

Appendix A: Project Description-

The KZN Department of Human Settlements proposes to undertake the development of the Rental Stock housing situated in Ndumo. The project area is located with Umkhanyakude District Municipality and Jozini Local Municipality.

Ndumo Rental Stock Housing Project is a residential development project comprising of 150 No Community Residential units (CRU) spread over an approximately 3ha site. All the CRUs are split into 9 individual blocks of walk-up flats spread across the site.

Each block comprises of either 12 or 18 flats on 2 or 3 floors and all reflecting different housing typologies. The following typologies have been considered in this proposal; bachelor units, 1 bedroom and 2 bedroom units.

The 9 blocks are grouped into 3 with each group positioned on engineering platforms of a vertical height difference of about 1,5m between them.

Parking of almost of 1 unit per parking bay is designed in this proposal.

Play and relaxation areas are located in various areas on the site with ample landscaping and provision for pedestrian movements.

Each building is built of 140mm concrete blocks in framed structure of walk-up flats. Internal walls are 90mm concrete blocks. The roof comprises of 0.8mm chromadek Kliplok roof sheeting fixed on 50mm by 70mm timber purlins with insulation on 150mm by 38mm timber trusses. Ceiling will be 9mm gypsum boards fixed to 38mm by 38mm timber battens fixed to tie beams.

The walls will be plastered and painted both internally and externally. The stairwell will be built of clay face-brick both internally and externally.

The windows will be standard steel-rolled mild steel frames to comply with SANS 727 of the National Building Regulations. The site will be controlled and fenced with steel-palisade fencing. On site management facility is to be considered if necessary.

Rainwater harvesting will also be investigated for use in the gardens.

Energy efficiency will be built into the development, such as solar water heaters.

It is also proposed that a sewage package plant be used for the project, which is the Famsystem FMP, which will comply with the WA and GLs. The plant is an activated sludge system; no pumps are used in the plant itself which flows by gravity and can cope with both high and low flows. Effluent will be used for watering of gardens.

Storm water will be properly managed by providing concrete lined v-drains that will drain into two flood attenuation dams.

The attenuation dams will collect up to 100 cubic metres of storm water which will be disposed slowly into the open field. Water saving is also considered by providing storm water storage dams as well as the use of such water for irrigation. During construction, water will be sourced from the river via a water truck for construction purposes.