



Ravenhall/ Laverton Creek Drainage Workshop

31/03/2026

Acknowledgement of Country

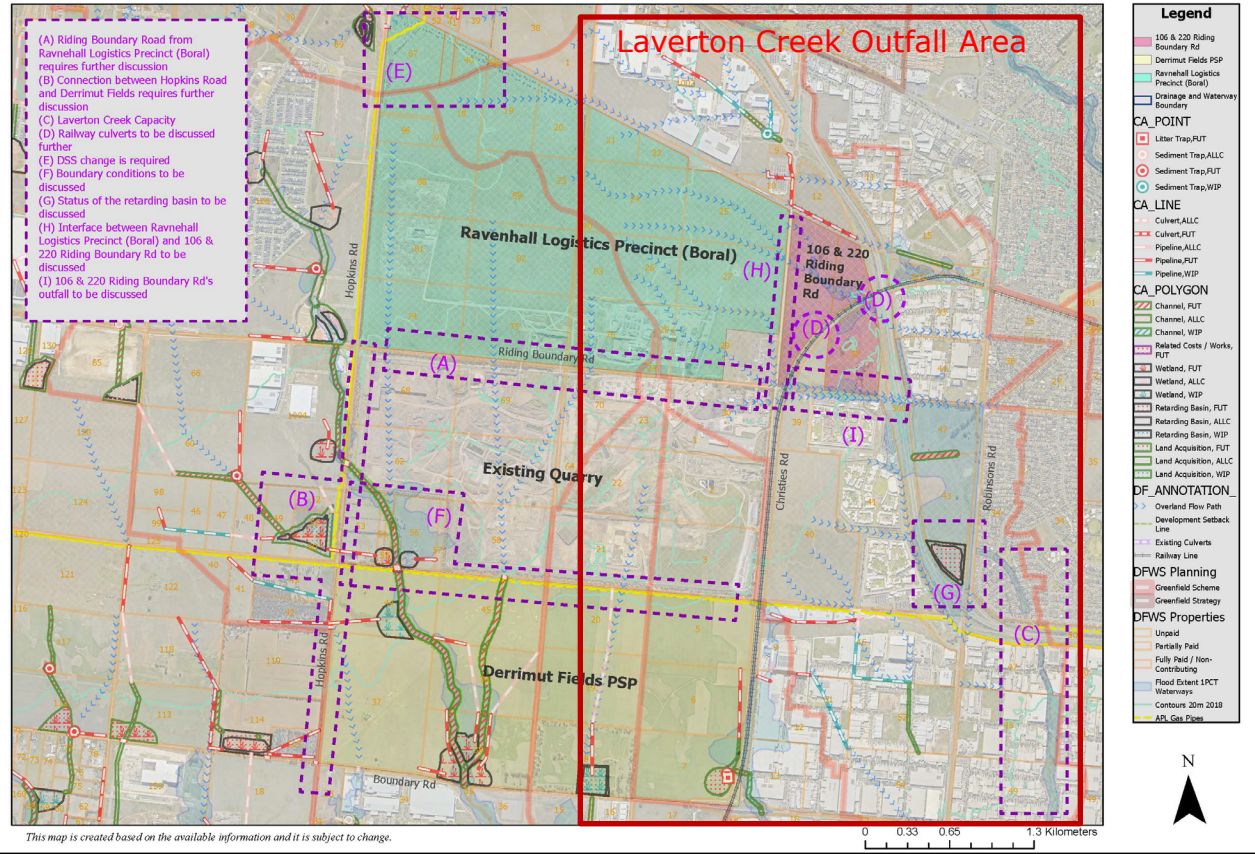
We would like to begin by acknowledging the Traditional Owners of the land on which the Ravenhall and Laverton Creek study area are located, Wurundjeri Woi Wurrung and Bunurong, and pay our respects to their Elders past, present and emerging.

Introduction

Who is here?

- Property owners, developers, utilities and other authorities
- Key public stakeholders (MW – DTP – Melton City Council)

Overall Ravenhall/ Derrimut Fields/ Laverton Creek Plan - Draft Drainage Assumptions



Purpose: Why are we here today?

- This workshop is the 2nd workshop – specifically for Ravenhall and Laverton Creek stakeholders
- Goal: To discuss drainage assumptions between landowners/ stakeholders.
- Technical assumptions boundaries to be determined
- Present Melbourne Water's review so far, based on development submissions and internal review and modelling. Key constraints and conditions have been identified.

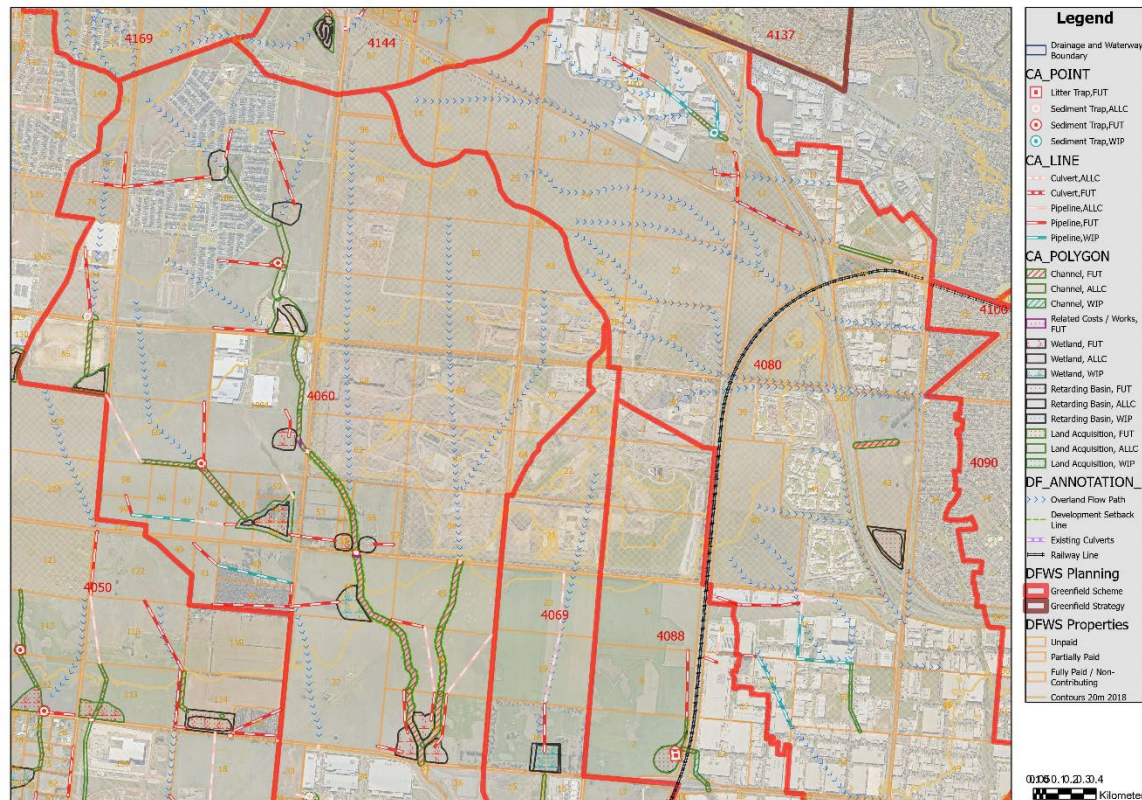


Current MW DSS Context to the PSP

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Presenter:
A.R.

Overall Ravenhall Plan - Draft



This map is created based on the available information and it is subject to change.

DSS General Summary

- 4080 DSS Laverton Creek
- 4060 DSS Truganina
- 4069 DSS Woods Rd
- 4080 Dohertys Drain
- 4144 DSS Neale Rd

PSP Summary

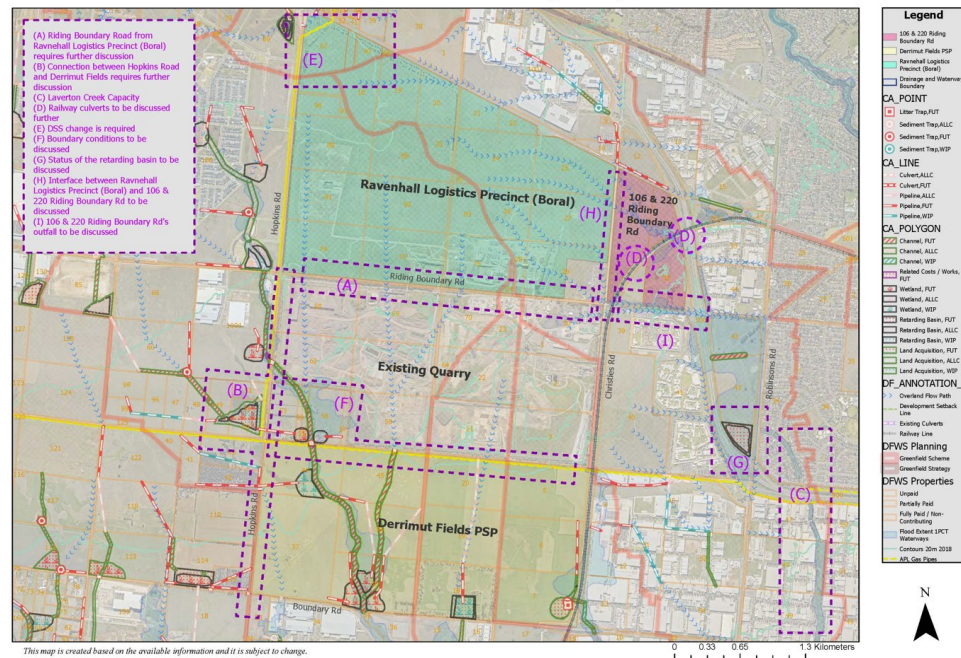
- Ravenhall
- Derrimut Fields
- Mt Atkinson
- Warrawee
- Chartwell East
- Tarneit Plains

Summary Assumptions Table

Location	Landowners & Stakeholders	Drainage Assumption
(A)	Boral & TransGrid/Cogency	Flow conveyance and connection to upstream and downstream properties
(B)	Property numbers 40, 41, 42, 43, 49, 50, 51, 52, 114, 119)	Asset mix and consideration of flows and location of flows from Ravenhall Logistics Precinct and existing quarry
(C)	Laverton Creek	Assumptions of what flood conditions and receiving capacity.
(D)	VicTrack – Culvert Crossings	Existing rail culvert capacity to be reviewed with development proposals
(E)	Boral	Confirm catchment to drain to the North
(F)	Derrimut Fields & surroundings (property 53, 54, 55, 56, 57)	Confirm boundary conditions – receiving flows and locations from existing Quarry. Will be integrated in DSS as part of Derrimut Fields PSP/
(G)	Department of Correction & Parks Victoria	Retardation basin is required and confirm the design note MW proposal is on MW owned land
(H)	Boral & TransGrid/Cogency & Dexu & GWW & DEECA	Confirm boundary conditions and asset type and IL
(I)	Dexu & GWW & Prelmin Properties	Confirm flows, conveyance, asset type, effective

Footer text

Overall Ravenhall/ Derrimut Fields/ Laverton Creek Plan - Draft Drainage Assumptions



Agenda

Ravenhall/ Laverton Creek Drainage Workshop

Meeting date: Tuesday, 31 March 2026

Meeting time: 10:00 AM - 12:00 PM

Location: Online - Microsoft Teams Meeting

Attendees: Ravenhall & Laverton Creek Key Landowners & Stakeholder

Chairperson: Melbourne Water

Note taker: Melbourne Water

1. Acknowledgement & Introduction

10:00 AM	1.1	5 mins	Acknowledgement	Melbourne Water
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10:05 AM	1.2	2 mins	Introduction	Melbourne Water
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2. Purpose & Agenda

10:07 AM	2.1	9 mins	Purpose	Melbourne Water
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10:16 AM	2.2	2 mins	DSSs/ PSPs	Melbourne Water
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10:18 AM	2.3	5 mins	Summary Table	Melbourne Water
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10:23 AM	2.4	2 mins	Agenda	Melbourne Water
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3. Laverton Creek Outfall Area (Section 1)

10:25 AM	3.1	4 mins	Location (E)	Melbourne Water
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10:29 AM	3.2	5 mins	Ravenhall Logistics Precinct	Boral
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10:34 AM	3.3	4 mins	Location (E)	Stakeholders Feedback
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10:38 AM	3.4	4 mins	Location (H)	Melbourne Water
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10:42 AM	3.5	5 mins	106 & 220 Riding Boundary Rd	Dexus
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10:47 AM	3.6	4 mins	Location (H)	Stakeholders Feedback
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10:51 AM	3.7	5 mins	Environmental & Hydrology Requirements	DEECA's Feedback
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4. Break

10:56 AM	9 mins	Break		
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5. Laverton Creek Outfall Area (Section 2)

11:05 AM	5.1	4 mins	Location (A)	Melbourne Water
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11:09 AM	5.2	4 mins	Location (A)	Stakeholders Feedback
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11:13 AM	5.3	4 mins	Location (D)	Melbourne Water
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11:17 AM	5.4	4 mins	Location (D)	Stakeholders Feedback
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11:21 AM	5.5	4 mins	Location (I)	Melbourne Water
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11:25 AM	5.6	4 mins	Location (I)	Stakeholders Feedback
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11:29 AM	5.7	4 mins	Location (G)	Melbourne Water
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11:33 AM	5.8	4 mins	Location (G)	Stakeholders Feedback
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11:37 AM	5.9	4 mins	Location (C)	Melbourne Water
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11:41 AM	5.10	4 mins	Location (C)	Stakeholders Feedback
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11:45 AM	5.11	5 mins	Environmental Update	Melbourne Water
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6. Summary

11:50 AM	6.1	5 mins	Summary	Melbourne Water
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11:55 AM	6.2	5 mins	Next Steps & Final Questions	Melbourne Water
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Presenter:
D.R.

(E) DSS change is required (Warrawee)

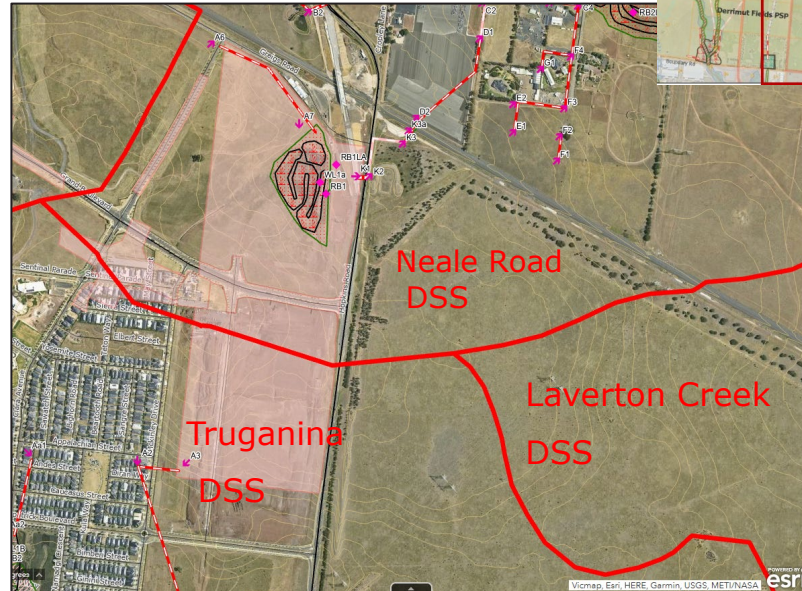
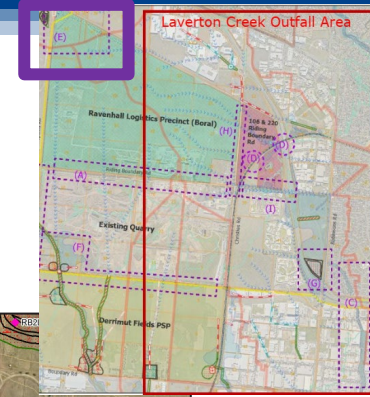
Objective:

- Understand how the catchment works and if we can align PSP and DSS boundary on the location (E)
- Ensure no developed flow from Boral's site is conveying to Warrawee's site

Boral's Presentation

To discuss:

- Warrawee PSP landowners - To confirm if the catchment change is suitable?
- Boral - To provide input about the design on this location
- Staging



(H) Interface between Ravenhall Logistics Precinct (Boral) and 106 & 220 Riding Boundary Rd to be discussed

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Presenter:
A.R.

Objective:

- Boral's site: Outfall from Catchment D, RB to be understood. MSA area within Boral's land
- Understand the design of TransGrid and consider as existing condition. Confirm if TransGrid flow path is similar to the current situation
- **Cristies Road Culverts** to be at the same location for developed flows ultimate connection to railway.

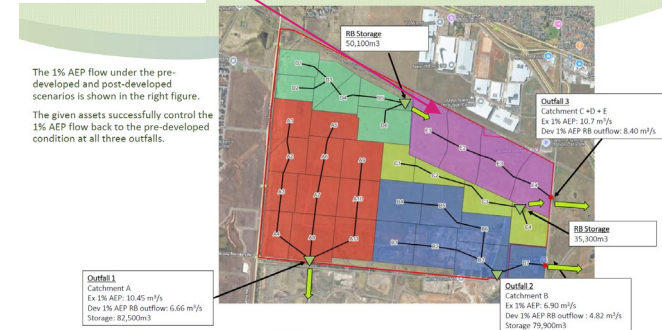
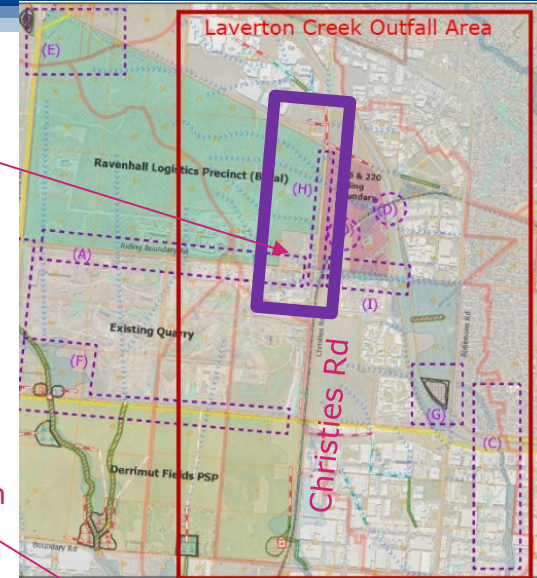
Dexus' Presentation

To discuss:

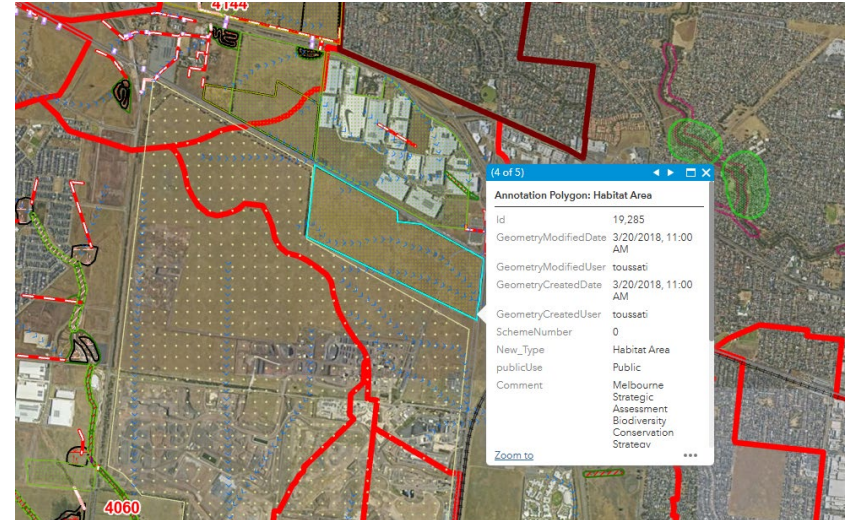
- Boral - Ask if they may assist with the modelling?
- **DEECA's Feedback** - To provide information regarding flooding regime for conservation area.
- TransGrid - Confirm that it will be used an existing conditions

TransGrid

Melbourne
Strategic
Assessment
Biodiversity
Conservation
Strategy
(MSA)



(H) Melbourne Strategic Assessment (MSA)



To discuss:

- **DEECA's Feedback** - To provide information regarding flooding regime for conservation area.
- Boral - Ask if they may assist with modelling?

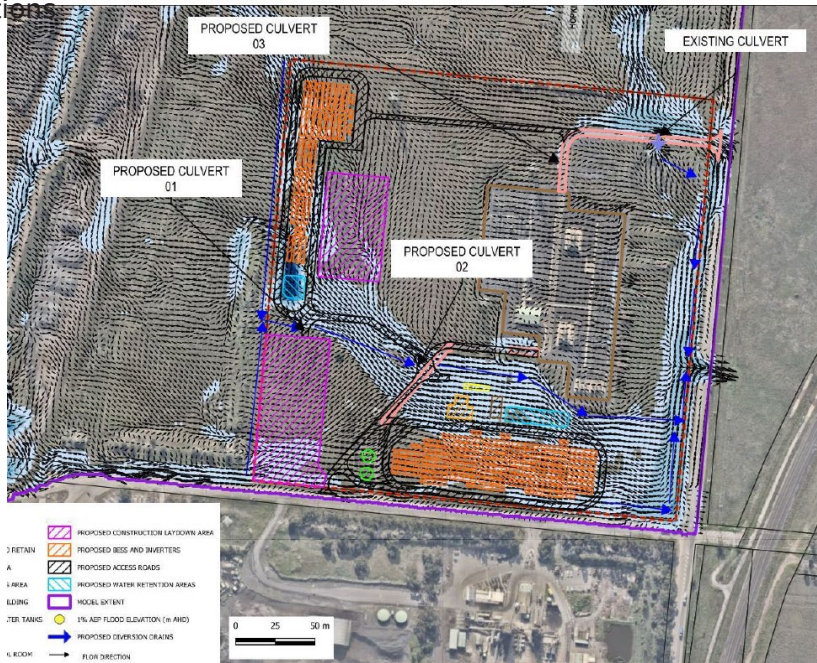
(H): 490 Christies Road, Ravenhall TransGrid/ Cogency

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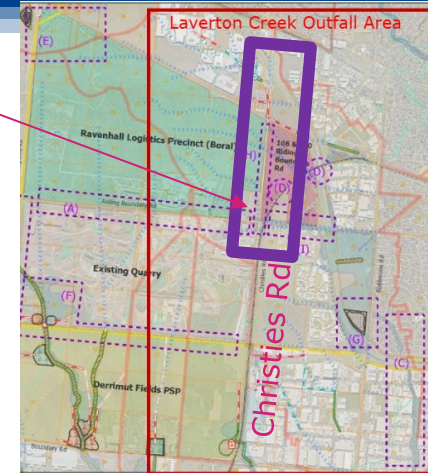
Presenter:
A.R.

Objective: Understand the design of TransGrid and consider as existing condition. Confirm if TransGrid flow path is similar to the current situation

To discuss: TransGrid – Confirm that it will be used as an existing condition

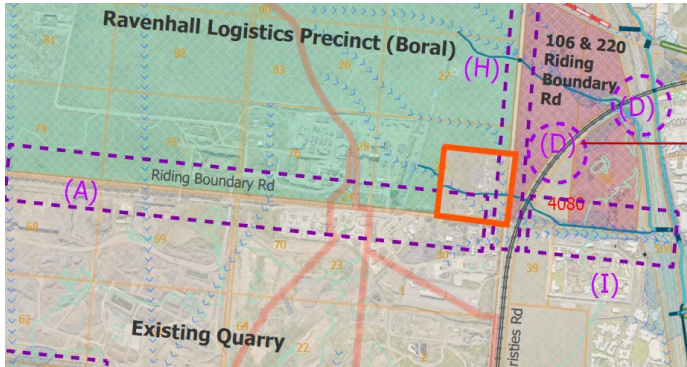
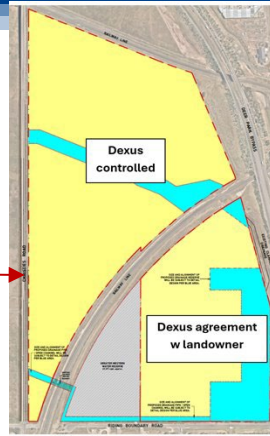
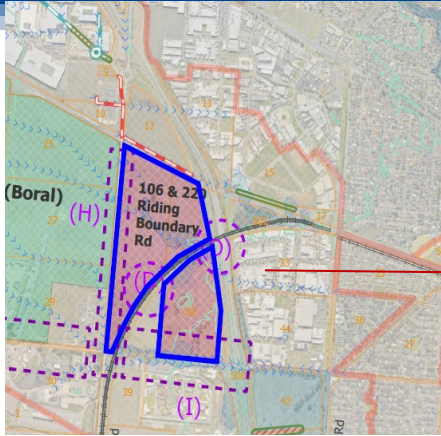


TransGrid



Condition number	Description	Comments
31	The new development footprint is to be filled to a minimum of either 300 mm above the 1 in 100-year flood level associated with an existing Melbourne Water drainage asset or 600 mm above the 1 in 100-year flood level associated with an existing Melbourne Water waterway, whichever one is greater.	No MW assets were identified within or adjacent to the site. However, the approximate bench levels for proposed BESS areas were estimated based on the modelled pre-development 1% AEP maximum flood levels.
32	A sufficiently sized easement and/or reserve must be created over any proposed Melbourne Water asset to the satisfaction of Melbourne Water prior to the commencement of any works on the land.	No MW assets were identified within or adjacent to the site. Therefore, this condition does not apply, consistent with the discussions held with MW on 25 June 2024.
33	Easements and reserves must be created over existing and proposed Melbourne Water assets	No MW assets were identified within or adjacent to the site. Therefore, this condition

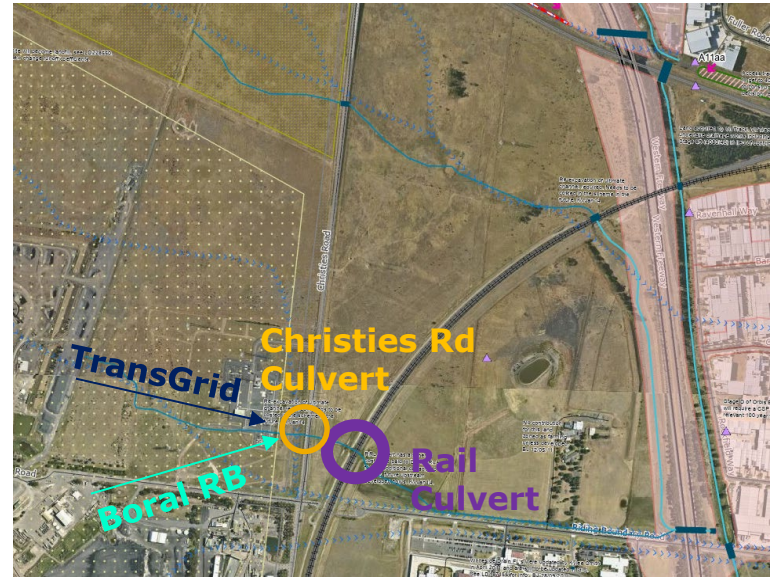
(H): Boral & TransGrid Flow Conveyance to Downstream A.R



Site specific drainage conditions

H – Upstream Interface.
Interface with the Boral site.

D – Existing Rail Culvert Capacity.
Assessment of current rail culvert – Outfall
Interface
Includes required conveyance for the neighbouring
property.



Break
(9 mins)

(A) Riding Boundary Road from Ravenhall Logistics Precinct (Boral) requires further discussion

Objective:

- Understand the number of outfalls
- Scheme boundary to be locked in through Boral's site
- We need to confirm how much flow is going south (to Derrimut Fields) and what is going east (to Laverton Creek)

To discuss:

- Boral – To confirm the outfall locations
- TransGrid
- Cogency/ Cleanaway (Existing Quarry)

Water quantity assessment

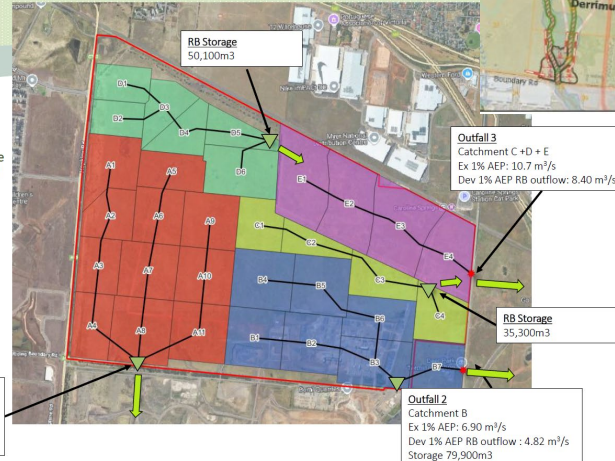
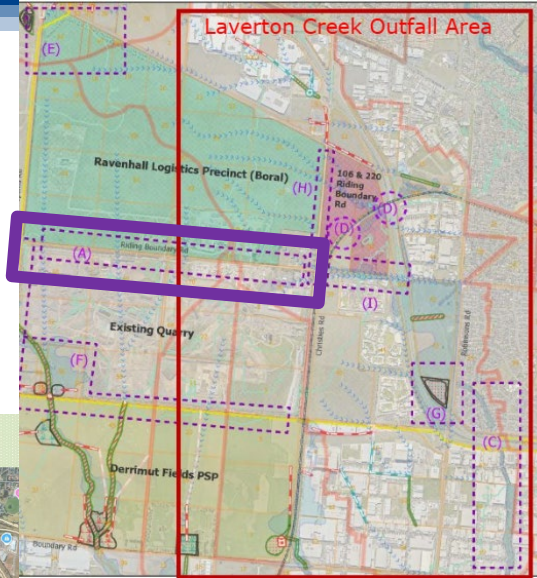
The 1% AEP flow under the pre-developed and post-developed scenarios is shown in the right figure.

The given assets successfully control the 1% AEP flow back to the pre-developed condition at all three outfalls.

Outfall 1
Catchment A
Ex 1% AEP: 10.45 m³/s
Dev 1% AEP RB outflow: 6.66 m³/s
Storage: 82,500m³

Outfall 3
Catchment C+D+E
Ex 1% AEP: 10.7 m³/s
Dev 1% AEP RB outflow: 8.40 m³/s

Outfall 2
Catchment B
Ex 1% AEP: 6.90 m³/s
Dev 1% AEP RB outflow: 4.82 m³/s
Storage: 79,900m³



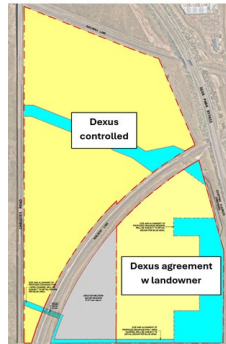
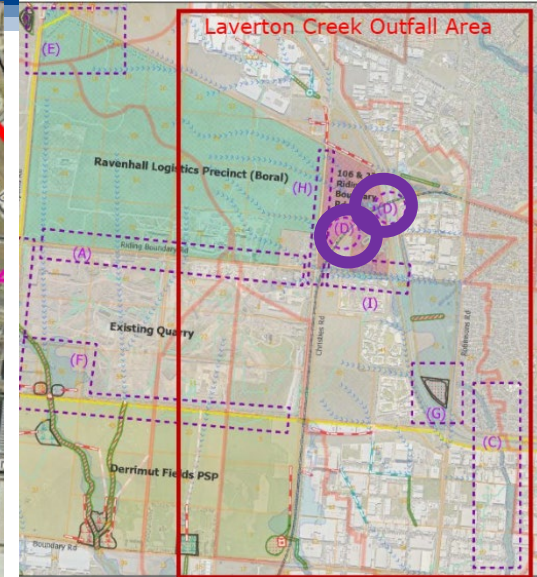
(D) Railway culverts to be discussed further

Objective:

- Culvert connection from Christies Road Culverts to the existing railway culverts, levels and conveyance method are to be confirmed.

To discuss:

- VicTrack – To discuss the requirements
- GWW
- Dexus

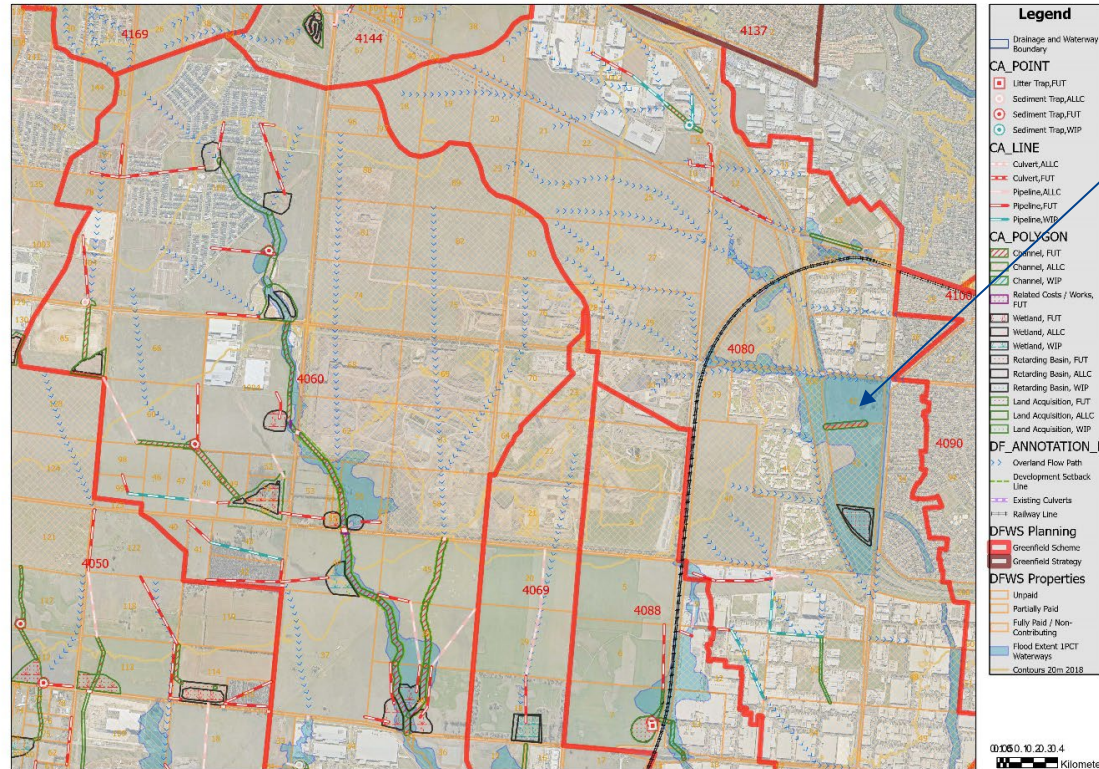


(I) Flood Mapping/ Uncontrolled of Dexus Downstream

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Presenter:
I.P.

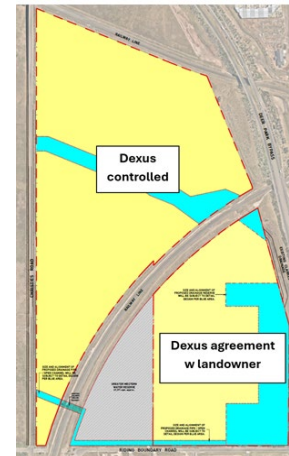
Overall Ravenhall Plan - Draft



This map is created based on the available information and it is subject to change.

Uncontrolled flood plain downstream

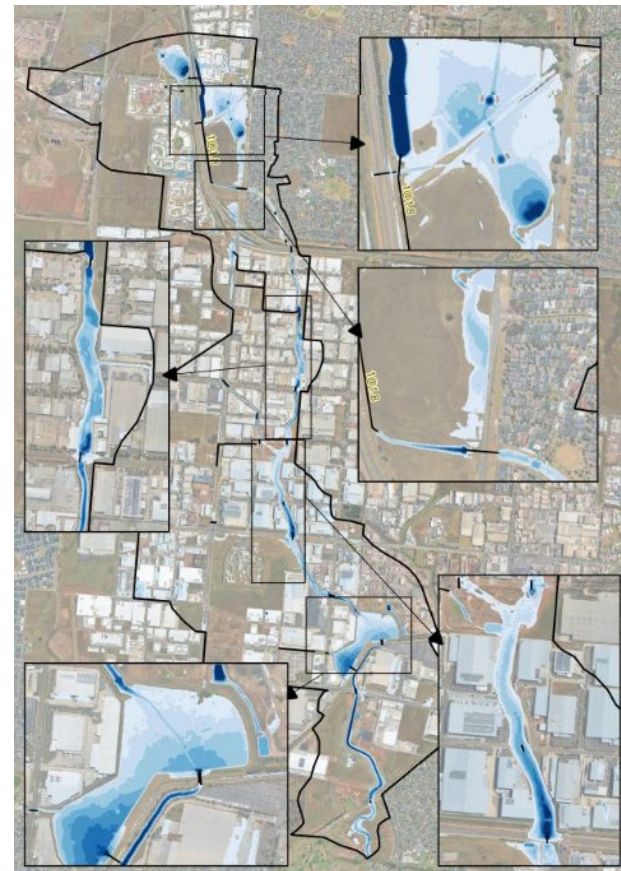
- MW has commenced initial flood modelling investigation to understand Laverton Creek capacity, and flood behaviour.



(I) Specific Flood Plain – Downstream Conditions

Existing Case Depth Map

- Purpose of this early internal high-level modelling is to understand **downstream constraints** and implications for **performance criteria** that DSS needs to meet.
- System is **complex**, downstream drainage works are not fully constructed or connected yet.
- Focus is to identify **priority constraint locations** and **indicative options** (not final design)
- Flooding is **driven by a combination of capacity constraints and storage spill**.
- The modelling indicates flooding is **localised** in some places, but it **pushes and spills** once storage is exceeded.
- This confirms we need to treat this as a **system constraint and outfall limitation**, not a single issue.



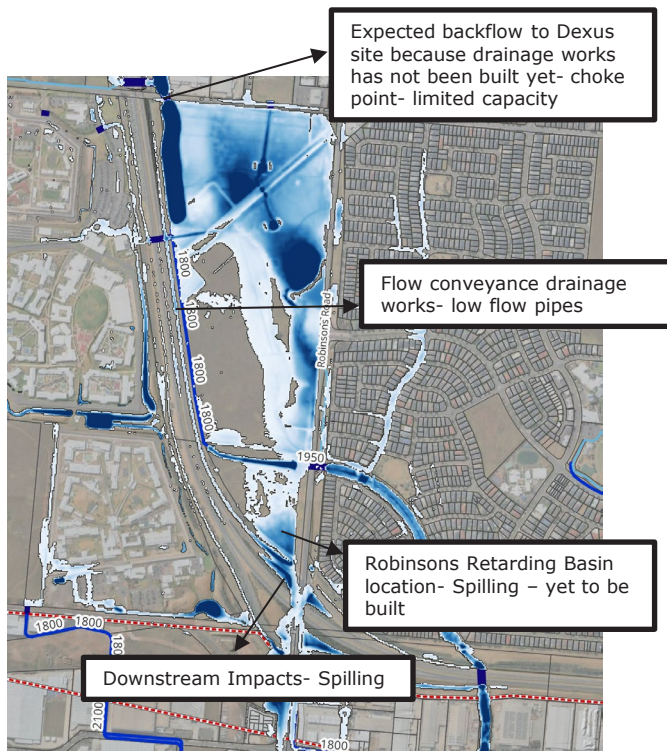
(I) Laverton Creek Modelling Investigations

High Level Investigations

Scheme Works (Robinsons Rd RB) have not been built.

Flood impacts downstream without these works:

- Water backs up where drainage capacity is limited.
- When storage areas fill, water spills into surrounding areas.
- Flooding is driven by **limited flow paths/conveyance and storages**.
- Flooding concentrates at three main locations:
 - Dexu → Limited downstream drainage capacity and backing up.
 - Robinsons retarding basin → storage spills once full.
 - Freeway and railway crossings → restricted drainage paths.
- Some downstream areas experience flooding even when upstream systems operate correctly because of the complexity of the system.



Freeway Flood Modelling – Indicative only not fit for purpose

Laverton Creek Infrastructure Investigations

Preliminary internal investigations– subject to verification and refinement

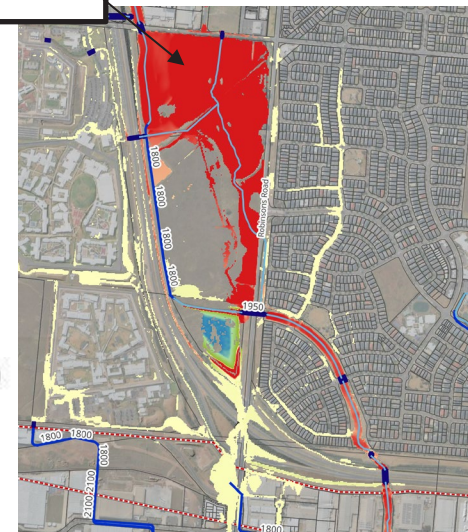
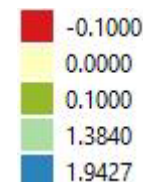
- Indicative “works” scenarios (increased conveyance / defined flow path) show **reduced flood extent** in key areas
- A perfect fix may be **constrained by feasibility** (land, environment, constructability)
- Implication for PSP:
 - **With works delivered** → potentially less conservative drainage performance criteria
 - **Without works** → criteria may need to be more conservative to avoid worsening downstream impacts
- Next step: Developing draft option and performance criteria

works:

Robinsons RB and/or a RB in the corner of Riding Boundary and Western Freeway being built if environmental requirements been met
increasing the number of 1800mm pipes/channel for more conveyance

reduced flooding footprint
reduced spill.

With Works



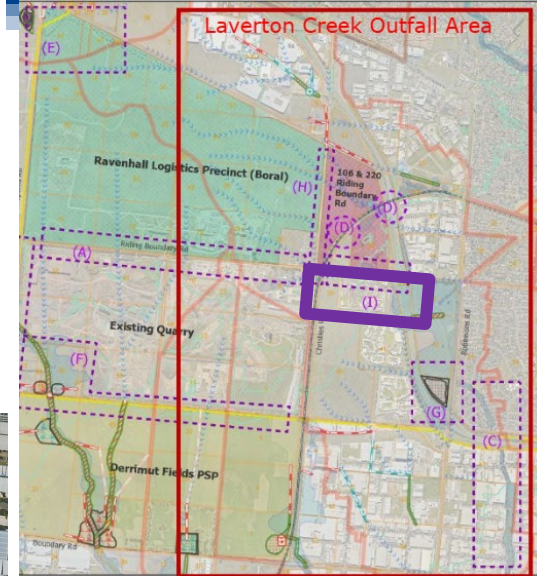
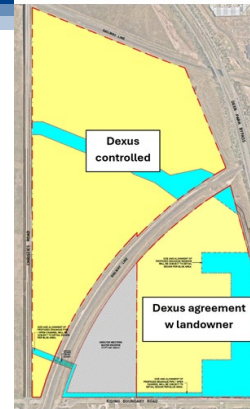
(I) 106 & 220 Riding Boundary Rd's outfall to be discussed

Objective:

- Understand the development expectations at Pelmin Site and DTP. Understand the flow amount/ outfall location
- Robinsons RB being built and increasing the number of 1800mm pipes/channel for more conveyance

To discuss:

- Pelmin Properties – To confirm their plans
- DTP (Roads) - Daniel Zaslona team
- Dexus, GWW, Parks Victoria, Department of Justice



Pelmin
Properties

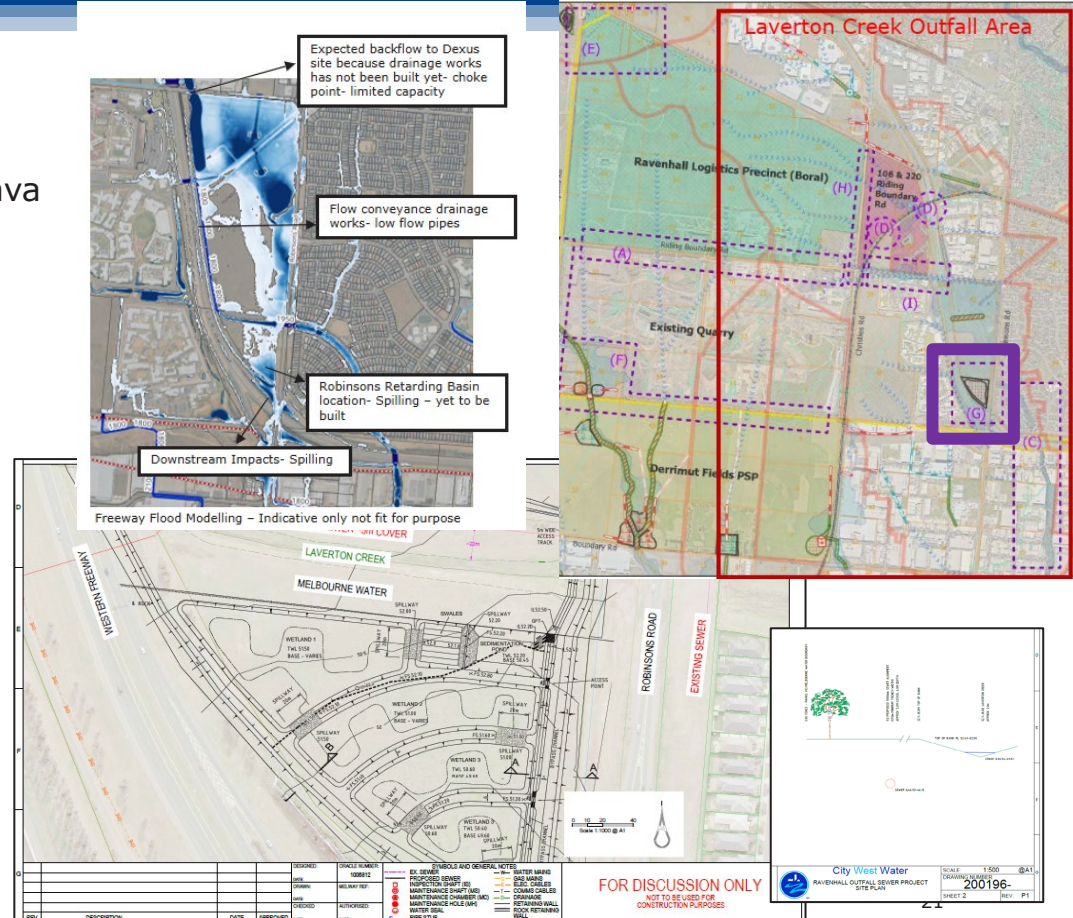
(G) Status of the retarding basin and pipeline to be discussed

Objective:

- Confirm the feasibility of location for an RB considering the insufficient storage and excavation issues and Pipe
- Confirm the inflow/ outflow
- Environmental investigations
- Status of the sewer line

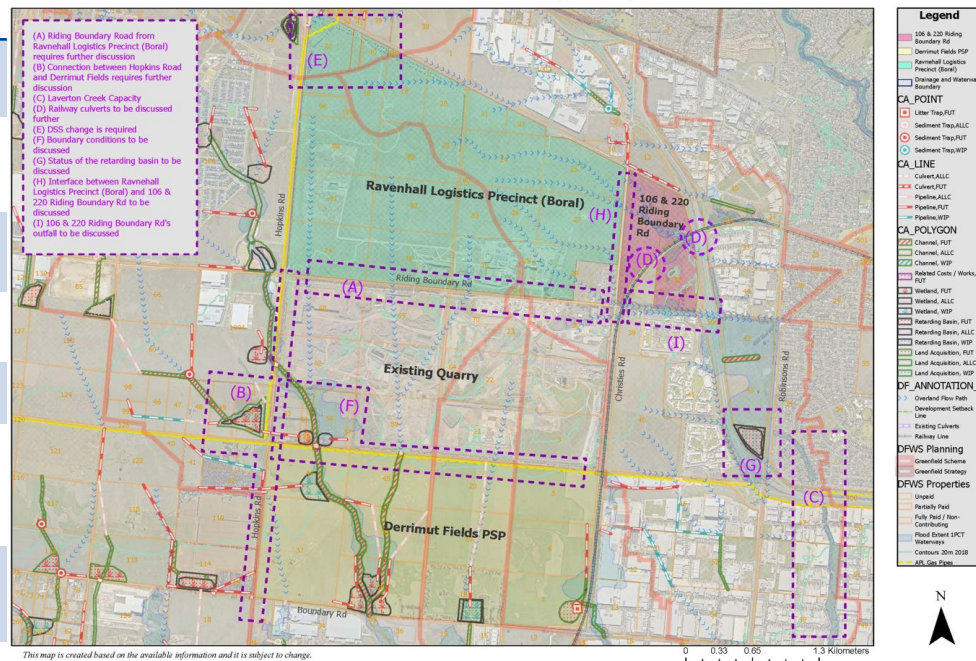
To discuss:

- GWW – To confirm the sewer line status
- Design and construct of basin and pipe
- Melbourne Water will provide capacity and Laverton Creek



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(I)	Dexu & GWW & Prelmin Properties	Confirm flows, conveyance, asset type , effective
	Footer text	

Overall Ravenhall/ Derrimut Fields/ Laverton Creek Plan - Draft Drainage Assumptions



Next Steps

- This workshop is to determine the key drainage assumptions
- A process to determine and finalise the key drainage assumptions
- Melbourne Water would like to receive stakeholder feedback on the process
- **Deliverable – Letter to VPA/DTP with the written assumptions of the outcome of the workshops**

Current ongoing work for MW

- Environmental background investigations
- Survey

Next Steps

- Please send any comments to Melbourne Water to consider
- Melbourne Water will work on the next steps based on this workshop and review
- **Deliverable – Letter to VPA/DTP with the written assumptions of the outcome of the workshops**



Feel free to ask any questions

End