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0227B\rietvlei geo2

2004-10-02

M&T Development
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Attention: Mrs Irene Tsai / Mr Barry Hertzog

ENGINEERING GEOLOGICAL CONDITIONS – RIETVLEI RIDGE

The Rietvlei Ridge development has been geologically investigated by Intraconsult and the results have been compiled in a report entitled: "A *GEOTECHNICAL REPORT TO CENTURUS ON PORTIONS 32 TO 55 OF THE REMAINDER 5, FARM DOORNKLOOF 391-JR*", report number IR499.

The results of this report indicated that the entire Rietvlei Ridge is underlain by the Timeball Hill Formation which consists of Mudrock. The in situ materials may show a heave and/or collapse potential and the foundations must be designed accordingly.

A large portion of the site classifies as NHBRC class H1/C1/S1. Typical foundation designs will be modified normal foundations, compaction of in situ soils below individual footings or the use of a soil raft. The detail of these foundation systems are given below:

Modified normal	<ul style="list-style-type: none">• Reinforced strip footings• Articulation joints at some internal and all external doors• Light reinforcement in masonry• Site drainage and service / plumbing precautions• Foundations pressure not to exceed 50kPa
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Compaction of in situ soils below individual footings	<ul style="list-style-type: none"> Remove in situ material below foundations to a depth and width of 1,5 times the foundation width or to a competent horizon and replace with material compacted to 93% MOD AASHTO density at -1% to +2% of optimum moisture content Normal construction with lightly reinforced strip foundations and light reinforcement in masonry
Soil raft	<ul style="list-style-type: none"> Remove in situ material to 1,0m beyond the perimeter of the building to a depth of 1,5 times the widest foundation or to a competent horizon and replace with material compacted to 93% Mod AASHTO density at -1% to +2% of OMC Normal construction with lightly reinforced strip footings and light reinforcement in masonry

There are small zones where the site classifies as a H1/C1-C2/S1. In these areas the use of a soil raft is recommended.

It is recommended that the services excavations be mapped during the installation of services to verify the expected conditions.

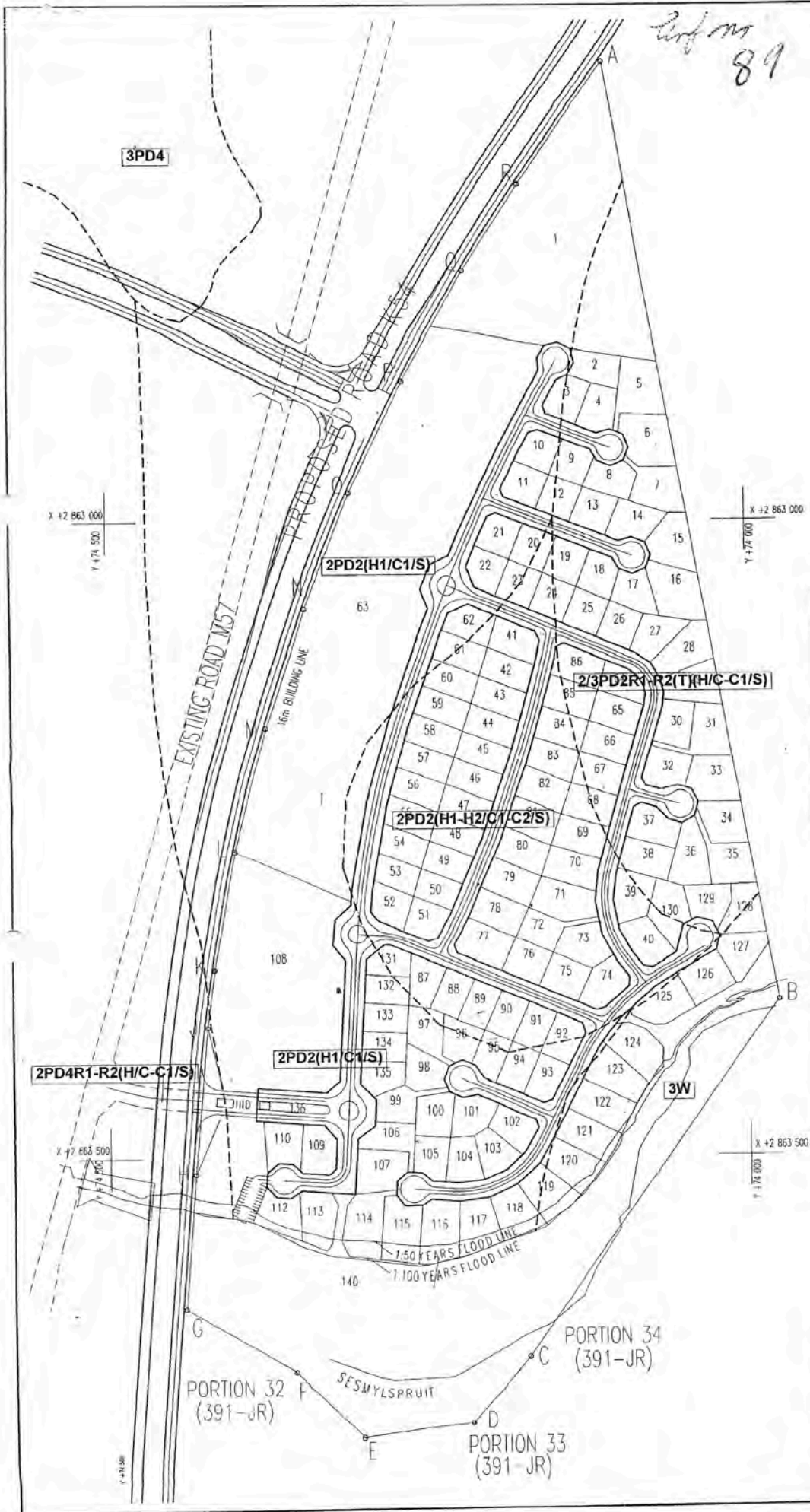
Please contact me if you require additional information.


Yours faithfully



SP Kok

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PROJECT RIETVLEI RIDGE			
TITLE OF THIS DRAWING ZONATION PLAN WITH TOWNSHIP LAYOUT			
LEGEND			
2PD2(H1/C1/S)	Provisional Site Class		
---	Zone Boundary		
CLIENT M & T DEVELOPMENT			
LOCAL AUTHORITY CITY OF TSHWANE METROPOLITAN MUNICIPALITY			
CONSULTANT DOLOMITE TECHNOLOGY			
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DATE DECEMBER 2004		SCALE 1:3000	
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