

Public Meeting in Holme Parish Hall on 27th. April 2017

Comments on the Surface Water Drainage Aspects for Phase 3B of the Proposed LADP - Land East of Milnthorpe Road.

Section 1 - Preview

In the light of the recent slightly dubious history of the drainage aspects of residential development in Holme it is entirely appropriate to approach the proposals contained in this present LADP by taking fully into account that history to ensure that a technically realistic and financially sound scheme is adopted. This is particularly appropriate in the light of the evident (although not unexpected as they are of a different discipline) lack of engineering expertise in SLDC Planning Dept. and their consequential rather naïve acceptance of the historically “less than totally accurate” environmental reports from Developers in respect of such proposals.

Section 2 - Introduction and Background

Following the reality and clear historical evidence in respect of the inadequacies of the later stages (essentially the Mayfield Avenue Phase) of the adjacent “Pear Tree Park” development these Comments will mainly concentrate upon the surface water run-off aspects of this present Draft Proposal.

The above observation is based largely upon those rather spurious observations and recommendations as were then accepted by SLDC regarding the potential “Flooding of Holme Beck” and the completely inappropriate and/or ineffective measures incorporated in that development (as mandated by “conditions imposed” in the SLDC's Planning Approval for those works). This matter is raised once more in these present Comments since, as will be shown below, it has a major impact upon the surface water drainage of the proposed development area.

As the above statement might seem rather contentious this writing sets forth the evidence in justification of the basis for the main details of those inappropriate measures as follows:-

- 2.1 The ignoring of the fact that in living memory “History” clearly indicated that Holme Beck (in the then prevailing “green-field” run off conditions) had never so flooded. This unfortunately led to SLDC mandating (as a Planning “condition”) the raising of Ground Floor Levels by up to 1.4m. above existing ground level (in particular adjacent to the western boundary of that development) thereby significantly shortening the “Time of Concentration” with the consequent massive increase in the run-off rate at that boundary.(especially with “Silvercroft”) This had the inevitable impact of leading to substantial and prolonged flooding on those properties located to the west and south of that development. This aspect was formally raised with SLDC and hence the related correspondence, together with the details of the “not fully successful” palliative measures adopted to mitigate the problem, are a matter of record.

- 2.2 The demonstratively ineffective requirement to install a “Detention Pond” adjacent to the “Play Area” on Mayfield Avenue. As installed, this useless facility comprises an approximately 200cu.m. volume pond adjacent to Holme Beck within which, as far as can be ascertained, at no time in its existence has any run-off water ever been impounded. Furthermore, despite the construction of this supposedly “cure-all” facility, major flooding of the gardens to many of the pre-existing properties located on Mayfield Avenue is ongoing.
- 2.3 The clear but simple lack of understanding that virtually ALL of the present Surface Water Run-off from the area of that Development (including, indirectly, the hard surface run-off) is now collected into the manhole located in the present south-western corner of the undeveloped part of the old Field Ref.-170. Here it combines with (and therefore increases) the pre-existing “green field run-off” from those areas which now comprise the bulk of the Site for this presently proposed LADP location. This enhanced combined flow is then directed into the pre-existing 9in. and 12in. dia. pipe-line passing through the private gardens of “Silvercroft” and “The Rookery” up to the northern edge of Milnthorpe Road. This flow then passes under the Highway to a manhole where it joins an existing pipe running along the south verge of Milnthorpe Road. However it is evident that this existing outfall system is already technically not fully adequate to handle these enhanced peak flows currently generated. In addition, it should also be noted that, as a consequence of the above mentioned “palliative measures”, the size of this road crossing was increased from a ridiculous 4in. dia. to 9in. dia.. However, notwithstanding those measures the capacity of this crossing and/or that existing Milnthorpe Road south verge drain is demonstrably inadequate to the effect that, even in “normal” heavy rainfall (i.e. NOT those prevailing in the 50year storm conditions) there is significant flooding of the Highway with water issuing through the top cover (a gully grating for some inexplicable reason!) of that manhole.

Section 3 - Overview of the LADP Proposals

The bulk of the land covered by this current LADP Proposal comprises all of the old OS Fields Ref.-174 , -175 and the remaining, still undeveloped, part of Field Ref.-170 (Note: later field references are 0015, 0020 and 1811 respectively).

Apart from the western quarter of Field Ref.-175 (which falls generally westwards towards its boundary with Milnthorpe Road) the topography is such that all of this land falls towards the present “valley bottom”, which is located alongside the western boundary of Field Ref.-170, where it collects into what is presently a virtually unmaintained ditch (so resulting in the consequent “boggy area” shown on the LADP plans)) which in turn leads the run-off into the existing manhole located in the present south west corner of that Field Ref.-170 (as recorded in “Section 12 – Natural and Built Features” on page 13 of the working document and as also mentioned in para. 2.3 above).

Those slight inadequacies of the present outfall system (as discussed in that para.2.3 above) can perhaps be just about accepted for the prevailing “green field” conditions but could NOT in any way be accepted as part of a permanent solution for a sustainable drainage system appropriate to a substantial residential development such as envisaged by this draft LADP.

Furthermore, it is noted that (as recorded in “Section 11 - Known Constraints” of the working document) the Environmental Agency has imposed the following constraints on drainage which must be taken into account:

- Since the proposed site is above an Aquifer “infiltration systems for disposal of surface water” are not to be used
- Surface water run off must not exceed present “green field run-off rates”.

An inevitable consequence of these constraints is that any outfall, together with any ancillary measures needed to reduce the flow rates to those “green field” conditions, from this proposed area must provide for ALL of the potential run-off including, if appropriate as discussed below, the safe conveyance of any treated foul sewage. ***In this context it must be noted that the existing outfall cannot meet those criteria!***

At that Parish Hall Meeting it was advised that SLDC intended to adopt National standards of “SUDS” for the surface water run-off arising from the proposed development but it was unfortunately further made clear that neither they, nor for that matter the Cumbria CC representative present, were aware of the constraints placed upon that quite grandiose statement by the two points in the above paragraph as exacerbated by the significantly sub-standard piped outfall from the area (which, as discussed in para. 2.3 above, is located within both the Highway boundary and private properties).

It is also noted that the topography of the site precludes the installation of any further gravity pipe-line links to the village Sewage Works and that (as recorded in “Section 17 - Sustainability Appraisal”) it is probable that any acceptable SA would not be able to incorporate, let alone condone the “maintenance in perpetuity”, a fully pumped scheme for this whole development ... especially since this would be mandatory in view of the Aquifer imposed constraints mentioned above (particularly with regard to potential contamination by pathogens remaining in even treated sewage!).

Section 4 - Conclusions

The topography of the Area dictates that the ONLY possible physical route for the Surface Water Run-Off from the southern boundary of this proposed site is along the route of the existing pipe line and this present drain is demonstrably inadequate. However, the present “green field” conditions render these inadequacies less critical than would be appropriate and acceptable for a sustainable built-up area system. The corollary of this is that in order to proceed it would be necessary to completely renew that entire pipe line all the way to at least the Holme Beck culvert under Milnthorpe Road (adjacent to the Mayfield Avenue junction) but this can only be achieved at a considerable financial and environmental cost.

In addition to any direct financial costs necessary to construct works the overall costs will be massively increased by the necessary and appropriate compensation/reinstatement costs to the private land owners along the route in respect of the damages and loss of amenity caused. In particular in this context attention is drawn to the likelihood of the impact of Planning Approval Ref, SL/2014/00897 for the imminent construction of a dwelling on land presently within the “Silvercroft” property limits and immediately adjacent to the existing pipe-line.

It is also pertinent in this context to note that it would not be acceptable to install a new public foul sewer (especially a “pumped” main) routed along this privately owned section of site. This will necessitate an alternative routing to be found for this facility to reach the village Sewage Treatment Plant since the afore mentioned Acquifer constraints preclude any conventional treated effluent disposal.

The environmental costs would also be equally massive since the line of any new pipe would inevitably be located closely adjacent to a substantial number of mature trees and established hedging in both the plots of “Silvercroft” and “The Rookery” thereby destroying their root system and killing off these green resources. Furthermore, the above cost does not take into account the further negative environmental impact on the land held in the public domain arising from associated destruction of the presently existing mature roadside planting along Milnthorpe Road.

On the basis of the above discussed facts the ONLY, and even inevitable, conclusion that can be reached is that the LADP proposal for this Site is fundamentally technically inappropriate whilst also being financially unsound and hence, notwithstanding any possible vested interests which may or may not exist, should be abandoned forthwith before any further public funds are wasted upon it!

Comments written by:

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(Stakeholder, as the landowner of “Silvercroft”)