

Stroud Local Plan Review High level Risk Review

Potential impact of proposed developments on sewerage infrastructure assets

Date: 15 January 2020

Common Acronyms
 STW - Sewage Treatment Works
 SPS - Sewage Pumping Station
 CSO - Combined Sewer Overflow

NOTE: The purpose of these desktop based assessments are to indicate where proposed development MAY have a detrimental impact on the performance of the existing public sewerage network taking into account the size of the development proposals.

For most new development provided the surface water in managed sustainably through use of a Sustainable Drainage Systems the additional foul only flows will have a negligible impact on existing sewer performance but where there are pre-existing capacity constraints additional capacity improvements may be required.

Where subsequent detailed modelling indicates capacity improvements are required such work will be phased to align with development occupancy with capacity improvement works to be funded by Severn Trent Water. However, whilst Severn Trent have a duty to provide additional capacity to accommodate planned development, we also have a requirement to manage our assets efficiently to minimise our customers' bills. Consequently to avoid potential inefficient investment we generally do not provide additional capacity until there is certainty that the development is due to commence. Where development proposals are likely to require additional capacity upgrades to accommodate new development flows it is highly recommended that potential developers contact Severn Trent as early as possible to confirm flow rates and intended connection points. This will ensure provision of additional capacity can be planned into our investment programme to ensure development is not delayed.

Note: These are desktop assessments using readily available information and have not been subjected to detailed hydraulic modelling

LPA	LPA Ref	Site Name	Settlement	Emp Size (Ha)	Units	Sewage Treatment Works Catchment	Sewerage Comment		Potential impact on sewerage infrastructure	Surface water Comment		Potential impact of surface water sewerage infrastructure	
							Known network constraints	Assumed connectivity		Outfall assumption	Surface water disposal		
Stroud DC	PS01 (SA1d)	Brimscombe Mill	Brimscombe and Thrupp		40	Stanley Downton STW	Development is on a brownfield site therefore opportunities for surface water betterment should be considered. There are 11 reported flooding incidences and 6 pollution incidences along the network to the treatment works, but modelling will be required to assess the scope of any capacity improvements. There is a CSO downstream which may be affected.	A sewer runs through the site and is the most likely connection point. It is a 450mm pipe.	Low Risk	There are no outfalls within the immediate vicinity of the site. There is a nearby watercourse (River Frome).	This is a brownfield site. Surface water should be managed on site using SuDS. There are no existing surface water sewers in the vicinity of the site.	Low Risk	
Stroud DC	PS02 (SA1e)	Brimscombe Port	Brimscombe and Thrupp		150	Stanley Downton STW	Development is on a brownfield site therefore opportunities for surface water betterment should be considered. There are 11 reported flooding incidences and 6 pollution incidences along the network to the treatment works, but modelling will be required to assess the scope of any capacity improvements. There is a CSO downstream which may be affected.	A sewer runs through the site and is the most likely connection point. It is a 450mm pipe.	Medium Risk	There are no outfalls within the immediate vicinity of the site. There is a nearby watercourse (River Frome).	This is a brownfield site. Surface water should be managed on site using SuDS. There are no existing surface water sewers in the vicinity of the site.	Low Risk	
Stroud DC	PS05	East of Tobaccoist Road	Minchinhampton		80	Stanley Downton STW	Development is on a greenfield site. There are 10 reported flooding incidences and 7 pollution incidences along the network to the treatment works, but modelling will be required to assess the scope of any capacity improvements.	A sewer runs to the west of the site and is the most likely connection point. It is a 150mm pipe.	Medium Risk	There are no outfalls within the immediate vicinity of the site. Additionally there is no watercourse nearby.	This is a greenfield site. Surface water should be managed on site through SuDS. There are no existing surface water sewers in the vicinity in addition to there being no nearby watercourse to discharge to. Surface water flows may have to be connected into the foul sewer network if	High Risk	
Stroud DC	PS06	The New Lawn, Nailsworth	Nailsworth		80	Stanley Downton STW	Development is mostly on a greenfield site. There are 8 reported flooding incidences and 4 pollution incidences along the network to the treatment works, but modelling will be required to assess the scope for any capacity improvements.	A sewer runs to the north-east of the site and is the most likely connection point. It is a 150mm pipe.	Medium Risk	There are no outfalls within the immediate vicinity of the site. Additionally there is no watercourse nearby.	This is a greenfield site. Surface water should be managed on site through SuDS. There are no existing surface water sewers in the vicinity in addition to there being no nearby watercourse to discharge to. Surface water flows may have to be connected into the foul sewer network if	High Risk	
Stroud DC	PS07	North of Nympsfield Road / Nortonwood Junction	Nailsworth		25	Stanley Downton STW	Development is on a greenfield site. There are 8 reported flooding incidences and 4 pollution incidences along the network to the treatment works, but modelling will be required to assess the scope for any capacity improvements.	A sewer runs to the east of the site and is the most likely connection point. It is a 150mm pipe.	Low Risk	There are no outfalls within the immediate vicinity of the site. Additionally there is no watercourse nearby.	This is a greenfield site. Surface water should be managed on site through SuDS. There are no existing surface water sewers in the vicinity in addition to there being no nearby watercourse to discharge to. Surface water flows may have to be connected into the foul sewer network if	High Risk	
Stroud DC	PS09	Rookmoor Mill	North Woodchester		54	Stanley Downton STW	Development is on a brownfield site therefore opportunities for surface water betterment should be considered. There are 4 reported flooding incidences and 3 reported pollution incidences downstream, but modelling will be required to assess the scope for	There is a sewer located to the east of the site and is the most likely connection point. It is a 750mm pipe.	Low Risk	There are no outfalls within the immediate vicinity of the site. There is a watercourse within the vicinity of the site (Nailworth Stream).	This is a brownfield site. Surface water should be managed on site using SuDS. There are no existing surface water sewers in the vicinity of the site.	Low Risk	
Stroud DC	PS10	Railway land / car parks, Cheapside	Stroud		75	Stanley Downton STW	Development is on a greenfield site (currently a car park). There are 7 reported flooding incidences and 10 pollution incidences along the network to the treatment works, but modelling will be required to assess the scope of any capacity improvements.	There is a sewer located to the south of the site and is the most likely connection point. It is a 450mm pipe.	Medium Risk	There are no outfalls within the vicinity of this site. The Thames and Severn canal runs alongside the site.	This is a greenfield site. Surface water should be managed on site using SuDS. There are no surface water sewers nearby.	Low Risk	
Stroud DC	PS11	Merrywalks Arches, Merrywalks	Stroud		25	Stanley Downton STW	Development is on a brownfield site therefore opportunities for surface water betterment should be considered. There are 15 reported flooding incidences and 9 pollution incidences along the network to the treatment works, but modelling will be required to assess the scope of any capacity improvements.	There is a sewer located to the north of the site and is the most likely connection point. It is a 600mm pipe.	Low Risk	There are no outfalls within the immediate vicinity of the site. There is a nearby watercourse which runs into the Thames and Severn canal.	This is a brownfield site. Surface water should be managed on site using SuDS. There are no existing surface water sewers within the vicinity of the site.	Low Risk	
Stroud DC	PS12	Police Station / Magistrates Court, Parliament Street	Stroud		45	Stanley Downton STW	Development is on a brownfield site therefore opportunities for surface water betterment should be considered. There are 14 flooding incidences and 10 pollution incidences along the network to the treatment works.	There is a sewer located to the north of the site and is the most likely connection point. It is a 225mm pipe.	Low Risk	There is a surface water pipe just to the north of the site.	This is a brownfield site. There is a surface water sewer running to the north of the site.	Low Risk	
Stroud DC	PS13	Central river / canal corridor	Stroud		120	Stanley Downton STW	Development is on a brownfield site therefore opportunities for surface water betterment should be considered. There are 7 reported flooding incidences and 10 pollution incidences along the network to the treatment works. There is a large pumped CSO within the site with associated reported pollution incidents which may be adversely affected by any increase in flow.	There is a 900mm sewer located at the east end of the site which would be the likely connection point for the east side of the site, and a 750mm sewer at the west end of the site which would be the likely connection point for the west side of the site.	Medium Risk	There is a 600mm surface water sewer just to the west of the site which may be suitable for connecting the west side of the site. The development is sandwiched between the River Frome and the Stouddwater Navigation.	This is a brownfield site. Surface water should be managed by SuDS. Discharges could be made to the surface water sewer and to the River Frome.	Low Risk	
Stroud DC	PS14	Stanley Mills	Kings Stanley		146	Stanley Downton STW	Development is on a brownfield site therefore opportunities for surface water betterment should be considered. There are no reported flooding incidences and 1 pollution incidences along the network to the treatment works.	A 225mm sewer passes through the site and is the most likely connection point, although there is also a 750mm trunk sewer just to the north which could be used if the 225mm is not suitable.	Medium Risk	There is no outfall within the immediate vicinity of the site. There is a watercourse nearby (River Frome).	This is a brownfield site. Surface water should be managed by SuDS. There is no surface water sewer within the vicinity of the site.	Low Risk	
Stroud DC	PS16	South of Leonard Stanley Primary	Leonard Stanley		25	Stanley Downton STW	Development is on a greenfield site. There are 1 reported flooding incident and no reported pollution incidences along the network to the treatment works.	There is a sewer located to the south of the site. It is a 150mm pipe.	Low Risk	There is a 375mm surface water sewer located to the south of the site.	This is a greenfield site. Surface water should be managed by SuDS. There is a surface water sewer within the vicinity of the site.	Low Risk	
Stroud DC	PS17	Hagges site, Oldwinds Lane	Stonehouse		10	Stanley Downton STW	Due to the size of the development and providing that surface water is managed sustainably the impact of this development is likely to be negligible.		Low Risk		Surface water should be managed on site using SuDS.	Low Risk	
Stroud DC	PS19a	North/northwest of Stonehouse	Stonehouse		5	500	Stanley Downton STW	There are no nearby sewers to connect to. The nearest sewer drains to a pumping station which may require capacity increase to accommodate these flows. There are no reported flooding incidences and 4 reported pollution incidences along the network to the treatment works, but modelling will be required to assess the scope of any capacity improvements.	There are no sewers in the vicinity of this site. The site will most likely connect to a 225mm sewer in Oldwinds Lane Industrial Estate (Stroudwater Business Park). This drains to Stroudwater SPS.	High Risk	There are no surface water outfalls near the site. There is a watercourse to the south of the site.	This is a greenfield site. Surface water should be managed on site through SuDS. There are no existing surface water sewers in the vicinity but there is a nearby watercourse.	Low Risk
Stroud DC	PS19b	North/northwest of Stonehouse	Stonehouse		150	Stanley Downton STW	Development is on a greenfield site. There are no reported flooding or pollution incidences along the network to the treatment works, but modelling will be required to assess the scope of any capacity improvements.	There is a pumping station located to the south of the site and this is the most likely connection point. This development will nearly double the population served by that pumping station and so will likely impact its performance.	Medium Risk	There are no outfalls within the immediate vicinity of the site. There is a watercourse 100m south of the site.	This is a greenfield site. Surface water should be managed on site using SuDS. There are no existing surface water sewers in the vicinity of the site.	Low Risk	
Stroud DC	PS20a	M5 Junction 13	Stonehouse		10	Stanley Downton STW	There are no nearby sewers to connect to. The nearest sewer drains to a pumping station which may require capacity increase to accommodate these flows. There are no reported flooding incidences and 4 reported pollution incidences along the network to the treatment works, but modelling will be required to assess the scope of any capacity improvements.	There are no sewers in the vicinity of this site. The site will most likely connect to a 300mm sewer in Oldwinds Lane Industrial Estate (Stroudwater Business Park). This drains to Stroudwater SPS.	High Risk	There are no surface water outfalls near the site. There are no nearby watercourses.	This is a greenfield site. Surface water should be managed on site through SuDS. There are no existing surface water sewers in the vicinity in addition to there being no nearby watercourse to discharge to. Surface water flows may have to be connected into the foul sewer network if	High Risk	
Stroud DC	PS20b	M5 Junction 14	Stonehouse		18	Stanley Downton STW	There are no nearby sewers to connect to. The nearest sewer drains to a pumping station which may require capacity increase to accommodate these flows. There are no reported flooding incidences and 4 reported pollution incidences along the network to the treatment works, but modelling will be required to assess the scope of any capacity improvements.	There are no sewers in the vicinity of this site. The site will most likely connect to a 300mm sewer in Oldwinds Lane Industrial Estate (Stroudwater Business Park). This drains to Stroudwater SPS.	High Risk	There are no surface water outfalls near the site. The River Frome runs along the south-west border of the site.	This is a greenfield site. Surface water should be managed on site using SuDS. There are no existing surface water sewers in the vicinity of the site.	Low Risk	
Stroud DC	PS23	Land adjacent to Thibodeau House	Cam		13	Coaley STW	Due to the size of the development and providing that surface water is managed sustainably the impact of this development is likely to be negligible.		Low Risk		Surface water should be managed on site using SuDS.	Low Risk	
Stroud DC	PS24	West of Draycott	Cam		700	Coaley STW	Development is on a greenfield site. There are 2 reported flooding incidences and 2 reported pollution incidences along the network to the treatment works, but modelling will be required to assess the scope of any capacity improvements. There is a CSO where the trunk sewers cross the River Cam which may experience increased spill frequency as a result of this development.	Site is located in central Coaley. A sewer runs along the east of the site and is the most likely connection point. This is a 375mm pipe. Some parts of the site are closer to 150mm sewers but these would probably not be suitable for such a large development.	High Risk	There are no outfalls within the immediate vicinity of the site. There is no nearby watercourse.	This is a greenfield site. Surface water should be managed on site through SuDS. There are no existing surface water sewers in the vicinity in addition to there being no nearby watercourse to discharge to. Surface water flows may have to be connected into the foul sewer network if	High Risk	
Stroud DC	PS25	East of River Cam	Cam		180	Coaley STW	Development is on a greenfield site. There are 3 reported flooding incidences and 2 reported pollution incidences along the network to the treatment works, but modelling will be required to assess the scope of any capacity improvements. There is a CSO where the trunk sewers cross the River Cam which may experience increased spill frequency as a result of this development.	Site is located in Cam. A sewer runs along the west of the site and is the most likely connection point. This is a 225mm pipe.	Medium Risk	There are no outfalls within the immediate vicinity of the site. There is a watercourse to the west of the site (River Cam).	This is a greenfield site. Surface water should be managed on site through SuDS. There is expected to be no impact on existing infrastructure.	Low Risk	
Stroud DC	PS27	1-25 Long Street	Dursley		1	Coaley STW	Development is on a greenfield site. There are no reported flooding or pollution incidences in the surrounding but modelling will be required to assess the scope of any capacity improvements.	Site is in the centre of Dursley. A sewer to the north of the site is the most likely connection point. This connection will be into a 300mm diameter pipe.	Low Risk	There is a 225mm surface water sewer to the north of the site which outfalls to the river Cam.	This is a greenfield site. Surface water should be managed on site through SuDS. There is a surface water sewer in the vicinity of the site.	Low Risk	
Stroud DC	PS28	The Old Dairy / Land off Prospect Place	Dursley		10	Coaley STW	Due to the size of the development and providing that surface water is managed sustainably the impact of this development is likely to be negligible.		Low Risk		Surface water should be managed on site using SuDS.	Low Risk	
Stroud DC	PS30 (SA4)	Hunts Grove extension	Hardwicke		750	Netheridge STW	Development is on a greenfield site. There are no reported flooding incidences and 3 reported pollution incidences along the network to the treatment works, but modelling will be required to assess the scope of any capacity improvements. The flows may affect a growth scheme currently being promoted in the Hardwicke area.	Site is to the south of Gloucester. A sewer to the west of the site is the most likely connection point. This connection will be into a 225mm diameter pipe.	Medium Risk	There are no surface water outfalls within the vicinity of the site. There is a watercourse to the south of the site but it may be too remote for most parts of the site.	This is a greenfield site. Surface water should be managed on site through SuDS. There are no existing surface water sewers in the vicinity and the nearby watercourse may not be accessible for most of the site so some surface water flows may have to be connected into the foul sewer network if infiltration is not feasible.	High Risk	
Stroud DC	PS31 (SA4a)	Quedgeley East	Hardwicke		13	Netheridge STW	Development is on a greenfield site. There are no reported flooding incidences and 3 reported pollution incidences along the network to the treatment works, but modelling will be required to assess the scope of any capacity improvements. The small existing pumping station serving this area may need to be upgraded and the flows may affect a growth scheme currently being promoted in the Hardwicke area.	Site is to the south of Gloucester. A sewer runs through the site and is the most likely connection point will be into a 150mm pipe.	High Risk	There are no surface water outfalls within the vicinity of the site. There is a watercourse to the north of the site but it may be too remote for some parts of the site.	This is a greenfield site. Surface water should be managed on site through SuDS. There are no existing surface water sewers in the vicinity and the nearby watercourse may not be accessible for most of the site so some surface water flows may have to be connected into the foul sewer network if infiltration is not feasible.	High Risk	
Stroud DC	PS32	South of M5 / J12	Hardwicke		5	Netheridge STW	Development is on a greenfield site. There are no reported flooding incidences and 3 reported pollution incidences along the network to the treatment works, but modelling will be required to assess the scope of any capacity improvements. The small existing pumping station serving this area may need to be upgraded and the flows may affect a growth scheme currently being promoted in the Hardwicke area.	Site is to the south of Gloucester. A sewer runs through the site and is the most likely connection point will be into a 150mm pipe.	High Risk	There are no surface water outfalls within the vicinity of the site. There are also no watercourses within the vicinity of the site.	This is a greenfield site. Surface water should be managed on site through SuDS. There are no existing surface water sewers in the vicinity in addition to there being no nearby watercourse to discharge to. Surface water flows may have to be connected into the foul sewer network if infiltration is not feasible.	High Risk	
Stroud DC	G1	South of Hardwicke	Hardwicke		1200	Netheridge STW	Development is on a greenfield site. There are no reported flooding incidences and 1 reported pollution incident along the network to the treatment works, but modelling will be required to assess the scope of any capacity requirements. There is currently a growth scheme being promoted in the area to accommodate the large amount of development in the area that is already planned and being built. This new potential site would affect that scheme.	Site is to the south of Gloucester. A 300mm sewer to the north of the site is the most likely connection point, although due to the size of the site some flow may need to be connected in upstream of Round Lane SPS to the south. Due to the large number of units being built, there may be inadequate capacity within the sewer system for the additional flows and capacity improvements may be needed.	High Risk	The site is likely to be connected to an existing surface water outfall to the north of the site. However, there is also a small watercourse through the site, and the Gloucester & Sharpness Canal runs to the north-west of the site.	This is a greenfield site. Surface water should be managed on site through SuDS. There are existing surface water sewers and watercourses in the vicinity.	Low Risk	
Stroud DC	G2	Land at Whaddon	Whaddon		2500	Netheridge STW	Development is on a greenfield site. There are 4 flooding incidences and 4 pollution incidences along the network to the treatment works, but modelling will be required to assess the scope of the any capacity requirements.	Site is to the west of Whaddon. A sewer runs to the north of the development and is the most likely connection point, this will be into a 150mm pipe. Due to the large number of units being built, there may be inadequate capacity within the sewer system for the additional flows and capacity improvements may be needed. This is not currently included within scope of the existing growth scheme for the south of Gloucester.	High Risk	The site is likely to be connected to a water course that goes through the site and to a surface water outfall to the north of the site, which drains to another nearby brook. Both brooks drain subsequently to the Gloucester & Sharpness canal.	This is a greenfield site. Surface water should be managed on site through SuDS. There are existing surface water sewers and watercourses in the vicinity.	Low Risk	
Stroud DC	PS33	Northwest of Berkeley	Berkeley		120				Not in Severn Trent Region				
Stroud DC	PS34 (SA5)	Sharpness Docks	Newton & Sharpness		7	300			Not in Severn Trent Region				
Stroud DC	PS35	Land at Focus School, Wantwell	Newton & Sharpness		75				Not in Severn Trent Region				
Stroud DC	PS36	South and east of Newtown and Sharpness	Newton & Sharpness		10	2400			Not in Severn Trent Region				
Stroud DC	PS37	Land at Wisloe	Wisloe		5	1500	Coaley STW	This development stretches over a length of 2km and there are no nearby gravity sewers to connect to, but it is close to the sewage treatment works. It will require a new pumping station pump the flows directly to the sewage treatment works. Site is considered low risk if it connects directly to the Sewage Treatment Works. The site would be high risk if it were to connect to the Cambridge catchment to the North, this should be considered.	There are no sewers in the vicinity of this site. The 'Low Risk' assigned to this site assumes connection to a new pumping station which will pump the flows directly to the sewage treatment works and therefore there will be no impact on the existing network.	Low Risk	There are no outfalls within the vicinity of the site.	This is a greenfield site. Surface water should be managed on site through SuDS. There are no existing surface water sewers in the vicinity, part of the site will be able to drain to the river Cam, other parts will not. Some surface flows may have to be connected into the foul sewer system if infiltration is not feasible.	High Risk
Stroud DC	PS38	South of Wickwar Road	Kingswood		50				Not in Severn Trent Region				
Stroud DC	PS39	Wickwar	Wickwar		25	Stanley Downton STW	Due to the size of the development and providing that surface water is managed sustainably the impact of this development is likely to be negligible.		Low	There are no existing surface water sewers in the vicinity, local ditch course may be available.	Surface water should be managed on site using SuDS. Site classed as medium risk if infiltration is not feasible.	Medium	