technical note



PROJECT PROPOSED DISTRICT PLAN: REZONING SUBMISSIONS

SUBJECT PEER REVIEW OF TRANSPORT MATTERS
TO RACHAEL CURRATHERS; JUSTINE ASHLEY

FROM MAT COLLINS
REVIEWED BY IAN CLARK
DATE 5 MAY 2023

SUMMARY OR PEER REVIEW

Flow Transportation Specialists Ltd (Flow) has been engaged by Selwyn District Council (Council) to provide transport planning and transport engineering advice regarding the Variation 1 to the Proposed District Plan (PDP). The Proposed District Plan was notified in August 2022, with numerous submissions being received seeking the re-zoning of land.

Council has requested that I review transport matters associated with these rezoning requests.

This technical note relates to submissions within Prebbleton. In summary, my view on each submission is as follows:

V1-0028: 681,687 AND 701 SHANDS ROAD AND 330 TRENTS ROAD, PREBBLETON, ADAM AND SARAH POLLARD; TREVOR HOLDER AND WESTPARK TRUSTEES LIMITED

I recommend that

- The submitters request can be adopted, as long as
 - All District Plan provisions that apply to the Plan Change 68 site under Operative District Plan (which I assume have been included in the Proposed District Plan) are applied to the submitters properties
 - The ODP for Plan Change 68 is updated to include the submitters properties, to ensure a coherent and legible internal transport network is provided.

Refer to my discussion in Section 1.

V1-0029: 93 TOSSWILL ROAD, PREBBLETON, GARY AND LYNDA BURGESS

- The submitters request can be adopted, as long as
 - o No development occurs until the following Council upgrades have been completed
 - Shands Road / Trents Road single lane roundabout
 - Trents Road seal widening, between Springs Road and Shands Road

- Hamptons Road seal widening, between Springs Road and Shands Road
- Shands Road / Hamptons Road dual lane roundabout
- Springs Road / Hamptons Road single lane roundabout
- Springs Road safety improvements to reduce vehicle speeds through Prebbleton
- Springs Road / Tosswill Road intersection upgrade to traffic signals
- The ODP is amended to include a local road, which allows for future extension into adjacent properties
- the submitter provides minor safety improvements (such as advance warning signage, road markings, etc) at the Trices Road/Tosswill Road intersection prior to any development of the site

Refer to my discussion in Section 2.

V1-0066: PREBBLETON SOUTH, BIRCHES VILLAGE LTD

I have reviewed the following Statements of Evidence from the Applicant for PC79:

- Lisa Williams (Transport), including Ms Williams Summary Statement
- Sally Elford (Planning), Appendix A Amendments to provisions for the District Plan only
- Nicole Lauenstein (Urban Design), Appendix 4 ODP Narrative only.

I have reviewed the following evidence from Submitters on PC79:

- Christchurch City Council
- Environment Canterbury Regional Council
- Thomas Fraser
- Benjamin Love.

In summary, I consider that matters identified in my PC79 Transportation Hearing Report have been resolved through evidence from the Applicant's experts. However, I consider that additional planning mechanisms are required to ensure that development within the site is staged to align with

- The Springs Road/Hamptons Road intersection upgrade to a roundabout
- Seal widening on Leadleys Road between Birchs Road and Ellesmere Road to 7m
- Seal widening on Ellesmere Road between Leadleys Road and Knights Stream bridge.

Refer to my discussion in Section 3.

V1-0070: PREBBLETON SOUTH, BALLANTRAE RESIDENTS GROUP

- The submitters request can be adopted, as long as
 - No development occurs until the following Council upgrades have been completed
 - Shands Road / Trents Road single lane roundabout
 - Trents Road seal widening, between Springs Road and Shands Road

- Hamptons Road seal widening, between Springs Road and Shands Road
- Shands Road / Hamptons Road dual lane roundabout
- Springs Road / Hamptons Road single lane roundabout
- Springs Road safety improvements to reduce vehicle speeds through Prebbleton
- Springs Road / Tosswill Road intersection upgrade to traffic signals
- the submitter provides a footpath along the site frontage with Trices Road, and a safe pedestrian crossing point of Birchs Road near the Trices Road intersection, prior to any development within the site.

Refer to my discussion in Section 4.

V1-0087: 529 SPRINGS ROAD, PREBBLETON, MARGARET SPRINGER

I recommend that

• The submitters request can be adopted, as long as a mechanism is included that requires the submitter to provide a walking and cycling connection from the site to the existing shared use path on the western side of Springs Road.

Refer to my discussion in Section 5.

V1-0098: PREBBLETON SOUTH, URBAN ESTATES NO.21 GROUP LIMITED

I recommend that

• The submitters request be rejected, unless further assessment of the safety and efficiency effects of the rezoning are provided. Should Council adopt the rezoning request, I recommend that development within the site is delayed until upgrades to the surrounding transport network are provided.

Refer to my discussion in Section 6.

1 V1-0028: 681, 687 AND 701 SHANDS ROAD AND 330 TRENTS ROAD, PREBBLETON, ADAM AND SARAH POLLARD; TREVOR HOLDER AND WESTPARK TRUSTEES LIMITED

The submissions relate to the zoning of 681, 687 and 701 Shands Road, and 330 Trents Road and the entire block of land extending west from Prebbleton bound by Hamptons, Shands and Trents Road (shown in Figure 1). As part of Variation 1, Council is proposing to rezone part of the block. This reflects land that was rezoned under Plan Change 68.

The submitters oppose the general Rural zoning of the above mentioned properties, and request that the block of General Rural zoned properties immediately adjoining Prebbleton is rezoned to Medium Density Residential Zone and Medium Density Residential Standards apply.

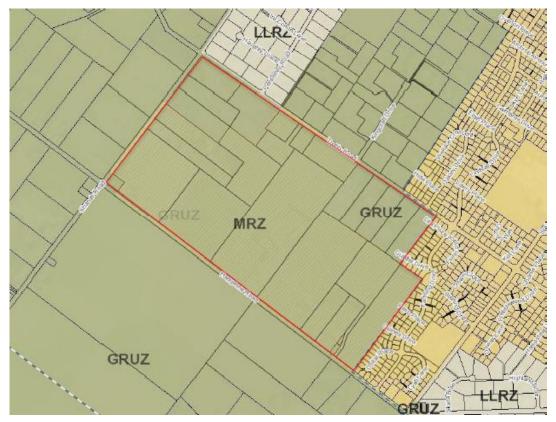


Figure 1: Hamptons Road/Shands Road/Trents Road block shown by a red border

1.1 Documents reviewed

I have reviewed the following documents

Submission by Kerstin Ghisel (Barker and Associates) dated 15 September 2022.

1.2 My discussion and recommendations

As part of my review I have taken into account the following

- I was engaged as Council transport expert for Plan Change 68. In my hearing report I discussed the potential transport effects that may arise from incorporating the submitters land within Plan Change 68 (submitter V1-0028 sought similar relief in their submission on Plan Change 68)
- In summary, I considered that the submitters land could be incorporated within Plan Change 68¹
 provided that development is deferred until nearby transport infrastructure upgrades are
 delivered
- I therefore consider that the submitters rezoning request can be adopted, provided that the planning mechanisms associated with Plan Change 68 are applied to the sites. In particular
 - o Operative Rule 12.1.3.48A, which
 - restricts development until the Shands Road/Trents Road intersection is upgraded to a roundabout, and
 - limits development to 120 dwellings until the Shands Road/Hamptons Road intersection is upgraded to a roundabout
 - limits development to 120 dwellings until seal widening has been undertaken on Trents Road, between Springs Road and Shands Road
 - limits development to 120 dwellings until seal widening has been undertaken on Hamptons Road, between Springs Road and Shands Road
- I also recommend that the ODP be updated to show the extension of the secondary road network and walking and cycling network through the site.

- The submitters request can be adopted, as long as
 - All District Plan provisions that apply to the Plan Change 68 site under Operative District Plan (which I assume have been included in the Proposed District Plan) are applied to the submitters properties
 - The ODP for Plan Change 68 is updated to include the submitters property, to ensure a coherent and legible internal transport network is provided.

¹ Refer to Flow Report R1C211213 PC68 Hearing Report, Section 7.3, available online https://www.selwyn.govt.nz/ data/assets/pdf file/0004/735763/Appendix-B-Transport-Report.pdf

2 V1-0029: 93 TOSSWILL ROAD, PREBBLETON, GARY AND LYNDA BURGESS

The Submitters made a submission (Ref: DPR-0143) on the Proposed Selwyn District Plan requesting the re-zoning of the site at 93 Tosswill Road, Prebbleton from General Rural Zone to General Residential Zone. The Submitter now confirms they wish to seek Medium Density Residential Zone for the site instead of General Residential Zone as previously requested as part of Variation 1 to the Proposed Selwyn District Plan.

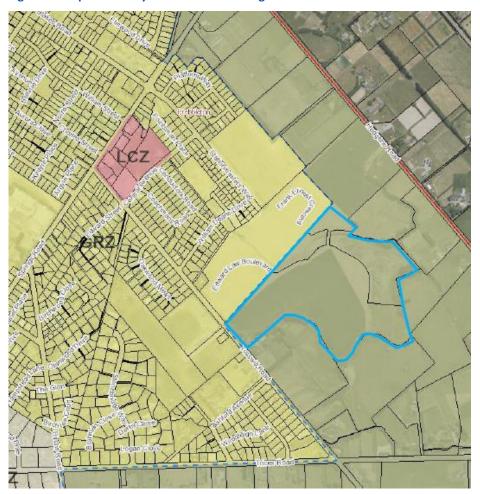
The rezoning applies to approximately 22.3 hectares at 93 Tosswill Road. The site location is shown in Figure 3. Approximately 120-140 residential dwellings are anticipated for the site, which would indicatively generate around 110 peak hour vehicle movements. This site is located within the Urban Growth Overlay. An ODP is proposed and is The Outline Development Plan is shown in Figure 3.

I was engaged by Council as its transport expert for nearby Plan Changes 68 and 72, and I have reflected on this during my review of submission V1-0029.

Key transport aspects of the submission include

- Vehicle access will be from Tosswill Road and the collector road through the adjacent land (Stationmasters Way and Edward Law Boulevard)
- Internal pedestrian and cycling links.

Figure 2: Proposed Selwyn District Plan Zoning and Site Location



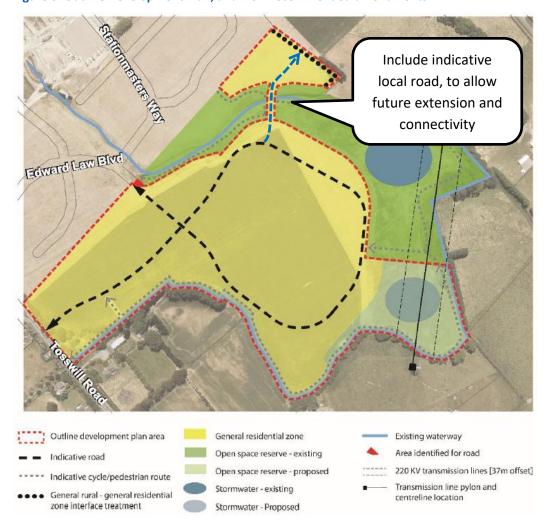


Figure 3: Outline Development Plan, and Flow recommended amendments

2.1 Documents reviewed

I have reviewed the following documents

Integrated Transport Assessment by Stantec, dated June 2021.

2.2 My discussion and recommendations

- The Long Term Plan includes several projects in the Prebbleton area, including
 - Shands Road / Trents Road single lane roundabout in 2022/2023
 - Trents Road seal widening in 2022/2023
 - Hamptons Road seal widening in 2024/2025
 - Shands Road / Hamptons Road dual lane roundabout in 2024/2025
 - Springs Road / Hamptons Road single lane roundabout in 2024/2025
 - Springs Road safety improvements to reduce vehicle speeds through Prebbleton, between Hamptons Road and Blakes Road in 2024/2027

- the installation of traffic signals at the Springs Road / Tosswill Road intersection in 2026/2027
- Section 11.1 of the ITA indicates that the rezoning of the site will have some impact on the efficient operation of the Springs Road/Blakes Road/Stationmasters Way roundabout, with queues anticipated to increase from 33 vehicles to 48 vehicles in the PM peak on the Springs Road north approach. The ITA suggests that Council's planning improvements to the Shands Road corridor will help mitigate the effect of the rezoning request, as it will divert some existing traffic from the Springs Road corridor
- Section 11.2 of the ITA indicates that the Springs Road/Tosswill Road intersection is currently performing poorly for right turns out of Tosswill Road, and that this may increase demand at the Springs Road/Blakes Road/Stationmasters Way roundabout. The ITA has modelled signalisation of this intersection, as proposed by Council, and concludes that it will operate acceptably with the inclusion of traffic from the site
- As part of my review for Plan Change 68, I recommended that development within the plan change area was limited until Council's improvements to the Shands Road corridor were constructed, to avoid safety and efficiency effects that would otherwise occur. I consider that such controls should also apply to this site due to the effects that may otherwise occur at the Springs Road/Stationmaster Drive and Springs Road/Tosswill Road intersections, as evidenced in the ITA
- Since 2015 there has been 1 serious injury crash, 1 minor injury crash, and 2 non-injury crashes reported at the Trices Road/Tosswill Road intersection. Crashes are generally related to failure to stop. The rezoning will have some effect on safety at this intersection, as an increase in vehicle movements will likely have some effect on the regularity of crashes, particularly as congestion on Springs Road may encourage commuting trips to Christchurch to use routes via Trices Road rather than Springs Road. I recommend that the submitter should provide minor safety improvements (such as advance warning signage, road markings, etc) at the intersection prior to any development of the site
- The ODP does not allow for future extension of the transport network into adjacent land, should the urban area of Prebbleton be extended in the future. I recommend that the ODP indicate that a local road should be provided to the northern boundary of the site, as indicated in Figure 3

- The submitters request can be adopted, as long as
 - No development occurs until the following Council upgrades have been completed
 - Shands Road / Trents Road single lane roundabout
 - Trents Road seal widening, between Springs Road and Shands Road
 - Hamptons Road seal widening, between Springs Road and Shands Road
 - Shands Road / Hamptons Road dual lane roundabout
 - Springs Road / Hamptons Road single lane roundabout
 - Springs Road safety improvements to reduce vehicle speeds through Prebbleton
 - Springs Road / Tosswill Road intersection upgrade to traffic signals

- The ODP is amended to include a local road, which allows for future extension into adjacent properties
- the submitter provides minor safety improvements (such as advance warning signage, road markings, etc) at the Trices Road/Tosswill Road intersection prior to any development of the site.

3 V1-0066: PREBBLETON SOUTH, BIRCHES VILLAGE LTD

V1-0066 seeks to rezone 36.58ha of rural land (GRUZ) to medium density residential (MRZ). I have previously carried out a review of transport matters for PC79, a private plan change on the same site as V1-0066, which also seeks to rezone the site from GRUZ to MRZ with an associated commercial zone. I have summarized my findings of the PC79 review below, and further detail can be found in my hearing report² and Summary Statement for PC79³.

In summary, I consider that matters identified in my Transportation Hearing Report have been resolved through evidence from the Applicant's experts. However, I consider that additional planning mechanisms are required to ensure that development within the site is staged to align with

- The Springs Road/Hamptons Road intersection upgrade to a roundabout
- Seal widening on Leadleys Road between Birchs Road and Ellesmere Road to 7m
- Seal widening on Ellesmere Road between Leadleys Road and Knights Stream bridge.

3.1 Documents reviewed

I have reviewed the following Statements of Evidence from the Applicant:

- Lisa Williams (Transport), including Ms Williams Summary Statement
- Sally Elford (Planning), Appendix A Amendments to provisions for the District Plan only
- Nicole Lauenstein (Urban Design), Appendix 4 ODP Narrative only.

I have reviewed the following evidence from Submitters:

- Christchurch City Council
- Environment Canterbury Regional Council
- Thomas Fraser
- Benjamin Love.

3.2 Discussion of key matters and recommendations

Recommendations in my Transportation Hearing Report that are resolved through Statements of Evidence from the Applicant's experts are discussed below

• I recommended that a planning mechanism is included which specifies a 600 dwelling threshold at which an updated Integrated Transport Assessment would be required, including an assessment of Birchs Road/Hamptons Road and Birchs Road/Springs Road intersections. This has been incorporated in Rule 12.1.3.48X(b) in Ms Elford's evidence.

² PC79 Transportation Hearing Report, Flow Transportation Specialists, 3 April 2023, available online at https://www.selwyn.govt.nz/ data/assets/pdf file/0007/1762999/Appendix-2-Mat-Collins-Transport.pdf

³ PC79 Summary Statement, Mat Collins, 2 May 2023, available online at https://www.selwyn.govt.nz/ data/assets/pdf file/0008/1815668/PC79-Closing-summary-Mat-Collins-Transport.pdf

- I recommended that the ODP identify that this intersection must be formed as a roundabout, and include safe crossing facilities to the Little River cycle trail. This has been incorporated in Rule 12.1.3.48(X)(c) in Ms Elford's evidence.
- Mitigation measures, such as a speed reduction or turning restrictions, will be required to ensure the Primary Road intersection with Hamptons Road can operate safely. I recommended that the ODP narrative identify that further assessment of the safe intersection sight distance is required. This has been adopted in the revised ODP narrative, contained in Appendix 4 of Ms Lauenstein's evidence.
- I recommended that the ODP narrative identify that the Birchs Road and Hamptons Road frontages would need to be upgraded to an urban standard. This has been adopted in the revised ODP narrative, contained in Appendix 4 of Ms Lauenstein's evidence.
- I recommend that the ODP plan and narrative should be amended to indicate an additional north/south road. Ms Williams discusses this in paragraphs 17 and 18 of her evidence, including the revised alignment for the primary north/south road. I do not have any concerns about the amended alignment for the north/south road.
- I recommended that road cross sections are removed from the ODP or otherwise amended to comply with Section 13 of Council's Engineering Code of Practice. In paragraph 19 of her Evidence, Ms Williams explains that the road cross sections were indicative and were not intended to replace Council's Engineering design standards.
- I recommended that the ODP should be amended to require that walking and cycling facilities must be provided on Primary Roads, and be separated from general traffic. I am comfortable that the revised ODP plan and narrative address this matter.

Recommendations in my Transportation Hearing Report that are resolved through the Summary Statement of Ms Williams are discussed below

- Springs Road/Hamptons Road intersection upgrade
 - I recommended that the Springs Road/Hamptons Road intersection is upgraded to a roundabout prior to any development within PPC79.
 - I note that Council's Long Term Plan has this upgrade scheduled for 2023-2025.
 However, Council sometimes has to adjust/reallocate funding away from committed projects. Further, as funding from the project relies on a contribution from Waka Kotahi, it may be subject to changes in funding proprieties from Central Government.
 - Should the project be delayed then unconstrained development within PC79 would exacerbate growth effects that are already being experienced at the intersection.
 - Following discussions with Ms Williams, I consider that up to 100 dwellings could be constructed within PC79 prior to the intersection upgrade, without causing significant effects. In paragraph 8.(i) of her Summary Statement Ms Williams supports this approach.
- Leadleys Road seal widening

- I recommended that carriageway seal widening of Ellesmere Road and Leadleys Road was undertaken on the formation of the roundabout at the Birchs Road/Leadleys Road/Primary Road intersection.
- o Following discussions with Ms Williams, I consider that up to an additional 155 dwellings could be constructed prior to the upgrade of the Springs Road/Hamptons Road roundabout if the Leadleys Road seal widening is completed (total of 255 dwellings).
- The formation of the Birchs Road/Leadleys Road roundabout is incorporated in Rule 12.1.3.48X(b) in Ms Elford's evidence.

Ellesmere Road seal widening

- Council has funding to undertake carriageway seal widening on Ellesmere Road, between Edward Street and Knights Stream bridge in 2024/2025. This project is in response to increased travel demand on this corridor. I consider that my arguments and conclusions in Paragraphs 5.1 to 5.3 of this Summary Statement apply to the Ellesmere seal widening project as well.
- I consider it appropriate to ensure staging within PC79 aligns with seal widening on Ellesmere Road. I consider that up to 100 dwellings could be constructed within PC79 prior to the Ellesmere Road seal widening between Leadleys Road and Knights Stream bridge, without causing significant effects.
- I consider that up to an additional 155 dwellings could be constructed prior to the upgrade of the Springs Road/Hamptons Road roundabout if the Ellesmere Road seal widening is completed (total of 255 dwellings).

In Table 1 I have summarised my recommended staging of transport improvements, including those already identified in Statements of Evidence from the Applicant's experts. I consider that additional planning mechanisms are required to ensure that development within the site is staged to align with

- The Springs Road/Hamptons Road intersection upgrade to a roundabout
- Seal widening on Leadleys Road between Birchs Road and Ellesmere Road to 7m
- Seal widening on Ellesmere Road between Leadleys Road and Knights Stream bridge.

Table 1: Transport network improvements and staging

Transport network improvement	Timing/staging or maximum number of dwellings within PC79	Comment
None	Maximum of 100 dwellings	
Birchs Road and Hamptons Road frontage upgrades	In conjunction with any development fronting respective road	ODP narrative, contained in Appendix 4 of Ms Lauenstein's evidence.

Leadleys Road/Birchs Road roundabout	Upon formation of the primary east/west road	Rule 12.1.3.48X in Ms Elford's evidence
Leadleys Road seal widening to 7m	Upon formation of the Leadleys Road/Birchs Road roundanout	Additional planning mechanism required
Leadleys Road seal widening to 7m between Birches Road and Ellesmere Road; AND Ellesmere Road seal widening between Leadleys Road and Knights Stream bridge, per Council's funded project.	More than 100 dwellings, up to a maximum of 255 dwellings	Additional planning mechanism required
Leadleys Road seal widening to 7m between Birches Road and Ellesmere Road; AND Ellesmere Road seal widening between Leadleys Road and Knights Stream bridge, per Council's funded project; AND Springs Road/Hamptons Road upgrade to single lane roundabout.	More than 100 dwellings, up to a maximum of 600 dwellings	Additional planning mechanism required
Additional infrastructure if required (subject to a further ITA)	More than 600 dwellings	Rule 12.1.3.48X(b) in Ms Elford's evidence

4 V1-0070: PREBBLETON SOUTH, BALLANTRAE RESIDENTS GROUP

The submitter requests the re-zoning of 24 lots in south Prebbleton from Large Lot Residential zoning to Residential Medium Density zoning which will allow for an additional 55-75 lots (i.e. up to around 100 lots). The site location is shown in Figure 4.

Key transport aspects of the request

- The sites are brownfield large lot residential sites, with access to existing vested roads
- The rezoning is indicated to result in around an additional 50-70 vehicle movements during the peak hour.

Figure 4: Site Location



4.1 Documents reviewed

I have reviewed the following documents

Integrated Transport Assessment prepared by Novo Group, dated November 2021

4.2 My discussion and recommendations

- The Long Term Plan includes several projects in the Prebbleton area, including
 - Shands Road / Trents Road single lane roundabout in 2022/2023
 - Trents Road seal widening in 2022/2023
 - Hamptons Road seal widening in 2024/2025
 - Shands Road / Hamptons Road dual lane roundabout in 2024/2025

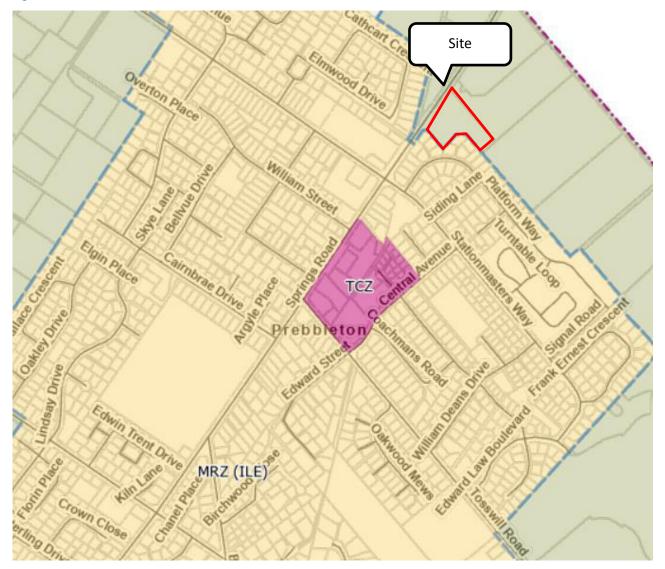
- Springs Road / Hamptons Road single lane roundabout in 2024/2025
- Springs Road safety improvements to reduce vehicle speeds through Prebbleton, between Hamptons Road and Blakes Road in 2024/2027
- the installation of traffic signals at the Springs Road / Tosswill Road intersection in 2026/2027
- Springs Road is classified as an Arterial Road and no property access is anticipated onto Springs Road. The Transport Chapter of the Proposed District Plan adequately addresses this matter.
- The Councils upgrading of the Springs Road/Hamptons Road intersection to a roundabout will result in the closure of the Trices Road/Hamptons Road intersection
- A footpath along Trices Road has been recommended by Novo Group, which will provide a direct connection to the Rail Trail on Birchs Road and access to the future Prebbleton Park. I support this recommendation and consider that a safe crossing point on Birchs Road should also be provided

- The submitters request can be adopted, as long as
 - o No development occurs until the following Council upgrades have been completed
 - Shands Road / Trents Road single lane roundabout
 - Trents Road seal widening, between Springs Road and Shands Road
 - Hamptons Road seal widening, between Springs Road and Shands Road
 - Shands Road / Hamptons Road dual lane roundabout
 - Springs Road / Hamptons Road single lane roundabout
 - Springs Road safety improvements to reduce vehicle speeds through Prebbleton
 - Springs Road / Tosswill Road intersection upgrade to traffic signals
 - the submitter provides a footpath along the site frontage with Trices Road, and a safe pedestrian crossing point of Birchs Road near the Trices Road intersection, prior to any development within the site.

5 V1-0087: 529 SPRINGS ROAD, PREBBLETON, MARGARET SPRINGER

The submitter requests that the zoning of approximately 1.28 hectares of land located at 529 Springs Road, Prebbleton be amended from General Rural to Residential Medium Density. The site location is shown in Figure 5. This could enable around 18 residential lots and could generate around 15-20 vehicle movements in the peak hour.

Figure 5: Site Location



5.1 Documents reviewed

I have reviewed the following documents

Preliminary Transport Assessment prepared by Plan Creative, dated September 2021.

5.2 My discussion and recommendations

- The site sits outside of the Urban Growth Overlay. My recommendation on many other rezoning submissions that are outside of the Urban Growth Overlay has been to reject rezoning if sufficient urban capacity exists within Rolleston, Prebbleton and/or Lincoln. However, in this instance due to the location and limited site size I consider that rezoning the site is unlikely to have noticeable effect on the wider transport network.
- ◆ The traffic volumes were taken in September 2019, between 4 6pm with around 2,000 vehicles per hour on Springs Road. The site has sole frontage onto Springs Road which is classified as an Arterial Road. The closest intersections to the site are the Black Road intersection (approximately 200m southwest of the site), and the Hodgens Road intersection (approximately 325m northwest of the site). The Transport Chapter of the Proposed District Plan give scope for Council to adequately address any minor safety or efficiency considerations during future consent applications.
- SIDRA modelling has been done to analyse the ability of site generated traffic to safely enter and exit the site. This demonstrated that the access can operate acceptably. Whether this access should to be a public road or private accessway can be assessed during future consent applications.
- The Preliminary Transport Assessment recommends an extension to the existing footpath on Springs Road to connect the site to the Prebbleton town centre. I support this recommendation, and consider that the submitter should be required to provide a safe pedestrian and cycling connection from the site to the shared pedestrian and cycle path on the western side of Springs Road, which I have shown indicatively in Figure 6.

Existing shared use path Connection

Site

Figure 6: potential walking and cycling connection to the site

• The submitters request can be adopted, as long as a mechanism is included that requires the submitter to provide a walking and cycling connection from the site to the existing shared use path on the western side of Springs Road.

6 V1-0098: PREBBLETON SOUTH, URBAN ESTATES NO.21 GROUP LIMITED

The submitter requests that the zoning of approximately 66 hectares of land bounded by Triced Road, Tosswill Road, Leadleys Road and Hamptons Road, Prebbleton is amended from General Rural Zone to Medium Density Residential (MDZ), the site is shown in Figure 7. A new Development Areas (DEV-PR5-Prebbleton 5 Development Area) is proposed, as shown in Figure 8, and the site is located outside of the Urban Growth Overlay.

Approximately 1000 residential lots are anticipated for the site, which would indicatively generate around 850 - 900 peak hour vehicle movements.

I was engaged by Council as its transport expert for nearby Plan Changes 68, 72 and 79, and I have reflected on this during my review of submission V1-0098.

Key transport aspects of the submission include

- Two roading connections to the west, one of which aligns with a road proposed in the ODP for Plan Change 72 and the other forms an extension to Hamptons Road
- New intersections on Leadleys Road, Tosswill Road and Trices Road
- A pedestrian and cyclist network through the site, providing connections to existing roads and the future Birchs Road Park (currently under construction).

Figure 7: Site Location

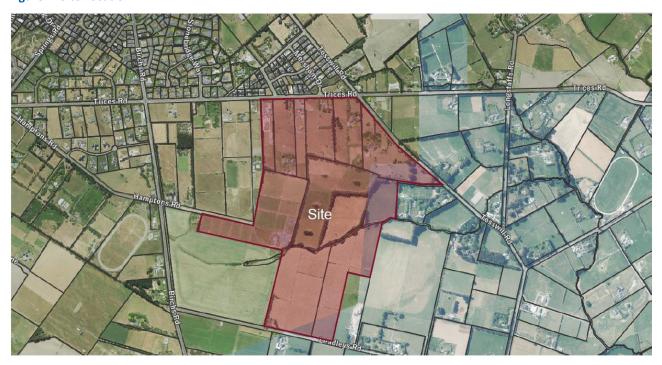
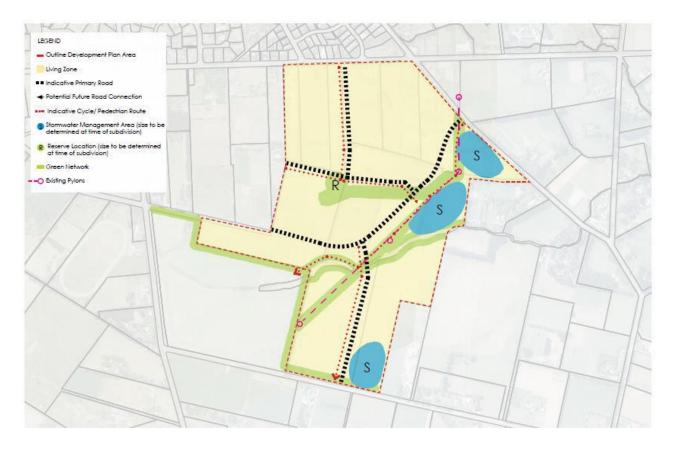


Figure 8: Proposed Prebbleton 5 Development Area



6.1 Documents reviewed

I have reviewed the following documents

Integrated Transport Assessment prepared by Abley, dated 28 September 2022.

6.2 My discussion and recommendations

- The Long Term Plan includes several projects in the Prebbleton area, including
 - Shands Road / Trents Road single lane roundabout in 2022/2023
 - Trents Road seal widening in 2022/2023
 - Hamptons Road seal widening in 2024/2025
 - Ellesmere Road seal widening in 2024/2025
 - Shands Road / Hamptons Road dual lane roundabout in 2024/2025
 - Springs Road / Hamptons Road single lane roundabout in 2024/2025
 - Springs Road safety improvements to reduce vehicle speeds through Prebbleton, between Hamptons Road and Blakes Road in 2024/2027
 - the installation of traffic signals at the Springs Road / Tosswill Road intersection in 2026/2027

- Section 6.2 of the ITA estimates that the rezoning would generate around 20 30 peak hour vehicle trips on Trices Road, east of the site. However, Figure 7.1 in Section 7 indicates that significant growth is expected on the Trices Road and Ellesmere Road corridors, which I interpret to be the result of congestion on the Springs Road and Shands Road corridors through Prebbleton. I therefore consider that the ITA may underestimate the demand that the rezoning would generate on existing rural roads to the east of the site
- The ITA makes that following recommendations
 - That the Springs Road/Tosswill Road intersection is upgraded to traffic signals prior to any development within the site (Section 7.2)
 - That the Tosswill Road/Trices Road intersection is realigned to address safety issues, potentially with a right turn bay for turning movements from Tosswill Road, prior to any development in the site (Section 7.3)
 - Upgrades along site frontages to include walking and cycling facilities (Section 8).
- The ITA has not provided transport modelling assessments or safe systems assessments, which
 would typically be undertaken for a development of this size. In my view, assessments should be
 provided for the following
 - o Birchs Road/Hamptons Road intersection
 - Tosswill Road/Trices Road intersection
 - Leadleys Road/Birchs Road intersection
 - Ellesmere Road/Tosswill Road intersection
 - o Leadleys Road, between Birchs Road and Ellesmere Road
 - o Trices Road, between Tosswill Road and Ellesmere Road
- In my view these assessments should include consideration of cumulative effects of Plan Change
 72 (currently under appeal) and Plan Change 79 (currently in the post notification phase)
- While assessments of Trices Road/Birchs Road and Birchs Road/Springs Road intersections might be needed, I anticipate that the site will generate lower demand on these intersections, particularly when the Trices Road/Hamptons Road intersection is closed along with Council's planned upgrade to the Hamptons Road/Springs Road intersection
- As part of my review for Plan Change 68, I recommended that development within the plan change area was limited until Council's improvements to the Shands Road corridor were constructed, to avoid safety and efficiency effects that would otherwise occur. I consider that such controls should also apply to this site due to the effects that may otherwise occur at the Springs Road/Stationmaster Drive and Springs Road/Tosswill Road intersections
- Section 2.7 and Section 2.8 of the ITA provide information on walking and cycling distances and times between the site and nearby destinations. In my view the existing Birchs Road shared use path provides an opportunity to connect the site to the Prebbleton town centre and provide transport choice for future residents of the site. I recommend that a walking and cycling connection be provided to Birchs Road prior to any development within the site. This could be provided on Trices Road, Hamptons Road or through the Plan Change 72 site depending on how the submitter decided to stage development

- At this stage I consider that there is insufficient information provided to understand the potential safety and efficiency effects of the submitters request. However, if the submitters request were adopted by Council I consider that the following mitigation should be provided
 - Mitigations as recommended in Section 8 of the ITA
 - Provision of a walking and cycling connection from the site to the existing shared use path on Birchs Road, prior to any development within the site.
 - o No development is to occur until the following Council projects are completed
 - Shands Road / Trents Road single lane roundabout
 - Trents Road seal widening
 - Hamptons Road seal widening
 - Ellesmere Road seal widening
 - Shands Road / Hamptons Road dual lane roundabout
 - Springs Road / Hamptons Road single lane roundabout
 - Springs Road safety improvements to reduce vehicle speeds through Prebbleton, between Hamptons Road and Blakes Road
 - the installation of traffic signals at the Springs Road / Tosswill Road intersection
 - No development is to occur until traffic modelling and safe systems assessments are undertaken, and any required mitigations constructed, for the following intersections and roads
 - Birchs Road/Hamptons Road intersection
 - Tosswill Road/Trices Road intersection
 - Leadleys Road/Birchs Road intersection
 - Ellesmere Road/Tosswill Road intersection
 - Leadleys Road, between Birchs Road and Ellesmere Road
 - Trices Road, between Tosswill Road and Ellesmere Road.

• The submitters request be rejected, unless further assessment of the safety and efficiency effects of the rezoning are provided. Should Council adopt the rezoning request, I recommend that development within the site is delayed until upgrades to the surrounding transport network are provided.