

**West's Road RDF & Waste Management  
Community Reference Group  
AOC  
32<sup>nd</sup> Meeting  
Accepted Notes  
25 October 2018  
Conference Rooms C & D**

**Present:**

Bruce Turner	- Independent Chair
Cr Peter Maynard	- Councillor (Iramoo Ward), Wyndham City Council
Caroline Lavoie	- Community representative
Harry Van Moorst	- Environment group representative (WREC) – outgoing member
Karen Hucker	- Community representative
Kimi Pellosis	- Community representative
Jacqui Scott	- Community representative – outgoing member
Julian Menegazzo	- Adjoining landowner representative
Lisa Field	- Community representative
Lindsay Swinden	- Community representative
Mason Asadi	- Environment group representative (Werribee River Ass.) – incoming member
Paul Von Harder	- Community representative – incoming member
Michelle Lee	- Planner, Metropolitan Waste and Resource Recovery Group (MWRRG)
Stephen Thorpe	- Director City Operations, Wyndham City Council
Simon Clay	- Manager Refuse Disposal Facility, Wyndham City Council
Liza McColl	- Business Analyst Refuse Disposal Facility, Wyndham City Council

**Guests**

Hayley Jarvis	- Team Leader Waste Policy
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**Apologies/ absent:**

Cr Walter Villagonzalo	- Councillor (Chaffey Ward), Wyndham City Council
Cr Tony Hooper	- Councillor (Harrison Ward), Wyndham City Council
Karthik Viswanathan	- Community representative – incoming member

**1. Welcome and Introductions**

No conflicts of interest were declared.

Bruce advised that Council had appointed Paul Von Harder and Karthikeyan Viswanathan (Karthik) as community representatives and Mason Asadi as the environmental group representative on behalf of the Werribee River Association to the CRG. Bruce welcomed the two incoming members present at tonight's meeting to the group and gave them an opportunity to introduce themselves.

Bruce advised that Harry Van Moorst and Jacqui Scott's membership term would conclude after tonight's meeting. Bruce thanked Harry and Jacqui for their considerable contribution over the years. Harry was one of the original members. Jacqui said she was sad to be leaving the CRG, especially at the current time where there is a potential for positive change. Jacqui noted that she was pleased to see the group's ideas coming to fruition.

Liza advised the group that Council also made the following changes to the CRG's Terms of Reference:

- Members need to let the Chair and Liza know if they are unable to attend a CRG meeting. A person who does not let Bruce know that they are going to be absent for two consecutive meetings will lose their place on the committee.
- A new process for filling pre-term vacancies.
- The ability for 'guests' to be invited to the meeting. Ideas for guests can be raised by CRG members at meetings or sent directly to the Chair. All guest must be approved by the Chair/Council.

**Action M32-1.1 Liza to distribute adopted revised Terms of Reference to CRG members.**

## 2. Notes and actions from the previous meeting

The notes from the 31st meeting, circulated prior to the meeting, were accepted and will be published on Council's website.

An 'action tracker' document with the status of outstanding actions from previous meetings was handed out. Bruce ran through outstanding actions:

ONGOING ACTIONS – FROM MEETINGS PRIOR TO 30 AUGUST 2018		
Action M24-5.2 And M26-9.1	<i>Council to invite Lend Lease to a future meeting of the CRG to discuss how best to represent the interests of future residents of the Harpley Estate in the CRG process (and wider community engagement).</i>	Pending. Lend Lease have been invited to December meeting but yet to receive confirmation. Stephen recently met with Tony Cole from Lend Lease and he confirmed that there have been staff changes. Tony indicated that they are definitely interested in meeting with the CRG. Stephen suggested that Liza contact Tony Cole at Lend Lease.
Action M24-5.3	<i>Council to pursue opportunities for screen planting along the Princes Freeway (in the road reserve in collaboration with VicRoads and/or on private land) to improve the view from the freeway.</i>	Pending. Site investigations commenced. Underground services (high pressure oil pipeline) present may influence/constrain type of trees that can be used. Not a current priority due to other projects and lack of resources.
Action M27-7.2	<i>Simon to circulate the auditor's report on the phytocap when this is available, before it is submitted to EPA for approval.</i>	<p>Pending. The auditor has reviewed the phytocap design documents. The auditor has requested that Council prepare and submit a Soil Acceptance Protocol because the phytocap will involve accepting approximately 500,000m<sup>2</sup> of soil. The auditor wants to ensure the protocol minimises the risk of acceptance of any contaminated material and that it meets EPA fill criteria.</p> <p>Karen noted that she would have thought that the site would have already had a soil acceptance protocol for the material that is used for daily cover. Simon advised that the daily cover material comes from the quarry.</p>

		As it is virgin material from the same source it is not tested. Simon further advised that is already a soil acceptance protocol for materials accepted for other uses, which will be modified for this purpose.
Action M27-8.1	<i>Simon to discuss with Council's waste strategy team the potential to initiate a dialogue around the opportunity for waste management services for businesses in Wyndham.</i>	Pending. Harry indicated WREC would be able to assist. It was agreed the best time to initiate would be towards the end of the current contract for kerbside collection.
Action M28-3.1-1	<i>Liza to circulate a copy of the Wyndham Vale Buffer Study and odour modelling information to all CRG members.</i>	Pending. Odour information to be updated following works approval.
Action M29-3.1	<i>Information on the recycling situation to be circulated to CRG members.</i>	Completed.
Action M29-3.2	<i>Topic of the future of the tip shop to remain open for further discussion.</i>	To be made into a standing Agenda Item (and removed from this list)
Action M29-3.3	<i>Simon to circulate report on waste baling technology after it has been fully reviewed.</i>	Pending. To be discussed today at Agenda item 6.
Action M29-8.1	<i>Council to document CRG's role and process for odour complaints including EPA's expectations regarding reporting.</i>	Pending. To be discussed today in Agenda Item 8 – RDF Update.
<b>NEW ACTIONS FROM LAST MEETING – 30 AUGUST 2018</b>		
Action M31-2.1	<i>Liza to advise Lend Lease of the CRG's interest in discussing the potential use of waste heat from the RDF in the Harpley Estate.</i>	Pending. Lend Lease have been invited in writing to attend the December meeting.
Action M31-2.2	<i>Karen to follow up her old notes to find the original reference in relation to the CRG's role and responsibility for the review of complaints.</i>	Completed. To be discussed today at Agenda Item 8 – RDF Update.
Action M31-2.3	<i>Liza to review all statutory documentation and previous meeting notes.</i>	Completed. To be discussed today at Agenda Item 8 – RDF Update.
Action M31-2.4	<i>Liza to send CRG copy of the planning permit for the RDF.</i>	Completed. Copy distributed by Karen Hucker to CRG members on 25 October 2018.
Action M31-3.1	<i>Council officers to pass the feedback about the need for targeted education for migrants onto Council's Waste Education Team.</i>	Completed. Minutes distributed to Council's Waste Education Team.
Action M31-3.2	<i>Hayley Jarvis, Team Leader Waste Policy and Education to be invited to the next CRG meeting (and ongoing) to discuss education activities/information on household bin usage to promote correct recycling behaviours.</i>	Complete. Hayley to attend today's meeting and future meetings for the first hour of each meeting.  Refer Agenda Item 4.
Action M31-4.2	<i>Lisa to send CRG members with links</i>	Completed. Link to free-cycle website

	<i>to free-cycle website.</i>	in these meeting,
Action M31-7.1	<i>Council to request information from LMS on the efficiency of electricity generation through gas combustion at the RDF.</i>	Not completed.

### 3. Members' Report

#### Karen Hucker

Karen Hucker noted that she had an interesting conversation with a fellow resident who had just realised that they only received one tip token per year. Karen was surprised by the resistance to her suggestion that the person sort the materials and only pay for items that go to landfill. This prompted a discussion about building project waste which is not accepted in the at-call hard waste collection service. Many of these items can actually be re-used and recycled.

Caroline recalled her need for a climbing frame in the garden and suggested that many items of building project waste would have been suitable for this. Michelle noted that many tip shops have a spot for building waste items that can be re-used. There are a number of small businesses that trade in recycling building materials.

There was general agreement that these items would be ideal to put on the freecycle website and that it would be good to promote this website. The website for the Werribee Freecycle is <https://groups.freecycle.org/group/WerribeeAU/posts/all>

**Action M32-3.1 Hayley to consider including information about the freecycle groups/service in the Wyndham Waste Guide.**

#### Caroline Lavoie

Caroline suggested that the Tip Shop could be run through a Work for the Dole project or another Not-for-Profit group. She noted that the Department of Education offers insurance. She noted that the lack of public transport to the site may be an impediment for some people.

Hayley noted that Council currently partner with Envision to recycle the bikes left at the Resale Shed. For further information about Envision see <https://envision.org.au/recycling/>

#### Lisa Field

Lisa reported she had attended the Waste Expo and the Waste and Litter Conference in Bendigo.

Lisa noted her support for the removal of food and organic waste from municipal solid waste. She acknowledged that it is very hard to engage with businesses about changes to their food waste behaviours. She would like to see a ban of organics from the yellow (residual waste) bin to try and get food waste into the green bin.

Simon indicated his belief that the kitchen caddies provided for people to transfer their food waste to the green bin were the best way to go. Simon noted however that the company that currently collects the green bins does not accept compostable bags (which other councils provide with kitchen caddies for food waste).



Stephen noted that Wyndham is only one of 6 councils in Melbourne to accept food waste in their green waste bin. Lisa suggested a trial in a smaller area. Simon agreed that a trial is the best way to introduce this change. Hayley and Harry noted that Wyndham was involved in a trial 'Food into Green' Project. A link to the results of the trial can be found at <https://www.mwrrg.vic.gov.au/assets/resource-files/FOGO-North-West-trial-new.pdf>

Michelle noted that the MWRRG had developed a guide for local government on introducing a kerbside food and garden organics collection service. The guide recommends a smaller trial is undertaken in the first instance. This guide can be found at <https://www.mwrrg.vic.gov.au/waste/organics/food-organics-and-garden-organics-fogo/>

Jacqui noted that Queensland was going to provide a smaller bin for food waste and only collect it every two weeks or a month.

Lisa noted that Loddon Malley Waste and Resource Recovery Group had developed an interesting waste app to help residents make quick and simple waste and recycling decisions with the aim to reduce contamination and increase recycling levels. Further information about the app is at <https://lmwrrg.vic.gov.au/loddon-mallee-waste-info-app/>

#### **Kimi Pellosis**

Kimi asked what information Council had available for children – like a 'landfill for kids' link on its website. Hayley noted that Council has a Recycling Detectives Program (schools activity book) targeted for kids. She said the book could be put on Council's website and be available at the Children's Picnic.

***Action M32-3.1 Hayley to look at whether it is possible to add the Recycling Detectives Program to Council's website.***

## **4. Strategic waste management and resource recovery**

### **a. Update From Hayley Jarvis, Team Leader Waste Strategy**

#### **Bin Lid Replacement Program**

Hayley Jarvis gave an overview and examples of the bin tags that are given out with a new or replaced bin. The tags are attached to the handle of a new bin. The tags have Frequency Asked Questions and link to Council's website and images about what you can 'feed your bin'. Copies of the bins tags are provided as an attachment.

Paul Von Harder asked what happens to the bins and bin lids that are replaced. Hayley advised that she was very confident that these were recycled and turned into new bins.

***Action M32-4.1 Hayley/Simon to report back to the CRG on whether the old bins and bins lids are recycled.***

#### **Bin Inspection Program**

Hayley also gave a presentation on Council's Bin Inspection Program. A copy of the presentation is attached. Hayley advised that the Annual Bin Inspection Program is funded through SKM, through our recycling processing contract. Approximately 12,000 bins are inspected to identify the level of contamination (on a rating scale of 1 to 4) and how full the bins are (to help inform the decision about moving to a smaller bin). The first round of inspections of 2500 bins has commenced. Additional bins

will be inspected in February 2019. Preliminary results have found that 68.5% of all bins showed some sign of contamination. 54.6% had minor contamination, 22.5% significant and 22.5% moderate. The contamination represents about 10% by weight, but a lot of the contamination is very light, so this is quite a high level of contamination by volume.

The main contaminants were soft plastics, nappies, bagged recyclables, paper towels, tissues and wipes. They were also surprised by the amount of clothes in the recycled clothing bags given out by charity groups. There appears to be some miscommunication or confusion about how this system works. Much of the contaminated materials also had the potential for damage to the collection vehicles. The findings support the view that there is confusion about bin lids with separated/sorted rubbish and recyclables found in the wrong bin.

Garbage bins were about 50% full. Recycling bins were about 90% full.

Mason noted that his bin was inspected and he was very surprised to receive a red sticker saying that he was not recycling correctly. Mason noted that he works within the waste industry and is very cognisant of what materials go in which bin. He was confident that there was no contamination in his bin. His red tag did not provide any feedback about what materials were incorrect. Hayley said that she could look into the result for his bin and provide him with further information.

Peter noted that he received calls from residents stating that the bin inspection program is an invasion of privacy. The CRG were supportive of the bin inspection program and did not believe that it was an invasion of privacy.

#### **b. Update on Residual Procurement Project**

Michelle Lee gave a presentation about the Metropolitan Waste and Resource Recovery Group (MWRRG) Advanced Waste Processing Project (formally referred to as the Residual Waste Project). A copy of the presentation is attached. Michelle explained that the MWRRG received funding through the State Government's Sustainability Fund (which is from landfill levies) to prepare a Regional Business Case for the metropolitan region.

The regional business case was released in September 2018. It identifies a way for MWRRG to facilitate the provision of waste services to Councils to meet the State's Waste objectives:

- Reduce landfill
- Increase recovery of food waste
- Increase jobs in resource recovery industries
- Facility infrastructure to plan for growth

Michelle noted that 3 million tonnes is expected to still go to landfill. The State's aim is to continue landfill levels at 2016 rates.

Michelle explained that the current MWRRG procurement model is not appropriate for the provision of services that require significant capital investment and aggregation of waste to be financially viable. The MWRRG is funded to run two new procurement processes involving a series of expressions of interest and the establishment of a 'special purpose vehicle' by the councils. The expected minimum capacity of alternative waste treatment plant is 150,000 tonnes. The current focus is on the south-east region due to the shortage of landfill space in that region. The MWRRG has not yet decided how to package up the other procurements – eg north, north west, west regions.

Michelle noted her view that there are a number of organisations/companies making a 'pre-emptive strike', outside of the MWRRG procurement process. Examples include the Australian Paper processing plant in Gippsland? and the proposed Gasification Plant in Laverton.

THE MWRRG are currently running some qualitative focus groups to better understand community knowledge, perceptions and preferences about waste management. This information will help firm up an education program.

Michelle noted that the procurement process and a broader community engagement program would not commence until after the election.

A copy of the Business Case was distributed to the CRG members with the Agenda for tonight's meeting. The Business Case document (full version and executive summary) and further information about the project can be found at <https://www.mwrrg.vic.gov.au/procurement/advanced-waste-processing/>

## **5. Strategic Planning (standing agenda item)**

Nothing to report

## **6. Advanced Resource Recovery and Alternative Waste Treatment**

Simon reported that he had nearly completed a review of the Waste Baling Feasibility Study. At this stage, the report is still confidential as it contains commercially sensitive information and has not been formally considered by Council.

Simon noted the benefits of baling waste include completely reducing litter, substantially reducing odour from the tip face operation (excepting the older cells) and reducing noise and dust.

Baling will increase the cost of disposal by approximately \$10-\$15 per tonne.

It is unlikely that commercial customers will pay an additional cost for this benefit and they may choose to go to another landfill as the least cost option. The municipal solid waste currently received at the RDF is through existing contracted prices. Council could offer this service in the next landfill services contract but it is not clear whether there would be a willingness to pay. Stephen noted that there is a huge risk that baling would make the RDF the most expensive landfill and the landfill operates in a competitive environment, so pricing and market demand will need to be fully assessed.

Lisa noted that there must be other savings from baling, including infrastructure (eg litter fence) and litter crew. Simon noted that the feasibility study includes a full cost analysis, but he was working through and verifying these figures at the moment.

Simon noted that if Council was going to bale the waste, it made sense to recover resources out of the waste before it is baled and put into landfill. This is also consistent with policy. The major challenge with this is that the recovered materials are likely to be low quality and dirty with a lower market value. It also means that Council would be operating in a completely new market for recovered materials.

Simon noted that there is a real opportunity to get the organics fraction out of the waste in an aerobic digester (producing compost) or an anaerobic process to product methane gas/electricity.

It is estimated that these processes could achieve a 35% reduction in the amount of Municipal Solid Waste going to landfill. This could be an attractive service for Council in terms of meeting its environmental objectives but, again, it is unclear whether customers will be prepared to pay more.

Julian noted his strong support for the implementation of baling at the RDF due to the significant benefits of cutting litter, noise and odour.

Lisa noted her view that it was important for a council to own and operate a landfill. She was wary of Wyndham Council being an early adopter of any untried waste-to-energy (or AWT) technologies.

Karen asked whether we were looking at putting baling, resource recovery and AWT on the existing RDF site. Simon advised that using the existing RDF site would be preferable, if feasible.

Simon explained that the baling facility would need about 1.5ha of land. It would have a designated area to receive waste in an enclosed shed. The waste material would then be sorted to remove organics and metals, and potentially other recyclable materials, with the residual waste being compressed and baled. The bales would be about 2m long by 1.5m wide, either strapped or wrapped in plastic. The bales would be transported to and deposited in the landfill cell. The landfill cell would have to be constructed in the same way as a no-baled landfill cell.

Mason asked whether baled waste would take up less volume in the landfill because the waste would have a more consistent compaction density. Simon advised that the feasibility study suggests a higher compaction rate would be achieved by baling, however discussions with baling machine suppliers suggests that these compaction figures may not always be achievable and would depend upon the composition of the waste.

Harry noted his support for the pre-sorting facility and his view that this was a priority, even without baling or waste-to-energy technologies. Simon noted that a pre-sort, baling and reprocessing facility is likely to take 2-3 years to develop. A waste-to-energy facility is 5-10 years away. It is expected that landfilling will continue to be part of the mix, with some council's continuing to landfill for economic reasons.

Karen noted that many of the European facilities on Council's waste education tour had a capacity of about 300,000 tonnes and asked what size Council is looking at. Council noted that it has investigated a range of technologies and that incineration seems to be the most reliable and proven technology and this seems to need a minimum of 150,000 tonnes, but Council does not have any first proposal or position on waste-to-energy facilities at this time.

Harry shared his view that gasification is the best technology that does not produce emissions. He also believed that smaller, local gasification plants across a region are a better model to a larger regional, incineration-type facility, as the former provide for redundancy in the system and overcome serious planning and transport/ environmental issues. He believes a system without redundancy will go back to using landfill.

Stephen initiated a general, wide ranging discussion of members impressions of the pros and cons of waste-to-energy options. There were no specific conclusions reached. This will be a topic for ongoing discussion.

## 7. Rehabilitation Plan and Update on Rehabilitation Works

A copy of the Rehabilitation Plan was displayed in the meeting for reference. A copy of the Plan is attached. The Plan outlines the proposed timelines for capping and rehabilitation. Simon noted that Council has not historically completed the capping of closed landfill cells in a timely manner. Capping must be done two years after a cell is closed. A landfill cell has an approximate life of two years, so the ideal program would be the construction of a cell in one year and the rehabilitation of a closed cell in the next year.

Simon noted that the capping for cells 1b – 3 will be a phytocap. The phytocap design is expected to be approved by the auditor by the end of 2018. The capping for Cell 4 will be a traditional cap. This cannot commence yet until cell 4a has been re-profiled. The re-profiling is needed because an area of the cell on the side batters was overfilled as discussed at several previous meetings. Some of the waste needs to be removed to reduce the gradient of the side batters to 1:3 and stabilise the slopes. The overall height of the cell will not change. The waste cannot be removed until cell 5a is open. EPA is aware of this rehabilitation program. The design of the capping for cell 5a is nearly finished and will be submitted to the auditor by the end of the year.

Rehabilitation works on both cells 1-3 will be undertaken in 2019.

Julian asked whether there will be odour problems when the old waste is removed during the reprofiling of cell 4a and how long would these works take. Simon advised that the works are likely to take about 2 months; odours are definitely possible and that the works will need to be managed very carefully. Management may include only working under certain weather conditions. Michelle noted that she recently visited a landfill in Victory Road that had huge sprayers for odour deoderiser, when they were cutting out old waste. Simon noted that further consultation with Julian and other neighbours will be necessary. The idea of timing the works to coincide with Julian's household being away was mentioned.

Mason asked whether there were examples of any landfills with completed phytocaps on full cells that were not trials. Simon advised that Hanson had a phytocap of about 7ha that had been there for many years.

**Action M32-7.1 Liza to send Mason a copy of the presentation on phytocaps given to the CRG in 2017 by Dr Melissa Salt from Tonkin Consultants.**

## 8. RDF Update

**Incoming Tonnes and Gas Emissions** - Simon distributed graphs of incoming tonnage received and gas emissions – refer copy attached. The incoming tonnage is down because of the uncertainty created by the works approval process. The total amount of gas is increasing because about 30 new gas wells were installed in an operating cell. This is the first time that this has been done and means that gas is being recovered sooner, which is a good thing.

**Complaints** – none received. Julian noted that the noise and odour had definitely reduced and, overall, he thought that management were doing a good job. Simon noted that the team at the RDF are strongly focused on the performance of the gas extraction system and keeping the tip face as small as possible (currently about 600m<sup>2</sup> – less than allowable 900m<sup>2</sup>).

Bruce drew attention to the information, located and circulated by Karen prior to the meeting, regarding the CRG's statutory roles. The group was reminded that it had agreed to take on the function of the 'Landfill Consultative Committee' which was required by EPA permit WYP1221/07.02 (2013). The purposes of the Landfill Consultative Committee include:

- To review complaints and generally assess compliance with the conditions of all approvals associated with the landfill operation
- To provide comment on any plan submitted to the Responsible Authority for approval and endorsement under this permit.

Furthermore, the approval for construction of Cell 4C sought "a revised procedure (or plan) for investigating community complaints (on odour, dust, litter etc) which have been received by Council...providing a bi-monthly aggregate of all community complaints...to the EPA". In response, Council proposed that officers would report any complaints and the outcome of the investigation as well as any remedial action to the Committee/ CRG.

It was noted that it would be helpful to make the above roles explicit in the CRG's Terms of Reference (next time they are to be revised).

In relation to the more formal reporting of complaints to the CRG, it was proposed that Council reconfigures its existing complaints register from 1 July 2017 to remove complainant details and record: the nature of the complaint, the conditions prevailing at the time, assessment of whether the RDF was the likely cause and, if so, what action was or will be taken. The reconfigured complaints register will be circulated to CRG members for comment.

***Action M32-8.1 Liza and Simon to propose amendments to the CRG's Terms of Reference to make its statutory roles explicit (at such time as the ToR is amended for other reasons or at the annual membership refresh in 2019).***

***Action M32-8.2 Liza and Simon to reconfigure the complaints register back to 1 July 2017 and circulate to the CRG for comment (re format, information captured etc).***

**Non-compliances** – leachate levels 300mm above the lining system. This issue is being managed in consultation with the EPA, and is trending down. The leachate system has recently been modified to take all the leachate to the newly constructed leachate pond in the centre of the site, as opposed to the leachate pond on the eastern boundary of the site – near Julian's house. The leachate pond on the eastern boundary may be converted to a stormwater pond over time.

## **9. RDF Planning Permit - Secondary Consent Amendments**

Liza presented plans for the proposed new, 12 metre high boundary litter fence. The proposed new boundary litter fence is a condition of the works approval. A design has been prepared for a structure to comply with this condition. Liza gave an overview of the proposed design – refer plans attached. The fence is proposed to extend along 1.5km of the eastern and northern boundary of the site for approximately 1.5km, adjacent to cells 4c and 5. Julian asked whether there was still room for the road/fire track on the inside of the property. Liza advised that there is about a 5 metre area between the boundary of the site and the internal road. It is in this location that the fence will be built.

The estimated cost of the litter fence is \$4.75 million. An analysis of the cost of the fence versus the cost of a baling facility will be undertaken.

The members of the CRG agreed that, at face value, it seemed preferable and more sensible to bale the waste and avoid the need for the litter fence in the first place.

In the event, that Council is required to build the litter fence, the CRG endorsed the proposed design of the litter fence. The CRG also endorsed the proposed plans for a plant maintenance shed. The plans will now be submitted to Council's planning department as part of an application for a Secondary Consent amendment to the plan approved as part of Planning Permit WYP1221.07.

## **10. Other business**

No items of other business were discussed.

## **Next meeting**

Thursday 13 December 2018 at 4:30pm-7:00pm



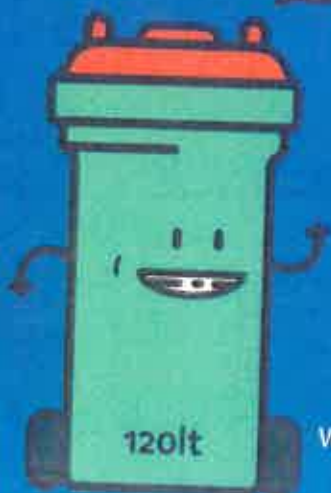
# Introducing the new bin on the block

Please welcome to the family your new 120lt garbage bin and 240lt recycling bin.

To find out what to feed your bins visit:

[www.wyndham.vic.gov.au/recycleright](http://www.wyndham.vic.gov.au/recycleright)

hi!



wyndhamcity  
city coast country

## Tell me more...

### Why is my bin different to my neighbour's?

You might notice that garbage bins in your neighbourhood have yellow lids. These bins are older and in the coming years will be replaced with a red lid bin. We're aiming to begin changing all remaining yellow lid bins by 2020.

### What do I do if I can't fit everything into my red lidded bin?

Did you know that on average almost half of the waste found in garbage bins can be composted? We have reduced the price of our green organics service to just \$75 per year and we also offer discount on worm farms and compost bins.

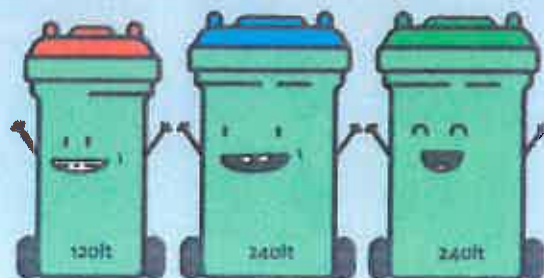
### Why the change to bins?

By introducing a new 120lt red lid garbage bin (previously 140lt) we are consistent with Australian standards and reducing the waste we're sending to landfill.

### For more information contact:

P: 9742 0777 | E: [mail@wyndham.vic.gov.au](mailto:mail@wyndham.vic.gov.au)

Thanks for your help!





# WELL DONE on recycling correctly!



**Paper and Cardboard**



**Glass Bottles and Jars**



**Metal Cans, Foil  
and Aerosols**



**Hard Plastic  
Containers**

Items must be placed loosely into your bin.

For more information visit:  
[www.wyndham.vic.gov.au/recycleright](http://www.wyndham.vic.gov.au/recycleright)  
or call 9742 0777



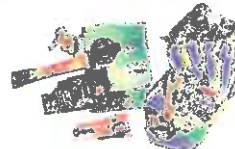
## These items should not be put in your recycling bin.



**Food & Garbage**



**Bagged Recyclables**



**Soft Plastics, Food  
Wrappers & Plastic Bags**



**Polystyrene/ Nappies**

**Other**

These items cause problems at the recycling facility  
and may result in your bin not being collected.

For more information visit:  
[www.wyndham.vic.gov.au/recycleright](http://www.wyndham.vic.gov.au/recycleright)  
or call 9742 0777



# Introducing the new bin on the block



Wyndham City is joining the war on waste! On July 1, 2018 all new garbage bins will have red lids. This change means we are consistent with Australian standards, while also supporting us to achieve our goal of 90% waste diversion from landfill by 2040.

We acknowledge your support in achieving this goal.



## Tell me more...

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You might notice that garbage bins in your neighbourhood have yellow lids. These bins are older and in the coming years will be replaced with a red lid bin. We're aiming to begin changing all remaining yellow lid bins by 2020.

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E: [mail@wyndham.vic.gov.au](mailto:mail@wyndham.vic.gov.au)

W: [www.wyndham.vic.gov.au/recyclerright](http://www.wyndham.vic.gov.au/recyclerright)



# Bin inspection program

Wyndham's War on Waste

# Background

- Processing contract includes allocation for bin inspection program
- Undertaking 12,000 inspections (July – Oct)
- Methodology – rating scale of contamination between 1 & 3, type of contamination, bin fullness
- Still collecting bins
- More important than ever to get recycling right!

# What data are we collecting?

Day	Monday												
Date	2/07/2018	Contamination Ratings: 1 - Significant, 2 - Moderate, 3 - Minor. (NOTE: BLANK = NO CONTAMINATION)											
Suburb	Point Cook	Recycling		Types of Contamination								Garbage	
		Capacity Used	Contamination Rating	Soft Plastics	Garbage/Food	Bagged Recycling	Garden Waste	Polystyrene	Clothing/ Shoes/ Linen/ Textiles	Paper Towel, Tissues, Wipes	Other		Capacity Used
Street Name	House No. / Bin No.											Comment	
SUNNYBANK DR	54	110%	2	Y					Y				110%
SUNNYBANK DR	56	100%	3	Y							Y	BUBBLE WRAP,FOAM	75%
SUNNYBANK DR	58	75%	1	Y		Y						POSTAL BAG	50%
SUNNYBANK DR	62	75%											25%
SUNNYBANK DR	64	75%	1			Y				Y			110%
SUNNYBANK DR	65	100%	3	Y							Y	KETTLE	75%
SUNNYBANK DR	66	75%	1	Y				Y					100%
SUNNYBANK DR	67	75%	3	Y									100%
SUNNYBANK DR	68	75%	1	Y					Y			BEDDING	50%
SUNNYBANK DR	69	25%	2	Y					Y			CLOTHING	25%
SUNNYBANK DR	71	25%	3	Y								RICE BAG	25%
SUNNYBANK DR	73	75%	3			Y						1 BAG OF RECYC	110%
SUNNYBANK DR	75	75%	1	Y		Y					Y	REUSABLE BAG	100%
SUNNYBANK DR	77	75%	3	Y						Y	Y	TISSUES,EAR BUDS	25%
SUNNYBANK DR	85	100%	1			Y						NEW 15C WOOLWORTHS BAGS FULL OF RECYCLABLES	100%
SUNNYBANK DR	87	75%										SPOKE TO RESIDENT	75%



OH NO!



These items should not be put in your recycling bin.



Food & Garbage



Bagged recyclables



Soft Plastics



Garden waste

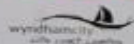
Other

METAL COAT HANGER,  
PRAM, POLYSTYRENE, BELT,  
SOCK, CIGARETTE BUTTS

These items cause problems at the recycling facility and may result in your bin not being collected. Turn over to see what can go into your recycling bin. Remember to keep items loose.

For more information visit:  
[www.wyndham.vic.gov.au/recyclerright](http://www.wyndham.vic.gov.au/recyclerright)  
or call 9742 0777

NOODEN  
FLOORING



TOP JOB!



WELL DONE  
on recycling  
correctly!



Paper and Cardboard



Glass bottles and jars



Metal cans, foil  
and aerosols



Hard plastic  
containers

Items must be placed loosely into your bin.

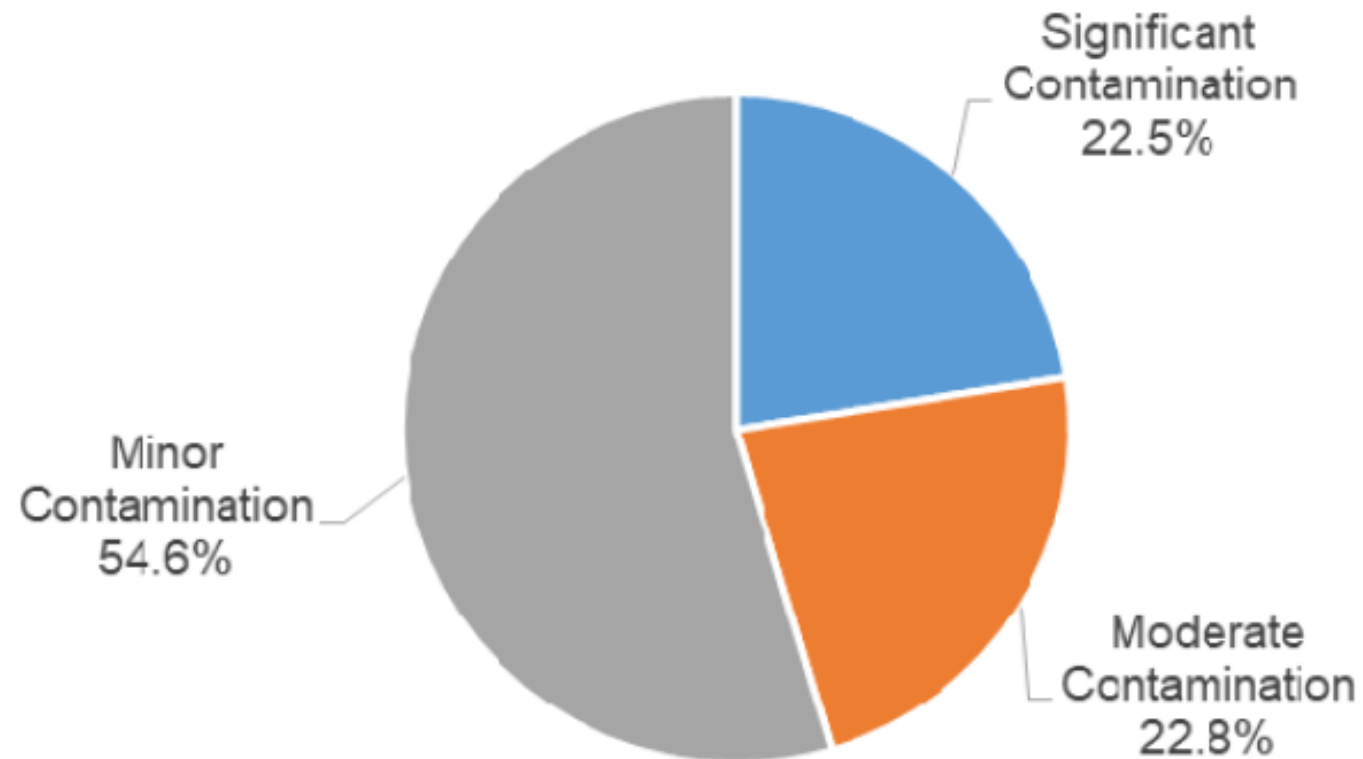
For more information visit:  
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or call 9742 0777

# How are we going?

Date	Day	Collection Area	Suburb	No. of Bins	Contamination Rate
02-Jul-18	Mon	Area 2	Point Cook	405	66.9%
09-Jul-18	Mon	Area 1	Point Cook	403	60.5%
10-Jul-18	Tue	Area 1	Truganina	413	79.4%
13-Jul-18	Fri	Area 1	Werribee	231	69.7%
17-Jul-18	Tue	Area 2	Williams Landing	464	61.6%
18-Jul-18	Wed	Area 2	Tarneit	208	73.6%
20-Jul-18	Fri	Area 2	Manor Lakes	250	65.2%
27-Jul-18	Fri	Area 1	Wyndham Vale	204	78.4%
			Totals	2,578	68.5%

- **31.5% – Top Job – no contamination**

# How bad is it?





# Where are we going wrong?

Contaminant	No. of Bins Containing Item	% of All Bins
Soft Plastics	1086	42.1%
Garbage/Food	166	6.4%
Bagged Recycling	654	25.4%
Garden Waste	62	2.4%
Polystyrene	172	6.7%
Clothing/ Shoes/ Linen/ Textiles	76	2.9%
Paper Towel, Tissues, Wipes	242	9.4%
Other	447	17.3%













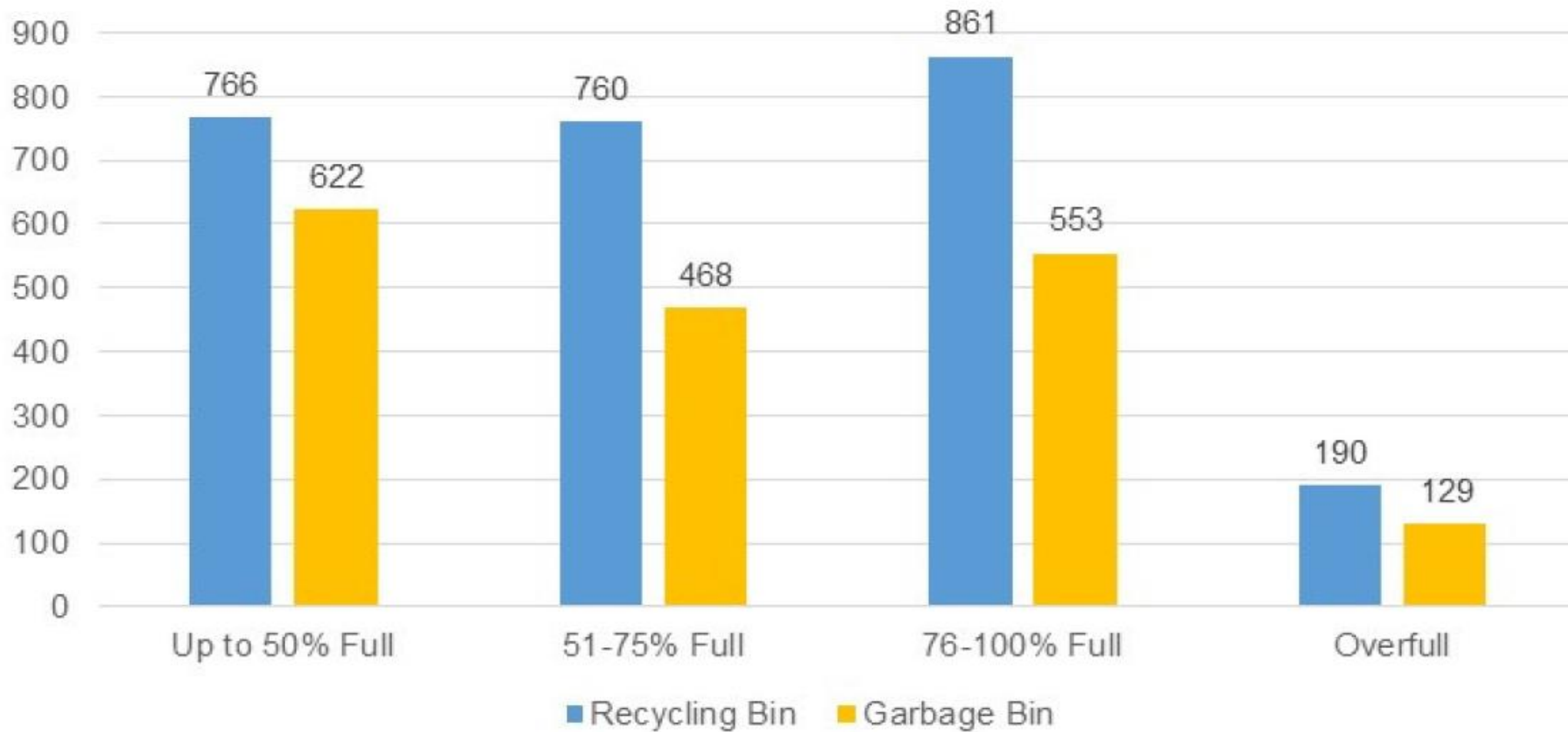








# How full are our bins?





NO 3

PROPERTY OF









How can we improve our recycling?



## General Update

- 800+ red bins have been delivered since July 1
- Tip token reduction – rates notices distributed this week
- Hard waste promotions
- Expansion of Waste Watchers program
- Green bin price reduction implemented



Advanced Waste Processing

# Wyndham CRG

25 Oct 2018



# Today's discussion

- Strategic drivers
- Road to procurement
- Community Involvement



# The vision 2026



Reduce waste sent to landfill



Increase organic waste recovered



Deliver community, environmental & economic benefits



Plan for Melbourne's growing population

# The Regional Business Case

A detailed assessment of advanced waste processing.



Can AWRRT and/or FOGO keep municipal waste to landfill at 2016 levels?



Can AWRRT recover 25% of resources from municipal residual waste collected through collaborate procurement?



Determine an effective method for councils to procure advanced waste infrastructure.

# Findings

## Can reduce Melbourne's reliance on landfill

- ✓ limit municipal solid waste to landfill to 2016 levels
- ✓ achieve the 25% recovery target
- ✓ better environmental and social outcomes

- FOGO only will not achieve targets
- some form of energy recovery will be required
- strong interest from private sector
- councils can achieve greater control of service outcomes
- aggregation of waste will be key to driving investment
- MWRRG is funded to manage two procurements.



# Securing investment

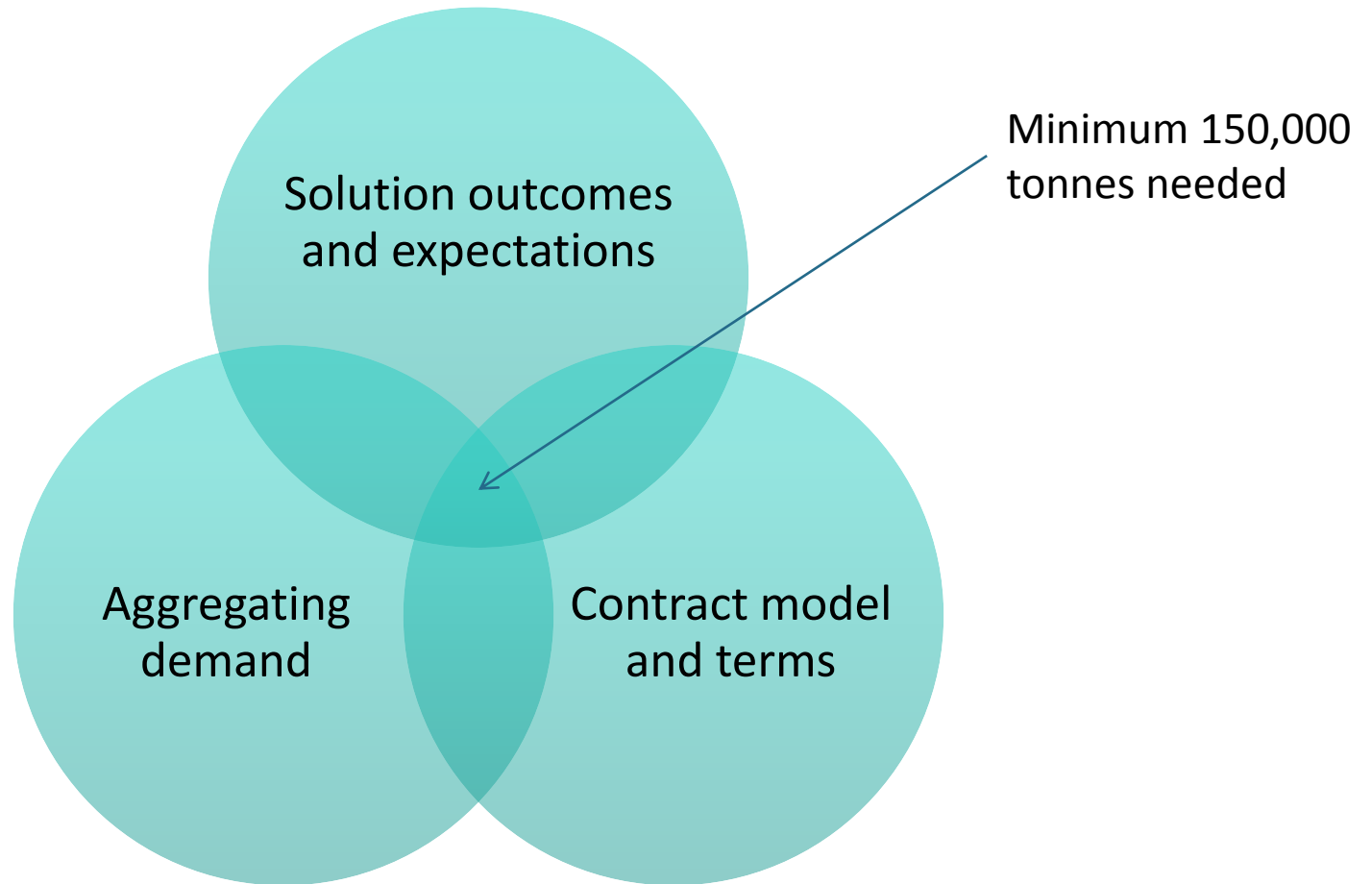
- new infrastructure will require substantial investment
- aggregation of waste will be the key to drive investment
- procurement options limited due to complexity and costs
- current contract arrangement is not well suited
- councils need to develop agreements that facilitate:
  - aggregation of residual waste
  - financing of the capital investment (land acquisition and construction) and operation.

# The road to procurement

## Many players involved

Who	Interest, role
Councils	waste service provider aggregated demand and expectations drive investment
Community	Kept informed, engagement throughout process, understanding of technologies and environmental impacts
MWRRG	Facilitating to align councils expectations
Industry	Respond to councils collective ambition and aggregation of waste Build facility and deliver service
Investors	Respond to Councils collective ambition and aggregation of waste ( <i>potentially</i> )
Regulators	Approve location, works and operation (land use planning, environment, energy )

# The road to procurement

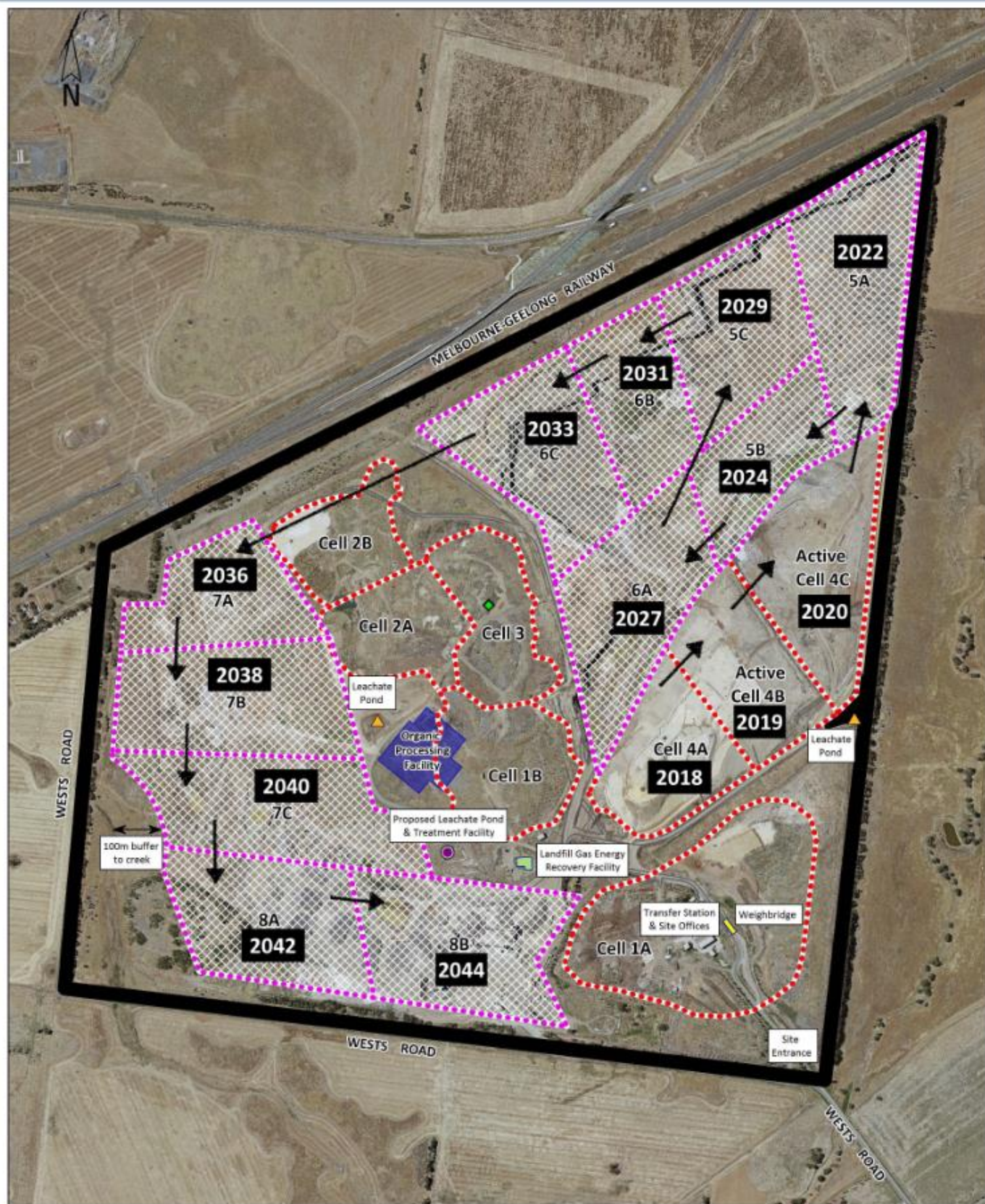


# Community Involvement

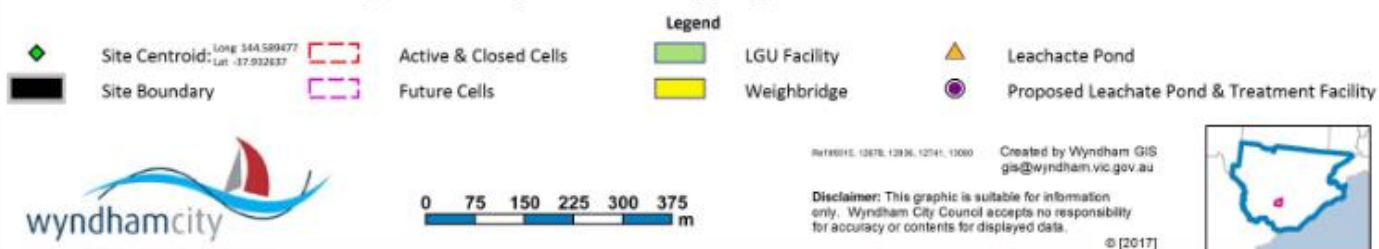
- Qualitative focus groups across Melbourne
- Social research to inform future communications and engagement, to research public knowledge and perceptions of potential advanced waste processing solutions, including waste to energy.
- Planning and Regulatory Approvals Processes will engagement opportunities
- Community education around waste generation and avoiding contamination

# Questions

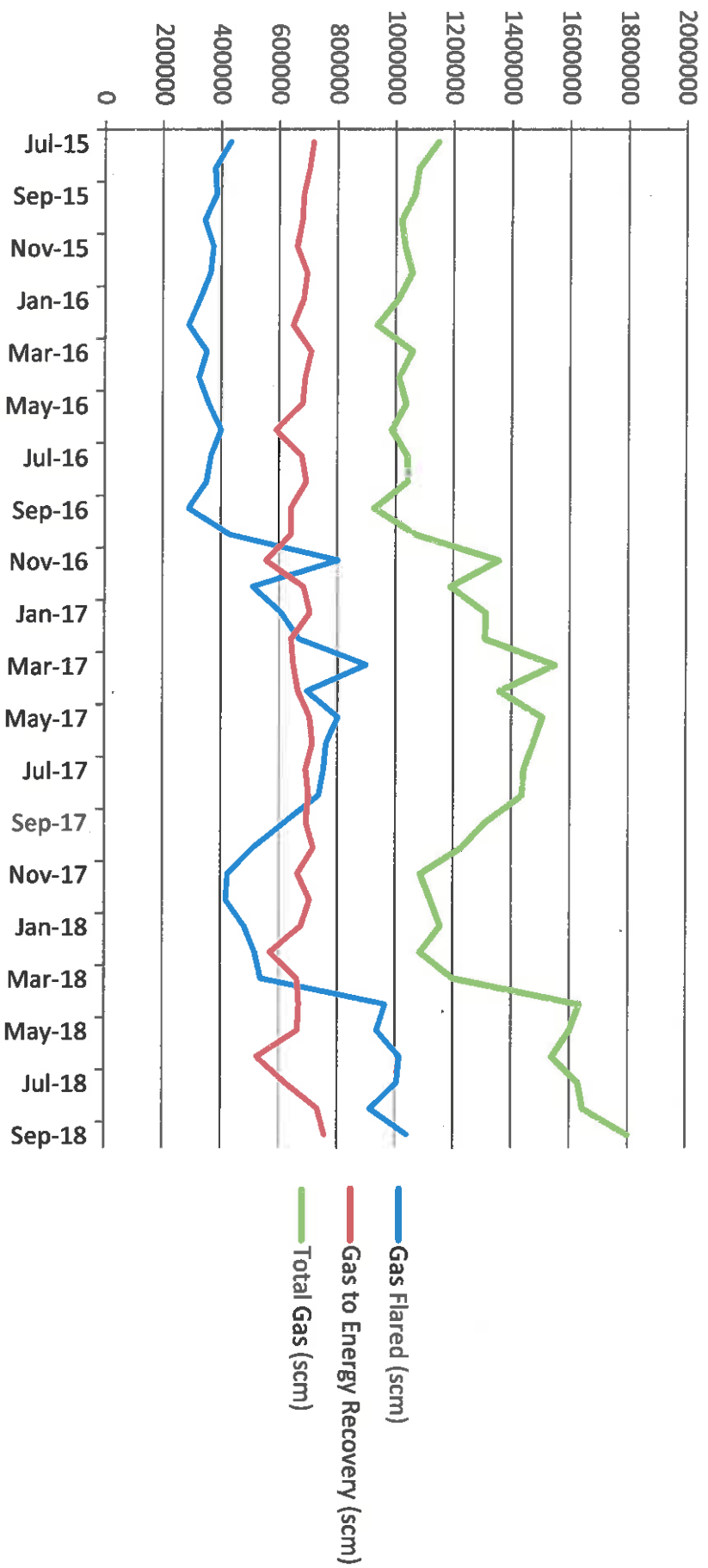




**Figure 1 - Proposed Cell Capping and Site Rehabilitation**



## Landfill Gas Capture Volumes - standard cubic metres (scm)



## Cummulative Tonnes by Month Received at the RDF for Landfill







PLAN VIEW  
SCALE 1:2500

PRELIMINARY

A FOR CLIENT REVIEW  
No. Revision 1. Note: \* Indicates signature on original task of drawing or last revision of drawing.  
Drawn: J. TANG  
Job: 31-36255  
Project: WYNDHAM CITY COUNCIL REFUSE DISPOSAL FACILITY DEBRIS FENCE  
Date: 04/10/18

0 25 50 75 100 125m  
SCALE 1:2500 AT ORIGINAL SIZE



Level 8, 180 Lonsdale Street, Melbourne VIC 3000 Australia  
Tel: 2 9867 9000 Fax: 2 9867 2111  
E: [enquiries@ghd.com.au](mailto:enquiries@ghd.com.au) W: [www.ghd.com.au](http://www.ghd.com.au)

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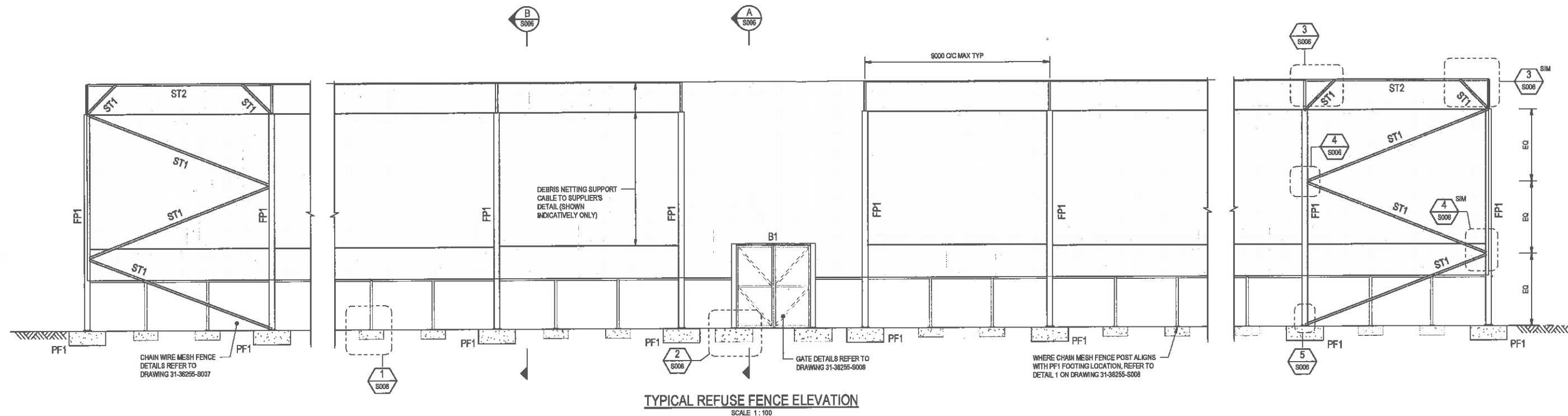
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Approved (Project Director):  
Date:  
Scale: 1:2500

Designed: A. BHARDWAJA  
Design Check:  
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WYNDHAM CITY COUNCIL  
Project: REFUSE DISPOSAL FACILITY DEBRIS FENCE  
Title: PLAN VIEW - PERIMETER FENCE LAYOUT PLAN

Sheet: A1 Drawing No: 31-36255-S004 Rev: A



STEEL FRAMING SCHEDULE	
MARK	DESCRIPTIONS
B1	76.1 x 3.8 CHS
C1	114.3 x 5.4 CHS
C2	219 x 6.4 CHS
FP1	800WB146 TAPER CUT 800 MAX, 200 MIN
ST1	88.9 x 3.2 CHS FIXED TO REAR FLANGE OF FP1
ST2	88.9 x 5 CHS

# LEGEND:

- DEBRIS NETTING - SUPPLIED, INSTALLED AND MAINTAINED BY SPECIALIST CONTRACTOR TO THE FOLLOWING SPECIFICATIONS:
- NETTING TO BE BLACK, PE NETTING ABLE TO WITHSTAND WIND LOAD OF 10kPa (ULTIMATE) WITH NETTING LARGELY COVERED WITH LITTER.
- NETTING SHALL BE CAPABLE OF WITHSTANDING EXPOSURE TO WIND, HEAT, RAIN AND UV RAYS FOR A PERIOD OF 20 YEARS.
- REFER TO GENERAL STRUCTURAL NOTES ON DRAWING 31-36255-S003 FOR DETAILED REQUIREMENTS.

# NOTE:

- FOR GENERAL STRUCTURAL NOTES REFER TO DRAWING 31-36255-S002 TO S003.
- PROVIDE VERTICAL BRACING AT END BAYS ONLY (4 LOCATIONS).

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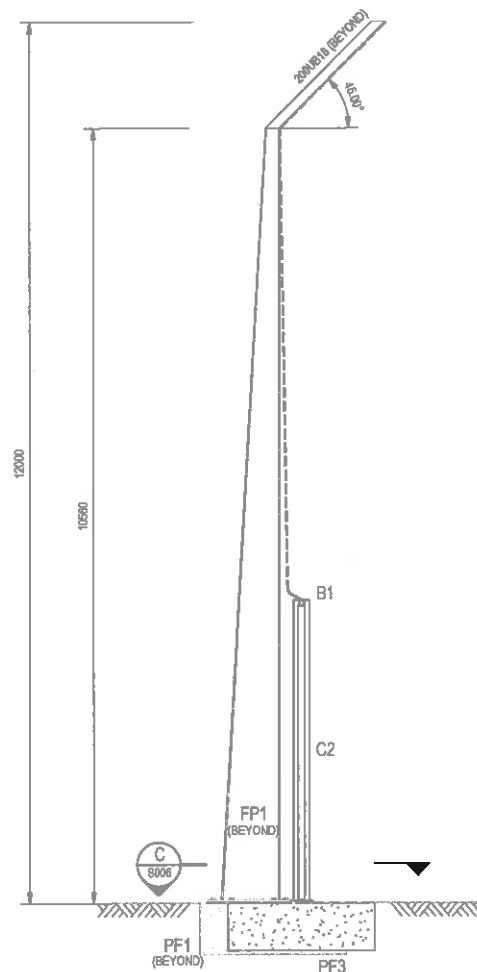
Drawn J.TANG  
Drafting Check  
Approved (Project Director)  
Date  
Scale As indicated

Designer A.SHRIVASTAVA  
Design Check  
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Client **WYNDHAM CITY COUNCIL**  
Project **REFUSE DISPOSAL FACILITY DEBRIS FENCE**  
Title **DEBRIS FENCE STRUCTURE ELEVATION**

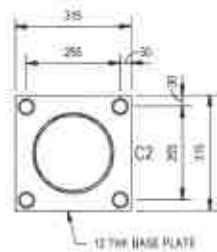
Original Set **A1** Drawing No: **31-36255-S005** Rev: **A**



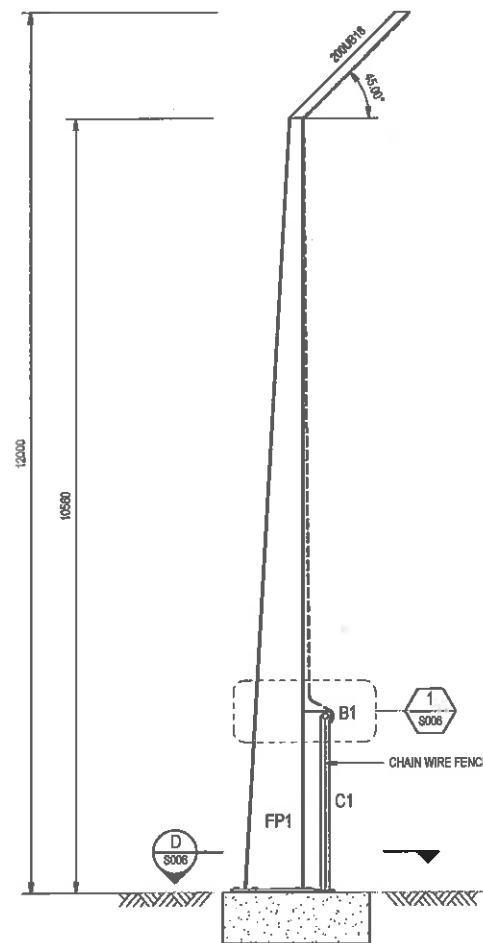


**TYPICAL DETAIL AT GATE**

**A SECTION**  
SCALE 1:50

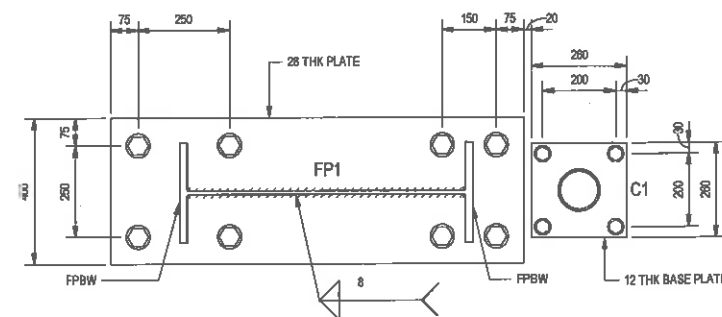


**C SECTION**  
SCALE 1:10

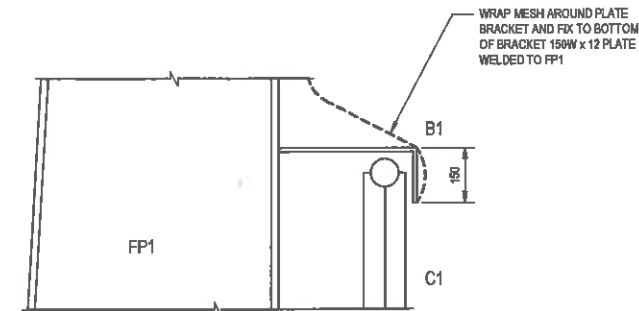


**TYPICAL POST DETAIL**

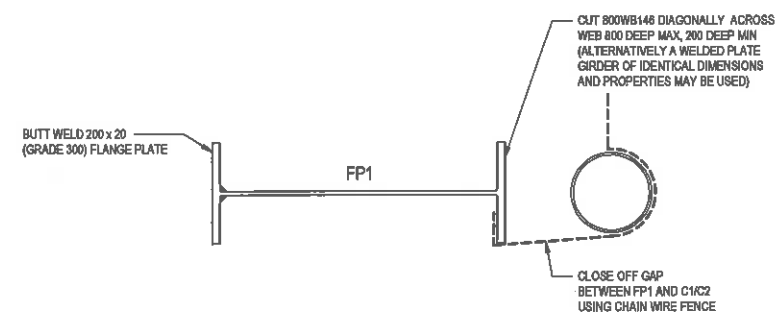
**B SECTION**  
SCALE 1:50



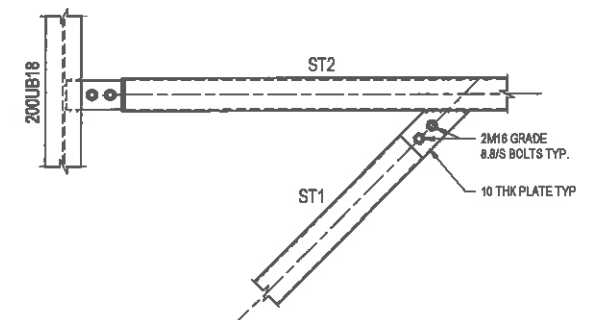
**D SECTION**  
SCALE 1:10



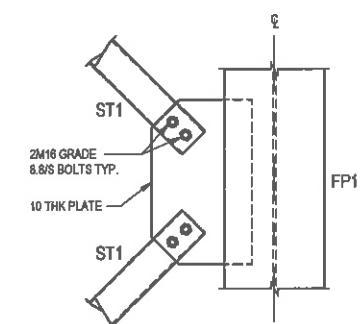
**1 DETAIL**  
SCALE 1:10



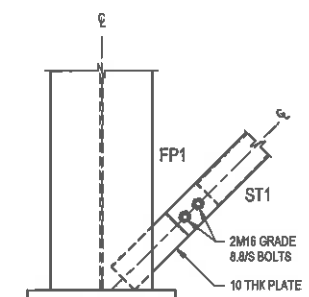
**CHAIN WIRE MESH DETAIL  
AT END POSTS AND GATE LOCATION**  
SCALE 1:10



**3 DETAIL**  
SCALE 1:10



**4 DETAIL**  
SCALE 1:10

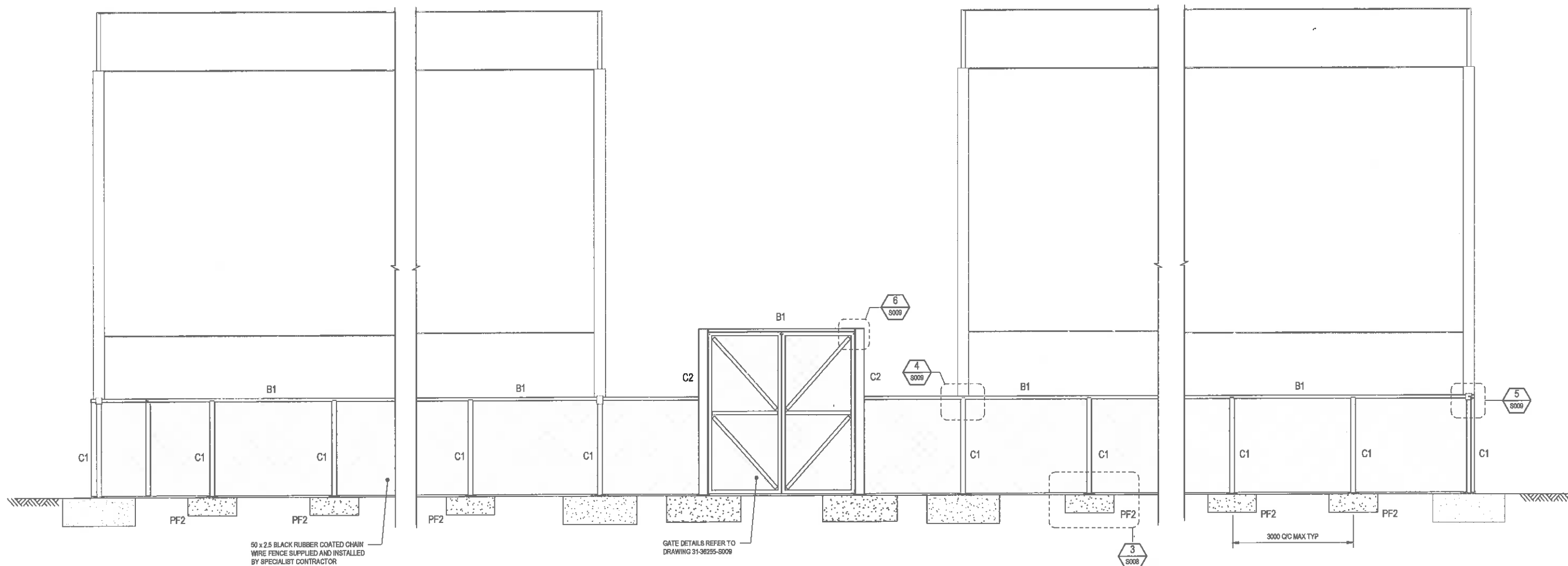


**5 DETAIL**  
SCALE 1:10

**NOTE:**  
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<p>FOR CLIENT REVIEW</p> <p>No. Revision. Date. Author. Signature. Date. Drawing. Date. Project. Date. Project. Date.</p> <p>Project: 31-36255-S006-S006</p> <p>Scale: 1:10 AT ORIGINAL SIZE</p> <p>Scale: 1:50 AT ORIGINAL SIZE</p> <p>Scale: 1:20 AT ORIGINAL SIZE</p>	<p>0 100 200 300 400 500 mm</p> <p>SCALE 1:10 AT ORIGINAL SIZE</p> <p>0 500 1000 1500 2000 2500 mm</p> <p>SCALE 1:50 AT ORIGINAL SIZE</p> <p>0 200 400 600 800 1000 mm</p> <p>SCALE 1:20 AT ORIGINAL SIZE</p>	<p><b>GHD</b></p> <p>Level 8, 180 Lonsdale Street, Melbourne VIC 3000 Australia</p> <p>T 61 2 8687 8000 F 61 2 8687 8111</p> <p>E melina@ghd.com.au W www.ghd.com</p>	<p><b>DO NOT SCALE</b></p> <p>Conditions of Use:</p> <p>This document may only be used by GHD's client (and any other person who GHD has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.</p> <p>Drawn: J.TANG</p> <p>Design: A.SHRIVASTAVA</p> <p>Client: WYNDHAM CITY COUNCIL</p> <p>Project: REFUSE DISPOSAL FACILITY DEBRIS FENCE</p> <p>Title: DEBRIS FENCE TYPICAL DETAILS</p> <p>Scale: As indicated</p> <p>This Drawing must not be used for Construction unless signed as Approved</p>	<p>Original Size</p> <p>A1 Drawing No: 31-36255-S006</p> <p>Rev: A</p>
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TYPICAL CHAIN WIRE FENCE ELEVATION  
SCALE 1:50

**NOTES:**  
1. FOR GENERAL STRUCTURAL NOTES REFER TO DRAWING 31-36255-S002 TO S003.

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<b>A FOR CLIENT REVIEW</b> No Revision Note: * Indicates signatures on original issue of drawing or last revision of drawing Drawn: JT AS* DW* 04.10.18 Manager: Project Director Date				 Level 8, 180 Lonadale Street, Melbourne VIC 3000 Australia T 01 2 8087 8000 F 01 2 8087 8111 E melina@ghd.com.au W www.ghd.com		<b>DO NOT SCALE</b> Conditions of Use: This document may only be used by GHD's client (and any other person who GHD has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.		Drawn: J.TANG Designer: A.SHIVASTAVA Drafting Check: Design Check: Approved (Project Director): Date: Scale: 1 : 50 This Drawing must not be used for construction unless signed as Approved		Client: <b>WYNDHAM CITY COUNCIL</b> Project: <b>REFUSE DISPOSAL FACILITY DEBRIS FENCE</b> Title: <b>CHAIN WIRE MESH FENCE ELEVATION</b> Original Size: <b>A1</b> Drawing No: <b>31-36255-S007</b> Rev: <b>A</b>	
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