CORNERSTONE CHURCH

999 GOULDS RD, ROLLESTON

ASSESSMENT OF ENVIRONMENTAL EFFECTS

Introduction

This Assessment of Environmental Effects describes the effects of the proposed new church construction and ongoing use, with particular reference to the aspects which do not comply with the provisions of the Partly Operative Selwyn District Plan Review as identified in the compliance summary.

A. Residential Medium Density Zone Rules

Community facility

The proposed church is a community facility as defined by the district plan and is therefore automatically a restricted discretionary activity. As such, all effects arising are able to be assessed, whether or not identified by the district plan. There a number of other matters requiring consent as restricted discretionary activities which are assessed below. However, overall the application should be assessed as a discretionary activity under the bundling principle.

It is considered however that in this case the only potential effect that requires consideration over and above those arising under other specific rules is the scale of the building.

Scale of Building

There is no longer a maximum floor area limit for buildings in this zone, as there was under the previous district plan. The site is large at 1.2138ha. It is a regularly shaped through site with a width of 71m. There are generous setbacks of 7m from the southern side boundary, 14m from the northern side boundary, 15m from the front boundary at Goulds Rd and 100m from the nearest point on the rear boundary at Rufus St. The building is 9.5m high at the peak of the roof and 7.2m and 5m high at the side walls. Total site coverage including the existing 172m^2 former dwelling, which is being retained as office and administration facilities is 14.5%

The 9.5m height is only at the peak of the gable roof and the side elevations are only as high as a typical 2 storey residential building.

It is considered that the scale of the building is appropriate to the size of the site.

The only potential adverse effects of the buildings size would be visual. It is considered that the only potentially affected parties would be the owners and occupiers of the adjacent rural properties to either side, No's 995 and 1005 and a group of 4 residential properties on the opposite side of Goulds Rd, at Numbers 52-62 Stanford Way.

The adjacent rural properties are both owned and occupied by one owner, who has not provided affected party approval. There are dwellings on both properties. The side boundaries on both sides are currently heavily screened by mature shelter belts. It is considered that at present the church buildings would not be readily perceptible. If the shelter belts were removed the church would be visible from these properties but the size of the building would be proportional to the size of the property, and visual effects reduced by the generous setbacks.

The four residential properties opposite are rear properties with their access to Stanford Way. The properties are all screened from Goulds Rd by high fencing and substantial landscaping, as shown by the photographs below.

Figure 1- 62, 64 and 68 Stanford Way viewed from site frontage

Figure 2 – 52 and 54 Stanford Way viewed from site frontage

It is considered that although the owners and occupiers may have some view of the upper parts of the church buildings, they will be unable to see the lower parts, or the vehicle accessways and car parking from their properties and will be unable to see ground level activities on the church site. It is considered that any adverse visual effect on these parties will be less than minor.

Staff Employment

The full-time staff on site are office-based within the buildings on site. There is no longer a standard for full-time equivalent staff in the district plan, but the matter may be considered as this application is for a full discretionary activity. At present there are 3 staff and even if this were to increase slightly in future this would have effects that are imperceptible.

B. Vehicle Crossings and Traffic

The church is large and will generate significant traffic flows immediately before and after services. There are two vehicle crossings which will operate in a one-way configuration. At busiest times before and after Sunday morning services the two accessways will operate in a two way fashion, i.e. virtually all traffic will be using one or the other at the same time. Therefore there will be few if any conflict issues with turning traffic in or out of the site.

The peak time for traffic generation will be on Sunday mornings, before and after the service. Because there will be very little traffic at these times on Goulds Rd, there will be minimal delays or safety issues on the wider traffic network.

There are a number of minor departures from the required dimensions for the parking and access layout, and other Transport Rules and Rule Requirements. These are identified in the attached Compliance Assessment and discussed in the Transport Report prepared by Carriageway Consulting Ltd.

Overall it is considered that any traffic-related adverse effects from traffic will be less than minor.

C. Activities And Light Spill

The exterior lighting on the site will exceed the standard for light spill in Rules LIGHT-R1, LIGHT REQ 1 and Table 5, of 2 lux horizontal or vertical. Actual levels will be 3.5 lux at the north and south side boundaries and the eastern(road) boundary as shown on the attached lighting plan prepared by BetaCom Ltd(Appendix X), falling quickly to 0.7 lux within a few metres. This is a very small increase over the permitted activity level. Therefore any adverse effects arising from this are expected to be less than minor.

D. Contaminated Land

A detailed Site Investigation of the site was carried out in 2016 by the consulting firm Fraser Thomas[1] for the purposes of the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (the NESCS) and is attached. It was found that due to earlier use of part of the land for a horticultural purpose, the level of lead and arsenic in a single soil sample were slightly higher than the background level, but not high enough to trigger the definition of contamination for the purposes of the NESC.

Although stormwater is to be discharged to land on-site, this will not occur in the area identified by Fraser Thomas.

Therefore there will be no adverse effects arising from land contamination.

E. Earthworks

Firstly, it is noted that the earthworks required for this project are similar in their nature and any effects to similar sized subdivisions in Rolleston and follow established and well understood techniques and practices. The earthworks component will also be subject to building consent and engineering approval processes at the Council.

The project exceeds permitted activity requirements in respect of volume, depth of excavations and filling, soil contamination and rehabilitation, as set out in the Compliance Schedule (Attachment 3). These matters are assessed in the attached assessment by Kim Sanders, Registered Engineering Associate, the Project Engineer for this project (Attachment 5d). Also attached are Siteworks Plans (Attachment 5a), a Siteworks and Design Report (attachment 5b), an Erosion and Sediment Control Plan (Attachment 5c). Detailed Site Investigation Report -Contamination report by Fraser Thomas Ltd (Attachment 5e) and dust control (Attachment 5f). Provided these documents are adhered to, it is considered any adverse effects will be less than minor.

Stormwater drainage.

Primary stormwater is to be disposed of in three soakpits on site, and secondary flow paths will be led to and along the accessways, as set out in the design report.

[1] Detailed Site Investigation Report -Contamination – Project 32437 Fraser Thomas, provided by Environment Canterbury

Site Rehabilitation

The earthworks are likely to be completed within 12 months, as required by Rule Requirement REQ4. It is possible that final remediation of bare areas may not be completed by then because they may have to wait for completion of the building project and carpark formation. Dust control of any remaining stock piles should be undertaken, as set out in the attached email correspondence with Kim Sanders. (Appendix YE)

Conditions of consent should be set in respect of these matters, and will ensure that any effects of the earthworks will be less than minor.

F. Noise

The proposal may exceed the permitted noise level of 50 dBA LAeq at the boundary and may be up to 55dBA. This is described in the acoustic report by Acoustic Engineering Services (AES) (Attachment 7). This conclusion is based on the design of the building and a conservative estimate of amplified music noise levels).

It is noted that 55dBA is not a high level of noise and was until recently used by many district plans as the standard permitted upper limit in residential zones, although recently there has been a tendency in some plans to reduce this to 50 dBA LAeq. It is also a worst case estimate by AES, not a figure confirmed by measurement. AES state that noise could be reduced to compliant levels if internal noise in the building is kept below 90 dBA LAeq and acoustic fences are constructed along the two side boundaries.

The church would prefer not to construct acoustic fences at this time, because any noise would only occur for very limited time in the middle of the morning on one day per week and the predicted noise maximum level of 55dBA is itself not a high level of noise and unlikely to cause annoyance to most residents. AES notes that the World Health Organisation publication Guidelines for Community Noise (WHO recommends a guideline daytime limit of 55 dB LAeq(16 h) to ensure few people are seriously annoyed in residential situations. A guideline limit of 50 dBA Laeq) is recommended to prevent moderate annoyance. At paragraph 2.4 AES notes that NZ Standard 6802:2008 Acoustics – Environmental noise outlines "a guideline daytime limit of 55 dB LAeq(15 min) for "the reasonable protection of health and amenity associated with the use of land for residential purposes".

In addition it is possible that construction of the acoustic fences at the boundaries may be difficult due to the location of existing shelter belts.

The church is willing to accept a condition requiring that the internal noise limit within the building not exceed 90dBA, the noise limit at the boundary not exceed 55dBALAeq and that doors remain closed while sound amplification is in use.

OBJECTIVES AND POLICIES OF THE DISTRICT PLAN REVIEW

The following objectives and policies are considered relevant in assessing this application;

A. Transport Objectives and Policies

TRAN-O2 *Land transport corridors and* ***land transport infrastructure a****re protected from incompatible land use activities and subdivision development.*

TRAN-P3 *Require Integrated Transport Assessments to assess the effects of high trip generating activities on the surrounding land transport network to:*

1. *Maintain the safety and efficiency of land transport infrastructure by ensuring there is sufficient capacity in land transport corridors; and*
2. *Establish whether the high trip generating activity can be supported by active transport modes, including accessibility to safe and convenient walking and cycling connections and access to public transport and public transport facilities.*

Comment

It is considered that the proposed church development will be fully compatible with Goulds Rd. It will be busy only for limited periods on Sundays. There will be no congestion or traffic conflicts created. Effective and efficient access and parking is provided on site and there is expected to be minimal need for on-street parking. It is considered that preparing an integrated Traffic Management Plan is unnecessary and would be excessive in these circumstances.

> *TRAN-**P9** Manage the design and layout of on- and loading facilities to maintain the safe and efficient operation of land transport corridors*
>
> *TRAN-**P11** Manage vehicle access, vehicle crossings and manoeuvring areas to maintain the safe and efficient operation of transport corridors and by:*
>
> 1. *Requiring all sites to have access to a road and to ensure that this access is constructed to the appropriate formation standards and is compatible with the network road classification;*
> 2. *Avoiding the need to reverse vehicles onto the strategic transport network;*
> 3. *Avoiding the establishment of new accessways and vehicle crossings to roads that require access across a rail line; and*
> 4. *Minimising the need to reverse onto Collector Roads through the provision of appropriate on-site manoeuvring areas.*

Comment

The access is provided, to the appropriate standard and is compatible with the collector road status of Gould Rd. There will be no need for reversing onto the road and in fact the location of most of the parking and the one way pattern will discourage reversing.

B. Earthworks objectives and policies

*EW-P4 Minimise any adverse visual effec*ts*, loss of privacy, dust nuisance, or shading adverse effects during and on completion of earthworks.* **Comment**

The earthworks are designed and the Siteworks Plan and Erosion and Sedimentation Control Management Plan have been prepared and will be implemented in a manner which achieves these provisions.

C. Light Objectives and policies

LIGHT-01

> *Artificial outdoor lighting enables work, transportation, recreation, and entertainment activities to occur beyond daylight hours, while:*
>
> 1. *maintaining the health, safety, and amenity values of people; and*
> 2. *protecting the District's natural darkness and natural features.*

LIGHT-P1

> *Manage new artificial outdoor lighting to minimise and glare onto adjoining sites and roads to provide for the health and safety of people and the safe, effective and efficient operation of the land transport network.*

LIGHT-P2A

> *Recognise that artificial lighting may be required to support the operational needs of* activities, *including their health and safety requirements, and those needing to operate on a 24-hour basis.*

Comment

Outdoor lighting of the accessways and parking areas is necessary to provide for night time events and for purposes of security and Crime Prevention Through Environmental Design. The design and the large site ensure adverse effects on adjacent properties and the road will be less than minor.

D. Noise objectives and Policies

NOISE-01 *The health and wellbeing of people and communities and their amenity values are protected from adverse noise effects, consistent with the anticipated outcomes for the receiving environment*

NOISE*-P1 Manage noise effects by setting:*

1. Maximum noise limits to reflect the character and amenity of each zone;

2. Limits on the location, frequency, and duration of specific activities that generate noise;

3. A vibration standard

Comment

This objective and policy will be achieved by the design and operation of the church.

Suggested Conditions of approval

Suggested conditions of approval include the following. Exact wording has not been provided as the Council probably has standard wording for these matters that it may prefer to apply.

1. Compliance with application document and plans submitter with the application, including
   - Site Plan, Floor Plans, and Elevations by Whimbrel Architects
   - Design Report for Civil Siteworks, Siteworks Plan and Erosion and Sediment Control Management Plan, all prepared by Kim Sanders Consulting Ltd, March, 2003,
   - Lighting Plan by BetaCom
2. Noise levels not to exceed 55BA Laeq at all boundaries of the site and 90 dBA Laeq inside the building. External door are to be kept closed when sound amplification is in use.
3. Dust Control measures to be employed at any excavated or filled areas of the site.