F - About the water supply

If you're proposing a m³ water storage tank, what is its capacity? MM NA YYYY When will you want your first domestic connection laid on? For water supplies, what

is the estimated flow rate required for your site?

litres/sec (Not required if applying only for wastewater.)

G - Existing sewerage connections (Not required if applying only for water.)

	Foul water	Surface water
Does the site have the following sewerage connections?	Yes	Λo
What is the type of discharge method?	Gravity Pumped	Gravity Pumped
If sewage is pumped, what is the pump rate?	/ litres/sec	litres/sec
Amount of existing impermeable area per connection	N/A	
What are the existing connection points? (For example, 'X' number of domestic and commercial properties drain into manhole 'Y' / sewer with diameter of 'Z'.)	US MH 9401 AND VIA MANHOLE (CONNECTION MH NOT ON THAME WATER (ZEORDS)	

H - Proposed sewerage connections (Not required if applying only for water.)

	Foul water	Surface water
Does the site have the following sewerage connections?	Yes	Ter Yes
What is the type of discharge method?	Gravity Pumped	Gravity Pumped
If sewage is pumped, what is the pump rate?	litres/sec	litres/sec
What is your proposed approach to surface water drainage?	N/A	Traditional piped system Sustainable drainage system (SuDS)
Do you propose using separate highway and surface water drainage systems?	N/A	Yes No
If the surface water rate is attenuated, to what rate is it attenuated?	N/A	25.2 litres/sec
Amount of proposed impermeable area per connection	N/A	Tise
What are the proposed connection points? (For example, 'X' number of domestic and commercial properties drain into manhole 'Y' / sewer with diameter of 'Z'.)	PEUSE EXISTING	CLOSE TO MH 9407

Please note: The developer is expected to follow the local authority's drainage strategy and be able to demonstrate how the proposed (attenuated) discharge rate of any surface water flows has been calculated. For developments in Greater London, please refer to the London Plan Drainage Hierarchy (Policy 5.13). We will challenge the rates provided if they are not in line with those based on the local drainage strategies.

I - Additional information (where available)

When we're assessing your development needs, it's important that we know what buildings (if any) currently exist on the site. It may be, for example, that the infrastructure serving those properties is already sufficient to cater for your proposed development.

We realise it may be too early in your process to complete this table, but any information you can provide at this stage will help improve the accuracy of our assessment and could prevent us from requesting data in the future.

Property type	Existing site	Proposed site
General housing (units 3 person+)		233
Flat (units up to 2 person)		151
Primary school (max. pupil capacity)		
Senior school (max. pupil capacity)		
Boarding school (max. pupil capacity)		
Assembly hall (max. capacity)		
Cinema (max. capacity)		
Theatre (max. capacity)		
Sports hall (max. capacity)		
Hotel (total bedrooms)		
Guest house (total bedrooms)		
Motel (total bedrooms)		
Holiday apartment (capacity)		
Leisure park (capacity)		
Caravan park standard (per space)		
Caravan site standard (per space)		
Camping site standard (per space)		
Camping site serviced (per space)		
Public house (max. capacity)		
Restaurant / Day care centre (max. capacity)		
Drive in restaurant (max. capacity)	A succession of the second	
Hospital (per bed)		
Nursing / Care home (per bed)		
Offices (gross internal area in m²)		
Shopping centre (gross internal area in m ²)	3,522	
Warehouse (gross internal area in m²)		
Commercial premises (gross internal area in m ²)		475
Manufacturing unit (gross internal area in m ²)		
Other (please state units and description)		
		- 11 AT

J - Enclose your documents

Please make sure any attachments are in PDF format and don't exceed a total of 20MB in size per email.

All drawings must be of suitable detail and have a drawing reference number on them.

What we need from you to process your application:

Site location plan	This should show the site with nearby buildings, roads and any sewers.
Scaled site layout	This should show existing and proposed layouts.
Site drainage strategy plan (if available at this stage)	This should show all proposed sewers, pipe sizes and gradients. (Not required if applying only for water.)

Please also let us know if you have a schedule of planned works showing how you might phase your development.

Please note, without this information we may need to make assumptions about your requirements when calculating your budget estimate (if requested).

K - How we'll use this information

We'll use the information you give on this application form, and potentially share it with our delivery partners, to provide the service you've requested.

This could include contacting you to discuss your application and/or provide more details, visiting the site where work needs to be carried out, and invoicing you when appropriate. Your feedback is important to us, so we may also use the information to ask for your feedback on how we can improve our performance.

We won't use this information for marketing purposes without contacting you to seek your consent.

You can find Thames Water's privacy policy at thameswater.co.uk/Legal/Privacy.

L - Declaration

I confirm to the best of my knowledge that the information in this application is complete and correct.

Print name	ADAM	PRAIS	
Position within	company	CIVIL	ENGINEER
Company	FA	ILRHURS -	τ
Date	14	112/2018	5
Signature	4	pe	8

Submitting your application

Please email your completed form to developer.services@thameswater.co.uk or send it to Thames Water Developer Services, Clearwater Court, Vastern Road, Reading RG1 8DB.

Once we've assessed your application, we'll write to tell you the result within 21 calendar days.

Where we know there's sufficient capacity we'll tell you, but if we're concerned there may not be, we'll advise you of the next steps. We'll also let you know if we need further information from you.

Getting in touch

For enquiries regarding this application or any other questions relating to your building or development work please contact us on:



thameswater.co.uk/developerservices



developer.services@thameswater.co.uk



0800 009 3921 Monday – Friday, 8am – 5pm



Thames Water, Developer Services, Clearwater Court, Vastern Road, Reading, Berkshire RG1 8DB

This leaflet can be supplied in braille or audio-tape upon request.



Adam Prais

From:	DEVELOPER.SERVICES@THAMESWATER.CO.U <developer.services@thameswater.co.uk></developer.services@thameswater.co.uk>
Sent:	04 January 2019 09:46
То:	Adam Prais
Cc:	siva.rajaratnam@thameswater.co.uk
Subject:	RE: RE: RE: DS6056467 - TW9 1YB Manor Road, Richmond

Dear Adam

Further to your previous communication with Siva, please see the feedback from our Asset Planning Team below:

Thames Water have noted that there is not yet a defined surface water drainage strategy for this site, for this reason we have been unable to identify the potential impact that this development proposes. We would request evidence of the existing surface water disposal method for the site, from this we can establish how the proposed strategy affects the public network. We would recommend that the surface water drainage strategy for this development should follow policy 5.13 of the London Plan. Typically greenfield run off rates of 5l/s/ha should be aimed for using the drainage hierarchy. The hierarchy lists the preference for surface water disposal as follows; Store Rainwater for later use > Use infiltration techniques, such as porous surfaces in non-clay areas > Attenuate rainwater in ponds or open water features for gradual release > Discharge rainwater direct to a watercourse > Discharge rainwater direct to a surface water sewer/drain > Discharge rainwater to the combined sewer.

With regards to the foul water proposals for this site we would request more details on how the split of flows relates to residential dwellings and commercial metereage per connection point. We request this in order to be able to assess the potential impact upon the public network. The proposal to connect 100% of the foul water flows from this site to Manhole TQ18759401 is acceptable and can be accommodated.

Should you have any further queries, please do not hesitate to contact me again.

Kind Regards

Artur Jaroma Developer Services – Sewer Adoptions Engineer Office: 0203 577 8082 <u>artur.jaroma@thameswater.co.uk</u>

Clearwater Court, Vastern Road, Reading, RG1 8DB Find us online at <u>developers.thameswater.co.uk</u>

Original Text

From: "DEVELOPER.SERVICES@THAMESWATER.CO.U" <DEVELOPER.SERVICES@THAMESWATER.CO.UK>

- **To:** adam.prais@fairhurst.co.uk
- **CC:** siva.rajaratnam@thameswater.co.uk <siva.rajaratnam@thameswater.co.uk>
- **Sent:** 21.12.18 16:15:00

Subject: RE: RE: RE: DS6056467 - TW9 1YB Manor Road, Richmond

Dear Adam,

I have consulted with our Asset Planners to confirm whether capacity exists for the foul water and as soon as I have a response I will update you.

Due to the festive period this will be in the New Year.

In regards to the surface water I have stated this will be discharged to a soakaway. If infiltration is not possible we would consider a restricted discharge of 5 litres per second per hectare or limited to the equivalent Greenfield run-off rate. This would need to be discussed with the Lead Local Flood Authority whose responsibility it is to manage risk from surface water flooding.

Regards

Siva Rajaratnam

Developer Services – Adoptions Engineer Mobile 07747 640477 Landline 0203 577 9811 siva.rajaratnam@thameswater.co.uk

Clearwater Court, Vastern Road, Reading, RG1 8DB

Find us online at developers.thameswater.co.uk

Original Text

From:Adam Prais <adam.prais@fairhurst.co.uk>To:DEVELOPER.SERVICES@THAMESWATER.CO.U
<DEVELOPER.SERVICES@THAMESWATER.CO.UK>CC:siva.rajaratnam@thameswater.co.uk <siva.rajaratnam@thameswater.co.uk>Sent:20.12.18 12:23:08

Subject: RE: RE: DS6056467 - TW9 1YB Manor Road, Richmond

Dear Siva,

Thank you for your comments. We do not currently have possession of the site to complete the tests so are planning alternatives to understand the cost and project implications if infiltration is not possible.

To assist this, would it be possible for you to provide an advisory rate of what capacity is available / allowable if required. We can then prepare contingency plans. Following receipt of infiltration tests, we would consult with you again with the additional information for a formal response, but if you could provide an indicative rate, it would be much appreciated.

Are you able to progress the foul water checks separately in the meantime too?

Kind regards,

Adam

Adam Prais Civil Engineer

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Website: www.fairhurst.co.uk

@fairhurstlondon

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From: DEVELOPER.SERVICES@THAMESWATER.CO.U [mailto:DEVELOPER.SERVICES@THAMESWATER.CO.UK]
Sent: 20 December 2018 12:16
To: Adam Prais
Cc: siva.rajaratnam@thameswater.co.uk
Subject: RE: RE: DS6056467 - TW9 1YB Manor Road, Richmond

Dear Adam,

Thank you for the additional information. Once you have the results from the infiltration tests I will be able to complete the capacity assessment.

If infiltration is not possible I will require a surface water drainage strategy to show how the flows will be attenuated. The proposed flow rate is currently too high and we would require this to be reduced further.

Regards

Siva Rajaratnam

Developer Services – Adoptions Engineer

Mobile 07747 640477 Landline 0203 577 9811

siva.rajaratnam@thameswater.co.uk

Clearwater Court, Vastern Road, Reading, RG1 8DB

Find us online at developers.thameswater.co.uk

Original Text

From:Adam Prais <adam.prais@fairhurst.co.uk>To:DEVELOPER.SERVICES@THAMESWATER.CO.U<DEVELOPER.SERVICES@THAMESWATER.CO.UK>

- **CC:** siva.rajaratnam@thameswater.co.uk <siva.rajaratnam@thameswater.co.uk>
- **Sent:** 20.12.18 09:40:06

Subject: RE: DS6056467 - TW9 1YB Manor Road, Richmond

Dear Siva,

Thank you for your email. Please see attached the draft FRA which answers most of your questions. I have also summarised the responses below;

- <![if !supportLists]><![endif]><![if !supportLists]><![endif]>Surface water is currently discharging to soakaways however the proposed development requires the removal of these. We are investigating the infiltration rates of the ground however preliminary desk studies indicate this may not be feasible due to ground water levels. We are investigating options for in case infiltration is not possible.
- 2. <![if !supportLists]><![endif]><![if !supportLists]><![endif]>Discharge via gravity
- 3. <![if !supportLists]><![endif]><![if !supportLists]><![endif]>(1) Infiltration under investigation, see FRA (2) Watercourse non on site, not possible (3) Sewer required if infiltration not feasible
- 4. <![if !supportLists]><![endif]><![if !supportLists]><![endif]>Please see table for runoff rates. The site is currently 100% impermeable. The proposed development will include some soft landscaping however the extent of this is to be confirmed. As such the current design is based on the site remaining 100% impermeable and the proposed brownfield rates will therefore be the same. In line with your comments below and local requirements, we would limit the site to the equivalent greenfield rate including climate change allowances.

	Existing		Proposed
Determine	Greenfield Rates	Brownfield Rates	Brownfield Rates
Return Period	Runoff (site) (l/s)	Runoff (site) (I/s)	Runoff (site) (I/s)
1yr	6.7	252.5	
30yr	18.2	594.7	
100yr	25.2	753.6	
100yr + climate change			25.2

Kind regards,

Adam

Adam Prais Civil Engineer

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From: DEVELOPER.SERVICES@THAMESWATER.CO.U [mailto:DEVELOPER.SERVICES@THAMESWATER.CO.UK]
Sent: 19 December 2018 15:09
To: Adam Prais
Cc: siva.rajaratnam@thameswater.co.uk
Subject: DS6056467 - TW9 1YB Manor Road, Richmond

Dear Adam,

Thank you for your Pre-Planning application. In order for me to process this further can you confirm the following details to complete the capacity assessment;

1 – How is the surface water currently discharged from the site?

2 – What is the proposed surface discharge method (gravity or pumped)?

3 - Have all surface water disposal routes been explored and has the London Plan Drainage Hierarchy (Policy 5.13) been followed. Only when it has been proven that infiltration to the ground or a connection into a watercourse is not possible would we consider a restricted discharge into the public surface water sewer network of **5 litres per second per hectare** or limited to the equivalent Greenfield run-off rate.

4- The surface water run-off rates for the existing and proposed site for the range of storms (1:1, 1:10, 1:30 and 1:100).

Should you have any queries please feel free to contact me on 0203 577 9811.

Regards

Siva Rajaratnam

Developer Services – Adoptions Engineer Mobile 07747 640477 Landline 0203 577 9811 siva.rajaratnam@thameswater.co.uk

Clearwater Court, Vastern Road, Reading, RG1 8DB Find us online at <u>developers.thameswater.co.uk</u>





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Join our premier developer event.

Our next Developer Day is in London on 7 Feb 2019. We'll discuss our 2019/20 charges, changes to sewer adoptions, new performance measures and more... Click to email us to register or request further info. From:Adam Prais <adam.prais@fairhurst.co.uk>To:DEVELOPER.SERVICES@THAMESWATER.CO.U
<DEVELOPER.SERVICES@THAMESWATER.CO.UK>CC:14.12.18 15:06:19Subject:126782 - Manor Road, Richmond

Dear Sir or Madam,

Please find attached a preplanning enquiry and supporting documents for a proposed development at Manor Road, Richmond. The site is currently preplanning stage and we are writing to you at this time to confirm capacity in the network alongside the development of our drainage strategy.

Kind regards,



Adam Prais Civil Engineer

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135 Park Street London, SE1 9EA Tel: 020 7828 8205

Website: www.fairhurst.co.uk

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SensationALL are a small charity based in Westhill, Aberdeenshire for children and adults with additional support needs.

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Mr Adam Prais Fairhurst 135 Park Street London SE1 9EA

Wastewater pre-planning Our ref DS6056467

11 Jan. 19

Pre-planning enquiry: Confirmation of sufficient capacity

Dear Mr Prais

Thank you for providing information on your development at Homebase, Manor Road, Richmond, TW9 1YB.

Construction of 384 residential units and 475m2 of commercial premises. Foul water discharging by gravity into existing connection at MH9401.

Foul Water

From the information you have provided, we can confirm that the existing foul sewer network does have sufficient capacity to accommodate the proposed foul water discharge from the proposed development.

Surface Water

Please note that discharging surface water to the public sewer network should only be considered after all other methods of disposal have been investigated and proven to not be viable. In accordance with the Building Act 2000 Clause H3.3, positive connection to a public sewer will only be consented when it can be demonstrated that the hierarchy of disposal methods have been examined and proven to be impracticable. The disposal hierarchy being: 1st Soakaways; 2nd Watercourses; 3rd Sewers.

Only when it can be proven that soakage into the ground or a connection into the adjacent watercourse is not possible would we consider a restricted discharge into the public surface water sewer network.

We would encourage techniques such as green roofs and/or permeable paving that restricts surface water discharge from your site.

When redeveloping an existing site, policy 5.13 of the London Plan and Policy 3.4 of the Supplementary Planning Guidance (Sustainable Design And Construction) states that every attempt should be made to use flow attenuation and SUDS/storage to reduce the surface water discharge from the site as much as possible.

If they are consulted as part of any planning application, Thames Water Planning team would ask to see why it is not practicable to attenuate the flows to Greenfield run-off rates i.e.

5l/s/hectare of the total site area or if the site is less than hectare in size then the flows should be reduced by 95% of existing flows. Should the policy above be followed, we would envisage no capacity concerns with regards to surface water for this site.

Please note that the Local Planning authority may comment on surface water discharge under the planning process.

This confirmation is valid for 12 months or for the life of any planning approval that this information is used to support, to a maximum of three years.

You'll need to keep us informed of any changes to your design – for example, an increase in the number or density of homes. Such changes could mean there is no longer sufficient capacity.

What happens next?

Please make sure you submit your connection application, giving us at least 21 days' notice of the date you wish to make your new connection/s.

If you've any further questions, please contact me on 0203 577 8082.

Yours sincerely

Artur Jaroma

Thames Water

A.4 Development Proposal Plans