



## ***Sunnyview Jr & Sr Public School, Toronto, Onta***

**LOCATION :** 450 Blythwood Road, Toronto, Ontario

**OWNER :** Toronto District School Board  
TDSB.

**TEAM MEMBERS :** **Mechanical Consultant**  
Mr. Imran Majeed  
Advanced Buildings Solutions Inc.

**Electrical Consultants**  
Suri & Associates Ltd



### **MECHANICAL ENGINEERING SERVICES:**

Mr. Majeed was engaged to provide following services:

- Mechanical - Roof top unit Assessment
- Site review
- Concept Studies & Design Development
- Preparation of Construction Documents
- Estimating Construction Cost
- Cost Control & Value Analysis throughout the Design Process
- General Administration & Design Coordination throughout the work

**PROJECT DESCRIPTION:** The project includes upgrade existing roof top units, condensing unit, exhaust fans, ductwork, piping, electrical upgrades in support of mechanical upgrades and services.

**Existing System:** The building has rooftop equipment on various levels of roof detailed as follows:

1. The two condensing units close to the Penthouse Mechanical Room are of 15 ton and 6.2 ton capacity and are of Trane make. The units were manufactured in 1982. Insulation on piping to unit is in poor condition. Electrical conduit and disconnect switch show sign of rust.
2. On the high roof there are two air-conditioning units of Carrier make of 15 ton and 20 ton capacity. The units were manufactured in 1982. Both the unit housing and electrical disconnect switch and conduit work are showing rust.
3. Gymnasium is served by 20 ton hvac unit of Carrier make. The label on the unit shows 1989 manufacturing year.
4. Adventure space is served by two 20 ton units of Lennox make. One of the unit require bearing replacement. The units were installed in 1989.
5. There are four (4) small condensing units serving various classrooms of York make and 2 ton capacity each. Both the units and the wiring appears in poor condition
6. Music Room is served by hvac unit of Trane make and 3.0 ton capacity. The unit was installed in 1983.
7. Classrooms 105 & 109 are served by rooftop condensing unit of Trane make and 6.2 ton capacity. The unit appears from 1982 installation.
8. Main Office & Staff Room are served by rooftop condensing unit of Trane make and 6.2 ton capacity. The installation of unit was done in 1982. The unit operation was identified as inadequate by the caretaker. The electrical disconnect switch and conduit work are showing rust.
9. Classrooms 128 & 130 are served by condensing unit of Trane make and 6.2 ton capacity. The unit was installed 1982.

**Recommendations:** Most of the rooftop equipment have recommended lifespan of 15-20 years. As noted above number of equipment exceed or are approaching their lifespan and hence are recommended to be replaced. It is recommended that one (1) 15 ton condensing unit, four (4) 6.2 ton condensing units, four (4) 2 ton condensing units and one (1) 15 ton & one (1) 20 ton air-conditioning units shall be considered for replacement based on the age and condition of the equipment.

