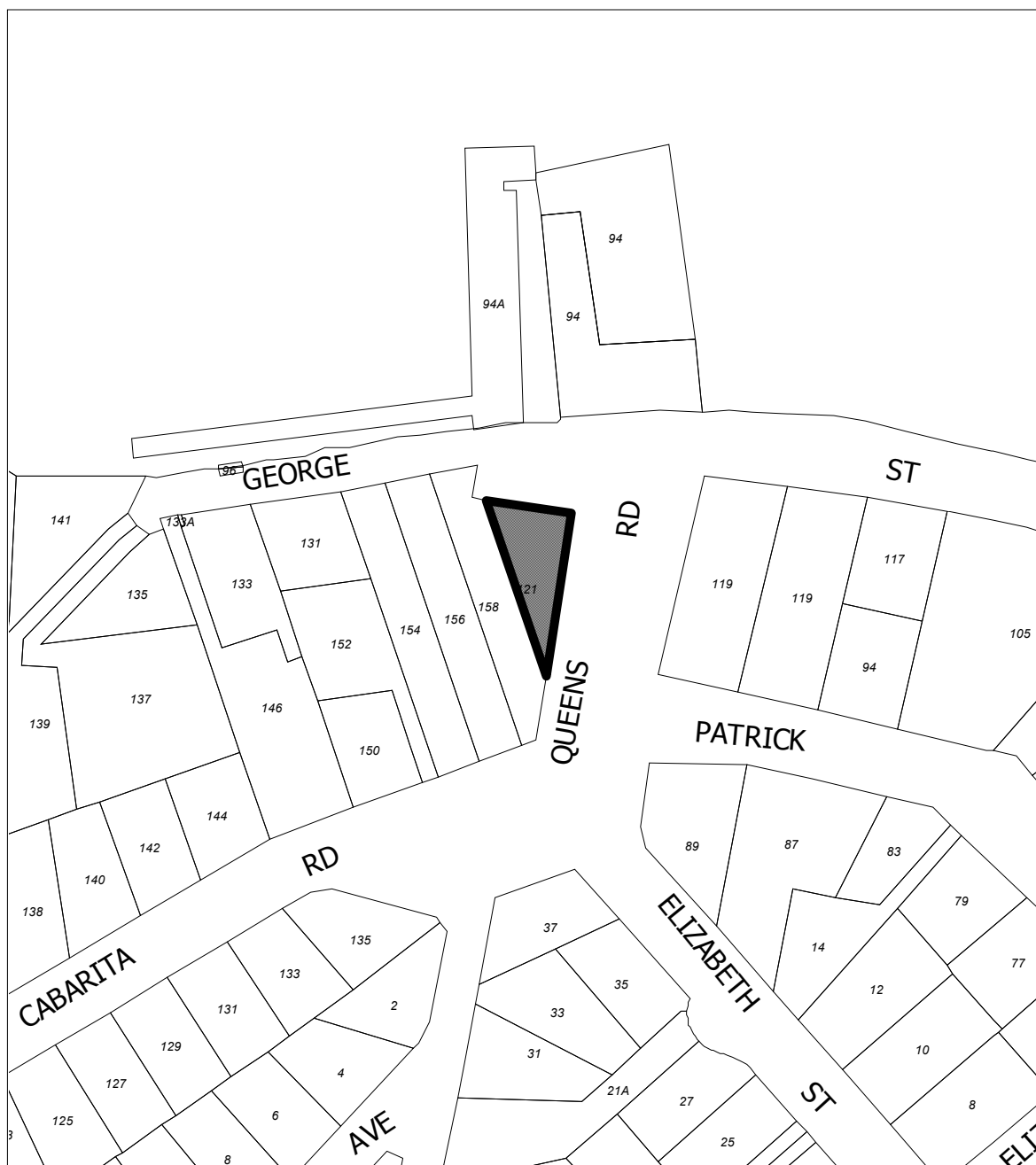
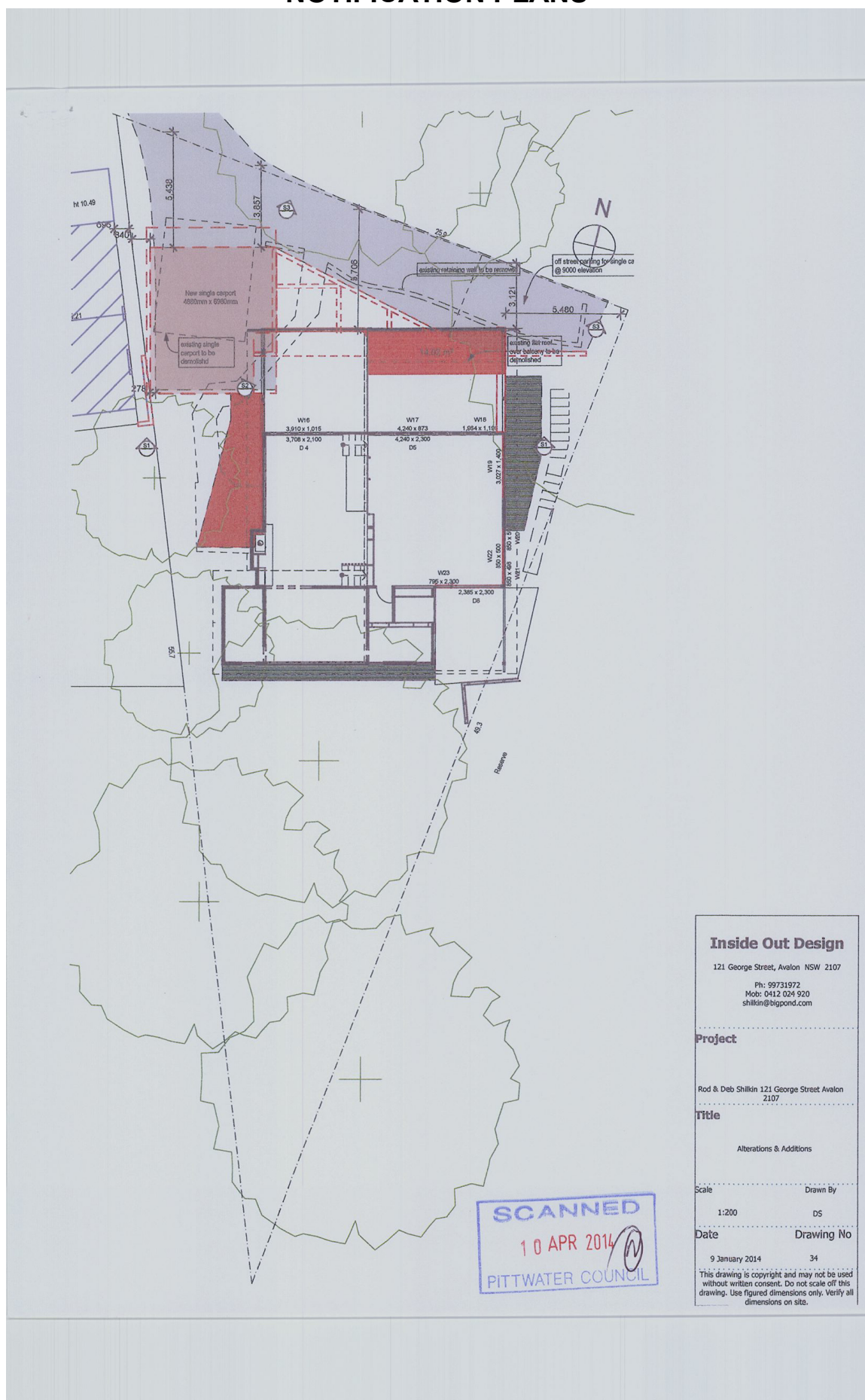


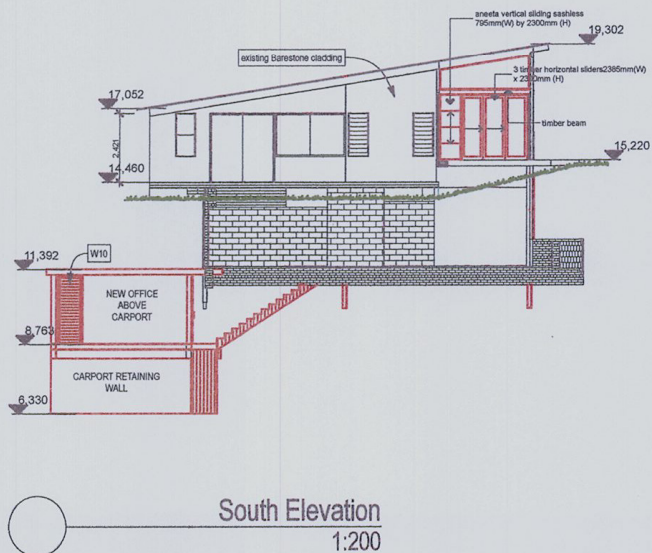
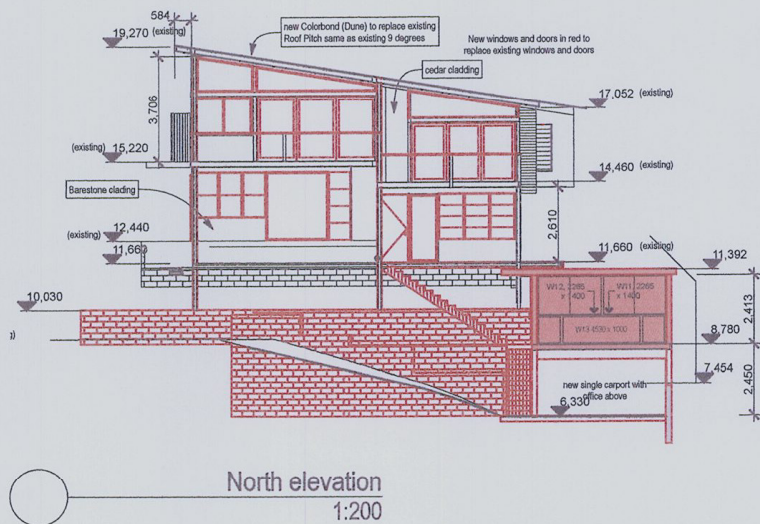
6. Should any of the determination not be acceptable, you are entitled to request reconsideration under Section 82A of the *Environmental Planning and Assessment Act, 1979*. Such request to Council must be made in writing, together with appropriate fees as advised at the time of lodgement of such request, within 1 year from the date of determination.
7. If you are dissatisfied with this decision, Section 97 of the *Environmental Planning and Assessment Act, 1979*, gives you a right of appeal to the Land and Environment Court within 6 months of the date of endorsement of this Consent.
8. The approved plans must be submitted to a Sydney Water Quick Check agent or Customer Centre to determine whether the development will affect Sydney Waters sewer and water mains, stormwater drains and/or easements, and if further requirements need to be met. The approved plans will be appropriately stamped. For Quick Check agent details please refer to the web site at [www.sydneywater.com.au](http://www.sydneywater.com.au) then see Building Developing and Plumbing then Quick Check, or telephone 13 20 92.

## LOCALITY MAP



# NOTIFICATION PLANS





### Inside Out Design

121 George Street, Avalon NSW 2107

Ph: 99731972  
Mob: 0412 024 920  
shilkin@bigpond.com

### Project

Rod & Deb Shilkin 121 George Street Avalon  
2107

### Title

Alterations & Additions

Scale

1:200

Drawn By

OS

Date

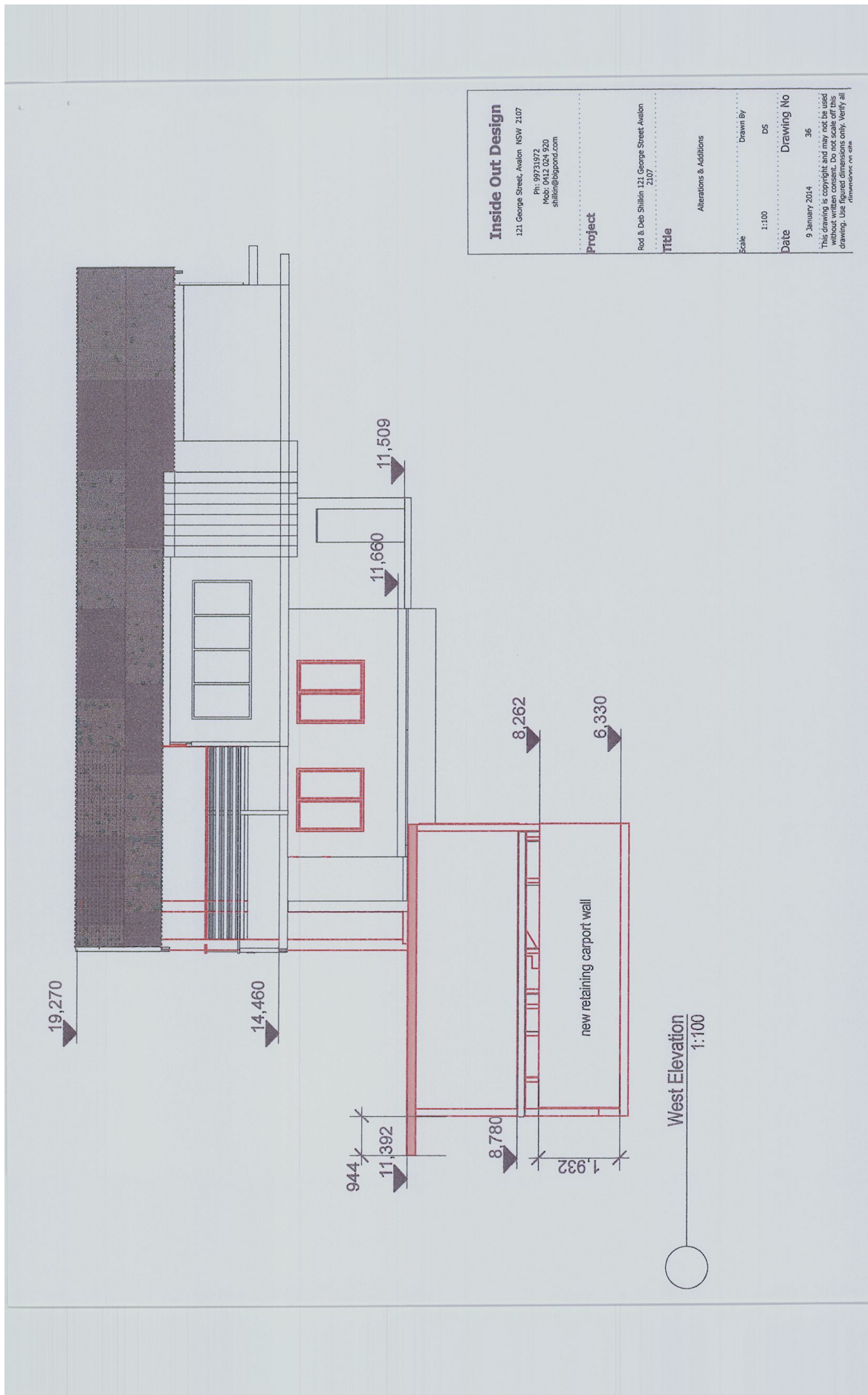
9 January 2014

Drawing No

35

This drawing is copyright and may not be used without written consent. Do not scale off this drawing. Use figured dimensions only. Verify all dimensions on site.





# **Inside Out Design**

121 George Street, Avalon NSW 2107  
 Ph: 99731972  
 Mob: 0412 024 920  
 shillen@igpond.com

## **Project**

Red & Deb Shillen 121 George Street Avalon  
 2107

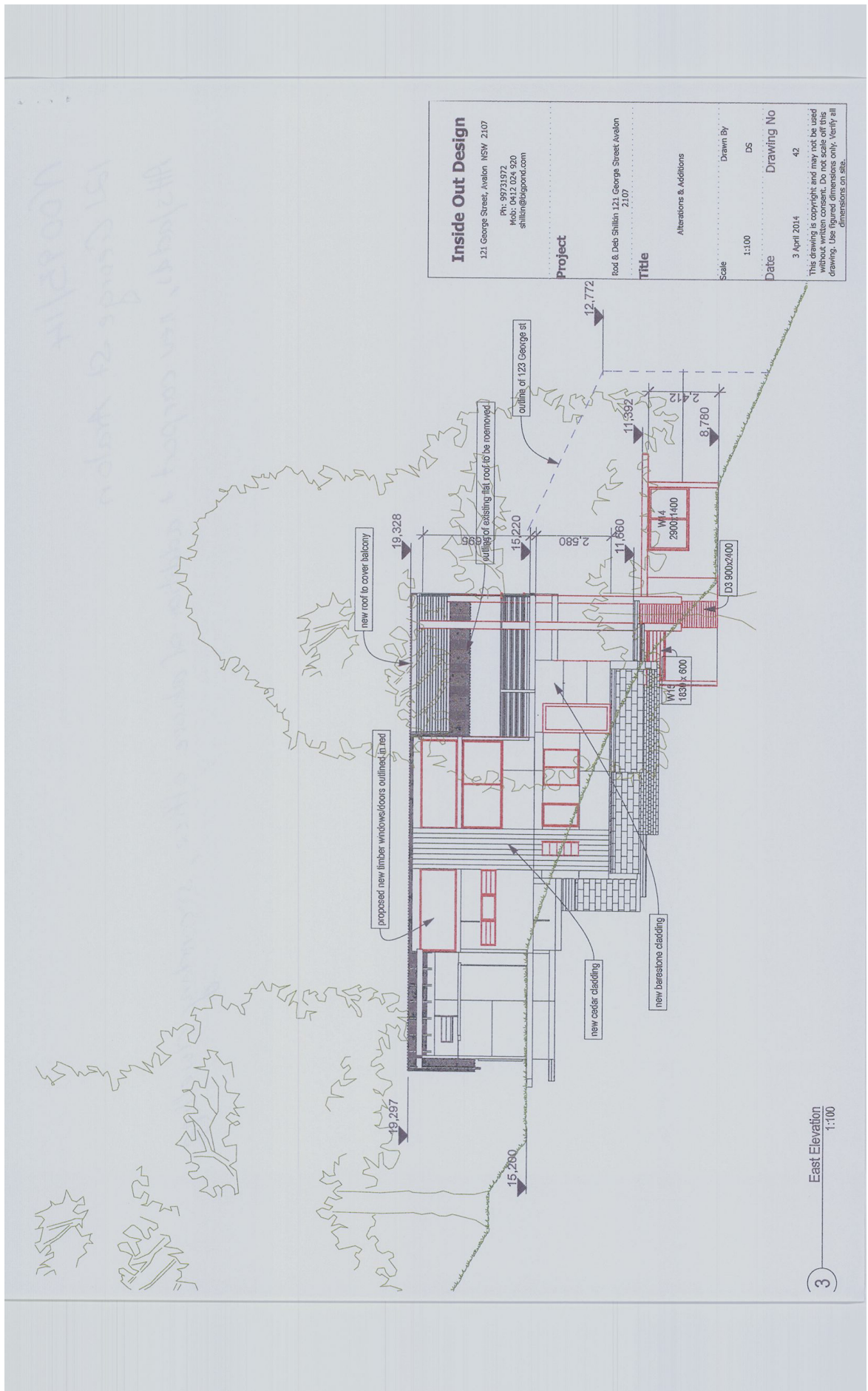
## **Title**

Alterations & Additions

Scale 1:100 Drawn By DS

Date 9 January 2014 Drawing No 36

This drawing is copyright and may not be used without written consent. Do not scale off this drawing. Use figured dimensions only. Verify all dimensions on site.



---

<b>C10.2</b>	<b>SHOROC Too Good to Waste - Regional Waste Avoidance and Resource Recovery Strategy</b>
--------------	---

**Meeting:** Natural Environment Committee

**Date:** 3 November 2014

---

**STRATEGY:** Land Use & Development Strategy

**ACTION:** Participate in and promote the SHOROC waste initiatives

Reduce the volume and putrescible material going to landfill by promoting composting, worm farming etc.

Promote participation by commercial groups in recycling programs.

---

## **PURPOSE OF REPORT**

To propose that Council adopt *Too Good to Waste* as the Regional Waste Avoidance and Resource Recovery Strategy (the Strategy) for the SHOROC region.

### **1.0 BACKGROUND**

- 1.1 The NSW Government encourages councils to collaboratively develop regional waste avoidance and resource recovery strategies, with a strategy identified for the SHOROC region under the NSW Government's Northern Beaches Regional Action Plan.
- 1.2 There are challenges to managing the region's waste for the future. Currently, 117,000 tonnes of household wastes (garbage, paper and container recyclables, garden organics and general clean-up waste) plus public place wastes are collected each year across the region with approximately 59,000 tonnes landfilled. A growing population and projected 24% increase in household waste by 2021, limited landfill space, environmental impacts of landfilling and increasing costs present significant challenges. There are also opportunities to recover resources and realise economic and environmental benefits from waste.
- 1.3 Pittwater, Manly, Mosman and Warringah Council Waste Managers and Kimbriki Environmental Enterprises staff have worked with SHOROC to develop *Too Good to Waste*, the region's Waste Avoidance and Resource Recovery Strategy (**Attachment 1**).
- 1.4 The Strategy sets a regional target of increasing the recycling rate for household waste to 70% by 2021 and has six key areas of focus: sustainable infrastructure solutions, maximising resource recovery, producing less waste, increasing recycling, making the disposal of problem wastes easier and keeping public spaces clean.
- 1.5 The Strategy also details the combination of community-based and infrastructure solutions for the region to work towards diverting more waste from landfill. Priorities and actions for delivery to 2017 have been identified that build on the strong collaborative work undertaken to date.

## **2.0 ISSUES**

### **2.1 Development of the Strategy**

- 2.1.1 The NSW Government encourages councils across NSW to collaboratively develop regional waste avoidance and resource recovery strategies, with the SHOROC region identified for a strategy under the NSW Government's Northern Beaches Regional Action Plan. The NSW EPA has funded SHOROC to develop the strategy under its *Waste Less Recycle More* program.
- 2.1.2 There are significant challenges and also opportunities in managing our waste for the future.
- The amount of waste being collected is increasing and it is estimated that Councils will need to manage an extra 27,672 tonnes of waste across the SHOROC region by 2021.
  - There are two waste facilities that the SHOROC Councils utilise in the region; Kimbriki Resource Recovery Centre located at Kimbriki Road, Terrey Hills, and Belrose Resource Recovery Centre located at Crozier Road, Belrose.
  - Belrose Resource Recovery Centre accepts household and public place garbage (putrescible waste) and this landfill is due to close in November 2014. Kimbriki is not currently licensed to accept putrescible wastes and without action the only option will be to transport garbage to landfills or recovery facilities outside the region.
  - Cost to dispose waste to landfill is also increasing, in part due to increases in the NSW Government waste levy, expected to rise from \$107.80 to \$130 a tonne by 2015/16.
  - NSW Government has set a state wide target of 75% diversion from landfill by 2021.
  - Reducing the amount of waste generated and increasing reuse and recycling will mean less waste to landfill, reducing greenhouse gases, reducing environmental impacts and saving money, energy, water and raw materials.

### **2.2 Collaboration with SHOROC Councils**

- 2.2.1 Pittwater, Manly, Mosman and Warringah Councils have a strong history of collaboration. The Councils are well progressed in the plan for new regional resource recovery facilities at Kimbriki Resource Recovery Centre that can recover resources from waste. In the coming years it is also intended to implement a new common household waste collection system across the region that is proposed to collect food and garden organics waste. The strategy builds on these actions that are already planned and underway.

### **2.3 Strategy Vision and Focus Areas**

- 2.3.1 The Strategy looks to 2021 with a vision to: *Lead and support our community to avoid, reuse, recycle and recover valuable waste resources* and includes an action plan to 2017 that will be reviewed annually. Its main focus is on areas of council responsibility such as household waste and public place waste, however business waste is also considered.
- 2.3.2 The Strategy sets a regional target to increase recycling rates for household waste from 54% in 2011 to 70% by 2021, and identifies priorities and actions for delivery.



- 2.3.3 The Strategy shapes the region's future where waste is recognised as a valuable resource of economic and environmental benefit. It enhances council collaboration to deliver regional outcomes for the community that are sustainable and build on or add value to individual SHOROC council waste initiatives. The strategy also contributes to the targets in the NSW Waste Avoidance and Resource Recovery Strategy.
- 2.3.4 The Strategy has two key planks. The first is planning the infrastructure solutions to make the best use of the resources available from materials that are currently going to landfill. This includes the planned Kimbriki Resource Recovery Project and the collection of food waste through the Common Waste Collection System. The second is establishing the right environment and giving the community the necessary tools and capability to do their part to take personal responsibility to produce less waste, increase recycling, deal with problem wastes and reduce littering and illegal dumping.

## 2.4 **Link to Pittwater Council 2025 Community Strategic Plan**

- 2.4.1 The Pittwater Council 2025 Community Strategic Plan includes objectives to:
- reduce waste to landfill in Pittwater and maximise recovery and use of recycled materials;
  - reduce litter and illegal dumping and promote sustainable waste management practices; and
  - actively participate in the development of new technology in waste management.

Actions within the Strategic Plan include participation in and promotion of SHOROC waste initiatives.

## 2.5 **Public Consultation**

- 2.5.1 On 14 May 2014 SHOROC's Regional Waste Co-Ordinator, Liz Quinlan, addressed the meeting of the Pittwater Council Natural Environment Reference Group (NERG) and discussed the development of the draft Strategy and public consultation process.
- 2.5.2 On 14 July 2014 Pittwater Councillors were briefed on the draft Strategy.
- 2.5.3 The draft strategy was released jointly by the Hon. Rob Stokes MP and SHOROC President Cr. Jacqui Townsend on Friday 15 August 2014 at Kimbriki Eco-House and Gardens in the presence of Mayors, Councillors, Council staff, Kimbriki Board, NSW Environmental Protection Authority (EPA) and other interested parties.
- 2.5.4 Four weeks of community consultation was undertaken ending on 12 September 2014 coordinated by SHOROC, with each council promoting the strategy and opportunity for feedback. Engagement was predominately through the council and SHOROC websites and social media utilising a range of tools such as e-newsletters, web pages, Facebook and twitter feeds based on the draft strategy and associated infographic.
- 2.5.5 The draft Strategy received positive support from the community including positive comments on the tools used to engage such as the infographics (**Attachment 2** SHOROC Community Consultation Report). The majority of the comments received were of high quality and related directly to the broad scale actions in the draft strategy. No comments were received on the strategy's vision or range of focus areas chosen for the strategy. The quantity of comments received does not warrant an individualised council level reporting approach to feedback.

- 2.5.6 The outcome of the community consultation resulted in improvements to the actions within the Strategy and affirmation that the strategy direction that has been taken meets the community's areas of concern. The tools used to promote the strategy have raised the community's awareness of how the regional waste management system works and the pivotal role that community plays in effective and efficient resource recovery. The Strategy has been updated to reflect the community feedback received.

## 2.6 Financial Implications

- 2.6.1 Funding of actions in the Strategy align with council funding priorities or are grant dependent.
- 2.6.2 Strategy implementation will also maximise funding opportunities under the NSW EPA *Waste Less, Recycle More* initiative that includes contestable grant programs for new and upgraded infrastructure, community recycling centres for household problem wastes, business recycling, market development and, programs to tackle illegal dumping and litter.
- 2.6.3 The NSW Government's non contestable Local Government *Better Waste Recycling Fund* will also provide funding for strategy initiatives. Implementation of actions related to household waste collection will be supported by operational funding through the Council's Domestic Waste Management Charge.

## 2.7 Endorsement of the Strategy and Next Steps

- 2.7.1 On 16 September 2014 the Strategy was endorsed by the SHOROC region General Managers Advisory Committee (GMAC). On 17 September 2014 the Strategy was endorsed by the Kimbriki Sub-committee of Councillors and community representatives.
- 2.7.2 The SHOROC Regional Waste Co-ordinator is working with the Regional Waste Manager's to identify, prioritise and implement actions to achieve individual Council strategic priorities.

---

## 3.0 SUSTAINABILITY ASSESSMENT

### 3.1 Supporting & Connecting our Community (Social)

The regional strategy will allow greater social integration across the SHOROC region through collaborative education and community engagement tools.

### 3.2 Valuing & Caring for our Natural Environment (Environmental)

The regional strategy will allow greater environmental benefits as it provides strategic and infrastructure planning on a regional level.

### 3.3 Enhancing our Working & Learning (Economic)

The regional strategy would provide greater economic benefit through financial savings achieved from reduction in waste generation and diversion from landfill.

### 3.4 Leading an Effective & Collaborative Council (Governance)

The regional strategy would enable participating Councils to coordinate and collaborate on the implementations of waste strategies more effectively and efficiently.

### 3.5 Integrating our Built Environment (Infrastructure)

The regional strategy would allow SHOROC councils to plan and implement waste infrastructures based on regional community needs.

---

## 4.0 EXECUTIVE SUMMARY

- 4.1 The *Too Good to Waste* Regional Waste Avoidance and Resource Recovery Strategy details the combination of community-based and infrastructure solutions for the region to work towards diverting more waste from landfill. The Strategy looks to the year 2021 with priorities and actions linking to policies and strategies of the individual SHOROC councils.
- 

## RECOMMENDATION

1. That Council adopt the *Too Good to Waste* Regional Waste Avoidance and Resource Recovery Strategy (**at Attachment 1**).
2. That correspondence be forwarded to SHOROC confirming adoption of the *Too Good to Waste* Regional Waste Avoidance and Resource Recovery Strategy.

Report prepared by  
Richard Li, Waste Services Officer

Jeff Lofts  
**MANAGER, ENVIRONMENTAL COMPLIANCE**

# Too good to waste

A waste avoidance and resource recovery strategy for Manly, Mosman, Pittwater and Warringah

Councils helping community to do their part

small changes make a  
**BIG IMPACT**



**GO PAPERLESS**



Use a wormfarm  
**MAKE COMPOST**



Give away unwanted items



**NO PROBLEM WASTE IN BINS**



Now over

**50%** of our garbage is recycled



We're aiming for **70%** by 2021



TO FIND OUT MORE GO TO

**SHOROC.COM**





*Too Good to Waste* is the overarching waste strategy for the region – encompassing Manly, Mosman, Pittwater and Warringah local government areas. It has been developed by the four SHOROC councils to improve waste avoidance and resource recovery practices and bring together projects that are more efficiently and effectively delivered in partnership, whilst recognising individual council initiatives. It responds to the NSW State Plan, *NSW 2021*, contributes to targets in the *NSW Waste Avoidance and Resource Recovery Strategy* and will maximise funding opportunities under the NSW Government's *Waste Less, Recycle More* initiative.



Photo: Steve Bliim

2

Too Good To Waste

SHOROC

Our councils continually face the challenge of managing our waste in the most sustainable way. This challenge will grow as the population increases, more people work here and more visitors explore what we have to offer. A 23.7% (27,672 tonnes) increase in the amount of household waste needing to be collected, recycled or disposed is the conservative forecast by 2021.

This strategy signals a shift to recognise waste as valuable resource of economic benefit. The strategy's main focus is on areas of council responsibility such as household waste and council owned waste infrastructure, however business waste is also considered.

The strategy looks to 2021 with a vision to:

***Lead and support our community to avoid, reuse, recycle and recover valuable waste resources.***

Priorities and actions to 2017 are targeted on six key focus areas:

- Sustainable infrastructure solutions
- Maximise resource recovery
- Produce less waste
- Increase recycling
- Make disposal of problem wastes easier
- Keep public places clean

The strategy will be monitored to track progress against key performance measures and will be reviewed annually.

### ***Did you know?***

- ***Paper recycling by SHOROC residents saves 250,000 trees each year.***
- ***17.5 million steel cans are recycled each week in Australia – enough to build 900 new cars.***

### **CONTACT US**

33/42-46 Wattle Road, Brookvale NSW 2100

W: [shoroc.com](http://shoroc.com) E: [admin@shoroc.com](mailto:admin@shoroc.com)

P: (02) 9905 0095 F: (02) 9939 6454

### **FOLLOW US**



[facebook.com/ourshoroc](https://facebook.com/ourshoroc)



[twitter.com/OurSHOROC](https://twitter.com/OurSHOROC)



[linkedin.com/shoroc](https://linkedin.com/shoroc)

## Where does our waste come from?

The region has a population of about 280,000 people. The majority of us work in the region and generate and dispose of waste every day. Locals and visitors alike enjoy playing in the region, on the beaches, at sport and in the natural environment.

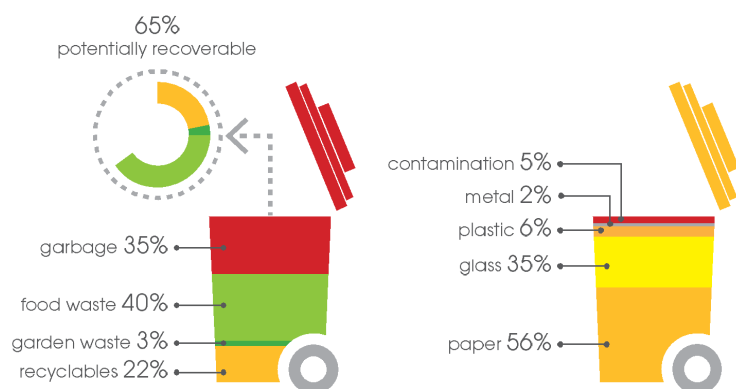
### AT HOME

Councils collect about 117,000 tonnes of household waste (garbage, recyclables, garden and clean-up waste) from 109,000 households each year. In addition householders take their own garbage to landfill.

The average household generates 19 kg of waste each week – 9 kg of garbage, 6 kg of recycling and 4 kg of garden waste. This is better than the Sydney metropolitan average of 21 kg of waste each week – 12 kg of garbage, 5 kg of recycling and 4 kg of garden waste.

Household garbage and clean-up waste goes to landfill, recyclables are reprocessed into new products, and garden waste is composted and sold.

Overall 54% of waste is recovered, but we could do better. Currently household bins contain 40% food waste that could be recycled into valuable compost, either in worm farms and compost bins at home, or through a regional facility. Add to this the 22% recyclables and the 3% garden waste found in our garbage, and we could potentially recycle 65% of our garbage bin.



By weight our recyclables are dominated by paper (56%) and glass (35%). A small quantity of garbage (5% contamination) also ends up in the recyclables that can reduce their value. When problem wastes such as batteries or smoke detectors are placed in the household bins they can harm human health and the environment and should be correctly disposed separately.

### AT WORK

About 45% of waste going to landfill in Sydney comes from small and medium sized commercial and industrial businesses. Wastes such as food, timber and packaging that could be reused, recycled or recovered make up 70% of this waste. Business costs drive decisions on waste management and waste costs are small relative to other operating costs. Construction and demolition businesses recycle better than commercial and industrial businesses as landfill costs are high due to the weight of the material and there is a market for this material.

The NSW Government has a target of increasing recycling rates from commercial and industrial waste to 70% and from construction and demolition waste to 80% by 2021. Councils are not directly responsible for business waste which is collected by private companies.

### ON THE GO

Residents are spending more time in public places, such as parks and beaches, and consuming more items on the go. Most people dispose of their waste responsibly in council provided litter and recycling bins or take their waste home. Events such as food, wine and jazz festivals common in the region concentrate waste generated.

The region's beaches and natural environment are second to none and attract high numbers of domestic and international visitors generating additional waste.

Our community values a litter free environment. Littering impacts on the local environment and the region's image as a tourist destination. Cleaning up litter is expensive and significantly impacts council's operating budget.

## The case for change

**There is a real need for us to change the way we manage our waste for the future. A growing population, limited landfill space and increasing costs present a significant challenge but also an opportunity to realise economic and environmental benefits from the waste we produce.**

The amount of household waste being collected is increasing. Councils will need to manage an extra 23.7% or 27,672 tonnes of waste by 2021. This figure is likely to be even higher with rising disposable incomes and increasing consumerism.



Photo: Kimbriki

There is limited landfill capacity across Sydney and the NSW Government has set a target of 75% diversion from landfill by 2021. There are only two landfills in the region; council owned Kimbriki landfill at Terrey Hills and the NSW Government owned Belrose landfill. The Belrose landfill that accepts council collected household garbage is nearly full and will close in November 2014, however the transfer station will remain open. The Kimbriki landfill is not licensed to accept this garbage so without action the only option will be to transport it to landfills or recovery facilities outside the region. Disposing of waste to landfill has environmental impacts. Household garbage has a high organic content from the food waste and as it degrades in landfill it

produces methane gas, one of the most significant contributors to climate change. Reducing the amount of waste generated and increasing reuse and recycling will mean less waste to landfill and less use of energy, water and raw materials.

The cost to dispose to landfill is also increasing, in part due to increases in the NSW Government waste levy, expected to rise from \$107.80 to \$130 a tonne by 2015/16. The way we currently collect household waste makes it hard to improve resource recovery rates and divert waste from landfill so costs will rise as the cost of waste disposal increases.

End of life materials (waste) also have a value if they can be efficiently and effectively treated to recover their resources. Innovative technologies can recover valuable resources from waste and these resources are replacing or supplementing virgin materials used in manufacturing. For example many councils across Sydney use a material resource recovery facility to mechanically sort mixed recyclables to recover steel, aluminium, paper and various plastics.

Food and garden waste, the largest part of household garbage, are recoverable to make high grade compost if they are collected separately from garbage. Household collections that collect food waste with garden waste have been introduced by Penrith Council and several regional NSW councils in conjunction with resource recovery facilities and the development of markets for the compost. Recovering food and garden waste makes good environmental and economic sense and will increase landfill capacity for future generations.

Improved waste management will improve our sustainability and reduce our environmental impact and carbon footprint. Waste can either continue to be harmful to the environment in landfill, or a valuable recovered resource – the choice is ours.



4

Too Good To Waste

SHOROC

## Ready for the future

Manly, Mosman, Pittwater and Warringah councils have a strong history of collaboration and are well placed for the future.

We are well progressed in the plan to introduce new regional resource recovery facilities and a new household waste collection system in the coming years. This regional waste solution is the centrepiece of this strategy and will enable the councils to sustainably manage the region's waste and recover its valuable resources for many years to come.

More planning is also needed if we are to produce less waste, reuse and do better at recycling. Decisions made now will have a major impact on our waste in the future.

## What is planned?

### SUSTAINABLE INFRASTRUCTURE SOLUTIONS

The councils strategically formed Kimbriki Environmental Enterprises Pty Ltd (KEE) in 2009 to operate the Terrey Hills Kimbriki Landfill and Resource Recovery Centre sustainably. KEE has researched and analysed the best way to efficiently and effectively maximise the recovery of resources from the region's waste while minimising the environmental impact. Resource recovery will be maximised through:

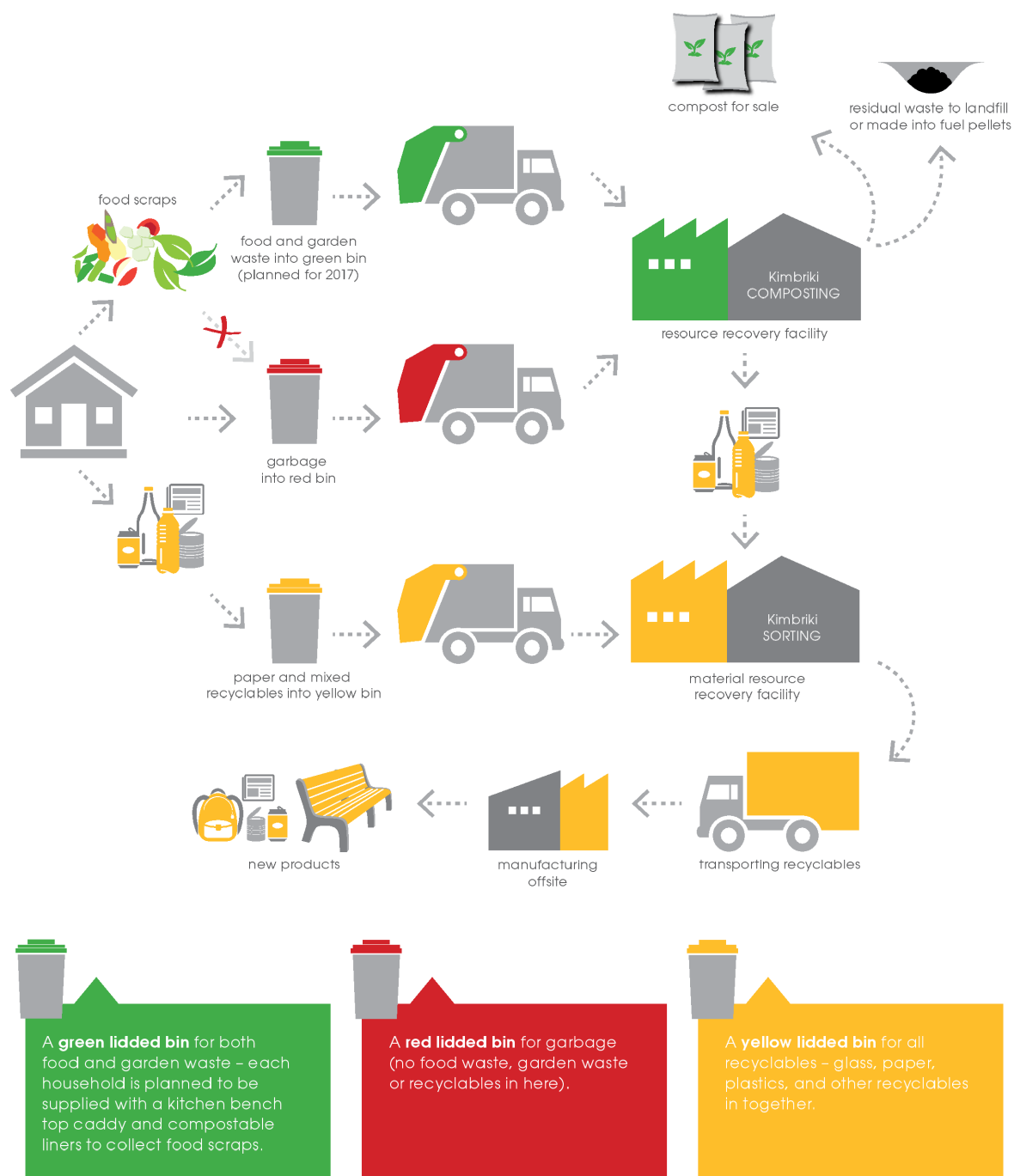
- A **landfill resource recovery facility** to sort and recover resources from commercial and household waste received at the Kimbriki site for landfilling – currently anticipated to be operational by the end of 2016.
- An enclosed **materials recovery facility** to sort mixed recyclable materials collected from households for final processing offsite and resale – currently anticipated to be operational by 2017.
- An enclosed **resource recovery facility** to process food and garden waste collected from households into high grade compost for sale, as well as process garbage collected from the kerbside to recover any further resources. Any remaining garbage would be made inert and disposed to Kimbriki's landfill – currently anticipated to be operational by 2017.

Planning is well progressed and the new infrastructure is anticipated to be in place in 2017. All household waste collected by councils will be processed to recover valuable resources, avoiding the need to transport over 51,000 tonnes of garbage to a landfill outside the region each year. Resources will also be recovered from household clean-ups and other material delivered to Kimbriki by residents and business that is currently disposed to landfill. Ancillary infrastructure is also planned to support these facilities, with landfill gas capture for power generation also investigated. We anticipate that with this new regional infrastructure the region will contribute to the NSW Government's target of 75% diversion of waste from landfill by 2021.

PRIORITY	KEY ACTIONS TO 2017 – KIMBRIKI ENVIRONMENTAL ENTERPRISES PTY LTD
Increase resource recovery and sustainably manage waste now and for the long term at Kimbriki Resource Recovery Centre	<ul style="list-style-type: none"> <li>• Continue to recover resources and manage waste using the existing Kimbriki infrastructure</li> <li>• Maximise resource recovery through: <ul style="list-style-type: none"> <li>• A landfill resource recovery facility to improve resource recovery from commercial and household dropped off waste prior landfilling</li> <li>• A materials recovery facility to maximise material recovery from kerbside recycling</li> <li>• A resource recovery facility to maximise organic recovery from kerbside food and garden waste and ensure any residues to landfill are stabilised to minimise potential greenhouse gas emissions</li> </ul> </li> <li>• Investigate feasibility of recovering refuse derived fuel from processed waste</li> <li>• Investigate potential for landfill gas to be used for power generation</li> <li>• Upgrade ancillary infrastructure including internal roadways, weighbridge and parking facilities to support new infrastructure</li> <li>• Advocate to state and federal governments and industry for the development of stable markets for recovered resources</li> <li>• Deliver a communications plan for the Kimbriki Resource Recovery Centre</li> <li>• Investigate demand for polystyrene recycling</li> </ul>



## A planned sustainable waste and resource recovery solution for the region – anticipated for 2017



## What is planned?

### MAXIMISE RESOURCE RECOVERY FROM HOUSEHOLD WASTE

The other key component of the regional waste solution is the common household waste collection system. Councils have researched and evaluated a range of options to reduce the amount of household waste going to landfill. Planning for the new collection system is progressing and the new system will commence once the resource recovery infrastructure is operational at Kimbriki – anticipated by 2017.

With the planned regional household waste collection system each residence has three bin types: a recycling bin, a food and garden waste bin and a garbage bin with flexible options for bin size and collection frequencies to cater for different household needs.

Householders putting waste in the right bin will be key to recovering wasted resources and reducing landfill. Councils will be working hard to help householders understand and use the new system when it is introduced.



Photo: Kimbriki

PRIORITY	KEY ACTIONS TO 2017 – COUNCILS AND SHOROC
Implement a regional household waste collection system to improve recycling and recover food waste that meets community needs	<ul style="list-style-type: none"> <li>Establish a new regional three bin household kerbside collection system that meets community needs, maximises resource recovery, and aligns with the planned Kimbriki resource recovery infrastructure</li> <li>Engage the community to raise awareness of the new household waste collection system</li> <li>Implement a behaviour change program to maximise recovery of food and garden waste, recycling and minimise contamination</li> <li>Investigate appropriate business models for efficient delivery of waste services</li> <li>Undertake kerbside audits of all waste streams to monitor performance of new system</li> </ul>



Photos: Kimbriki

### Did you know?

- Recycling one glass bottle saves enough energy to run a computer for 25 minutes.
- It takes 125 plastic milk bottles to make a 140 litre wheelie bin.
- We throw away 20% of the food we buy – 1 out of every 5 bags of groceries.

## What else should we plan for?



Photos: Kimbriki

### PRODUCE LESS WASTE

We can try to use fewer materials or use materials more efficiently to keep them out of the waste stream for as long as possible. If we don't generate the waste, there's no need to spend money to manage and dispose of it and our environmental footprint will reduce.

Tackling waste generation is difficult as it affects our way of life. Making decisions when purchasing, avoiding packaging, home composting food scraps, donating goods to charity, repairing products and extending their life, and improving product and packaging design are some examples of generating less waste.

Councils and Kimbriki Resource Recovery Centre's Eco House and Garden work with the community to avoid and reduce waste through educational programs. For example *Love Food Hate Waste* helps people make better purchasing decisions, improve food storage techniques and use leftovers. Councils can also lobby state and federal governments and industry on behalf of their communities, for example, for better environmental design of products and packaging and better product lifespan responsibility.

PRIORITY	KEY ACTIONS TO 2017
Engage the community to encourage behaviour change to avoid and reduce waste	<ul style="list-style-type: none"> <li>Engage with community to produce less waste by delivering a range of behavioural change programs to householders (councils and SHOROC)</li> <li>Kimbriki Eco House and Garden, Manly Environment Centre and Coastal Environment Centre and councils to promote home and community composting or other appropriate approaches to reduce food and garden waste (councils, Kimbriki and SHOROC)</li> <li>Promote regional waste to art and waste creative activities (councils, Kimbriki and SHOROC)</li> <li>Develop regional school resources on waste avoidance to assist council school initiatives (SHOROC)</li> <li>Facilitate greater donation of unwanted food and goods and maximise opportunities for reuse or repair of goods (councils and SHOROC)</li> <li>Advocate to state and federal governments for major campaigns on: avoid and reduce; smart shopping and smart consumption (SHOROC)</li> </ul>
Advocate for greater producer responsibility	<ul style="list-style-type: none"> <li>Work with state and federal governments to advocate that producers of products take greater responsibility for managing the environmental impact of their products throughout their life cycle (SHOROC)</li> </ul>
Work with NSW and Australian Governments and industry associations to facilitate industry behaviour change to avoid and reduce waste	<ul style="list-style-type: none"> <li>Ensure proper design of multi-unit dwellings' waste infrastructure to accommodate waste and recycling source separation and collection</li> <li>Advocate to increase implementation of and accountability for waste management plans for all development types (SHOROC)</li> </ul>

## INCREASE RECYCLING

### Households

Recycling has become a subconscious routine for many people and for others it's an inconvenience. To engage in recycling people need to connect emotionally with the need to recycle. There are also misconceptions about what can be recycled and what condition it needs to be in.

About 65% of household garbage is potentially recyclable including food waste. Householders in apartments sometimes face additional barriers to recycling when there are insufficient or poor recycling facilities available. Recyclables are also found in household clean up waste and while metals are sometimes collected separately, other recyclables such as timber, mattresses and textiles could also be recovered.

The NSW Government and councils want to increase the recycling rate for household waste to 70% by 2021

compared to a regional baseline of 54% in 2011. Changing recycling behaviours of householders and making the new collection system work well for recycling food waste will be vital to make this happen. Councils will engage with the community about what's in their waste and ways to maximise recycling.

### Business

Businesses are responsible for their own waste and use private companies for waste collection and disposal. However, Warringah Council provides commercial kerbside waste and recycling service to some commercial premises.

Councils can work with other levels of government to improve recycling practices and infrastructure, particularly in small and medium sized business. Councils can also make a difference through their policies and planning.

PRIORITY	KEY ACTIONS TO 2017
Engage the community to increase kerbside recycling and decrease contamination	<ul style="list-style-type: none"> <li>• Develop regional educational resources for councils to engage the community to increase understanding of what is recyclable and what happens to recyclables</li> <li>• Promote householder behaviour change to decrease recyclables in the garbage bin and minimise contamination in recycling bins (councils, KEE and SHOROC)</li> <li>• Investigate schemes to decrease the volume and increase reuse and recycling of kerbside bulky clean-up collections prior to collection (councils and SHOROC)</li> <li>• Continue to incentivise recycling over disposal (councils)</li> </ul>
Work with state and federal governments and industry associations to facilitate improved recycling practices and recycling infrastructure in businesses	<ul style="list-style-type: none"> <li>• Work with local chambers of commerce and other organisations to increase social and corporate responsibility for better waste management amongst business (councils and SHOROC)</li> <li>• Advocate to state and federal governments for the waste industry to promote business recycling (SHOROC)</li> </ul>
Ensure councils' policies and processes support sustainable waste solutions for business	<ul style="list-style-type: none"> <li>• Increase compliance with councils' Waste Not Development Control Plans (councils)</li> <li>• Strengthen councils' policies and practices to support waste and recycling solutions in commercial premises (councils)</li> <li>• Advocate to NSW Government for inclusion of waste avoidance and resource recovery initiatives in significant developments (SHOROC)</li> <li>• Review DA processes and compliance with building plans in regards to construction and demolition waste and strengthen internal council processes and accountabilities where required (councils)</li> <li>• Promote increased recycling at commercial and industrial premises and building sites (councils)</li> </ul>



## What else should we plan for?

### MAKE DISPOSAL OF PROBLEM WASTES EASIER

Wastes such as fluorescent lights, paints, household chemicals, smoke detectors, batteries, gas bottles, asbestos and motor oils contain potentially hazardous materials that can harm human health and the environment. These wastes also contaminate household waste and recycling making it harder and more expensive to recover resources.

Some problem wastes are captured by product stewardship schemes such as the National TV and Computer Product Stewardship Scheme for electronic waste or the FluoroCycle scheme for fluorescent lighting tubes that take responsibility for their products at the end of their life. However, access to these schemes is often facilitated by councils.

The EPA in partnership with councils periodically collects problem wastes through the *Household Chemical CleanOut Program*. Main wastes collected during the two regional events in 2013 included paint, gas cylinders and batteries. However, accessing this service is difficult for some residents and it is sometimes oversubscribed.

Problem wastes need to be separated from household waste and recycling, managed with care and recycled appropriately. While Kimbriki and Belrose Resource Recovery Centres do accept some problem wastes, the infrastructure and knowledge for managing problem wastes across the region is sparse.

Councils play a role in facilitating community access to collection schemes. Councils can also engage their communities about the correct disposal methods and help minimise the contamination of household waste and recycling.

### KEEP PUBLIC PLACES CLEAN

#### Reduce illegal dumping

Our councils are responsible for regulating and cleaning up after people illegally dump waste from, for example, households, construction and demolition sites (including asbestos) and gardens. This can take place along roads, in bushland, around residential units, litter bins and charitable recyclers. Illegal dumping can pollute the environment, is potentially dangerous to human health and wildlife and affects local amenity.

There is little information about illegal dumping in the region as councils have concentrated on clean-up and it is difficult to identify and prosecute perpetrators. It is also expensive for councils to clean-up and enforce. The rate of illegal dumping is likely to increase as landfill disposal fees increase and housing density increases.

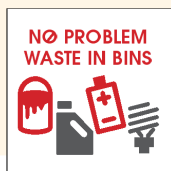
For councils to combat illegal dumping a coordinated effort will be needed to make it harder to dump (eg lighting, barriers); increase the risk of getting caught; make legal disposal easier and remove excuses by raising the community's awareness of their responsibilities. The community also plays an important role in identifying illegal dumping hot spots and reporting illegal dumping incidents.

The NSW Government has developed a strategy to combat illegal dumping and has set a target of reducing illegal dumping in Sydney by 30% compared with 2010 by 2016.



Problem waste

PRIORITY	KEY ACTIONS TO 2017
Engage with householders to correctly dispose of problem wastes	<ul style="list-style-type: none"> <li>Engage with householders on the correct disposal of problem wastes and minimise problem waste contamination in household waste and recycling (councils, KEE and SHOROC)</li> <li>Facilitate access to collection points for problem wastes (councils and SHOROC)</li> <li>Facilitate better regional coverage and access to EPA's Household Chemical CleanOut Program (SHOROC)</li> <li>Advocate to state and federal governments and industry for Sydney and state-wide solutions to problem waste collection and facilitate the take back of problem wastes at retailers (SHOROC)</li> <li>Advocate to state and federal governments and industry for extended producer responsibility (SHOROC)</li> <li>Investigate methods for recovering problem wastes from council clean-ups (councils and SHOROC)</li> </ul>



## Reduce litter

Litter, particularly visible on our beaches and waterways, can damage wild life and marine life, vegetation and human health and pollute waterways. Overflowing bins, mailboxes and trailers also contribute to littering. Litter often becomes mobile, travelling in the wind or water often for long distances. Studies have shown that litter breeds litter and a clean site is more likely to stay clean longer.

Councils provide and maintain litter and recycling bins to help us dispose of our waste responsibly. This infrastructure is stretched at peak visitor periods over summer and major celebrations and events.

Managing litter is expensive with the costs of clean up impacting on council rates and detracting from other services. Apart from providing bins, councils have a role in educating the community and visitors about the effects of litter. Councils also enforce litter laws that reinforce these messages. The community also contributes by, for example, participating in clean-up campaigns and bush care initiatives, and by business owners maintaining the areas outside their premises.

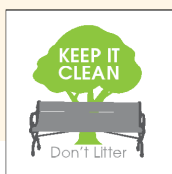


Photo: Beachwatch NSW

Litter is becoming a focus at national and state level. The NSW Government has set a target of reducing litter by 40% compared to 2011 levels by 2016.

***Did you know that 95% of the litter on our beaches comes from our streets, down street drains and into stormwater?***

PRIORITY	KEY ACTIONS TO 2017
Improve amenity and reduce the environmental impact of illegal dumping	<ul style="list-style-type: none"> <li>Investigate the extent of illegal dumping in the region and establish a reporting and monitoring system (councils and SHOROC)</li> <li>Work to change public perceptions that it is acceptable to dump household items (councils and SHOROC)</li> <li>Increase awareness of the impacts of illegal dumping and regulations (councils)</li> <li>Undertake a regional illegal dumping campaign (SHOROC)</li> <li>Investigate and implement programs to encourage the appropriate disposal of typically dumped problem and hazardous wastes (councils)</li> <li>Control and manage access to dumping hotspots to reduce illegal dumping (councils)</li> </ul>
Reduce the incidence of littering through preventative measures at litter hotspots	<ul style="list-style-type: none"> <li>Engage with the community to reduce the rate of littering/windblown material from overflowing bins, mail boxes and vehicles (councils)</li> <li>Investigate marine litter prevention initiatives (SHOROC)</li> <li>Undertake education and awareness campaigns to reduce littering (councils)</li> <li>Undertake a regional anti-litter campaign (SHOROC)</li> </ul>
Continue to clean up existing litter and maintain public places to improve amenity and the environment	<ul style="list-style-type: none"> <li>Work with local community and sporting groups, schools and business in litter and clean up campaigns and to maintain the area around their businesses and neighbourhoods free of litter (councils)</li> <li>Review litter and recycling bins to optimise placement and frequency of use (councils)</li> <li>Investigate how best to measure the extent of littering across the region (councils and SHOROC)</li> <li>Ensure commercial premises take responsibility for waste and recycling generated by their business (councils)</li> </ul>



## Where to from here?

Manly, Mosman, Pittwater and Warringah councils are planning to shape the future where waste is no longer a burden but a resource. Innovative resource recovery infrastructure is being planned to manage the region's waste sustainably at Kimbriki. A new household kerbside waste collection system is also being planned to complement these facilities. However, it is the community's support and action that will make this happen. A change of behaviour could see all of us waste less, and recycle more. Implementation plans will be prepared for the actions and once the strategy is finalised the actions will be incorporated into councils' policies and strategies.

Progress on performance and delivery against agreed targets will be measured and reported to SHOROC, the councils and the NSW EPA through annual progress reports and action plans. The strategy will be reviewed and updated in 2016 and actions evaluated after 30 June 2017.

## Funding the Strategy

Strategy development has been supported by the NSW Environment Protection Authority with funding from the waste levy. Strategy implementation will be supported by the Domestic Waste Management Charge and the *Waste Less, Recycle More* initiative, a five-year \$465.7 million program to transform waste and recycling in NSW. Some actions will be funded dependent on contestable grant funding from the *Waste Less Recycle More* initiative.

Printed on recycled paper containing 100% post consumer waste.

## Councils helping community to do their part



**50,000** tonnes going to **LANDFILL** each year



equivalent  
= to



SAVING OUR



ENVIRONMENT



AND MONEY



TO FIND OUT MORE GO TO

**SHOROC.COM**



## Outcomes of community consultation on draft Regional Waste Avoidance and Resource Recovery Strategy



This paper presents the outcomes from the community engagement on the draft Regional Waste Avoidance and Resource Recovery Strategy for Mosman, Manly, Pittwater and Warringah that was held from 15 August to 12 September 2014 and its impact on finalising the strategy.

The objectives of *Too Good to Waste* Community Engagement Plan were to:

- ☐ Raise awareness that a Regional Waste Strategy is being developed for Mosman, Manly, Pittwater and Warringah Councils and encourage input to strategy development
- ☐ Create ownership for councils and community of the strategy and implementation of actions in the future
- ☐ Raise awareness of how the waste management system works and the pivotal role that community plays in effective and efficient resource recovery

### Consultation process overview

The draft strategy was released jointly by the Hon. Rob Stokes MP and SHOROC President Cr. Jacqui Townsend on Friday 15 August at Kimbriki Eco-House and Gardens in the presence of Mayors, Councillors, Council staff, Kimbriki Board, EPA and others.

Four weeks of community consultation was undertaken ending on 12 September.

Community engagement was undertaken coordinated by SHOROC using a range of engagement methods (Table 1) and media products with opportunities for community feedback provided via group and one on one meetings, online survey, email, mail, phone or social media, with the majority of comments received via an online survey (50 respondents). Table 2 presents an overview of strategy outputs used in the consultation.

### Feedback received and recommended changes to the strategy

The draft strategy received positive support from the community (Attachment A: Feedback on consultation on *Too Good to Waste*) including positive comments on the tools used to engage such as the infographic.

No comments were received on the strategy's vision or range of focus areas chosen for the strategy.

The majority of the comments received were of high quality and related directly to the broad scale actions in the draft strategy. Many suggestions were at activity level and are captured in actions already included in the Strategy so will be considered in the preparation of implementation plans for each action.

The quantity of comments received does not warrant an individualised council level reporting approach to feedback.

The comments with duplication removed have been grouped around the focus areas of the strategy (Table 3). Those issues with the most comments included:

- Reuse/recycling of clean up waste
- Increase awareness of what Kimbriki does
- Engage better with households on what can be recycled and incentivise recycling over disposal