Office & Storage Building

Environmental Services Department

Committee / Council Report

January 2021

Drafted by:

Manager of Environmental Services

Plant Background

The main plant office area was originally built in the 1960's and housed all the plant pumps, office, lab and chemical storage. This was a one building facility.

When the expansion upgrade was done in the early 1990's this build was extensively reconfigured to be used as offices, lab, control room and staff lunch and changeroom washrooms.

From my understanding there was an issue with water and flooding in the basement back in this time frame. Multiple "band aid" attempts were made to rectify the flooding such as cutting grooves in the floor to direct water to the sewage ejection pump pit which was designed to be a sealed pit and it created a pooling area instead. A pump was put in place to pump to a drain but this only controlled the water depth on the floor and did not keep up most of the time.

In 2015 Advanced Basement Systems was contracted to do a repair and installed a proper solution which worked most of the time, but is dependent on the pumps not failing, which has happened a couple times with in the last 5 years. Unfortunately water is now working its way in through the walls and around the old abandoned 1960's piping causing water to once again pool in floor areas and creating high humidity in the basement which the commercial dehumidifiers are working hard to stay up with demand.

Hazards

Water leaks, pooling & flooding

With this water issue we have slip, trip, and fall hazards in the basements as we have found that multiple times water has been discovered pooling where it was dry the day before. An abundance of electrical and delicate electronics in these areas creates concerns of potential damage to equipment and personnel injury from these sources.

Mold

We have had an accredited 3rd party lab (Paracel) do testing analysis for mold in the plant office building. The results came back positive with multiple molds being found.

Among these are:

Aspergillus species – implies the fungus is actively growing. Some known to be allergenic and toxigenic

Aspergillus / Penicillium-like spores. Some known to be allergenic and toxigenic

Chaetomium Species – Implies actively growing fungus. Some strains produce mycotoxins

Stachybotrys spores- high exposure to some species may cause lung disease. Even when the spores are not viable in samples that have not

been wet in recent past, they remain toxigenic and allergenic. Some species are known to produce mycotoxins

The Paracel report has been forwarded to the H&S Coordinator and was to be avail. to the JHSC.

Due to the roof leaks in the Managers office and digester, leaks into the building for years the areas in the ceiling have become a significant area or concern. Both the main floor and the basement have false plaster type ceilings and the main floor also had a suspended ceiling put in after the expansion we believe. These ceilings have extensive water damage and require to be removed or replaced for H&S reasons.

The main floor office restoration has been quoted by Belfor for approx. $10,000 (this will be dependent on what is found during demo). This is just the internal portion. The roof area and siding will require repair to be done which would be done after the digester project is completed.

Due to the extensive electrical and plumbing work involved we have not received quotes to remove the false ceiling in the basement for remediation.

As a side note we have had rodent problems in the past couple years with an abundance of rodent feces that falls onto the desks and copiers etc. in the office, and is a serious H&S concern. We have contracted Pest Away to manage a program and it does seem to be working.

Access Egress

A major safety concern has been identified with only having 1 route of access & egress in the basement. The basement is used as a workspace, lunch/break room, laundry area, parts storage, drawing & document storage, washroom and change area. In the event of a fire or serious event that requires immediate evacuation this could be impossible and trap staff or other personnel in the basement. The possibility to add an additional staircase for access & egress has been looked at but not feasible due to the space constraints, water issues and construction of the 1960's foundations and walls.

Storage Building

The approval for a new water/wastewater storage building was given in 2020 and included in the budget. A portion of the funds were budgeted in 2019 and put into a reserve with the remaining funds added in the 2020 budget. This was then put on hold due to the unknown effects with the COVID-19 virus and the second allotment of additional funds for the 2020 portion were not added to reserves.

This building is required to allow for the proper storage of the drinking water system parts and supplies which are currently stored in multiple various locations which causes difficulties during emergency repair situations as well as the uncontrolled environments which could cause potential contamination and or damage to these items. The inventory of these items also proves difficult as occasionally some of these items must be moved and are missed during inventory checks or when needed in emergency situations which prolongs the repair times.

The same goes for storage of wastewater equipment and parts minus the contamination portion which is not a concern.

This not only affects the Environmental Services Department but also the Public Works Department as a significant portion of the parts & equipment are stored in multiple areas in the PW department buildings. It has been noted that the space taken up by these items could be used by the PW Department.

Due to the limited space in these areas there has been H&S issues documented and additional work created to avoid these issues. It has been concluded by Management and Council that this will positively help both Village departments and is supported by the approval in the last 2 budgets.

Other items for consideration

The age of this building is a factor that should also be considered as the cost for performing required maintenance will need to be budgeted for.

We have windows that leak and are not energy efficient as well as doors that need replacement and or major/minor repair. Flooring is at the end of life and there is plumbing that will require work also.

A majority of the Council recently toured the building to personally see the issues and the condition of the building and these items were discussed..