

8. PROPOSED PUMP STATION 36 RELOCATION TO BEXLEY RESERVE



General Manager responsible:	General Manager City Environment, DDI 941-8608
Officer responsible:	Asset and Network Planning Unit Manager
Author:	Terry Howes, Asset and Network Planning Manager

PURPOSE OF REPORT

1. To seek the Council's approval to set apart an area of Bexley Reserve for public utility purposes to enable the construction of a replacement wastewater pump station.

EXECUTIVE SUMMARY

2. The existing pump station 36 is located in Pages Road opposite Bexley Reserve near Portchester Street and is the most critical pumping station in the eastern area of the city. The pump station was seriously damaged by the recent earthquakes and is only just able to function. It is however in a very delicate state, and if not replaced is not expected to be able to continue operating close to full capacity. This will potentially result in a disruption to wastewater services to hundreds of households and continue to mean significant wastewater discharges to the Avon River.
3. Several options for the replacement of the damaged pump station have been considered. Locating a new station across the road within Bexley Reserve would enable the cessation of periodic spills of sewage into the Avon River and provide a better location for the pump station to be built. Impacts on the park are considered to be minor. Results of consultation on the setting apart of an area of the reserve for public utilities purposes by Council staff and on the pump station itself by Stronger Christchurch Infrastructure Recovery Team (SCIRT) will be tabled at the same meeting that this report is considered.
4. At the 30 April ordinary Board meeting of the Burwood Pegasus Community Board a deputation was heard from Mr and Mrs Ter Haar the owners of adjacent property 476 Pages Road against the proposed pump station development. At the following Board seminar the Board heard from the City Council, Fulton Hogan and SCIRT staff explaining the proposal. The Board considered all layouts and expressed a preference for a layout variation, where the pump station building would be located a further 8-10 metres back from Pages Road, and suggested it be presented to the property owner as an option. The property owner responded that this option in his opinion would not improve the impact on his property and if constructed he would like the Council to purchase his property. The Ter Haars further comments can be seen in **Attachment 4**. Consultation comments received by SCIRT are tabulated in **Attachment 3**. No comments were received in response to a public notice placed in The Press inviting comment on the proposal to set aside an area of Bexley Reserve for public utility purposes to enable the construction of the pump station.
5. Council staff believe the impact on the reserve of setting aside the area of the park indicated in paragraph six of this report, and shown in **Attachment 1** for public utility purposes, and the construction of the intended wastewater pump station, would have minimal impact on park users and the park itself.

BACKGROUND (THE ISSUES)

6. The existing Pump Station 36 wastewater pump is located at 471A Pages Road, Aranui, near the intersection of Porchester Street. The pump station is a large terminal pump station, pumping to the Christchurch Wastewater Treatment Plant at Bromley. Its catchment is the north-eastern area of Christchurch (including Belfast, Brooklands, Spencerville, Burwood, Parklands, New Brighton, Southshore, Bexley, Aranui and Wainoni).
7. Pump Station 36 suffered extensive damage in the February and June 2011 earthquakes, including significant differential settlement, resulting in it being highly susceptible to further damage from future earthquakes or aftershocks and therefore requires replacement. It is proposed to locate the replacement pump station within Bexley Reserve. See **Attachment 1** for location.

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8. Bexley Reserve (51.2 hectares) is not a reserve vested in the Council pursuant to the Reserves Act 1977, but is Council owned land vested in the Council pursuant to the Local Government Act 2002. The land is maintained as a sports park for organised soccer and includes soccer club buildings and a BMX track. Large portions of the park are currently grazed. The future use of the park is currently uncertain due to earthquake land damage to much of the area.
9. Most of Bexley Reserve was formally utilised as a landfill site. Investigations have been carried out to determine the extent of the landfill, the proposed site for the pump station building being located outside the landfill area.
10. The new Pump Station 36 will be designed to pump 940 Litres per second in the future with a new pressure main. The new station would eventually service 27,000 properties, the current station services approximately 24,000. In the short to medium term the new pump station would use the existing pressure main and be limited to the existing capacity. The proposed sewer line outside the area of the portion of the park to be set aside for the public utility would be required to be placed within an easement. Council Corporate Support staff would create the necessary easements under delegated authority from the Council to the Corporate Support Manager.
11. Four location options were considered for the PS36 replacement site:
 - (a) The existing site
 - (b) An adjacent site in private property
 - (c) Opposite the existing site, in Bexley Reserve
 - (d) Further east along Pages Road, in Bexley Reserve.
12. These site options are shown in **Attachment 2**. The advantages and disadvantages of these site options are listed in the table below. Building the new pump station further south in Bexley Reserve (away from Pages Road) would require construction within the landfill, which would require the pump station (and trunk gravity mains into it) to be deeper resulting in greater expense and access for any future repairs more time consuming.

Option	Location option	Advantages	Disadvantages
a	Existing PS36 site	<ul style="list-style-type: none"> No additional land required 	<ul style="list-style-type: none"> Not technically feasible to retain the existing pump station and build a new one on the same site. Constructing a new pump station on the same site would require the old pump station to be demolished first, resulting in overflows into the Avon River for an extended period (6 -9 months). The site is small, with insufficient room for ground improvement works. There are close residential neighbours.

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B	Adjacent site in private property	<ul style="list-style-type: none"> • Adjacent site would make the switch-over from the old to the new pump station straightforward 	<ul style="list-style-type: none"> • Land purchase required as the site is owned by Housing New Zealand. • The site is small, with insufficient room for ground improvement works. • The small site would make construction difficult, increasing the cost of the new pump station. • The small site would also increase the effects on the neighbouring properties during construction and operation. • There are close residential neighbours.
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Option	Location option	Advantages	Disadvantages
c	Opposite the existing site in Bexley Reserve	<ul style="list-style-type: none"> • Opposite site would make the switch-over from the old to the new pump station straightforward. • There is sufficient room for ground improvement works and to efficiently construct the pump station. • No land purchase required. • The proposed site is on higher ground and meets the recommended levels of "Variation 48" in the City Plan, which means that the new station would be less susceptible to the risk of flooding. • The land appears to have been less damaged by the earthquakes. 	<ul style="list-style-type: none"> • The site is zoned Open Space 2, so is for recreation purposes not utilities. • There are residential neighbours.
d	Further east along Pages Road in Bexley Reserve	<ul style="list-style-type: none"> • There is sufficient room for ground improvement works and to efficiently construct the pump station. • No land purchase would be required. • Further from residential neighbours. 	<ul style="list-style-type: none"> • The site is zoned open Space 2, so is for recreation purposes not utilities. • Closer to the active playground area. • Further east site would make switch-over from the old to the new pump station, including connection to the existing pressure mains, more complicated and expensive.

13. The pump station would include two buildings – a pump building and a generator building. The scale of these buildings is set by their functions. The buildings are shown in red on the plan included in **Attachment 1**. There would also be a number of chambers which would finish at ground level. These are shown in grey on the plan included in **Attachment 1**.
14. The largest building is the pump building. It would be approximately seven metres tall, and extend approximately eight metres below ground level being of 182 metres squared in area. The below ground structure would comprise two wet wells (tanks) containing the four submersible (underwater) wastewater pumps. The above ground structure would allow the pumps to be removed to be serviced, using a crane (gantry) within the building. The generator building would supply emergency power to the pump station during power outages and be approximately four metres high being 72 metres squared in area.
15. Stronger Christchurch Infrastructure Recovery Team (SCIRT) intend to apply for a resource consent as the park is zoned Open Space two in the City Plan and therefore any use is required

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to relate to recreation purposes. The design employed will be such that impacts on park users would be minimised and comply with City Plan standards where applicable, specifically:

- (a) Odour from the pump station would be treated using a bark biofilter, which would be an approximately 18 metres x 12 metres bed of bark, raised about one metre above the surrounding ground. The biofilter would treat odour so that there is no objectionable odour at the boundary of the pumping station site.
 - (b) The pump station will be designed to meet the City Plan noise requirements.
 - (c) The architectural design of the buildings and landscape design of the site would be carried out by City Council staff or contractors. It is intended that the buildings would be screened from the road and from the balance of Bexley Reserve by vegetation yet to be planted. SCIRT will be circulating a draft landscape plan, presently being drafted to the local community in the near future seeking feedback on the proposed plantings.
 - (d) The construction and operation of this pumping station would have no affect on the existing trees, or the layout of sports fields within the park.
16. Construction is expected to take 10 to 12 months and would commence following Council approval. Once construction is complete, temporary fencing would be removed, admitting public to the area. The adjacent bus stop would be relocated a short distance along Pages Road to remain clear of construction traffic. At this stage it is SCIRT's intention to reinstate the bus stop at its present location, however depending on the final design of the access into the site it may need to be moved 30 metres or so along Pages Road.

FINANCIAL IMPLICATIONS

17. Minor costs to survey the area to be set aside for public utilities and to register on the certificate of title would be in the order of \$5,000, and charged back to the project.

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

18. Not applicable.

LEGAL CONSIDERATIONS

19. The 3,888 square metres of park land proposed to be set aside comprises part of Pt Lot 3 DP 2787: 713 square metres (contained in Certificate of Title CB 12B/958), part of Lot 1 DP 18712: 3,010 square metres (contained in Certificate of Title CB 680/78), and all of Lot 3 DP 14003: 165 square metres (contained in Certificate of Title CB 12B/958), areas are subject to survey. These lots are vested under the Local Government Act 2002 in the Christchurch City Council and not currently held for a specific purpose.
20. Section 52 (4) of the Public Works Act 1981 permits the setting apart of Council owned land for a specific purpose. The Minister of Land Information must place a notice in the Gazette notifying the public that the Council has resolved to set aside the area of land for public utilities, following a request to do so from the Council's Chief Executive.

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

21. Yes, as above.

ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

22. Not applicable.

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

23. Yes, page 70 of 2009/19 LTCCP and 11.0.1 of Activity Management Plan, wastewater collection is provided in a safe, convenient and efficient manner.

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ALIGNMENT WITH STRATEGIES

Do the recommendations align with the Council's strategies?

24. Yes, in alignment with Waste Water Activity Management Plan.

CONSULTATION FULFILMENT

25. The Council is required to consult on the proposal to dispose of the area of park described above under section 138 of the Local Government Act 2002. The use of "dispose" here includes utilising an area of land held by the Council for a purpose other than a range of current uses including recreation.
26. Council staff have placed a public notice in the Press (Wednesday 18 April) outlining the proposal to set aside the area described above for public utility purposes. The consultation notice describes the intended pump station use of the site. In addition, SCIRT have produced a leaflet in which they describe the pump station proposal in more detail and refer to the Council public notice. The SCIRT document is to be delivered to the neighbourhood. Both consultations invite comments up until 2 May. Contact will be made with directly affected property owners and residents if no response is heard prior to this date.

STAFF RECOMMENDATION

It is recommended that:

- (a) The Council resolve to set apart 3,888 square metres of Bexley Reserve comprised of Pt Lot 3 DP 2787: 713 square metres (contained in Certificate of Title CB 12B/958), part of Lot 1 DP 18712: 3,010 square metres (contained in Certificate of Title CB 680/78), and all of Lot 3 DP 14003: 165 square metres (contained in Certificate of Title CB 12B/958) for public utility purposes under section 52 of the Public Works Act 1981. All areas being subject to survey.
- (b) The Council's Chief Executive be requested to sign a request to the Minister of Land Information to gazette that portion of Bexley Reserve described in (a) above for public utility purposes.

LEGEND:

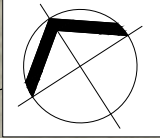
PROPOSED SEWER LINE

MH

PROPOSED / FUTURE MANHOLE

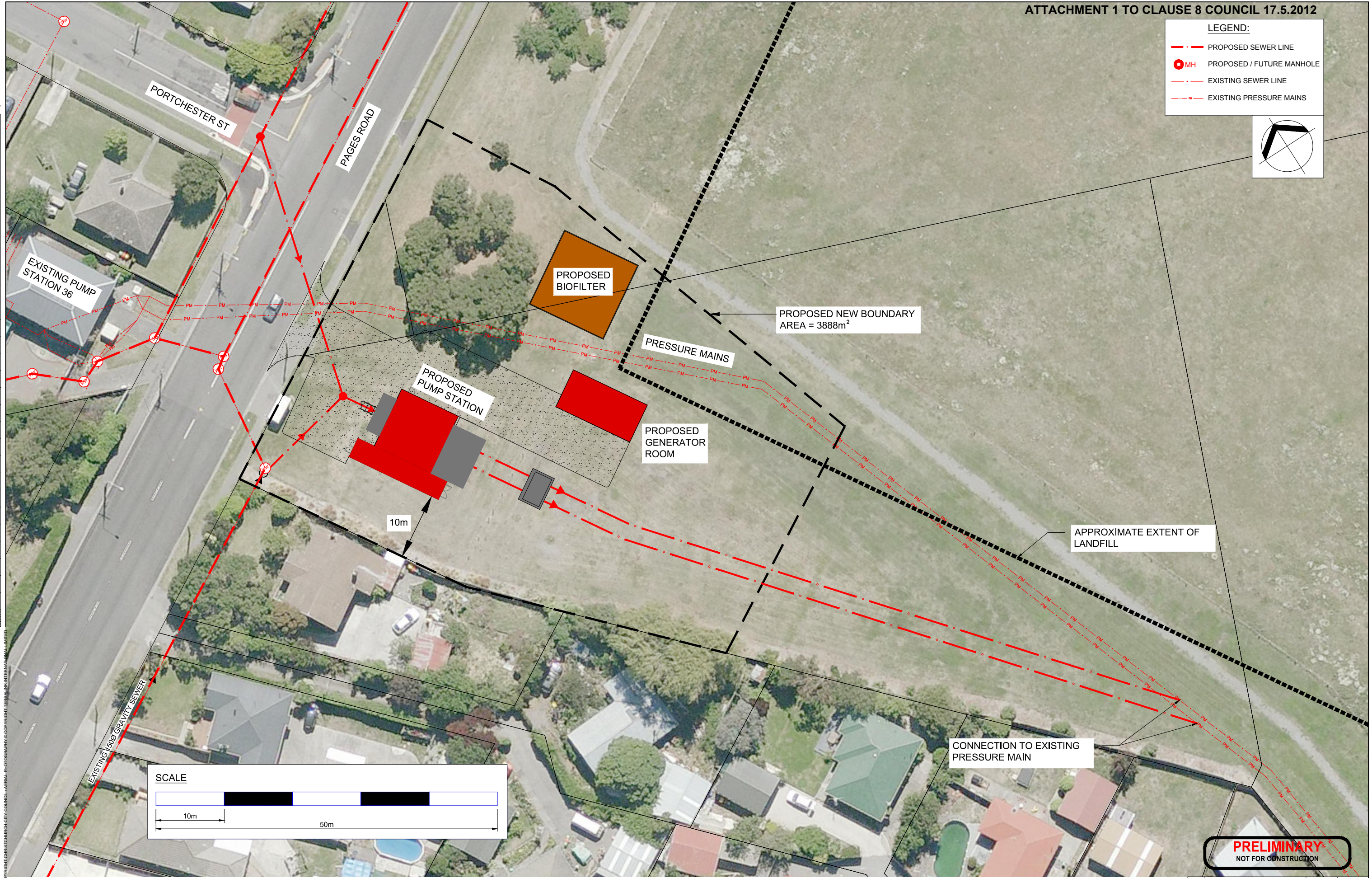
EXISTING SEWER LINE

EXISTING PRESSURE MAINS



0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300

Original size mm



PRELIMINARY
NOT FOR CONSTRUCTION



CAPITAL PROGRAMME GROUP

DATUM	C.D.D.	DESIGNED	NAME	SIGNED	DATE	APPROVED
BENCH MK.	-	DESIGNED	M.Kerr	M.Kerr	19.12.2011	FOR RECOMMENDATION
RE.	-	DES. REVIEW	D.Gardiner	D.Gardiner	19.12.2011	DATE SIGNED
SURVEY	-	DRAWN	J.Sen	J.Sen	19.12.2011	FOR CONSTRUCTION
SURVEY LB	-	DRW. CHECK	M.Kerr	M.Kerr	19.12.2011	DATE SIGNED
FILE LOCATION: J:\10694 Pump Station 36 Drawings						
DRAIN. REF.	-	10694-CO-WW-SK-0001.dwg				
SAP WBS	-	PRINTED ON 17-Apr-12 BY serj				



CONSULTANT	PROJECT TITLE
10694-CO-WW-SK-0001	INFRASTRUCTURE REBUILD CHRISTCHURCH SCIRT 10694

INFRASTRUCTURE REBUILD
CHRISTCHURCH
SCIRT 10694

PUMP STATION
SITE PLAN

SCIRT PROJECT REF. 10694	ORIGINAL SHEET SIZE A1	SCALES 1:500
CPG CAD DRAWING FILE REF. .DWG		
CPG PROJECT FILE NUMBER --	DRAWING No. SK0001	



No.	Name	Address	Suburb	City	Postcode	Telephone	Email Address	Comments on the Proposal	Supported			Consultation Leader Comments
									Yes	No	Not Indicated	
1	P & E Floris	458 Pages Road	Aranui	Christchurch	8061	388 1006		Fine by us. Go for it. (Note: all comments and spelling are recorded exactly as received)	Yes			Reply letter sent 23rd April
2	Don Parish	70 Rowan Avenue	Aranui	Christchurch	8061		don33@slingshot.co.nz	Location looks fine and would not cause any problem to the park users. Go for it, it's needed anyway.	Yes			Reply letter sent 23rd April
3	B & C McDonnell	Flat B/ 1 Farnborough Street	Aranui	Christchurch	8061	981 6651	mcds@clear.net.nz	We have no objections to this project. Please could you paint it with anti graffitti paint so graffitti can be just hosed off - you know what it's like around this area.	Yes			Reply letter sent 24th April
4	J Evans	11 Esk Place	Bexley	Christchurch	8061	983 3503		I would like to know if we who are situated quiet close to new sewage line will have to put up with a lot of noise and smell whilst this work is proceeding, will it affect the area i-e smell and noise to those of us living along the boundary of the sewerage pipe. All so will it affect our health and value of properties. Also how long will the project take?			?	Reply letter sent 27th April which includes answers to questions raised. No change to smell during work as existing pump still manages waste until new one is completed. Health not effected as waste material managed to industry standards. Only background noise as this house is 3 sections back from Bexley Park and 4 sections back from Pages Road. Project is aproximately 12 months duration.
5	Pat & Ben Ter Haar	476 Pages Road	Bexley	Christchurch	8061	021 122 3622		Standard of living effected living next to pump station. Smell, noise and sunshine outlook. Devaluation of property. Stability of dwelling. Lack of good sleep with noise next door. After earthquake stress now more stress and anxiety from proposal. We strongly oppose current proposal. Not on Reserve Land.		No		Murray Kerr, Sandra Wilson and myself met Patricia and Benie on site 20th April to discuss their concerns.
6	B Palmer	59 Rowan Avenue			8061	980 5654		No Comments. Go Ahead	Yes			LATE RESPONSE RECEIVED 01/05/12 after Community Board Meeting took place.
7								To Who it may concern. It would be nice to see some of the men <u>working</u> for a change. <u>Most</u> times I drive down Pages Rd, (sometimes 3-4 times a day) they are <u>all standing</u> in groups talking, smoking, or sitting in vehicles - own cars even!! They all should feel guilty when they collect their wages. Maybe I should take some photos!! Would that get them moving? and I don't go past at lunch time. Come on guys. A fair days <u>work</u> for your pay. Conclusion <u>motto</u> Licence to stand around and wear an orange jacket!				LATE RESPONSE RECEIVED 02/05/12 after Community Board Meeting took place.
8	From a very Concerned Rate Payer											
9												
10												

Relocation Pages Road Pump Station 36

I refer to your notification to resident.

As you are aware I am the owner of 476 Pages road which will be significantly impacted should this proposal proceed.

I consider the relocation will have more than a minor affect on our property, and an adverse impact upon value and saleability.

Some reasons are

1. No building on reserve land
2. Noise of the pumping at night
3. Smell of the odour pits
4. Park view out of our kitchen windows
5. No more sunlight
6. What's happening with our building, when dewatering trail starts
7. We have enough stress, we don't want anymore

Yours
B+P TerHaar
479 Pages Road
Bealey
Christchurch

Relocation Pages Road Pump Station 36

I refer to your notification to resident.

As you are aware I am the owner of 476 Pages road which will be significantly impacted should this proposal proceed.

I consider the relocation will have more than a minor affect on our property, and an adverse impact upon our property value and saleability.

Your previous advices made no mention of the proposed bio filter pond and this causes us considerable worry together with the noise of the pump station. I am a bus driver working shifts and require regular sleep and peaceful relaxation. We are already under significant earthquake stress and this proposal adds to our anxiety.

I see two alternatives:

1. Relocation site to be immediately opposite Portchester Street and shielded by existing trees.
2. The Council purchases our house

We would be happy to support the proposal under either scenario. We oppose the current proposal.

B + P Ter Haar
476 Pages Road
Bexley
Christchurch 8061

To Whom it May Concern

We bought our house for living in an investment for the future for our children

One son apprentice's builder, the other an apprentices drain layer they want to put four over 60 house on the land, over looking a reserve not a pump house that is noisy and smell

When the house is finish, we can live in it and have to put up with the smell and noise

The pump house has devalued our house

You give a grant to the angling church of \$240000 dollars a year and I do not attend the church

The city council has undervalue there excess in chch and want the rates payers to pay the rest. With all the excess I doubt if I would use them all, but I still will have to pay for them

My mother is going to be 87 this year her house is also in blue green t3 and the stress of her living in here house is not doing her heal any good, we are living with her in a two bed room townhouse which is not very big, my elders son sleeps in the sunroom which is made of primarily of window and get very cold in the winter my husband sleeps in one of the bed room that has most of our valuables' all sound the bed so no room for me, I sleep with my mother and have done for 14 months.

We put up with a lot and you are trying to put more stress on us give us a break

We have been burgled and \$4000 thousand dollars of tool where stolen after push and shuf we were paid only \$1800 hundred dollars and the lawnmower, out of pocket again, also my motorbike was damage they broke the lock bike and the front panel I have to pay the first \$750 dollars before the insurance company start to pay out of pocket again what more do we have to take

Buy the property then you can do what you want, it help us a bit, but well have to get a mortgage again as we are in our 60s we are mortgage free and not living in our house

Yours truly, Pat TerHaar