

Ms Hilary Stroud

By email to: hilarystroude@hotmail.co.uk

Corporate

Contact: Bridget Smith

Email: cllr.bridgetsmith@scambs.gov.uk

21st July 2022

Dear Ms Stroud,

Thank you for your email to me of 13th July following your presentation to Cabinet meeting on 11th. I recognise that residents want answers and the response below aims to explain what we are doing at present on this matter. The Council has been asked to attend a meeting with residents and we are happy to do so – noting that elements of any discussion will be limited by the ongoing legal action. I trust however that the feedback below, is helpful as a precursor to that meeting.

1. Was the collapse in groundwater permitted in the original Northstowe planning permission? If not, have the groundworks deviated from that original permission?

The submissions to the Council as part of the phase 1 planning permission did not propose the permanent reduction of groundwater levels on the site. That was not an objective of the development. At the time of the original Northstowe application, local concerns meant that the primary focus of the drainage design team was focused on managing concerns around flood risk. A technical working group of water specialists and engineers was convened who considered ways in which local concerns following flooding events in 2001 in Longstanton, could be avoided. The exploration of drainage options therefore focused in the main on this objective, noting the Environment Agency responses to the LPA at that time focused less on the management of groundwater resources.

The Council is the Local Planning Authority (LPA), but on technical design matters, relies upon the advice and guidance of other statutory - such as Environment Agency (EA) and Lead Local Flood Agency (LFFA) - and non-statutory specialists (such as internal drainage team officers) to be able to assess the technical design solutions for drainage - including at Northstowe. As indicated above, given the emphasis of local partners and the community appeared to have been on mitigating flood risks, there appears to have been less of a focus by the Environment Agency and the other members of the technical advisory group on the scoping of groundwater issues into the Environmental Assessment of the Phase 1 application. This focus is carried through and reflected in the technical consultees' advice in respect to approval of the drainage scheme details.

The LPA has subsequently sought additional information from L and Q (the developer) about the completed surface water drainage system at Northstowe in order to consider this point. The mapping information received suggests that the completed system does not interfere with the RTD layer so that the greenways should not result in the conveyance of groundwater from the site. Whilst the Council has not undertaken a detailed

comparative survey of the surface water drainage system along the lengths of the greenways, officers have sought to compare the approved and completed details to determine whether the proposals are in breach of the drainage details approved for the site – and have to date not found a significant departure from the approved scheme.

More recent efforts have therefore centred upon exploring whether unintended conveyance of groundwater is taking place through the surface water drains – see below.

2. Has SCDC investigated the works carried out on Northstowe to ensure no deviation from the planning permission has occurred?

As required by the HR Wallingford report, the Council has sought to determine whether the swales particularly have been constructed correctly. L and Q have provided 'as built' plans and these have been compared with the position on site – albeit that an independent survey of the swales has not been commissioned.

With Northstowe Town Council, the Planning service has therefore been investigating a particular area of interest around the fall in groundwater levels near to the development plots adjoining the Kingfisher Pond - where RTD water levels are lower. A site visit with Northstowe Town Council earlier this year indicated that water was flowing from a drainage spur from this site into the surface water drainage system despite that system not yet being connected to the development. The levels of flow were modest – but because of that finding, the LPA have sought a further survey of that spur to determine whether there is a construction fault that might account for the flows observed. We are currently awaiting the outcome from that survey.

3. What mechanism did the planning permission contain for filling Northstowe's amenity lakes?

The Council has recently received comment on this matter and is seeking a response from the developer to the suggestion made. Once I have received their response, I will be in a position to comment further on this matter.

4. Why has the Northstowe planning process not given Longstanton adequate environmental protection?

The planning process for phases 1, 2 and 3 has sought to identify and then assess the environmental effects of the development. In the early phases of the sites' consideration and development, the focus was on ensuring that surface water flooding risks were managed effectively. Consideration of groundwater by the technical drainage consultants involved in the development, assessment and approval of the initial drainage scheme focused in the main on flood mitigation/protection. In subsequent phases, and particularly as the groundwater changes around the site have arisen, consideration of groundwater impacts has been considered more fully, alongside the matters of flood risks and foul water management.

The Environmental Assessments prepared for each phase of the development were scoped out with the input from the statutory agencies involved – including the Environment Agency – who are primarily responsible for managing groundwater. As you know they were also consulted on the planning applications and their views were considered, alongside others such as the LLFA, as part of the decision-making process. The purpose of the Environmental Assessment Regulations is to seek to capture the

potential effects of a development upon the environment. As knowledge and understanding of the issues around groundwater have increased over the life of the development at Northstowe, the consideration of the effects of development upon groundwater has also increased. I have noted in particular, the extensive consideration given to the matter in the recent planning committee meetings for phase 3

- 5. By December 2017, the kingfisher pond was empty but the Phase 1 lake was full. This lake was supposedly designed to be filled with surface water from Phase 1. At the time very few houses had been built so there would have been little surface water from the development itself. So where did the water come from to fill up the lake?**

The Council has paid for HR Wallingford to investigate the reasons for the Kingfisher Pond water levels being reduced. Whilst they associate the construction of the development with the reduced water levels in that pond and suggested that the pond and the groundwater were in hydraulic continuity, they did not make any further connection to specific infrastructure. The Council have sought clarification from L and Q as to the relationship of the drainage scheme with the groundwater/RTD. L and Q have suggested that the development is not responsible for this change. There are ongoing investigations of potential routes for conveyance of groundwater (see above) from near to the Kingfisher Pond but no firm conclusion on this matter currently. The Council is continuing to work with the developer on this matter and, as above, is seeking further comment from the developer in response to recent comments.

- 6. Currently, the Phase 2 lake has plenty of water and there is standing water nearby despite very little rainfall. Where has this water come from?**

The Council has engaged with Homes England on this matter who make the following points:

- Northstowe Phase 2 drainage has been designed to be a lined system, keeping groundwater and surface water runoff separate to ensure capacity for anticipated rainfall events is available and prevent groundwater pathways being developed
- The water park lakes have been designed to have 2 metres minimum permanent water (stored surface water) below the space available for surface water attenuation for runoff in extreme events. Whilst they may appear 'full', there is significant storage capacity over and above this to accommodate attenuation of the developments surface water which is currently under-utilised. It should also be noted that there is currently no pumped outfall from these lakes, this is allowing the lakes to fill up to the permanent water level as noted above.
- Homes England's contractor SISK have been managing water levels between the two lakes to enable them to complete the lakes (including swimming platform installation) in accordance with the various permissions. This work is almost complete.

- SISK have confirmed that no ground water is being abstracted and that no water is being pumped into Beck Brook.

The Council has previously responded to the matter of water pooling near to lake three which arises as a result of archaeological excavations which have led to the ground level being lower than it was originally resulting in surface water ponding in this area.

7. Why are Councillors ignoring the disparity in water levels between Longstanton and Northstowe?

The Council is not ignoring this issue. Officers have been seeking to work through the potential reasons for the levels falling in the Kingfisher Pond in recent years, including paying for HR Wallingford's investigation. Officers have also met with the developers, Parish Councils and with representative of the Environment Agency to try and better understand how the matter might be investigated further. The Council is continuing to explore the matter and to determine whether any further form of investigation might lead to a definitive conclusion on this issue.

8. In 2016, the Environment Agency wrote to SCDC and queried 'whether the drainage scheme has altered from that originally agreed'. They also advised that 'the applicant does have responsibility to correct or mitigate against any local effects that their dewatering is having'. Damaging local effects are obvious, as illustrated by the photos on your screen – why then has this advice from the Environment Agency been ignored?

The advice of the EA has not been ignored. The Council has been, and continues to, explore how the matter can be resolved. In particular, the Council has sought information from L and Q concerning the completion of the drainage scheme and continues to explore with Northstowe Town Council, their hypothesis concerning abnormal surface water drainage on phase 1.

9. The H R Wallingford report has proved that the groundwater collapse was not caused by a lack of rainfall. Why then have the recommendations of this report still not been implemented?

The HR Wallingford report key findings indicated that the Kingfisher Pond was in hydraulic continuity with the RTD and concluded that in their view, local land use change as a result of development is the most significant impact upon the RTD groundwater levels. It also noted however that the RTD are highly responsive to local rainfall – so that dry periods will have had an impact on groundwater levels and heavy rainfall expected to be followed by quick increases in RTD reported groundwater levels. The report's commentary on periods of below average rainfall and RTD levels indicates some significance to climate conditions in RTD water levels but suggests it is not the primary cause for the decline. HR Wallingford also observe however that the below average level of regional rainfall has made it more difficult to understand the impacts on RTD water levels but recognise that it is nevertheless a contributory factor to the low levels observed.

In drawing conclusions about the contribution of dewatering, the HRW report then goes on to highlight the reduction in recharge opportunities arising from the development. This is an inevitable consequence of the increased impermeable surfacing/material (impacting infiltration levels) and the system of surface water drainage that conveys this water away from, rather than allowing it to percolate into the RTD below. The effect of these works is to convey around 60% of all surface water falling on the site, away from the site where it falls. The HRW report indicates that the measures outlined in the original drainage design - notably the surface water drainage strategy for playing pitches, allotments and the orchard have not been effective in allowing water levels in the pond to be maintained.

The report recommendations are split into 2 specific areas; firstly, recommendations 6.1 apply "If the Kingfisher Pond recovers." These comprise:

- Regular monitoring of the surface water levels in the pond and other ponds in the area
- Regular monitoring of the groundwater elevation in the RTD underlying Northstowe and Longstanton
- Regular monitoring of groundwater levels adjacent to and flows in the greenways to ensure that they have been constructed in accordance with the design principles and that they are not dewatering the RTD

Or recommendation 6.2 "...if the Kingfisher Pond does not fully recover"

The report in this case indicates "it remains possible that the Kingfisher Pond and other features may be affected in the long term by the changes in recharge and construction of the greenways. This may include being more susceptible to dry periods or a more permanent lowering of ground levels. If this occurs, it may be necessary to make some engineering changes, which could include:

- Supporting levels in the Kingfisher Pond
- Deepening the Pond
- Improving the greenways to ensure that they are in accordance with the design principles"

The Council is continuing, through its investigations to explore whether the observed changes in levels in the Kingfisher Pond are likely to recover or not – and our efforts to date have centred upon that. Once it has been able to draw that conclusion, it will then consider further the HR Wallingford recommendations – and the actions arising. I realise that this has taken some time – but the variations in climatic conditions – noting that this year for example rainfall is 50% of average – has made drawing such a conclusion more difficult.

10. Why does SCDC consider the environmental damage inflicted on Longstanton to be 'insignificant'?

The Council does not consider the impact of reduced RTD water levels to be insignificant – and is focused on investigating the causes for it.

11. When have members of SCDC Cabinet come to Longstanton to witness the environmental damage and to discuss mitigation options with the Parish Council and local residents?

Members of SCDC Cabinet have taken an ongoing interest in the issues at Northstowe, and Cllr Tumi Hawkins, as Lead members for Planning has worked alongside Stephen Kelly and the Shared Planning team to support investment in the ongoing investigation. Cllr Bridget Smith has attended Longstanton Parish Council only recently along with Stephen Kelly.

12. When will SCDC take responsibility for nature and the environment and the impacts of Northstowe on surrounding communities?

SCDC is the Local Council and the Planning Authority. It is not however the body responsible for enforcing the provisions of the legislation which manage matters to do with groundwater. This remains the responsibility of the Environment Agency. SCDC has therefore sought their advice and guidance in its investigation of this issue. The EA have, to date, not taken action or advised the LPA of the need to take action following their consideration of matters to do with groundwater at Northstowe.

SCDC is nevertheless continuing to try and seek to understand whether ground conditions will return levels of water in local ponds to "normal" or, having regard to recommendations 6.2 of the HR Wallingford report, whether alternative engineering to the Kingfisher Pond may be required to address the long-term impacts of RTD water levels.

I realise that things are not moving as quickly as you would like but do assure you that it is a very complex issue and needs to be investigated systematically. The Council will use its influence to ensure partners and developers and fully engaged in this process as we try to find a resolution.

Yours sincerely,



Leader
South Cambridgeshire District Council

cc: Cllr Alex Malyon
Cllr Sarah Cheung-Johnson
Cllr Bill Handley