



New Zealand Government

**INFRASTRUCTURE REBUILD PROGRESS REPORT  
DECEMBER 2012**

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## **1. INTRODUCTION**

The purpose of this report is to provide Council, CERA and NZTA an update on the horizontal infrastructure rebuild. For this month, and going forward, progress on all horizontal infrastructure rebuild work is reported. This includes the work activity being delivered by SCIRT (section 4.1) and work being delivered under business as usual (BAU) mechanisms (section 4.2).

## 2. ACTIVITIES FOR THE MONTH

November has seen another productive month in the field for SCIRT, with a continued increase in delivery of work in construction. Now that SCIRT has ramped up delivery the focus over the next few months is to demonstrate that we are successfully achieving good value for money through the rebuild. A number of reporting metrics are being established to help with visibility in this area which are anticipated to be in use in the first quarter of next calendar year.

The SCIRT training and recruitment programme has been in full swing in November with the “Train, Work, Earn, For Real” bus travelling around the South Island. To date over 1350 people have registered expressions of interest and over 330 of those have been identified for interview to go into training and/or employment. The challenge will be to translate those suitable candidates into employment opportunities.

SCIRT are currently undertaking their quarterly prioritisation of the five year work programme by adding in further information from the ongoing asset investigation work. It is anticipated that an updated rebuild schedule will be available early in the new year. The rebuild team will be scheduling further Community Board visits once the updated schedule is available.

Work is ongoing with regard to the updated Infrastructure Rebuild Estimate, including investigating opportunities for reducing costs where appropriate. This updated estimate will be used to inform the LTP and the Programme Business Case required by Treasury to secure funding for the Rebuild Programme going ahead.

Overall it has been a challenging but productive year for the Infrastructure Rebuild Programme with numerous successes that can be attributed to the hard work of all those involved.

**3. FINANCIALS**

**3.1 2012/13 Annual Plan – Actual year to date cost against budget**

Below is a summary of the financials for the horizontal infrastructure rebuild. These have been separated into rebuild activities being carried out by SCIRT (including NZTA State Highway rebuild work) and Council infrastructure rebuild activities being undertaken through Council business as usual mechanisms.

This report includes a breakdown for the current financial year to date as per the agreed SCIRT annual target budget and the Council Annual Plan in section 3.1 and actual life to date costs against the overall infrastructure rebuild estimate (plus additional projects) in section 3.2. For the purpose of this report all indirect costs have been allocated based on portion of the programme estimate per activity.

The table below summarises the year to date and life to date of the horizontal infrastructure rebuild activities performed by SCIRT, rebuild activities performed by others and other CCC renewal projects performed by SCIRT.

This month rebuild activities performed by others includes \$2.4m for repair works to park assets paid for by Christchurch Earthquake Appeal Trust. Also this month saw Pressure Main 11 and Keyes Pumping Station project costs move from “Other activities performed by SCIRT” to “Rebuild activities performed by SCIRT” to correctly reflect the nature of the repair.

**Table 3.1 Summary Cost Table.**

<b>FINANCE AS AT 30 NOVEMBER 2012</b>					
<b>Activity</b>	<b>Year to date 2012/2013</b>			<b>Life to date</b>	
	<b>Budget</b>	<b>Actual</b>		<b>Estimate</b>	<b>Actual</b>
Rebuild activities performed by SCIRT	\$ 440,000,000	\$ 186,922,781	\$	1,751,095,238	459,005,670
Rebuild activities performed by others	\$ 103,486,521	\$ 14,747,048	\$	305,546,857	76,087,003
Other activities performed by SCIRT	\$ 29,699,092	\$ 9,999,786	\$	29,699,092	8,805,608
<b>GRAND TOTAL</b>	<b>\$ 573,185,613</b>	<b>\$ 211,669,615</b>	<b>\$</b>	<b>2,086,341,187</b>	<b>\$ 543,898,282</b>

**3.1.2 SCIRT actual year to date costs**

The approved annual target budget for SCIRT is \$440m. This includes NZTA State Highway rebuild activities of \$10.9m. Table 3.2 below presents the actual costs for each activity for the year to date reported against the agreed annual target budget for SCIRT. As mentioned above, this month saw Pressure Main 11 and Keyes Pumping Station projects moved into the Rebuild works performed by SCIRT. All costs are up to the end of November 2012.

**Table 3.2 Actual costs for year to date of rebuild works by SCIRT**

FINANCE AS AT 30 NOVEMBER 2012						
SCIRT						
Activity	Description	2012/13 SCIRT Target Budget	Actual Cost YTD	Forecast Total Spend This Year	Year End Variance	
Road Network	Roading	\$ 105,410,459	\$ 53,018,366	\$ 119,661,933	-\$	14,251,474
Wastewater Collection		\$ 272,979,267	\$ 114,687,659	\$ 266,012,598	\$	6,966,670
Water Supply	Water Supply	\$ 26,872,162	\$ 14,547,347	\$ 26,325,687	\$	546,475
Waterways & Land Drainage	Stormwater	\$ 23,824,220	\$ 3,524,744	\$ 23,378,282	\$	445,938
NZTA Highways		\$ 10,913,892	\$ 1,144,664	\$ 11,121,502	-\$	207,610
<b>TOTAL SCIRT INFRASTRUCTURE REBUILD PROGRAMME</b>		<b>\$ 440,000,000</b>	<b>\$ 186,922,781</b>	<b>\$ 446,500,001</b>	<b>-\$</b>	<b>6,500,001</b>

### 3.1.3 Non-SCIRT actual year to date costs

The balance of the annual plan budget for the infrastructure rebuild (\$103.5m) is being delivered by Council business as usual mechanisms. Table 3.3 below presents the actual costs for the year to date of the infrastructure rebuild performed by Council for each activity against the 2012/13 Annual Plan budget. These costs are up to the end of November 2012.

Parks and Open Spaces includes the \$2.4m repairs paid for by Christchurch Earthquake Appeal Trust.

**Table 3.3 Actual costs for year to date of non-SCIRT rebuild works**

FINANCE AS AT 30 NOVEMBER 2012					
Non SCIRT					
Activity	Description	Approved Budget	Actual Cost YTD	Year End Forecast	Year End Variance
Road Network	Roading	\$ 31,367,190	\$ 50,820	\$ 8,187,821	23,179,369
Wastewater Collection		-\$ 42,779,266	-\$ 12,456	-\$ 12,456	- 42,766,810
Parks & Open Spaces	Greenspace	\$ 13,554,101	\$ 3,324,883	\$ 9,754,101	3,800,000
Refuse Minimisation & Disposal	Solid Waste	\$ 5,105,263	\$ 2,112,247	\$ 5,105,263	- 0
Wastewater Treatment & Disposal	WW Treatment Plant	\$ 29,020,147	\$ 6,094,384	\$ 29,020,146	1
Water Supply	Water Supply	\$ 62,553,010	\$ 1,508,080	\$ 34,265,041	28,287,969
Waterways & Land Drainage	Stormwater	\$ 4,666,077	\$ 1,669,090	\$ 6,755,465	- 2,089,388
<b>TOTAL NON-SCIRT INFRASTRUCTURE REBUILD PROGRAMME</b>		<b>\$ 103,486,521</b>	<b>\$ 14,747,048</b>	<b>\$ 93,075,382</b>	<b>\$ 10,411,140</b>



**3.2 Overall Infrastructure Rebuild estimate - actual life to date costs against current infrastructure rebuild estimate.**

The current estimate for the overall rebuild of the City's horizontal infrastructure is \$2.015 billion (including contingency and excluding escalation), plus \$16.4m project budget not included in the horizontal infrastructure cost estimate. In addition to the above there is an estimate of \$25m for NZTA State Highways rebuild. For the purpose of this monthly progress report the current overall estimate reported against is therefore \$2.057 billion.

The revised programme estimate is anticipated to be completed by the end of calendar year 2012 to help inform the long term planning process.

**3.2.1 SCIRT actual life to date against estimate**

Table 3.4 includes the overall life to date costs against the current estimate for the SCIRT performed rebuild of the City's infrastructure. SCIRT is performing \$1.7b of Council infrastructure rebuild, plus \$25m NZTA Highways rebuild.

**Table 3.4 SCIRT Actual life to date costs against estimate**

SCIRT									
Activity	Description	Current Estimate of					Forecast Total		
		Cost	Actual Cost 2010/11	Actual Cost 2011/12	Actual Cost 2012/13	Total Actual Cost	Spend	Programme Variance	
Road Network	Roading	\$ 814,857,143	\$ 11,812,105	\$ 72,567,577	\$ 53,018,366	\$ 137,398,049	\$ 814,857,143	\$	-
Wastewater Collection		\$ 714,095,238	\$ 10,376,296	\$ 130,232,206	\$ 114,687,659	\$ 255,296,161	\$ 714,095,238	\$	-
Water Supply	Water Supply	\$ 128,142,857	\$ 1,857,860	\$ 35,483,416	\$ 14,547,347	\$ 51,888,623	\$ 128,142,857	\$	-
Waterways & Land Drainage	Stormwater	\$ 69,000,000	\$ 999,542	\$ 6,558,723	\$ 3,524,744	\$ 11,083,009	\$ 69,000,000	\$	-
NZTA Highways Rebuild		\$ 25,000,000		\$ 2,195,164	\$ 1,144,664	\$ 3,339,829	\$ 25,000,000		
<b>TOTAL</b>		<b>\$ 1,751,095,238</b>	<b>\$ 25,045,803</b>	<b>\$ 247,037,086</b>	<b>\$ 186,922,781</b>	<b>\$ 459,005,670</b>	<b>\$ 1,751,095,238</b>	<b>\$</b>	<b>-</b>

**3.2.2 Non-SCIRT actual life to date against estimate**

Table 3.5 includes the overall life to date costs against the current estimate for infrastructure rebuild activities being delivered by Council business as usual mechanisms. This table also includes \$16.4m budget from Earthquake Building/Infrastructure Shortfall Allowance for the Waste Water Treatment Plant.

**Table 3.5 Non-SCIRT actual life to date costs against estimate**

NON-SCIRT									
Activity	Description	Current Estimate of					Forecast Total		
		Cost	Actual Cost 2010/11	Actual Cost 2011/12	Actual Cost 2012/13	Total Actual Cost	Spend	Programme Variance	
Road Network	Roading	\$ 77,761,905	\$ 848,201	\$ 692,114	\$ 50,820	\$ 1,591,135	\$ 77,761,905	\$ -	-
Wastewater Collection		\$ -	\$ 1,634,066	\$ 13,757,590	\$ 12,456	\$ 15,379,201	\$ -	\$ -	-
Parks & Open Spaces	Greenspace	\$ 56,952,381	\$ 611,310	\$ 1,835,060	\$ 3,324,883	\$ 5,771,252	\$ 56,952,381	\$ -	-
Refuse Minimisation & Disposal	Solid Waste	\$ 8,761,905	\$ 2,076,017	\$ 3,091,587	\$ 2,112,247	\$ 7,279,851	\$ 8,761,905	\$ -	-
Wastewater Treatment & Disposal	WW Treatment Plant	\$ 96,356,381	\$ 4,488,038	\$ 13,249,043	\$ 6,094,384	\$ 23,831,465	\$ 96,356,381	\$ -	-
Water Supply	Water Supply	\$ 24,095,238	\$ 4,266,124	\$ 830,545	\$ 1,508,080	\$ 6,604,749	\$ 24,095,238	\$ -	-
Waterways & Land Drainage	Stormwater	\$ 41,619,048	\$ -	\$ 13,960,259	\$ 1,669,090	\$ 15,629,349	\$ 41,619,048	\$ -	-
<b>TOTAL</b>		<b>\$ 305,546,857</b>	<b>\$ 13,923,757</b>	<b>\$ 47,416,198</b>	<b>\$ 14,747,048</b>	<b>\$ 76,087,003</b>	<b>\$ 305,546,857</b>	<b>\$ -</b>	<b>-</b>

## **4. COMMUNICATIONS**

### **4.1 Strategic Communications**

Positive media coverage and community feedback on the rebuild continued during November. Promotion of key progress milestones was placed in existing Council and CERA publications. The Communications Working Group is considering issues for wider messaging in the coming month and awaiting final approval of spending for proposed media campaign, which would begin in the new year.

### **4.2 Operational Communications (SCIRT)**

#### **4.2.1 Key Outcomes**

SCIRT held a community day to explain planned work on the Avondale Bridge to residents and this was well-received. The infrastructure rebuild presence at the A&P Show in November helped hundreds of visitors learn more about the work underway and was also well-received.

During November SCIRT delivered 106 start work notices to more than 30,000 properties. SCIRT communications staff carried out 743 direct interactions with residents through door knocking, responded to 357 hotline calls and 346 resident emails. The web was updated 97 times, four e-newsletters were sent and 82 tweets were made.

#### **4.2.2 Upcoming Priorities**

Communication of retaining wall ownership to affected residents is a key focus for SCIRT and the Council over the coming months as ownership is determined.

### **4.3 Summary of Media Coverage**

Media coverage was once again positive for the month of November. More than 50 items were aired on local and national media. The launch of the For Real recruitment campaign received significant attention.

## **5. ENVIRONMENT**

### **5.1 Key Outcomes**

- Environmental initiatives are increasing, will 11 initiatives identified and shared between teams this month.
- A global contaminated land consent has been granted for the programme.
- ECan confirmed a non-enforcement decision for the Beachville sea wall reconstruction, i.e. no resource consent requirement. This is another example of ECan's continued pragmatic approach to SCIRT's programme of work.
- High profile consent applications have been lodged for:
  - Main Road (to Sumner) causeway sea wall; and
  - Triumphal Arch on the Bridge of Remembrance

### **5.2 Upcoming Priorities**

- The development of a SCIRT environmental training programme in conjunction with Environment Canterbury.
- Develop an information sharing platform to assist with viewing of consent compliance information between Delivery Teams, the IST and regulators.

### **5.3 Environmental Statistics**

<b>Description</b>	<b>October 2012</b>	<b>November 2012</b>	<b>October Life To Date</b>	<b>November Life To Date</b>
Environmental Hazards	96	98	775	873
Environmental Opportunities	127	188	299	487
Environmental Team Initiatives	6	9	59	68
Community Organised Events	3	3	21	24
Number of Environmental Incidents	24	53	244	297
Infringement Notices	0	0	0	0
Abatement Notices	0	0	0	0
% of waste reduced, re-used, recycled	24	25	91	116

*Data from SCIRT Operational Report – December 2012*

**6. PROGRAMME**

**6.1 SCIRT Work Activity**

6.1.1 Achievement Report

The progress report for this month includes an achievement report which outlines progress made by the construction projects against key metrics for each asset type.

<b>Asset Type</b>	<b>Asset Sub-Type</b>	<b>Unit</b>	<b>October</b>	<b>November</b>	<b>Life To Date</b>
<b>Storm Water Reticulation</b>	Drainage	m	764	969	5,833
<b>Storm Water Pump Stations</b>	Pump Station	%	0	50	50
<b>Transport - Roothing</b>	Bridge Repairs	%	56	5	76
	Kerb & Channel	m	1,631	1,612	9,617
	Pavement	m <sup>2</sup>	13,939	15,190	126,348
	Footpath	m <sup>2</sup>	2,221	1,304	11,670
	Retaining Walls	m <sup>2</sup>	152	296	1,028
<b>Waste Water Reticulation</b>	Reticulation	m	13,430	13,761	90,864
<b>Waste Water Pump Stations</b>	Pump Station	%	311	361	1863
<b>Water Supply Pump &amp; Reservoir</b>	Pump Station	%	94	48	596
	Reservoir	%	0	0	283
<b>Water Supply Reticulation</b>	Reticulation	m	657	162	19,482
	House connections	#	0	8	167

**6.1.2 Number of Ongoing SCIRT Projects**

The following table is a summary of the programme pipeline as at November 31<sup>st</sup> 2012. It shows how many projects and the total value at each stage of the project lifecycle.

<b>Project Lifecycle Stage</b>	<b>October Estimate</b>	<b>November Estimate</b>	<b>October Estimated Construction Cost</b>	<b>November Estimated Construction Cost</b>
<b>Investigation (Asset Assessment)</b>	31	11	\$43.5m	\$1.1m
<b>Concept Design</b>	115	126	\$636.1m	\$700.8
<b>Detailed Design</b>	63	104	\$430.4m	\$577.2
<b>Construction</b>	131	95	\$401.4m	\$265.5
<b>Handover</b>	223	231	\$91.2m	\$102.6
<b>Grand Total</b>	<b>563</b>	<b>567</b>	<b>\$1,602.6M</b>	<b>\$1,647.2</b>

In the table above, the previous monthly report totals have also been included to show the change in activity.

### **6.1.3 Ongoing Projects by Ward**

#### **6.1.3.1 Introduction**

The progress report this month includes a summary of all SCIRT projects that are currently either in detailed design or construction separated on a Ward basis. A separate table has been included specifically for projects either in detailed design or construction within the central city (within the four avenues). This has been created to assist in the coordination with the Central City Recovery Plan and vertical infrastructure rebuild going forward.

For projects in construction – estimated construction cost (Target Outturn Cost) has been included together with actual Life to Date Costs as at the end of November 2012.

6.1.3.2 Burwood / Pegasus

DETAILED DESIGN		
Reference	Project	Project Description
10415	PS 128 (formerly PS 63)	New replacement PS63 at Beach Road. This project is linked to 10926 for the approximately 4km long 700mm pressure main.
10620	Pages Rd Bridge	Repair to Pages Rd Bridge, including road network connecting to roundabout on North end of bridge.
10796	NZTA Anzac Bridge Repairs	Ground improvements, removal of landward bridge spans, demolish and rebuild abutments, repair piers, approaches and underpasses.
10809	PS28 Catchment RD SW and WS Repairs	Design for repair (some full reconstruction) of minor to severe earthquake damage to carriageways, kerbs and channels, and footpaths with some associated stormwater and water supply works in streets situated in the area from Woodham Rd/Pages Rd north to Wainoni Rd/Breezes Rd. This work will follow construction of wastewater repairs/replacement.
10840	PS37 Catchment RD SW WS	Linked to Project 10318 WW for the RD WS and SW elements.
10900	New Brighton NE6&NE7 Catchment Rebuild (WW)	Full, one pass rebuild of the New Brighton Catchment Area (Waste Water Element).
10932	PM136 New Pressure Main for PS36 (WW)	Construction of an additional Pressure Main from Pump Station 36 to provide resilience in the system. The existing asset will remain as PM 36 and the new pressure main will be known as PM 136.
10959	Aranui Catchment NE4 Vacuum Pump Station, Pages Road (WW)	Construction of a vacuum pump station to service the Aranui catchment including an above ground, architecturally designed pump station building, biological filter bed, shared generator building with PS36 and an access road. This pump station is located at the same site as PS36 and has some shared facilities.
10960	Aranui Catchment NE4 Vacuum Arm 1: Rowses Road Subcatchment (WW)	Construction of vacuum sewerage pipes, pits, and laterals (in road reserve only) and connecting up to the new vacuum pump station in Bexley Reserve.
10961	Aranui Catchment NE4 Vacuum Arm 2: Pages Rd West Subcatchment (WW)	Construction of vacuum sewerage pipes, pits, and laterals (in road reserve only) and connecting up to the new vacuum pump station in Bexley Reserve.



DETAILED DESIGN		
Reference	Project	Project Description
10962	Aranui Catchment NE4 Vacuum Arm 3: Shortland Street Subcatchment (WW)	Construction of vacuum sewerage pipes, pits, and laterals (in road reserve only) and connecting up to the new vacuum pump station in Bexley Reserve.
10963	Aranui Catchment NE4 Vacuum Arm 4: Marlow Road Subcatchment (WW)	Construction of vacuum sewerage pipes, pits, and laterals (in road reserve only) and connecting up to the new vacuum pump station in Bexley Reserve.
10964	Aranui Catchment NE4 Vacuum Arm 5: Portchester Street Subcatchment (WW)	Construction of vacuum sewerage pipes, pits, and laterals (in road reserve only) and connecting up to the new vacuum pump station in Bexley Reserve.
10975	NE12 - North New Brighton Wastewater Catchment Repairs (WW)	Repair of the Wastewater network within the North New Brighton area.
10976	NE13 - Beach Road & Bower Ave Wastewater Catchment Repairs (WW)	Wastewater replacement in the Beach and Bower Ave Catchment within Parklands East.
10977	NE13 - Parklands East Wastewater Catchment Repairs (WW)	Replacement of the Wastewater system in the Parklands East area.
10978	NE13 - Parklands West Wastewater Catchment Repairs (WW)	Wastewater repairs to the Parklands West catchment area.
11020	Keyes Road Catchment - New Brighton and Frosts Road - Roding Stormwater and Water Supply (WS,SW,RD)	Repair of Earthwork damage to Stormwater, Roding and Water Supply for the Areas including Frosts Road, Travis Drive, Bower Avenue, Palmers Road and Baker Street. Stormwater issues may be affected by the adjacent New Brighton Road Project.
11035	North New Brighton and North Shore (RD, WS,SW)	Repairs to roading, stormwater and water supply assets.
11045	South New Brighton - Gravity Repairs (WW)	South New Brighton gravity repairs. This has been split out of the original projects 10861 and 10318 scopes.
11040	PS 56 - Burwood North Wastewater (WW)	Wastewater Repair/Renewal within the Burwood North Area.
11041	Burwood East Wastewater (WW)	Replacement of the Wastewater System in the Burwood East Area.
11042	Burwood West Wastewater & Trunk Sewers (WW)	Replacement of Wastewater system within the Burwood West Area.

DETAILED DESIGN		
Reference	Project	Project Description
11043	Burwood Pressure Main 54 (WW)	Replacement of Pressure Main 54 within the Burwood Area.
11032	Parklands East (RD, SW, WS)	Repairs to roading, stormwater and water supply assets.
11033	Parklands West (RD, SW, WS)	Repairs to roading, stormwater and water supply assets.
11034	Parklands South (RD, WS, SW)	Repairs to roading, stormwater and water supply assets.

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
10314	Keyes Road Catchment (WW, WS)	Repair and/or reinstatement of wastewater system.	05/03/12	14/01/13	\$5,465,563	\$8,036,933
10318	PS37 North Catchment (WW)	Wastewater repairs and renewal for northern half of PS37 catchment. Includes one new pump station and approximately 100 pressure sewer pumps.	27/04/12	02/05/13	\$4,361,942	\$4,150,382
10363	PS 108 Catchment (old PS39 Catchment)	A large waste water catchment of approx 12 streets which all drain to Pump Station 54 in Avondale.	11/11/11	09/11/12	\$5,306,865	\$5,175,942
10416	PS37 (PS)	Repairs to existing PS37, including new pump intakes and repairs to yards.	24/01/13	05/06/13	\$247,891	\$716,412
10429	Estuary Rd Carriageway, PS37 to Bridge Street Catchment (WS,SW,RD)	Repairs to roads, stormwater and water in Estuary Road between Bridge Street and Beatty Street.	28/09/12	28/02/13	\$1,351,722	\$881,694
10430	PS28 - Catchment	PS 28 catchment services residential and industrial land loosely bounded by Pages Rd, Cuffs Rd, Wainoni Rd and Shortland St in the suburb of Wainoni. Other pockets of land are also serviced including 650 m of Wainoni Rd north of Shortland St and 240 m of Breezes Rd, an area west of Wainoni Rd including a	24/07/12	18/12/13	\$15,841,952	\$2,148,347

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
		portion of Avonside Dr, Newport St, Tenby Pl and Emlyn Pl, 350 m of Wainoni Rd south of Cuffs Rd and an area south of Pages Rd including Price Pl, 180 m of Kearneys Rd and Mecca Pl. The seismic events caused liquefaction and land settlement throughout the catchment. The pump station is still operational and in a serviceable state. The majority of the network suffered either loss of grade, cracks and breakages or a combination of the two. Therefore a significant proportion, if not all, of the network will need to be replaced.				
10557	Gayhurst Road Rooding (RD)	Design for road reconstruction to repair moderate to severe earthquake damage to carriageway, kerb and channel, and footpaths from Dallington Bridge northwards to Mundys Road. This project will become part of PS108 Catchment Phase 1 Rooding, Storm Water and Water Supply. This work follows wastewater repairs/replacement.	16/07/12	07/02/13	\$2,869,439	\$1,473,358
10705	Owles Tce (WW)	Project released from hold March 2012.	06/11/12	19/06/13	\$7,359,572	\$976,593
10765	PS 108 New Pump Station	Minor new pump station.	15/10/12	25/02/13	\$1,056,159	\$456,848
10769	Keyes Pumping Station (WS)	CCC capital works programme rebuilding project for the Keyes Water Pumping Station. Initial design was carried out by CPG, and URS are also involved with the geotechnical investigation and report.	25/06/12	23/11/12	\$2,915,195	\$2,845,815
10786	PS 108 Catchment Stormwater, Water Supply and Rooding Renewals (SW,WS,RD)	Design for repair (some full reconstruction) of minor to severe earthquake damage to carriageways, kerbs and channels, and footpaths with associated storm water and water supply works in 11 streets situated immediately to the east and west of Gayhurst Rd from	03/10/12	22/04/13	\$1,915,623	\$657,922

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
		McBratneys Rd northwards to Mundys Rd. This work will follow construction of wastewater repairs/replacement.				
10800	PS 108 Phase 2 Waste Water	Detailed Design of remediation works for wastewater catchment 108.	14/08/12	24/04/13	\$4,541,913	\$2,580,818
10801	PS108 Phase 2 Rooding and Storm Water Renewals (RD,SW,WS)	Design for repair (some full reconstruction) of minor to severe earthquake damage to carriageways, kerbs and channels, and footpaths with associated storm water and water supply works in 10 streets situated immediately to the east and west of Gayhurst Rd - generally south of Strathfield Ave in the west and McBratneys Rd in the east. This work will follow construction of wastewater repairs/replacement.	15/02/13	06/06/13	\$2,693,015	\$348,377
10802	PS54 Stage 1 - Northern Rooding Renewals incl Breezes Road	Road design for 8 roads in Avondale. New pipe sytems are needed in multiple roads requiring asset managers understanding and buy-in. Includes stormwater full dynamic modelling with probable need to restore capacity by optioneering new components (new basin and/or pump upgrading).	10/09/12	03/10/13	\$3,782,598	\$1,122,396
10803	PS54 Stage 1 Southern Rooding Renewals (South of Breezes Road)	Road design for Pembroke St and Horton Place in Avondale. A new pipe sytem is needed on Horton St requiring asset managers understanding and buy-in.	02/07/12	15/03/13	\$900,394	\$1,038,395
10846	Water Main Replacement Projects Vivian St, Admirals Way, Pine Ave (WS)	Water Main replacement projects for: Vivian St, Admirals Way, Pine Ave. Other streets have been moved to other projects: Port Hills Rd and Flavell St to 10681. Keyes Road to 10314. All others removed.	25/05/12	26/11/12	\$883,245	\$845,303
10896	Minor Works - Demolition of Porrit Park and Snells	Demolition and make safe work for Porrit Park Footbridge, Snells Footbridge, PS26 and PS27. Rebuild of the bridges to be undertaken in separate	23/10/12	27/11/12	\$223,083	\$83,028

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
	Footbridges, PS26 and PS27 Pump Stations	standard projects.				
10898	Minor Works - Medway Footbridge Removal	Removal and make safe of the footbridge. Store off site until a decision is made regarding the structure.	01/11/12	14/11/12	\$82,348	\$14,027

6.1.3.3 Fendalton / Waimairi

**DETAILED DESIGN**

Reference	Project	Project Description
10994	North West Trunk Sewers (WW)	Rehabilitation of North West Trunk Sewers.

**CONSTRUCTION**

Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
10425	Glandovey/Bryndwr Cluster	Design for repair to severe earthquake damage to wastewater and minor damage to carriageways, kerbs and channels, and footpaths (severity yet to be confirmed) storm water and water supply. This cluster incorporates the 9 streets immediately adjacent to and including Glandovey Road between the Wairarapa Stream and Strowan Road.	12/11/12	19/06/13	\$2,855,572	\$405,840
10485	Merivale WW	Approximately 9km of WW gravity system, one new pump station.	14/05/12	26/04/13	\$14,270,192	\$7,815,260
10575	Papanui Rd - Knowles to May (WW)	The area has been broken into wastewater sub-catchments in order to determine the best catchment wide solution. 10575 therefore includes Browns Rd north of Mansfield Ave, McDougal Ave east of Murray Pl, Murray Pl, Innes Rd between Papanui Rd and Browns Rd, Heaton St east of Circuit St, Papanui Rd between Innes Rd and Mays Rd, approximately 230 m of the eastern end of Knowles St, Weston Rd and Chapter St, Approximately 280 m of the western end of Normans Rd and 150 m of the eastern end of Mays Rd. The seismic events caused some liquefaction and land settlement in parts of the sub- catchment. Much of the network is made up of Earthenware pipe laid during the 1920s and 1930s. Much of the network suffered either loss of grade, cracks and breakages or a combination of the two. Therefore a significant	17/05/12	05/06/13	\$4,795,898	\$3,875,629

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
		proportion, if not all, of the network will need to be repaired or replaced.				
10595	Wairakei Road (WW)	Replacement of the deep 225 mm sewer main and the construction of new 150 mm sewer rider mains over the deep main. The wastewater works are from Aorang Street to Idris Road.	02/08/12	05/06/13	\$1,004,981	\$334,506
10852	Minor Works - Casebrook Block	Minor footpath, K&C and pavement repairs	31/05/12	15/03/13	\$226,107	\$89,604
10857	Minor Works - Bridge Minor Works Project Package 02	Minor repair works to 55 bridges that suffered low levels of damage during the EQ events. Delivery team led with input from SCIRT Design teams where required.	01/08/12	09/11/12	\$29,231	\$157,512
10884	Merivale Pumping Station (PS)	New Pumping station for the Merivale Catchment Project. Linked to Project #10485	21/01/13	16/05/13	\$895,481	\$138,818

6.1.3.4 Central City

**DETAILED DESIGN**

Reference	Project	Project Description
10464	F106 Antigua Street Footbridge	Replacement of existing structure, or incorporate historical elements into major repair works.
10467	R114 Colombo St (North) Bridge	Major structural repair works Northern Colombo St, over the Avon, heritage bridge near intersection of Oxford Tce & Colombo St.
10468	R115 Armagh St Bridge	Major structural repair works.
10934	Wairakei Diversion - Local Reticulation & Rooding repairs (WW,SW,WS,RD)	Repair of any other damaged infrastructure along the route of the new Wairakei Diversion.
10986	Central City Kilmore Street Catchment Area (WW)	Repair/replacement of wastewater system in the north west of the CBD. Excludes WW Brick barrel which is considered under Project 10845.

**CONSTRUCTION**

Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
10401	Moorhouse Brick Barrel 01 (SW)	Repair of a failed stormwater Brick Barrel pipe on Moorehouse Ave under the Colombo St over bridge.	14/01/13	11/03/13	\$486,192	\$102,556
10445	Fitzgerald Ave Wall and Rooding	The works include the replacement of a failed retaining wall and carriageway. Ground stabilization is also being installed with stone columns 12 meters deep.	15/06/11	30/01/13	\$3,130,000	\$4,819,212
10845	Central City - Brick Barrel Assessment, Relining and Repairs	Full assessment, relining and repair works for the Brick Barrel Trunk network within the CBD Catchment. Includes all WW and SW Brick Barrels. A separate Project has been created for the Kilmore St Brick Barrel and concept / detailed design should be undertaken in conjunction with this work.	21/05/12	24/04/13	\$18,687,281	\$11,281,772
10893	Minor Works-Bridge Minor Works Project Package	Minor repairs to bridges requiring little design input. Project to be led by SCIRT Project Manager and Delivery teams.	23/07/12	13/12/12	\$221,900	\$128,117



CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
	01 Bridging					

6.1.3.5 Hagley / Ferrymead (\*excludes central city)

DETAILED DESIGN		
Reference	Project	Project Description
10347	Gayhurst Rd Bridge Works EW (RD)	Retrofit repair to bridge involving new abutments, piles, wingwalls and associated road approaches and services.
10462	Site 228 Rangatira Tce Retaining Wall (RW)	
10655	CCC - Main Road 3 Laning Sea Wall - Capital Works Project (RD)	
10795	PS57 McCormacks Bay Rd Pump Station Repairs (PS)	Repairs to building at existing pump station.
10823	St Johns (SW,WS,RD)	Catchment study for a full one pass rebuild of remaining services within the catchment area. Refer to Project 10449 for WW assets in this area.
10824	Beachville Catchment Area including Beachville Road & Celia Street (WW,WS,SW,RD)	Full one pass rebuild of the catchment area. Project Includes PS30, WW, SW, RD and Sea Wall assets. Projects already existing in this area which this catchment study will relate to are: 10600 - PS30, 10619 - Beachville Road Eastern Seawall, 10677 - Beachville Watermain WS.
10832	PS15 - Alport Place Pump Station Replacement (PS)	Construct a new Pump Station, tie in works, odour control system and demolition of existing PS15.
10868	PS 18 Rebuild SE11 North (WS,SW,RD)	Full area rebuild of the northern area of the PS18 catchment - RD,SW & WS elements. Linked to 10860. Construction projecta in the region of \$10M expected from this concept report.
10897	Woolston Ferrymead PS15 Central (WW)	Repair and rebuild of wastewater reticulation and trunk main assets. This includes for approximately 130 residential properties to be replaced with a pressure wastewater system in St Lukes. PS15 Pump Station rebuild under Project #10832 (Yellow Team).
10907	Site 226 Soleares Ave	Stabilisation of rock face and re instatement of the access road damaged in Feb 2011 earthquake.
10908	CCC - The Causeway, Main Road Sumner, Culvert Replacement (SW)	Renewal of the culvert structure, linked to the Causeway project #10634. CCC BAU Project.
10916	Bromley & Woolston PS15 North (WW)	Repair and rebuild of wastewater reticulation and trunk main assets.
10927	Retaining Wall - 1 to 3 Maffey's Road (RW)	Repair of the retaining wall at 1-3 Maffey's Road. Linked to 10307.
10979	CCC - Main Road 3 Laning - Capital Project (RD)	CCC Capital project for the 3 laning of Main Road. To be completed in conjunction with the SCIRT earthquake repair job of 10634, and the culvert replacement CCC project 10908.

DETAILED DESIGN		
Reference	Project	Project Description
10980	NZTA - Dyers Road Repairs (Metro PI to Bridge St) (RD)	Repairs to the State Highway between Metro Place and Bridge Street (through the treatment ponds area).
10995	Avonside Linwood Stage 1 (WW,SW,WS,RD)	One pass approach renewing wastewater, roading and stormwater assets within stage one of the Avonside Linwood Catchment. Standard project resulting from Catchment Studies 10875 and 10876.
10996	Avonside Linwood Stage 2 (WW,SW,RD)	One pass approach renewing wastewater, roading and stormwater assets within stage two of the Avonside Linwood Catchment. Standard project resulting from Catchment Studies 10875 and 10876.
10997	Avonside Linwood Stage 3 (WW,WS,SW,RD)	One pass approach renewing wastewater, roading and stormwater assets within stage three of the Avonside Linwood Catchment. Standard project resulting from Catchment Studies 10875 and 10876.
11027	Main Road Causeway Stage 2 - Seawall Renewal (RW)	Renewal of seawall along causeway.
11048	Woolston SE-13 (WW)	Repair and rebuild of wastewater reticulation and trunk main assets.

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
10303	Site 229 Mt Pleasant Rd Retaining Wall (RW)	60m replacement retaining wall and road reinstatement, in Mt Pleasant.	04/02/13	28/05/13	\$458,381	\$73,071
10306	PM11 Randolph (WW)	3.6km, 1.2m dia WW pressure main.	05/03/12	14/05/13	\$13,086,719	\$11,601,740
10307	173 Maffey's Road Retaining Wall (RW)	Repair of retaining wall in Maffey's Rd, along with associated buried services.	08/10/12	15/02/13	\$1,505,280	\$865,568
10317	Heberden Ave Permanent Solution (WW)	New gravity sewer diversion to replace broken sewer down Scarborough Cliffs.	09/11/12	18/12/12	\$256,733	\$481,117
10356	Woodham Rd (PS5)	The project scope requires replacement of 960m of	14/11/11	19/11/12	\$3,095,185	\$3,145,016

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
	east of river)	damaged waste water from Linwood Ave to Ngarimu St. Road refurbishment will follow sewer works. Traffic diversion are required for this work to be completed safely.				
10403	Barbour St Water (WS)	Replacement of water mains in two streets to the south and east of AMI Stadium, Waltham.	08/10/12	10/12/12	\$174,742	\$132,052
10459	Lower Richmond-Stanmore to Fitzgerald (WW)	Approximately 5km of WW, gravity system; requiring 2 new pump stations.	20/03/12	23/04/13	\$11,833,107	\$8,665,626
10472	Charleston	Approx 2.9km WW enhanced gravity system, 1 new pump station; 0.3km SW; 8600m2 carriageway reconstruction, and 1830m2 localised repairs.	07/05/12	21/12/12	\$3,737,683	\$3,182,939
10483	Lower Richmond (Southern Section) WS,SW,RD	Full reconstruction of intersection (80m), and localised repairs on remaining streets; 86m of SW replacement.	07/01/13	02/04/13	\$316,261	\$116,238
10541	PS 11 - Randolf		11/06/12	22/03/13	\$475,000	\$753,107
10548	Gloucester Street	Design for Wastewater, Stormwater, Water & Rooding along Gloucester Street between Woodham Road and Avonside Drive. Close to complete replacement of all WW and Rooding assets. Stormwater is reasonably intact.	26/06/12	16/11/12	\$1,083,590	\$1,323,401
10578	PS 107	Minor new pump station.	29/10/12	04/03/13	\$563,749	\$266,821
10579	PS5 - Catchment (West of river)	Pump Station 5 catchment originally serviced an area either side of the Avon River at the northern end of Linwood Avenue and south eastern edge of lower Richmond. Pump Station 5 was badly affected in the series of earthquakes. A proposal to split the PS5	15/10/12	29/05/13	\$2,422,349	\$358,964

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
		catchment either side of the river to enable removal of pump station from close proximity of the river has received informal agreement among CCC Asset and technical representatives. This project relates to the reinstatement of sewer services to the portion of the original PS5 catchment to the west of the Avon River. Initial assessment of condition suggests that the entire sewer network requires replacement, due to gross and differential land settlement and consequential adverse impact on sewer grades, in addition to physical damage to the predominantly earthenware piping. Reinstatement options will consider the range of options allowed under the technical standards and will likely require a new pump station or siphon crossing beneath the Avon river.				
10582	PS8 - Catchment	Design for repair to severe earthquake damage to wastewater within Pump Station 8 catchment green zone. The green zone is located to the north-west of the Avon River and generally bounded by Flesher Ave to the east and south, Chrystal St to the west and Medway St to the north.	19/11/12	26/07/13	\$2,974,474	\$82,484
10634	Main Road (Mt Pleasant - Beachville) Sumner Causeway (RD)	Repairs to main road causeway including replacement of estuary seawall and minor cross culverts and carriageway repairs.	11/01/13	26/09/13	\$1,189,803	\$212,671
10680	Clifton No. 4 Reservoir	Repair and retrofit of reservoir.	21/03/12	11/12/12	\$437,673	\$348,045
10799	NZTA Horotane Overpass Bridges (RD)	Propping system between piers, subject to ground investigation results.	07/12/12	13/06/13	\$1,614,301	\$130,920
10820	McCormacks Bay	Tank 1 and 2 and access reinstatement.	01/06/12	29/08/13	\$1,106,431	\$928,988

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
	Reservoir Stages 3,4 and 5					
10822	McCormacks Bay Reservoir Stage 2 Walls	Retaining walls and rock fall protection works at reservoir site.	30/01/12	17/09/13	\$1,549,159	\$1,166,362
10841	Charleston Catchment Area (RD,SW,WS)	Linked to Project 10472 WW for the RD SW and WS elements.	26/10/12	24/06/13	\$1,399,044	\$157,303
10843	Lower Richmond Catchment RD SW WS	Linked to #10459 for the RD SW and WS elements of the project.	21/01/13	02/09/13	\$1,573,629	\$168,040
10853	McCormacks Bay Reservoirs - Rock Face Protection Work	Rock protection work to facilitate the repairs to the reservoir tanks.	07/05/12	21/12/12	\$1,231,910	\$1,165,334
10862	Lower Richmond Pump Stations - Avalon and Haywood	Pump station construction in conjunction with the Richmond project.	16/07/12	21/01/13	\$1,322,356	\$600,661
10863	Charleston Waste Water Pump Station	Pumps Station Construction.	10/12/12	12/04/13	\$503,092	\$78,136
10864	Woodham Road (SW,RD,WS)	Storm water and water supply elements linked to project 10356 WW & RD.	29/03/12	09/11/12	\$441,840	\$517,209
10895	PM11 Randolph Phase 5 (WW)	All remaining design works for the design and delivery of the 3.6km, 1.2m waste water pressure main. This is a CCC business as usual project and is the fifth phase. Phases one to four are included under project number 10306.	01/02/13	26/04/13	\$905,557	\$222,233
11022	Emergency Repair - Southern Relief Sewer - Worcester	Emergency Repair for the 1525mm Dia Trunk Sewer. Currently reported by Operational Team as high risk of imminent failure. Depressions forming at road level	31/05/13	31/07/13	\$500,000	\$80,579

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
	Street (WW)	around manhole. Falls within existing Project Area #10995.				

6.1.3.6 Lyttelton / Mt Herbert

**DETAILED DESIGN**

Reference	Project	Project Description
10981	Retaining Wall Area 1 - Lyttelton 1A Brittan Terrace (RW)	Design and construction of multiple soil retaining walls from Lyttelton town centre west towards Diamond Harbour Blvd.
11005	Retaining Wall Area 1 - Simeon Quay Emergency Work (RW)	Stabilise face or provide new retaining wall at Simeon Key, Lyttelton.

**CONSTRUCTION**

Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
10394	RW Package 05 - Canterbury Stone Walls (RW)	Project to design three replacement retaining walls on Canterbury Street and one wall on Ripon Street, Lyttelton. The walls are up to 4.5m high and are of high heritage value.	21/05/12	30/11/12	\$1,482,372	\$1,632,869
10475	Site 079 Coleridge/Dublin St Ret. Walls	200m replacement retaining wall and road reinstatement in Lyttelton.	01/02/13	13/11/13	\$1,607,135	\$115,175
10905	Sumner Rd Retaining Wall L - Stage 2 Wall and Stage 1 and 2 Roads (RW, RD)	Stage two of new 450m long modular block retaining wall.	25/10/12	04/06/13	\$2,054,487	\$43,447
10400	RW Package 08 - Lyttelton on-stone (RW)	Design five replacement retaining walls on London Street, Canterbury Street, Hawkhurst Road and Ticehurst Road. Sections of these walls are of high heritage value.	12/06/12	14/02/13	\$589,801	\$890,509
10424	Sumner Rd Retaining Wall L (RW)	Stage one of new 450m long modular block retaining wall.	25/11/11	11/02/13	\$1,658,595	\$1,716,849
10427	035 Cunningham	Repair of retaining wall in Cunningham Tce, along with	04/05/12	28/03/13	\$1,785,393	\$1,293,354



CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
	Tce Retaining Wall (RW)	associated buried services.				
10511	RW Package 06 - Selwyn and Ross	Five retaining walls on Selwyn Street and Ross Terrace, Lyttelton. The walls range in height from 1.5m to 3m, and are of high heritage value.	24/01/13	28/03/13	\$188,044	\$116,680
10818	NZTA Norwich & Gladstone Quay State Highway Repair (RD, WW, SW, WS)	Repairs to state highway adjacent to the Port of Lyttelton.	14/01/13	31/05/13	\$1,101,973	\$123,188

6.1.3.7 Riccarton / Wigram

**DETAILED DESIGN**

Reference	Project	Project Description
10831	CCC - PS60 (PS)	Upgrade of pump station 60 and pressure main 60 to ensure increased flows can be managed in the short term.

**CONSTRUCTION**

Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
10409	Halswell WW Package 03	Repair wastewater along a section of Halswell Rd, O'Halloran Dr, & within private properties behind Muir Ave.	09/07/12	30/01/13	\$1,516,362	\$1,724,521
10768	CCC - Wilmers Road Water Pumping Station (WS, PS)	New water source and pumping station to cater for projected growth in the western area of Christchurch.	30/04/12	25/03/13	\$4,524,196	\$2,751,830
10909	Minor Works - Port Hills Package 01	Minor road repairs within the Port Hills.	03/07/12	09/11/12	\$178,770	\$209,042
10912	Sparks Road Pavement Repairs	Minor roading repairs to Sparks Road.	13/09/12	16/11/12	\$115,749	\$226,425

6.1.3.8 Shirley / Papanui

**DETAILED DESIGN**

Reference	Project	Project Description
10858	Minor Works - Pump Station Demolition and Repairs (WW)	Minor repair works to slightly damaged Pump Stations that require no major works during the rebuild programme. Demolition of 3 PS buildings to make safe in Red Zones. Project led by the delivery team with a SCIRT Design input and coordination. Close liaison with CCC Operations team (Graeme Black) required throughout the project.
10883	Emergency Repair - Northern Relief Sewer Hills & Dudley	Emergency repair to the Northern Relief Sewer.
11051	Shirley NW-2 Pressure and Vacuum Sewer (WW)	Design and construction of two pressure sewer sub catchments and one vacuum sub catchment. Concept design and Gravity elements included within project 10914.
10943	PS 124 Replacement Pump Station for PS5 (PS)	Pump Station 5 catchment originally serviced an area either side of the Avon River at the northern end of Linwood Avenue and south eastern edge of lower Richmond. Pump Station 5 was badly affected in the series of earthquakes. The wastewater portion of this area is covered by project 10579. This project is for the required replacement pump station works only.

**CONSTRUCTION**

Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
10344	Edgware Road - Emergency Works	A large complex repair to a sewer trunk main in Edgware Rd.	22/09/11	09/11/12	\$1,734,794	\$2,479,061
10457	Purchas & Madras (Bealey - Edgware)	WW, SW and roading repairs. Includes traffic calming on Purchas St to conform with IDS and City Plan requirements for Local Road widths.	08/11/11	30/01/13	\$3,974,790	\$4,774,880
10534	Innes & Knowles - subcatchment	The local wastewater reticulation on Innes Rd and Knowles St between Philpotts Rd and Bretts Rd suffered earthquake induced damage during the recent seismic events. Some liquefaction and land settlement was recorded in the area. Investigations continue however much of the network is made up of	10/08/12	03/07/13	\$9,217,618	\$1,805,237

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
		Earthenware pipe laid during the 1920s and 1930s. This material has not performed well in other areas therefore it is anticipated some form of repair or replacement will be required for the majority of the network.				
10535	Rutland Rd – sub catchment	Wastewater repair along a single street east of Papanui. This project area is lightly to be revised.	20/04/12	21/02/13	\$1,561,775	\$1,434,527
10810	PS7 Catchment Phase 1 Waste Water Renewal	Wastewater network remediation in the Pump Station 7 catchment which is situated in Shirley, centred upon Stapleton's Road and Shirley Road which bisect the catchment. (Area 1 of 4, south of catchment).	28/05/12	05/04/13	\$4,631,305	\$3,015,379
10812	PS7 Catchment Phase 2 Waste Water Renewal	Wastewater network remediation in the Pump Station 7 catchment which is situated in Shirley, centred upon Stapletons Road and Shirley Road which bisect the catchment. (Area 2 of 4, eastern quarter of catchment).	30/05/12	24/07/13	\$5,460,231	\$3,443,874
10814	PS7 Catchment Phase 3 Waste Water Renewal	Wastewater network remediation in the Pump Station 7 catchment which is situated in Shirley, centred upon Stapletons Road and Shirley Road which bisect the catchment. (Area 3 of 4, north western quarter of catchment).	23/07/12	15/08/13	\$6,154,487	\$2,101,935
10816	PS7 Catchment Phase 4 Waste Water Renewals	Wastewater network remediation in the Pump Station 7 catchment which is situated in Shirley, centred upon Stapletons Road and Shirley Road which bisect the catchment. (Area 4 of 4, central/western quarter of catchment).	28/09/12	06/12/13	\$3,188,229	\$186,384
10886	Innes & Knowles Pump Station 118 and 119 (PS)	New pump station for the waste water reticulation system in the region of Innes Rd and Knowles St. This projects covers the pump station only, with the waste water system being undertaken under the SCIRT project number 10534.	26/11/12	01/05/13	\$801,569	\$169,449
10899	Minor Works - Lower Styx Road &	Pavement repairs.	08/10/12	26/11/12	\$150,763	\$76,468

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
	Turners Road					
10930	PS7 Phase 3 Pump Station Shirley Road (PS)	New wastewater Pump Station in the PS7 catchment which is situated in Shirley, centred upon Stapletons Road and Shirley Road which bisect the catchment (area 3 of 4, north western quarter of catchment).	31/07/12	25/01/13	\$985,228	\$410,093

6.1.3.9 Spreydon / Heathcote

DETAILED DESIGN		
Reference	Project	Project Description
10872	Opawa, Hillsborough Catchment SE11 (South) (RD,WS,SW)	Full one pass rebuild of the catchment area - RD, WS & SW elements.
10879	Durham Street Over bridge Repairs	Repairs to the Over bridge.
10888	Hillmorton & Hoonhay S-7 (WW)	Full one pass rebuild of this catchment area - Waste Water Element.
10889	Hillmorton & Hoonhay S-7 (WS,SW & RD)	
10892	Antigua Burke Stormwater (SW)	Repair of storm water assets along Antigua St (between Moorehouse & Brougham) and Burke St (between Selwyn & Montreal). Related to project 10311 which has completed Detailed Design.
10913	Retaining Wall - Site 349 Major Aitken Road (RW,WW,SW,WS,RD)	Repair of the gabion basket retaining wall, WW,SW,WS and RD.
10922	Rossmore Terrace Retaining Walls (RW, WW,SW,WS,RD)	Repair of 5 retaining structures on Rossmore Terrace including associated infrastructure adjacent to the wall.

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
10311	Antigua St / Burke St Arterial Roads (WW,WS,SW,RD)	Repair of road and all buried services along Antigua St (between Moorehouse & Brougham) and Burke St (between Selwyn & Montreal).	18/04/12	11/06/13	\$3,151,988	\$2,105,852
10379	Fisher Ave & Eastern Tce Syphon (WW)	Repair of Syphon near Fisher Ave.	04/05/12	31/01/13	\$455,870	\$1,165,185
10385	Bewdley Evesham and Dellow	Repair of road and all buried services along Bewdley St, Eversham Cres & Dellow Pl.	20/04/12	21/12/12	\$1,552,670	\$2,077,067
10398	Somerfield Package 01 (WW,SW,RD,WS)	Repair and reconstruction of all assets within a small catchment block.	19/11/12	21/08/13	\$4,130,180	\$367,311
10407	St Martins Package	Repair of road and all buried services within the St	20/08/12	16/12/13	\$8,385,354	\$2,927,165

CONSTRUCTION						
Reference	Project	Project Description	Estimated Start	Estimated Finish	Estimated Cost	Life To Date
	02 (WW,WS,SW,RD)	Martins loop, north of Centaurus Rd.				
10520	Hoon Hay Package 01	Repair of road and all buried services along a section of Hoon Hay Rd (between Halswell & Sparks), including Penny In, Weir Pl, McBeath Ave, Muirson Ave & Greenpark St.	23/07/12	18/07/13	\$6,767,934	\$2,591,661
10785	Holliss Ave / Glamis Place - All Services (WW,WS,SW,RD)	Repair of water & roading along a section of Holliss Ave (between Gunns & Centaurus) and all services within Glamis Pl.	08/10/12	21/12/12	\$287,051	\$158,169
10797	NZTA Heathcote/Opawa Bridge Repairs	Ground improvements, and underpinning and lifting (jacking) of the abutments.	19/11/12	30/09/13	\$2,291,591	\$333,613
10821	Huntsbury Reservoir Tank No 2 & demolition	New reservoir tank (no.2) constructed in NE corner of old reservoir.	02/02/12	21/12/12	\$3,458,765	\$4,492,450
10829	CCC - Victoria Reservoir Replacement (WS)	Victoria reservoir is being replaced by SCIRT and funded by CCC.	13/08/12	25/01/13	\$968,840	\$1,216,281

**6.1.4 Projects Complete by Ward**

The following section outlines the projects within each ward that have been completed since SCIRT was established on 1<sup>st</sup> September 2011. It includes both a summary of numbers of projects as well as a list of specific projects. It is anticipated that the completed projects for the last quarter will be reported on a monthly basis.

<b>Ward</b>	<b>October Number of Projects</b>	<b>November Number of Projects</b>	<b>October Projects Life To Date Cost</b>	<b>November Projects Life To Date Cost</b>
Burwood-Pegasus	92	96	\$33,519,203	\$37,479,068
Fendalton-Waimari	3	3	\$210,796	\$210,796
Central City	9	9	\$1,728,272	\$1,734,789
Hagley-Ferrymead	70	70	\$21,257,394	\$21,751,063
Lyttelton-Mt Herbert	5	5	\$464,597	\$464,597
Riccarton-Wigram	7	7	\$4,924,554	\$4,929,676
Shirley-Papanui	22	23	\$6,926,175	\$7,084,133
Spreydon-Heathcote	18	18	\$7,479,383	\$7,475,940
<b>Total</b>	<b>226</b>	<b>231</b>	<b>\$76,510,375</b>	<b>\$81,130,063</b>

In the table above, the previous monthly report totals have also been included to show the change in activity.



**6.1.4.1 List of Projects Complete by Ward**

<b>Ward</b>	<b>Reference</b>	<b>Project</b>	<b>Project Life to Date Cost</b>
<b>Burwood-Pegasus</b>	<b>10312</b>	Rowes/Tomrich Street Watermain	\$264,247
	<b>10321</b>	PM 51 Emergency Repair	\$1,510
	<b>10325</b>	Cresswell Avenue - Watermains	\$148,731
	<b>10327</b>	Pembroke Street	\$146,277
	<b>10328</b>	De Ville Place	\$107,535
	<b>10331</b>	PM 39 - Gayhurst Road	\$1,594,161
	<b>10332</b>	PM54 - Niven-Avonside	\$375,476
	<b>10335</b>	PS54 - Catchment	\$6,640,762
	<b>10338</b>	Wainoni Road (WW EW - Ottawa to Avonside)	\$908,330
	<b>10339</b>	Woodham Road (Temp Repairs)	\$4,149,374
	<b>10340</b>	Ottawa Road Sewer Emergency Repair	\$517,444
	<b>10342</b>	Avondale Road (Bridge Emergency Works)	\$0
	<b>10343</b>	PM16 - Oakmont Green	\$4,287
	<b>10346</b>	Fleete Street - Emergency Repair	\$9,328
	<b>10349</b>	PS39 - Birchfield Avenue WW EW	\$218,674
	<b>10351</b>	Ardrossan Street - Temp. Solution	\$347,571
	<b>10355</b>	Landy Street	\$18,738
	<b>10359</b>	PS54 - Niven Street (WW)	\$62,282
	<b>10364</b>	Shortland Street	\$343,883
	<b>10366</b>	McBratneys Road - WM	\$348
	<b>10376</b>	PM 28	\$1,499,119
	<b>10384</b>	Pacific Tedder Watermain Replacement	\$528,152
	<b>10421</b>	Estuary Rd Carriageway, PS37 to Bridge Street Catchment (WW)	\$2,412,079
	<b>10440</b>	PS 25C	\$702,670
	<b>10443</b>	PM 38 Beach Rd	\$596,770
	<b>10484</b>	Pump Station 25 connection repair	\$8,977
	<b>10532</b>	Cnr Pages & Cuff - Emergency Repair	\$2,845,126
	<b>10547</b>	New Brighton Road	\$24,036
	<b>10551</b>	Avondale Rd (Temp Repair)	\$0
	<b>10576</b>	PM 106 - Woolley	\$1,466
	<b>10577</b>	PS 106 - Woolley	\$670,945
	<b>10604</b>	PM 45 (WW)	\$324,122

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<b>Ward</b>	<b>Reference</b>	<b>Project</b>	<b>Project Life to Date Cost</b>
	10605	Sylvia Street watermain (WS)	\$134,293
	10606	Chadlington Street Water Mains	\$35,376
	10607	PM 37 (WW)	\$1,908,949
	10608	PM 35	\$1,087,648
	10614	Aldershot Street watermain (WS)	\$255,436
	10615	Willryan Avenue Watermain	\$237,336
	10616	Flemington and Ascot Ave Watermains	\$525,630
	10617	PM 46	\$55,828
	10621	Chartwell Street Water Mains	\$384,531
	10638	630 Pages Road 450mm (WW)	\$25,397
	10639	23 Leaver Tce WW	\$62,858
	10641	Kirner St WW	\$21,497
	10645	Inwoods Close 450mm WW	\$128,404
	10647	Travis Rd watermains and submains	\$215,845
	10649	Corhampton Street watermains and submains	\$261,190
	10650	Water Main on Bridge Street Bridge (WS)	\$161,781
	10651	Keyes Road Watermain (WS)	\$195,318
	10664	Saltaire (Bower to Marriots Rd) (WS)	\$69,096
	10665	Sinclair (Keyes to Rawson) - WS	\$250,841
	10669	Palmers Road PS Stabilisation	\$16,065
	10670	Major flooding Pratt St.	\$295,425
	10671	Owles Tce Temp. (WW)	\$113,618
	10676	Marine Parade Watermain	\$153,358
	10681	Bower Avenue Watermain and Submains (WS)	\$468,915
	10682	Briarmont Street watermain (WS)	\$87,815
	10683	Cowes St Watermain and Submains (WS)	\$107,789
	10684	Gresham Terrace Watermain and Submains (WS)	\$161,116
	10685	Inverell Pl Watermain and Submains (WS)	\$63,517
	10686	Orrick St Watermain and Submains (WS)	\$83,284
	10688	Blake St Watermain (WS)	\$343,340
	10689	Pegasus Ave Watermain	\$168,650
	10690	Bassett St Watermain (WS)	\$225,196
	10691	Falcon St Watermain	\$180,732
	10692	Beach Rd Watermain	\$138,143

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<b>Ward</b>	<b>Reference</b>	<b>Project</b>	<b>Project Life to Date Cost</b>
	<b>10695</b>	Allstone Watermain	\$90,800
	<b>10696</b>	Marriotts Road Watermain	\$36,116
	<b>10700</b>	Hulverstone Drive Emergency Repair	\$22,188
	<b>10702</b>	Rawhiti Water Well Stormwater Outfall	\$147,524
	<b>10706</b>	Bowhill Watermain (WS)	\$149,728
	<b>10708</b>	Rookwood Ave Watermain (WS)	\$174,380
	<b>10711</b>	Waitaki St Temp. Sewer	\$0
	<b>10714</b>	Kate Sheppard Emergency Repair (Barkers Lane Temp Works) (WW)	\$187,534
	<b>10723</b>	Merrington Cres Watermain	\$183,621
	<b>10728</b>	Rowan Ave Emergency Work WW	\$447,340
	<b>10744</b>	PS 36 Gravity Main (Pages Rd)	\$649
	<b>10749</b>	Beach Rd Gravity Sewer (WW)	\$67,291
	<b>10752</b>	Desal plant long term storage (WS)	\$79,908
	<b>10756</b>	PM39 Temp Overland Pipe (PM)	\$7,828
	<b>10760</b>	Pages Road	\$69,173
	<b>10789</b>	Woodham Road Water Supply Pumping Line Renewal	\$83,862
	<b>10794</b>	Pratt Street (Keyes Road) Water Main from Pumping Station	\$217,767
	<b>10806</b>	Pages & Cuffs Emergency Repair Roding (RD)	\$390,097
	<b>10833</b>	Fast Track - PS36 Sewerage Overflow Repairs Pages/Waitaki (WW)	\$21,546
	<b>10834</b>	Minor Works - Stage 1 Schools	\$7,185
	<b>10838</b>	Minor Works - Banks Avenue	\$121,504
	<b>10859</b>	CCC - Private Laterals Keyes Road (WW)	\$49,616
	<b>10865</b>	Catchment Study - Burwood Rebuild NE8 (WW) - 11040, 11041, 11042, 11043	\$0
	<b>10315</b>	Ferner Street - Emergency Works	\$223,901
	<b>10336</b>	Kingsford & Liggins Streets (Projects 10336 & 10885)	\$204,574
	<b>10873</b>	Catchment Study - PS36 Catchment, Area NE4 split into 10959-65 (WW)	\$36,398
	<b>10882</b>	Emergency Work - Beatty Street	\$236,824
	<b>10903</b>	Catchment Study - Parklands & North New Brighton split into	\$0

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<b>Ward</b>	<b>Reference</b>	<b>Project</b>	<b>Project Life to Date Cost</b>
		10975-78 NE12, NE13 (WW)	
	<b>10904</b>	Catchment Study - Parklands & North New Brighton (RD,WS,SW) spilt to 11032, 11033, 11034, 11035	\$28,515
	<b>10928</b>	Emergency Works - Merrington Crescent (WW)	\$96,564
<b>Fendalton-Waimari</b>	<b>10354</b>	Papanui Road - Emergency Work	\$53,511
	<b>10480</b>	R126 Monavale Footbridge	\$31,654
	<b>10590</b>	Thornycroft Street - Pri4 (WS)	\$125,632
<b>Central City</b>	<b>10447</b>	Fitzgerald Ave Temp Sewer Replacement (WW)	\$22,117
	<b>10455</b>	Fitzgerald Ave Twin Bridges Temp Repairs	\$0
	<b>10506</b>	Hagley Syphon	\$601,348
	<b>10726</b>	Stormwater Pump Station 203	\$44,715
	<b>10764</b>	PM 3 Temporary Repair (Complex Emergency)	\$52,786
	<b>10790</b>	Liverpool Street Water Main (CBD)	\$107,959
	<b>10867</b>	Fitzgerald Ave Retaining Wall Footpath	\$677,831
	<b>10880</b>	Kilmore St Brick Barrel Repair - Emergency Work (WW)	\$190,110
	<b>10941</b>	Minor Works - 789 Colombo Street (WS)	\$37,922
<b>Hagley-Ferrymead</b>	<b>10301</b>	CCC - Tanner Street Replacement Well (WS)	\$15,792
	<b>10319</b>	St Martins Package 01 (WW) Wilsons Rd South, St Martins Rd and Gamblins Rd	\$1,337,159
	<b>10326</b>	Retreat Road	\$678,774
	<b>10333</b>	PM 57 - Replacement (Stage 2 March)	\$2,075,207
	<b>10337</b>	Avonside - WW Trunk Sewer	\$204,090
	<b>10341</b>	River Road - Siphon (WW)	\$669,189
	<b>10350</b>	Avonside Drive/Retreat - Gravity Sewer Repair	\$93,588
	<b>10352</b>	Avonside Drive/Morris Bowie - Gravity Sewer Temp. Solution	\$86,006
	<b>10353</b>	294 Avonside Drive - Temp. Solution	\$241,562
	<b>10358</b>	PS57 - McCormacks Bay Rd Sewer Overflow Renewal	\$170,231
	<b>10361</b>	PS54 Catchment Temp. Solutions	\$878,147

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<b>Ward</b>	<b>Reference</b>	<b>Project</b>	<b>Project Life to Date Cost</b>
	10362	PS5 - Glade	\$0
	10372	Dacre Street	\$125,100
	10386	St Andrews Hill Rd Sewer (Major Hornbrook)	\$67,715
	10391	Stevens St Watermain	\$164,811
	10402	Moorhouse SW BB 02	\$72,744
	10406	226 Main Road SW	\$4,627
	10411	Clifton Reservoir 3	\$360,172
	10417	Upper Balmoral Reservoir	\$406,969
	10422	PM 31 Renewal Works (WW)	\$1,591,347
	10428	RW Mt Pleasant Rd Wall 156 (RW)	\$181,134
	10431	PS15 Alport	\$1,282,063
	10434	PS 12 Smith	\$546,105
	10441	Ferry Road 873	\$366,749
	10442	PS15 Gould Cres Overflow Structure	\$210,522
	10448	PM 12	\$710
	10451	Manning-Ferry	\$17,158
	10452	WW No Service Grafton	\$134,202
	10454	225 Linwood Ave	\$74,062
	10458	31 Stanmore Road	\$49,606
	10463	Hamner Street - waste water relay	\$72,948
	10471	33 River Terrace	\$38,939
	10473	Wickham St Watermain Replacement	\$307,303
	10478	F805 McCormacks Bay 1 Footbridge	\$8,795
	10479	F806 McCormacks Bay 2 Footbridge	\$7,959
	10481	R223 Heathcote Barrage	\$5,703
	10496	PS13 Tilford	\$10,207
	10497	PS 10 Linwood WW	\$13,921
	10499	Saxon Street Waste Water	\$15,687
	10505	Stanmore Road Lateral	\$0
	10537	Patten Street	\$633,749
	10539	Brittan Street	\$564,468
	10586	PM 107	\$261,816
	10609	PM 47	\$24,815
	10612	McCormacks Bay Reservoir No 2-2	\$693,102
	10613	Mt Pleasant Reservoir 2/2	\$95,660
	10618	Beachville Road Pressure + Gravity Main	\$476,693

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<b>Ward</b>	<b>Reference</b>	<b>Project</b>	<b>Project Life to Date Cost</b>
	<b>10629</b>	McCormacks Bay Rd WR mains and submains (WS)	\$2,188,133
	<b>10644</b>	55 Clark St WW	\$759
	<b>10666</b>	Head Street - Esplanade to Nayland (WS)	\$78,803
	<b>10677</b>	Beachville Watermain (WS)	\$248,043
	<b>10679</b>	Moncks Spur No. 3	\$215,102
	<b>10687</b>	Wakefield Ave Watermain (WS)	\$156,900
	<b>10716</b>	PM 34 Sumner - Replacement	\$1,609,254
	<b>10729</b>	WW, Gravity Bridal Path and Cannon	\$250,799
	<b>10739</b>	Heberden Ave Temporary Solution (WW)	\$102,792
	<b>10743</b>	281 River Rd Siphon (WW)	\$0
	<b>10746</b>	Ruru Ave Repair PM 11	\$42,191
	<b>10747</b>	Bromley Waste Water Treatment	\$23,860
	<b>10753</b>	WW No Service Glendevere (WW)	\$2,081
	<b>10763</b>	Moncks Bay Walkway - Temp Repairs	\$45,416
	<b>10770</b>	Linwood Ave / Humphrys Dr Retaining Wall Emergency Permanent Repairs (RW)	\$429,902
	<b>10779</b>	CCC - Linwood Avenue Water Main	\$456,000
	<b>10782</b>	15 Dunoon Place Emergency Stabilisation / Sewer Repair	\$179,641
	<b>10792</b>	Truro Street Emergency Waste Water Sewer Renewal (Van Asch School)	\$180,850
	<b>10830</b>	Minor Works - Bridge Minor Works Project Package 01 Roding	\$13,135
	<b>10835</b>	Minor Works - Avonside Girls High School	\$78,494
	<b>10875</b>	Catchment Study - Avonside & Linwood Area CE-5,6,7,9,10,11,12 (WW)	\$0
	<b>10876</b>	Catchment Study - Avonside & Linwood Area CE5,6,7,9,10,11,12 (RD, SW & WS)	\$96,101
	<b>10772</b>	Monks Bay Main Road Emergency Repair (WW)	\$15,503
<b>Lyttelton-Mt Herbert</b>	<b>10382</b>	Lyttelton Treatment Plant Access	\$0
	<b>10636</b>	Priority Roads - Governors Bay	\$389,090

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<b>Ward</b>	<b>Reference</b>	<b>Project</b>	<b>Project Life to Date Cost</b>
		Road Rebuild	
	<b>10672</b>	Sutton Quay Retaining wall 441 (RW)	\$39,384
	<b>10878</b>	Minor Works - Cunningham Terrace & Sumner Rd Temp Access Works	\$35,211
	<b>10418</b>	Lytelton Dyers Road Pump Station (WS, PS)	\$912
<b>Riccarton-Wigram</b>	<b>10309</b>	Halswell Minor Roothing Works - All Areas	\$322,784
	<b>10380</b>	Halswell WW Package 02	\$2,031,265
	<b>10383</b>	PS73 Kennedys Bush	\$101,031
	<b>10387</b>	Townshend Crescent Wastewater	\$46,679
	<b>10389</b>	Sparks Rd Watermain	\$175,935
	<b>10392</b>	Halswell WW Package 1 (WW)	\$2,109,992
	<b>10408</b>	Glovers Street water (WS)	\$141,990
<b>Shirley-Papanui</b>	<b>10308</b>	Riselaw Street	\$91,424
	<b>10313</b>	PM 6 - Harrison St	\$207,579
	<b>10322</b>	Ranfurly Street	\$118,626
	<b>10323</b>	Chrystal Street	\$83,927
	<b>10329</b>	Hope Street	\$145,208
	<b>10330</b>	Orontes Street - WS	\$90,022
	<b>10334</b>	PM 7 - Stapletons Road	\$242,909
	<b>10345</b>	Nancy Ave / Weston Road	\$16,297
	<b>10348</b>	Shirley Road - Wastewater (Emergency Repair)	\$696
	<b>10369</b>	Orion Street	\$41,881
	<b>10435</b>	Temporary Gravity Sewer Lower Styx Road	\$1,074,738
	<b>10437</b>	PM 40 Marshlands	\$585,684
	<b>10439</b>	Heyders 29-65 (WW)	\$320,151
	<b>10446</b>	Brooklands Roothing - Temporary Repairs	\$364,289
	<b>10453</b>	PS78 Heyders (PS)	\$50,098
	<b>10460</b>	449 Durham Street North	\$304,376
	<b>10536</b>	Edgeware Rd - WW	\$1,828,863
	<b>10555</b>	Madras Street / Forfar Wastewater	\$588,121
	<b>10805</b>	Madras Street Road, Storm Water & Water Supply Repairs	\$376,626
	<b>10837</b>	Minor Works - Shirley Boys High School	\$112,202
	<b>10851</b>	Minor Works - Marshland Road & Belfast Road	\$332,048

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<b>Ward</b>	<b>Reference</b>	<b>Project</b>	<b>Project Life to Date Cost</b>
	<b>10856</b>	Minor Works - Northwood Block	\$107,269
	<b>10581</b>	Catchment Study - PS7 (10810, 10811, 10812, 10813, 10814, 10815, 10816, 10817)	\$1,098
<b>Spreydon-Heathcote</b>	<b>10320</b>	Murray Aynsley Reservoir 2	\$148,161
	<b>10381</b>	Rydal St (WW)	\$921,784
	<b>10390</b>	Centaurus Rd Watermain	\$143,772
	<b>10393</b>	Smartlea WW Emergency Repair	\$109,989
	<b>10396</b>	75 Wilsons Emergency Repair	\$825
	<b>10397</b>	Glenelg Spur 01	\$142,696
	<b>10404</b>	Hollis Ave Water (WS)	\$175,384
	<b>10410</b>	Hollis Ave WW	\$967,783
	<b>10432</b>	PS19 Beckford	\$3,201
	<b>10433</b>	PS20 Locarno	\$19,394
	<b>10476</b>	F207 Aynsley Tce Footbridge	\$8,319
	<b>10477</b>	F212 Sloan Tce Footbridge	\$593
	<b>10545</b>	PS19 - Syphon	\$0
	<b>10597</b>	Huntsbury Reservoir (WS)	\$4,071,178
	<b>10717</b>		\$2,207
	<b>10745</b>	CCC - Sydenham Stn Replace Wells (WS)	\$236,486
	<b>10755</b>	PS19 Fifield - 171 Fifield - Sheetpiling protection of riverbank	\$114,715
	<b>10787</b>	Rydal Street Water Supply, Storm Water and Rooding Renewals (SW,WS, RD)	\$409,453
<b>Grand Total</b>			<b>\$81,130,063</b>



## **6.2 NON-SCIRT Work Activity**

### **6.2.1 Introduction**

The following section of the report included a progress report against infrastructure and other associated rebuild projects that are not being delivered by SCIRT. It includes a report on progress on Greenspace projects, Christchurch Wastewater Treatment Plant and Organics Processing Plant, Burwood Landfill and Water Supply Wells.

### 6.2.2 Greenspace

No change in Greenspace reporting this month. Status of all projects is currently under review, in particular those on hold, due to the Central City Plan and red zone areas.

Ward	Work Package Number	Project	Description	Number of projects in package	Phase	Estimated Construction Start	Estimated Construction Finish	Estimated Cost
<b>Banks Peninsula Wards</b>	WP0000537	PARKS Marine Structures Repairs	Marine Structures Repairs	13	CONSTRUCTION	01/08/2011	30/06/2013	\$412,000
	WP0000551	PARKS Marine Structures Assessments	Marine Structures Assessments	10	COMPLETE	01/08/2011	30/11/2011	\$50,000
	WP0000783	B/P Retaining Walls	Retaining wall repairs in parks and cemeteries on Banks Peninsula	4	INVESTIGATION	01/07/2012	30/06/2013	\$241,000
<b>Burwood Pegasus</b>	WP0000251	PARKS CEAF 1.1 Sth New Brighton CAPEX	Hard surface and playground undersurfacing renewals	4	CONSTRUCTION	01/10/2011	30/06/2013	\$227,000
	WP0000257	PARKS CEAF 1.2 B/P CAPEX	Bexley, Avondale and Burwood Parks hard surfacing renewals	3	COMPLETE	01/09/2011	31/10/2011	\$100,400
	WP0000258	PARKS CEAF 1.2 B/P OPEX	Hard surface repairs	11	COMPLETE	01/10/2011	29/02/2012	\$148,500
	WP0000284	PARKS CEAF 2.6 TRAVIS CAPEX	Hard surface renewals	5	COMPLETE	01/12/2011	29/02/2012	\$340,500
	WP0000285	PARKS CEAF 2.7 AVON PARK CAPEX	Hard surface renewals	3	INVESTIGATION	01/03/2012	30/06/2013	\$63,850
	WP0000286	PARKS CEAF 2.8 ESTUARY CAPEX	Hard surface renewals	1	INVESTIGATION	01/03/2012	30/06/2013	\$300,000
<b>City wide</b>	WP0000177	PARKS Playground Softfall - CAPEX	Replacement of contaminated softfall to playgrounds	24	COMPLETE	01/08/2011	30/11/2011	\$335,755

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Ward	Work Package Number	Project	Description	Number of projects in package	Phase	Estimated Construction Start	Estimated Construction Finish	Estimated Cost
	WP0000206	PARKS Playground Softfall - OPEX	Repairs to playground undersurfacing	8	COMPLETE	01/08/2011	20/12/2011	\$54,200
	WP0000269	PARKS CEAF 2.2 S/P,F/W,R/W,L/M OPEX	Hard surface and minor structural repairs	11	COMPLETE	01/03/2012	31/05/2012	\$90,500
	WP0000312	PARKS Hard Surface Nthn & Sthn - OPEX	Hard surface repairs	58	CONSTRUCTION	01/03/2012	30/04/2013	\$450,000
	WP0000313	PARKS Hard Surfaces Nthn & Sthn CAPEX	Hard surface renewals	14	CONSTRUCTION	01/03/2012	30/04/2013	\$550,000
	WP0000318	PARKS Hard Surfaces Eastern CAPEX	Hard surface renewals	23	CONSTRUCTION	01/03/2012	30/04/2013	\$755,000
	WP0000321	PARKS Hard Surface Eastern - OPEX	Hard surface repairs	76	CONSTRUCTION	01/03/2012	30/04/2013	\$700,000
	WP0000323	PARKS City Wide Turf Repairs - OPEX	Repairs to non sports turf surfaces	110	COMPLETE	01/11/2011	31/05/2012	\$390,550
	WP0000357	PARKS Retaining Walls CAPEX	Minor retaining wall renewals	5	CONSTRUCTION	01/08/2011	30/06/2013	\$393,000
	WP0000358	PARKS Retaining Wall Repairs	Minor retaining wall repairs	24	CONSTRUCTION	01/08/2011	30/06/2013	\$336,000
	WP0000376	PARKS Minor Structures CAPEX	Minor structures renewals	8	INVESTIGATION	01/08/2011	30/06/2013	\$439,000
	WP0000377	PARKS Minor Structures Repairs	Minor structures repairs	60	CONSTRUCTION	01/08/2011	30/06/2013	\$471,000
	WP0000571	PARKS 2012 Sports Fields Repairs	Repairs to sports turf 2011/12	45	COMPLETE	01/09/2011	31/03/2012	\$691,000
	WP0000768	PARKS Mature Tree Replacements	Tree renewals at Hagley Park and Sth Brighton Domain	2	COMPLETE	01/03/2012	30/06/2013	\$100,000
	WP0000769	PARKS Port Hills Restoration	Port Hills rock fencing and planting	2	INVESTIGATION	01/07/2012	TBC	\$200,000
	WP0000205	PARKS Sports Fields Repair - Moderate	Repairs to sports turf	19	COMPLETE	01/05/2011	31/07/2011	\$244,000

**ATTACHMENT 1 TO CLAUSE 4  
ENVIRONMENT AND INFRASTRUCTURE COMMITTEE 7. 2. 2013**

Ward	Work Package Number	Project	Description	Number of projects in package	Phase	Estimated Construction Start	Estimated Construction Finish	Estimated Cost
	WP0000207	PARKS Sports Fields Repair - Minor	Repairs to sports turf	23	COMPLETE	01/05/2011	31/07/2011	\$122,550
	WP0000779	Structural	Bridge repairs on Parks City wide	14	INVESTIGATION	01/07/2012	30/06/2014	\$919,000
	WP0000780	Regional Parks	Repairs to structures and hard surfaces	6	INVESTIGATION	01/07/2012	30/06/2013	\$465,000
	WP0000781	Trees	City wide tree renewals	1	CONSTRUCTION	01/07/2012	30/06/2013	\$500,000
	WP0000782	Ponds	Repairs to small ponds and outflows in parks	2	COMPLETE			\$50,000
	WP0000784	Cemeteries - Operational	Repairs and make safe work to headstones in Operational cemeteries	18	COMPLETE	01/12/2011	30/06/2013	\$250,000
	WP0000785	Cemeteries - Heritage	Repairs and make safe work to headstones in Heritage cemeteries	3	INVESTIGATION	01/07/2012	30/06/2015	\$250,000
	N/A	On Hold	Projects on hold due to them being in Red Zoned areas, cordons, rock fall risk etc. Depending on land decisions some of these repairs/renewals may become redundant	141	ON HOLD	XXXX	XXXX	\$6,347,200
	N/A	Port Hill Parks/Tracks Reopening Project	Port Hill Parks/Tracks Reopening	21	INVESTIGATION	TBC	TBC	\$2,196,020
<b>Hagley Ferrymead</b>	WP0000252	PARKS Victoria Lake CAPEX	Relining Victoria lake	1	COMPLETE	01/07/2011	29/02/2012	\$500,000
	WP0000253	PARKS CEAF 1.3 Hagley Pk/Bot.Gdns CAPEX	Hard surface and playground undersurfacing renewals	5	COMPLETE	01/09/2011	29/02/2012	\$228,000
	WP0000254	PARKS CEAF 1.4	Irrigation and Turf renewals	2	COMPLETE	01/07/2011	31/07/2011	\$30,000

**ATTACHMENT 1 TO CLAUSE 4  
ENVIRONMENT AND INFRASTRUCTURE COMMITTEE 7. 2. 2013**

Ward	Work Package Number	Project	Description	Number of projects in package	Phase	Estimated Construction Start	Estimated Construction Finish	Estimated Cost
		Hagley Pk North CAPEX						
	WP0000263	PARKS CEAF 1.6 H/F CAPEX	Hard surface renewals	5	COMPLETE	01/10/2011	29/02/2012	\$230,500
	WP0000264	PARKS CEAF 1.6 H/F OPEX	Hard surface, track and minor structure repairs	20	COMPLETE	01/10/2011	29/02/2012	\$142,000
	WP0000265	PARKS CEAF 1.8 BOT. GARDENS CAPEX	Playground undersurfacing repairs	1	COMPLETE	01/10/2011	29/02/2012	\$50,000
	WP0000287	PARKS CEAF 2.9 VICTORIA SQUARE CAPEX	Hard surface, track and minor structure renewals	4	CONSTRUCTION	01/12/2012	30/06/2013	\$277,000
	WP0000288	PARKS CEAF 2.10 CENTRAL CITY PARKS CAPEX	Hard surface renewals	3	ON HOLD	XXXX	XXXX	\$15,000
	WP0000289	PARKS CEAF 2.10 CENTRAL CITY PARKS OPEX	Hard surface, track and minor structure repairs	10	ON HOLD	XXXX	XXXX	\$19,100
	WP0000767	PARKS Sumner/Scarborough Restoration	Hard surface renewals	9	CONSTRUCTION	01/12/2011	30/04/2013	\$187,000
<b>Riccarton Wigram</b>	WP0000280	PARKS CEAF 2.5 MONA VALE CAPEX	Hard surface, bridge and wall renewals	5	INVESTIGATION	01/07/2012	30/06/2013	\$322,000
<b>Shirley Papanui</b>	WP0000255	PARKS CEAF 1.5 Groynes CAPEX	Car Park, Driveway, Turf, Track and Jetty renewals	6	COMPLETE	01/08/2011	30/09/2011	\$96,000
	WP0000256	PARKS CEAF 1.7 Temp Changing Rooms CAPEX	Portable changing facilities for sports parks	2	CONSTRUCTION	01/02/2012	31/12/2012	\$300,000
	WP0000268	PARKS CEAF 2.1 English Park CAPEX	Car Park renewal	1	COMPLETE	01/08/2011	30/10/2011	\$247,500
	WP0000277	PARKS CEAF 2.3 S/P OPEX	Hard surface and track repairs	5	COMPLETE	01/03/2012	31/05/2012	\$20,500



6.2.3 Wastewater Treatment Plant and Organics Processing Plant

Project	Description	Phase	Estimated Construction Start	Estimated Construction End	Estimated Cost
Clarifiers	C4 - New structural bottom - CIPP repair to influent pipe - Modify Arms to suit new structure.	Complete	Nov 11	3 Feb 12	\$9,432,768
	C3 - New structural bottom - CIPP repairs to influent pipe. - Modify Arms to suit new structure	Complete	24 Jan 12	30 June 12	
	C1 - New structural bottom - CIPP repair to influent pipe - Modify Arms to suit new Structure	Construction	July 12	15 Feb 13	
Civil & Structural	<ul style="list-style-type: none"> <li>• Paving</li> <li>• C2 water</li> <li>• Crack repairs to structures.</li> <li>• Reclad Digester 2</li> <li>• PST/SCT &amp; Grit Tank Repairs</li> </ul>	Complete Complete Complete Complete Construction	Oct 11 Oct 11 April 11 Sept 11 Aug 12	Sept 12 Feb 12 Nov 12 Dec 11 Feb 13	\$4,514,760
Contaminated Sand Disposal Point	<ul style="list-style-type: none"> <li>• Repair after hours access road &amp; improve for increased traffic movements.</li> <li>• Repair and strengthen septic waste dump point into Lagoon 2.</li> </ul>	Construction Construction	Oct 12 Oct 12	Dec 12 Dec 12	\$1,500,000
Oxidation Ponds	<ul style="list-style-type: none"> <li>• Transfer structures 1-4</li> <li>• Transfer Structure 4-5.</li> <li>• Pond banks strengthen and reinstate to design levels.</li> <li>• Estuary outfall structure</li> <li>• Dyers Road transfer structure</li> </ul>	Complete Complete Construction Construction Construction	Oct 11 Dec 11 Jan 12 July 12 Oct 12	Feb 12 Mar 12 Feb 13 Sept 12 April 13	\$16,250,000
Galleries	<ul style="list-style-type: none"> <li>• South Gallery – drainage and structural <i>Proposed repair strategy unsuccessful, redesign underway</i></li> <li>• North Gallery – drainage &amp; joints</li> </ul>	Design Construction	TBA June 12	TBA Jan 13	

Project	Description	Phase	Estimated Construction Start	Estimated Construction End	Estimated Cost
	<ul style="list-style-type: none"> <li>Diagonal Gallery – drainage &amp; joints</li> <li>Pump Stn A – drainage &amp; joints</li> <li>Sludge Rm A – drainage &amp; joints</li> </ul>	Design Design Design	Jan 13 Dec 12 Jan 13	Mar 13 Mar 13 Mar 13	\$1,353,550
<b>Trickling Filters Stage 1</b>	<ul style="list-style-type: none"> <li>External repairs to Trickling Filter 1</li> <li>External repairs to Trickling Filter 2</li> </ul>	<b>Design</b> <b>Design</b>	<b>Feb 13</b> <b>May 13</b>	<b>April 13</b> <b>Aug 13</b>	
<b>Trickling Filters Stage 2</b>	Investigate and repair any damage to Trickling Filter internal structure	Loss Adjusters	2020		\$3,500,000
<b>Mechanical &amp; General Repairs</b>	<ul style="list-style-type: none"> <li>Digesters 2</li> <li>Digesters 1</li> <li>Digester 4</li> <li>Digester 3</li> <li>Digesters 5</li> <li>Digester 6</li> <li>Buffer Tank</li> <li>Primary Sedimentation Tanks</li> <li>Bio- Solids Holding Tank</li> </ul>	Construction <b>Construction</b> Investigation Investigation Investigation Investigation Complete <b>Complete</b> <b>Loss Adjusters</b>	Oct 11 <b>Nov 12</b> <b>Feb 13</b> <b>Mar 13</b> Jan 14 Jun 14 Nov 11 Jun 11 <b>Mar 13</b>	<b>Feb 13</b> <b>Mar 13</b> <b>Aug 13</b> <b>Sept 13</b> <b>Jun 14</b> <b>Nov 14</b> Jan 12 July 12 <b>Aug 13</b>	\$5,450,250
<b>Organics Processing Plant</b>	<ul style="list-style-type: none"> <li>Demolish &amp; Reconstruct Tunnels</li> <li>Repair &amp; Strengthen Process Hall</li> <li>Repair Hard Standing</li> </ul>	Construction	Mar 12	July 13	\$9,518,133
<b>Facilities</b>	<ul style="list-style-type: none"> <li>Laboratory</li> <li>Control room</li> <li>Workshops</li> <li>Offices/ Cafeteria/ Mtg room</li> </ul>	<b>Loss Adjusters</b> <b>Loss Adjusters</b> Investigation <b>Loss Adjusters</b>	Feb 13 Feb 13 Feb 13 Feb 13	Jun 13 Jun 13 Jun 13 Jun 13	\$2,741,000
<b>Outlet Structure</b>	<ul style="list-style-type: none"> <li>Replace Broken Outlet Pipes</li> <li>New Outlet Structure</li> <li>Decommission Broken Pipes</li> </ul>	<b>Tender</b>	<b>Jan 13</b>	<b>Jun 13</b>	\$2,300,000



Project	Description	Phase	Estimated Construction Start	Estimated Construction End	Estimated Cost
	<b>TOTAL</b>				<b>\$56,560,461</b>

In the table above, the bolded text identifies a change in activity since the previous monthly report.

6.2.4 Burwood Landfill

Project	Description	Material Received (tonnes)	Material Processed (tonnes)	Phase	Estimated Construction Start	Estimated Construction End	Estimated Cost
<b>Burwood Landfill</b> Liquefaction and Infrastructure Rebuild Waste Disposal	<ul style="list-style-type: none"> <li>Prepare areas for disposal</li> <li>Operate and maintain disposal site</li> <li>Restoration and landscaping</li> <li>Resource consent application</li> <li>Consultation documents to affected parties</li> <li>Consultation Feedback documents to affected parties</li> <li>Consents granted</li> </ul>	<b>376,013</b>	<b>376,013</b>	Completed Operation <b>Operation Completed</b> Completed  Completed  Completed	Feb 11 Feb 11 Jan 12 Jan 12 Apr 12  Jun 12  Jul 12	Jan 12 Dec 13 Dec 13 Aug 12 Jul 12  Jul 12  Sept 12	Self Funded
<b>Burwood Landfill</b> Residual Demolition Waste Disposal	<ul style="list-style-type: none"> <li>Design of new cell for residual waste</li> <li>Cell construction</li> <li>Operate and maintain disposal site</li> <li>Restoration and landscaping</li> <li>Resource consent application</li> <li>Consultation documents to affected parties</li> <li>Consultation Feedback documents to affected parties</li> <li>Consents granted</li> </ul>	0	0	<b>Completed Construction Construction</b> Design <b>Completed</b> Completed  Completed  Completed	Oct 11 Mar 12 <b>Jan 13</b> Jul 17 Oct 11 Apr 12  Jul 12  Jul 12	Jun 12 <b>Jan 13</b> Dec 17 Dec 17 Aug 12 Jul 12  Aug 12  Sep 12	To be funded by Transwaste Canterbury
<b>Burwood Resource Recovery Park</b> Demolition Sorting and Processing Facility	<ul style="list-style-type: none"> <li>Construct areas for storage of material and associated roading</li> <li>Design of sorting plant</li> <li>Construction of sorting plant</li> <li>Sorting operation</li>   <li>Rehabilitation and landscaping</li> <li>Resource consent application</li> </ul>	<b>370,000</b>	0	Complete  Completed <b>Commenced</b> <b>To commence</b> <b>Jan 13</b> Design <b>Completed</b> Completed	Feb 11  Mar 11 Jul 12 <b>Jan 13</b>  Jul 17 Oct 11	Jun 11  Jun 12 Dec 12 Dec 17   Dec 17 Aug 12	To be funded by Transwaste Canterbury

Project	Description	Material Received (tonnes)	Material Processed (tonnes)	Phase	Estimated Construction Start	Estimated Construction End	Estimated Cost
	<ul style="list-style-type: none"> <li>• Consultation documents to affected parties</li> <li>• Consultation Feedback documents to affected parties</li> <li>• Consents granted</li> </ul>			Completed	Apr 12	Jul 12	
				Completed	Jun 12	Jul 12	
					Jul 12	Sep 12	
	<b>TOTAL</b>	<b>746,013</b>	<b>376,013</b>				

In the table above, the bolded text identifies a change in activity since the previous monthly report.

### 6.2.5 Wells

The damage to wells has been reported separately from the remainder of the non-SCIRT infrastructure rebuild because much of the wells repair work is reactionary due to the ongoing aftershocks.

Forward programming is limited by the reactionary work and the operational requirements of the water supply network, meaning that each package of work is programmed “on the fly” on a prioritised basis before it is issued.

The programme of work must be kept flexible in order to keep as many damaged wells operational as possible while at the same time moving forward with the repair and replacement programme. Only a limited number of wells can be taken out of service at one time to avoid affecting the demand on water supply network, and to minimise water restrictions.

	October At Ground Level	November At Ground Level	October Below Ground Level	November Below Ground Level	October Totals	November Totals
Total number of active wells					154	154
Wells yet to be repaired**	34	32	37	34	71	66
Cost Estimate all repairs <sup>+</sup>	\$4,692,000	\$4,692,000	\$18,584,000	\$18,603,000	\$23,276,000	\$23,295,000
Wells repaired to date**	68	69	100	104	168	173
Cost to date <sup>+</sup>	\$2,830,173	\$2,958,439	\$6,575,652	\$6,479,604	\$9,405,825	\$9,438,043

+ includes replacement wells

- some wells are damaged both at and below ground level

