b) Under a design-unseating head of less than 3.0m measured from the gate invert, leakage shall not exceed 2.50 L/min per meter seating perimeter.

F. Material of construction the stop locks shall be metal with compatible coating protection suitable for installation at storm water pump station.

G. Stainless Steel u-channels, chains and shackles of suitable grade for immersion into storm water of high salinity shall be used for lifting and lowering the stop locks.

1.2.11 NOT USED

1.2.12 Expansion Joints

A. Expansion joints shall be installed wherever necessary or required by the Engineer in order to eliminate stress and vibration transfer from rotating / oscillating or otherwise vibrating equipment and/or thermal stress to the pipe work or vice versa. The expansion joints shall be of the single sphere bellow type with tie bars and flanges.

B. Material: Bellow: Natural rubber or neoprene.

Flanges: Stainless Steel 1.4571

Tie Bar: Stainless Steel 1.4571

1.2.13 Flexible Hoses

A. To avoid damage and/or malfunctions of instruments and other sensitive equipment by vibration transfer flexible hose connection shall be provided.

B. Pipe connection by integrated unions.

C. Material: Inner Hose: Natural rubber or neoprene

Armouring: Stainless Steel 1.4541

1.2.14 Actuators, Electrical Motor driven

A. Heavy duty industrial type actuators shall be provided with appropriate gear and air cooled motor, including manual override device (hand wheel or lever) and as per general condition above.

B. Closing / opening time shall be in accordance to the process requirements, but shall not exceed 0.25 sec/mm hub.

C. The actuator shall be equipped with Open / close limit switches, Over Torque limit switch, Mechanical and Electronics (4-20mA) Moving indicator