NATURES VALLEY – SEWAGE MANAGEMENT

25-02-2015 (FINAL DRAFT)

PROPOSED PROCEDURE FOR ASSESSMENT AND APPROVAL OF SITES SUITABLE FOR INSTALLATION OF SEPTIC TANKS AND SOAK-AWAYS and for the CONSTRUCTION OF CONSERVANCY TANKS AND SEPTIC TANK SYSTEMS.

The following documents should be referred to in order to establish the background to this proposal and are attached for reference:

- 1. Dept of Water Affairs letter dated 04-12-2013, ref. 16/2/7/K600/A/7 addressed to the Municipal Manager. "Natures Valley Bulk Sewage Management"
- 2. NVRA Notes from meeting with Pikkie Lombaard and Philip Dietzsch of Bitou Municipality on 10-04-2014. "To Discuss the Municipalities Insistence on the Conversion of Septic Tanks in NV to Conservancy Tanks"
- 3. Bitou LM (Philip Dietzsch) e-mail dated 08-12-2014

Arising out of the discussions with the above parties, with a view to reaching agreement for the continued use of Septic Tanks and Soak-aways in Natures Valley, the following assessment procedure is proposed by the NVRA.

IN PRINCIPLE: Conservancy Tanks (CT's) will be mandatory in any area of the township known to be affected by flooding or known high water table and in areas where Septic Tank systems (ST's) do not work effectively due to underlying clay soils.

The following principles will be applied in assessing and approving building plans:

- On receipt of building plans for approval, the NVRA will indicate on the plan whether an ST can be
 considered acceptable, or not. (This assessment will be based on previous research conducted by
 Bitou Municipality and the Sewage Steering Committee, which identified areas of high water table
 and those under-lain by clay. This info is clearly documented in the Environmental Impact Report
 prepared by Ninham Shand Consulting Engineers, dated July 2008).
- 2. If the site, due to its location, is considered likely to be suitable for an ST, the building plan will be recommended for approval by the NVRA without a new or existing CT, provided that the Owner arranges for a Percolation Test (PT) to be carried out, either on the site of the existing ST or in the proposed position of a new ST.
 - The Bitou Municipality can approve the building plan for construction on this basis, but a final decision on the ST will be subject to completion of a successful PT, certified by the responsible professional. If the PT is not successful the plan will only be finally approved on the basis that a CT is to be installed, which is to be shown on the plan in an approved location and endorsed by the Owner.
- 3. If considered un-suitable for an ST the plans will only be recommended for approval by the NVRA, if a new or existing CT is shown on the plan.
 - Should the Owner disagree with the ruling, he will be required to arrange for a PT to be carried out either in the vicinity of the existing ST or in the proposed location of the new ST.
 - The Bitou Municipality will only approve said plan including an ST, if the PT is successful.

(See para 10 below, for clarification of Percolation Test requirements.)

- 4. In the case of building plan approvals which do not result in any change to an existing CT or ST, the owner is to arrange for an inspection of the existing installation by a competent person (approved by the municipality). The existing installation is to be modified if necessary, to comply with current Bitou Municipality standards. A Certificate of Compliance is to be issued by the approved inspector and installer (where applicable) on completion, countersigned by the chief building inspector.
- 5. The cost of carrying out a PT will be borne by the Owner. The PT is to be conducted and certified by a suitably qualified professional or competent person, approved by the municipality. Form 3 (SANS 10400-A) "Declaration by a Competent Person" is to be completed and submitted for approval by the municipality as part of the process of conducting a PT. (Form 3 is attached as an Addendum).
 Should the Owner elect not to carry out a PT, then a CT is to be installed.
- 6. Any CT is to be sized and constructed in accordance with requirements of Bitou Municipality and the National Building regulations (SANS 10400-P: 2010). The proposed capacity of the CT is to be
- clearly indicated on the plan which is submitted for approval.
- 7. Any ST and its associated soak-away, is to be sized and constructed in accordance with the requirements of Bitou Municipality and the National Building regulations (SANS 10400-P: 2010). Installation is to be carried out by a suitably qualified competent person, approved by Bitou Municipality. The proposed capacity of the ST and associated French drain, is to be clearly indicated on the plan which is submitted for approval.
- 8. The final handover of the building works to the Owner is to include a Certificate of Compliance, signed by the installer of the CT or ST and French drain, countersigned by the chief building inspector.

9. Percolation Test requirements:

The Percolation Test (PT) referred to in this document is to be carried out in accordance with SANS 10400-P: 2010, clauses 4.8.9 and 4.25 or subsequent update.

The depth of the test holes associated with the percolation test shall be of such a depth as to accurately reflect the depth at which the french drain or soak-away would be constructed (a minimum of 1m below NGL).

The conducting of a Percolation Test and certification of the results is to be the responsibility of a suitably qualified competent person, approved by Bitou Municipality (Refer para 5 above).

Prepared by: **DC Blaine Pr Eng** Chairman, NVRA Feb 2015