

2. AVON PARK – EARTHQUAKE REPAIRS SEWAGE PUMPING STATION EASEMENTS

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PURPOSE OF REPORT

1. The purpose of this report is to gain the approval of the Hagley/Ferrymead Community Board, under delegated authority from the Council, to the granting of easements unto itself as required by section 48(6) of the Reserves Act 1977, (Act), over parts of Avon Park to enable the establishment of a Pumping Station within the park to replace the one badly damaged by the 4 September 2010 earthquake. Pumping Station PS27 was situated upon the riverbank reserve by the footbridge across the Avon River by Avon Park; refer the easement plan showing the proposed easements which is labelled Sewer Pump Station PS27 Replacement – Avonside Drive (refer **Attachment 1**).

EXECUTIVE SUMMARY

2. During the 4 September earthquake, pumping station (PS27) tilted over towards the river and 'floated' up breaking all the connections with the pipes that were connected to it. The pumping station is inoperable and is not repairable. A new pumping station is to be built to connect to the existing sewage system, which services approximately 237 houses and other buildings in the area. The sewage system within the area, while suffering significant damage, is to be repaired and reinstated to the pre-earthquake configuration, which will require a new pump station to be built in the general location of the current one.
3. The current location of PS27 is identified in the Environment Canterbury (ECAN) 2002 liquefaction damage maps as having "very high liquefaction ground damage potential". The geotechnical assessment completed post earthquake confirms the ECAN assessment with liquefaction susceptible soils extending below the ground water table at 1.5 metres depth, to between nine and 11 metres depth below the ground surface. Liquefaction modelling using the results obtained by drilling and soil testing concludes that "The return period for liquefaction occurring is likely to be in the order of 100 to 200 years giving a probability of occurrence in the next 100 years (the design life of the pumping station) of 40 to 60%" (Opus 13 October 2010). Lateral spread in this area has been estimated as 1.2 metres at the river bank reducing to around 0.3 metres, 50 metres away from the river bank. The findings by Opus Consultants are consistent with the Tonkin and Taylor Stage 1 report produced for the Earthquake Commission (EQC). Therefore to mitigate the effects of a future earthquake it is proposed to build the new pumping station away from the riverbank.
4. There is one constraining factor to where the new replacement pumping station can be built, that being that it needs to be built where it can be connected to the lowest point of the present gravity sewer system. The new pumping station must therefore be built in the vicinity of the present pumping station. The only "vacant" land available on which to build the new pumping station as far away from the river as possible, whilst still being able to connect it to the lowest point in the present gravity sewer piping system is on Avon Park.
5. It is proposed that the pumping station will be located at the western end of the sports field area midway along the western boundary of trees approximately 54 metres away from the riverbank, the present station being approximately two metres from the riverbank thereby greatly reducing it's susceptibility to future earthquake damage. The attached plan (refer **Attachment 2**) labelled Sewer Pump Station PS27 Replacement – Avonside Drive, shows the above ground elements of the pumping station. Easements will be required to cover all the services required to service the pumping station. The majority of these easements are for underground services laid from the road to and from the pumping station, these services being placed a minimum of one metre beneath the surface of the ground, to ensure they do not present an issue for the future use or development of the park. The placement of the pumping station in this position will not affect the winter or summer sport field positions on the park.

6. Public advertising of the above ground elements of the proposed pumping station (refer plan on which the proposed easements are shown, **Attachment 2**) was undertaken in the public notices column of The Press newspaper on Wednesday 10 November for one calendar month closing 5pm Monday 13 December as required by section 119 of the Reserves Act. A limited letterbox drop was also made to residents adjacent to the park, this notification being in addition to the public advertising in a newspaper circulating in the area that is required under section 48(2) of the Reserves Act. Two enquiries were received to the advertising but no formal submissions were made, the enquirers concerns being satisfied.
7. Officers are recommending that the Community Board under delegated authority from the Council approve the granting of the proposed easements unto itself.

FINANCIAL IMPLICATIONS

8. The costs of the work is being sort from Council Insurance cover.

Do the Recommendations of this Report Align with 2009-19 LTCCP budgets?

9. No, the work being required as an emergency response to damage caused by the 4 September 2010 earthquake.

LEGAL CONSIDERATIONS

10. Avon Park is a public reserve (recreation reserve) of approximately 5.6218 hectares, vested in the Council under the Reserves Act 1977 (Act). Avon Park is made up of two parcels of land. The proposed easements will be over Lot 7-21 and Lot 69 Deposit Plan 9195 which is approximately 4.8600 hectares in area, contained in certificate of title CB505/131.
11. The proposed easements will be approximately 883 square metres of which approximately 27 metres will be for the control panel, pumping station and aerial/lighting post, which are above ground structures, the rest being at or below ground. The proposed easements will cover:
 - (a) Access Road – 3.5 metres wide – 153.4 square metres
 - (b) Incoming Services (pipe work and cabling) – 8.65 metres wide – 179.5 square metres
 - (c) Pumping Station – 15 metre triangle – 97.4 square metres
 - (d) Control Panel – 7.5 metres wide - 58.8 square metres
 - (e) Rising Main - 2.16 metres wide – 394.0 square metres.
12. The Council is required to grant unto itself an easement before building infrastructure on a park held under the Reserves Act to service properties located outside the park, (section 48(6) of the Act).
13. Section 48(2) of the Reserves Act requires the Council to publicly advertise it's intention to grant an easement over a park, except where the park is vested in the Council, and is not likely to be materially altered or permanently damaged, and the rights of the public are not likely to be permanently affected, (section 48(3) of the Act).
14. Section 48(3) of the Reserves Act is not able to be satisfied in this case because of the requirement for above ground structures, and therefore the proposed easement, with respect to the above ground elements was publicly advertised in the public notices column of The Press newspaper on Wednesday 10 November 2010 for one calendar month closing 5pm Monday 13 December as required by section 119 of the Reserves Act.

15. A limited letterbox drop was also made to residents adjacent to the park, a copy of the plans on which the proposed easements in the park are shown accompanied with a letter explaining the situation was sent to the contact for the Avonside Community Group, and discussions about the proposal were held with Mainland Soccer who are the main winter users of the sports field. This consultation was undertaken in addition to that required under the Act.
16. The Community Board has delegated authority from the Council to grant easements across park and reserves pursuant to section 48 of the Reserves Act as listed in the Delegations Register dated 18 November 2010.

Have you considered the legal implications of the issue under consideration?

17. Yes, see above.

ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

18. This emergency response work is required to be undertaken to ensure that the Council complies with its community agreed activity management plans and to maintain the levels of service to the local community.

Do the recommendations of this report support a level of service or project in the 2009-19 LTCCP?

19. Yes, see above.

ALIGNMENT WITH STRATEGIES

20. The proposed emergency work is required to be undertaken to ensure that the key Council Strategies of providing a reliable and efficient waste water collection service that:
 - (a) protect public health.
 - (b) are environmentally sustainable.
 - (c) are culturally acceptable.
 - (d) meet the needs of present and future generations.
 - (e) are able to be complied with as set out in the LTCCP.

Do the recommendations align with the Council's strategies?

21. Yes, see above.

CONSULTATION FULFILMENT

22. Consultation has been undertaken in excess of the requirements of the Reserves Act, see paragraphs 14 and 15 above. Although two enquiries were received to the public advertising no submissions were received.

STAFF RECOMMENDATION

It is recommended that the Hagley/Ferrymead Community Board under delegated authority from the Council, grant the proposed easements, pursuant to section 48 of the Reserves Act 1977, over approximately 883 square metres of Lot 7-21 and Lot 69 Deposit Plan 9195 a public (recreation) reserve of approximately 4.8600 hectares vested in the Christchurch City Council, contained in certificate of title CB505/131, as shown on easement plan Sewer Pump Station PS27 Replacement – Avonside Drive, in which to build a new sewage pumping station, and place associated services to and from the station, subject to the following conditions:

- (a) The consent of the Minister of Conservation being obtained.
- (b) The easement terms being negotiated by the Corporate Support Manager or his nominee.
- (c) The easement construction area being maintained by the contractors in a safe and tidy condition at all times.
- (d) All services required to be laid under the drip line of any trees are to be laid by tunnelling under the trees or in hand dug trenches to ensure that damage does not occur to the trees rooting system.
- (e) The easements are to be surveyed “as built” and registered on the title for the park.
- (f) The contract that is drawn up to undertake the work is to include a minimum of a \$2,000 bond payable to Council before commencing work on the site.
- (g) The successful contractor is to meet the Greenspace Contract Manager, Linwood Service Centre, to sign a temporary access licence before any construction work commences on the site.
- (h) The bond, less any expenses incurred by the Council including reinstatement of the park, will be refunded to the payee upon completion of the development to a standard acceptable to the Greenspace Managers nominee, the Greenspace Contract Manager, Linwood Service Centre.

BACKGROUND (THE ISSUES)

Pumping Station and Constructional Details

24. The majority of the pumping station which consists of a 'wet well' and a separate valve chamber, will be built beneath the ground, only the tops protruding approximately 150 - 200 millimetres above the ground surface to ensure that ground water can't enter the structures. A new pole will be erected beside the wet well to act as a vent pipe for the station, and onto which an aerial for station communications, and the present winter sports field training light nestled in the trees, will be transferred. The subsequent redundant pole being removed from the park. The pole itself will be galvanised, which will weather to a grey colour during its first few years on the site. Nestled back into the edge of the trees will be a light environmentally coloured control box, (necessary to minimise heat build-up inside the cabinet), which needs to be situated above the ground away from moisture and for servicing requirements. The total area covered by the above ground components is approximately 26.75 square metres, of which only 3.3 square metres of the structures are of any appreciable height above the ground.
25. Some of the pipes and services to the pumping station are going to be laid through the established trees which are growing around the outside of the park. All services required to be laid through such plantings will be laid by tunnelling under the trees or in hand dug trenches to minimise damage to the trees rooting system.
26. The permanent driveway to the station required for year round ongoing maintenance access purposes will be built mostly on top of an existing driveway, the construction being on top of the ground, to ensure that no damage occurs to the tree roots, the adjacent land being contoured up to the driveway accordingly.