

EAST AYRSHIRE COUNCIL

CABINET – 6 FEBRUARY 2008

SCOTTISH WATER: NETWORK MODEL SCENARIO PROPOSAL

Report by the Depute Chief Executive/Director of Corporate Support

1. PURPOSE OF REPORT

- 1.1 To inform members of a Network Model Scenario Proposal for Kilmarnock put forward by Scottish Water, and to seek approval for the Council to part fund this proposal together with the developers of the five new major greenfield sites identified in the finalised draft of the Alteration to the East Ayrshire Local Plan for Kilmarnock.

2. BACKGROUND

- 2.1 Scottish Water has been aware for some time that there may be an emerging problem with the supply of water to future housing developments in the Kilmarnock area and in March 2007 commissioned Farrer Consulting to build a strategic model of the water distribution network supplying Kilmarnock. This model is now complete and shows the existing water supply situation in Kilmarnock. However, in order to build in and show the effect of future growth, an extension to the model is required. The finalised draft of the Alteration to the East Ayrshire Local Plan identifies land for 3,310 houses in Kilmarnock and by adding the proposed local plan alteration housing sites, any infrastructure improvements that will be required as Kilmarnock develops can be identified and costed. Some business/industrial land will also be added to the model.

3. THE PROPOSAL

- 3.1 Scottish Water propose that a total of 6 scenarios are run. Each scenario will identify cumulatively the extra water and infrastructure required to service the additional one sixth of the combined demand arising from all of the major greenfield sites identified in the finalised alteration for Kilmarnock. In other words when each scenario is run, the associated cumulative demand on the water supply system created by one sixth of each major site taken together with the other major sites will be added to the strategic model until the full capacity of each site in combination is reached at the end of the sixth scenario. Accordingly the first run will identify the additional water

infrastructure needs of 1/6 of the housing capacity of all the major sites, the second run 1/3 and so on until the full requirement is identified by the 6th run.

3.2 Scottish Water has a set of minimum thresholds below which the water supply system is not considered to operate effectively. Should it become evident that the level of service or storage falls below Scottish Water's minimum threshold following a scenario run of the model, necessary infrastructure upgrades will be identified. If the cause of the unacceptable levels of service or storage can be attributed to one specific development, the associated budget cost will be allocated to the corresponding developer. Otherwise, the budget price will be shared between all developments within the affected water supply zone boundary with the share of the associated budget cost being in proportion to the overall demand calculated for each development. If any of the scenario runs show that improvements to strategic or what is termed Part Four infrastructure is required (i.e. improvements to water treatment works, raw water intakes, reservoirs or aqueducts), Scottish Water will be responsible for such works and will be able to build this into future or amend Quality and Standards Investment Programmes.

3.3 The model on which the scenarios will be run includes mains in the following supply zones:

- Bradan (partial)
- Guiltreehill
- Highlees (partial)
- Stafflar
- Amlaird

And to the outlet of the following reservoirs:

- Torcross
- Ladykirk
- Hillfarm

It should be noted that it is possible for demands that are applied in Kilmarnock to result in infrastructure upgrade requirements anywhere in the system.

3.4 At the end of the study, a single report detailing the results of all scenario runs will be produced and will include the following for each model run:

- Details of the amount and location of development demands that are allocated
- Description and evidence of any failures observed in levels of service and storage

- Approximate scope of works required for any infrastructure upgrades deemed necessary
- Associated budget costs allocated to individual developers as described in paragraph 3.2 above.

4. BENEFITS OF THE NETWORK MODEL SCENARIO PROPOSAL

- 4.1 By proceeding with the proposal, any water supply improvement works required to service the scale of development at the locations proposed in the Alteration to the East Ayrshire Local Plan will be flagged up and enable solutions to be identified well in advance of development commencing on site. The earlier such upgrades are known about, the quicker a solution can be found and the quicker the housing sites identified in the local plan in Kilmarnock can be delivered. The results of the study will also give certainty to developers by showing what upgrades are required to service their site and whether there are opportunities to share the cost of infrastructure upgrades. If the current water supply model is not extended to cover the sites contained in the finalised alteration to the Local Plan it is possible that development will progress in a piecemeal fashion and prevent co-ordinated and the comprehensive development of community facilities.

5. FINANCIAL IMPLICATIONS

- 5.1 The fixed fee for the proposal is £29,106 excluding VAT. The Council would pay one sixth of this amount with the five main developers paying the balance. All 5 developers have indicated their willingness to contribute on an equal basis. Each party would therefore pay approximately £5,000. It is proposed that the Council's share is met from existing budgets.

6. POLICY IMPLICATIONS

- 6.1 One of the main strategies of the approved replacement Ayrshire Joint Structure Plan is to build enough houses in Ayrshire to maintain current population levels. The Local Plan has identified housing sites to meet the requirements of the structure plan and, being the largest settlement in the area, Kilmarnock identifies over 40% of East Ayrshire's total housing land to 2017. By proceeding with this proposal, any major water supply constraints can be identified and solutions sought at this early stage in the development process. This will avoid developers discovering constraints at a later stage and development being delayed unnecessarily. It will also assist in ensuring that the strategies of the Ayrshire Joint Structure plan and the Alteration to the East Ayrshire Local Plan are achieved within the timescales of the local plan.

7. RECOMMENDATIONS

7.1 It is recommended that Cabinet agrees:

- (i) to note the contents of this report**
- (ii) that the Council proceeds with the proposal**
- (ii) that the Council makes a financial contribution towards the total cost of the proposal equal to one sixth of its total cost and that the five main developers fund the remainder of the consultant's fee.**

Elizabeth Morton

Depute Chief Executive/Executive Director of Corporate Support

8th January 2008 (EF/SA)

Members wishing further information should contact Emma Fyvie, Senior Planning Officer on 01563 576756

LIST OF BACKGROUND PAPERS

- (i) Network Model Scenario Proposal: Kilmarnock, Scottish Water and Farrer Consulting**