



4 August 2022

The Variation 2 Officer
Dunedin City Council
PO Box 5045
Dunedin

**RESPONSE TO VARIATION 2 s42A REPORT
GF 07 (33 EMERSON STREET)
SUBMITTER: ROBERT DAVID MATHIESON**

Attached:

- Site photographs and index plan (Paterson Pitts Group)

Please find below, the submitter's response to the s42A recommendations that relate to this greenfields site.

Background

This is a 3.44ha property that is currently zoned Rural (Coastal). It is open pasture with a scattering of exotic trees and shrubs. It has extensive frontage to Emerson Street. There are no existing dwellings on the property.

Transportation Matters

We have reviewed the DCC Transport comments contained in the s42a report. These comments state that 'the standard of Emerson Street itself is of significant concern when considering the prospect of reasonably dense residential development as proposed. As it passes the development site, Emerson Street typically comprises a 5.5m wide sealed carriageway with no kerb and channel, footpaths or street lighting. There are banks on both sides'.

The DCC Transport comments further advise that DCC Transport considers the following upgrades would be required at a minimum to support rezoning:

- construction of a new footpath, kerb and channel that safely links with existing infrastructure on the northern parts of Emerson Street. This could be problematic given the topography and also noting that there is currently no footpath on the western side of the road until northeast of Thoreau Street (i.e., beyond the frontage of the development site).
- installation of street lighting in accordance with AS/NZS1158.

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- a safety analysis to review whether any engineering intervention is required to mitigate the potential for errant vehicles to leave the road on the downhill (eastern) side.
- a review of new intersection location(s) and confirmation that compliant sight distances and longitudinal gradients can be achieved in accordance with NZS4404:2010.

The submitter has engaged Paterson Pitts Group to investigate the feasibility of a road upgrade to achieve the standards noted in the DCC Transport comments. Paterson Pitts Group has visited the site and has produced the attached document that contains a number of photos of the road (these photos move in a northerly direction along the frontages of 41 and 33 Emerson Street).

The purpose of the site investigation was to confirm whether it is reasonable for a kerb and channel and a standard 2.0m wide footpath could be constructed along the western side of Emerson Street. The Photos labelled 'A' through to 'G' show a green-painted stake that has been placed at exactly 2.5m from the white edge line of Emerson Street. This width was selected because it enables the carriageway to be increased by 0.5m to a full width of 6.0m (complying with the 2GP), and then a 2.0m wide footpath beyond that. A new kerb and channel would be constructed at a distance of 0.5m from the current edge line. Photos 'H' and 'I' show the green stake at 2.0m from the existing kerb and channel (the addition 0.5m is not required at these locations).

Reviewing the photos, it is possible to visualise the extent to which the existing bank would need to be modified by earthworks in order for the road to be widened and a footpath constructed. Generally, in the majority of images, the bank modifications will be moderate, but not significantly large. I have no doubt that there are relatively straight-forward engineering solutions that can be applied to achieve compliance with the relevant road carriageway and footpath standards. Furthermore, as these will generally be limited to earthworks and batter rehabilitation processes (retaining walls might be an option to consider, but I do not believe these will be necessary), I expect that the cost of providing the require transport infrastructure will be able to be accommodated within the development budget relatively easily.

In respect to the interaction of the footpath at the northern end of the site with the existing transport infrastructure, I consider that one solution might be to provide a pedestrian crossing point from the end of the new footpath to the existing footpath in front of 28 Emerson Street. This can be observed in Photo 'I', where a pedestrian crossing located at around the midway point between the power pole in the foreground and the parked car on the east side of the street, might be a suitable safety link. The detail of any such crossing will need to be reviewed by a qualified transportation engineer, which could occur at the time a resource consent application is submitted to Council.

Street lighting can be provided as part of any future development. I do not see the cost of this as being problematic.

A safety assessment in respect to vehicles running off the road on the eastern side of Emerson Street is sensible. I consider that this is something that could be undertaken at the time a resource consent application is submitted to Council. If required, a barrier solution could be implemented.

The review of any new intersection, in respect of its location, gradient and sight distances, is something that would normally occur at the time a resource consent application is submitted to Council. I expect that some reasonably moderate earthworks may need to be undertaken in order to meet the turning and gradient requirements of a new intersection, however I have not found anything at this location that suggests to me that a compliant intersection could not be achieved.

Overall, while I agree that there are some design challenges for any development of this land, I am confident that there are solutions to all of the concerns raised by DCC Transport, and that these solutions will not be cost prohibitive.

Landscape Matters

The s32 report notes that 'Rural amenity values are low to moderate. The site is visible in long views from the southern motorway. Further development is likely to appear as a natural extension of the existing developed area, with overall minor effects on rural character and amenity'. We agree with this assessment.

3-Waters Matters

The 3-Waters commentary in the s42a report adds little to the earlier (and relatively positive) s32 report. It is noted that a minor network extension will be required, at the developer's expense, to connect the infrastructure to the new residential sites. It also records that utility upgrades in the wider network are budgeted for within the 10 year plan.

A 150mm dia trunk supply main is contained within the carriageway of Emerson Street, with a 100mm water main extending up Emerson Street to a point just north of the southern extent of the site.

Three 150mm dia foul sewers terminate slightly downhill of the subject site, in the lower portion of Emerson Street (at the intersection of Roy Crescent and Thoreau Street).

Regarding stormwater, the site assessment notes that 'the property currently discharges via an overland flow, through a 225mm pipeline along Emerson Street, and then to an open watercourse. The pipe is under capacity for the expected 10 year annual recurrence interval (ARI) and the capacity of the open watercourse is unknown. Therefore, attenuation is required'. We agree that this assessment is reasonable, and we envisage that stormwater attenuation will be a required design element for any future development of this property.

The submitter is satisfied with the above considerations.

Hazards Matters

In regard to geotechnical considerations, the site assessment notes that there are 'some issues (manageable)' and that 'this site is assessed as having a medium level hazard associated with slope instability. Geotechnical investigations will be required prior to development'.

We are confident that relatively straightforward engineering solutions can be applied to manage slope instability on this gradient. It is anticipated that a suitable geotechnical assessment will be required as part of the resource consent process for any future development.

Structure Plan

None provided.

Planning Matters

Having carefully considered the council's evidence and the s42a recommending report, we continue to believe that rezoning the property to General Residential 1 is appropriate. We generally concur with Council's assessments. The only caveat to this, is that we feel comfortable, having visited the site and considered the relevant infrastructure, that the geotechnical and road improvement concerns are likely to be relatively straightforward to resolve. For this reason, it is our opinion that the issues raised by the Council departments should not be seen as a major impediment to developing the site.

Council's policy planner considered that rezoning the site to General Residential 1 to be appropriate in-principle, however with a suggestion that it might be helpful if information could be provided at the hearing to satisfy the concerns of DCC Transport regarding the feasibility of upgrading Emerson Street. The submitter is of the view that the attached information does just that.

Having carefully considered Policy 2.6.2.1, the Council's evidence and the s42a recommending report, and having prepared that attached information regarding the feasibility of upgrading Emerson Street, we continue to believe that rezoning the property to General Residential 1 is appropriate.

Yours faithfully

PATERSON PITTS GROUP



Kurt Bowen

Registered Professional Surveyor

