width for e.g., minimum 2 m wide tree planting band to screen/ visually buffer the noise barriers - this is a significant constraint on possible mitigation measures being able to be implemented.</p> | <p>The draft EIS needs to be updated as it fails to address the significant and adverse impacts on residents’ views outwards into rural scenery. This needs to be considered by the assessment.</p> <p>Where high embankments are proposed in townships, the proponent needs to ensure the width at the top of the embankment is sufficiently wide to enable a sufficient depth of tree screen planting for noise barriers at the top of embankment level; the draft EIS needs to be amended to take this design consideration into account across all impact assessments.</p> |
| 56 | <p>Chapter 10</p> <p>Appendix H (Landscape and Visual Impact Assessment Technical Report) Figure 31 Viewpoint 7</p> <p>Appendix P (Operational Railway Noise and Vibration Technical Report), Section 15.4 (Review of Noise barrier options) and Figures 37, 39;</p> | <p>Visual Impact of Noise Walls – location and height information – Section 15.4.1 of Appendix P states that whether noise barriers would be a reasonable and practicable noise mitigation will be determined by the proponent during the detailed design and construction of the project... and in particular will need to carefully consider aspects such as ...visual amenity...</p> <p>Concept noise barrier options through areas such as Gatton, Forest Hill, Valley Vista Estate at Laidley indicate proposals for very high (at least 4 m metres to be effective) and very long (hundreds of metres long) barrier wall on both sides of the tracks.</p> <p>The location of the noise barriers shown in Appendix P Figure 39 is inconsistent with the visualisations shown in Appendix H Figure 31 (Figure 39 shows noise barriers blocking/across the crossing point shown in the visualisation, with a gap in the noise barrier further along the corridor which would defeat the purpose of having a barrier each side).</p> <p>Consideration of the effects of noise barriers on visual amenity should include an assessment of views likely to be obstructed ... in particular those views from residential areas ‘outwards’ to their rural surrounds and setting.</p> | <p>The draft EIS requires updating to show the actual location of proposed noise barriers and the proposed height in each location nominated to enable affected stakeholders to appreciate the probable, significant and adverse visual impacts.</p> |

| | | | |
|----|--|---|--|
| | 40, Section 15.4.5 (Summary of the Concept Noise Barrier Mitigations) | | |
| 57 | Chapter 10 Appendix H (Landscape and Visual Impact Assessment Technical Report) | Cumulative Impacts – the landscape and visual amenity assessment fails to consider the 550kV Transmission Line planned to be constructed in the eastern part of the study area. As a result, the draft EIS fails to meet the requirements of TOR 7.3 regarding cumulative impact. | The draft EIS needs to be updated to take into consideration the 550kV Transmission Line planned to be constructed in the eastern part of the study area as it might (in some viewsheds) add sufficient visible ‘mass’ of linear infrastructure to that of the proposed alignment, existing rail and highway and significantly change the local character. |
| 58 | Chapter 10 Appendix H (Landscape and Visual Impact Assessment Technical Report), Section 3.2 Table 3 Appendix Q (Social Impact Assessment) Section 7.1.5 (Town Centre Amenity, Gatton) | SEQ Regional Plan <i>Shaping SEQ</i> goals not taken onto account – the TOR Land objective <i>(d) Mitigate impacts to the natural landscape and visual amenity</i> and TOR 11.89 <i>Describe any proposed measure to avoid, minimise or mitigate potential impacts on landscape character and visual amenity</i> have not been adequately addressed by the draft EIS. Table 3 Queensland (regional level) identifies the Shaping SEQ regional framework relevant to the project and includes: <ul style="list-style-type: none"> - Goal 4: Sustain (DILGP 2017b) is the most important in terms of guiding the regional context for landscape and visual amenity values stating <i>‘Our regional landscapes contain a wide range of values, including biodiversity, rural production, natural economic resources, scenic amenity, cultural landscapes and outdoor recreation. These values contribute to SEQ being one of the most biodiverse and liveable regions in Australia.’</i> - Element 4 Regional Landscapes seeks to ‘protect regional scenic amenity areas from development that would compromise their values.’ - Live Element 5 is identified in the EIS as being relevant in terms of landscape and scenic amenity: e.g., Live Element 3: Inspiration from local character requires that <i>‘the communities of SEQ demonstrate a strong respect for their heritage, distinct context and local character’</i>. | The visual impact assessment needs to be amended to include consideration of how and where views from towns and residences include vistas and long-distance views over rural land; and the extent to which the proposed alignment (and associated noise barriers) will permanently obstruct such views. |

| | | | |
|----|--|---|---|
| | | <p><i>This includes identifying and conserving local landscape, heritage and cultural assets including indigenous landscape values; working with natural topography to create development that contributes positively to the environmental and visual experience of a place; using appropriate building material; that add to a local area's character and diversity; and, working with the characteristics, traditions and values of the local community to create a distinctive local character and contributory community value.'</i></p> <p>- ...'this subregion is characterised by features including 'a predominantly regional and rural lifestyle supported by spectacular open space, hinterland and natural landscape settings.'</p> <p>While the draft EIS states the above are relevant to the project, it fails to adequately consider the impacts of the proposed alignment on the above State level strategic goals and proposed permanent change to landscape character especially where the proposed alignment passes through regional towns. Furthermore, the draft EIS does not consider the detrimental effect on existing local regional town landscape character values with regards to the above points and proposed mitigation for very high embankments and long and high noise walls through the towns. Section 7.1.5 of Appendix Q identifies that 'rail overpasses would be constructed... (which) would change the appearance of the town centre from its approaches, and the addition of additional infrastructure (such as fencing and signage) will intensify the appearance of the rail corridor as a barrier through town.'</p> | |
| 59 | <p>Chapter 10</p> <p>Appendix H (Landscape and Visual Impact Assessment Technical Report) Section 3.2, Table 3</p> | <p>State Scenic Amenity Guideline influence not taken into account – TOR 11.88 states the draft EIS needs to '<i>Address the findings, requirements and recommendations of the South East Queensland Regional Plan 2005-2026 Implementation Guideline No. 8 – Identifying and Protecting Scenic Amenity Values (2007).</i>'</p> <p>The draft EIS identifies the above guideline as being relevant to this project, however the State Government SEQ's scenic amenity mapping influence on ratings appears to have been dismissed as not relevant because only part of the proposed alignment is in SEQ scenic amenity mapping. This approach is inconsistent with the recognition and incorporation of local government planning schemes (which are different</p> | <p>The draft EIS needs to be amended to include the broadscale SEQ scenic amenity mapping for the study area as part of the baseline information.</p> |

| | | | |
|----|--|--|---|
| | | for each Council area) and the respect shown to various NSW transport corridor urban design guidelines. The broadscale SEQ scenic amenity mapping is relevant for the study area and should have been part of the baseline information. As a result, the draft EIS does not adequately address TOR 11.88 and the state scenic amenity influence on landscape values. | |
| 60 | Chapter 10 Appendix H (Landscape and Visual Impact Assessment Technical Report) | Appropriate Landscape Character and Intent – there is considerable subjectivity surrounding another important ‘big picture’ issue - are trains of this size and frequency compatible or consistent with the existing and intended character of the study area? The viewpoint-by-viewpoint analysis of impacts provides relevant context (e.g., whether or not there is an existing railway line, HV transmission lines or other infrastructure in the viewshed), and this implies that the proposed alignment will be more compatible with existing character than in other places. However, this also completely ignores the reasonable expectation of residents and the local community that a new railway line would at some stage be constructed in the Gowrie to Grandchester future public transport corridor. Although this ‘reasonable expectation’ test is somewhat peripheral to objective assessment of project-related visual impacts (comparing the future visual appearance of the study area with the existing landscape values), it is nonetheless relevant to ask whether or not the predicted ‘High’ and ‘Major’ visual impacts have been assessed relative to the existing situation, or relative to what would have occurred with the Gowrie to Grandchester future public transport corridor. | The visual impact assessment should be amended to compare the impacts of the proposed alignment relative to the existing situation, and also relative to what would have occurred with the Gowrie to Grandchester future public transport corridor, especially with respect to visual impacts rated as ‘High’ and ‘Major.’ |
| 61 | Chapter 10 Chapter 16 (Social), Section 16.2 Appendix H (Landscape and Visual Impact Assessment) | Loss of visual amenity unable to be mitigated for some residents –the visual impact assessment is good with respect to rural and natural areas (i.e., it appropriately identifies values and impacts) but has flaws with respect to residences close to the alignment. Some of these pockets of housing will suffer major visual impacts and loss of amenity, which cannot be addressed through mitigation measures. The image below is from Appendix H (p 99) (view 9) and is provided as an example of a situation where visual amenity impacts cannot be addressed. It shows an existing house at Valley Vista estate Laidley with the proposed Patrick Street underpass. This viewpoint is rated as experiencing a ‘High’ impact. The | The visual impact assessment should be amended to compare the impacts of the proposed alignment relative to the existing situation, and also relative to what would have occurred with the Gowrie to Grandchester future public transport corridor, especially with respect to visual impacts rated as ‘High’ and ‘Major.’ To meet the OCG TOR, LVRC strongly recommend the COG require the proponent to abandon the current alignment and to undertake further and more comprehensive and accurate assessments of alternate alignments that comply with the TOR to identify an alignment that will adequately avoid, minimise and mitigate the potential project impacts. |

| | | | |
|-----------|--|---|--|
| | <p>Technical Report)</p> | <p>draft EIS does not suggest any means of mitigating impacts at this viewpoint.</p>  | |
| <p>62</p> | <p>Chapter 10 Sections 10.7.1 (Potential Impacts), Section 10.7.3 (Visual Impact), Section 10.7.4 (Lighting Impact) Appendix H, Sections 5.2, 5.3 and 7</p> | <p>TOR 11.87 requires description and illustration of the visual impact of construction and operation, including major views – but also stipulating that: <i>'such views should be representative of public and private viewpoints, including places of residence, work and recreation.'</i></p> <p>In consideration of the impacts on visual amenity (view), there are insufficient viewpoints in the draft EIS which have been selected from private residences. Further, some road users that may be in the line-of-sight of oncoming trains have also not been appropriately considered. As such, the draft EIS fails to properly evaluate the impact of transient lighting effects due to train headlights during operation and therefore has not met the requirements of TOR 11.87.</p> <p>Transient lighting associated with train headlights during operation is dismissed by the draft EIS as having no potential impact (from a landscape amenity point of view). However, it can still be a potential source of disability glare to road users and possible nuisance (i.e., obtrusive light) for nearby residences in line of sight of oncoming trains (this is subject to alignment and elevation of the track). There is no information in this chapter regarding whether assessment has been conducted on these line-of-sight issues particularly considering their frequency and duration.</p> <p>The viewpoints used by the draft EIS for the lighting impact assessment are the same as the visual amenity (view) impact assessment. This means they are not generally selected to be coincident with the critical visual receptor in this case (i.e., the nearby residents or road users with a</p> | <p>The draft EIS requires update to meet the requirements of TOR 11.87 and to include the assessment of impacts to critical residential and road user viewpoints which are potentially in line-of-sight of operating train headlights and include appropriate mitigation measures and commitments in relation to same.</p> |


| | | | |
|----|---|--|--|
| | | <p>potential view of oncoming trains) and as such, they are unable to capture issues related to glare or nuisance lighting.</p> <p>Potential sensitive viewpoints which should be considered by the draft EIS are likely to include:</p> <ul style="list-style-type: none"> - Any residences very close to active level crossing signalling. - Any residences where rail alignment and local topography facilitate interior incursion of light from rolling stock headlight. | |
| 63 | <p>Ch 10 Sect 10.8 (Mitigation Measures) Chapter 23 (Draft Outline EMP), Section 23.13.3 Appendix H, Section 11</p> | <p>TOR 11.89 requires a description of: <i>'any proposed measures to avoid, minimise or mitigate potential impacts on landscape character and visual amenity.'</i></p> <p>The draft EIS fails to provide any mitigation strategies for glare or obtrusive light-related issues resulting from transient lighting during the operational phase of the project.</p> | <p>The draft EIS requires update to include strategies to mitigate or manage transient glare or obtrusive light during the operation phase of the project in an appropriate manner and in order to meet the requirements of TOR 11.89.</p> |
| 64 | <p>Chapter 10 Section 10.8 (Mitigation Measures) Chapter 23 (Draft Outline Environmental Management Plan), Section 23.13.3 Appendix H, Section 11</p> | <p>TOR 11.89 requires a description of: <i>'any proposed measures to avoid, minimise or mitigate potential impacts on landscape character and visual amenity.'</i> The draft EIS fails to meet the requirements of TOR 11.89 as mitigation relating to lighting during the operational phase of the project has not been considered. Mitigation strategies to reduce the impact of permanent lighting are described for the design stage only. This is not acceptable and should be expanded to include remediation strategies should design strategies be insufficient to reduce impacts.</p> | <p>The draft EIS requires update to meet the requirements of TOR 11.89 and appropriately include mitigation strategies for the impacts of permanent new lighting and possible remediation strategies where design strategies are determined to be insufficient.</p> |
| 65 | <p>Chapter 10 Section 10.4 (Legislation, policies,</p> | <p>TOR 5.4 requires that: <i>the draft EIS be 'generally in accordance with relevant policies, standards and guidelines.'</i></p> <p>The draft EIS fails to meet the requirements of TOR 5.4 as the impact assessment of temporary and permanent obtrusive lighting arising from</p> | <p>The draft EIS requires update to accurately reflect appropriate consideration of the requirements of AS/NZS 4282:2019 as they are highly relevant to assessment and discussion of lighting impacts for the proposed alignment. Further, a subsequent review of the lighting</p> |

| | | | |
|--|--|---|--|
| | standards and guidelines), and Table 10.2 Appendix H, Section 3.1 and Table 2 | the proposed alignment references the significantly out-of-date standard <i>AS 4282:1997 Control of the obtrusive effects of outdoor lighting</i> . Note this version of the standard document has been superseded by <i>AS/NZS 4282:2019</i> with significant changes in the updated version that are relevant to the draft EIS, in particular: <ul style="list-style-type: none"> - The 1997 edition is a guidance document whereas the 2019 edition specifies requirements. - Classification of environmental areas has been expanded to include environmentally sensitive areas and better align the categories to International Standards. - Although in general the standard does not apply to public (road) lighting, limits have been included in the 2019 edition that can be applied when specified by the relevant authority. This was done so that obtrusive light can be controlled in areas where it may be seen as a problem without the need to calculate the impact of every streetlight. | impacts described in Chapter 10 and Appendix H will also be required as a result of the reassessment of lighting impacts using the correct standard. |
|--|--|---|--|

Chapter 11 – Flora and Fauna

| | | | |
|----|---|---|--|
| 66 | Chapter 11, Section 11.4 (Legislation, policies, standards and guidelines) and Table 11.2 | TOR 5.4 requires <i>‘the EIS is to be generally in accordance with relevant policies, standards and guidelines.’</i> However, the draft EIS contains no reference to existing national guidelines on light pollution and wildlife, that would contribute to assessment of the impacts of lighting on wildlife and as a result, does not meet the requirements of TOR 5.4. | The draft EIS requires update to include reference to the <i>National Light Pollution Guidelines for Wildlife</i> (January 2020) (found at: https://www.environment.gov.au/biodiversity/publications/national-light-pollution-guidelines-wildlife). This document provides detailed information on this topic, including strategies to mitigate the impacts of light pollution on wildlife. The draft EIS should reference to this document and a review and update of the mitigation and management measures provided in Chapter 11, Chapter 23 and Appendix I should be completed as a result. |
| 67 | Chapter 11, Section 11.9.2 (Proposed Mitigation) | TOR 11.98 requires the draft EIS to <i>‘describe any proposed measures to avoid, minimise or mitigate potential impacts on natural values, and enhance these values.’</i> While the draft EIS acknowledges in detail the potential negative impacts of lighting on fauna (Section 11.8.2.9), the | The draft EIS requires update to provide more detailed mitigation measures to minimise the negative impacts of light at night on flora and fauna and to meet the requirements of TOR 11.98. |

| | | | |
|----|---|--|---|
| | Measures) and Table 11.27 Chapter 23 (Draft Outline Environmental Management Plan) Appendix I (Terrestrial and Aquatic Ecology Technical Report), Section 5.2 | mitigation design strategies in Table 11.27 are incomplete and insufficient to best address these potential impacts. For example, Table 11.27 provides a list of mitigation design measures proposed, however the only measure listed for lighting is: <i>'project design to incorporate minimum lighting requirements feasible for Project safety.'</i> This statement only relates to lighting for areas such as workplaces and for safe movement and does not address spill or obtrusive lighting, which it should. Also, minimum lighting requirements are not the only important considerations: spectral content and directionality of obtrusive light are also highly significant factors for wildlife considerations. Review of the relevant national guideline (as mentioned above) will provide further specific measures that will reduce impact to wildlife. | |
| 68 | Chapter 11 Section 11.9.3 (Management and Monitoring) Appendix I (Terrestrial and Aquatic Ecology Technical Report), Section 5.2 | TOR 11.100 requires that the draft EIS: <i>'describe how the achievement of the objectives would be monitored and audited, and how corrective actions would be managed.'</i> The flora and fauna monitoring section of the draft EIS (Section 11.9.3) does not include any plan for post construction, as-designed lighting assessment in identified sensitive areas. It would be expected that the lighting design strategies for mitigating impacts from operational lighting would be assessed post-construction. This is not explicitly addressed in this section. | The draft EIS requires update to include lighting design strategies for mitigating impacts from operational lighting in order to meet the requirements of TOR 11.100. |
| 69 | Biosecurity TORs 11.104 – 11.108 | The TORs required detailed measures to control spread of pests. There is no analysis contained in the EIS – Simply that a BSQ plan will be done. This is a significant concern given the risk of the spread of fire ants and other pests in a longitudinal corridor situation involving the transportation of spoil. This is a significant risk to our agriculture industry. | It is recommended that the analysis of detailed measures be undertaken as required by TORs Especially with respect to Bio Security risks like fire ants which are present in the H2C alignment. |
| 70 | TORS 11.29 11-138 | The TORS require that impacts on listed threatened species must be addressed. | That the proponent be required to amend the EIS and incorporate this known data. |

| | | | |
|----|-----------|--|---|
| | | <p>The permanent Grey-Headed Flying fox roost located in Laidley has not been identified or considered despite raising the issue with ARTC on multiple occasions, providing detailed GIS data to ARTC and being assured it will be incorporated.</p> <p>The table on page 11-138 states that “It is noted no roost sites have been previously identified within 5 km of the Project”</p> <p>The roost is located within the study area and currently sited within 400m of the proposed alignment. It has also been known to expand in size when other species of flying foxes inhabit the roost, to the extent that the roost would be within 50m of the proposed rail line itself. See map below of known roost extent.</p>  | <p>Further that the impact of the noise, vibration, dust and odour etc during construction and operation need to be analysed and addressed.</p> |
| 71 | TOR 11.29 | <p>A further threatened species is the Spotted tailed quoll. LVRC has a record of a Spotted-tail Quoll (Southern subspecies) <i>Dasyurus maculatus maculatus</i>, which was hit by a vehicle and found on the side of the Warrego Highway on 6 May 2021. The location is within the study area and approximately 1.8km from the proposed alignment.</p> | <p>That the EIS be updated accordingly and that the known and predicted habitat modelling should be updated to incorporate this record and mitigation measures proposed to adequately address quoll habitat and movement.</p> |

| | | | |
|--|------------------------|--|--|
| 72 | | <p>Grey Snake (<i>Hemiaspis damelii</i>) is listed as significant fauna– it is LVRC officer’s opinion that grey snake habitat has not been adequately assessed. 0.0ha of predicted habitat has been identified in the EIS, despite recent records within the Lockyer Valley, Queensland Museum specimens being collected from the current rail line just west of Forest Hill, suitable habitat being located within the study area and Commonwealth Distribution Modelling suggesting they are known and may occur within the Lockyer Valley. Given their known habitat preference, the impacts of the construction methods, vehicle movements and ongoing noise and vibration during operation could have a significant impact on this species.</p> | <p>That this additional data be incorporated in the EIS and mitigation measures proposed to adequately address habitat and impacts during construction and operation.</p> |
| <p>Chapter 13 Surface Water and Hydrology</p> | | | |
| 73 | Chapter 13 | <p>The Independent International Panel of experts for Flood Studies of Inland Rail in Queensland has prepared a Draft Report on the Review of Helidon to Calvert Section (May 12 2021). This report identifies 21 issues areas of concern ranging in significance from Low to Very High.</p> | <p>It is recommended that the Panel’s report be adopted and the areas of concern addressed through conditions.</p> |
| 74 | TOR 11.64 to TOR 11.71 | <p>In the last 18 months Council has undertaken its own review and update of Laidley Creek and Laidley Township flood modelling to address issues arising since the original 2012 work post the 2011 flood disaster. This work does not include the proposed ARTC alignment at this time. This work uses a peer reviewed increased IFD rainfall (generally in excess of ARR2019). It appears at this stage in comparison to the ARTC modelling that the ARTC extents are not conservative for the design events in the pre-railway scenario.</p> <p>Council thus considers that the bulk of the Panel’s listed items are of a serious nature with the potential ability to impact the feasibility of railways alignment and configuration and need to be addressed and changes independently verified as satisfactory before the design process proceeds any further. This includes, and is not limited to, the documented medium to very high classified items.</p> | <p>It is recommended that Councils issues of concern are also included in this review.</p> <p>(Note that the above raised Panel and Council issues include, but are not limited to, the items documented in the schedule below.)</p> <p>The panel has advised that revised documentation should be provided to the panel for their review. In line with this advice, a key recommendation from LVRC (that is not within the scope of the Panel) is to strongly recommend that the scope and period of engagement of the Panel be extended to cover the time frame of the detailed design to ensure continuity, timeliness, consistency, defendability and irrefutability of advice to the project by a recognised body of professionals.</p> <p>Given the extent of the issues raised and the number of issues that will need to be addressed at detailed design, it is critical that there be</p> |

| | | | |
|----|------------------------|--|--|
| | | <p>In addition to the panel’s recommendations, based on Council’s experience and information provided to date we have further concerns in relation to the consideration and satisfactorily addressing of:</p> <ul style="list-style-type: none"> • climate change impacts; • blockage and embankment collapse; • management of regional and local flooding as well as their interaction; • the impacts of noise walls, earthworks and redirection of flood flows in extreme events; • the adverse impacts on flood evacuation routes and waterways alignments in both Laidley and Gatton; • the consideration of ultimate development as dictated by the planning documentation and the SEQ Plan; and • the risk management of creation of debris, heavy objects and washing away of stored materials relating to proposed Laydown areas. <p>Any variation in the design water elevation will likely have a significant impact on rail and other configurations. Based on reporting there is a lack of confidence in the models and their ability to replicate design events appropriately.</p> <p>The listed issues constitute standard requirements in relation to normal development and the need to satisfy the State Planning polices and accepted engineering practice.</p> | <p>independent oversight of the modelling work and in the review of the detailed design.</p> <p>It is recommended that the outcomes of the design review from this process be provided and a new report issued by the flood panel for Councils review prior to finalising conditions for any approval.</p> |
| 75 | TOR 11.64 to TOR 11.71 | <p>Detailed design will be undertaken by the preferred tenderer. Given they are a PPP driven by profit it is fundamental that there be independent oversight of the modelling process through to detailed design. Given the issue identified by the Panel with ARTC’s modelling it would be inappropriate for ARTC to be conditioned to oversee this report. The communities of the Lockyer Valley will demand independent oversight.</p> | <p>The panel has advised that revised documentation should be provided to the panel for their review. In line with this advice, a key recommendation from LVRC (that is not within the scope of the Panel) is to strongly recommend that the scope and period of engagement of the Panel be extended to cover the time frame of the detailed design to ensure continuity, timeliness, consistency, dependability and irrefutability of advice to the project by a recognised body of professionals. Given the extent of the issues raised and the number of issues that will need to be addressed at detailed design, it is critical that there be independent oversight of the modelling work and in the review of the detailed design.</p> |

| | | | |
|-----------|------------------------|--|--|
| 76 | TOR 11.66 | It is noted that the Panel was not provided with copies of the flood models developed with respect to the local catchments (Page 8 Panel report) | LVRC would recommend that these models be provided to the Panel and the scope widened to enable a complete review of local and regional flooding as well as their interaction. |
| 77 | TOR 11.64 to TOR 11.71 | The EIS has used 2016 version of the Australian Rainfall and Runoff. It is currently accepted engineering practice to utilise the most recent available data. Similarly, currently accepted engineering practice would require the use of the most recently work available including the WMA 2020 work. | It is recommended that The COG require the proponent to use the currently accepted best practice in relation to rainfall- namely a maximum of the combination of 2019 ARR and WMA 2020 IFD data as inputs as recommended by the 2020 study Peer Reviewer. |
| 78 | TOR 11.64 to TOR 11.71 | Given the potential for impact on people property and infrastructure appropriate flood impact objectives (FIO) should be utilised. | It is recommended that the Quantitative Design Limits utilised in the N2NS project (Table 3.2 of the Panel report) be utilised in the modelling along with the extreme event risk management objectives and the sensitivity testing objectives specified in Table 3.1 of the Panel Report. Impacts must be less than 0.01 M as specified in ARTC Basis of Design. "Was Dry Now Wet" should also be considered under a FIO. These matters must also satisfy current engineering practice and common law requirements. |
| 79 | TOR 11.64 to TOR 11.71 | Farm drain connectivity is a significant issue for agricultural and other affected land-owners e.g. urban settings, even for small local catchment events | It is recommended that the proponent be required to demonstrate that the capacity of existing open channels and/or and transverse drainage is maintained at a minimum. |
| 80 | TOR 11.64 to TOR 11.71 | Currently accepted best practice requires sensitivity testing for climate change eg regarding intensity of rain events. Ultimate development requirements need to be considered and accommodated. Construction scenarios need to be investigated and risks addressed and managed. | That climate change sensitivity testing be applied and reported upon. Demonstration that the consideration of ultimate development as dictated by the planning documentation and the SEQ Plan; and, the– risk management of creation of debris, heavy objects and washing away of stored materials relating to proposed Laydown areas has been managed. |
| 81 | TOR 11.64 to TOR 11.71 | Flood Impact Objectives are fundamental | It is recommended that FIOs be amended to consider and include the additional requirements with respect to: <ul style="list-style-type: none"> • Impact on roads • Duration of inundation • Velocity • Flood hazard • Extreme events • Increased concentration/ diversion and management of flows |

| | | | |
|-----------|------------------------|--|---|
| 82 | TOR 11.64 to TOR 11.71 | Hydrology needs to be modified to current acceptable engineering practice. Differences identified between the hydrological and hydraulics models i.e. peak flows, levels, velocities and affluxes. Use of latest modelling software. | It is recommended that the proponent be required to undertake sub catchment division and address other identified matters in the hydrological model sets as well as resolve identified issues between the hydrological and hydraulics models in accordance with accepted engineering practice in relation to the proposed use i.e. the ARTC alignment and related and affected uses. The use of the latest modelling software is recommended. |
| 83 | TOR 11.64 to TOR 11.71 | There appear to be no Flood Evacuation plans described either for construction or operation of the railway. Two specific examples include: the need to provide a road crossing through the embankment at Valley Vista estate to allow for a regional flood evacuation route; and, the impact presented by the rail crossing closure at Gatton will, without mitigation, isolate the whole of North Gatton in both local and regional flooding – inconsistent with State Planning policy. | Recommend that the COG condition the proponent to incorporate flood evacuation plans including the establishment of the base case (including future ultimately developed requirements) and demonstration of equal or better arrangements after implementation of the ARTC works. This work should incorporate “all hazards” approach as these are commonly interdependent. |
| 84 | TOR 11.64 to TOR 11.71 | DTMR Hydrologic and Hydraulic Modelling Guidelines were recently released. | That DTMR Hydrologic and Hydraulic Modelling Guidelines be utilised in future design work along with accepted engineering best practice. |
| 85 | TOR 11.64 to TOR 11.71 | The Panel has noted that interaction of local and regional flood mechanisms may not be captured. Some inconsistencies are noted the severity of which is unknown. The need for satisfactory inclusions of the Interfaces in the models between structures and channels has been raised. | That Detailed design must consider and address satisfactory management of regional and local flooding as well as their interaction to meet FIO objectives. That Detailed design must satisfactorily include acceptable interfaces in the models between structures and channels in accordance with accepted engineering practice |
| 86 | TOR 11.64 to TOR 11.71 | Interaction of local and regional models is fundamental. Varying Beta values to account for local and regional responses is not common practice. Issues in relation to differing parameters between flood model sets, placement/configuration of inflow points, boundary conditions, losses, model instabilities, TOS, storage, missing structures, current topographic surfaces, lack of sensitivity testing to support adopted strategies, need to look at extreme and frequent event impacts etc. | Hydraulic modelling needs to be undertaken using updated hydrological modelling with inflows and related modelling parameters applied along with appropriate sensitivity testing for all issues raised in this schedule in accordance with accepted engineering practice. |
| 87 | TOR 11.64 to TOR 11.71 | It appears Flood Frequency Analysis has been based on one gauge while other gauge data is available | It is recommended that multiple gauges be utilised to assess FFA in accordance with accepted engineering practice. |
| 88 | TOR 11.64 to TOR 11.71 | The model results section 7.6 of the Panel report are concerning. | It is recommended that the COG require the proponent to undertake sufficient calibrated modelling in accordance with accepted engineering |

| | | | |
|----|------------------------|--|--|
| | | Any variation in the design water elevation will likely have a significant impact on rail and other configurations. | practice to ensure design evaluation can be validated so there can be confidence in the design. |
| 89 | TOR 11.64 to TOR 11.71 | The use of only 2 design rainfall locations across 41 catchments also reduces confidence in the efficacy of the modelling. | It is recommended that additional rainfall data is utilised and ARF be applied in the areas of interest in accordance with accepted engineering practice. |
| 90 | TOR 11.64 to TOR 11.71 | There is a need to review and justify the use of model parameters such as roughness. Similarly, there is a need to review cross drainage in the model. Longitudinal drainage needs also be considered. | It is recommended that the proponents justify the selection of parameters and the subsequent design solution. Longitudinal and cross drainage needs to be investigated for impacts along the alignment and a satisfactory design response documented. Additional modelling is required to address these matters. |
| 91 | TOR 11.64 to TOR 11.71 | Local drainage impacts are a concern. | That as part of detailed design there is a need to confirm that the local catchment drainage to each culvert does not produce a higher flow than that calculated for the regional case. |
| 92 | TOR 11.64 to TOR 11.71 | Further documentation is required on diversion drains | A specific example is the need to provide a diversion drain through the embankment at Valley Vista estate to allow cross flow into the system. |
| 93 | TOR 11.64 to TOR 11.71 | Given the nature of the soils in this region there will be a need consider scour protection. | That in detailed design the proponent investigate and detail suitable scour protection through the length of the alignment. |
| 94 | TOR 11.64 to TOR 11.71 | Key aspects need to be reviewed and accepted before going to detailed design which is to be undertaken by a third-party PPP. | That ARTC be required to address key items and submit a revised reference design to the COG prior to detailed design. |
| 95 | TOR 11.64 to TOR 11.71 | The Panel has concluded that the Technical Report is not sufficiently comprehensive to meet the Panel's Terms of reference or all necessary affected aspects. That the panels terms of reference did not cover all necessary affected aspects e.g. local flooding and the interaction with the regional event. | That the proponents provide additional modelling and details in relation to the calibration of the flood models and the modelling of design events. That the panel or equal future review body have a suitable terms of reference to cover all necessary affected aspects. |
| 96 | TOR 11.64 to TOR 11.71 | Local flood models covering large catchments need to be included in the results | That the proponent be required to integrate, consider and address the local and regional flood modelling. |
| 97 | TOR 11.64 to TOR 11.71 | It is concerning that local landowners may not be aware of the potential impacts. | That the proponents provide a table of consultation specifying consultation on flood modelled outputs with affected landholders and the land-holders acceptance of the findings and the impacts to their property. |
| 98 | TOR 11.64 to TOR 11.71 | Flood evacuation routes have not been identified | That the proponents identify current evacuation routes and evacuation centre locations particularly for Laidley, Gatton and Forest Hill and demonstrate the viability of future evacuation routes following Inland |

| | | | |
|---|------------------------|--|---|
| | | | rail construction. These routes to be to the satisfaction of the LVRC and the Lockyer LDMG. |
| 99 | TOR 11.64 to TOR 11.71 | It is considered that the cumulative impacts of the project (including flooding) make the mitigation of impacts impossible on the current alignment. | Flood modelling, taking into account the abovementioned concerns, needs to be undertaken on alternative alignments to the north of Gatton and Forest Hill. |
| | | Chapter 14 – Groundwater | |
| 100 | | Given the local government areas reliance on agriculture, there is significant concern in the Lockyer valley regarding competing uses of water especially in time of drought. The project will be a significant user of water but has not adequately described the sources and quantities of water required for construction. | It is recommended that the COG specify that water from Lake Dyer, Lake Clarendon and Atkinsons dam not be utilised by the proponent for construction or operational purposes. Further that groundwater use will be prohibited without due consultation with Water Users and LVRC. All other potential water sources to be considered. Further that the proponents identify water sources that may be unsuitable for agriculture use that can be utilised for works such as dust suppression. |
| Chapter 15 – Noise and Vibration | | | |
| 101 | Chapter 15 | <p>Inappropriate noise criteria – The proponent has nominated noise criteria that ensures the majority of the cost of rail noise mitigation, financial or otherwise, is borne by the community. Costs to the community include direct noise mitigation costs, reduced amenity, reduced property value, reduced ability to develop, and increased cost of future development. The Lmax trigger level chosen by the proponent for noise mitigation is 80 dB(A). To put that into perspective, acceptable construction for a dwelling in a rail noise corridor that experiences 80 dB(A) Lmax is:</p> <ul style="list-style-type: none"> - Mini 10.38 mm laminated glass with acoustic seals for small windows. - Minimum 14.38 mm laminated glass or double-glazing with acoustic seals for large windows and sliding doors. - Double brick walls. - Insulated roof with sarking. | The noise impact assessment needs to be revised to use recognised noise assessment criteria, so the noise impacts are accurately understood. It must also include firm commitments by the proponent to be wholly responsible for all noise mitigation measures. This is to ensure that burden of responsibility for implementing noise mitigation measures is not simply avoided by the proponent and passed on the community. |

| | | | |
|-----|---|--|---|
| | | <p>This is an extremely onerous level of noise mitigation that Queensland requires at 80 dB(A) Lmax, however the same noise level is only the point at which the proponent will consider mitigation.</p> <p>Queensland mandates acoustic construction requirements via the Queensland Development Code (QDC) MP4.4 - buildings in a noise corridor with rail noise levels over 69 dB(A) Lmax. The QDC MP4.4 does not provide Leq criteria. Further, the WHO guidelines, recommend 44 dB(A) Lnight as the limit to mitigate sleep disturbance.</p> <p>Therefore, it can be considered that any sensitive dwellings that are predicted to experience noise over 44 dB(A) Lnight and 69 dB(A) Lmax and below the proponent's trigger levels are being overlooked by this assessment. These dwellings will have varying noise impacts but will not receive any mitigation. There are literally thousands of them.</p> <p>TOR 5.1 states that 'the objectives of the EIS are to ensure that all relevant environmental, social and economic impacts of the project are identified and assessed, and to recommend mitigation measures to avoid or minimise adverse impacts.' Based on the points raised here, it is concluded that the draft EIS does not satisfy the fundamental objective described in the OCG's TOR and grossly underestimates the noise impacts.</p> | |
| 102 | <p>Chapter 15</p> <p>Appendix E (Proponent Commitments), Table E.3 (Commitments – Detailed Design Actions) Table E.6 (Commitments – Operations)</p> | <p>Inappropriate mitigation – The noise and vibration assessment completed to inform the draft EIS concluded that there would be significant exceedances of noise criteria during both the construction and operation phases in communities adjacent to the proposed alignment. However, there is little detail as to how such issues will be mitigated.</p> <p>In addition, D19 in Table E.3 of Appendix E states that 'where reasonable and practicable (or feasible), the project operational noise goals will be applied at existing sensitive receptors (at the time of EIS public notification) as shown in Table A1.3 and Table A1.4.' In addition, O2 in Table E.6 states 'the proponent will investigate reasonable and practicable (or feasible) mitigation measures where monitored noise and/or vibration levels at sensitive receptors are confirmed to be above the adopted project operational noise design goals.'</p> <p>As a result, the draft EIS fails to meet the OCG's TOR Objective for Noise and Vibration which requires the proposed project be 'planned, designed, constructed and operated <i>to protect the environmental values of the</i></p> | <p>The draft EIS needs to be updated to meet the requirements of the OCG's TOR and to provide firm commitments to achieving noise and vibration goals at sensitive receivers during the construction and operation phases. Investigating reasonable and practicable (or feasible) mitigation measures is not sufficient, particularly given the significant impact on urban areas impacted by the project.</p> <p>As a result, the draft EIS requires update to include appropriate assessment, appropriate mitigation and appropriate commitments regarding noise levels at sensitive receptors.</p> <p>The current alignment through and adjacent to towns means that it is highly unlikely, if not practically impossible, that the proponent can adequately mitigate the potential noise impacts of the project on the residents of Lockyer Valley. Therefore, LVRC strongly recommends that the COG require the proponent to abandon the current alignment and to undertake further and more comprehensive and accurate assessments of</p> |

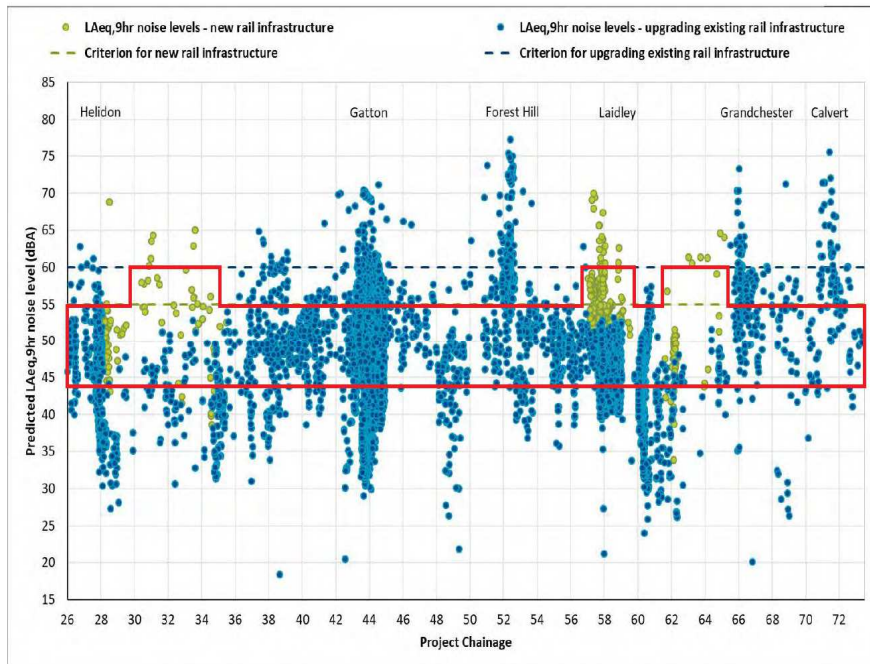
| | | | |
|-----|---|---|--|
| | | <i>acoustic environment.</i> And also fails to meet the requirements of TOR 5.1, which requires that <i>'all relevant environmental, social and economic impacts of the project are identified and assessed and to recommend mitigation measures to avoid or minimise adverse impacts.'</i> | alternate alignments that comply with the TOR to identify an alignment that will adequately avoid, minimise and mitigate the potential project impacts. |
| 103 | Chapter 15 Section 15.4 (Legislation, Policies, Standards and Guidelines) Table 15.2 | Use of outdated guidance – With regard to the World Health Organisation's (WHO) <i>Night Noise Guidelines for Europe (2009)</i> , the proponent states that 'the document has not been used to establish criteria...but rather provides context on contemporary approaches to considering potential night-time noise impacts'. The WHO published a relevant and updated guideline in 2018 titled <i>Environmental Noise Guidelines for the European Region</i> which includes specific criteria of the assessment of sleep disturbance by railway noise. The current WHO guidance should have been used for the assessment and not the outdated guidance that was referred to in the draft EIS but not actually used to assess impacts. The draft EIS fails to meet the requirements of TOR 5.4 which requires the document to be 'generally in accordance with relevant policies, standards and guidelines.' | The draft EIS requires update to meet the requirements of the COG's TOR and to appropriately consider the latest guidelines from the WHO which represent the most comprehensive and current information on noise related sleep disturbance for railway projects and must be used to establish night-time noise criteria for assessing sleep disturbance. |
| 104 | Chapter 15 Section 15.4 (Legislation, Policies, Standards and Guidelines), Table 15.2 Section 15.8.2 (Construction Vibration Impacts), Table 15.22 | Inappropriate vibration criteria – TOR 11.121 requires the draft EIS to 'describe the characteristics of the noise and vibration sources that would be emitted when carrying out the activity'... 'describe noise and vibration emissions (including fugitive sources) that may occur during construction, commissioning and operation.' Further, TOR 11.12 requires the draft EIS to 'describe how the proposed project would be managed to be consistent with best practice environmental management for the activity...' The following information provided in the draft EIS is not considered to be consistent with best practice for environmental management: - Vibration criteria provided in Table 15.22 are expressed as 'Limits' rather than 'Guideline Targets'. Many large-scale projects adopt the latter, which potentially allows the opportunity for the construction contractor to motivate for alternative, possibly elevated, criteria, to develop the proposed project at a reduced cost and/or a quicker schedule. 'Guideline Targets' may sometimes be considered advantageous for construction contractors as they allow opportunities | The draft EIS requires update to: - Reflect 'Guideline Targets' rather than 'Limits'. - Use the more relevant AS 2187.2, rather than BS528. |

| | | | |
|-----|--|--|--|
| | | <p>for alternative construction techniques. However, 'Guideline Targets' are less rigid in terms of clearly identifying permissible values and therefore offer less certainty for affected property owners.</p> <p>Additionally, the 'Limits' approach offers increased assurance of potential project impacts for LVRC and affected property owners.</p> <ul style="list-style-type: none"> - The proposed vibration limits for blasting are taken largely from the British Standard BS528 rather than AS 2187.2, which more frequently used for assessing blasting in Australia. As a result, the draft EIS fails to meet the requirements of TOR 5.4 which requires the document to be 'generally in accordance with relevant policies, standards and guidelines.' | |
| 105 | Chapter 15 Section 15.8.1.1 (Airborne Construction Noise Impact), Table 15.20 | <p>Significant number of impacted dwellings – Table 15.20 shows a significant number of dwellings are predicted to receive construction noise levels above the limits. In relation to this, the proponent states that 'the assessment has identified that measures to reduce and control construction noise will need to be developed and implemented...' The document fails to provide any real commitment to mitigate significantly large numbers of impacted dwellings and as a result, fails to meet the requirements of TOR 5.1, and the OCG's TOR Objectives for Noise and Vibration.</p> | <p>The draft EIS requires update to meet the requirements of the OCG's TOR and to identify appropriate Queensland policies and make a firm commitment to compliance with these policies.</p> <p>LVRC request that the OCG impose the following condition: 'The proponent is required to develop construction noise management plans for the project for approval by LVRC at least six months prior to the commencement of construction.'</p> |
| 106 | Chapter 15 Section 15.8.2 (Construction Vibration Impacts), Table 15.23 | <p>Incomplete vibration assessment – TOR 11.121 requires the draft EIS to 'describe the characteristics of the noise and vibration sources that would be emitted when carrying out the activity'... 'describe noise and vibration emissions (including fugitive sources) that may occur during construction, commissioning and operation.' An assessment of the vibration from hydraulic hammers has not been included in the assessment of impacts. Should the proponent wish to use hydraulic hammers during construction activities, an assessment would be required in order to meet TOR 11.121. In addition to this, the potential impacts of flyrock caused by blasting for the construction of cuttings and the tunnel through the Little Liverpool Range has not been assessed.</p> | <p>The draft EIS requires update to include the assessment of vibration from hydraulic hammers, particularly in areas where rock excavation is required, and drilling and blasting is not feasible. Further, the updated document should also address the potential impacts of flyrock from blasting to meet the requirements of the OCG's TOR.</p> |
| 107 | Chapter 15 Section 15.8.8.5 (Non-residential | <p>Inappropriate consideration of mitigation – Section 15.8.8.5 discusses using a 7dB(A) adjustment for external to internal noise levels through an opened window for non-residential sensitive receivers. The text states</p> | <p>The draft EIS requires update to meet the requirements of the OCG's TOR and to appropriately consider the adverse noise impacts non-residential sensitive receivers will experience as a result of the proposed</p> |

| | | |
|--|---|---|
| <p>Sensitive Receptors), Table 15.29</p> | <p>that 'in practice, many of the buildings listed in Table 15.29 will be a modern building construction and/or have air-conditioning so windows do not need to be opened or the façade would provide more than 7 dBA reduction to the intrusion of railway noise. This would result in lower railway noise levels within the buildings greater likelihood of achieving the criteria and potentially reduce the noise mitigation requirements.'</p> <p>The proponent should not rely on the assumption of existing acoustic improvements at a building to minimise their liability for mitigation. For example: Schools near the alignment may have air-conditioning installed already, but only use it for 2 months per year. If the proponent assesses the mitigation requirements of the school based on windows closed and air-conditioning running, the proponent takes advantage of the existing improvements made by the school while forcing them to change their normal use of the windows and air-conditioning. This may result in reduced amenity at the school and increased electricity costs, while the proponent benefits by showing that internal criteria are met.</p> <p>This should be considered when at-property mitigation is negotiated. Additionally, air-conditioning does not imply ventilation (i.e., access to <i>fresh air</i>), and the proponent is not entitled to rely on an assumption that buildings remaining liveable with windows and doors permanently closed purely on the basis that the air in the building is heated or cooled. The requirements of the <i>Building Code of Australia</i> set out access requirements for fresh air and should be complied with.</p> <p>As a result, the draft EIS fails to meet the OCG's TOR:</p> <ul style="list-style-type: none"> - Objective for Noise and Vibration which requires the proposed project be 'planned, designed, constructed and operated to protect the environmental values of the acoustic environment.' - TOR 5.1, which requires that 'all relevant environmental, social and economic impacts of the project are identified and assessed and to recommend mitigation measures to avoid or minimise adverse impacts.' - TOR 5.4 which requires the document to be 'generally in accordance with relevant policies, standards and guidelines.' | <p>alignment either through, or on the outskirts of, LVRC townships. This should include, but not be limited to, identifying the most appropriate mitigation required to minimise adverse noise impacts in a way in which ensures there is no significant residual impact on any of LVRC's communities. Furthermore, the proponent should commit to appropriate noise mitigation measures and not place the burden of mitigation on the affected parties.</p> |
|--|---|---|

| | | | |
|-----|---|---|--|
| 108 | Chapter 15 Section 15.8.8.7 (Assessment of Sleep Disturbance) | <p>Underestimated sleep disturbance – Section 15.8.8 references the outdated WHO <i>Night Noise Guidelines for Europe (2009)</i> and accepts that an external level of L_{Amax} 49 dB(A) is the trigger for sleep disturbance, assuming opened windows. The section goes on to say, that ‘based on noise modelling, the noise levels from rollingstock could be above L_{Amax} 49 dBA within approximately 1km of the rail corridor’.</p> <p>Noise modelling in the draft EIS demonstrates that levels <i>much higher than 49dBA L_{max}</i> are predicted to be experienced at distances greater than 1 km. For example, receiver 292929 appears to be approximately 1 km from the track and is predicted to experience 75 dBA L_{max}.</p> <p>The draft EIS suggests that 175 properties may experience noise that causes sleep disturbance, however this a grossly misleading and inaccurate claim. The number of houses where sleep disturbance may be experience will be well above 4000 dwellings. The potential for sleep disturbance appears to be significantly underestimated and ultimately dismissed by the proponent.</p> | <p>The draft EIS requires update to quantify the number of dwellings that may experience sleep disturbance and appropriately consider the real extent of those impacts.</p> <p>The assessment should use criteria from the most recent WHO (2018) guidelines for sleep disturbance from railway noise and include real and effective mitigation measures for every sensitive receptor that is predicted to experience noise levels which will cause sleep disturbance.</p> |
| 109 | Chapter 15 Section 15.8.8.7 (Assessment of Sleep Disturbance) Appendix P, Figure 24 | <p>Thousands of adversely affected properties not considered – Section 15.8.8 also states that ‘this guidance acknowledges the establishment of relationships between single event noise indicators, such as L_{Amax}, and long-term health outcomes remains tentative’. The draft EIS did not utilise the most current authoritative guidance on the topic of sleep disturbance. The WHO released new guidelines in 2018 which strongly recommend a night time outdoor noise limit of 44 dBA Leq,night (external façade level) for noise from a railway. The draft EIS does not reference this current document.</p> <p>The proponent has adopted trigger levels of 55 dBA Leq,night and 80dBA L_{max}, both of which appear to have no connection to any credible guidance on the mitigation of sleep disturbance.</p> <p>As it stands, there appear to be <i>over 4000</i> sensitive receptors with predicted night time noise levels of ≥ 44 dB(A) Leq,night but below the criteria adopted by the noise assessment. These <i>4000+ dwellings</i> are not triggered for mitigation but are well above the WHO guidelines for sleep disturbance. The result is that the financial and personal cost of the rail noise impacts are borne by those residents without any form</p> | <p>The draft EIS suggests that 175 properties may experience noise that causes sleep disturbance, however this a grossly misleading and inaccurate claim. The number of houses where sleep disturbance may be experience will be well above 4000 dwellings. The WHO (2018) states that sleeping satisfies a basic need and the absence of undisturbed sleep can have serious effects on human health.</p> <p>The draft EIS requires update to accurately assess the noise impacts of the project, appropriately identify adversely affected sensitive receptors, meet the requirements of the COG’s TOR and demonstrate how the assessment criteria that is currently adopted can possibly protect the ability to sleep at sensitive dwellings. If this cannot be demonstrated, the criteria and assessment need to be revised and the noise assessment undertaken again with the adoption of more appropriate and justifiable criteria for sleep disturbance.</p> |

compensation. See the example figure below (Figure 24 from Appendix P), the red box encloses the dwellings that exceed WHO noise guidelines but do not trigger the proponent's mitigation process.



| | | | |
|-----|--|---|---|
| | | <p>The section goes on to say that 'the 1 km distance is a guide to where night-time noise levels may have the potential to result in sleep-disturbance impacts. As previously discussed, the 1 km distance is a <i>grossly underestimated</i> guide. The text then states that 'individuals will respond to noise differently, and just because railway noise can be audible does not mean it will cause disturbance or annoyance impacts.' This sentence is silent on the potentially very large proportion of the population who will be disturbed and annoyed by audible train noise where it has not existed before or has become significantly more intense and/or frequent. These people will complain, and for those who experience noise above credible guidelines, their complaints will be justifiable.</p> <p>The impacts of sleep disturbance are widely reported and are well understood to have a major impact on health and quality of life. The WHO (2018) states that sleeping satisfies a basic need and the absence of undisturbed sleep can have serious effects on human health. Causal pathways have been established between noise induced sleep disturbance and health effects such as cardiovascular and metabolic disease. Other effects include impaired cognitive function and psychological impacts.</p> <p>As a result, the draft EIS fails to meet the OCG's TOR Objective for Noise and Vibration which requires the proposed project be 'planned, designed, constructed and operated <i>to protect the environmental values of the acoustic environment.</i>' And also fails to meet the requirements of TOR 5.1, which requires that '<i>all relevant environmental, social and economic impacts of the project are identified and assessed and to recommend mitigation measures to avoid or minimise adverse impacts.</i>'</p> | |
| 110 | Chapter 15 Section 15.9.1.2 (Operational Noise Initial Mitigation), Table 15.37 | Unclear mitigation details – Section 15.9.1.2 states that 'the mitigation measures...presented in Table 15.37...have been applied prior to the prediction of operational railway noise...' however, it is unclear how any of the mitigation measures in Table 15.37 are applicable to noise prediction modelling. | The draft EIS requires update to revise this section and ensure the intended meaning is effectively communicated. |

| | | | |
|-----|---|---|--|
| 111 | Chapter 15 Section 15.9.2 (Proposed Mitigation Measures), Table 15.38 | <p>Dismissal of more appropriate alignments – Table 15.38 of Section 15.9.2 proposes the mitigation and management measure ‘avoid / minimise impacts on nearby sensitive receptors during detailed design.’ It can be demonstrated that the proponent has not followed this mitigation measure in the design when comparing the preferred and alternate alignments through the town of Gatton. The preferred alignment passes through the town, just 30 m from some dwellings. An alternative alignment exists to the north of Gatton which appears to have approximately half the number of sensitive receptors within 1 km compared with the preferred alignment.</p> <p>As a result, the draft EIS fails to meet the OCG’s TOR Objective for Noise and Vibration which requires the proposed project be ‘planned, designed, constructed and operated to protect the environmental values of the acoustic environment.’ And also fails to meet the requirements of TOR 5.1, which requires that ‘all relevant environmental, social and economic impacts of the project are identified and assessed and to recommend mitigation measures to avoid or minimise adverse impacts.’</p> <p>An alternate alignment not through the centre of towns will enable more effective and less costly noise mitigation measures (along with the many other benefits outlined in this submission of an alternate alignment).</p> | <p>Alternative alignments should be appropriately considered where large numbers of receptors are affected. Whether or not this has occurred has not been made clear by the content of the draft EIS and as a result, the draft EIS fails to meet the requirements of the OCG’s TOR.</p> <p>To meet the OCG TOR, LVRC strongly recommend the OCG to require the proponent to abandon the current alignment and to undertake further and more comprehensive and accurate assessments of alternate alignments that comply with the TOR to identify an alignment that will adequately avoid, minimise and mitigate the potential project impacts.</p> |
| 112 | Chapter 15 Section 15.9.2.1 (Operational Railway Noise and Vibration Mitigation) | <p>Unclear mitigation measures – Section 15.9.2.1 presents examples of at-premises noise mitigation ‘such as increased glazing or façade construction’. It is not expected that this is intended to limit possible mitigation options, but it is unclear, nonetheless.</p> | <p>The draft EIS requires update so that ‘or’ is not used as it implies that increased glazing AND façade construction will not be offered together. Air-conditioning should also be mentioned here as any improvements to glazing and facades imply that windows are closed, and air-conditioning will be required.</p> |
| 113 | Chapter 15 Section 15.9.2.1, Table 15.39 | <p>No assessment of outdoor impacts – Table 15.39 of Section 15.9.2.1 lists noise mitigation options. The options generally seem reasonable; however, they are all specific to internal habitable areas. Rail noise, especially at close proximity, will affect a whole property including outdoor spaces. The acoustic amenity of private open space does not appear to have been considered in the draft EIS at all. Informally - imagine trying to entertain in your BBQ area with 2 freight trains passing each hour 50 m away.</p> | <p>The draft EIS needs to be updated to appropriately consider the OCG’s TOR requirements and all adverse noise impacts to the LVRC community, including outdoor spaces. The proponent should consider private open spaces as living areas and provide specific mitigation options for these spaces.</p> |

| | | | |
|-----|--|---|---|
| | | As a result, the draft EIS fails to meet the OCG’s TOR Objective for Noise and Vibration which requires the proposed project be ‘planned, designed, constructed and operated <i>to protect the environmental values of the acoustic environment.</i> ’ And also fails to meet the requirements of TOR 5.1, which requires that ‘ <i>all relevant environmental, social and economic impacts of the project are identified and assessed and to recommend mitigation measures to avoid or minimise adverse impacts.</i> ’ | |
| 114 | Chapter 15 Section 15.9.2.1 | Dismissal of impacts to Gatton Caravan Park – Section 15.9.2.1 discusses four ‘concept railway noise barriers’ for the Gatton Caravan Park. The text further states that ‘caravans can potentially be moved within the site and may not be permanently occupied, which can influence the potential requirements for noise mitigation. This implies that the proponent is willing to take advantage of the flexible nature of the site without regard for ensuring that the entire site remains useful and is not appropriate on any level. As a result, the draft EIS fails to meet the COG’s TOR Objective for Noise and Vibration which requires the proposed project be ‘planned, designed, constructed and operated <i>to protect the environmental values of the acoustic environment.</i> ’ | The draft EIS requires updating to ensure the requirements of the COG’s TOR Objective for Noise and Vibration is met and ensure that mitigation measures do not expect the adversely affected community to become responsible for managing noise levels and mitigation. The document should remove any text which proposes to reduce the ability for a property to be used as it is currently and suggests that the onus of mitigation is on the producer of the adverse noise impacts, which would be the proponent. |
| 115 | Chapter 15 Section 15.9.3.3 (Operational Infrastructure) | Underestimated distances for adverse noise impacts – Section 15.9.3.3 states that ‘external rail noise levels have the potential to be clearly audible above the ambient noise environment within relatively close proximity of the project, such as the initial 400 m from the rail corridor’. This distance is grossly underestimated. Using receiver 292929 as an example, which is approx 1000 m from the rail line and is predicted at 75dBA Lmax which is approximately 45dBA above the night-time rating background level in the area. This demonstrates the trains will be clearly audible at distances FAR in excess of 400 m . As a result, the draft EIS fails to meet the OCG’s TOR Objective for Noise and Vibration which requires the proposed project be ‘planned, designed, constructed and operated <i>to protect the environmental values of the acoustic environment.</i> ’ | The draft EIS requires update to ensure the requirements of the OCG’s TOR Objective for Noise and Vibration is met. To achieve this, the document should accurately quantify the full spatial extent of the impact of rail noise with relation to the exceedance of background noise levels. |
| 116 | Chapter 15 Section 15.9.3.3 | Underestimated distances for adverse noise impacts – Section 15.9.3.3 goes on to state that ‘given the high level of noise that can be experienced close to a rail corridor during train pass-bys, there can still be potential for | The draft EIS requires update to ensure the requirements of the COG’s TOR 5.1 are met and to provide a solution for when noise criteria cannot |

| | | | |
|----------------------------|-----------------------------------|---|---|
| | (Operational Infrastructure) | noise-related impacts, including sleep disturbance, where noise mitigations and at-property treatments are implemented. Again, ‘close to a rail corridor’ should be understood as meaning <i>much further than 400 m</i> . Additionally, as previously discussed, there are <i>several thousand dwellings with noise levels over the WHO guidelines</i> but will not receive mitigation from the proponent. The draft EIS then states that proposed mitigation measures may not be able to provide an amenable dwelling, yet do not provide a solution for situations where that is the case. As a result, the draft EIS fails to meet the requirements of TOR 5.1, which requires that ‘all relevant environmental, social and economic impacts of the project are identified and assessed and to recommend mitigation measures to avoid or minimise adverse impacts.’ | be met with mitigation, e.g., compensation, purchasing of land / property, etc. |
| 117 | Ch 15 | LVRC owns a range of facilities in close proximity to the rail corridor. Concern is raised over the long-term effect of vibration on the structural integrity of these buildings and facilities. | It is recommended that the COG require the proponents to conduct an audit of facilities within close proximity of the corridor and specify the compensation regime that will apply for long term damage caused by the project. |
| Chapter 16 – Social | | | |
| 118 | Chapter 16 | Little regard for adverse community impacts – Chapter 16 of the draft EIS gives little regard to the impacts associated with the proposed alignment on LVRC’s urban communities and over-emphasises the benefits to local communities. The Chapter does however acknowledge that residential dwellings, businesses and community facilities closest to the project will have the greatest potential to experience adverse amenity impacts and that there is also potential for the project to harm community cohesion. As a result, the draft EIS fails to meet the requirements of TOR 5.1, which requires that ‘all relevant environmental, social and economic impacts of the project are identified and assessed and to recommend mitigation measures to avoid or minimise adverse impacts.’ | The current alignment through and adjacent to towns means that it is highly unlikely, if not practically impossible, that the proponent can adequately mitigate the social impacts of the project on the residents of LVRC region. LVRC strongly recommend the COG require the proponent to abandon the current alignment and to undertake further and more comprehensive and accurate assessments of alternate alignments that comply with the TOR to identify an alignment that will adequately avoid, minimise and mitigate the potential project impacts. |
| 119 | Section 16.12 (Impact assessment) | TOR 11.141 requires the social impact assessment to describe the potential impacts on affected communities. | It is recommended that the COG require the proponent to further consider mitigation options to reduce social impacts is required by the project. (This may involve a revised alignment). |

| | | | |
|------------|--|---|---|
| | | <p>The social impact assessment has identified “Significance of social impact ratings” at Table 16.28 however there is no discussion or explanation around what the different ratings mean. This discussion is required.</p> <p>For example, the impact assessment summary identifies many residual risks in the ‘Extreme’ social impact rating however it is not clear if an ‘Extreme’ residual risk is acceptable or unacceptable for the project to continue.</p> <p>In the strongest terms, Council recommends any ‘Extreme’ residual risks are inappropriate for this project and must be further mitigated to reduce the residual impact (which may involve a revised alignment).</p> | |
| 120 | <p>Section 16.12 (Impact assessment)</p> <p>Table 16.30</p> | <p>The TOR objectives for the Social chapter are to “avoid or mitigate/ manage adverse social impacts arising from the project”.</p> <p>Council notes the Impact Assessment Summary results in 71 NEGATIVE impacts and only 8 POSITIVE impacts. The positive impacts relate mostly to the potential 20 ongoing operational jobs. This impact assessment summary clearly demonstrates that the adverse social impacts of the project outweigh any potential social benefits. On this basis, the project should not be approved.</p> | <p>Please note and consider whether an alternate alignment is warranted.</p> |
| 121 | <p>Section 16.1 (Summary) – Project benefits sub-heading</p> <p>Section 16.11.3 Workforce management</p> | <p>TOR 11.152 requires management plans addressing workforce management.</p> <p>The Workforce Management Plan states an objective is to “enable residents of nearby communities to access the project’s construction and operational employment benefits”.</p> <p>Targets for employment within 125 km do not support local employment where the impacts of the project are felt.</p> <p>Unfortunately, Council takes no assurance from this objective when other parts of the Social Chapter specifically exclude the Lockyer Valley Regional Council as where potential construction employment will be derived from:</p> | <p>That unambiguous and clear commitments that 85% of the construction workforce of the H2C alignment will be sourced from Lockyer Valley is required for the region to see any tangible benefit from this project. That ARTC procure with this target in place.</p> <p>Firm targets be introduced for employment and made publicly available and reported upon. (Unreleased targets are not targets at all.)</p> |

| | | | |
|-----|---|---|--|
| | | The construction workforce is expected to be drawn from within a safe daily (one-hour) driving distance, including communities within the Brisbane, Beaudesert, Logan, Ipswich and Toowoomba LGAs, with some personnel sourced from nearby communities. On | |
| 122 | Section 16.10.5 Business and industry Section 8.7.2.5 Development activity | TOR 11.152 requires management plans addressing local business and industry content. The draft EIS has identified potential local supply opportunities including that the project “will likely be a catalyst for the construction and industrial uses and development in the GWIZ”. Council has undertaken separate, independent, investigations into opportunities at the GWIZ which have confirmed that inland rail is not likely to catalyse the precinct. | That the draft EIS should be amended to remove this as a project benefit. |
| 123 | Section 16.11.2.8 Engagement measures | TOR 11.152 requires management plans addressing community and stakeholder engagement. A Forest Hill local area planning process is identified to be undertaken during detailed design to “identify challenges to the sustainability of businesses and the amenity of community facilities, measures to support town centre businesses, and measures to enhance the amenity of community facilities during the construction phase”. Undertaking this action at the detailed design phase is too late in the process to yield any realistic outcomes or community support. The impacts of inland rail will have already been set through approval of an EIS and conditions that any local area planning benefits will ultimately fall to the Council to implement (which is grossly inadequate). Similarly, if a realignment to outside Gatton is not forthcoming, a local area planning process will be required in Gatton. | The Forest Hill local area planning process requires reconsideration to undertake it prior to detailed design (ie. Start the process now with outcomes then incorporated into the EIS). Alternatively, other mitigation measures are required. It is recommended that a Gatton local area planning process is required prior to detailed design. (ie. Start the process now with outcomes then incorporated into the EIS) |
| 124 | Chapter 16 | The TOR objectives for the Social chapter are to “avoid or mitigate/ manage adverse social impacts arising from the project”. | It is considered that further detailed consideration of alternate alignments which deviate around the townships of Lockyer Valley is |

| | | | |
|-----|--|--|---|
| | | <p>This chapter has outlined in several instances that the project will result in ongoing and long-term impacts to the communities of Lockyer Valley including impacts to:</p> <ul style="list-style-type: none"> • Residential amenity • Rural character • Tourism values • Community safety • Regional development • Health and wellbeing • Traffic safety and travel times • Agricultural movements • Connectivity • Noise • Sense of place (Table 16.5 of the draft EIS) <p>It has further identified that these themes are valued by the community members of Lockyer Valley, determined through the outcomes of the SIA engagement process.</p> <p>Council recognises some mitigation measures have been identified (ie. Community Wellbeing Plan, Workforce Management Strategies). However, even with the project specific strategies the residual risk remains at “Extreme” thresholds for town centre amenity, construction noise and rural residential amenity, and “Moderate” to “High” for operational noise, sense of place, community cohesion.</p> <p>The social impact assessment has identified the impacts to the townships of Lockyer Valley will be profound, significantly adverse, and irreversible.</p> | <p>therefore required. This must be undertaken in consultation with the local community where the preferred alignment, and alternate alignments are identified contemporaneously with all impacts and operational aspects of the project clearly articulated.</p> <p>Acceptance of the draft EIS in its present format will be devastating for the communities of Lockyer Valley.</p> |
| 125 | Chapter 16 Section 16.9.2.1 (Community Survey) | <p>Disregarded Community Survey – Section 16.9.2.1 discusses the findings of a community survey completed in 2018 regarding the project. The section openly states that ‘the general tone of the survey comments indicates <i>mistrust, anger, fear and opposition to the project</i>’ and that the</p> | <p>LVRC consider that community consultation has not been appropriately managed, and this is made clear through the lack of consideration of the findings of the community survey in the document.</p> |

| | | |
|--|--|---|
| <p>Appendix Q: Social Impact Assessment Technical Report, Section 6.3.1 (Community Survey) and Section 8.6.6 (Action Plan), Table 8.12</p> | <p>respondents <i>anticipated negative effects</i> for their community in relation to many issues including, but not limited to, <i>community fragmentation, noise impacts, impacts to sleep and general health and wellbeing.</i>' Specifically, community concerns regarding anticipated negative affects garnered from the survey included:</p> <ul style="list-style-type: none"> - Impacts on local property values and on quiet enjoyment of private properties. - Severance of farming land and impacts to agricultural productivity and local business operations. - Impacts to the scenic amenity and character of townships. - Disruption of residents' quiet way of life and enjoyment of public spaces and townships, also affecting local visitor appeal. - Community wellbeing, including: <ul style="list-style-type: none"> - Fear of community fragmentation, harming cohesion. - The potential for increased stress, anxiety and depression among affected property owners and also nearby residents who fear or oppose the project. - Noise impacts causing nuisance, affecting sleep and general health and wellbeing. - Potential for pollution and coal dust to affect the drinking water of nearby residents that rely on rainwater tanks.' <p>The Chapter provides no evidence that any community or stakeholder inputs were actually integrated into mitigation measures. Rather the reader is directed to Appendix Q. As a result, the draft EIS fails to meet the requirements of TOR 12.2 which states that '<i>no significant issue or matter should be mentioned for the first time in an appendix – it must be addressed in the main text of the EIS.</i>' These community concerns are a significant issue and should be treated accordingly, rather than dismissed. Section 6.3.1 (Community Survey) of Appendix Q also fails to address any of these concerns, rather it instead cites key themes from respondents including 'changes to the project alignment to avoid impacts on towns, and/or minimising agricultural land severance.' Table 8.12, which claims to provide commitments and management measures to support the mitigation of impacts is silent on any and all community concerns and completely fails to consider realignment.</p> | <p>The draft EIS requires updating to show how the findings of the survey have resulted in changes to the proposed project. The very real adverse impacts the proposed alignment will have on the local community, and the communication (through various means) of community concerns, need to be considered by the proponent and addressed in a way which will ensure that there will be <i>no significant residual impact</i> to the community as a result of the project.</p> |
|--|--|---|

| | | | |
|-----------------------------|-------------------------|---|---|
| | | As a result, the draft EIS fails to meet the requirements of TOR 7.8 as it has not made clear how the findings of the community survey were ‘incorporated into the design and outcomes of the project.’ | |
| Chapter 17 Economics | | | |
| 126 | Chapter 17 TOR 11.21 | A fundamental concern remains regarding the real economic viability of Inland Rail. Chapter 17 states it is based on a 2015 Business case, yet the deputy PM announced additional costs of \$5B and the PPP has still yet to be concluded. That process is likely to introduce substantially more cost. Yet the additional benefits have not been described. It is questionable that a BCR greater than 1 remains. At what point do additional costs make the project unviable? Covid-19 has also introduced increased costs of materials. This will significantly impact on construction costs. | That the COG requires additional costs to be factored into impacts to recalculate the BCR in light of additional cumulative costs now identified. This should be included in a revised assessment. The Project has claimed a net economic benefit. This needs to be tested given recently increased costs and additional Covid-19 related cost increases. |
| 127 | 17.6.3 TOR 11.153 | TORs 11.153 requires an identification of economic impacts on the local and regional area . This has not been done. The statement that “the regional economy is represented by the Toowoomba and Greater Brisbane labour market regions” demonstrates the economic analysis is fundamentally flawed. | It is recommended that the CoG require ARTC to provide a meaningful analysis of economic impacts within the local area. |
| 128 | 17.6.5 TOR 11.153 | The EIS admits that there are limitations on the assessment methodology and does not examine economic impacts at a local level. The statement from ARTC in this section that the 2015 Business Case should be relied upon is dismissive of CoG processes and the requirements of the IAS. Fundamental problems have clearly arisen with that business case given the Australian Governments press release increasing funding of the project to \$14.5 B up by \$5B. The 2015 Business case is no longer current. | Proper economic assessment should look at the benefits and costs at a Local government and regional area level. Looking at National benefits does not demonstrate the costs and benefits of the H2C project. |
| 129 | 17.9.2 TOR 11.153 | The loss of agricultural land is discussed. Though calculations are very poorly made and misleading. To suggest that loss of 86 Ha of Class A land represents only an annual loss \$17,274 is simply wrong. | That the section be corrected with appropriate methodology for this calculation. |
| 130 | 17.9.2.1 TOR 11.153 | This states that specific impact on the economic viability of farming operations, as a result of this potential disruption to access and infrastructure, is not quantified in this assessment. | That these impacts be considered. |

| | | | |
|-----|-----------------------|---|---|
| 131 | 17.9.5 TOR 11.153 | This section is misleading. It suggests local businesses will be able to supply a range of construction supplies. This is simply not the case and other sections of the report acknowledge where these projects inputs are travelling from. | More transparent assessment is required to acknowledge limitations of local supply. |
| 132 | 17.10.3 TOR 11.153 | <p>The benefit categories are too generic and are meaningless at a local level. The EIS has not been able to demonstrate any tangible benefits at this critical level. Making a high-level assessment based on invalid assumptions is meaningless for assessment. For example, assuming a significant mode shift from road to rail. No farmers from the Lockyer Valley have advised Council they would utilise rail - for valid timing and product risk reasons. Claims that our farmers will use the inland rail for produce is simply not the case.</p> <p>The economic analysis is meaningless at a local and regional level. Using Toowoomba and Greater Brisbane as a proxy for local is misleading and needs correction.</p> <p>No direct costs have been identified to assess true economic costs. For example, no analysis is attempted for costs such as reduced mental and physical health for local residents.</p> | H2C is largely in the Lockyer Valley. Economic analysis is required at this level (not greater Brisbane). |

Chapter 19 – Transport Traffic and Access

| | | | |
|-----|--------------------------|---|---|
| 133 | Chapter 19 Table 19.1 | <p>TOR 11.111 Objectives not met. The project does not comply with <i>QLD Level Crossing Safety Strategy 2012-2021</i>.</p> <p>Key strategy 9 identified in <i>QLD Level Crossing Safety Strategy “Explore opportunities for grade separation or closing level crossings and seek to minimise any proposals to construct a public level crossing on a greenfield site, with a clear objective to add no further open level crossings to the network”</i>.</p> | <p>The option to alter the alignment to reduce the number of impacted level crossings and/or change the vertical alignment of the Inland Rail track in order to facilitate grade separation at all crossings should be further explored to reduce the risk as far as is reasonably practical.</p> <p>Options to consider include realignment away from towns where heavily utilised level crossings exist, utilisation of natural or existing road levels to construct rail over road bridges and placement of the rail line on viaduct across the flood plains allowing for clear grade separation at road</p> |
|-----|--------------------------|---|---|

| | | | |
|------------|---|---|--|
| | | <p>The reference design includes the introduction of a new level crossing at Connors Road ch31400, relocating Hunt Street to a new location at Glenore Grove Road ch52500.</p> <p>The existing Jamieson Road ch41500 crossing remains open.</p> <p>The existing Dodt Road ch51000 crossing remains open.</p> <p>The increased number of trains and length of delays due to Inland Rail traffic increases the likelihood of incidents occurring at these locations.</p> | <p>crossings on top of the reduction of flood impacts due to rail embankment.</p> |
| 134 | Chapter 19 Section 19.8 | <p>Section 19.8 notes the potential for increased parking demand due to project workers. Construction workers generally commence earlier than retail shops and if allowed to utilise public parking space, this will significantly impact on available parking in towns such as Helidon, Gatton, Forest Hill and Laidley, having a detrimental impact on local businesses and residents.</p> | <p>That all project workers shall be required to park both commuter and work vehicles on dedicated sites provided by the project and be prohibited from using public parking spaces.</p> |
| 135 | Chapter 19 Table 19.21 TOR 11.109 | <p>Intersections listed for LVRC are underreported due to erroneous traffic count data being used to evaluate intersection impacts.</p> <p>This impact is due to both incorrect low counts (e.g. eight (8) on Railway Street, Laidley) and high assumed counts (e.g. 300 left turn movements in peak hour existing from Glenore Grove Road to Hall Road). Hall Road is a gravel road servicing three (3) properties and associated agricultural activities. An assumed daily traffic count of 4000 is obviously incorrect. These types of inaccuracies are found through the Traffic Impact Assessment. With such poor-quality data, conclusions drawn are equally questionable.</p> <p>The absence of actual count data is no excuse for not making an educated assessment of likely traffic volumes, based on recognised trip generation models commonly used for new development work. Even simply counting the number of houses/businesses on a road and applying a standard number of daily trips would be an improved starting point.</p> | <p>It is recommended that the COG require the Traffic Impact Assessment to be amended to use actual or agreed traffic volumes and turning movements and re-submitted for consideration by the impacted road authorities.</p> |

| | | | |
|-----|---|---|--|
| | | <p>Low counts underplay the number of turning movements and even with increased construction traffic upgrade, warrants aren't triggered (e.g. Laidley-Plainland Road and Railway Street) or the base count is so much higher than reality, that it dilutes the real impact of construction traffic – making it easier to stay under the 5 % hurdle for considering upgrade works.</p> | |
| 136 | Chapter 19 Section 19.11 TOR 11.102 | <p>Other Inland Rail projects forming part of the PPP (G2H and C2K) are listed only as projects considered in cumulative assessment.</p> <p>These three (3) projects are being procured as one (1) contract and to not consider specific impacts of all three (3) being delivered concurrently is significantly understating cumulative impacts.</p> | That the Traffic Impact Assessment should cover all three (3) Inland Rail projects in combination in order that full traffic impacts can be assessed with specific numbers available. |
| 137 | Appendix U Traffic_P1 Sect 12.4.2 | Jamiesons Road level crossing – not grade separated. | <p>After completion of the reference design, LVRC and ARTC have identified a new option on the western edge of the Gatton township. LVRC prefers an option that involves the construction of a new bridge across Lockyer Creek to the south of the existing rail line and reconstruction of Burgess Road to Jamiesons Road. The majority of traffic attracted to this point stays on the southern side of the rail line and decreases the number of movements across the level crossing.</p> <p>In the absence of a grade separation at this location, the newly agreed treatment in Gatton also has safety benefits at Jamiesons Road. In lieu of a grade separation at Jamiesons Road, a new bridge and associated road works shall be provided across Lockyer Creek. (It is understood ARTC would support this option.)</p> |
| 138 | U_Traffic_P1 Sect 12.4.4 | Traffic queues of 140-152m is a significant change in a small town such as Forest Hill. Associated delays will cause locals to avoid using the state-controlled roads, which will in turn encourage more traffic onto lower standard local roads with the resultant increased risks. | The Traffic Impact Assessment should include consideration of changing driver behaviour as a result of new delays introduced into their regular trips. Changing movement patterns could result in other locations on the road network requiring upgrades that would otherwise not have been necessary. This could include people using the unformed road parallel to the rail corridor between Gatton and Forest Hill and increased usage of Woodlands Road. |

| | | | |
|-----|-------------------------|--|---|
| | | | A traffic model should be developed for the entire region in order to properly consider the impact of changed driver behaviour as a result of delays introduced to currently preferred routes. Results of this model should be used to consider whether any upgrades to alternative routes should be included as part of project mitigation treatments. |
| 139 | TOR 11.113 Not met | Traffic impacts only consider the H2C project. This does not adequately consider the total transport task. | Cumulative impacts of the delivery of the three (3) Inland Rail projects under one (1) contract shall be quantified in a consolidated Traffic Impact Assessment. |
| 140 | U_Traffic_P1 Sect 3.4 | Council generally does not support construction worker camps. Council does recognise that local accommodation is close to capacity. While local employment should be considered as the priority due consideration would be given to workers camps being constructed provided due approval processes were undertaken and long-term alternative uses of the infrastructure could be identified (such as for farm worker accommodation). | That any consideration of construction worker camps be regulated through the usual development application/approval process. |
| 141 | U_Traffic_P1 Sect 3.4 | The lack of rental accommodation in local and surrounding regions is not adequately addressed. With the number and type of workers required for this project, it is expected that a significant number will require local accommodation for the duration of the project. Current rental vacancies in Toowoomba are significantly lower than reported in 16.8.5.3 and similarly low in the Lockyer Valley. | An updated assessment is required regarding accommodation supply and demand based on current prevailing conditions as well as addressing the impact on the small rental market in the Lockyer Valley for other participants in terms of availability and affordability. |
| 142 | Chapter 19 – Table 19.3 | A significant quantity of spoil is generated by the project ~1.3 million cubic metres. It is noted that this will be transported along the road network to a final re-use location. Appendix U Part 1 Table 5.7 row 3 identifies the Gatton West Industrial Zone as a receiving site for 1 million cubic metres of spoil. As the owner of this land, LVRC has not requested, nor agreed to, receiving this material. A significant amount of this site is within the flood plain and consequences of adding 1 million cubic metres of fill, which will therefore displace an equal amount of water during flooding, have not been addressed. | The spoil management plan makes a number of broad assumptions around disposal sites that have not been resolved with the owners of these sites. It is recommended that the Proponent should be required to produce a specific plan for spoil sites that have been agreed with the owner of the land, the route proposed to be used for haulage and how they intend to mitigate impact to the road network on an asset and safety level. |
| 143 | ToR 11.113 – Table 19.3 | Movement of greater than 1.3 million cubic metres of spoil on the road network is of great concern to LVRC as the owner of the local road network. The majority of council roads, particularly lower order roads are | The Proponent and/or their contractor shall be required to enter into an agreement with the road authority including, but not limited to, compensation for maintenance of agreed haulage routes during the |

| | | | |
|-----|---|---|---|
| | | not designed to handle this volume of heavy vehicle traffic. It can be expected that this will result in significantly increased maintenance costs, reduction in the remaining life of the pavement and seal, together with increased safety risk on the network. | project, compensation for accelerated deterioration of pavement and seal assets. Road safety audits shall be conducted along all haulage routes with any identified required upgrades to be funded by the project. |
| 144 | Appendix U Part 1 Table 5.12 | The total number of trips estimated by activity is optimistically low and understating the potential number of movements. Eg. Spoil is 56,867 trips to move 1.3million cubic metres would imply in excess of 22 cubic metres per load (even without applying a bulking factor, which could increase the task by 30%). A standard truck and dog carries 16 cubic metres legally. There is no mention of larger vehicle being required for this task or that the road authority would permit their use. | The total number of movements are potentially understated and/or the planned use of oversize vehicles has not been disclosed. The Proponent or their contractor shall be required to submit a detailed haulage plan to the road authority for approval of routes and vehicle types. This shall form a key part of the agreement between both the project and the road authority for compensation of utilising the road network. |
| 145 | Appendix U Part 1 Table 5.7 | Spoil for use in reclamation, quarry remediation and/or landfill cover is not considered by the Traffic Impact Assessment. | Any proposal to use any alternative site for laydown or disposal shall include a Traffic Impact Assessment encompassing safety, maintenance and asset consumption considerations to the satisfaction of the road authority. |
| 146 | Appendix U Part 2 Appendix Q Gaul Street Technical Memo | The underlying growth assumption of 5% is based on a potential development to the southeast of Gatton. There is no guarantee that this will proceed and to do so over the next 20 years would by far more than double the current population of the town. | There is no underlying economic driver expected to cause this level of demand within this timeframe. This very optimistic growth estimate very likely overstates the base case and therefore understates the projects relative impact on the road network. There is no evidence to suggest a growth rate of anything beyond 2% is appropriate in Gatton. The difference in base traffic over the 15 years in the base case is 34% increase compared to 107% increase. Traffic modelling to be undertaken with 2% growth rates and sensitivity analysis undertaken for higher growth rates. |
| 147 | Appendix U Part 2 Appendix Q Gaul Street Technical Memo | The base model shows that Eastern Drive Old College Road is already a level of service F. It has since been shown that this assessment was based on a traffic count taken when the Gatton Bypass (Warrego Highway) was closed and all traffic was diverted through Gatton. Effectively, this doubled the count at this intersection. This error is carried through all assumptions and models. | The intersection of Eastern Drive and Old College Road will be impacted by the project – a fact that has recently been acknowledged by ARTC. The EIS boundary must include this impacted area. All Gatton traffic modelling should be reconsidered from base assumptions onward and include a detailed traffic model to properly consider changes in driver behaviour of any road closures, and proposed intersection upgrades. |

| | | | |
|-----|---|---|---|
| | | <p>Scenario 2 – Closure of Gaul Street assumes that 100% of traffic will utilise the underpass at the western edge of town via Crescent and Old College Road with no traffic utilising Eastern Drive. LVRC conducted its own traffic counts during a temporary closure of Gaul Street and demonstrated this assumption to be false.</p> <p>In combination, errors and assumptions noted in sections 17 & 18 were used to justify excluding Eastern Drive and Old College Road from the project scope.</p> | <p>Eastern Drive and Old College Road intersection shall be upgraded as part of the project. This upgrade should not reduce accessibility to any commercial premises or existing roads.</p> |
| 148 | Appendix U Part 2 Appendix Q Gaul Street Technical Memo | <p>Gaul Street closure – flood access impacts.</p> | <p>The new proposed underpass at the western edge of Gatton (Crescent Street to Old College Road) will have lower immunity than the existing underpass. During times when Lockyer Creek is in flood, all traffic would have to utilise the Eastern Drive and Old College Road intersection. This should be considered in the design of this intersection. Additionally, the flood prone nature of the Eastern Drive and Old College Road intersection is to be considered.</p> <p>If this intersection was to be flooded concurrently with Lockyer Creek, there would be no road access to the north of Gatton. This isolation of thousands of people would result in a major issue and one which must be properly addressed to ensure such a scenario does not occur. One obvious option to remove all of these issues is to change alignment and take the Inland Rail alignment out of Gatton, which would remove all of these negative traffic outcomes (not to mention the social impacts which are also addressed in this submission).</p> |
| 149 | Appendix U Part 2 Appendix Q Gaul Street Technical Memo - Table 6 Scenario 2 Commentary | <p>It is noted that 10 years after opening the Eastern Drive/Crescent Street/Golf Links Drive intersection, that it would operate within acceptable levels of service and delay in an isolated state. Level of service D is to be considered acceptable according to the Proponent. D does not meet these criteria.</p> | <p>That the standard to be achieved for level of service and delay is “C”.</p> |
| 150 | Appendix U Part 2 Appendix Q | <p>It is noted in the commentary that the network impacts of upstream and downstream queuing and lane blockage is not accounted for.</p> | <p>The Proponent shall be required to undertake detailed traffic modelling for all of Gatton in order to ensure full impacts of a closure of the Gaul</p> |

| | | | |
|-----|--|---|--|
| | Gaul Street Technical Memo - Table 6 Scenario 2 Commentary | | Street level crossing are understood. At an intersection already not meeting the required Level of Service, impacts on other parts of the network must be considered. |
| 151 | Appendix U Part 2 Appendix Q Gaul Street Technical Memo | Emergency Vehicle Access is not adequately addressed as a consequence of the proposed level crossing closure. | <p>The proposed diversion route results in an additional 1.2km travel distance and estimated 108 seconds of travel time from one side of the rail line to the other. In emergency situations, delaying ambulance, fire and police responses by up to two (2) minutes may have serious repercussions for the wellbeing of the community.</p> <p>In a major flood scenario, there would be no road access to north Gatton. This in turn would result in placing this community at risk. That an alternate alignment be considered.</p> |
| 152 | Appendix U Part 2 Appendix R | The Principal Cycle Network is not mapped and only bus routes are indicated. | The Principal Cycle Network is an important part of the active transport network and a current priority for provision by the state. Making space provisions and not impeding future construction of this infrastructure shall be demonstrated as part of the Inland Rail project. Provisioning for this infrastructure has major impacts on the requirement for land acquisition, in particular between Gatton and Forest Hill. |
| 153 | Appendix U Part 2 Appendix S | Provided graphs do not distinguish between light and heavy vehicles. | That the Proponent be required to provide detailed traffic forecasts prior to approval of any local roads to be used as haulage roads and for the purposes of informing the compensation agreements for maintenance and asset consumption between the project company and the road authority. |
| 154 | Appendix U Part 2 Appendix S | <p>The number of vehicle movements in various locations seem optimistically low or segments omitted altogether, for example, Crescent Street in Gatton is only considered between William and East Street, not William and Eastern Drive.</p> <p>For the segment graphed, a peak of 10 vehicles per day does not align with major works required to construct new bridges at Eastern Drive and new underpass at East Street/Crescent St/Old College Road.</p> | The Traffic Impact Assessment must be developed again, with all assumptions clearly justified and agreed to with the road authority or appropriate measures agreed to in order to limit traffic for assumed numbers in the Traffic Impact Assessment. |

| | | | |
|-----|---------------------------------|--|--|
| | | The validity of underlying assumptions is brought into question however, such low traffic numbers are being generated by large construction activities. Hickey Street peaks at <20 vehicle per day. The road needs to be reconstructed with new drainage channel and footpaths. This is another very low assumed traffic count. | |
| 155 | Appendix U Part 2 Appendix D | The Pavement Impact Analysis has only been undertaken on state-controlled roads. | The impact of significant numbers of heavy vehicle movements on the local road network must be accounted for and compensation agreements are required to be in place between the Proponent, project company and local road authority. |
| 156 | Vol 3 Drawings | The intersection of Warrigal Road and new Seventeen Mile Road is a priority. | That Seventeen Mile Road is to be the priority road and Warrigal Road a minor leg of this intersection. |
| 157 | Vol 3 Drawings | Laydown area Ch35-36km | LVRC has not agreed to the use of its land for a laydown area. |
| 158 | Vol 3 Drawings | Laydown area Ch39km | LVRC has not agreed to the use of its land for a laydown area. |
| 159 | Vol 3 Drawings | Proposed changes to the road network at the rail underpass located at Old College Road / Crescent Street in Gatton are not agreed to by LVRC. | Subsequent to the reference design being finalised, LVRC and ARTC have reached agreement on a preferred alternative solution at this location. This alternative (Burgess Rd bridge option) shall be included in the EIS as the minimum requirement and all EIS documentation, including but not limited to, the Traffic Impact Assessment shall be updated to reflect this change. |
| 160 | Vol 3 Drawings | The proposed changes to the road network at the Golf links Drive / Woodlands Road intersection are not agreed to by LVRC. | A 4-way intersection is not an acceptable solution at this location. LVRC and ARTC have discussed alternatives but a final solution has not yet been agreed. The final solution shall be developed to the satisfaction of LVRC. |
| 161 | Vol 3 Drawings | The proposed access road through the Gatton Showgrounds to service the State Emergency Services building is not agreed to by LVRC. | Vehicular access from the SES building to Golf Links Drive or Spencer Street must be provided. |
| 162 | Ch 19 Cycleway | Impacts on the PCNP and active transport and disruptions to planning and delivery of cycleway in Lockyer Valley. | It is recommended that the proponent be required to develop the detailed planning for the shared pathway between Lockyer Creek at Gatton to Forest Hill generally parallel to the corridor and including appropriate connections to the University of Queensland campus. Given the impacts the proponent should specify what proportion (up to 100%) of the cycleway they will deliver as part of the project. |

| | | | |
|-----|------------------------|--|--|
| 163 | Chapter 19 Cycleway | Given safety concerns during construction upgraded cycleway should be considered for Patrick Street between Railway St and Cunningham Ave Laidley. | It is recommended that the proponent be required to develop the detailed planning for the shared pathway between Railway St and Cunningham Ave Laidley in consultation with LVRC. Given the project impacts the proponent should specify what proportion (up to 100%) of the cycleway they will deliver as part of the project. |
|-----|------------------------|--|--|

Chapter 20 – Hazard and Risk

| | | | |
|-----|---|--|--|
| 164 | Chapter 20 (Hazard and Risk) Chapter 16 Section 16.9.2.4 (Community Information Sessions), Section 16.10.4 (Health and Wellbeing) | <p>Failure to Appropriately Address Community Health and Safety Risks – the OCG’s TOR objective (b) for hazards, health and safety states: ‘developments are to be appropriately located, designed and constructed to minimise health and safety risks to communities and individuals and adverse effects on the environment.’</p> <p><u>Rail Safety</u> The draft EIS fails to meet this objective as the proposed co-location in the WMSRC corridor (which passes through and adjacent to urban areas) significantly increases the risk to the community from potential rail accidents such as derailments and at level crossings (which are proposed even though these are not best practice or support by State or Federal Government transport policy). Rail safety and concerns over a catastrophic derailment have been raised by members of the public and have been recorded in Section 16.9.2.4 and discussed in Section 16.10.4. However, Chapter 20 of the draft EIS only makes mention of the possibility of derailment, with Table 20.4 citing ‘0.423 per million freight km’, and Table 20.10 ‘outlining’ the management of a derailment. At no time does the document discuss in detail how derailments would be managed to ensure there is no significant residual risk to communities. Independent research reveals that train derailments occur quite frequently, with many incidents and accidents on rail each year. It is noted that only last week a fatal rail accident involving 2 trains colliding near Rockhampton. The Australian Transport Safety Bureau (ATSB) rail safety investigation database shows that of the 282 recorded rail incidents between 1997 and 2021, 106 were incidents were derailments (equivalent</p> | <p>The current alignment through and adjacent to towns means that it is highly unlikely, if not practically impossible, that the proponent can adequately mitigate the potential health and safety impacts of the project on the residents of Lockyer Valley. Therefore, LVRC strongly recommend and urge the OCG to require the proponent to abandon the current alignment. That ARTC are unable to demonstrate that the risk of a catastrophic derailment is 0 that the alignment through the townships of Gatton and Forest Hill be abandoned. (Refer also to comments above seeking the abandonment of this alignment on a range of clear grounds). To meet the OCG TOR, LVRC strongly recommends the COG require the proponent to undertake further and more comprehensive and accurate assessments of alternate alignments that comply with the TOR to identify an alignment that will adequately avoid, minimise and mitigate the potential health and safety impacts to the residents of the Lockyer Valley.</p> |
|-----|---|--|--|

| | | | |
|--|--|--|--|
| | | <p>to 4 derailments per year). At capacity, and at speed, the possibility of an incident on Inland Rail increases exponentially. Even conservatively, in the draft EIS quoted train numbers calculate approximately four derailments a year on the Inland Rail alignment. If such an incident occurred in a township such as Gatton or Forest Hill, there would be catastrophic consequences.</p> <p>The EIS says such an incident is rare .423 per million freight Km. Though at capacity, 50 trains per day the total quickly adds up. At 0.423 per million freight train km. Assume even only 4 services a day as it is 1700 km from Melbourne to Brisbane by rail. That is almost 2.5 million km per year – so approx. 1 derailment somewhere on the line per year. Based on historical data from ARTC’s EIS. Chapter 20 (page 20-26).</p> <p>Similarly looking at the Lockyer Valley alone: 47km of line x 50 services a day x365 days = 857750 km of train movements in the Valley. 857750 km x .423 probability = 36% chance of a derailment in the Lockyer Valley every year.</p> <p>Further, the draft EIS states that proposed ‘mitigation strategies’ would only reduce the risk of these incidents from ‘high’ down to ‘medium’. This level of risk post-mitigation is not acceptable to LVRC. The concern about the possibility of a derailment in townships, is very real given that the proponent fails to commit to trains slowing down to go through built-up areas. A 1.8 km long train travelling at speeds between 80-115 km/hr and derailing in a town would be catastrophic and should be considered so. Trains which are 3.6 km long and travelling at similar speeds through townships are guaranteed to have even greater adverse impacts on the safety of residents.</p> | |
|--|--|--|--|

| | | |
|--|---|--|
| | <p><u>Health Risks</u></p> <p>The project poses very significant potential health risks to the community from noise and air emissions, but these lack any form of meaningful assessment in the draft EIS.</p> <p>LVRC’s assessment found that sleep disturbance may be experienced at more than 4000 dwellings, but the draft EIS suggests that only 175 dwellings may be impacted. The draft EIS grossly underestimates the scale of sleep disturbance that will be experienced as it fails to use recognised best practice guidance on this matter. The impacts of sleep disturbance are widely reported and are well understood to have a major impact on health and quality of life. The WHO (2018) states that sleeping satisfies a basic need and the absence of undisturbed sleep can have serious effects on human health. Causal pathways have been established between noise induced sleep disturbance and health effects such as cardiovascular and metabolic disease. Other effects include impaired cognitive function and psychological impacts. The draft EIS is silent on the health impacts associated with sleep disturbance and makes no firm commitment to addressing this profoundly serious and real risk.</p> <p>Table 20.12 at Chapter 20 rates the residual risk of noise impact from rail operations as low. LVRC vehemently oppose this finding as the assessment of noise is seriously flawed (as demonstrated in earlier in this response) and the proponent provides no detail or commitment to noise mitigation. Therefore, how can the risk of noise impact be known given the seriously flawed nature of the assessment and lack of detail around mitigation. Sleep disturbance will occur from the project at a far greater scale than predicted by the draft EIS and this will present profoundly serious health risks to Lockyer Valley residents that the proponent has failed to recognise or demonstrate how they will accept responsibility for preventing these impacts.</p> <p>As demonstrated earlier in this response, the air quality assessment does not give any consideration to microbiological contaminants in air emissions during operations, namely Q-fever (<i>Coxiella burnettii</i>) in dust from livestock trains. TOR 11.132 requires assessment of <u>any contaminants or materials</u> that may be released from the project. Q-fever</p> | |
|--|---|--|

| | | | |
|-----|------------|---|--|
| | | <p>is an infectious disease spread from animals (mainly cattle, sheep and goats) to humans by a bacterial called (<i>Coxiella burnettii</i>). People become infected with Q-fever by inhaling contaminated aerosols and dusts. Sources of relevance to the project can include animal wastes (urine, faeces etc) and contaminated machinery/equipment/vehicles. People may be exposed to infected dusts even if located a kilometre or more from the source. Much larger potential zones of infection are reported by various studies, ranging from 5 km to more than 10 km. Stock transport trucks are identified a source of infective dusts. Research by the University of Queensland published in the <i>BMC Infectious Diseases Journal</i> in 2018 noted that outbreaks of Q-fever had been reported previously in Europe for residents living along roads where livestock were transported. Table 20.12 at Chapter 20 rates the residual risk of air emission impacts from rail operations as low. LVRC strongly opposes this finding as the assessment of air emissions is seriously flawed (as demonstrated in detail later in this response) as the proponent has failed to meet the TOR and identify all potential risks and impacts. The livestock trains present a real and profound health risk to receptors with regards to Q-fever and this needs to be assessed by the draft EIS. Given the potential dispersal distance, the scale of impact and number of exposed receptors is enormous but wholly unaccounted for in the draft EIS.</p> <p>The draft EIS does not meet TOR objective (b) for hazards, health and safety as it does not accurately identify, assess and mitigate the potential significant health and safety risks associated with the project. The current alignment through and adjacent to towns means that it is highly unlikely that the proponent can adequately mitigate the potential health and safety impacts of the project on the residents of Lockyer Valley.</p> | |
| 165 | TOR 11.156 | As discussed in Chapter 13 comments flood and bushfire evacuation routes have not been identified. | That the proponent identify current evacuation routes and evacuation centre locations particularly for Laidley Gatton and Forest Hill and demonstrate the viability of future evacuation routes during construction and following rail construction. These routes to be to the satisfaction of the LVRC and the Lockyer LDMG |

| | | | |
|-----|--|---|--|
| 166 | TOR 11.156 | The proposed railway will prevent access across the corridor. Escape routes for flood and bushfire events need to be identified and established. | Recommend that a condition be imposed requiring the identification of flood and bushfire evacuation routes for both the construction and operational phases of the railway. |
| 167 | TOR 11.156 | If the existing Gaul Street level crossing is to close consideration needs to be given to escape routes in times of flood or disaster. emergency crossing. This may entail the use of collapsible noise barriers bollards etc to enable crossing by people and vehicles in the event of a disaster. | The proponent be required to investigate means to utilise Gaul Street as an emergency crossing point for people and vehicles. |
| 168 | Outline of Management of Incidents Identified - Rail incidents | Rail Accidents refers to ARTC's Accident or Derailments - Actions to be Taken (SMP03). SMP03 available online does not outline the process for notifying emergency services and the Local Disaster Management Group if required | That ARTC be required to include communication protocols with emergency services and the Local Disaster Management Group in SMP03 or appropriate document |
| 169 | Outline of Management of Incidents | Consult with local emergency service/local government to plan and develop alternative means of access for use in emergencies. | That ARTC be required to consult with local emergency service/local government to plan and develop alternative means of access for use in emergencies. |
| 170 | Hazard and Risk Mitigation Measures - Bushfire | Bushfire mitigation and management measures do not include maintaining access/egress for community during all project phases. | ARTC be required to maintain community accesses during all phases of the project including construction. |
| 171 | Hazard and Risk Mitigation Measures - Bushfire | Bushfire mitigation and management measures do not include maintaining existing fire trails. | That ARTC be required to maintain access to fire trails at southern end of McNamaras Road, Withcott, Hodgets to Howmans Road, Lockyer and Railway Street to Kesslings Road, Laidley. |
| 172 | Hazard and Risk Mitigation Measures - Bushfire | Bushfire mitigation and management measures do not identify where water supply for firefighting purposes will be accessed from. | ARTC be required to source water for firefighting purposes from sources other than private properties and ensure water storage on corridor is maintained during construction and operational phases. |
| 173 | Natural Hazards Mitigation | The potential impacts to environmental values throughout the Project lifecycle will be managed in accordance with ARTC's Safety Management System, e.g. Emergency Management Procedure (ARTC, 2019) | That ARTC be required to provide their Emergency Management Procedures to Emergency Services and the Local Disaster Management Group to identify level of response capability within ARTC and level of service required from emergency services and the Local Disaster Management Group. |
| 174 | Bushfire TOR 11.156 | The EIS does not address where fire breaks/access will be established. | That ARTC be required to engage with Rural Fire Brigades and residents to identify fire trails and emergency accesses not included in Lockyer |

| | | | |
|------------|--|--|---|
| | | | Valley Regional Council fire trail mapping (provided to ARTC). That ARTC be required to prioritise construction of fire breaks and accesses at the commencement of construction phase and advise Rural Fire Service, emergency services and the Local Disaster Management Group of locations. |
| 175 | Bushfire TOR 11.157 | The EIS does not confirm what capacity of 'trained personnel' ARTC has for fire response. | That ARTC be required to confirm their bushfire response capacity and level of service required from emergency services and the Local Disaster Management Group. |
| 176 | Bushfire TOR 11.156 | The EIS states 'consideration will be given to providing and maintaining access where local roads can facilitate emergency access, first response firefighting, accessibility and sufficient water supply for firefighting purposes and safe evacuation. | That ARTC be required to: <ul style="list-style-type: none"> • maintain or provide alternative access to local roads to the road managers satisfaction with no loss of connectivity • ensure there is sufficient water storage during construction phase for firefighting purposes. • provide emergency access for emergency services. • construct corridors to enable firefighting and emergency vehicles to traverse across the corridor considering current and future vehicles heights widths weights, capacity etc |
| 177 | Emergency Planning TOR 11.157 | Testing of emergency procedures for Level 1 incident - through exercising should include emergency services and the Local Disaster Management Group | That ARTC be required to provide for emergency procedures for Level 1 incident to be tested annually to evaluate the effectiveness of emergency preparedness, communications and response including emergency services and the Local Disaster Management Group. |
| 178 | Residual Risks – Mitigation Measures | This section does not identify evacuation routes across the corridor for communities under threat from bushfire, flood or other disaster | That ARTC be required to consider local and regional hazards and their interaction on evacuation routes current and future considering climate change and the ultimate developed footprint and usages of the region. |
| 179 | Climatic Conditions 11.166 | Increased wind speeds, could potentially result in derailments or escalate the spread of fire. | That ARTC be required to demonstrate that speed limits on approaches to and from built up areas and on high structures take into account climatic conditions. That ARTC be required to demonstrate how they have reduced the risk of sparking fire on high or higher Fire Danger Rating days. |

| | | | |
|-----|--------------------------------------|---|---|
| 180 | Conclusions – Overview TOR 11.154 | Risk of embankment failure along the approximately 34km of significant embankments increasing flood impacts | That ARTC be required to: <ul style="list-style-type: none"> • demonstrate how the risk of embankment failure will be mitigated. • model the impact of embankment failure during flood • detail how flood impacts due to embankment failure will be mitigated. |
|-----|--------------------------------------|---|---|

Chapter 21 – Waste

| | | | |
|-----|--|---|--|
| 181 | Chapter 21 Waste and Resource Management TOR 11.169 to 11.176 | <p>Waste issues for the project construction have been considered and there is an emphasis on applying the waste hierarchy which promotes reduction and reuse where possible. It is acknowledged much of the waste generated in the project will be spoil and this will be reused where possible.</p> <p>Issues of concern and worth raising for reconsideration or review:</p> <ol style="list-style-type: none"> 1. Section 21.6.4 notes there are existing waste management facilities in Lockyer Valley, and these may have the ability to accept waste from the project. Whilst Council is licensed to receive up to 20,000 tonnes per annum of waste at the Gatton Landfill (noted in Table 21.4), the management of the waste streams for our community currently absorbs almost all this figure. There is also only five years remaining life at the Gatton Landfill so acceptance of large amounts of waste from this project is not feasible in either tonnage terms or protection of our valuable landfill airspace. 2. Council currently carefully manages the amount of clean fill accepted into our waste sites so that we both manage our stockpile sizes and don't store material in excess of what we need for our operational use. There is no capacity to accept any clean fill at either of our landfill sites. 3. Table 21.4 infers transfer stations at Laidley, Helidon and Grantham may have capacity to take waste. These facilities are provided for the use of residents to dispose of domestic waste and have no capacity to stockpile or dispose or large vehicle | <p>It is recommended that the Draft EIS be amended to:</p> <ol style="list-style-type: none"> 1. Remove Laidley, Helidon and Grantham transfer stations from Table 21.4 as they are not available for any waste disposal for this project. 2. Remove Gatton Landfill from Table 21.4 as there is no tonnage capacity at this site to take waste generated by this project. 3. Note formally that there is no opportunity to manage waste disposal through the Lockyer Valley Regional Council waste facilities and 4. Any approval condition the proponent to require that that all disposal be to other landfills owned by the private sector or (with their approval) other local governments. |
|-----|--|---|--|

| | | | |
|--|--|--|---|
| | | <p>access to take the types and volumes of waste suggested. It is recommended these facilities be removed from this table as they are not relevant.</p> <p>4. There is no ability at any of the abovementioned sites to take or stockpile green waste that is removed as part of this project. Council mulches green waste every 1-2 years (depending on volumes) and does not have the room to stockpile volumes of green waste that are over and above normal domestic and small commercial generation rates.</p> <p>5. Section 21.7.1.5 discusses potential spoil disposal locations. Whilst Council sites are not mentioned here (and can't accept fill material as per comments above), it may be possible to accept some material in coming years for landfill remediation. The remediation program of old landfills across the Lockyer Valley is expected to be mapped out in 2021/22 and, depending on the quality of the spoil produced, this material could be suitable for final capping of the landfills. Discussions should be held with the project managers when more information is known on the type of fill required. This would be mutually beneficial to dispose of certain spoil and remediate old landfills.</p> | <p>It is recommended that the proponent be conditioned to liaise with LVRC and identify suitable fill for use in land fill remediation.</p> |
|--|--|--|---|

Chapter 22 – Cumulative Impacts

| | | | |
|------------|--|---|---|
| 182 | <p>Chapter 22, Section 22.6 (Potential Impacts)</p> <p>TOR 7.3</p> | <p>Dismissed and unassessed operational cumulative impacts – Cumulative impacts can be defined as ‘successive, incremental and combined impacts of activities on society, the economy and the environment’ (NSW Social Impact Assessment Guideline, 2017).</p> <p>Section 22.6 of the draft EIS states that ‘the initial phase (construction) is typically more likely to have the most material impact’ ... and that ... ‘for this reason, the Cumulative Impact Assessment (CIA) has focused on the construction phase of the project and its potential impacts.’ The text goes on to say that operational air and noise are the only impacts considered during the completion of the CIA. This assumption of only considering the cumulative operational impacts from air and noise is incorrect and fails to</p> | <p>To meet the requirements of the COG’s TOR, it is recommended the COG require the draft EIS to be amended to include a cumulative impact assessment of the operational phase of the project over time.</p> <p>Further that that cumulative impacts in key locations (including Gatton Forest Hill and Laidley) be considered with reference to the concerns highlighted in Attachment 1 to the Submission.</p> <p>Further that the cumulative transport impacts of the PPP projects be considered given the shared transport impacts on the Lockyer Valley from those projects.</p> |
|------------|--|---|---|

| | | | |
|--|--|--|--|
| | | <p>address the substantive social, health and safety impacts on urban communities throughout the Lockyer Valley. This is a serious shortcoming of the draft EIS.</p> <p>As a result, the draft EIS fails to meet the requirements of TOR:</p> <ul style="list-style-type: none"> - 5.1, particularly, ‘... ensure that all relevant environmental, social and economic impacts of the project are identified and assessed.’ - 5.3, particularly, ‘...when determining the scale of an impact, consider its intensity, duration, cumulative effect, irreversibility, the risk of environmental harm, management strategies...’ - 7.3, particularly, ‘... cumulative impacts should be assessed over time...’ | |
|--|--|--|--|

Appendix C – Consultation Report

| | | | |
|------------|---|---|--|
| 183 | <p>Appendix C (Consultation Report), Section 4.5 (Communication Tools), Table 4.9 and 4.10</p> <p>Section 6 (Consultation Outcomes), Table 6.1</p> <p><u>Inland Rail – Helidon to Calvert fly-through – YouTube</u></p> | <p>Visual impact information not provided to communities – TOR 7.2 states the ‘<i>assessment and supporting information should be sufficient for the Coordinator-General and administering authorities to decide whether an approval ... should be granted</i>’. Further, the TOR Land objective (d) states ‘<i>mitigate impacts to the natural landscape and visual amenity</i> and TOR 11.89. <i>Describe any proposed measure to avoid, minimise or mitigate potential impacts on landscape character and visual amenity</i>’ TOR 7.2 and Land Objective (d) have not been adequately considered or addressed by the draft EIS. Appendix C (Consultation Report) fails to identify how the <i>Shaping SEQ</i> goals have been considered and/ or addressed in track alignment selection. Specifically:</p> <ul style="list-style-type: none"> - From Section 4.5 (Communication tools): <ul style="list-style-type: none"> o Section 4.5.2 (Project display posters) – no visual amenity information displayed. o Section 4.5.3 (Fact sheets) – no visual amenity mentioned. o The H2C webpage has visualisation images, but not all people may have access to this/ internet literacy or speeds to support viewing them; the visualisation information is difficult to find on the website and there is no reference to the YouTube flythrough available for this section of the Inland Rail project. | <p>Appendix C requires amendment to include evidence of what visualisations were shown, and when in the process they were shown to the community to ensure the community were given ample opportunity and able to properly consider the comparative impacts of different track alignment options from a landscape and visual amenity impacts perspective.</p> <p>If there is no evidence of this having occurred, then the draft EIS needs to be amended to include these comparative different track alignment landscape and visual impacts as well as visualisations for each alignment options, and then to consult with the community on these comparative options to ensure a community engagement process with all the information available has been provided in order to meet the requirements of TOR 7.2.</p> |
|------------|---|---|--|

| | | | |
|--|--|--|--|
| | | <ul style="list-style-type: none"> ○ Section 4.5.12 (visualisations and alignment fly through)– this whole area of visual amenity is covered in one small paragraph only. ○ It is noted stakeholders wanted more information, so this was produced and ‘displayed at community information sessions,’ however the report does not state when in the process / how many sessions/which, where or how many visualisations were displayed. <ul style="list-style-type: none"> - According to the information provided in Table 4.9 and 4.10, it appears that none of the community information displays or landowner engagement in 2017, 2018, 2019 specifically had topic of Visual Amenity – there is a ‘social and economic’ topic covered but no visuals are mentioned as having been presented. - Section 6 references influence of consultation on outcomes and Table 6.1 also references ‘developed and tested options to bypass Gatton and Forest Hill and tested with the community and landowners (not accepted due to community feedback and preference to stay in rail corridors).’ <p>At the only presentation noted that was undertaken by the Visual Impact Assessment experts in August 2019 in Gatton, there were only 8 attendees which brings into question the consultation notification methods used to inform stakeholders of potential opportunities to better understand potential impacts.</p> <p>Appendix C fails to identify the process, timing of presentations, and which, if any, visualisations were used to inform the community of the potential landscape and visual amenity impacts of different potential alignments and how the alignment through the regional towns came to be decided. The Appendix also fails to identify that any visual representations of the project were used in information sessions which would allow the above state goals to be adequately considered by all parties.</p> <p>The project fly-through (provided on YouTube) does not show the visual impact of the proposed extent of noise barriers for the project, particularly where they are proposed through town centres.</p> <p>The draft EIS fails to provide evidence in Appendix C of consideration of a landscape and visual impacts comparison of the proposed alignment with</p> | |
|--|--|--|--|

| | | | |
|--|--|--|--|
| | | <p>other alignment options considered, as part of the evaluation process in confirming the preferred track alignment option. Nor is there evidence in Appendix C that the community had an opportunity to see and comment on any visualisations comparing the proposed alignments from a landscape and visual impact perspective, during the community engagement process, to enable preferences for a particular track alignment to be considered in these terms. As a result, LVRC do not consider that the draft EIS meets the OCG’s TOR as provided above.</p> | |
|--|--|--|--|

Appendix E Proponent Commitments

| | | | |
|------------|------------|--|---|
| 184 | Appendix E | Public infrastructure upgrades and their location is not readily accessible. | It is recommended that the proponent be required to amend Appendix E to include a complete list of the public infrastructure upgrades and their location that the proponent is intending to construct (for example, the 5 pedestrian crossings, 7 active road level crossings, etc) |
|------------|------------|--|---|

Appendix H – Landscape and Visual Amenity Technical Report

| | | | |
|------------|---|--|--|
| 185 | Appendix H Section 4.9.2 (Visual Sensitivity), Table 13 | <p>TOR 11.87 relates to the impact assessment on visual amenity. It requires description and illustration of the visual impact of construction and operation of the project, including that <i>‘such views should be representative of public and private viewpoints, including places of residence, work and recreation.’</i></p> <p>Table 13 defines viewpoint sensitivity using distance between viewers and light source. This is particularly important for determining impact on private viewpoints from residences. The viewpoint sensitivities described in this table may be misleading in relation to dark rural environments where the viewer’s dark adaptation increases their sensitivity to more distant light sources, particularly if the light source is in direct view.</p> <p>For Table 13, the ‘sensitivity of viewpoints’ and the ‘attributes of visual sensitivity categories’ provide typical distances for viewers from a light source for each sensitivity level. However, these will be misleading in relation to dark rural environments where the viewer’s dark adaptation</p> | It is recommended that the COG require the draft EIS to be amended to meet the requirements of TOR 11.87 and to appropriately consider revising these attributes by removing the typical distances or qualify distances as examples for urban areas and making clear reference to the significance of direct view of light sources in dark rural environments. |
|------------|---|--|--|

increases the viewer's sensitivity to more distant light sources, particularly if light source is in direct view.

Appendix K – Air Quality Technical Report

186 Appendix K (Air Quality)

Microbiological emissions to air – the draft EIS does not meet TOR 11.132. This is because the air quality assessment does not give any consideration to microbiological contaminants in air emissions during operations, namely Q-fever (*Coxiella burnettii*) in dust from livestock trains. TOR 11.132 requires assessment of any contaminants or materials that may be released from the project.

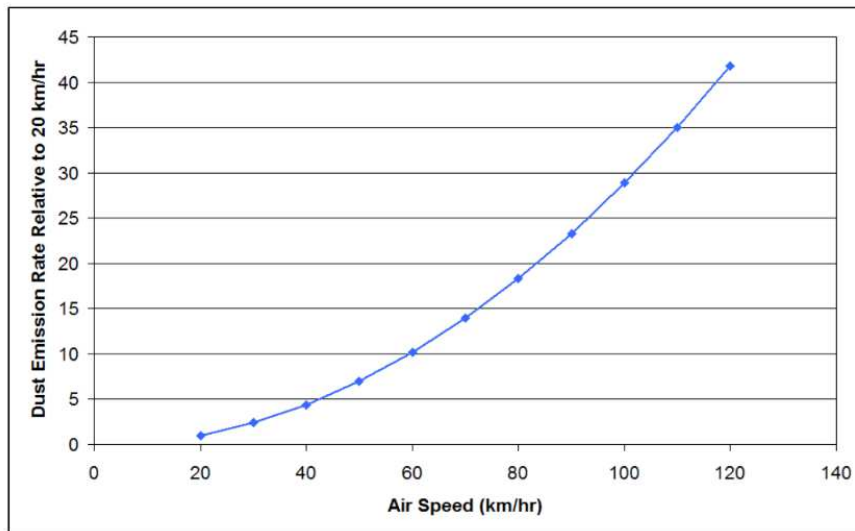
Queensland Health provide extensive information about Q-fever which is summarised here (<https://www.worksafe.qld.gov.au/safety-and-prevention/hazards/hazardous-exposures/biological-hazards/diseases-from-animals/q-fever>). Q-fever is an infectious disease spread from animals (mainly cattle, sheep and goats) to humans by a bacterial called (*Coxiella burnettii*). People become infected with Q-fever by inhaling contaminated aerosols and dusts. Sources of relevance to the project can include animal wastes (urine, faeces etc) and contaminated machinery/equipment/vehicles. The risk of infection is significant as:

- Q fever is very infectious, and people can become infected from inhaling just a few bacteria.
- Large numbers of bacteria are shed by infected animals.
- The bacteria can survive in the environment for long periods, tolerate harsh conditions and spread in the air.

Information from the Australian Q-fever Register website (<https://www.qfever.org/aboutqfever#IndirectExposure>) states that people may be exposed to infected dusts even if located a kilometre or more from the source. Much larger potential zones of infection are reported by various studies, ranging from 5 km to more than 10 km. Stock transport trucks are identified a source of infective dusts. Research by the University of Queensland published in the *BMC Infectious Diseases Journal* in 2018 noted that outbreaks of Q-fever had been reported previously in Europe for residents living along roads where livestock were transported.

The draft EIS requires update to meet the requirements of the OCG's TOR 11.132. Specifically, the air quality assessment needs to be revised and updated to include an assessment of the potential risks of Q-fever from livestock trains to human health. It is recommended that the proponent consult with Queensland Health in relation to the further assessment of this matter. This is to ensure that an appropriate method of assessment is used that an acceptable zone of infection (i.e., study area) is applied to adequately assess the hazards and risks to public health from the project with respect to Q-fever and necessary mitigation measures.

| | | | |
|-------------------|---------------------------------|--|---|
| | | <p>Based on this information, the livestock trains present a health risk to receptors with regards to Q-fever and this needs to be assessed by the draft EIS. Given the potential dispersal distance, the scale of impact and number of exposed receptors is enormous but wholly unaccounted for in the draft EIS.</p> | |
| <p>187</p> | <p>Appendix K (Air Quality)</p> | <p>Coal Dust – Table 2.3, Section 2.3 states that the modelled coal trains were 990 m long, however the project description says trains may be up to 3.6 km long. It is not clear if coal trains will be limited to 990 m or if they may be longer (i.e., up to 1.8 km or 3.6 km long). Table 6.2 in Chapter 6 suggests longer trains could be used based on customer requirements within the maximum train length which is potentially up to 3.6km. The draft EIS does not consider the effect of train lengths up to 3.6 km on air quality from coal dust emissions.</p> <p>Table 4.17, Section 4.4.3.1 describes the release height above ground level of 3.3 to 4.3 m, however the project description clearly states trains will be double stacked and exceed heights of 7 m. We have assumed though it is not stated that coal trains will be limited to single wagons not double stacked. If that is incorrect, the draft EIS does not consider the effect of double stacked train heights on air quality from coal dust emissions.</p> <p>Appendix K and Table 6.2 in Chapter 6 suggest that the maximum coal train speed will be 80 km/hr based on 25 ton axle loads (TAL). The modelling however did seem to include contributions to the effective wind speed over the coal wagons by local winds which could contribute to coal lift off. The Environmental Evaluation of Coal Dust Emissions (Connell Hatch, 2008) suggests that on average, local wind could add 10-15 km/hr to the air speed across the coal surface in the wagon. The graph below is from Environmental Evaluation of Coal Dust Emissions (Connell Hatch, 2008) (which is referred to by the draft EIS). It shows that if air speed across the surface of the coal increased from 80 km/hr to 95 km/hr (assuming an allowance for local winds) the coal dust emission rate would increase by about 35%.</p> | <p>The assessment of coal dust emissions does not meet 11.135 of the TOR because the assessment does not accurately estimate the rate of coal dust lift off and concentration at sensitive receptors. It is recommended that the COG require the proponent to update the air quality impact assessment to include the following to better estimate the potential impact of coal dust emissions at sensitive receptors:</p> <ul style="list-style-type: none"> - Clarify the limit of rollingstock sizes - Assess impacts for all train sizes potentially used - Consider train speeds of 80 km/hr with an appropriate allowance for local winds on coal dust lift off. - Consider train speeds of 115 km/h with an appropriate allowance for local winds on coal dust lift off. |



Also, Table 6.2 in Chapter 6 indicates that future proofing works will include structures and formation that can allow higher speeds for heavier axle loads (30 TAL). This suggests that coal trains may be able to travel at higher speeds in the future, but this is not clearly defined in the EIS nor is it assessed by the air quality assessment which limits coal train speed to 80 km/hr. Referring to the above graph, if air speed across the surface of the coal increased from 80 km/hr to 115 km/hr (**excluding an allowance for local winds**) the coal dust emission rate would increase by 100%. The assessment of coal dust emissions does not meet 11.135 of the TOR because the assessment does not accurately estimate the rate of coal dust lift off and emission and concentration at sensitive receptors. This is because it fails to consider maximum train lengths and source heights and wind speeds across the surface of coal wagons do not include the effect of local winds or the effect of higher train speeds in the future.

| | | | |
|-----|---|--|---|
| 188 | Chapter 12 (Air Quality) and Appendix E (Proponent Commitments) | <p>Coal Wagon Veneering – Veneering was assumed to be used as a mitigation measure for controlling coal dust from wagons and is overly critical to the outcomes of the coal dust emission and modelling assessment. The model relies on a reduction in coal dust lift off from the wagons of 75% due to veneering. Appendix K clearly states that there was a predicted exceedance of air quality criteria when a scenario without veneering was analysed.</p> <p>Veneering is currently used for trains on the West Moreton Rail System. However, the draft EIS makes no commitment to ensuring all trains using the H2C alignment will apply veneering to coal wagons.</p> <p>Therefore, the draft EIS does not meet 11.136 of the TOR as it makes no clear commitment to any mitigation measures to control coal dust emissions. This is important because the draft EIS has shown that if veneering is not used the air quality criteria will not be met.</p> | <p>The draft EIS needs to make a clear commitment to the use of veneering on coal wagons to meet 11.136 of the TOR. The veneering must be adequately specified and detailed in the EIS to ensure that it can achieve a reduction in coal dust emissions by at least 75%.</p> <p>That the COG should condition that the surface of all coal wagons shall be veneered to minimise dust emissions. The veneering must be adequate to achieve a reduction in coal dust emissions of at least 75%.</p> |
| 189 | Appendix K (Air Quality) | <p>Australian drinking water guidelines – Section 7.2 of the Air Quality Assessment report refers to the <i>Australian Drinking Water Guidelines</i> cites the date of publication as 2011 and 2018. The guidelines were updated in May 2019. As a result, the document fails to meet the requirements of TOR 5.4, which requires the document to be ‘generally in accordance with relevant policies, standards and guidelines.’</p> | <p>The draft EIS requires update to appropriately revise the air quality assessment and the consideration of tank water quality impacts to refer to the most recent update of the <i>Australian Drinking Water Guidelines (May 2019)</i>. This should include ensuring that criteria used in the assessment are updated accordingly to reflect the most current guidance on drinking water quality.</p> |
| 190 | Appendix K (Air Quality) Section 2.3 (Operation) | <p>Train movements – Section 2.3 of the Air Quality Technical Report Part 1 estimated a forecast peak train volume of 402 trains per week for the 2040 year. However, there is no specific information provided in report which relates to how these volumes have been estimated. This estimated train volume has a direct bearing on the emissions estimated.</p> | <p>Section 2.3 should be revised to include additional information on how the peak weekly train movements for 2040 were estimated. (Yet another variation of train numbers).</p> |
| 191 | Appendix K (Air Quality_ Section 4.4.2.1 (Selection of Meteorological Year) | <p>Selection of the 2013 meteorological modelling year – Meteorological modelling was conducted for the 2013 calendar year and the justification was that neutral conditions were observed during this year and for the remaining years between 2007 and 2017 were either characterised by El Nino or La Nina episodes. There is no information in the report on how atmospheric stability and mixing height parameters varied between the chosen 2013 year and the remaining years which had either a El Nino or La Nina episode.</p> | <p>It is recommended that the Air Quality Technical Report be updated to present CALMET mixing height and stability parameters for a typical El-Nino / LA-Nina year for at least one (1) CALMET modelling domain in order to provide a more robust model for assessment.</p> |

| | | | |
|-----|--|---|--|
| 192 | Appendix K (Air Quality) Section 5.3 (Background Air Quality) | <p>Selection of the 70th percentile value to represent background concentrations – Although the selection of the 70th percentile value to determine background concentrations is agreeable, this approach tends at times to underestimate the background concentrations of the study area and a more conservative approach to estimate background concentrations is warranted.</p> | <p>It is recommended that the Air Quality Technical Report be revised to use the 90th percentile value from the Inland Rail AQMS be used rather than the 70th percentile for determining the background particulate (PM₁₀ and PM_{2.5}) concentrations as it provides a conservative picture of the local air quality levels. The use of 90th percentile value would still filter out the observations corresponding to the bush fire and dust storm activities and is therefore not appropriate for use given the rural location of the proposed project.</p> |
| 193 | Appendix K (Air Quality) Section 5.3.6 (Background Air Quality) Section 5.4 (Existing Emission Sources) Section 7.1.1 (Dispersion Modelling Results) | <p>Assessment of cumulative impacts – Section 5.3.6 of the Air Quality Technical Report Part 1 summarises the existing background concentrations adopted for the assessment. Upon close observation of Table 5.19 is it noted that with the exception of deposited dust, background concentrations for the remaining pollutants are referenced from the air quality monitoring stations managed by DES at Mutdapilly, Flinders View and Springwood. With respect to deposited dust, background deposited dust levels are based on a 3-month monitoring campaign conducted back in 2016 along the Yelarbon to Gowrie alignment, which is now included in the Border to Gowrie alignment. As such, none of the background concentrations are specific to the study area.</p> <p>However, Section 5.4 of the report excludes inclusion of emissions from the Valley Beef meat production facility, which is at a distance of 4 km from the alignment line, and the reason for non-inclusion is that the emissions from that facility would be adequately represented in the adopted background concentrations. This reasoning would hold strong when there is a local air quality monitoring station which is measuring background concentrations for the project and is also capturing emissions from the meat production facility. However, the monitoring stations which have been used to determine background concentrations are at a physically separate location.</p> <p>Furthermore, it is observed from Sections 5.3.2.2 and Sections 5.3.2.4 that PM10 and PM2.5 concentrations have been recorded from the Inland Rail air quality monitoring station between July 2018 and August 2019. This station is located at a residential dwelling off Draper Road, Charlton, west of Gowrie. Data from this station has not been considered for the</p> | <p>The draft EIS requires update to appropriately consider these issues and appropriately utilise background data from more representative locations and provide an appropriate air quality assessment for the proposed alignment. This should also include undertaking a revised cumulative assessment which is also more appropriate to the air quality experienced by the LVRC region.</p> |

| | | | |
|-----|---|--|--|
| | | background concentrations because it can be influenced by emissions from existing rail traffic. On the same note, concentrations measured at the Flinders View and Springwood station would also be influenced local traffic in that area and moreover the location of the air quality monitoring station is far more representative of the project setting than the stations at Flinders View and Springwood. Upon closer observation, it is noted that the particulate concentrations at the Inland Rail air quality monitoring station are higher than the corresponding levels measured at the air quality monitoring stations managed by DES. Therefore, at the very least, for the assessment of particulate concentrations, reference is to be drawn to the concentrations measured at the Inland Rail air quality monitoring station. | |
| 194 | Appendix K (Air Quality) Section 5.6 (Sensitive Receptors) | Sensitive Receptors – Section 5.6 of the Air Quality Assessment notes that existing sensitive receptors near the alignment and in the townships of Gatton, Forest Hill, Helidon, Laidley, Grandchester and Calvert were selected. However, there is no discussion on identifying potential future sensitive receptors that could be developed in the identified areas of interest. | The draft EIS requires update to include a discussion regarding future residential development surrounding the alignment and the potential impacts on those future developments. |
| 195 | Appendix K (Air Quality) Section 7.4 (Agricultural Train Odour Impacts) | Agricultural train odour impacts – Section 7.4 identifies livestock trains as presenting the greatest risk of nuisance related to odour emissions, when compared to agriculture freight. The potential for offensive odours is especially quite high when stopping at crossing loops. The draft EIS described associated odours as strong to very strong and the offensiveness of the odour would be unpleasant. The draft EIS identified no significant impacts to amenity due to odour from livestock trains because: <ul style="list-style-type: none"> - The livestock train pass by events would only be 6 per week and would be no more than 1-hour in duration. - Residents and visitors would have a higher tolerance to intermittent odour from agricultural sources because of the rural setting! This assessment of odour impacts does not meet TOR 11.135 as the assessment of amenity impacts does not: <ul style="list-style-type: none"> - Acknowledge that Gatton, Laidley, Helidon and Forest Hill are urban areas under the SEQ Regional Plan. These are not rural areas and | The air quality assessment should be revised to meet TOR 11.135 and to more accurately assess the air quality amenity impacts and cumulative impacts of the project. At present, the draft EIS does not adequately consider the receptor types and their sensitivity to odours (urban areas not rural areas) nor does it accurately assess the potential impacts of odour from livestock trains. |

| | | | |
|--|--|---|--|
| | | <p>therefore the premise that such odours are expected by the community is factually incorrect and baseless.</p> <ul style="list-style-type: none">- Adequately consider cumulative impacts of odour at receptors. If the population is already exposed to similar (livestock) odour from local agricultural activities, what impacts may occur to amenity from adding an additional odour source? Furthermore, the assessment does not take into consideration the assimilative capacity with regards to livestock odours.- It is assumed that the 6 livestock trains would be spread over a 1-week period, resulting in an average of less than 1 train per day. However, there is no additional discussion regarding the likelihood of two (2) trains turning up on the same day. This would worsen the odour impacts at the sensitive receptors and the assessment does not provide enough discussion on this matter. <p>The draft EIS fails to explain the estimated duration of a livestock train pass-by which may be up to 1 hour and intensity of impact compared to more common livestock transport methods such as a livestock truck. This would seem like a considerably longer duration than, for example, a livestock truck (which is understood given the length of the train). How do the scale of livestock numbers on a livestock train compares to livestock numbers on a cattle truck? Presumably, a livestock train will be a substantially more significant odour source than existing modes of livestock transport.</p> | |
|--|--|---|--|