

**C23030****STEENBERG GOLF COURSE DAMS****METHOD STATEMENT – DAM AT 5<sup>TH</sup> TEES****1 INTRODUCTION**

The Steenberg Golf Course wishes to enlarge the dam at the 5<sup>th</sup> Tees to 32 690 m<sup>3</sup> to increase the storage capacity for water to be used to irrigate the course. The design provides for a predominantly excavated dam lined with a geosynthetic composite liner covered with a soil blanket to waterproof the dam. The excavated material will be used to raise a section of the 5<sup>th</sup> fairway and to create a berm along the generally eastern boundary of the golf course as a visual and noise barrier to the adjoining public road. The shape of the dam has been determined taking the playability requirements of the golf course into account.

**2 CONSTRUCTION METHOD**

The construction of the dam will comprise the following:

- The extent of the works area will be fenced off with Ready Fence covered with shade cloth.
- The grass/lawn will be lifted and stockpiled where it will be maintained for reuse.
- The irrigation pipes and sprinklers will be removed and stockpiled for reuse or disposed of at an off-site waste site.
- Trees that can be replanted will be removed and stockpiled where they will be maintained for reuse.
- Other vegetation that cannot be reused will be removed and disposed of, either in the golf course compost yard or at an off-site waste site.
- The dam will be excavated and the material will be used as filler where the fairway has to be modified or it will be placed in the berm that is to be constructed. Excess material will be disposed of in an off-site waste site. Some material will be stockpiled for use as the cover blanket for the liner.
- Should groundwater be encountered, sub-soil drains and a sump will be installed to keep the excavation dry for the duration of construction. The groundwater will then be pumped out onto the golf course to infiltrate and recharge the groundwater resource.
- Where required, a reinforced concrete and brick stone-faced perimeter wall will be constructed along the dam's edge.
- The excavated surface will be trimmed and shaped, after which the liner will be placed and covered with material from the stockpile.
- The final trimming and site clearance will be done whereafter the golf course maintenance contractor will re-establish the irrigation system and vegetation.
- As the dam will be constructed during the dry months, surface draining is not anticipated. However, should construction start or extend over a period during which rain can be expected, surface drainage channels will be provided to lead water away from the area of the works. Geofabric screens will be provided to trap sediment in the run-off water.

### **3 EQUIPMENT TO BE USED**

The dam will be constructed using general large earthmoving equipment, including excavators, roller compactors, and trucks. The perimeter retaining wall will be constructed primarily by hand but with concrete either mixed on-site in a small mixer or imported in trucks from a ready-mix plant.

A stockpile area will be created for materials to be used in the construction of the dam. These materials will include the liner, bricks, cement, reinforcing steel, sand, stone, geofabric, and drainage pipes. The contractor may also use this area as a temporary site camp. This area will be within the overall extent of the works area.

### **4 WASTE MANAGEMENT**

Within the stockpile area, provision will be made for refuse bins for non-recyclable and recyclable waste. These bins will need to be disposed of when full. Chemical toilets will be provided for the contracting staff.

### **5 TIMELINE**

It is anticipated that the construction of the dam will take four to five months.