8 November 2018 COPY

Stephen O'Connor
Altis Property Partners
Level 14, 60 Castlereagh Street
Sydney NSW 2000

Mamre Road South, Kemps Creek – Detailed Planning Requirements Package

Dear Stephen,

I refer to your discussions with our Growth Planning Lead, Kristine Leitch about accelerating the water related servicing of Mamre Road South, Kemps Creek. We understand this is a joint venture between Frasers Property and Altis Property Partners located around Mamre Road and Bakers Lane comprising the creation of a warehousing and logistics hub with associated employment creation of 2,500 jobs. The development is proposed to be built over five stages with the first aiming to start in 2019-22 and the final to be completed by 2026-2029.

Commercial Agreement
To accelerate the servicing of Mamre Road South, Frasers/Altis will need to complete the detailed options planning activities outlined in Attachments 1 and 2 at their cost. If, following the completion of the detailed options planning activities Frasers/Altis chooses to proceed with the design and delivery of water and wastewater infrastructure needed to service Mamre Road South, Sydney Water may reimburse Frasers/Altis for the reasonable and efficient costs of the design and construction of this work. This will be achieved through a commercial agreement in line with our funding principles for developer delivered major infrastructure if applicable.

Sydney Water will not reimburse costs for the options planning stage irrespective as to whether the work progresses to the design and delivery stage, as the development is currently not re-zoned, and the developer is undergoing an application for a State Significant Development which is not yet approved and which, whilst covering the whole site, is only investigating warehouse development within part of the development. Further approvals would be required to cater for the total growth indicated across the five development stages. At present these sit in the South Creek Precinct.

If applicable, and under the relevant commercial agreements, and Frasers/Altis deliver the required infrastructure to Sydney Water's standards, Sydney Water may then look to reimburse the developer for the reasonable and efficient costs of these infrastructure works on a per lot/connection basis or as set out in the commercial agreement.

Detailed Options Planning
Presently there is no significant water or wastewater infrastructure servicing the development. Sydney Water's strategic planning for the Mamre Road South development has identified the preferred servicing strategy as:

- Water – supply from Erskine Park Elevated.
- Wastewater – transfer from the St Mary's treatment works
- Non-drinking water – supply from rainwater tanks or BASIX system where appropriate.

The preferred servicing strategy is shown in Attachment 1.
Frasers/Altis will need to complete the detailed planning work to develop the above servicing options to determine the optimal servicing solution for the lowest lifecycle cost and acceptable risk.

This work will need to consider the potential staging of infrastructure. A full list of the tasks to be completed is in Attachment 1 and 2. A detailed planning options report will ultimately be delivered as part of this work, which identifies the location and/or route of water and wastewater infrastructure needed to service the development area.

As outlined in Attachment 1 and 2:

- Frasers/Altis will need to obtain planning approval for the infrastructure from the relevant local council.
- Requirements for land acquisition and easements for any infrastructure to be delivered will be in line with Sydney Water's land acquisition policies.

Engagement of professional services
Frasers/Altis will need to engage and fund appropriate consultancies to complete the detailed planning work. The funding of this work is at Frasers/Altis own risk. Should Frasers/Altis choose not to progress the development of the site, Sydney Water will not reimburse Frasers/Altis for any costs associated with the detailed planning.

Frasers/Altis is to prepare a project brief based on the tasks in Attachment 1 which is to be endorsed by Sydney Water **prior to seeking quotes from any consultants.** We recommend that Frasers/Altis also engages a Project Manager to manage the detailed planning. The role of the Project Manager is outlined in Attachment 1.

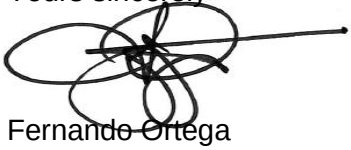
Frasers/Altis must follow our Urban Growth Procurement Guidelines for any work Frasers/Altis may seek reimbursement for. This includes the engagement of any consultants for the detailed planning work. Our Procurement Guidelines are available in the Plumbing, Building and Developing (Growth Servicing Plan) section of our website at: www.sydneywater.com.au.

Agreement of terms
Sydney Water only approves the developer to complete the detailed planning work. Approval of and requirements for the next stages of work (concept and detailed design) will be provided following Sydney Water's approval of the detailed planning options report.

If detailed planning work is progressed without Sydney Water's endorsement or approval as required, we may not reimburse you for the cost of that work.

To initiate the detailed planning work, Frasers/Altis must accept (in writing) the above conditions and agree to complete all appropriate tasks as listed in the enclosed attachments.

Yours sincerely



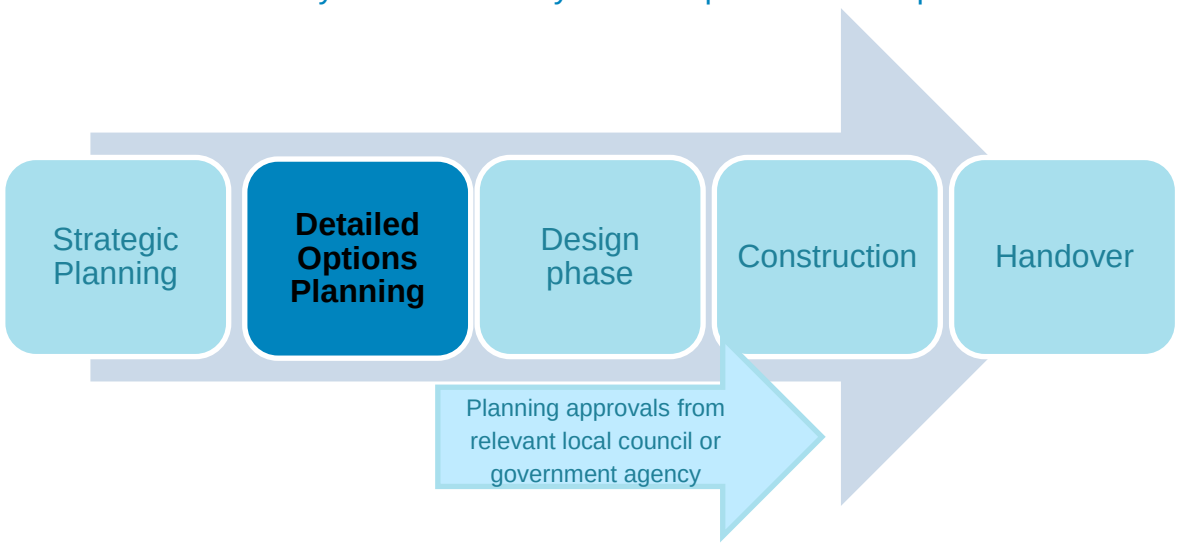
Fernando Ortega
A/ Manager, Growth Planning and Development
CC: Frasers Property

Attachment 1

Detailed Planning Options Assessment

Planning Requirements Package

Detailed Options planning is the second step in Sydney Water's process for planning and delivering water related infrastructure. Detailed options planning is based on the preferred servicing strategy and considers the optimal location, route, staging and sizing of infrastructure to identify the lowest lifecycle cost option with acceptable risk.



Overview

Where a developer chooses to accelerate the servicing of their development ahead of Sydney Water's delivery timeframe they may need to complete detailed planning work to determine the preferred servicing option. **Figure 1** provides an overview of this process.

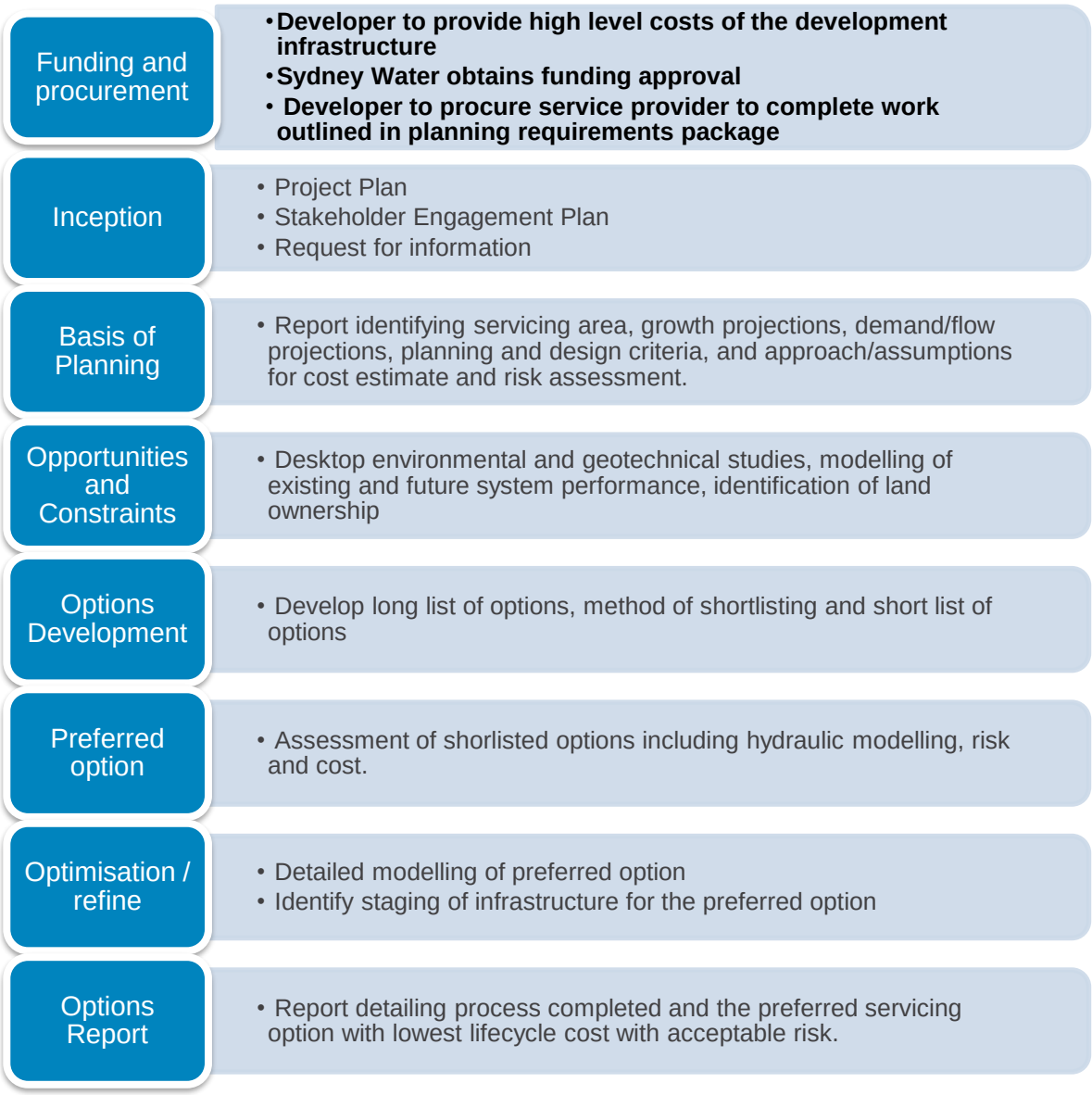
Figure 1

This detailed planning requirements package outlines the tasks, deliverables and hold points in Sydney Water's process for detailed planning of water related infrastructure. An overview of the detailed planning process is in **Figure 2**. Also included is the Planning output artefacts overview which provides a mirror of the SW planning process to assist in streamlining the processes, documentation and review timescales.

For the costs associated with detailed planning and subsequent delivery of water and wastewater infrastructure to be eligible for reimbursement by Sydney Water under a commercial agreement, where feasible, detailed planning works must be delivered in accordance with these requirements.

A number of 'hold points' are identified. At each of these hold points, Sydney Water must provide formal approval for the next tasks to commence. If subsequent tasks are commenced prior to receiving approval from Sydney Water at a hold point, some of or all of the work may not be eligible to be reimbursed by Sydney Water.

Figure 2 Over view of process



Funding of work

HOLD POINT: Before detailed planning work can begin, the developer must obtain formal confirmation from Sydney Water that funding of the work has been approved. The developer must provide indicative costs of the project to facilitate this.

To assist in obtaining funding approval, Sydney Water will require information from the developer including anticipated timing for rezoning, lot development, dwelling occupancy, infrastructure delivery and a pre-tender cost estimate for the work to be completed.

Engagement of professional services

The developer will need to engage and fund appropriately qualified service providers to complete the detailed planning work. The developer should prepare a project brief covering the tasks

outlined in **Table 1**, and submit to Sydney Water for review prior to seeking quotes from any service providers. Any work that may ultimately be funded by Sydney Water must be procured in line with Sydney Water's Procurement Guidelines.*

HOLD POINT: Prior to engaging a service provider for detailed planning and commencing work, the developer must demonstrate compliance with Sydney Water's Procurement Guidelines to gain approval of their procurement strategy and subsequent engagement of service providers.

*Work which is not reimbursable at the planning stage need not follow the guidelines however this may impact reimbursement at following stages.

Project Manager

We recommend developers engage a Project Manager to manage the detailed planning options assessment. The project manager must have relevant experience in planning and delivery of water related infrastructure to meet Sydney Water's requirements. The Project Manager is to be engaged only for the completion of the detailed planning options report and would be responsible for:

- Preparation and maintenance of a Management Control Plan for the detailed planning.
- Chair monthly progress meetings and prepare and circulate minutes.
- Prepare detailed project briefs as required for specialist contracts and assist the developer with engaging professional services in line with Sydney Water's Procurement Guidelines.
- Managing detailed planning contracts.

Planning approval

The developer will need to obtain planning approval for the delivery of infrastructure from the relevant planning authority. For example, from Council(s) under Part 4 of the *Environmental Planning and Assessment Act 1979* or the Department of Planning and Environment where the proposal is State Significant Development. This is typically by submission of a Development Application and a Statement of Environmental Effects or Environmental Impact Statement. We recommend developers liaise with Council(s) while completing strategic planning work.

Land acquisition and easements

Sydney Water may need to acquire land or take out easements to ensure our needs for operating and maintaining assets are met. The requirements for land acquisition and easements will be in line with Sydney Water's land acquisition policies. A stakeholder from Sydney Water's Group Property team will need to be consulted during the detailed planning work.

Mamre Road South Water Servicing Strategy

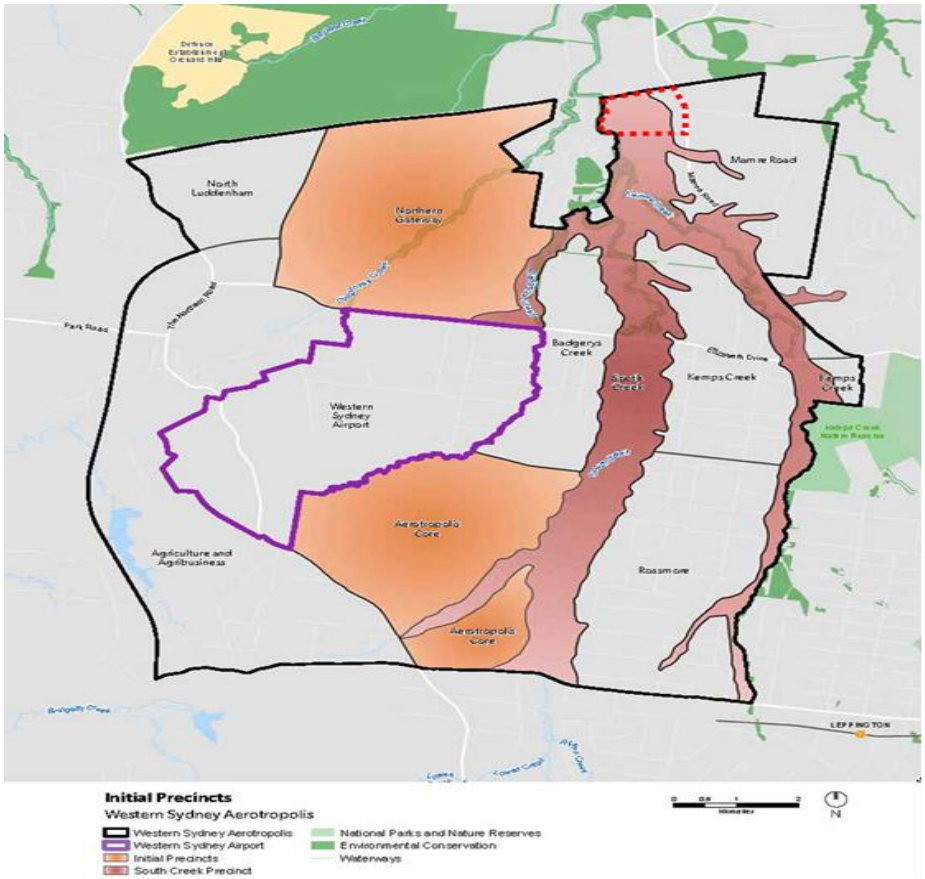
Sydney Water's endorsed water servicing strategy for *Mamre Road South* is:

Supply from *Erskine Park Elevated*

The investigation should: Consider the impact on and ability of the Erskine Park water supply to service this, and Minchbury only if required.

The options planning must consider:

- *The new growth demand from this development*
- *Existing demand*
- *Known variations to the demand at the Mamre Road North Development*
- *Additional growth volumes identified in the area that may impact the servicing ability, and as provided by Sydney Water.*



Indicative map only

Mamre Road South Wastewater Systems

Sydney Water's endorsed wastewater servicing strategy for *Mamre Road South* is:

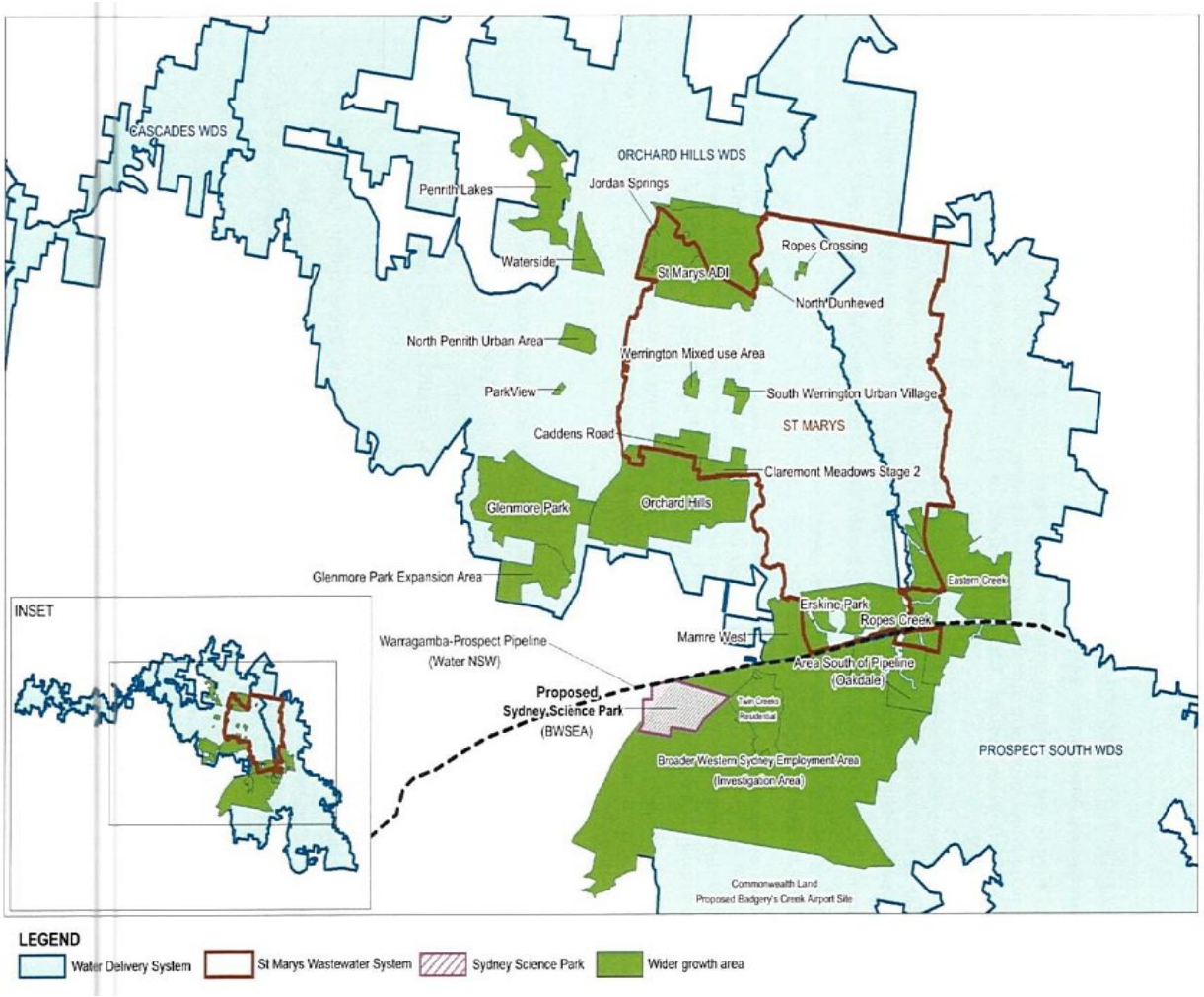
Transfer to *St Marys Wastewater Treatment Plant*

The investigation should:

Consider impact to St Marys treatment plant.

The options planning must consider:

- *The new growth demand from this development*
- *Existing demand*
- *Known variations to the demand at the Mamre Road North Development*
- *Additional growth volumes identified in the area that may impact the servicing ability, and as provided by Sydney Water.*



Indicative map only

Table 1 - Detailed planning activities -see also planning artefacts

Deliverable	Activities
Inception	Hold inception meeting with Sydney Water. The meeting should cover: • Confirmation of objectives, scope and deliverables. • Confirmation of communication protocols. • Discussion of any system constraints, issues or opportunities that may impact on options development. • Handover of any relevant Sydney Water reports, studies and planning guidelines • Access to Sydney Water models and cost estimator tools. **HOLD POINT: Inception meeting to be held with Sydney Water prior to work commencing.** Prepare a Project Execution Plan outlining: • Scope and deliverables • Management Control Plan (15 working days are needed for any hold points for Sydney Water review, endorsement or approval). • Roles and responsibilities. • Project objectives / methodologies. • Deliverables, timing and budgets. • Communication protocols. • Project Risk Assessment. The risk assessment is to be updated throughout the project and included in the final options report. Prepare a Stakeholder Engagement Plan outlining: • Internal stakeholders and how they will be engaged throughout the project. Stakeholders will be confirmed by Sydney Water Project Manager and may include Urban Growth, Servicing and Asset Strategies, Engineering and Environmental Services, Group Property and Service Delivery. • External stakeholders and how they will be engaged throughout the project, including coordination with planning authorities and other service providers. **HOLD POINT:** **Sydney Water to endorse Project Execution Plan before progressing to further activities** **Sydney Water to endorse Stakeholder Engagement Plan before progressing to Opportunities and Constraints.**

Deliverable	Activities
Basis of Planning Report	Prepare a Basis of Planning Report. Sydney Water may provide a template Basis of Planning Report. The report should include, but is not limited to: *Define servicing area* • Identify all potential development that can be included in the servicing area • Growth forecasts and development schedule for servicing area • Map showing staging plan for development area *Identify projected water demand and wastewater flows for the full catchment (including any staging). Consider different scenarios e.g. growth, demand design rates.* *Define planning and design criteria for locating and sizing assets.* *Identify planning horizons, including current and ultimate development. Interim horizons need to be assessed to determine staging of assets.* *Define assessment approach* • Identify cost estimate approach and assumptions (using Sydney Water Cost Estimator) • Identify non-cost assessment criteria • Identify risk framework approach and assumptions for acceptable risk (using Sydney Water risk matrix) **HOLD POINT: Sydney Water review and endorsement of Basis of Planning Report before progressing further activities.**
Opportunities and Constraints	*Assess Baseline System performance* • Update the relevant water and wastewater hydraulic models to existing conditions following Sydney Water's Water Modelling System QMS and Wastewater Modelling System QMS • Baseline performance of existing water and wastewater systems without the proposed development • Assessment of current and future water system performance using Sydney Water's Water Modelling System hydraulic water models • Assessment of current and future wastewater system performance using Sydney Water's MOUSE hydraulic wastewater models • Future system performance requirements.

Deliverable	Activities
	Desktop environmental constraints mapping • Environmental and geotechnical desktop assessments to map key environmental and geological constraints and issues using desktop assessment. This work will be used in the identification of options and assessment criteria. *Please note that while not required at this stage, field studies will be required once the preferred servicing option has been selected.* *External stakeholder engagement* • Engage with external stakeholders, as identified in the endorsed stakeholder engagement plan, to identify any other opportunities and constraints that may impact on the assessment of the servicing options e.g. land ownership, works being done by other utilities. • Minutes of meetings with external stakeholders capturing discussions and key outcomes to be provided to Sydney Water with the opportunities and constraints for endorsement. **HOLD POINT: Sydney Water review and endorse opportunities and constraints before endorsing shortlisted options (see Options Development)**
Options Development	Develop a list of options that are consistent with the approved Servicing Strategy. This should take into consideration: • Pipe alignment and sizing • Asset locations and sizing • Storage and operating configurations • Staging of infrastructure • Opportunities and constraints. Attend Value Options Workshop. The purpose of this workshop is to exhaust any feasible option that meets the project objectives. Tasks will include: • Preparation of a briefing paper on the long list of options • Attendance at the workshop by up to 2 key members of the project team • Review and incorporate outcomes of the Value Options Workshop. Identify method for shortlisting options. Short list options. **HOLD POINT: Sydney Water to endorse shortlisted options before detailed options assessment (see Determine preferred option).**

Deliverable	Activities
Determine preferred option	Detailed assessment of shortlisted options including: • Preliminary hydraulic assessment (including operating performance and issues) • Energy consumption / efficiency • Construction methods • Cost estimate / life cycle cost • Risk assessment Hold options assessment workshop with relevant stakeholders to determine preferred servicing option based on the assessment approach in the endorsed Basis of Planning Report. Sensitivity assessment including impact of staging, cost and sizing of infrastructure and population projections. **HOLD POINT: Workshop with relevant stakeholders to determine preferred option to be held prior to Options optimisation and completion and submission of Detailed Planning Options Report to Sydney Water.** **Key external stakeholder briefing on preferred option.** Sydney Water is to attend this briefing and minutes of the meeting to be endorsed by Sydney Water and attached to the final options report.
Options optimisation	Confirm staging of preferred option. Consider delivery timeframe of preferred option and potential need for interim option if required. Detailed hydraulic assessment of preferred option. Demand sensitivity analysis +/- 10% of as advised by Sydney Water Urban Growth. **HOLD POINT: Options optimisation to be completed prior to completion and submission of Detailed Planning Options Report to Sydney Water.**
Detailed Planning Options Report	Prepare an options report using Sydney Water's template to demonstrate the process of determining the preferred servicing option. The report at a minimum must include: • Objective of planning process. • Study area including growth and demand forecasts, and staging location of the development. • Catchment plans. • Description of existing systems including: - Evaluation of performance and constraints. - Operation and design criteria and design loadings. - Demands, flows and assumptions.

Deliverable	Activities
	- Geotechnical constraints. • Summary of environmental constraints. This should include discussion around the environmental factors that were relevant to the development and/or selection of the preferred option. • Identify stakeholders, engagement activities and any issues. This should include any supporting evidence from discussions with stakeholders that was used in the assessment of the options. • Description of all servicing options including advantages and disadvantages of each option with respect to technical, environmental, social and economic assessment criteria. This should include the cost of each option. • Assessment process including: - Assessment criteria (cost and non-cost criteria) - Process for assessment - Sensitivity analysis - Outcome - Econ 8 – NPV of shortlisted options • Preferred servicing option including: - Description - Staging plan - Risk assessment **HOLD POINT: Sydney Water review and comment on Detailed Planning Options Report. Sydney Water to endorse the Detailed Planning Options Report once all comments have been adequately addressed.**

Next Steps

Following Sydney Water's endorsement of the Detailed Planning Options Report the developer may choose to progress with the next phase of work. The tasks below provide indicative information for next phase of work. Sydney Water will need to obtain funding approval for concept design, detailed design and construction, and executing the commercial agreement with the developer. The developer will need to allow time in their program for funding approval and procurement of service providers.

Deliverable	Activities	
Application	The developer is to engage a Water Servicing Coordinator (for application only). The Water Servicing Coordinator will submit an application in our e-developer system for the development. **HOLD POINT: In response to the application Sydney Water will issue a Notice of Requirements to the Water Servicing Coordinator. The Notice will:** • **confirm the infrastructure to be designed and constructed by the developer** • **confirm scope of work and funding approval for the next stage of work** • **identify any agreements that the developer must enter into with Sydney Water.**	
Concept Design and Needs Specification	If a **reservoir, water or wastewater pumping station or booster and associated pressure mains** are needed to service the development you will need to follow our Managing New Developments (Complex Works) process. This will include preparation of concept drawings and Needs Specification for Sydney Water approval prior to detailed design commencing.	If **water or wastewater gravity lead in mains** are needed to service the development you will need to follow our Managing New Developments process.
Risk Based Cost Estimate	Following Sydney Water's endorsement of the required concept designs and need specifications the developer will need to engage a consultant to do a Risk Based Cost Estimate of all works to be delivered under the commercial agreement. The outcome of the Risk Based Cost Estimate will inform the funding approval for detailed design and delivery of the infrastructure.	

HOLD POINT: Following completion of the above work Sydney Water may/will need to obtain funding approval for the detailed design and construction of the infrastructure.

Note:

The developer will need to allow time in their program for funding approval and procurement of professional services.

APPENDIX 2 – SYDNEY WATER PLANNING ARTEFACTS PROCESS (new)

Planning Needs	Basis of Planning	Gap Analysis	Pathways Development	Options Assessment	Local Area Scheme Plan (LASP)	Build Needs	Operational Change Needs	Plan on a Page
Need and trigger	Project objectives and scope	Constraints mapping	Pathway Development	Options Assessment	Background	Scope summary[3]	Operational Change Requirement	Current Risk
Scope / Coverage	Planning / design criteria [1,2]	Existing system/infrastructure	Decision criteria making approach	Decision-making approach	Growth Table and Growth Map	Timing	Operational Change Scope	Current Issues
Background	Growth forecast	Current performance	Servicing Concept Analysis	Options Analysis	Scheme Plan Layouts	Staging	Change Impact Assessment	Current Opportunities
Expected benefits	Flow / demand projections	Future performance	Adaptive Pathways	Sensitivity Analysis	Flow Schedule (appendix)	Summary of benefits	Timing & Staging	Future 30yrs Issues
Expected completion timeframe	Water and nutrient balance	Asset condition and capability assessment	Staging and Investment Plan	Preferred Option	Flow Diagram (appendix)	Cost forecast CAPEX and OPEX	Monitoring Plan	Future 30yrs Action Plan
Funding pathway	Process decision making approach	Gaps identification & importance assessment	Action Plan	Staging and Investment Plan		Delivery Pathway	Risk Assessment	5yrs Action Plan Cost
Cost forecast - CAPEX (30 years)	Stakeholder Engagement Plan	Risks, Issues and Opportunities (RIOs) identification		Action Plan		Risk and opportunity identification	Funding Pathway	5yrs Action Plan Operational Changes
Risk / opportunity assessment				Preliminary Geotechnical Assessment (appendix)			Recommendation	5yrs Action Plan Key benefits and drivers
				Preliminary Environmental Assessment (appendix)				
				Local Area Scheme Plan (when required)				

26 June 2019

Paul Solomon
Planning and Infrastructure Manager
Frasers Property Australia
E Paul.Solomon@frasersproperty.com.au

Stephen O'Connor
Project Director
Altis Property Partners
E: stephen.oconnor@altisproperty.com.au

RE: Altis Fraser proposed Mamre Road development.

Dear Paul and Stephen

Thank you for the Options Report to service your development at Mamre Road. Sydney Water is committed to delivering integrated water services to meet growth in collaboration to achieve the Western Parkland City vision.

We are currently working with the Department of Planning and Environment to better understand potential changes to the release of the Western Sydney Employment Area and development along Mamre Road. Delivery of temporary solutions are developer funded and to fast track Sydney Water services for the Mamre Road Precinct is dependent on DPE formal release advice and subject to Sydney Water's policy on developer accelerated servicing. We have a meeting with the Department of Planning to discuss the proposed changes shortly and propose to provide comments on your option report post that meeting.

Concurrently, we are progressing with planning services for the Mamre Road Precinct based on current growth forecast and timeframes provided by the Department of Planning and Environment. In brief we can confirm that based on this information the Mamre Road Precinct can be serviced by 2026. Sydney Waters current proposed long-term services for the Mamre Road Precinct include:

- **Wastewater** services to Mamre Road Precinct can be provided temporarily by St Marys STP for up to 3years, this is based on formal notification of the expected date of connection. Long-term we intend to provide wastewater services from the proposed Upper South Creek WRP to be completed by 2025/26.

- **Drinking water** services can be provided in the short term, we are working to deliver a trunk main along Mamre Road by 2024-25. We will be working with RMS to deliver trunk mains in Mamre Road during road upgrade, subject to funding approval based on risk for development timeframes. Developer delivered precinct trunk mains will also be required to service the precinct.

- **Recycled water** services are being investigated for the whole of the Western Sydney Aerotropolis Growth Area (WSAGA) including this Precinct. We are seeking information on potential recycled water demands, types of use and will provide further advice later in the year. Consideration should be given to incorporating third pipe reticulation and recycled water plumbing connections during your planning stages.

- **Stormwater** – Sydney Water is collaborating with the Western Sydney Planning Partnership Office, member Councils and agencies on typologies, flood and waterway health models for the whole South Creek Catchment, to inform WSAGA LUIIP 2 and the WSAGA Precinct Plans. Consideration should be given to managing flooding and stormwater runoff quality.

Please feel free to contact me or Nelly Berry on 8849 6921 if you wish to further discuss.

Yours sincerely

Fernando Ortega
Account Manager for the Western Sydney Planning Partnership
Liveable City Solutions
Sydney Water
0407 702 994

26 June 2019

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Yours sincerely

Fernando Ortega
Account Manager for the Western Sydney Planning Partnership
Liveable City Solutions
Sydney Water
0407 702 994

For approval
External

9 January 2020

Sydney WATER

Endorsement of Interim Options for Stage 1 Altis-Frasers site in Mamre Rd Precinct

It is recommended that Sydney Water endorses the interim options report (Attachment A) to provide water and wastewater services for Stage 1 of the Altis and Frasers study site at 657-769 Mamre Rd, Kemps Creek.

The planning proposal for rezoning of the Mamre Rd Precinct was put on display by DPIE on 20 November 2019. Sydney Water is expecting to finalise Strategic Planning of the precinct by February 2020. This will enable completion of Options Planning for Mamre Rd South Precinct by end of 2020, pending business case approval.

When Altis-Frasers submit a s73 application for this development, Sydney Water must confirm that the design follows the endorsed interim option and aligns with the ultimate servicing strategy.

The preferred interim water option is a DN250-DN300 extension of the Erskine Park water supply zone (WSZ). There are two potential interim wastewater options that can be used at the discretion of Altis-Frasers. The first option is a local pressure sewer network connecting to the existing sewer network 2km away. The second option, preferred by both Altis-Frasers and Sydney Water, is an internal gravity network with a temporary pump out facility.

Context

Altis Property Partners (Altis) and Frasers Property Australia (Frasers) are proposing to develop a 118ha warehouse, logistics and industrial facilities hub at 657-769 Mamre Rd, Kemps Creek (Proposed Site) generating an assumed 2,500 jobs.

The Proposed Site is located within the Mamre Road Precinct of the Western Sydney Aerotropolis. Altis-Frasers have submitted a State Significant Development application (SSD-9522) for Stage 1 of the development to DPIE, as shown below, and it is currently under assessment.

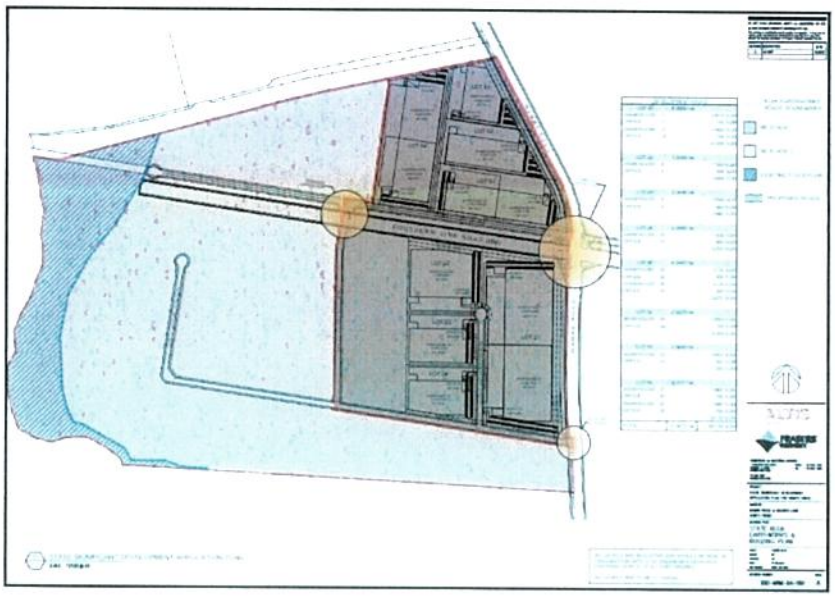

Figure 1: Altis-Frasers proposed Stage 1 development

Concurrently, DPIE has put on exhibition the draft structure plan (Figure 2) for Mamre Rd Precinct, which will ultimately define the boundary of the future industrial zoning for the Proposed Site.

If there are substantial changes to the Altis-Frasers SSDA that impacts water and wastewater servicing, the interim options will need to be revised based on the changes to their plans.

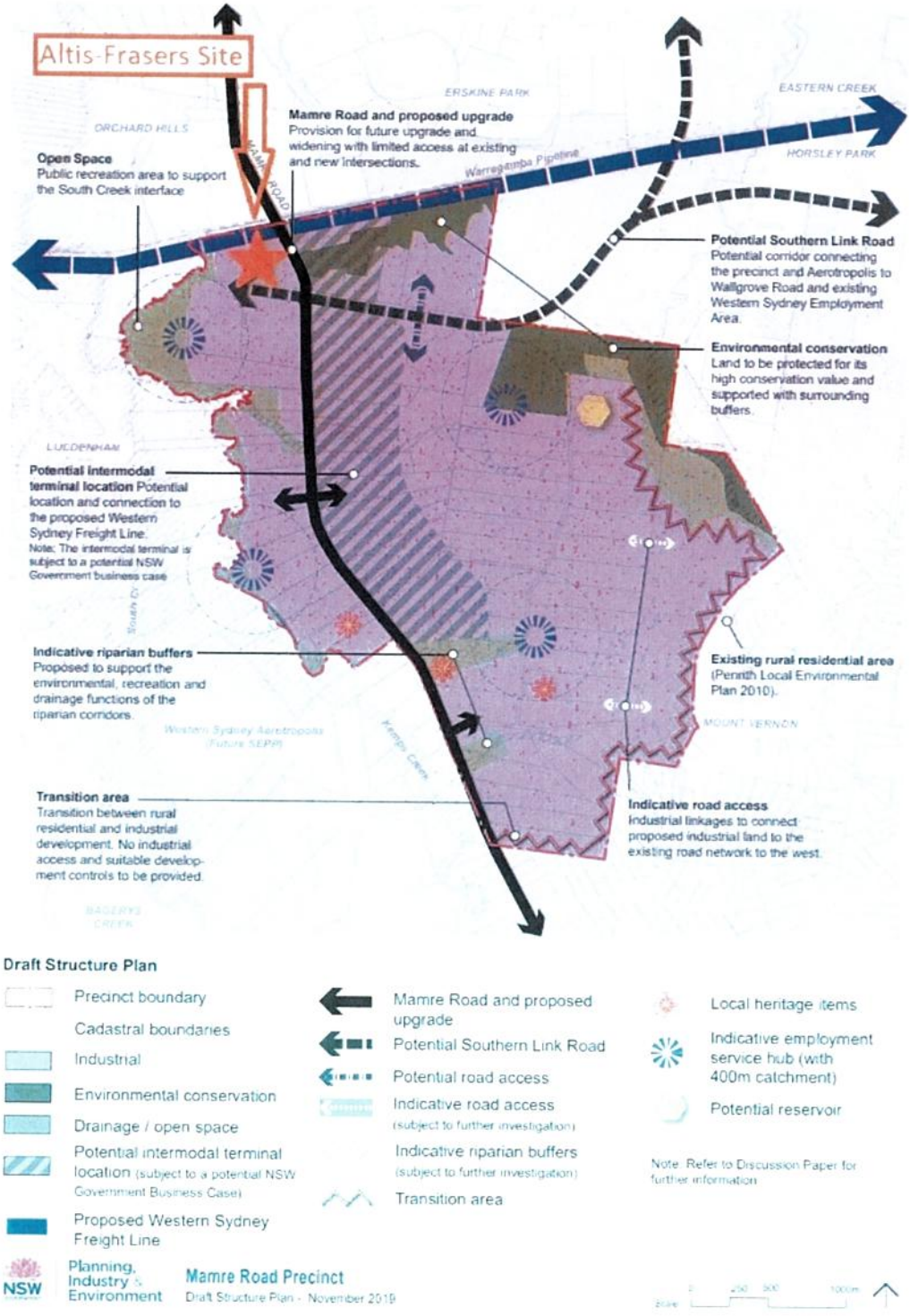

Figure 2: Draft Structure Plan with Altis-Frasers site

Sydney Water Strategic Planning for Mamre Rd Precinct

Sydney Water is currently undertaking strategic planning to determine the servicing strategy for Mamre Rd Precinct. It is expected that the interim and ultimate servicing strategies for water and wastewater will be determined by February 2020.

Options Planning will commence once the servicing strategy is endorsed, a business case has been approved and there is further clarify on the future zoning and land use types, e.g. the final location of the Intermodal.

Sydney Water has also been in discussion with key landowners and large corporate developers, including Altis-Frasers, to understand their ultimate development plans and timing. These plans will provide growth intelligence to inform the servicing strategy and final water and wastewater infrastructure options.

Interim Options

Altis-Frasers have carried out an options assessment (Attachment A) to determine the preferred interim servicing option for water and wastewater servicing their proposed warehouse, logistics and industrial facilities hub at 657-769 Mamre Rd, Kemps Creek. Sydney Water stakeholders from Integrated Systems Planning, Customer Delivery and City Growth & Development have been involved throughout the assessment process.

Water – Preferred Interim Option

The Mamre Rd Precinct is currently within the Cecil Park Water Supply Zone (WSZ). As at the time of the options assessment, there is limited available capacity from the Cecil Park WSZ. Interim supply for Altis-Frasers, and other potential developers in Mamre Rd Precinct, can be temporarily sourced from the Erskine Park Elevated WSZ. The Strategic and Options Planning for Mamre Rd Precinct will determine the ultimate source of water and trunk upgrades required to service forecasted growth in the area.

The shortlisted interim options to provide water to the Altis-Frasers site are shown in Table 1.

Option	Benefits	Risks	Risk rating		Cost Estimate[1]
W1 DN200 lead in main	• Least cost option to supply development only	• Mamre Rd proposed upgrade. May need to realign main • Crossing raw water pipeline needs lengthy approval • Can only cater for limited additional growth • Lower firefighting capacity		Moderate Very Unlikely	$2.0M
W4 DN200-DN300 lead in main	• Larger main to the development and duplication of the existing DN200 main will provide flexibility to serve other developments • Likely reduced impact on Cecil Park WSZ	• Mamre Rd proposed upgrade. May need to realign main • Crossing raw water pipeline needs lengthy approval		Minor Very Unlikely	$3.3M

Table 1: Shortlisted interim water options

The preferred interim option for water for the Altis-Frasers site is option **W4** and shown in Figure 3. It includes:

- 700m of DN250 main
- 1600m of DN300 main

[1] The Cost Estimate is total cost to deliver the interim water infrastructure. A preliminary funding assessment has been completed on page 6 to determine Sydney Water's potential share of costs.

- A Dividing Valve (DV) for potential future rezoning onto Cecil Park WSZ

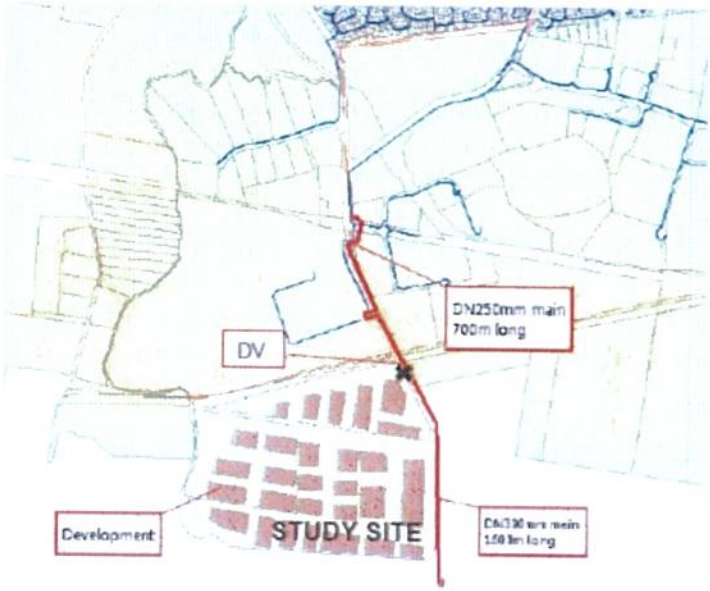

Table 2: Shortlisted interim wastewater options

Wastewater – Interim Options

There are two shortlisted interim options for wastewater that are viable and endorsed by Sydney Water. They are shown in Table 2.

Option	Benefits	Risks	Risk rating		Cost Estimate[2]
WW1 Low pressure sewer	• Developer bears cost and responsibility to maintain the system	• Issues with developer's pressure system could cause local overflow and loss of service. • Crossing raw water pipeline needs lengthy approval • Likely not to align with ultimate servicing strategy		Minor Very Unlikely	$1.9M
WW5 Gravity reticulation with pump out	• Reticulation can likely be used in the ultimate servicing • Developer bears cost and responsibility to maintain the system	• Overflow if tanker operation is not adequately managed • Odour issues at pump out location		Minor Very Unlikely	$2.6M

Table 2: Shortlisted interim wastewater options

Wastewater – Interim Option WW1

Interim Option WW1 is low pressure sewer network with individual collection pots for each building. The pressure sewer will connect to the existing network north of the study site, for treatment at St Marys. If the ultimate strategy is for a gravity system, the pots will be removed, pressure mains decommissioned and internal reticulation put in by Altis-Frasers at their cost. Altis-Frasers will connect the internal reticulation to the ultimate trunk sewer network.

Interim Option WW1 is shown in Figure 4 and requires:

[2] The Cost Estimate is total cost to deliver the interim wastewater infrastructure. A preliminary funding assessment has been completed on page 6 to determine Sydney Water's potential share of costs.

- Collecting pots and pumps for each building
- 2000m of DN140 pressure main
- Barometric loop at DN140 connection into existing manhole

Figure 4: Wastewater Interim Option WW1

Wastewater – Interim Option WW5

Interim Option B is a single tankered pump out facility with reticulation gravity mains within the site. The reticulation gravity mains will be built to Sydney Water standards and can form part of the ultimate solution.

When the ultimate wastewater trunk sewer is ready for connection, Altis-Frasers will be required to decommission all interim pump out infrastructure and connect their reticulation network into the ultimate infrastructure.

Interim Option B is shown in Figure 5 and requires:

- 4500m of DN150 reticulation mains
- Pump out facility with emergency storage (estimated 75m^3)

It is noted that for compliance with the WSAA code, minimum reticulation for industrial and commercial zoning should be DN225, not DN150. This will be reviewed by Sydney Water when the s73 application is submitted.

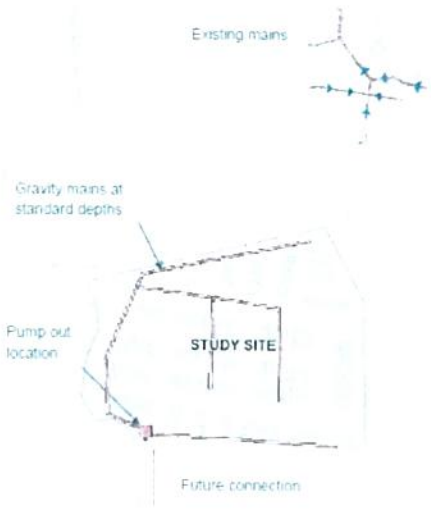

Figure 5: Wastewater Interim Option WW5

Preliminary Funding Assessment

The final determination of Sydney Water funding will be done at the completion of the design and when there is a valid development consent. A preliminary assessment of Sydney Water funding has been completed below based on the current Funding Infrastructure to Service Growth policy and forecasted timing of the Altis-Frasers interim infrastructure to be delivered by end of 2020.

Water

All internal reticulation is to be funded by Altis-Frasers. As the lead in water main provides no benefit to other developers, Sydney Water will only consider funding reimbursement for upsizing of the pipeline from DN150, which is the minimum reticulation size for industrial and commercial property.

Wastewater

All interim wastewater works and the ultimate minimum reticulation is to be funded by Altis-Frasers in accordance with the Sydney Water – Funding Infrastructure to Service Growth policy. The decision not to fund the interim works is based on Altis-Frasers accelerating development ahead of Sydney Water's Growth Servicing Plan, ahead of rezoning and release of land by DPIE and ahead of RMS finalisation of the Mamre Rd upgrade design.

Figure 5 shows the likely future connection to the ultimate trunk sewer. If this connection requires a lead in main to be delivered by Altis-Frasers, it will be subject to funding assessment at that point in time.

Recommendation

It is recommended that Sydney Water endorses the interim options to provide water and wastewater services for Stage 1 of the Altis and Frasers study site at 657-769 Mamre Rd, Kemps Creek.

When Altis-Frasers submit an interim design or s73 application for this development, Sydney Water must confirm that it follows the endorsed interim option and aligns with the ultimate servicing strategy.

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Attachment A – Altis-Frasers Mamre Rd Interim Options Assessment

14 January 2020

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Altis Property Partners
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Issued by email

Reference: Altis and Frasers Mamre Rd South Options Planning (2019) – Interim Options Development for 657-769 Mamre Rd, Kemps Creek

Dear Stephen and Paul

Thank you for providing Sydney Water with the Mamre Road South Options Planning (2019) Interim Options Development Report (Attachment A) to determine the preferred interim servicing option for water and wastewater servicing for the proposed warehouse, logistics and industrial facilities hub.

Sydney Water expects to finalise our Strategic Planning for this precinct by February 2020, with completion of Options Planning for Mamre Rd South Precinct expected by end 2020, pending business case approval. Your interim options report is aligned to the current strategic planning for the precinct.

When Altis-Frasers submits a s73 application for this development, Sydney Water will confirm that the design follows the endorsed interim options outlined below and that it aligns with our ultimate servicing strategy. We will work collaboratively with Altis-Frasers during the development of our options planning for the Precinct.

We endorse the preferred water and wastewater options as outlined below, to be read with the notes at the end of this letter. We will also provide a formal endorsed Memo to you shortly.

Water – Preferred Interim Option

The Mamre Rd Precinct is currently within the Cecil Park Water Supply Zone (WSZ). At the time of the options assessment, there is limited available capacity from the Cecil Park WSZ. Interim supply for Altis-Frasers, and other potential developers in the Mamre Rd Precinct, can be temporarily sourced from the Erskine Park Elevated WSZ.

The Strategic and Options Planning for Mamre Rd Precinct being developed by Sydney Water will determine the ultimate source of water and trunk upgrades required to service forecasted growth in the area.

The preferred interim water option is a DN250-DN300 extension of the Erskine Park WSZ (Option W4 in Attachment A) and shown in Figure 1 below. It includes:

- 700m of DN250 main
- 1600m of DN300 main
- A Dividing Valve (DV) for potential future rezoning onto Cecil Park WSZ

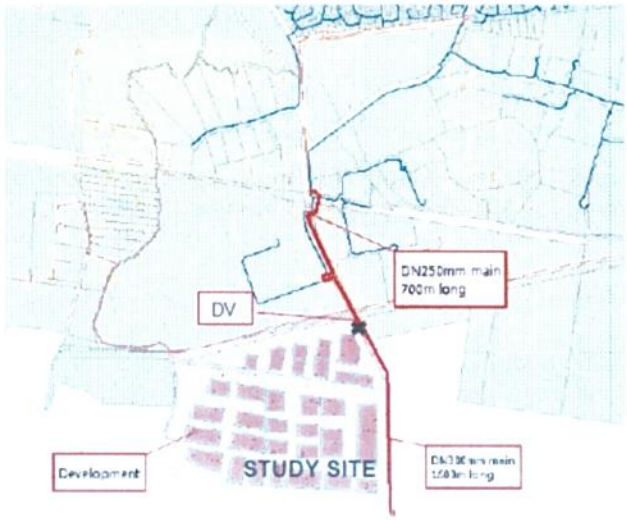

Figure 1: Shortlisted interim wastewater options

Wastewater – 2 preferred interim options

There are two potential interim wastewater options that can be used at the discretion of Altis-Frasers:

1. **A local pressure sewer network** with individual collection pots for each building connecting to the existing sewer network 2km north of the study site, for treatment at St Marys Wastewater Treatment Plant (WW1 in Attachment A, Figure 2 below). It requires:
    - Collecting pots and pumps for each building
    - 2000m of DN140 pressure main
    - Barometric loop at DN140 connection into existing manhole

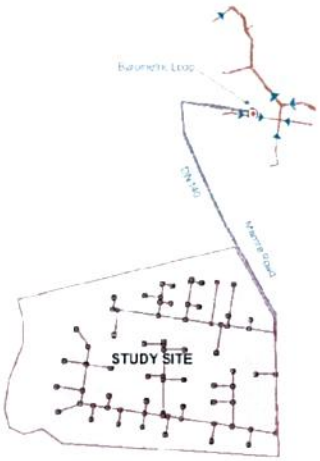

Figure 2: Wastewater Interim Option WW1

If Sydney Water's ultimate servicing strategy is for a gravity system, the pots will be removed, pressure mains decommissioned, and internal reticulation put in by Altis-Frasers at your cost. Altis-Frasers will connect the internal reticulation to the ultimate trunk sewer network.

2. **An internal reticulation gravity network with a single temporary pump out facility (Interim Option WW5 in Attachment A, Figure 3 below)**. This is the option preferred by both Altis-Frasers and Sydney Water. It requires:

   - 4500m of DN150 reticulation mains
     NOTE: For compliance with the WSAA code, minimum reticulation for industrial and commercial zoning should be DN225, not DN150. This will be reviewed by Sydney Water when the s73 application is submitted.
   - Pump out facility with emergency storage (estimated 75m^3)

   The reticulation gravity mains will be built to Sydney Water standards and can form part of the ultimate solution. When the ultimate wastewater trunk sewer is ready for connection, Altis-Frasers will be required to decommission all interim pump-out infrastructure and connect your reticulation network into the ultimate infrastructure.

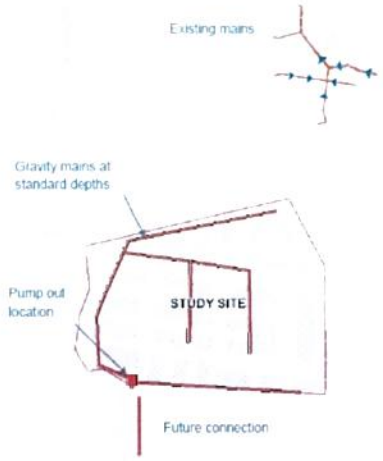

Figure 3: Wastewater Interim Option WW5

We note that the planning proposal for rezoning the Mamre Rd Precinct was put on display by the Department of Planning, Industry and Environment (DPIE) on 20 November 2019. The draft structure plan on display may ultimately define the boundary of the future industrial zoning for the Proposed Site. If there are substantial changes to the Altis-Frasers SSDA that impacts water and wastewater servicing, the interim options will need to be revised.

We look forward to working with Altis-Frasers to finalise interim servicing for this development.

Yours sincerely

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Sydney WATER

Attachment A – Altis-Frasers Mamre Road South Interim Options Development Report Final dated 21/10/2019