###### National Assembly

###### Question Number: 3972

**3972. Mr M Waters (DA) to ask the Minister of Transport:**

(1) With reference to his reply to question 2787 on 19 September 2017, what are the reasons that the size of the culverts under the N3 highway were not done in accordance with the master plan (a) after the 2009 flood and/or (b) in 2011 as this resulted in the flooding of the N3 highway in 2016;

(2) what steps are being taken to ensure that the proposed improvements to the Bedfordview drainage, which will lead to faster runoff to and under the R24 will not cause flooding at Boeing Rd and further downstream;

(3) will the proposed retention pond of 14000 m3 between R24 and Boeing Rd be sufficient to retain all the water from a 1:20 year storm event; if not, (a) why not and (b) what steps is his department taking to ensure the retention dam can retain water from a 1:20 year storm? NW4518E

**Reply**

1. (a) The master plan for the development of the area was approved by the City of Ekurhuleni Metropolitan Municipality. A layout plan was obtained from Ekurhuleni Metro showing the development upstream of the culvert in the flood plain. From this layout plan it is clear that City approved developments based on a 1:20 year flood, which was not shown on the plans, and not based on the 100 year flood as per legislation applicable. The development of the erven is in the flood plain that acted like a natural retention pond. Calculations by our independent experts indicate that the development is in fact below the 20 year flood line. Prior to the property development within the flood plain the culvert acted adequately. Due to the risk associated with the downstream flooding of property if culvert sizes are increased, the size of the culverts cannot just be increased without substantial improvement to downstream drainage by City of Ekurhuleni Metropolitan Municipality.

(b) Due to risk associated with the downstream flooding of property the size of the culverts cannot just be increased without substantial improvement to downstream drainage by City of Ekurhuleni Metropolitan Municipality on their land.

1. SANRAL is aware of the problems in the area especially regarding flooding in the vicinity of Boeing Road and the engineers are in discussion with the City of Ekurhuleni Metropolitan Municipality to address the problem. In addition SANRAL is in a process of appointing professional consulting engineers to assist with a detailed investigation/design to find a solution in consultation with City of Ekurhuleni Metropolitan Municipality.
2. (a) Retention ponds were only mentioned in the flood study as a possible solution to the problem but there were some reservations as to how effective these would be. The limited land space on both sides of the N12 highway will determine the size of the pond/s that can actually be constructed, and thus the size of the flood event that can be retained.

(b) SANRAL has already commenced with the appointment of its own professional consulting engineers to assist with detailed investigation/design to find a solution in collaboration with the City of Ekurhuleni Metropolitan Municipality.