DesignFlow

6 November 2025

Nikki Morrison
C/- MEDQ Delegate
Development Planning Branch
Ipswich City Council
PO Box 191
IPSWICH QLD 4305

Dear Nikki,

RE: PROVIDENCENCE WEST ROL 2 – INFORMATION REQUEST RESPONSE – STORMWATER AND WATERWAYS ITEMS

The following letter has been prepared to support the application Providence West ROL 2 application (3406/2025/PDA) in response to Ipswich City Council's Information Request (IR) issued on 3 July 2025. This letter outlines the responses to items related to the stormwater and waterways should be read with the updated:

- *Providence West ROL 2– Stormwater Quality Management Plan V2* (DesignFlow, October 2025)
- *Providence West ROL 2 – Waterways Strategy Report V2* (DesignFlow, November 2025)

The following approved documents are the basis for the stormwater and waterway management strategy and establish the head of power for the site:

Context Plan Approval (MCU DEV2012/13 – 26/3/2014)

Supporting Documents

- *Amex Ripley project (ARP) West Flood Study* (Cardno, 27 June 2013)
- *Site Based Stormwater Quality Management Report for proposed development at 813-843 Ripley Road, South Ripley 4306 for AMEX Corporation Pty Ltd* (ETS Engineering, 28 May 2013)
- *MCU Open Space Plan* (Cardno, 27 July 2012)

Condition 11: Stormwater - Outlines that in addition to the requirements set out in the PDA condition 3, an IMP for stormwater infrastructure should be generally consistent with the *Amex Ripley project (ARP) West Flood Study* (Cardno, 27 June 2013) and *SBSQMR* (ETS Engineering, 28 May 2013).

Condition 13: Community greenspace - Outlines that in addition to the requirements set out in the PDA condition 3, the community greenspace IMP must reflect the land and embellishment rates generally in accordance with the Ripley Valley Development Scheme and PDA guideline. Furthermore, it was noted that it was acceptable for the function of the District Recreation Park to be split so long as the desired standards of serviced are achieved.

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ROL Approval (9820/2019/MAPDA/A – 26/7/2021)

Documents noted/referenced in the approval conditions:

- *Amex Ripley project (ARP) West Flood Study* (Cardno, 27 June 2013)
- *Site Based Stormwater Quality Management Report for proposed development at 813-843 Ripley Road, South Ripley 4306 for AMEX Corporation Pty Ltd* (ETS Engineering, 28 May 2013)

Condition 38. Flooding – requires completed works to comply with the *Amex Ripley Valley West Flood Study Report* (Cardno, 27 June 2013)

Condition 39. Stormwater Management (Quality) – requires stormwater quality devices should be designed generally in accordance with the *SBSQMR* (ETS Engineering, 28 May 2013) and the relevant DSDIP Guideline No. 13 – Engineering standards.

Condition 40. Stormwater Management (Quantity) – requires stormwater drainage system generally in accordance with the requirements of QUDM and Ipswich City Council guidelines

The relevant items and responses are provided in the table below.

Table 1. Summary response to Assessment Manager Information Request

No.	Further Information Request	Applicant Response
Item 2: Stormwater Quality The submitted Stormwater Management Plan (SMP) prepared by Design Flow is acknowledged. The SMP includes references to Providence South RoL, design concerns and assumptions for future development. The applicant is requested to address the following:		
2a).	The MEDQ delegate acknowledges the inclusion of the following note in the SMP: *"The drainage path / waterway to the south of Providence West ROL 2 is to be substantially restored and vegetated as part of the Providence West development. The intent is to create a similar outcome as Councils Small Creek located in Raceview. For the purposes of this SQMP, the pollutant removal associated with the vegetated waterway has not been included. However, as part of future stormwater planning for the remainder of Providence West, the pollutant removal benefit of the vegetated water in Providence West ROL 2 will be included in the strategy and performance modelling. This will allow optimisation of the stormwater quality infrastructure in Providence West."* However, the applicant is advised that the proposed future intent to use the ephemeral waterways as a treatment node is not supported by the MEDQ delegate. It is inconsistent with the intentions of the State Planning Policy (Stormwater Quality) which instead, seeks to control stormwater at the source and minimise pollutants through reductions, reuse and finally treatment prior to entering waterways. The Small Creek Project as a treatment solution is not appropriate for greenfield development, as it is a retrofitted partial treatment solution for an existing urbanised catchment area constrained by historical built environment.	Stockland and DesignFlow have met with the waterways team at Council to discuss. There was agreement that further discussion of this item is required between Stockland and Council. The updated *Providence West ROL 2– Stormwater Quality Management Plan V2* (DesignFlow, October 2025) has been updated to reword this comment to the following: *The drainage path / waterway to the south of Providence West ROL 2 is to be restored and vegetated as part of the Providence West development. The intent is to create a similar outcome as Councils Small Creek located in Raceview. For the purposes of this SQMP, the pollutant removal associated with the vegetated waterway has not been included. Stockland would like to explore opportunity with Council in the future for gaining some water quality benefit from this waterway restoration through mutual agreement and approval, but this initiative does not form part of this application.*

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	The applicant is advised that at source low maintenance WSUD assets are encouraged and early communication with Councils Waterway Health Officers is recommended.	
Item 6: Open Space Whilst it is acknowledged that the submitted design is conceptual, it lacks adequate detail to demonstrate if embellishments can be delivered as intended within the open space network. Accordingly, the applicant is requested to demonstrate that the open space areas can be embellished to the required Desired Standard of Service for park types under Ipswich Planning Scheme LGIP 2016 and EDQ Guideline No. 12 including land area, grades and sections.		
6 a)	The applicant is requested to provide additional information that demonstrates compliance with the required Desired Standards of Service for the relevant park types from both the Ipswich Planning Scheme LGIP 2016 and EDQ Guideline No. 12. The MEDQ Delegate's particular concerns that need addressing/further information provided are outlined below: (i) Terminology and documentation to reflect EDQ park types and DCOP numbers for clarity of requirements. (ii) Dimensions grades, and flood levels required on Park concept and sections to confirm compliance to EDQ Guideline 12 and ICC Desired Standards of Service. (iii) Waterway riparian corridor to comply with Ipswich Waterway Health Strategy riparian offsets and defined linear park from top of bank to both sides of waterway (excluding District and Neighbourhood Recreation Park areas adjacent to one side of waterway).	In relation to Stormwater Management and Waterway Corridors, the design of the park and waterway corridor for ROL2 has been design in collaboration with the design team to comply with EDQ Guideline No. 12. This guideline applies to the Ripley Valley PDA which this development is located. Consideration of Council requirements outlined in Ipswich Planning Scheme LGIP 2016 and ICC Desired Standards of Service has occurred where possible (but these do not apply to the PDA). Refer to *Providence West ROL 2 – Waterways Strategy Report V2* (DesignFlow, November 2025).
6 c)	District Recreation Park (DCOP POS006) The applicant is requested to address the following with regards to the proposed District Recreation Park: (i) The proposed park encompasses Stream Order 3, and waterway should be excluded from the park area (notated as 25% of park area), as well as the whole detention and biobasin land. Land required for the principle purposes of drainage are to be dedicated as separate lot/s for drainage. The area to south of the waterway is linear park and not district park, as it cannot function as a district park with the large waterway dissecting the area. After excluding these areas, functional land area of district park should be approximate 3ha to ensure District Park facilities and function can be accommodated within the lot (current proposal of less than 2ha of functional land does not meet requirements for a district park from the required 5ha requirement).	A workshop was held with Council on 9 September 2025 to present two waterway and parkland options: • Option 1 - minor change to park and waterway • Option 2 – move the waterway south and increase the size of the main precinct recreation park On the 30 September 2025 confirmed via email that they preferred Option 2. The design have been updated to provide 3ha of parkland north of the waterway. Refer to the attached *Providence West ROL 2 – Waterways Strategy Report V2* (DesignFlow, November 2025) and relevant landscaple plans for the site.
Item 8: Stormwater management plan The report titled Providence West ROL 2 Stormwater Quality Management Plan by DesignFlow 4540 Ver 01) dated 20 May 2025 is acknowledged. Whilst the SMP presents a site-based solution for stormwater management (quality and quantity), it has not demonstrated that the proposed development will not result in detrimental impacts to upstream, downstream or surrounding properties or to road immunity within the catchment. The applicant is requested to submit a revised version of this report addressing:		
8a).	Nominate the lawful point of discharge for the development.	The lawful point of discharge if the far north boundary of the site adjacent to Ripley Road.

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8 b)	Providence West ROL 2 Waterway Strategy Report by DesignFlow (4540 Ver 01) dated 21 May 2025, does not include any details on the site specific proposal such as flows, depths/levels, velocities. The applicant is requested to update the report to include the specifics to demonstrate the proposed treatment achieves the intended outcomes including flood immunity for adjacent development and roads.	Stormwater treatment systems are above the 1% AEP. Refer to Figure 13 of *Providence West ROL 2 – Waterways Strategy Report V2* (DesignFlow, November 2025). No detention is provided above the stormwater treatment systems.
8 c)	Stormwater Quality Management Plan prepared by DesignFlow (4540 Ver 01) dated 20 May 2025 proposes two bioretention facilities for the development. However, the report does not include details of flow volumes from the developed catchment or how the treatment facilities are sized to demonstrate the proposal is sufficient for the development. Accordingly, the applicant is requested to address the following: (i) Provide details of inlet and outlet volumes demonstrating the outflows are limited to predeveloped flows. (ii) Include further details on the typical cross sections, proposed footprint of the facilities, and how they integrate within the lot in terms of maintenance access, safety and landscaping outcomes. (iii) Detention basin depths are to be limited to 1.2m in the 5% AEP design storm for public safety (QUDM section 5.12). Safety fencing around proposed detention basins would not be supported. (iv) Indicate proposed finished surface levels, batter slope, Q20 & Q100 water depth, minimum freeboard, emergency spillway, inlet/outlet pits and/or pipes, etc. Note: Batter slopes for detention basins are to be 1:6 in accordance with QUDM for safety. Isolated sections of batter slopes to absolute maximum 1:4 may be considered, subject to the batter being landscaped.	Please refer to the Water Engineering Partnership Flood Study (dated November 2025). There is no requirement for the Stormwater Quantity Management Plan in either the PDA guidelines or Council Implementation Guideline 24. The flood management strategy adopts the same online detention approach in the approved *Amex Ripley project (ARP) West Flood Study* (Cardno, 27 June 2013).
	Bioretention Basins B1 & B2: the cross section labels on the layout and detailed sections differ in the section name (A/SK3 on plan and A/SK2 on the section). Please address.	The labelling is correct. A/SK3 on plan means Section A refer to Drawing SK3. A/SK2 on section means Section A as shown on Drawing SK2.
	Extend the 4m wide maintenance track to the bio retention basin for maintenance access. The design is to be supported with maintenance vehicle swept path diagrams.	4m path has been extended Swept paths will be completed as part of detailed design.
	Provide details, including stage-storage-discharge curves for all storm events up to and including the 1% AEP for all proposed basins and demonstrate that any expected basin overtopping will cause no worsening to flooding or safety hazard to surrounding properties or roads (particularly Ripley Road) in accordance with QUDM.	There is no flood detention/storage proposed over the stormwater treatment systems. Refer to the Water Engineering Partnership Flood Study (dated November 2025).
	Basins B1 & B2 are proposed to have emergency spillways. Provide the following information in relation to the proposed spillways:	There is no flood detention/storage proposed over the stormwater treatment systems. These weirs are not emergency spillways but a fundamental part of the hydraulic function of the stormwater systems.

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	(i) The design storm event during which each of the proposed spillways will be activated; (ii) The applicant is requested to submit sensitivity analysis, including calculations, for pipe/inlet blockage in accordance with Implementation Guideline 24 (IG24) and QUDM to identity any flood impacts and safety hazards to surrounding properties and Ripley Road. The submission must also include afflux impact maps detailing the impact in the event that the spillways are activated on surrounding, upstream and downstream properties and road.	Weirs are provided out of the sediment basins to provide high flow conveyance. These will be design in accordance with the PDA Engineering and Water by Design Guidelines as per normal engineering practice. The weirs will function once the capacity of the treatment systems are reaches and will overflow regularly.
	In relation to the proposed development staging, provide details on how stormwater drainage (including stormwater mitigation devices) is to be delivered in a timely manner to treat the associated stormwater sub-catchments. Where stormwater infrastructure is to traverse land under private ownership until the development of future stages, the infrastructure must be fully contained within a minimum 4m wide stormwater drainage easement.	Staging of infrastructure will be resolved part of detailed design and provided with the Pre-Construction Certification.
	In relation to the proposed stormwater drainage, the applicant is requested to provide the following: (i) Concept stormwater longitudinal sections with hydraulic grade line; and (ii) Preliminary design (including typical cross sections and minor/major water surface levels/velocity/hazard) of all proposed overland flow paths to demonstrate that the proposed corridor is of sufficient width to locate the required overland flow path as well as any proposed driveways and/or pedestrian pathways.	This stormwater design work will be completed as part of detailed design. This is a not a development assessment requirement. The design will be resolved part of detailed design and provided with the Pre-Construction Certification.
	Given the intended future use of proposed Lot 8007, the applicant is requested to amend the proposed treatment train so that it excludes Lot 8007, as the site will be required to treat its own catchment for stormwater. This will reduce the future asset burden to council given the nature of the proposed use and minimise the area required for the stormwater quality treatment train abutting the riparian corridor.	We have retained Lot 8007 is the design of the stormwater system. If we were to exclude this Lot of from the treatment catchment then the system will be smaller. However, in the future Lot 8007 may be developed as a normal detached dwelling development, meaning this treatment system would be undersized (i.e. because it excluded Lot 8007 from the catchment). This would be a oversight and resolve in poor outcomes for Stockland and Council. We would rather allow space in the urban design for Lot 8007 to be a detached dwelling development. If this site is a private development in the future, then the stormwater treatment system will be downsized at that time.
	The submitted report and MUSIC.sqz file have different asset parameters. The applicant is requested to ensure the amended report and MUSIC model are consistent.	MUSIC model has been included with this submission.
	It is noted that Table 8 of the submitted SMP advises design parameter compliance, however it is advised that parameters within the report and included indicative cross sections are currently non-compliant. The main	700mm has been included in the MUSIC model.

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	spatial influence concerns are the high-flow bypass arrangement and the local government preferred 700mm filter media depth to facilitate full structural planting inclusive of canopy. MUSIC model and cross sections currently indicate 600mm, given the area made available is tight the applicant is requested to demonstrate conceptually the area is sufficient without compromising design batters.	
	Clarify if any detention is proposed within the bio-basins as they are noted as bioretention and high flow bypass is not shown on the concept plans submitted.	No detention is proposed. High flow bypass is provided in the design. Refer to the weirs in the sediment basins.
	Weir structures are to avoid significant expanse of rock and achieve a low maintenance vegetated outcome. Particularly avoid a dumped rock solution.	Given the flow velocities, rock on the weirs is required. I will not certify the design as the RPEQ without rock. We are happy to discuss including topsoil on the rock and vegetating but we will not certify the landscape will stay in place long term.
Item 15: Waterway The material submitted in support of the proposed development footprint identifies constraint of the floodplain and encroachment of the 25m buffer to the ToB of the waterway, realignment of sections of the waterway and online detention. The applicant has stated the impacts to the area are approved under 9820/2019/MAPDA/A. The applicant is advised that the proposed layout for areas external to Stage 1-5 were not approved owing to unresolved impacts from Stormwater Management (see approved plans for 9820/2019/MAPDA/A). While it is acknowledged the proposed area allocated is more responsive to the local environment than previously indicated, the applicant is reshaping, confining and recreating the riparian corridor, creating a low flow and habitat pools. Owing to the extent of the proposed constraint floodplain, earthworks batters within 25m from recreated and existing top of bank and changes to the waterway to facilitate the development footprint the applicant is requested to address the following items: Note: The MEDQ delegate notes that while the catalyst east west road is not part of this application the road will form a southern bund further confining the waterway floodplain. Owing to this the applicant is requested to demonstrate the appropriateness of the proposed design in the post fully developed case in addressing the below items.		
15a)	Figure 12 of the Waterway Report prepared by Design Flow is acknowledged. The applicant is requested to amend the design to demonstrate the proposed riparian corridor widths and stream order 3 buffer is maintained to linear park and WSUD asset infrastructure that is a minimum 25m from recreated top of Q5 bank or 25m from the current top of high bank of the waterway.	A workshop was held with Council on 9 September 2025 to present two waterway and parkland options: • Option 1 - minor change to park and waterway • Option 2 – move the waterway south and increase the size of the main precinct recreation park On the 30 September 2025 confirmed via email that they preferred Option 2. The design has been updated to provide 3ha of parkland north of the waterway. Refer to the attached *Providence West ROL 2 – Waterways Strategy Report V2* (DesignFlow, November 2025) and relevant landscaple plans for the site.

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		The design of the waterway is consistent with the PDA guidelines. We have considered Councils request for 25m and accommodated as far as practical. The velocities in the waterway are low and the risk to batters/infrastructure will be further confirmed during detailed design through a refined geomorphic assessment.
15b)	The applicant is requested to submit an amended Concept Functional Waterway Design and reporting inclusive of green infrastructure, complex fauna habitat features and facilitate a largely fully vegetation outcome consistent with the mapped regional ecosystems for the site and vegetated riparian corridor intent. To demonstrate this, the applicant is requested to address item (e) below, the other items of this information request relating to the waterway design and provide an assessment and appropriately scaled plans showing post development expected velocities, bed shear and shear stress, identify the areas/ extent of rock protection, location of complex habitat (terrestrial and aquatic) features. The design should be responsive to the local environment soil conditions and existing vegetation.	On the 30 September 2025 confirmed via email that they preferred Option 2. The design has been updated to provide 3ha of parkland north of the waterway.
15c)	It is advised to maintain the current low flow via the Ripley Road dam. The MEDQ delegate acknowledges that the dam will need reshaping to address the Ripley Road widening. This will minimise earthworks to the one area.	The dam can not be retained due to the Catalyst Road batter.
15d)	Given the site topography and sensitive receiving environment, the applicant is advised that the piped stormwater solution to outlets within the riparian corridor must demonstrate velocities of no more than 2m/s at the end of the concrete apron in all key storm events.	Noted. This will be considered as part of detailed design and Pre-Construction Certification.
15e)	The applicant is requested to redesign the waterway functional layout to address retention of vegetation proximate to the earthworks interface as per Item 14 – Vegetation Retention, remove indicative proposed pathways and earthworks that impact on vegetation or constrain the waterway (locate them on the periphery adjacent to roads), locate the emergency access to avoid impacts to the ephemeral sedge and reduce extent of culvert length in accordance with Item 7 – Traffic Impact Assessment. The images below identify key areas of council concern for the waterway impingement.	On the 30 September 2025 confirmed via email that they preferred Option 2. The design has been updated to provide 3ha of parkland north of the waterway. Trees will be retained where possible.

Please contact me on 07 55281148 should you require further information or clarification.

Yours sincerely

Shaun Leinster
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Director – DesignFlow