STAFF REPORT
SUBMITTED BY: Chris Frotten
DATE: April 6, 2020
SUBJECT: Arena Fees

ORIGIN

In the past two years, the arena has incurred a deficit of, on average, $180,000 each year due to a decrease in usage and an increase in maintenance and operating costs. Based on the current budget projections, the arena will incur another deficit of approximately $200,000 in fiscal 2020/2021. For these reasons, we need to examine the operations of the arena and consider increasing fees to generate more revenue to compensate for the increased costs and future replacement of the building.

BACKGROUND

The Sandy Wickens Memorial Arena was constructed in 1995 and the building is considered a typical pre-engineered structure. It has one official NHL size ice surface, 5 changerooms, a referee/first aid room, a canteen, a meeting/multi-purpose room and seating for 784.

Over the past few years, the arena has been the subject of several reports and Council deliberations. In November 2017, Eastpoint Engineering performed an assessment of the arena (report attached) and provided recommendations on future repairs. The total estimated cost of the recommended maintenance and repairs was $600,000.

Recently, we have invested approximately $570,000 in other required equipment and building maintenance and repairs such as the replacement of the dehumidifiers, the purchase of a new ice resurfacer, the replacement of the flat roof and doors, the installation of rubber flooring and the renovation of the changeroom showers.

Finally, even with the decreased usage, increased operating costs and declining lifespan of the building, the arena fees have not substantially changed in 10 years and were actually decreased in 2017 for youth groups (minor hockey, figure skating and high school teams).

DISCUSSION

In General

Municipalities are being challenged to make the best possible decisions with scarce resources for both today's users and future generations. Planning for infrastructure renewals, growth (or lack thereof), and new demands amidst increasing service expectations, risk exposure, and financial challenges can put elected officials and staff in a difficult position.

Public infrastructure is the foundation for a health and vibrant community. Fundamentally, infrastructure exist to provide services to our communities and managing our assets to deliver those services is important. However, many of us are faced with an aging and quickly deteriorating asset base but have limited revenues to rehabilitate or replace those assets. At the same time, ratepayers, citizens, and businesses within municipalities have increased expectations for the level of services received, despite the fact many reject increases to taxes or fees required in order to pay for the higher level of service.

Sport and Recreation Facilities are not immune to this phenomenon. According to the 2016 Canadian Infrastructure Report Card, 46% of sport and recreation facilities are in poor, very poor and fair condition, requiring attention and the current reinvestment levels are not meeting targets.

In addition, according to the Canadian Recreation Facilities Council's 2005 National Arena Census, an arena's approximate life expectancy is 32 years depending on different factors. Out of the 1,857 arenas surveyed, approximately 45% (1,350) were all ready beyond their projected life expectancy.

Decrease in Usage

Even with our efforts in increasing usage by proactively contacting local organizations that may have a use for available ice times and trying new initiatives such as female pick-up hockey, we have seen a steady decline in the rental revenues. This can be attributed to a number of trends and factors such as our population decline, the high level of inactivity among children and youth and the availability of more diverse recreation opportunities.

Increased Maintenance and Operating Costs

In the past 5 years, we have seen an increase in costs associated to building maintenance, refrigeration maintenance, other equipment maintenance (i.e. condensers, dehumidifiers) and electrical (power). The increased maintenance costs can be attributed to the aging building and equipment. The arena is now 25 years old and the building and its equipment is starting to show its age. The increased electrical (power) costs can be attributed to the installing of two new dehumidifiers in 2017. More information on the costs can be found below.

The task of finding funding for much needed repairs and upgrades to aging and outdated infrastructure and for growth-related new infrastructure is becoming increasingly difficult. As mentioned, the arena is now 25 years old and is beginning to show its age as it moves toward the end of its expected lifespan. As a result, we are approaching a critical period in time.

The Municipality does not have an asset management program, has not completed any detailed assessment of the arena and does not have a facility master plan. Without these broad overarching

documents, we do not fully understand the condition of our existing facilities, financial projections, potential risks and forecasts for the future. This all limits our ability to properly plan for the future and determine the proper fee structure.

For this reason, the best way to determine the appropriate fee structure is to review our current operating costs and try to determine a fee structure that limits the deficit to a minimum but takes into consideration our users ability to pay, what other facilities similar to ours are charging and our need to replace the building in the future.

Operating Costs

The largest operating costs of the arena are the salaries, building maintenance, refrigeration maintenance, other equipment maintenance (i.e. condensers, dehumidifiers), electrical (power) and furnace oil.

At a quick glance of the 5-year comparison, it is evident that there was a significant increase in the deficit between fiscal 16/17 and 17/18 and 18/19. This can be attributed to 4 factors:

1. We had a $50,000 reduction in revenues due to the drastic decrease in hockey rental fees and canteen revenue (associated savings in expenses). The decrease in hockey rental fees was primarily due to the reduction of the fee for prime rate usage by youth groups from $120 + HST / hour to $95 + HST / hour.
2. We had a slight increase in staffing in 17/18 to properly perform the required checks of our refrigeration system and to improve on the management of the arena scheduling and service to our users. In 18/19, we added the position of Arena & Property Services Administrative Assistant to assist the Director of Property Services with his administrative duties of reporting, filing and invoicing and to streamline the operational coordination of the arena. We have had the same employee structure for the past 2 years and we have been very pleased with the operations of the arena and feedback from the users and community.
3. We have been faced with a number of emergency or required equipment and building maintenance costs. The building and its equipment is starting to show signs of its age, and we have had to replace or repair some important equipment and parts of the arena such as the dehumidifiers, condensers, ice resurface and changerooms.
4. The electrical (power) costs have increase by almost 50% due to the installation of our new dehumidifiers at the end of 17/18.

In total, approximately 1,000 hours of prime time hours are booked during the season. If we wanted to erase the deficit by just 50%, we would need to increase our rates by $100/hour. We obviously do not want to do that but if we were to increase our rate by $20/hour-$25/hour, that would total $20,000-$25,000 in additional rental fees which would be helpful. This increase would also bring us more in line to what arenas similar to ours are charging.

Environmental Scan

A comparison of the fees at arenas in our region or similar to ours in the Province shows that we are 14% below average in the prime rate, 57% below average in the non-prime rate and 19% below average on the youth rate.

I also inquired with Mariners Centre and Yarmouth County Minor Hockey Association to understand whether any discounts were provided to youth groups. I found that in some cases there are. For example, the Yarmouth County Minor Hockey Association receives ice time at non-prime rates regardless of the time of day which represents a 14% savings if they booked ice during prime-time hours.

BUDGET IMPLICATIONS

Arenas make communities a place for current and future generations to build their lives. Many children grow up dreaming of becoming the next Sidney Crosby, or Tessa Virtue and Scott Moir. And even if these dreams are not realized, the pursuit of the sport provides valuable experiences in perseverance, dedication, sportsmanship and team play. Our arena is no different and all options should be considered before making more serious decisions.

That being said, there needs to be a balance between the public benefit and the financial burden. A $200,000 operating deficit on one facility is significant in our case and has a substantial impact on our ability to invest in other services and capital projects. There is also no saving for the eventual replacement cost of the building.

We therefore must take a closer look at how we can reduce expenses and increase revenues. There is no doubt that there are some operational efficiencies we could implement. An example of one we have already done is supporting two employees in achieving the Second Class Refrigeration Arena certification which helped us save on the cost associated to contracting out the service. For this reason, more efficiencies must be implemented but we must also generate more revenues and, in addition to already increasing our grant applications, funding partnerships and advertising revenue, we believe rental fees must be increased.

LEGAL IMPLICATIONS

There are no legal implications at this time.

PUBLIC CONSULTATION/COMMUNICATIONS

There has been no general community engagement in the preparation of this report.

RECOMMENDATION

As mentioned, the arena is now 25 years old and is beginning to show its age as it moves toward the end of its expected lifespan. As a result, we are approaching a **critical** period in time.

Based on this conclusion and the information contained in this report, I recommended to increase the prime time rental rate by $20, the non-prime rental rate by $10 and the youth group rate (minor hockey, figure skating, high school team) by $25 for the 20/21 season.

I would also recommend to increase the rates by 2% each year to compensate for the increased operational costs such as power, heating and telecommunications which increase every year.

Based on the hours from our last season, this would generate approximately $30,000.

SUGGESTED MOTION

Move to increase the rental fees of the arena for the 20/21 season to the following and increase them by 2% each year thereafter:

Category	Times	Old Rates	**New Rate**
Prime Time	Weekdays 4:00 pm to close Weekends 9:00 am to close	$120.00 + HST / Hour	**$140.00 + HST / Hour**
Non-Prime Time	Weekdays 8:00 am to 4:00 pm	$60.00 + HST / Hour	**$70.00 + HST / Hour**
Minor Hockey, Figure Skating & High School Team	Weekdays 8:00 am to close	$95.00 + HST / Hour	**$120.00 + HST / Hour**
Arena Rental Without Ice		$75.00 + HST / Hour	**$75.00 + HST / Hour**
Arena Rental Without Ice - Non-Profit Organization		$250.00 + HST / Day	**$250.00 + HST / Day**
Arena Rental Without Ice - Commercial		$500.00 + HST / Day	**$500.00 + HST / Day**
Benefit Concerts & Fundraisers		Free - Subject to CAO's Approval	**Free - Subject to CAO's Approval**
Hospitality Room (Without Arena Rental)		$30.00 / Hour	**$30.00 / Hour**

ALTERNATIVES

1. Council could direct the CAO to complete a detailed assessment of the facility.
2. Council could direct the CAO to re-evaluate the 2% percentage increase and develop a replacement plan for the arena.
3. Council could direct the CAO to develop a plan to reduce operations of the arena (i.e. hours of operation, staff). This alternative is not recommended for the reasons outlined in this report.

4. Council could direct the CAO to develop a plan to close the arena. This alternative is not recommended for the reasons outlined in this report.

ATTACHMENTS

- 5-Year Financial Comparison.
- 2019 Arena Fees Comparison.
- 2017 Eastpoint Engineering Infrastructure Assessment and Recommendations Report.
- 2019/2020 Season Prime Time Allocation Report.
- 2019/2020 Season Non-Prime Time Allocation Report.

Municipality of the District of Barrington
Sandy Wickens Memorial Arena
5 Year Comparison

Rev/Exp	Account Number	Account Name	15/16 Actuals	16/17 Actuals	17/18 Actuals	18/19 Actuals	19/20 Actuals
Revenue	01-14780-001	Ice Hockey Rentals	97,243	91,894	68,023	70,155	51,792
	01-14780-002	Figure Skating Ice Rentals	11,340	10,362	10,273	11,020	8,930
	01-14780-003	Public Skating	2,935	5,100	4,988	4,933	2,936
	01-14780-004	Special Events Ice Rentals/Receipts	2,615	4,195	7,337	625	26
	01-14780-005	Canteen Sales	24,898	23,749	1,262	-	-
	01-14780-006	Vending Machine Sales	4,690	3,623	1,530	3,166	1,180
	01-14780-007	Acadian Vending Receipts	915	479	1,032	663	379
	01-14780-009	Skate Sharpening	1,166	813	352	1,014	714
	01-14780-010	Propane Heaters	1,042	953	1,146	1,145	141
	01-14780-011	Miscellaneous	922	5,326	776	2,157	1,116
	01-14780-012	Signs/Banners	14,274	10,220	13,209	10,141	14,974
	01-14780-013	Summer programs	1,122	870	-	-	691
	01-14780-014	Merchandise Sales	-	-	-	-	582
Revenue Total			**163,162**	**157,585**	**109,927**	**105,019**	**83,462**
Expense	01-27150-001	Salaries/Wages	49,585	64,350	75,059	89,317	74,609
	01-27150-002	Emloyment Insurance	1,300	1,603	1,741	2,051	1,677
	01-27150-003	Canada Pension	2,570	2,699	3,133	3,765	3,460
	01-27150-004	Workers Compensation	834	1,117	1,301	1,518	1,165
	01-27150-005	Group Insurance	1,170	1,419	2,841	2,777	2,719
	01-27150-006	Pension Premiums	2,082	1,699	3,342	3,422	3,711
	01-27150-007	Training/Development	45	201	74	1,051	4,288
	01-27150-009	Water and Sewer	30	-	-	-	-
	01-27150-010	Clothing/Footwear	126	227	98	1,061	1,114
	01-27150-011	Office Supplies	1,155	1,146	768	3,560	2,074
	01-27150-013	Telephone	2,918	2,696	3,141	3,168	2,594
	01-27150-014	Property Maintenance	1,075	548	1,004	834	138
	01-27150-015	Travel	596	226	10,989	11,482	2,166
	01-27150-016	Insurance	2,511	2,480	2,524	2,604	2,695
	01-27150-017	Miscellaneous	2,135	1,182	2,149	2,648	479
	01-27150-018	Freight/Courier	538	426	-	-	-
	01-27150-019	Janitorial Supplies	2,320	3,473	3,072	4,506	3,141

Municipality of the District of Barrington
Sandy Wickens Memorial Arena
5 Year Comparison

Rev/Exp	Account Number	Account Name	15/16 Actuals	16/17 Actuals	17/18 Actuals	18/19 Actuals	19/20 Actuals
Expense	01-27150-020	Building Maintenance	15,718	18,208	32,985	39,561	36,512
	01-27150-021	Refrigeration Eqpt Mtnce	39,699	25,188	31,901	13,612	38,406
	01-27150-022	Olympia Maintenance	4,516	3,360	3,899	6,266	1,903
	01-27150-023	Other Eqpt Maintenance	3,481	2,800	3,315	11,632	11,255
	01-27150-025	Licenses/Fees/Permits	1,656	1,105	697	721	313
	01-27150-026	Electrical	58,153	56,743	62,757	89,639	71,487
	01-27150-027	Propane	1,408	1,390	2,163	1,017	1,384
	01-27150-028	Olympia Propane	4,925	1,848	4,322	4,903	2,982
	01-27150-029	Furnace Oil	6,924	7,957	11,236	12,304	7,592
	01-27150-030	Canteen Costs	17,493	14,318	118	-	96
	01-27150-031	Vending Machine Costs	768	1,752	3,206	2,953	3,306
	01-27150-101	Salaries/Wages	19,210	12,937	1,099	-	-
	01-27150-102	Emloyment Insurance	506	328	25	-	-
	01-27150-103	Canada Pension	630	435	32	-	-
	01-27150-104	Workers Compensation	312	211	17	-	-
	01-27150-107	Training/Development	-	50	74	-	-
	01-27150-109	Canteen Supplies	-	-	1,058	-	-
	01-27790-002	HST - Arena	1,878	4	119	- 70	- 49
	01-27150-008	Vacation Accrual	87	2,942	140	- 2,916	-
	01-27150-024	Grounds Maintenance	50	-	2,714	1,177	825
	01-27150-012	Advertising	-	-	-	-	-
	01-27150-034	Small Tools and Equip	-	-	-	178	600
	01-27150-033	Special Events	-	-	-	-	626
	01-27150-035	Merchandise	-	-	-	-	688
Expense Total			**248,402**	**237,070**	**273,113**	**314,742**	**283,954**
			- 85,239	**- 79,485**	**- 163,186**	**- 209,723**	**- 200,492**

Arena Fees Comparison (HST incl.)
As of March 28, 2019

	Barrington	Shelburne	Yarmouth		Queens	Clare	Digby	LCLC	Lunenburg	Kentville	Middleton	Kings	**Avg.**
Ice Rental Rate			Arena 1	Arena 2									
Prime Time	$138.00	$132.25	$185.00	$170.00	$172.43	$153.00		$181.70	$164.00	$175.00	$125.00	$160.00	**$159.67**
Non-Prime Time	$109.25	$132.25	$160.00	$150.00	$86.22	$134.50		$158.70	$134.00	$125.00	$125.00	$160.00	**$134.08**
Youth Rate	$109.25	$132.25	N/A	N/A	$114.55	N/A		$170.20	$134.00	N/A	$125.00	$160.00	**$135.04**
Mornings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$98.00	N/A	N/A	N/A	**$98.00**
Public Skate													
Children	$2.00	$2.00	$2.00	$2.00	$2.00	N/A		$3.00	$3.00	N\A	$2.00	$4.00	**$2.44**
Youth	$2.50	$2.00	$2.00	$2.00	$2.00	N/A		$3.00	$3.00	N\A	$2.00	$4.00	**$2.50**
Teen	$2.50	$2.00	$2.00	$2.00	$2.00	N/A		$4.00	$4.00	N\A	$4.00	$4.00	**$2.94**
Adult	$3.00	$2.00	$2.00	$2.00	$2.00	N/A		$4.00	$4.00	N\A	$4.00	$4.00	**$3.00**
Family	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$10.00	N/A	N\A	$10.00	N/A	**$10.00**
Pick-Up Hockey													
Youth	$5.00	$10.00	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	**$7.50**
Adult	$5.00	$10.00	N/A	N/A	N/A	N/A		N/A	$10.00	N/A	N/A	N/A	**$8.33**

MoDB1701

EastPoint Project No. 309001

November 16, 2017

MUNICIPALITY OF THE DISTRICT OF BARRINGTON
INFRASTRUCTURE ASSESSMENT AND RECOMMENDATIONS

Report Submitted to:
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Contents

1 BACKGROUND

The Municipality of the District of Barrington (MoDB) currently occupy and maintain four key facilities in the Community. Administrative offices and the Council Chambers are housed in the mid-1970's building along the main road running through town. A recreation centre, circa WWII, and a mid-1990's ice rink, are located in the social and recreational centre of Barrington on Sherose Island. The Property Services shop is also located nearby on Circle Drive, at Sherose. The intent of this report is to assess the existing conditions of these four facilities and to compare the opportunity cost of upgrading / restoration with construction of new purpose-built structures. Assessment is based on components' condition, provincial and National Building Codes and / or Canadian Standards, net areas for operational needs, building age and current user expectations for accessibility, inclusivity and security.

A multi-discipline consultant team visited the four buildings to review and document components including envelope (roof, exterior cladding, windows/doors,), mechanical systems (heating, plumbing, ventilation), electrical systems (lighting, power distribution, fires alarms) and interior finishes / layouts. Systems were reviewed with the full understanding that they would have met code requirements at the time of initial construction. A summary description of each building is supported by full systems descriptions recorded on facility audit sheets in Appendix B. Reference sketches for each building are provided in Appendix A.

2 EXISTING CONDITIONS

2.1.1 SANDY WICKENS MEMORIAL ARENA

The Sandy Wickens Memorial Arena was constructed in 1995 and is used primarily as an ice rink. The building is considered a typical pre-engineered structure. See drawing (ASK-001) for the general layout of the facility. A facility audit sheet has been compiled for the arena and is appended to this report and the findings summarized here.

2.1.2 ARCHITECTURAL/STRUCTURAL SYSTEMS

EastPoint was unable to get on the roof, due to safety concerns. However, the North part of the roof, over exit doors in the arena, is leaking into Corridor 111.

Exterior metal siding is showing average wear and condition for the age of the building. All metal doors are showing significant amounts of rust. The brick wall at the main entrance and lockers area is in generally good condition. No apparent deterioration is evident.

Change rooms and hallway leading to the rink have been covered with rubber floor. We were unable to observe concrete condition. The remainder of the slab on grade is in good condition. Ceramic tile in the canteen is in good condition.

The building does not meet the latest accessibility code B651-12. The railing at the edge of the arena seating does not extend 300mm over the first step. There is no railing at the ramp in the arena. The canteen sink counter protrudes into the exit door area. Emergency exit doors in the arena do not close.

Maintenance and repairs are estimated to be approximately $150,000.

2.1.3 MECHANICAL SYSTEMS

The Arena has a large quantity of process equipment which has been maintained, upgraded or replaced periodically. The Arena equipment is in relatively good shape with minor maintenance needed on certain items.

The fire suppression system, primarily the fire pumps, will continue to have a shortened life expectancy due to the storage of pool chemicals in the fire pump area. This system should continue to be inspected and tested on a regular basis to ensure proper operation.

Many pieces of original mechanical equipment are in good operational condition however, due to their age these items were given a condition of fair/poor.

A notable code violation would be the building HVAC system. The HVAC should be reviewed and revised to meet ASHRAE 62.1-2016 Ventilation for Acceptable Indoor Air Quality. Currently there is no fresh air supply to any of the changerooms, administration or general areas.

Expenditures in the order of $300,000 will be required over the next 5 years to maintain existing mechanical systems and provide required fresh air.

2.1.4 ELECTRICAL SYSTEMS

The Barrington Arena electrical systems are in relatively good condition, and with minor maintenance and upgrades needed on certain items, can be kept in good condition.

Many pieces of older electrical equipment are in good repair, but due to their age and lack of available parts, these items are considered to have a condition of fair.

Visually, wiring and conduit are in good condition.

Recommendations that could be easily implemented would be to retag pieces of equipment and update panel schedules, as well as removing items from in front of the electrical equipment and giving the code required one (1) metre (39") clear.

Expenditures in the order of $150,000 will be required over the next 5 years to the maintain existing electrical systems.

2.2 RECREATION CENTRE

The Recreation Centre consists of two repurposed DND wood-framed structures with a common area across the front of the building. The facility was constructed in 1968 and consists of a variety of open areas and closed office spaces. Drawing (ASK-002) illustrates the existing footprint and space allocations. A facility audit sheet has been compiled for the Recreation Centre and is appended to this report and the findings summarized here.

2.2.1 ARCHITECTURAL/STRUCTURAL SYSTEMS

The Facility is in poor condition and does not meet current Provincial or National Accessibility Standards and requirements. The building envelope, including siding, insulation and windows require maintenance. The building layout is generally poor. Work required does not justify maintaining the facility. EastPoint recommends replacement for the following reasons:

- Poor air quality.
- Dampness/mold.
- Rodents.
- Current code violations w.r.t. electrical and mechanical systems in same room.
- General age of building.

2.2.2 MECHANICAL SYSTEMS

As the Recreation Centre is used often during summer months as a child care facility, the domestic hot water system should have a tempering valve installed to protect the occupants from scalding.

A notable code violation would be the building HVAC system. The system should be reviewed and revised to meet ASHRAE 62.1-2016 Ventilation for Acceptable Indoor Air Quality. Currently there is no fresh air provided to the building.

It was also noted that the domestic hot water tank has been installed in the main electrical room which is not permitted by the National Building Code of Canada.

Expenditures in the order of $20,000 will be required over the next 5 years to maintain existing mechanical systems.

2.2.3 ELECTRICAL SYSTEMS

The Recreation Centre is in relatively in poor condition. However, with major maintenance and upgrades, certain items can be brought up to code and fair condition.

Many pieces of older electrical equipment are presently in fair condition, but due to their age and lack of obtainable parts, these items are considered to be at end of life and should be replaced.

In addition to the electrical room containing a hot water heater, which would not be acceptable when bringing the electrical system up to meet current code requirements, another electrical code violation is the inadequate service space in front of an electrical panel.

Visually, wiring and conduit are in good to fair condition.

Recommendations that could be easily implemented would be to retag pieces of equipment and update panel schedules, as well as removing items from in front of the electrical equipment and giving the code required one (1) metre (39”) clearance in front of the electrical panel.

Expenditures in the order of $40,000 will be required over the next 5 years to maintain existing electrical systems.

2.3 PROPERTY SERVICES / PUMP HOUSE

The Property Services Office was constructed in 1959 and is a conglomerate of garage and office space that is grossly undersized. The Pump House is adjacent to the Property Services Office and houses all pumping requirements for the Municipality. A facility audit sheet has been compiled for the Property Services / Pumphouse facilities and is appended to this report and the findings summarized here.

2.3.1 ARCHITECTURAL/STRUCTURAL SYSTEMS

This Property Services Office does not meet the stated operational requirement to house a snow plow and salt truck, provide storage for general consumables, and minimal office area. It is recommended that a new, purpose-built facility be constructed.

2.3.2 MECHANICAL SYSTEMS

In general, the garage is in good operational condition with the only complaints being that space is inadequate for the needs of the Municipality.

A notable code violation would be the building HVAC system. This system should be revised to meet ASHRAE 62.1-2016 Ventilation for Acceptable Indoor Air Quality. Currently there is no fresh air supplied to the office area.

Expenditures in the order of $20,000 will be required over the next 5 years to maintain the existing mechanical systems.

2.3.3 ELECTRICAL SYSTEMS

The Property Services Office electrical system is in relatively good condition, and with minor maintenance and upgrades needed on certain items can be kept in good condition.

Many pieces of older electrical equipment are in good condition, but due to their age and lack of obtainable parts, these items are considered to have a condition of fair.

Visually, wiring and conduits are in good condition.

Recommendations that could be easily implemented would be to retag pieces of equipment and update panel schedules, as well as removing items from in front of the electrical equipment to provide the code required one (1) metre (39") clearance.

There is also a Pumping Station at the same location as the Property Services Office. The Pumping Station has a separate feed from the NSPI pole-top transformers to a service entrance electrical panel that feeds the building lights and the mechanical equipment located within the Pumping Station Building.

The distribution panel is Federal Pacific and is in fair condition, but has little room for future expansion. The interior lighting, wiring devices, and lighting controls are in fair condition. The exterior lighting appears to have been upgraded to LED lighting. The fire alarm for the Pumping Station appears to be tied into the Property Services Office fire alarm system.

Expenditures in the order of $15,000 will be required over the next 5 years to maintain the existing electrical systems.

2.4 ADMINISTRATIVE CENTRE

The Administrative Centre was constructed in 1976 and is used primarily as administrative offices. The attached drawing (ASK-003) shows the existing Municipal Administration use and leased space. A facility audit sheet has been compiled for the Administrative Centre and is appended to this report with the findings summarized here.

Discussions with the Municipality indicated that the entire area currently occupied for administrative purposes is not required. Much of this space is being used for files and general storage, or is unoccupied. Approximately 40% of the space is occupied by the Municipality with 35% being leased to other government departments and 25% is vacant / unoccupied space.

2.4.1 ARCHITECTURAL/STRUCTURAL SYSTEMS

The Administrative Centre is constructed as a slab-on-grade structure at the north side, and a two-storey (basement) structure on the south. At the junction, there is a considerable separation and areas of ground water penetration. Windows, doors, accessibility and overall envelope renovations are required.

2.4.2 MECHANICAL SYSTEMS

A notable code violation would be the Administrative Centre building HVAC system. This should be reviewed and revised to meet ASHRAE 62.1-2016 Ventilation for Acceptable Indoor Air Quality. Currently there is no fresh air supplied to some of the administration or general facility areas.

The domestic water tank has been installed in front of the panel which allows water to be piped over the electrical panel. This is a code consideration and facility risk.

Another noted discrepancy is the fire suppression system or lack there of. It was reported that the demolition of the fire hose cabinets was approved through the local authority having jurisdiction, however there was no documentation for this or engineering drawings for the project. This should have an in-depth review to ensure the proper life safety measures are in place.

Expenditures in the order of $175,000 will be required over the next 5 years to maintain the existing mechanical systems.

2.4.3 ELECTRICAL SYSTEMS

The Administration Centre electrical systems are in relatively good condition and, with minor maintenance and upgrades needed on certain items, can be kept in good condition.

The main electrical room has a large spot on the floor where the paint has lifted indicating water damage. As the main switchboard is raised up on a housekeeping platform, the switchboard doesn't seem to be damaged, but this room should be repaired to ensure that no further leaks occur.

At least one distribution panel is designed to have a main circuit breaker, but is taped over instead of being used. Distribution panels should be used for their designed purpose, so this panel should either have a main breaker installed, or the panel should be changed out to an MLO panel. Another code violation is inadequate service space in front of the electrical panel.

Many pieces of older electrical equipment are in good condition, but due to their age these items are considered to have a condition of fair.

Visually, wiring and conduit are in good condition.

Recommendations that could be easily implemented would be to retag pieces of equipment and update panel schedules, as well as removing items from in front of the electrical equipment, to provide the code required one (1) metre (39") clearance.

Expenditures in the order of $175,000 will be required over the next 5 years to maintain the existing electrical systems.

2.5 WASTE WATER INFRASTRUCTURE

The Municipality of the District of Barrington operates three wastewater collection and treatment systems. These serve Woods Harbour, Barrington and a small facility at Sherose Island. The first two systems are extensive and have numerous pumping stations, and each facility has a sewage treatment plant.

The data for this report was gathered in the field during two one-day site visits. On the first day all of the pumping stations were visited, and on the second day the treatment facilities were visited. During the data collection Municipal operating staff accompanied the data collector. Much of the data quality depends on the knowledge of the accompanying staff persons. Their experience with the systems was important since the pumps were not pulled to preform a detailed examination of the equipment, and therefore relied on their comments, experience and knowledge.

Collection pipe infrastructure was not considered since video inspection reports were not made available. It is assumed that video inspection has not been done. The operators commented that the sewers are cleaned regularly in a maintenance program and that the sewer collection infrastructure was generally in good condition with few apparent problems.

The pump stations were visited, and the condition of visible equipment was noted. A detailed table of pump stations is provided in a spreadsheet for all of the data collected. It is anticipated that Municipal staff will review the table for accuracy and provide comment.

2.5.1 PUMP STATIONS

All pump stations are of the submersible type. Most of the pump stations have two pumps, one for duty and one for standby in lead lag mode. Although the pump stations were constructed over twenty-five years ago, most of the hard infrastructure appears to be in good condition. Wet wells and monuments varied in size but were always in good condition. The exposed components that showed the most deterioration were the control panels and hatches. In many pump stations panels had been altered, and in a few cases replaced. In many cases the alterations reduced the complexity of the panels by eliminating the control interface which converted the panel to relay type controls. In some cases, the frequency of lightning surges necessitated these changes.

In most pump stations the pumps are or were Flygt 3085 pumps. Many still have these pumps but recently there have been replacements with Sultzer pumps equal to the original Flygt model. When this occurs, it is important to keep a record of the change. Converting from one pump manufacturer to another brand can have impacts on pump station performance. Therefore, it is important to record the performance of the new pump in comparison to the original pump. Unfortunately, the pump stations have very little instrumentation to enable this to be done. To do this each pump station would need a flow meter and discharge pressure gauge. Where pump stations only have one pump, there should be a spare pump maintained at the nearest plant.

The pipe work in the pump stations was originally ductile iron which is a very durable product. In Barrington many pump stations have been retrofitted with PVC pipework. The pipework and valves are all located in the wet well. This makes repair and maintenance very difficult. Modern submersible pump stations are required to provide a separate valve chamber. This simplifies the pipework in the pump chamber and eliminates many maintenance issues related to entering the wet well and confined space.

Many pump stations had the power to the pump panel pass through the wet well. This practice should be eliminated as a potential hazard. It was done because the monuments were set on top of the wet well, but it is not a good practice by todays standards.

Many access hatches are showing signs of their age and a few have been replaced. New replacement hatches now have safety grates which prevent potential accidents when the hatch is open. None of the original hatches have safety grates. If safety grates are not in place, Department of Labour inspectors could issue fines when the hatches are opened and no barrier, or anchor point, is in place. While safety grates have to be opened for access to the chamber for maintenance, they do fulfill a function and should be part of any hatch replacement. Hatches noted for replacement are due to corrosion. The hatches all functioned and fulfilled the access requirements. The main concern is for security, and for this the hinges and locks are important. Many hatches use chains to lock the closed position. However, this may not be effective if hinges are not fully functional. The hinges of every hatch should be inspected and repaired if not identified for replacement. The use of chains, while effective, leaves the lock available to be cut with bolt cutters and therefore vulnerable to vandalism and tampering.

Panel upgrades are required on many pump stations. This provides an opportunity to consider the future of the overall system. In Woods Harbour the panels have been equipped with alarm notification systems. This is a basic dialer that calls operators if there is a malfunction of the pump station. This results in callouts and overtime costs. Modern control panels have SCADA systems which allow operators to check and acknowledge alarms remotely. This can reduce costs of after hours callouts.

SCADA also provide data which can be used in assessing both the pump station and the collection system. When provided with input from flow meters the SCADA can provide most of the information necessary to document performance. The potential downside is the susceptibility to power surges caused by lightning. Wherever possible, panel upgrades should be completed with the long-term goal of implementing a SCADA system.

Currently panel replacements and repairs are being made by L&B Electric from Bridgewater, NS. It is uncertain whether there is an overall plan or whether each pump station is dealt with to correct problems. It is recommended that an overall plan be put in place before spending capital on control panels which may not meet the future goals.

Instrumentation is very limited in most control panels. All operate from control floats. A few have additional instrumentation such as current meters and hour meters. No pump station was equipped with a flow meter or continuous level measurement. These would be very useful if SCADA was to be implemented.

Overflows were originally part of every pump station. Many have been plugged to prevent discharges. However, it needs to be confirmed for each pump station, whether there is an overflow or not. It is required to report pump station overflows to NSE and to keep a record of frequency and duration of overflows.

During the field trips it became apparent that there are significant issues with records availability. The sewage treatment plant in each collection system would be the appropriate location to keep records for each system. There were no collection system drawings at the plant and no drawings for the plant. Drawings must be kept at the plant as part of the approval requirements. Each plant should also have the plant records available including flows and test results. These do not have to be in paper form but can be in a computer as electronic files. This is essential for proper documentation of the system and any changes made over the life of the system. During the study annual reports, as required by NSE, were not made available for review. Each plant should have an O&M Manual, emergency response and contingency plans. These are normal requirements of the approval. Based on this assessment the plants are basically in violation of the approvals. Facility audit sheets for the pump stations in Woods Harbour and Barrington pump stations is appended to this report and the findings summarized here.

The following should be long term goals:

- Provide each pump station with an external valve chamber and a metering chamber.
- Identify the requirements for a SCADA system to serve the Municipality
- Only replace control panels with panels meeting SCADA requirements.
- Provide current sensors and readout for each pump.
- Convert to continuous level sensing in wet wells.
- Renovate wiring to eliminate power passing through the wet well.
- Replace hatches with hatches having safety grates.
- Confirm which pump stations have active overflow capability.
- As part of the SCADA upgrade provide a computer at each plant as an operator interface.
- Send out all existing as built drawings for the system to be scanned to large format PDF.
- Keep appropriate records and documents at the plants as required by the approvals.
- Where a pump station has only one pump, maintain a spare at the nearest plant.
- The hinges of every hatch should be inspected and repaired if not identified for replacement.

2.5.1.1 WOODS HARBOUR PUMP STATIONS

There are 9 pumping stations; only four had duplex pumps the rest were single pump installations. The single pump installations were generally very small pump stations, only serving a few houses. This has not proven to be a problem and is workable in the future. It is recommended that a spare pump, suitable for any one of these stations, be maintained at the nearest treatment plant.

The most significant problem is at PS6 which experiences forcemain breaks. The pumps often cannot meet the flow demand, so the pump station should be upgraded with pumps providing more capacity. The forcemain is reported to be 2" diameter; upgrading to 4" would substantially improve the pump output. This pump station needs further study to determine the flows to the pump station and the appropriate capacity of the pumps.

PS3 also has capacity issues although the internal 4" pipes and 6" forcemain appear to be adequate. It is reported that the sewage flows out the top on occasion. This should be further studied to determine the appropriate upgrades to the pumps and pipes. This pump station needs a new panel as well.

PS 2 needs a new panel and PS 1 requires a new panel and new hatches.

In summary, two pump stations need a more detailed study leading to increased capacity. Four additional pump stations need new panels. One pump station needs new hatches.

2.5.1.2 BARRINGTON PASSAGE PUMP STATIONS

There are 15 pump stations in the system that runs from Barrington Passage to Brass Hill where the sewage treatment plant is located. These are all submersible type pumping stations with a wet well and monument to support the control panel. In general, the concrete infrastructure is in good condition, and it is only the panels and hatches the need attention.

Five panels are identified as at end of their life and in need of replacement. Panels are often mounted over a bus box and the bus boxes are in need of replacement in three pump stations. The bus box at PS 9 is closed by electrical tape and is a hazard. The others are corroding and may not last many more years if corrosion is not halted.

PS3 is the only station requiring the hatch to be replaced.

2.5.1.3 ESTIMATED COST OF UPGRADES

The following costs are Order of Magnitude costs for the pumping stations and are considered to be for budgetary purposes only. They are based on our experience with similar upgrades and do not necessarily reflect a contractor bid price at time of tender. More detailed studies are required to develop more accurate prices based on a scope of work and timing of upgrades. Engineering studies are required to define contractors scope of work and prices will be affected by the required scope of work.

Budgetary Upgrade Costs

Short term Upgrades	#	Unit Cost	Total Cost
Replace Panels (SCADA ready)	7	$ 60,000	$ 420,000
Replace Hatches	2	$ 10,000	$ 20,000
Bus Box upgrades	3	$ 2,000	$ 6,000
Replace WH PS6**	1	$ 100,000	$ 100,000
Replace FM from WH PS6**	300	$ 450	$ 135,000
subtotal			$ 681,000
Engineering studies and designs		15%	$ 102,150
Scada Planning (engineering)	1	$ 25,000	$ 25,000
Total Short Term Upgrades			**$ 808,150**

Long Term Upgrades	#	Unit Cost	Total Cost
external valve metering chambers	24	$ 60,000	$ 1,440,000
Scada implementation**	27	$ 30,000	$ 810,000
level instumentation	24	$ 4,000	$ 96,000
Electrical upgrades	24	$ 10,000	$ 240,000
Hatch upgrades	18	$ 10,000	$ 180,000
subtotal			$ 2,766,000
Engineering studies and designs		15%	$ 414,900
Total Long Term Upgrades			**$ 3,153,300**

notes:
** subject to further study
Cost for long Term Ugrades are time sensitive
HST excluded

Cost Estimate – Pumping Station Upgrades

2.5.1.4 PUMP STATION PROGRESS PLAN

While costs have been identified for long and short-term upgrades. It would be unwise to start these without an engineering study to define the type of system and features that are required in the long term. The study should focus on the panel upgrades to establish a standard of quality and features for the panels that will ensure that they meet the anticipated long-term needs. The panels must be designed for SCADA implementation. It would be unfortunate if panels were replaced and then turned out not to be compatible with long term objectives. Therefore, the first project to be undertaken should be the SCADA study in which the existing panels would be examined for capability for the long term and integration into the long-term solution, and to determine how the SCADA system should be configured. Although we have identified 7 panels to be replaced this should not be done until the SCADA study is completed and the needs have been properly identified.

2.5.2 SEWAGE TREATMENT FACILITIES

There are three sewage treatment facilities in the municipality with locations in Sherose Island, Woods Harbour, and Brass Hill.

2.5.2.1 SHEROSE ISLAND FACILITY

The Sherose Island facility is a small treatment plant using Recirculating Sand Filter (RSF) technology. It serves a few buildings located in the vicinity including the Recreation Centre, an RV dump station and Property Services building. This treatment facility is relatively new (2012) and requires routine maintenance such as sludge removal and UV bulb maintenance in accordance with manufacturer's instructions.

The plant consists of:

- 42 M^3 septic tank with an effluent filter;
- 42 M^3 recirculation tank complete with pumps to the RSF bed;
- A five-zone valve;
- A 186 M^2 recirculating sand filter bed complete with distribution and effluent pipes;
- A stinger valve to discharge effluent;
- An effluent pump and UV system; and
- Outfall pipe.

It is noted that some of the distribution pipes have become exposed at the surface of the RSF. These need to be protected. It appears that there may not have been enough pea gravel cover supplied during construction. It is recommended that at least 8" of clean pea gravel be placed over the RSF bed.

It is important to monitor the sludge accumulation in the septic tank, recirculation tank and to clean the screens of the pump vaults and filters. High water levels can result from excessive flows or from failure to clean the screens and filters. On the visit high water levels were observed and reported to the operator.

This facility needs only routine maintenance and to top up the pea gravel.

No records were available for performance or flows. The permit was not available for review, but it is anticipated that continuous flow monitoring is required. An effluent flow meter should be installed.

There is also a dump station facility provided for tourists in RVs at the Sherose Island site. The RVs can drain their holding tanks into septic tanks which are periodically cleaned with a vacuum truck. The supernatant from the tanks is pumped to the Sherose Treatment facility.

There are no obvious needs at this facility.

2.5.2.2 WOODS HARBOUR SEWAGE TREATMENT PLANT

This plant was constructed on or about 1990 and has not had any upgrades. It is a Class 2 plant requiring monthly sampling and quarterly and annual performance reports.

The plant consists of:

- A headworks structure which has a bar screen and rock trap; (the bar screen drive is not functioning)
- An oxidation ditch with an approximate volume of 400 M^3 and having two 7.5 hp brush aerators;
- A 20-foot diameter effluent clarifier complete with aluminum cover and sludge scraper mechanism;
- Two 2.2 hp sludge return pumps;
- Chlorine contact tank with liquid hypo chlorite feed pump; and
- 536 foot long, 8" diameter outfall.

The control building is located over the chlorine contact tank. The building is in good condition but needs some minor exterior maintenance. The chemical feed for disinfection is located in the building. The building contains the electrical distribution and control MCC. The location of the chemical feed is not ideal. It should be in a separate room separated from the electrical facilities. There is also a hatch from the main room to the chlorine contact tank effluent weir. This could introduce moisture into the same area as the controls. The weir is the measuring point for plant flows. In future there will be a need to add dechlorination or convert to UV disinfection. Dechlorination could be added to the effluent at the weir but a sample point will need to be added to prove that there is no chlorine residual. The alternative is to abandon chlorine and implement UV disinfection as was done at Brass hill. If this was done it would be best done in a new building.

In general, the plant is operating well and is physically in good condition and should not require any significant upgrades.

It is likely that this plant would become the central SCADA facility for the Woods Harbour collection and treatment system. There is not much to control at this plant, so the function would be mostly to monitor the operating equipment. It is possible that the MCC could be upgraded with current monitors, and other instruments could be added to monitor effluent quality including suspended solids monitors. The SCADA system would provide better records of flow. Flow is currently recorded by hand once a day. It would be desirable to have continuous record of flow for trouble shooting the plant and identifying peak flows.

The plant currently receives about 50,000 gpd of flow which is well within its capacity. The rating on the clarifier would be about 650 M^3/d or about 170,000 USgpd with a peak capacity of about 425,000 USgpd. Examination of flow records indicates that there is no significant impact from inflow and infiltration.

This plant would benefit from repair to the bar screen or from a new influent screen. Inefficient screens lead to higher maintenance costs due to wipes etc. clogging sludge pumps and impinging on the aerator brushes. Although not required, it is advisable to have good screens at the headworks. Modern screens can remove material down to ¼ inch and protect downstream equipment. They can also be fitted with screening dewatering and bagging for improved disposal.

This plant does not require any major upgrades. Any upgrades which may be considered in future would be those required by the approval or to implement SCADA.

2.5.2.3 BRASS HILL SEWAGE TREATMENT PLANT

This plant was constructed on or about 1990 and was upgraded in 2012. It is a Class 2 plant requiring monthly sampling and quarterly and annual performance reports. All flow to the plant is delivered by PS9.

The plant consists of:

- A headworks structure which has a manual bar screen and rock trap;
- An oxidation ditch with an approximate volume of 800 M^3 and having four10 hp aspirating aerators;
- A 34.66 foot diameter effluent clarifier complete sludge scraper mechanism;
- Two 3 hp sludge return pumps;
- UV disinfection; and
- 260 foot long 8" diameter outfall.

The control building is in good condition but needs some minor exterior maintenance. The building contains a small lab, washroom, an office and the electrical distribution and control MCC. There is also a maintenance bay. The electrical system was completely upgraded in 2012 and is in excellent condition.

In general, the plant is operating well and is physically in good condition and should not need any significant upgrades. At the time of the visit there was foaming on the surface of the oxidation ditch. This is common in extended aeration plants but makes it difficult to meet effluent TSS objectives. It is often associated with excess grease in the influent and generally occurs during the summer season. Its impact can be seen in the TSS results between July and September. The Municipality may want to ensure that grease traps are required and maintained at restaurants discharging to the system.

It is likely that this plant would become the central SCADA facility for the Barrington collection and treatment system. There is not much to control at this plant, so the function would be primarily monitor the operating equipment. It is possible that the MCC could be upgraded with current monitors, and other instruments could be added to monitor effluent quality including suspended solids monitors. The SCADA system would provide better records of flow. Flow is currently recorded by hand once a day. It would be desirable to have continuous record of flow for trouble shooting the plant and identifying peak flows.

The plant has been converted from brush aerators to aspirating floating aerators. Two of the four aerators were out of service at the time of the site visit. These aerators may not be the best way to achieve aeration requirements, but they do accomplish the task. It would be possible to operate the aerators on SCADA control using DO monitoring to turn off two aerators when the load to the plant is low.

The plant currently receives about 120,000 to 150,000 USgpd of flow which is well within its capacity. The rating on the clarifier would be about 1848 M^3/d or about 487,000 US gpd with a peak capacity of about 1,200,000 US gpd. Examination of flow records indicates that there is some impact from inflow which typically raises the flow to about 250,000 US gpd. It is well within its peak capacity. Therefore, there is no need of upgrades to capacity.

This plant does not need any major upgrades and upgrades which may be considered in future would be those required by the approval or to implement SCADA. For future consideration the plant would benefit from automated screens as discussed for Woods Harbour.

3 OPTIONS

After completing the inspections of all of the structures listed in the MoDB assets the following options have been developed:

Option 1: declare the existing Recreation Centre, Property Services, and Administration buildings as surplus and construct three separate purpose-built facilities as direct replacements. In the case of the Recreation Centre and the Property Services facility the new infrastructure would be constructed on adjacent lands at Sherose Island while the existing infrastructure is used to support the ongoing activities of each program. See drawing (ASK-002) for conceptual layout of a new Recreation Centre compared to the existing facility.

The new Recreation Centre would be in the same general vicinity as existing;

- To maintain tie with the recreation complex.
- Day care facility uses adjacent services such as pool and rink.
- Recognized gathering spot for community/sporting events.
- Parking for evening and weekend activities.

The new Recreation Centre would be:

- A single-storey structure with frost wall and slab on grade.
- Wood construction.
- Electric heat.
- Fully accessible to B651-12 Standards.
- Provide greater flexibility for community events.
- Would not be joined with the arena due to interferences with rink parking and the increased child/vehicle interaction; aesthetically the addition would give the appearance of an add-on and limit architectural options for the new recreational centre.

The Property Services compound would be:

- A single-storey structure with frost wall and slab on grade.
- Wood construction.
- Electric heat.
- A two-bay truck garage would be constructed as an integral component of the building.
- The pump house would be maintained at it's present location.

The new Administration building could be constructed at a new location along highway 3. With the size of the land area where the existing building is located, a new administration building could be constructed adjacent to the present building and sized to meet present needs. In either case the location would still provide the level of visibility as the present location provides. The building would be sized in accordance with today's requirements. The new recreation building would be:

- A single-storey structure with frost wall and slab on grade.
- Wood construction.
- HVAC system.
- Fully accessible to B651-12.

Option 2: declare the existing Recreation Centre, Property Services, and Administration buildings as surplus and construct a single purpose-built facility that would meet the needs of all three as either an addition to the Wickens Memorial Arena or a stand-alone facility adjacent to the arena.

Attached drawing (ASK-004) "Proposed Space Allocation - 1 Level" shows a single-storey addition constructed along the side of the existing arena. This connection would be made at the existing door to provide an operational link. A playground to serve child-care requirements and layout for both assembly and gathering space, and support recreation administration could be achieved.

Municipal Offices, public interaction and the Council Chambers would be adjacent to the recreation component. Both of these spaces are accessed from Park Lane. However, the attached Property Services garage would be accessed from the back portion of this site, providing user safety and vehicle traffic separation.

Drawing (ASK-005) takes a similar approach but creates a two-story structure. This reduces overall footprint and provides a single, shared entry for the Municipal and Recreation functions. Although using less space on site, two stairwells and an accessible elevator will be required.

Drawing (ASK-006) provides a two-storey addition on the gable end of the existing arena. The arena entrance and lockers remain in the current locations. The Recreation area can be on the grade level with direct access to the existing pool and rink. Municipal Offices and Council Chambers would be above the existing lockers and ground floor addition. A new "warm room" could also be located on the second floor to provide viewing into the present rink.

The new tri-service building would be:

- A one or two-storey structure with frost wall and slab on grade.
- Wood construction.
- HVAC system.
- Fully accessible to B651-12 Standards.
- A two-bay truck garage would be constructed as an integral component of the building.
- The pump house would be maintained at it's present location.

New Administration Offices and Council Chambers centralized on Sherose Island would:

- Provide proximity to Recreation and Property Services.
- New construction and systems to meet all current codes and standards.
- Able to plan and build for future flexibility.
- Cost of new construction not much greater than renovation of existing. Sale of existing Administration building could reduce overall capital requirements.

This option removes visibility of MoDB Administrative offices. Based on the cost of recently constructed facilities in Berwick and Yarmouth cost is a factor. This option will also need to address what to do with existing Administration building.

Option 3: declare the existing Recreation Centre, Property Services buildings as surplus and construct a single purpose-built facility that would meet the needs of both, as either an addition to the Wickens Memorial Arena or a stand-alone facility adjacent to the Arena.

In this option the existing Administration building would be renovated to meet today's requirements and scaled to the requirements of the present administration. The existing Administration building is large enough to accommodate a phased approach with occupants moving to vacant areas of the building while their permanent space is being renovated. The renovation of the existing Administration building is considered viable because:

- A new roof was recently placed on portion of building
- Lower level can be used as swing space while admin area/leased areas are renovated.
- Would require exterior face lift with removal and replacement of the "shingled" cladding.
- New windows for entire building.
- New roof on remaining portion of the building.
- New mechanical systems to replace window a/c units.
- Building would be made accessibility compliant to B651-12 Standards.
- Settled concrete slab would be addressed.
- Maintains the administration visibility in Community of Barrington.

4 COST ESTIMATES

4.1 Buildings

Cost for renovations and upgrades to existing facilities must be weighed against both long-term maintenance/operational costs and full facility replacements. Additionally, operational efficiencies may be realized by building new facilities. These include modern and sustainable energy systems and use, full accessibility, "right-sized" functional space planning, ability to plan for future flexibility or growth and a centralized location.

Sandy Wilkens Memorial Area is located at Circle Drive and Park Lane, Sherose Island. The Recreation Centre is across the street, and the curling rink is also accessed from Park Lane. Existing baseball facilities are located off Circle Drive as well. This is the social and recreational centre of Barrington. Therefore, the opportunity to centralize municipal administration with recreation and support areas on Sherose Island may make operational sense.

Costs for construction of new facilities in the Barrington and Shelbourne areas tend to be higher than the Annapolis Valley or Greater Halifax. As a basis for the comparison of new construction versus renovation, \$3500 /M^2 (\$350/ft^2 ±) is used for new work, and \$2500/ M^2 (\$250/ft^2 ±) for renovations. This renovation cost does not include hazardous material remediation such as moulds, asbestos, lead or leachates.

- New two-storey construction at side of arena: 1, 210 M^2 = \$4.24 M
- New two-storey construction at end of arena: 1,570 M^2 = S5.50 M
- New one-storey construction at side of arena: 1,210 M^2 = \$4.10 M.
- Renovated Municipal Administration Building 1,656 M^2 = \$4.14 M plus Recreation Centre.

Should the existing Municipal Building be re-purposed and sold to private business (residential / commercial) it appears to make economic sense to construct new facilities. Further discussion on final layout and location is required to confirm the operational benefits of a centralized location on Sherose Island.

4.2 Highway 103 Development

The cost estimate provided is high level treating each route as equal unit costs. In fact, the routes may be different due to rock and other features which cannot be accounted for in this exercise. There are already services on River Road so this reduces the number of new services. Services that were more than 50 m from the road were not included. The order of magnitude cost estimate for the wastewater expansion is provided in the table below.

Under the above parameters it would take four times the number of services on each route to make the extension of waste water infrastructure to Municipal lands adjacent to Highway 103 pay in 25 years at 5%. The answer is to have each development provide their own services using onsite technology. This way the Municipality only need develop the access and subdivide the land. The lots could be made large enough to have onsite services for each type of development. To go beyond this point, The Municipality needs to have a concept plan and engineering study for the land. This study demonstrates that central services may not be an appropriate development strategy.

Barrington Service Extension

Oak Park Road

Item	Unit	Quantity	Unit Price	Cost
Pump Stations	each	2	$ 200,000	$ 400,000
Forcemain	m	1200	$ 130	$ 156,000
Gravity Sewer	m	2013	$ 150	$ 301,950
services	each	20	$ 2,000	$ 40,000
Highway Crossing	LS	1	$ 160,000	$ 160,000
SuBtotal				$ 1,057,950
contractors duties and profit		35%		$ 370,283
Estimated Cost				$ 1,428,233
revnue from new services		20	320	$ 6,400
Future value of the service payments invested at 5% for 25 years				($305,453.43)

River Road

Item	Unit	Quantity	Unit Price	Cost
Pump Stations	each	3	$ 200,000	$ 600,000
Forcemain	m	1320	$ 130	$ 171,600
Gravity Sewer	m	2145	$ 150	$ 321,750
services	each	30	$ 2,000	$ 60,000
Highway Crossing	LS	1	$ 160,000	$ 160,000
SuBtotal				$ 1,313,350
contractors duties and profit		35%		$ 459,673
Estimated Cost				$ 1,773,023
revnue from new services		30	320	$ 9,600
Future value of the service payments invested at 5% for 25 years				($458,180.15)

Conclusion: In both cases the Municipality must make a substantial investment or plan to recover the additional cost from the development of the land. Alternately the development may proceed with onsite systems serving each site.

Cost Estimate – Extension to HWY 103

5 SUMMARY

5.1 BUILDINGS

Representatives of EastPoint met with MoDB Stakeholders on October 30, 2017 to review the options identified in this report and to discuss potential for multi-use or shared spaces. The consensus gathered from the discussion indicated that a multi-service facility addressing the space requirements for the Administration and Recreational needs would be the desired approach.

Earlier discussion with the Municipality suggested that the Administration building contains more space than it currently required for use. The Administrative functions are housed in 40% of the total building, 35% of the building is leased to other users, and approximately 25% of the overall space is unused. EastPoint suggest that with minor layout changes, the total useable space for a new Administration building could be reduced by ±30%.

Therefore, the discussion of 500 M^2 for the Municipal Administrative functions is a reasonable area. The additional 500 M^2 for Recreation use also appears to be functional and a realistic estimate of the Centre's requirements. It was noted that both the Administration facility and Recreation Centre potentially offer space which may be shared or used at specific times of day. For example, the Council Chambers function on a regular but limited schedule. Rather than construct purpose-built Council Chambers, this Building component might be designed for flexible, multi-purpose use. The area could house local gatherings, meeting or reception uses, and the regular council functions. This approach could potentially reduce the overall combined building area of 10,000 M^2 to provide adequate funds to construct a new stand-alone Property Services garage.

During the discussions, EastPoint identified standard percentages of overall energy consumption for typical facilities:

- HVAC: 40%
- Lighting: 25 to 30%
- Misc. (Hot water, office equipment): 30% ±

Therefore, the potential to reduce overall space, whether used for Operations or Storage, could reduce on-going O & M costs over the short and long term. Should the Municipality elect to construct new facilities, the energy savings based on new equipment, efficient building envelopes, and sustainable operating procedures will offer additional on-going savings.

Siting of an 800 M^2 building housing the Administration and Recreation operations with 200 M^2 of common use space is provided in the following drawing ASK-007. The 200 M^2 Property Services garage is also located on the siting plan. The anticipated cost for the Administration/Recreational building is $2.8M with the cost of the Property Services garage being estimated as $700k.

5.2 STORM AND WASTEWATER

The storm and wastewater systems are in relatively good condition with the odd exception. The emphasis on going forward would be the implementation of a SCADA system for monitoring the performance of the individual systems. There is also a need to make the pumping station facilities compliant with provincial Environment and Labour departments.

Extending the wastewater infrastructure along Oak Park Road or River Head Road to service municipal lands at Exit 30 of Highway 103 is only economically viable, at today's annual hook-up rate, if there are four times the number of services connected on each route.

EASTPOINT

DRAWING TITLE:

ALTERNATIVE
BUILDING LOCATION

DWN BY:	D.M.	CKD BY:	J.M.
DES BY:	J.M.	SHT NO:	

SCALE: NTS

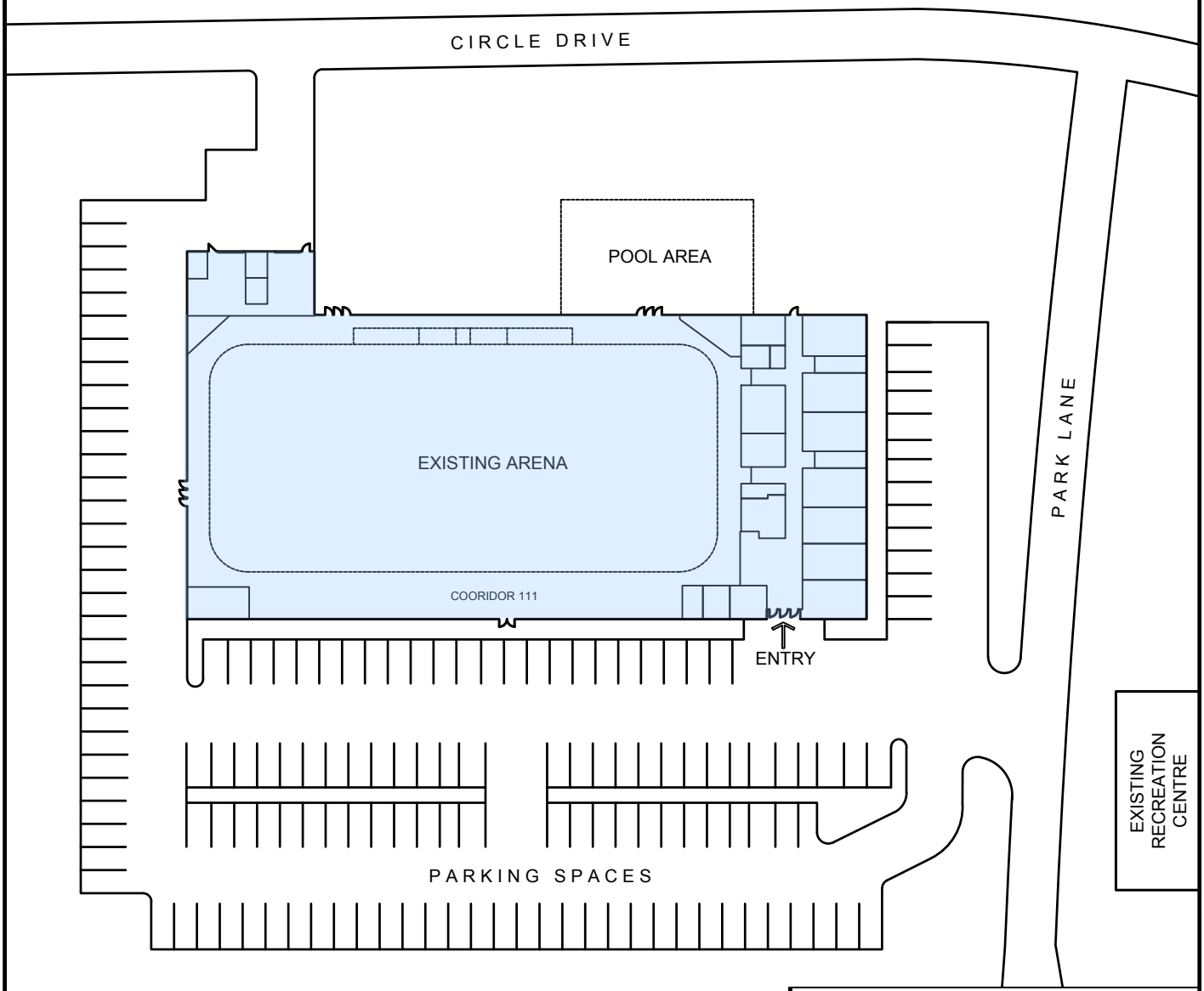
CLIENT JOB NO:	EASTPOINT JOB NO:
MoDB1701	309001

DRAWING NO:	REV:
ASK-007	

APPENDIX A
COMBINED SKETCHES

EASTPOINT
ENGINEERING

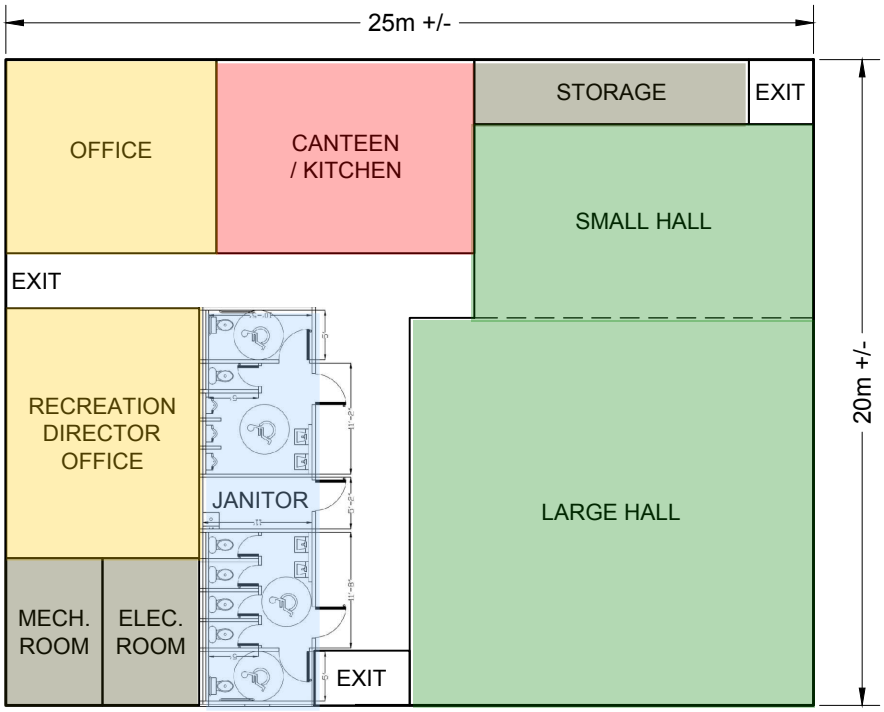
EASTPOINT



DRAWING TITLE:

EXISTING ARENA SITE PLAN

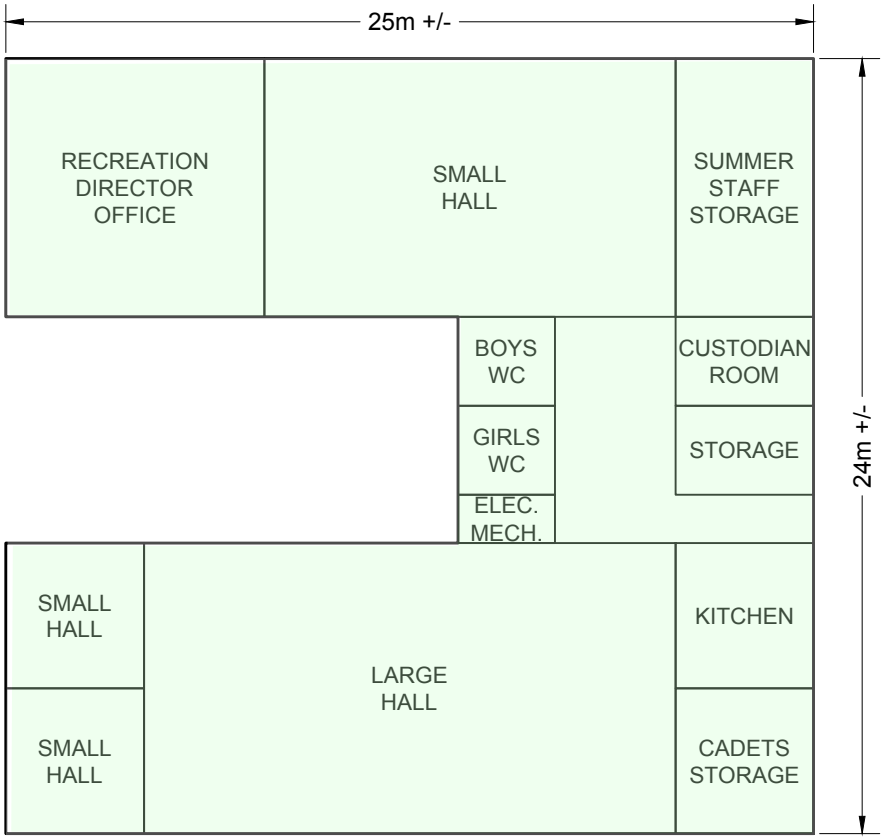
DWN BY:	D.M.	CKD BY:	J.M.
DES BY:	J.M.	SHT NO:	1 of 7
SCALE:	NTS		
CLIENT JOB NO:	MoDB1701	EASTPOINT JOB NO:	309001
DRAWING NO:	ASK-001	REV:	



EASTPOINT

PROPOSED LAYOUT FOR SHEROSE ISLAND RECREATION CENTRE

APROX. SIZE 500m²
SCALE: 1:250

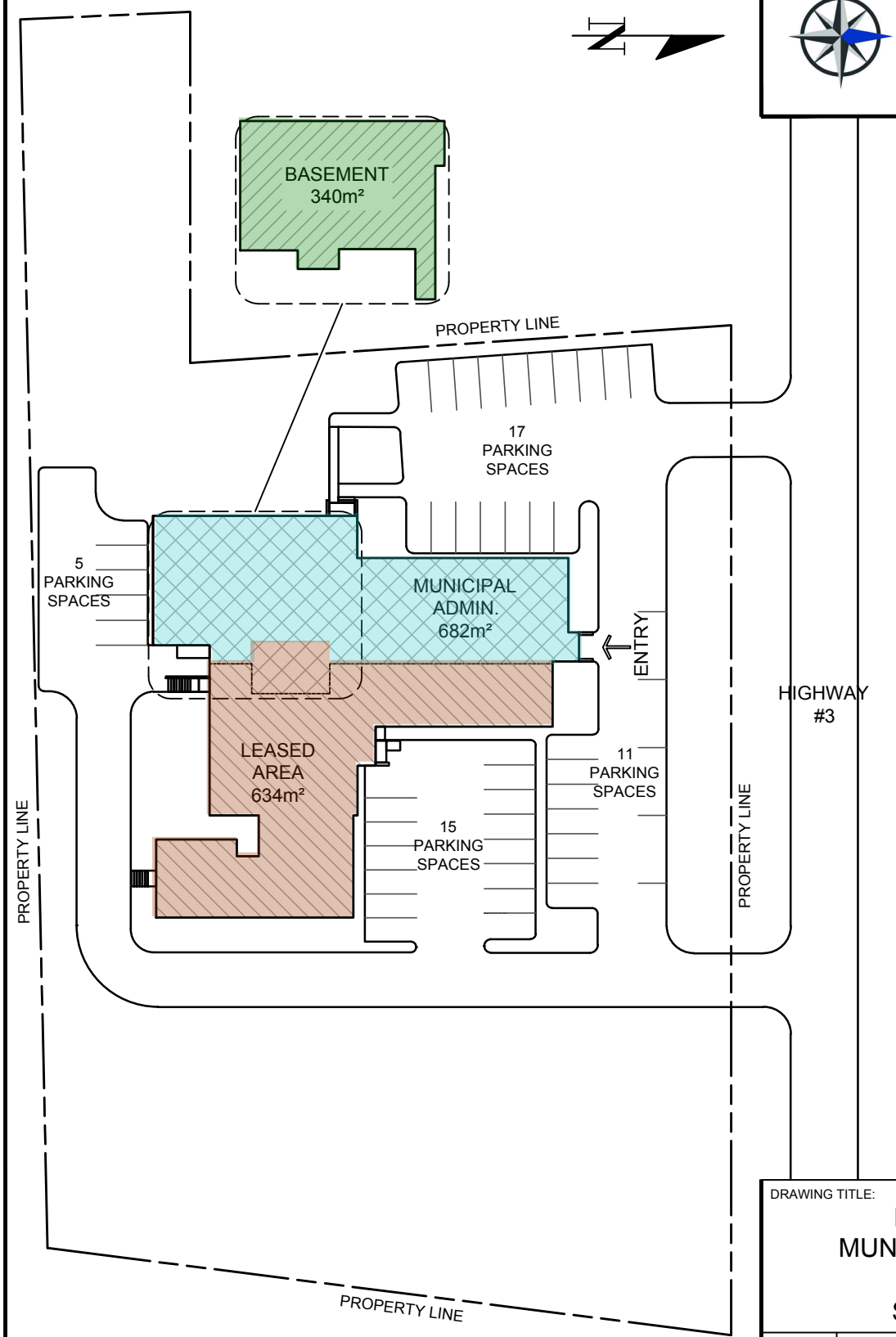


EXISTING LAYOUT SHEROSE ISLAND RECREATION CENTRE

APROX. SIZE 500m²
SCALE: 1:250

DRAWING TITLE:
RECREATION CENTRE ALLOCATION SPACE

DWN BY:	D.M.	CKD BY:	J.M.
DES BY:	J.M.	SHT NO:	2 of 7
SCALE:	NTS		
CLIENT JOB NO:	MoDB1701	EASTPOINT JOB NO:	309001
DRAWING NO:	ASK-002	REV:	



EASTPOINT

DRAWING TITLE:

EXISTING MUNICIPAL ADMIN. BUILDING SITE PLAN

DWN BY:	D.M.	CKD BY:	J.M.
DES BY:	J.M.	SHT NO:	3 of 7
SCALE:	NTS		
CLIENT JOB NO:	MoDB1701	EASTPOINT JOB NO:	309001
DRAWING NO:	ASK-003	REV:	

EASTPOINT

EXISTING ARENA

COORIDOR 111

ENTRY

PLAYGROUND

RECREATION CENTRE 500m²

ENTRY

ENTRY

MUNICIPAL ADMIN. 500m²

ENTRY

PUBLIC WORKS GARAGE 210m²

DRAWING TITLE:

PROPOSED SPACE ALLOCATION 1 LEVEL

DWN BY:	D.M.	CKD BY:	J.M.
DES BY:	J.M.	SHT NO:	4 of 7
SCALE:	NTS		
CLIENT JOB NO:	MoDB1701	EASTPOINT JOB NO:	309001
DRAWING NO:	ASK-004	REV:	

EASTPOINT

EXISTING ARENA

COORIDOR 111

ENTRY

ENTRY

PUBLIC WORKS GARAGE 210m²

RECREATION CENTRE 500m²

ENTRY

GROUND FLOOR

PLAYGROUND

PUBLIC WORKS GARAGE BELOW

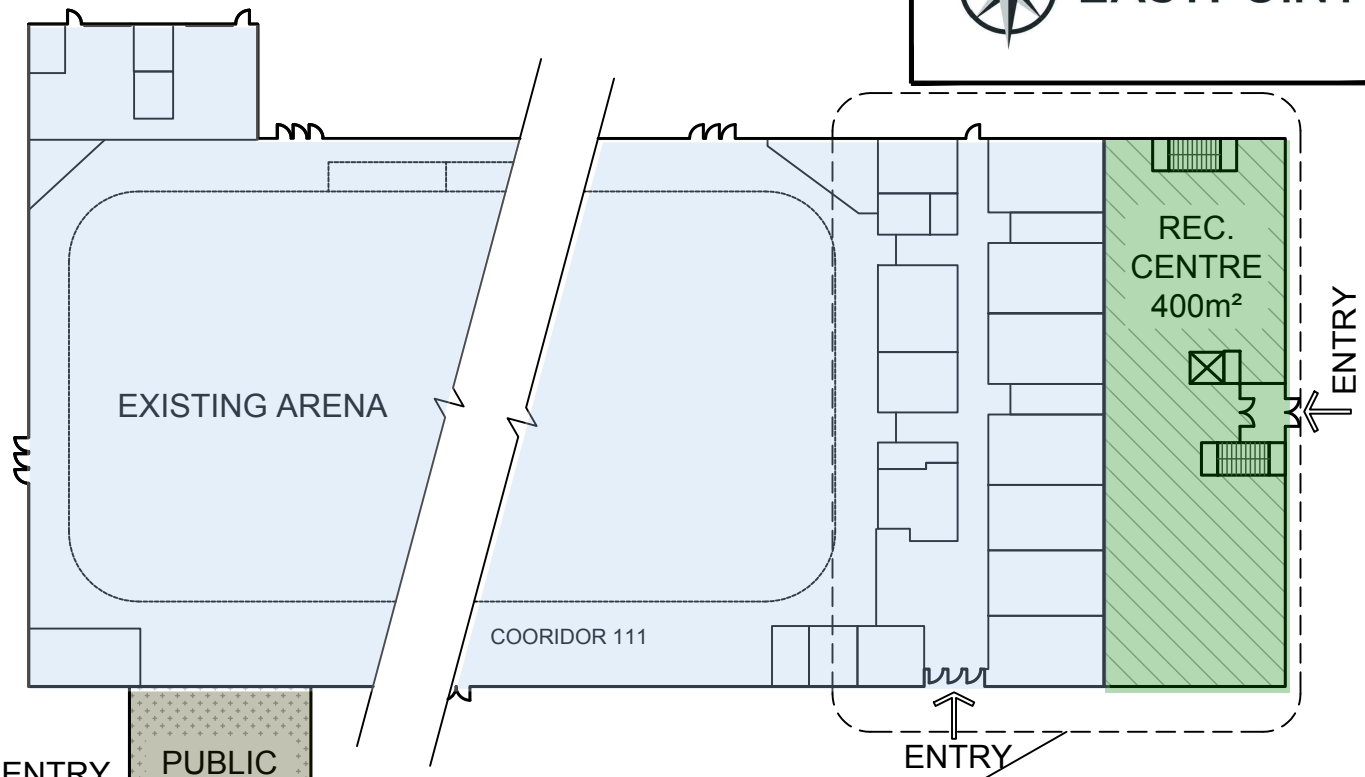
MUNICIPAL ADMIN. 500m² SECOND LEVEL

DRAWING TITLE:

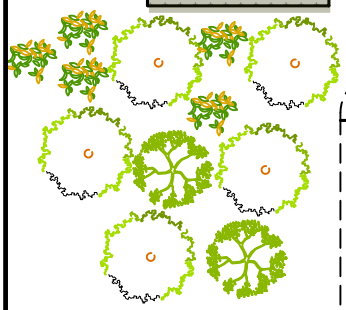
PROPOSED SPACE ALLOCATION 2 LEVELS

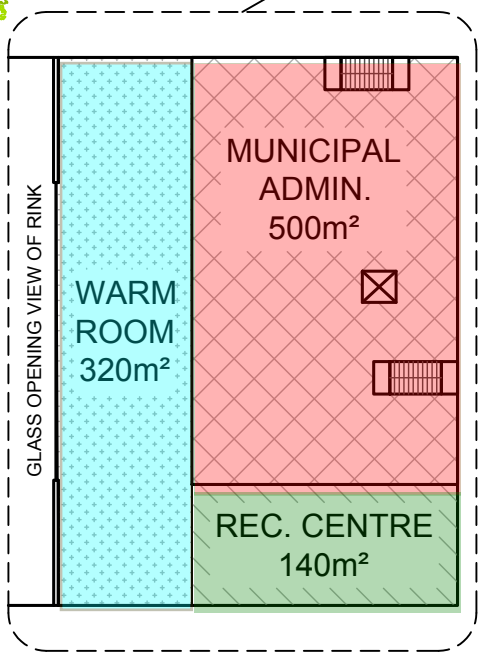
DWN BY:	D.M.	CKD BY:	J.M.
DES BY:	J.M.	SHT NO:	5 of 7
SCALE:	NTS		
CLIENT JOB NO:	MoDB1701	EASTPOINT JOB NO:	309001
DRAWING NO:	ASK-005	REV:	

EASTPOINT



ARENA GROUND FLOOR w/ ADDITION





SECOND LEVEL

DRAWING TITLE:

PROPOSED SPACE ALLOCATION 2 LEVEL, GABLE END

DWN BY:	D.M.	CKD BY:	J.M.
DES BY:	J.M.	SHT NO:	6 of 7
SCALE:	NTS		
CLIENT JOB NO: MoDB1701		EASTPOINT JOB NO: 309001	
DRAWING NO: ASK-006		REV:	

APPENDIX B
AUDIT SHEETS

EASTPOINT
ENGINEERING

FACILITY AUDIT
DESCRIPTION

Asset #:	DSS Bldg#:	Bldg. Year: **1974**	
Building Name: **Administrative Centre, Municipality of Barrington**			
Address: 89 Queen Street, **2447 Nova Scotia Trunk 3, Barrington, NS B0W 1E0**			
Contact Person: **Rob Frost**	Phone No: 902-637-2015		
Inspected By: **Dragan Moraca**	Date: 11 August, 2017		
Inspection Type:	☒ Audit	☐ Emergency Inspection	☒ Maintenance Inspection	☐ New Construction

General Notes:

Wood frame, and hand split Cedar Shakes, one story structure facing main road. Two story sections at back of lot on lover elevation. This was an original Courthouse, holding cell area.

Facility Description:					
☒ Office/Admin.	☐ Maintenance Garage		☐ Bridge Building	☐ Cold Storage	☐ Other
Business Hours:					
Gross Floor Area:	1,665 M²		Storeys above ground: **1**	Storeys below ground: **1**	
Basement Floor Areas:	345 M²		Garage: M²	No. of Bays:	
2nd Floor Areas:	Office: M²		Mezzanines: M²		
Storage Areas:	136 M²		Height of Building: M		
Auxiliary Storage:	M²				
No. of Personnel:	Office: employee		Garage: employees	Seasonal: employee	
B-F Accessible:	☒ Yes ☐ No		Environmental Audit on file:	☐ Yes ☒ No	
Floor Plan on file:	☒ Yes ☐ No		Fire Escape Plan:	☒ Yes ☐ No	
Roof Plan on file:	☒ Yes ☐ No		Asbestos Hazard Plan:	☐ Yes ☒No	
Site Plan on file:	☒ Yes ☐ No		Maintenance Plan/Schedule on file:	☐ Yes ☒ No	

Property:							
☒ Asphalt	☐ Chip seal			☐ Loose gravel	☐ Hard Soil		☐ Other
Property size:	8,931 M²			Developed area: 8,931 M²		Undeveloped area: M²	
Security Fencing:	Total Length: M			Condition:	Poor	**Fair**	Good
General Topography	Steep	Flat	**Rolling**	Property Drains to:			
Drainage Rating:	Poor	**Fair**	Good	Adjacent Properties:			
Site Organization:	Poor	**Fair**	Good	North	South	East	West
Site Cleanliness:	Poor	**Fair**	Good	☐ Residential	☐ Residential **2**	☐ Residential	☐ Residential
Vehicle Wash Area	**N/A**			☐ Commercial **1**	☐ Commercial	☐ Commercial	☐ Commercial **1**
Oil/Water interceptors	**N/A**			☐ Industrial	☐ Industrial	☐ Industrial	☐ Industrial
Oil/Water separators	**N/A**			☐ Undeveloped **2**	☒ Undeveloped**1**	☒ Undeveloped	☒ Undeveloped
General Site Lighting	Poor	Fair	Good	☒ Roadway	☐ Roadway	☐ Roadway	☐ Roadway
Location Rating:	Poor	Fair	Good	☐ Water way	☐ Water way	☐ Water way	☐ Water way **2**

Property Notes:

Roof Conditions:

Roof Section#	Type	Age:	Condition:			Comments:
1			Poor	Fair	Good	
2			Poor	Fair	Good	
3			Poor	Fair	Good	
4			Poor	Fair	Good	

Roof Notes:

We were unable to get on the roof, due to safety concerns.

Snow Removal Damage: ☐ Yes ☒ No | Reported Leaks ☐ Yes ☒ No Areas:

Exterior Façade:

Components	North Elevation	South Elevation	East Elevation	West Elevation
Cladding	**Hand split Cedar Shakes**	**Hand split Cedar Shakes**	**Hand split Cedar Shakes**	**Hand split Cedar Shakes**
Windows	**Aluminum**	**Aluminum**	**Aluminum**	**Aluminum**
Glazing	**Sealed Unit**	**Sealed Unit**	**Sealed Unit**	**Sealed Unit**
Man Doors	**Aluminum**	**Aluminum**		**Aluminum**
Garage Doors				
Trims				
Sealants	Poor **Fair** Good	Poor **Fair** Good	Poor **Fair** Good	Poor **Fair** Good

Exterior Façade Notes:

Exterior siding in fair shape, no reported leaks.

Foundation/Basement:

Components:	Type:	Finish:	Condition:			Comments:
Primary Structure	**Slab on Grade**	**Concrete**	**Poor**	Fair	Good	
			Poor	Fair	Good	
			Poor	Fair	Good	
			Poor	Fair	Good	
			Poor	Fair	Good	
			Poor	Fair	Good	

Interior Ground Floor Notes:

Dividing wall between slab on grade (front section) and lower section at the rear is leaning toward the back. One potential reason is that foundation wall was not designed as retaining wall, so soil pressure is tipping the wall.

Interior _____ Floor:						
Components:	Type:	Finish:	Condition:			Comments:
Primary Structure	**Concrete**	**Composite Vinyl Tile**	Poor	Fair	**Good**	
		Ceramic Tile	Poor	Fair	**Good**	
		Carpet	Poor	**Fair**	Good	**Wear and tear**
			Poor	Fair	Good	
			Poor	Fair	Good	
			Poor	Fair	Good	
			Poor	Fair	Good	
			Poor	Fair	Good	
			Poor	Fair	Good	
			Poor	Fair	Good	
			Poor	Fair	Good	
			Poor	Fair	Good	
			Poor	Fair	Good	
			Poor	Fair	Good	
			Poor	Fair	Good	
			Poor	Fair	Good	
Interior Ground Floor Notes:						
Carpet has several areas where there is significant wear and tear. To be replaced.						

Maintenance Schedules:	
Building Maintenance check list: ☐ Yes ☐ No	Fuel Tank Dipping Schedule Log: ☐ Yes ☐ No
Waste Oil Dipping Schedule Log: ☐ Yes ☐ No	Method of collection:
Pick-up point ☐ Yes ☐ No	Transported to:
Frequency of pick-up:	
Maintenance Schedules Notes:	

Electrical Service:			
Components:	Phase:	Type:	Capacity:
Main Entrance	**3**	**120/208V**	**1200A**
Generator:	**N/A**	**N/A**	**N/A**
Com/Data	☐ Phone ☐ Fax ☐ Internet		

Electrical Distribution:	
Panel board:	
Conduit:	☐ Yes ☐ No
Conductors	Type:

Electrical Notes:

Electrical panel in storage room off Council Chambers has a missing main circuit breaker.

Building Systems Information:								
Heating Source: **Electric**			Supplier:					
Type of Heating System: Electric Baseboard								
Oil Tank: Size:		Age:	Location:					
Steam: ☐ Yes ☒No	Line Size:		Valve Location:					
Heating Water Line Size:			Valve Location:					
Ventilation System: HRV in Corridor								
Cooling System: Building: ____**%**	Chillers: ☐ Yes ☐ No		Location:					
Window Units: ☒ Yes ☐ No	Location:		Size: _____ BTU					
Electric Baseboard Locations:								
Unit Mounted Thermostats: ☒ Yes ☐ No			Wall Mounted Thermostats: ☒ Yes ☐ No					
Wall Mounted Thermostat Locations:								
Floor Drains:	Flow Direction:	N S E W	Discharge Point:					
O/W interceptor:	☐ Yes ☒ No	Maintained: ☐ Yes ☐ No	Schedule:					
O/W separator:	☐ Yes ☒ No	Maintained: ☐ Yes ☐ No	Schedule:					
Sanitary Sewer Line Size:		☐ Septic Waste	☐ Municipal Sewer Account #					
Water Line Size:		☐ Well Water	☐ Municipal Water Account #					
Is well used as potable water? ☒ Yes ☐ No		Well Location:						
H/W Tank:	☐ Yes ☐ No	Size:	Type:	Model #				
~~IBEX Monitor~~:	☐ Yes ☐ No	Location:						
Water Meter:	☐ Yes ☒No	Location:						
Gas Meter:	☐ Yes ☒ No	Location:						
Electric Meter:	☒ Yes ☐ No	Location:						
Tag/Lock-out box:	☐ Yes ☐ No	Location:						
Alarm Panel:	☒ Yes ☐ No	Location:						

Building Systems Notes:

HVAC Equipment:						
Components:	Delivery Type:	Fuel Type	Condition:			IBEX Check
HW TANK	**JOHN WOOD 22 GAL 1975**	**ELECTRIC**	**Poor**	Fair	Good	☐ Yes ☐ No
HW TANK	**GRANT 142 L 2006**	**ELECTRIC**	Poor	**Fair**	Good	☐ Yes ☐ No
HW TANK	**GSW 100L 2004**	**ELECTRIC**	Poor	**Fair**	Good	☐ Yes ☐ No
AC Window Units (25)	**ELECTROHOME CIRCA 1985**	**ELECTRIC**	**Poor**	Fair	Good	☐ Yes ☐ No
AC Window Units (1)	**FRIEDRICH CIRCA 2010**	**ELECTRIC**	Poor	**Fair**	**Good**	☐ Yes ☐ No
AC Window Units (5)	**KESPRITE CIRCA 2000**	**ELECTRIC**	**Poor**	**Fair**	Good	☐ Yes ☐ No
HRV (2)	**NV AIR 2015**	**ELECTRIC**	Poor	Fair	**Good**	☐ Yes ☐ No
			Poor	Fair	Good	☐ Yes ☐ No
			Poor	Fair	Good	☐ Yes ☐ No
			Poor	Fair	Good	☐ Yes ☐ No

HVAC Equipment Inventory				
Components:	Manufacturer:	Model Number:	Serial Number:	Age:
Furnace				
Boiler				

Burner				
A/C unit				

Mechanical Equipment Notes:

Fire, Health and Safety:								
Fire alarm: ☒ Yes ☐ No	Monitored: ☒ Yes ☐ No	Company: **dBm monitors, Troy Fire and Safety services**						
Pull Stations: ☒ Yes ☐ No	Annunciator: ☒ Yes ☐ No	Smoke Detectors: ☒ Yes ☐ No						
Fire Evacuation Plan Posted: ☒ Yes ☐ No	Health & Safety Program: ☐ Yes ☐ No	Building Hazards Posted and clearly marked: ☐ Yes ☐ No Type:						
System Test Last Date: **Annually**		Last Fire Drill Date: **Annually**						
Sprinkler System:	☒ Yes ☐ No	Type: ☒ Wet ☐ Dry	Water Storage/Supply:					
Stand Pipe System	☐ Yes ☐ No	Valves:	Hose Cabinets:					
Fire Extinguishers	☒ Yes ☐ No	Type:	Insp. Date: **Annually**					
Locations and Quantity:								
First Aid Station:	☐ Yes ☐ No	Supplies:	Low	Fair	Good	Insp. Date:		
First Aid Poster:	☐ Yes ☐ No	Up to date: ☐ Yes ☐ No						
Eye Wash Station:	☒ Yes ☐ No	Type:	Condition:	Poor	Fair	Good		
Worksite Inspection Checklist	☐ Yes ☐ No	Sym2dut Site Inventory List: ☐ Yes ☐ No						
WHMIS Binders:	☐ Yes ☐ No	Up to date: ☐ Yes ☐ No						
Emergency Lighting:	☒ Yes ☐ No	Type: **Wall packs with battery and remote heads**						
Exit Signs:	☒ Yes ☐ No	Type: **Red "EXIT"**						
Security Alarm:	☒ Yes ☐ No	Monitored: ☒ Yes ☐ No	Company: **Dorey**					
Motion Sensors:	☐ Yes ☐ No	Locations:						
Security Camera:	☐ Yes ☐ No	Exterior:	Interior:					

Fire, Health and Safety Notes:

Inspector: _____
(Print Name)

FACILITY AUDIT
DESCRIPTION

Asset #:	DSS Bldg#:	Bldg. Year: **4th November 1995**	
Building Name: **Barrington Arena**			
Address: **12 Park Ln, Barrington, NS B0W 1E0**			
Contact Person: **ROB FROST**	Phone No:		
Inspected By: **Dragan Moraca**	Date: 11 August, 2017		
Inspection Type:	☒ Audit	☐ Emergency Inspection	☒ Maintenance Inspection	☐ New Construction

General Notes:

Ice rink with supporting lockers & public areas. Note that exterior swimming pool used as fire / sprinkler reservoir.

HVAC Equipment:

Components:	Delivery Type:	Fuel Type	Condition:			IBEX Check
FIRE PUMP	**500 GPM CLARKE 1995**	**ELECTRIC**	Poor	**Fair**	Good	☐ Yes ☐ No
HWT (BLDG)	**OIL AO SMITH 1994**	**OIL (5 REPLACED)**	**Poor**	Fair	Good	☐ Yes ☐ No
HWT (In floor)	**OIL AO SMITH 2009**	**OIL**	Poor	**Fair**	Good	☐ Yes ☐ No
HWT (Ice)	**ELECTRIC RHEEM 2011**	**ELECTRIC**	Poor	**Fair**	Good	☐ Yes ☐ No
OIL Tank (HW) (2)	**IIIIL 2017**	**OIL**	Poor	Fair	**Good**	☐ Yes ☐ No
OIL TANK (FIRE)	**900L 1995**	**OIL**	**Poor**	Fair	Good	☐ Yes ☐ No
OIL TANK (In floor)	**900L 2009**	**OIL**	Poor	Fair	**Good**	☐ Yes ☐ No
BOILER	**30 BMBH HYDROTHRM 1995**	**OIL (HAZARDOUS)**	**Poor**	Fair	Good	☐ Yes ☐ No
DEHUMID(x2)	**CIMCO 1995**	**ELECTRIC (Life Expect)**	**Poor**	**Fair**	Good	☐ Yes ☐ No
REFRI RECLAIMER (x2)	**THERMOSTAT**	**ELECTRIC**	Poor	**Fair**	Good	☐ Yes ☐ No
COMPRESSOR (x2)	**CIMCO 1995**		Poor	**Fair**	Good	☐ Yes ☐ No
CONDENSOR	**2017**	**(IN PROGRESS)**	Poor	Fair	**Good**	☐ Yes ☐ No
RINK HEATERS	**Coin Operators Need Replaced**	**PROPANE**	**Poor**	Fair	Good	☐ Yes ☐ No
AMMONIA DET	**1995**	**INSP. ANNUALLY**	Poor	**Fair**	Good	☐ Yes ☐ No
INFLOOR MANIFOLDS	**WIRSBORO 1995**	**SOME NEED REPLACING**	**Poor**	**Fair**	Good	☐ Yes ☐ No

HVAC Equipment Inventory

Components:	Manufacturer:	Model Number:	Serial Number:	Age:
Furnace				
Boiler				
Burner				
A/C unit				

Mechanical Equipment Notes:
NO VENTILATION AIR

Fire, Health and Safety:								
Fire alarm: ☒ Yes ☐ No	Monitored: ☒ Yes ☐ No	Company: **dBm monitors, Troy Fire and Safety services**						
Pull Stations: ☒ Yes ☐ No	Annunciator: ☒ Yes ☐ No	Smoke Detectors: ☒ Yes ☐ No						
Fire Evacuation Plan Posted: ☒ Yes ☐ No	Health & Safety Program: ☐ Yes ☐ No	Building Hazards Posted and clearly marked: ☐ Yes ☐ No Type:						
System Test Last Date: **May, Annually**		Last Fire Drill Date: **Annually**						
Sprinkler System: ☒ Yes ☐ No	Type: ☒ Wet ☐ Dry	Water Storage/Supply: **Pool**						
Stand Pipe System ☐ Yes ☐ No	Valves:	Hose Cabinets:						
Fire Extinguishers ☒ Yes ☐ No	Type:	Insp. Date: **February, Annually**						
Locations and Quantity:								
First Aid Station: ☐ Yes ☐ No	Supplies: Low / Fair / Good	Insp. Date:						
First Aid Poster: ☐ Yes ☐ No	Up to date: ☐ Yes ☐ No							
Eye Wash Station: ☒ Yes ☐ No	Type:	Condition: Poor / Fair / Good						
Worksite Inspection Checklist ☐ Yes ☐ No	Sym2dut Site Inventory List: ☐ Yes ☐ No							
WHMIS Binders: ☐ Yes ☐ No	Up to date: ☐ Yes ☐ No							
Emergency Lighting: ☒ Yes ☐ No	Type: **Wall packs with battery and remote heads**							
Exit Signs: ☒ Yes ☐ No	Type: **Red "EXIT"**							
Security Alarm: ☒ Yes ☐ No	Monitored: ☒ Yes ☐ No	Company: **Dorey**						
Motion Sensors: ☒ Yes ☐ No	Locations: **Front office & canteen**							
Security Camera: ☐ Yes ☐ No	Exterior:	Interior:						

Fire, Health and Safety Notes:
Ammonia alarm has separate call out.

Facility Description:				
☐ Office/Admin.	☐ Maintenance Garage	☐ Bridge Building	☐ Cold Storage	☒ Other - Arena
Business Hours:				
Gross Floor Area:	3,255 M²	Storeys above ground: **1**	Storeys below ground: **0**	
Ground Floor Areas:	Office: 19 M²	Garage: M²	No. of Bays:	
2nd Floor Areas:	Office: -- M²	Mezzanines: M²		
Storage Areas:	27 M²	Height of Building: 6 M		
Auxiliary Storage:	-- M²			
No. of Personnel:	Office: employee	Garage: employees	Seasonal: employee	
B-F Accessible:	☐ Yes ☒ No Partially	Environmental Audit on file:	☐ Yes ☒ No	
Floor Plan on file:	☒ Yes ☐ No	Fire Escape Plan:	☒ Yes ☐ No	
Roof Plan on file:	☒ Yes ☐ No	Asbestos Hazard Plan:	☐ Yes ☒ No	
Site Plan on file:	☒ Yes ☐ No	Maintenance Plan/Schedule on file:	☐ Yes ☒ No	

Property:								
☒ Asphalt	☐ Chip seal			☒ Loose gravel		☐ Hard Soil		☐ Other
Property size:	M²			Developed area:	M²		Undeveloped area:	M²
Security Fencing:	Total Length: M			Condition:	Poor	Fair	Good	
General Topography	Steep	**Flat**	Rolling	**Property Drains to: Manhole #18 and #19**				
Drainage Rating:	Poor	Fair	**Good**	Adjacent Properties:				
Site Organization:	Poor	Fair	**Good**	North		South	East	West
Site Cleanliness:	Poor	Fair	**Good**	☐ Residential		☐ Residential **2**	☐ Residential	☐ Residential
Vehicle Wash Area	**N/A**			☐ Commercial **1**		☐ Commercial	☐ Commercial	☐ Commercial **1**
Oil/Water interceptors	**N/A**			☐ Industrial		☐ Industrial	☐ Industrial	☐ Industrial
Oil/Water separators	**N/A**			☒ Undeveloped **2**		☐ Undeveloped**1**	☒ Undeveloped	☐ Undeveloped
General Site Lighting	Poor	Fair	**Good**	☐ Roadway		☒ Roadway	☐ Roadway	☒ Roadway
Location Rating:	Poor	**Fair**	Good	☐ Water way		☐ Water way	☐ Water way	☐ Water way **2**

Roof Conditions:						
Roof Section#	Type	Age:	Condition:			Comments:
1	**Metal Roof over Arena**		Poor	**Fair**	Good	
2	**Torched applied Roof over Change Room Areas**		Poor	**Fair**	Good	

Roof Notes:

We were unable to get on the roof, due to safety concerns. North part of the roof over exit doors in the arena roof is leaking.
Roof is leaking above corridor 111.

Snow Removal Damage: ☐ Yes ☒ No | Reported Leaks ☒ Yes ☐ No Areas: **See above**

Building Systems Information:								
Heating Source: **OIL FIRED HW BOILER**			Supplier:					
Type of Heating System: HOT WATER								
Oil Tank:	Size: 2X 1111 L	Age 2017	Location: BOILER ROOM					
Steam: ☐ Yes ☒ No	Line Size: **N/A**		Valve Location:					
Heating Water Line Size:			Valve Location:					
Ventilation System: N/A								
Cooling System: Building: **0 %**	Chillers: ☐ Yes ☒ No		Location:					
Window Units: ☐ Yes ☒ No	Location: N/A		Size: **308000** BTU					
Electric Baseboard Locations: N/A								
Unit Mounted Thermostats: ☒ Yes ☐ No			Wall Mounted Thermostats: ☒ Yes ☐ No					
Wall Mounted Thermostat Locations:								
Floor Drains:	Flow Direction:	N	S	E	W	Discharge Point:		
O/W interceptor: ☐ Yes ☒ No	Maintained: ☐ Yes ☒ No		Schedule:					
O/W separator: ☐ Yes ☒ No	Maintained: ☐ Yes ☒ No		Schedule:					
Sanitary Sewer Line Size: **4”**	☒ Septic Waste		☐ Municipal Sewer Account #					
Water Line Size: **6” + 2”**	☒ Well Water		☐ Municipal Water Account #					
Is well used as potable water? ☒Yes ☐ No	Well Location:							
H/W Tank: 3 ☒ Yes ☐ No	Size:	Type: ELECTRIC	Model #					
~~IBEX Monitor: ☐ Yes ☐ No~~	Location:							
Water Meter: ☐ Yes ☒ No	Location:							
Gas Meter: ☐ Yes ☒ No	Location:							
Electric Meter: ☒ Yes ☐ No	Location:							
Tag/Lock-out box: ☒ Yes ☐ No	Location:							
Alarm Panel: ☒ Yes ☐ No	Location:							
Building Systems Notes:								

Electrical Service:			
Components:	Phase:	Type:	Capacity:
Main Entrance	**3**	**347/600V**	**500A**
Generator:	**N/A**	**N/A**	**N/A**
Com/Data	☐ Phone ☐ Fax ☐ Internet		
Electrical Distribution:			
Panel board:			
Conduit:	☐ Yes ☐ No		
Conductors	Type:		

Electrical Notes:

Electrical panel in Pool House showing signs of corrosion and rust due to damp environment.

Exterior Façade:												
Components	North Elevation			South Elevation			East Elevation			West Elevation		
Cladding	**Metal / Brick**			**Metal / Brick**			**Metal**			**Brick**		
Windows	**Aluminum**			**n/a**			**n/a**			**Aluminum / Glass block**		
Glazing												
Man Doors	**Metal**			**Metal**			**Metal**			**n/a**		
Garage Doors	**n/a**			**Overhead Door**			**Overhead Door**			**n/a**		
Trims												
Sealants	**Poor**	Fair	Good	**Poor**	Fair	Good	**Poor**	Fair	Good	**Poor**	Fair	Good

Exterior Façade Notes:

Exterior Metal Siding is showing average wear and tear. All metal doors are showing significant amount of rust. Sealant and Caulking to be replaced.

Foundation/Basement:						
Components:	Type:	Finish:	Condition:			Comments:
Primary Structure	**Slab on Grade**	**Concrete**	Poor	Fair	**Good**	

Interior Ground Floor Notes:

Change rooms and hallway leading to the rink have been covered with rubber floor. We were unable to observe concrete condition's. Rest of the slab on grade is in good condition's. Ceramic tile in Canteen

Interior 1st Floor:						
Components:	Type:	Finish:	Condition:			Comments:
Primary Structure	Slab on Grade	**Concrete**	Poor	Fair	**Good**	
	Slab on Grade	**Ceramic tile**	Poor	**Fair**	Good	**Some tile repair must be completed in locker rooms**
	Slab on Grade	**Rubber mats**	Poor	Fair	**Good**	
			Poor	Fair	Good	
			Poor	Fair	Good	

Interior Ground Floor Notes:

Change rooms and hallway leading to the rink have been covered with rubber floor. We were unable to observe concrete conditions. Rest of the slab is in good condition. Ceramic tile to be replaced.

Building Upgrades & Maintenance History:	
Year	Description
	No Reported Upgrades.

Repair/Maintenance Recommendations Summary:		
Description	Cost	Year
As Building is 22 years old, many equipment items are in need of replacement due to the life expectancy.		
This can however, be done with a 5-year maintenance plan. Deferral will increase the		
Potential for equipment failure or protentional injury.		
i.e. Boiler was purging Boiling water into air and on floor at time of inspection and could		
Cause serious injury. – Stephen Fullarton.		

Building does not meet latest barrier free accessibility code. Railing at arena seating does not extend 300mm over
first step. No railing at the ramp in the arena. There is no fire separation between electrical room and surrounding
areas. Canteen Sink counter protrudes into the exit door. Emergency exit doors in arena do not close.

. - Dragan Moraca

Inspector: _____

(Print Name)

BUILDING ELECTRICAL AUDIT
EP# 309001

Asset #:	Bldg. Name: **Barrington PW Garage**	Bldg. Age:
Building Name: **Barrington Public Works Garage**		
Address: **12 Park Ln, Barrington, NS, B0W 1E0**		
Contact Person: **Rob Frost**	Phone No:	
Inspected By: **Jennifer Almon**	Date: **11 August 2017**	

Inspection Type:	☒ Audit	☐ Emergency Inspection	☒ Maintenance Inspection	☐ New Construction

General Notes:

Small wood frame structured used to house spare parts and equipment, with administrative / organizational duties.

Facility Description:

☐ Office/Admin.	☒ Maintenance Garage	☐ Bridge Building	☐ Cold Storage	☐ Other - Arena
Business Hours:				
Gross Floor Area:	60 M²	Storeys above ground: **1**		Storeys below ground: **0**
Ground Floor Areas:	Office: 18 M²	Garage: **42** M²		No. of Bays: **1**
2nd Floor Areas:	Office: -- M²	Mezzanines: M²		
Storage Areas:	-- M²	Height of Building: **3** M		
Auxiliary Storage:	-- M²			
No. of Personnel:	Office: employee	Garage: employees		Seasonal: employee
B-F Accessible:	☐ Yes ☒ No	Environmental Audit on file:		☐ Yes ☒ No
Floor Plan on file:	☐ Yes ☒ No	Fire Escape Plan:		☐ Yes ☒ No
Roof Plan on file:	☐ Yes ☒ No	Asbestos Hazard Plan:		☐ Yes ☒ No
Site Plan on file:	☐ Yes ☒ No	Maintenance Plan/Schedule on file:		☐ Yes ☒ No

Property:

☒ Asphalt	☐ Chip seal		☒ Loose gravel	☐ Hard Soil		☐ Other	
Property size:	M²		Developed area:	M²		Undeveloped area:	M²
Security Fencing:	Total Length: M		Condition:	Poor	Fair	Good	
General Topography	Steep	**Flat**	Rolling	Property Drains to: **No Drainage Visible**			
Drainage Rating:	Poor	**Fair**	Good	Adjacent Properties:			
Site Organization:	Poor	**Fair**	Good	North	South	East	West
Site Cleanliness:	Poor	**Fair**	Good	☐ Residential	☐ Residential **2**	☐ Residential	☐ Residential
Vehicle Wash Area	**N/A**			☐ Commercial **1**	☐ Commercial	☐ Commercial	☐ Commercial **1**
Oil/Water interceptors	**N/A**			☐ Industrial	☐ Industrial	☐ Industrial	☐ Industrial
Oil/Water separators	**N/A**			☐ Undeveloped**2**	☒ Undeveloped**1**	☒ Undeveloped	☐ Undeveloped
General Site Lighting	Poor	Fair	**Good**	☒ Roadway	☐ Roadway	☐ Roadway	☒ Roadway
Location Rating:	Poor	**Fair**	Good	☐ Water way	☐ Water way	☐ Water way	☐ Water way **2**

Property Notes:

Building Systems Information:								
Heating Source: **Electric baseboards**				Supplier: **WSP**				
Type of Heating System: ELECTRIC UH, SPLIT HEAT PUMP								
Oil Tank:	Size:	Age:		Location:				
Steam: ☐ Yes ☒No	Line Size:			Valve Location:				
Heating Water Line Size:				Valve Location:				
Ventilation System: NONE								
Cooling System: Building: ___**0**_**%**	Chillers: ☐ Yes☒No	Location:						
Window Units: ☐ Yes ☒ No	Location:	Size: _____ BTU						
Electric Baseboard Locations: OFFICE BASEBOARD, UH IN FRONT CORNERS								
Unit Mounted Thermostats: ☐ Yes ☒ No	Wall Mounted Thermostats: ☒ Yes ☐ No							
Wall Mounted Thermostat Locations:								
Floor Drains:	Flow Direction:	N	S	E	W	Discharge Point:		
O/W interceptor: ☐ Yes ☒ No	Maintained: ☐ Yes ☐ No	Schedule:						
O/W separator: ☐ Yes ☒ No	Maintained: ☐ Yes ☐ No	Schedule:						
Sanitary Sewer Line Size: **4”**	☐ Septic Waste	☐ Municipal Sewer Account #						
Water Line Size: **1/2**	☐ Well Water	☐ Municipal Water Account #						
Is well used as potable water? ☒ Yes ☐ No	Well Location:							
H/W Tank: ☒ Yes ☐ No	Size:	Type:	Model #					
IBEX Monitor: ☐ Yes ☐ No	Location:							
Water Meter: ☐ Yes ☒ No	Location:							
Gas Meter: ☐ Yes ☒ No	Location:							
Electric Meter: ☒ Yes ☐ No	Location: **Interior – By Service Entrance**							
Tag/Lock-out box: ☐ Yes ☒ No	Location:							
Alarm Panel: ☒ Yes ☐ No	Location: **FA Panel – Near Main Entrance**							
Building Systems Notes:								

HVAC Equipment:							
Components:	Delivery Type:	Fuel Type	Condition:			IBEX Check	
HW TAK	**GSW 2010**	**ELECTRIC**	Poor	**Fair**	Good	☐ Yes ☐ No	
UH (2)	**OULETLE**	**ELECTRIC**	Poor	Fair	**Good**	☐ Yes ☐ No	
SPLIT HEAT PUMP	**TOSHIBA**	**ELECTRIC**	Poor	Fair	**Good**	☐ Yes ☐ No	
PLUMBING FIXTURE	**OPERATIONAL**		Poor	Fair	Good	☐ Yes ☐ No	
			Poor	Fair	Good	☐ Yes ☐ No	
			Poor	Fair	Good	☐ Yes ☐ No	
			Poor	Fair	Good	☐ Yes ☐ No	
			Poor	Fair	Good	☐ Yes ☐ No	
			Poor	Fair	Good	☐ Yes ☐ No	
			Poor	Fair	Good	☐ Yes ☐ No	

Foundation:							
Components:	Type:	Finish:	Condition:			Comments:
Primary Structure	**Slab on Grade**	**Concrete**	Poor	**Fair**	Good	
			Poor	Fair	Good	
			Poor	Fair	Good	
Interior Ground Floor Notes:						
Building floor requires re-painting / finishing.						

Electrical Service:			
Components:	Phase:	Type:	Capacity:
Main Entrance	**3**	**120/208V**	**100A**
Generator:	**N/A**	**N/A**	**N/A**
Com/Data	☐ Phone ☐ Fax ☐ Internet		
Electrical Distribution:			
Panel board:			
Conduit:	☐ Yes ☐ No		
Conductors	Type:		
Electrical Notes:			
Separate service entrance and meter for pump house			

Roof Conditions:						
Roof Section#	Type	Age:	Condition:			Comments:
1	**Shingled Roof**		Poor	**Fair**	Good	
2			Poor	Fair	Good	
Roof Notes: Asphalt shingles have approximately 15-year life. No drain gutters or rain water leaders.						
Snow Removal Damage: ☐ Yes ☐ No			Reported Leaks ☐ Yes ☒ No Areas:			

Exterior Façade:												
Components	North Elevation			South Elevation			East Elevation			West Elevation		
Cladding	**Painted Plywood**			**Painted Plywood**			**Painted Plywood**			**Painted Plywood**		
Windows	**PVC**			**PVC**			**PVC**			**n/a**		
Glazing												
Man Doors	**Metal**			**n/a**			**n/a**			**n/a**		
Garage Doors	**Overhead Door**			**n/a**			**n/a**			**n/a**		
Trims												
Sealants	Poor	**Fair**	Good	Poor	**Fair**	Good	Poor	**Fair**	Good	Poor	**Fair**	Good
Exterior Façade Notes:												
Painted Plywood is delaminating but not reported to leak. Windows horizontal sliders are leaking. Portion of front elevation Board and Batten which is delaminating.												

Fire, Health and Safety:								
Fire alarm: ☒ Yes ☐ No		Monitored: ☒ Yes ☐ No		Company: **dBm monitors, Troy Fire and Safety services**				
Pull Stations: ☐ Yes ☐ No		Annunciator: ☐ Yes ☐ No		Smoke Detectors: ☒ Yes ☐ No				
Fire Evacuation Plan Posted: ☒ Yes ☐ No		Health & Safety Program: ☐ Yes ☐ No		Building Hazards Posted and clearly marked: ☐ Yes ☐ No Type:				
System Test Last Date: **Annually**				Last Fire Drill Date: **Annually**				
Sprinkler System:	☒ Yes ☐ No	Type: ☒ Wet ☐ Dry		Water Storage/Supply:				
Stand Pipe System	☐ Yes ☐ No	Valves:		Hose Cabinets:				
Fire Extinguishers	☒ Yes ☐ No	Type:		Insp. Date: **Annually**				
Locations and Quantity:								
First Aid Station:	☐ Yes ☐ No	Supplies:	Low Fair Good	Insp. Date:				
First Aid Poster:	☐ Yes ☐ No	Up to date: ☐ Yes ☐ No						
Eye Wash Station:	☒ Yes ☐ No	Type:		Condition:	Poor	Fair	Good	
Worksite Inspection Checklist	☐ Yes ☐ No	Sym2dut Site Inventory List: ☐ Yes ☐ No						
WHMIS Binders:	☐ Yes ☐ No	Up to date: ☐ Yes ☐ No						
Emergency Lighting:	☐ Yes ☒ No	Type:						
Exit Signs:	☐ Yes ☒ No	Type:						
Security Alarm:	☒ Yes ☐ No	Monitored: ☒ Yes ☐ No		Company: **Dorey**				
Motion Sensors:	☐ Yes ☐ No	Locations:						
Security Camera:	☐ Yes ☐ No	Exterior:		Interior:				

Fire, Health and Safety Notes:

NO SPRINKLER

Building Upgrades & Maintenance History:	
Year	Description
	See Mechanical Notes. No finishes upgrades recorded.

Repair/Maintenance Recommendations Summary:		
Description	Cost	Year
MECHANICAL NOTES – no ventilation equipment, fresh air or exhaust for		
Welding, cutting, etc. Should have ventilation unit installed.		
Overhead door requires new weather seals at base w/ floor and jambs. Floor finish with		
Washroom to be repainted. Horizontal slicer windows are leaking. Replace w/ vertical sliders.		

Inspector: _____

(Print Name)

FACILITY AUDIT
DESCRIPTION

Asset #:	DSS Bldg#:	Bldg. Year: **4th November 1995**	
Building Name: **RECREATION COMMUNITY CENTRE**			
Address: **12 Park Ln, Barrington, NS B0W 1E0**			
Contact Person: **ROB FROST**	Phone No: 902-637-2015		
Inspected By: **Dragan Moraca**	Date: 11 August, 2017		
Inspection Type:	☒ Audit	☐ Emergency Inspection	☒ Maintenance Inspection	☐ New Construction

General Notes:

One story wood structured c/w crawl space. Originally there were two rectangular buildings spaced approximately 7 m. Later these buildings were connected with new structure. Current building structure is a "U" Shape.

Facility Description:				
☐ Office/Admin.	☐ Maintenance Garage	☐ Bridge Building	☐ Cold Storage	☒ Other - Arena
Business Hours:				
Gross Floor Area:	500 M²	Storeys above ground: **1**	Storeys below ground: **0**	
Ground Floor Areas:	Office: 19 M²	Garage: M²	No. of Bays:	
2nd Floor Areas:	Office: -- M²	Mezzanines: M²		
Storage Areas:	27 M²	Height of Building: 6 M		
Auxiliary Storage:	-- M²			
No. of Personnel:	Office: employee	Garage: employees	Seasonal: employee	
B-F Accessible:	☐ Yes ☒ No Partially	Environmental Audit on file:	☐ Yes ☒ No	
Floor Plan on file:	☒ Yes ☐ No	Fire Escape Plan:	☒ Yes ☐ No	
Roof Plan on file:	☐ Yes ☒ No	Asbestos Hazard Plan:	☐ Yes ☒No	
Site Plan on file:	☒ Yes ☐ No	Maintenance Plan/Schedule on file:	☐ Yes ☒ No	

Property:							
☒ Asphalt	☐ Chip seal		☒ Loose gravel	☐ Hard Soil		☐ Other	
Property size:	M²		Developed area: M²			Undeveloped area: M²	
Security Fencing:	Total Length: M		Condition:	Poor	Fair	Good	
General Topography	Steep	**Flat**	Rolling	Property Drains to: Manhole #18 and #19			
Drainage Rating:	Poor	Fair	**Good**	Adjacent Properties:			
Site Organization:	Poor	Fair	**Good**	North	South	East	West
Site Cleanliness:	Poor	Fair	**Good**	☐ Residential	☐ Residential **2**	☐ Residential	☐ Residential
Vehicle Wash Area	**N/A**			☐ Commercial **1**	☐ Commercial	☐ Commercial	☐ Commercial **1**
Oil/Water interceptors	**N/A**			☐ Industrial	☐ Industrial	☐ Industrial	☐ Industrial
Oil/Water separators	**N/A**			☒ Undeveloped **2**	☐ Undeveloped**1**	☒ Undeveloped	☐ Undeveloped
General Site Lighting	Poor	Fair	**Good**	☐ Roadway	☒ Roadway	☐ Roadway	☒ Roadway
Location Rating:	Poor	**Fair**	Good	☐ Water way	☐ Water way	☐ Water way	☐ Water way **2**

Roof Conditions:						
Roof Section#	Type	Age:	Condition:			Comments:
1	**Metal Roof over Arena**		Poor	**Fair**	Good	

2	**Torched applied Roof over Change Room Areas**		Poor	**Fair**	Good	
3	**Wood Shingles**		**Poor**	Fair	Good	

Roof Notes:

Asphalt shingles have approximately 15-year life. North part of the roof over exit doors in the arena roof is leaking. Roof is leaking above corridor 111. Also leaks have been reported throughout the Centre.

Snow Removal Damage: ☐ Yes ☒ No | Reported Leaks ☒ Yes ☐ No Areas:

Building Systems Information:

Heating Source: **ELECTRIC BASEBOARD**						Supplier: **NSP**		
Type of Heating System: BASEBOARD								
Oil Tank:	Size:	Age:				Location:		
Steam: ☐ Yes ☒ No	Line Size:					Valve Location:		
Heating Water Line Size:						Valve Location:		
Ventilation System: NONE								
Cooling System: Building: __**0%**			Chillers: ☐ Yes ☒ No			Location:		
Window Units: ☐ Yes ☒ No			Location:			Size: _____ BTU		
Electric Baseboard Locations: **PERIMETER**								
Unit Mounted Thermostats: ☐ Yes ☒ No						Wall Mounted Thermostats: ☒ Yes ☐ No		
Wall Mounted Thermostat Locations:								
Floor Drains:	Flow Direction:	N	S	E	W	Discharge Point:		
O/W interceptor: ☐ Yes ☒ No		Maintained: ☐ Yes ☒ No				Schedule:		
O/W separator: ☐ Yes ☒ No		Maintained: ☐ Yes ☒ No				Schedule:		
Sanitary Sewer Line Size: **4"**		☐ Septic Waste				☐ Municipal Sewer Account #		
Water Line Size: **½"**		☐ Well Water				☐ Municipal Water Account #		
Is well used as potable water? ☒ Yes ☐ No						Well Location:		
H/W Tank: ☒ Yes ☐ No		Size: **142L**				Type: **ELECTRIC**	Model # **GIANT 142ETE**	
IBEX Monitor: ☐ Yes ☐ No		Location:						
Water Meter: ☐ Yes ☒ No		Location:						
Gas Meter: ☐ Yes ☒ No		Location:						
Electric Meter: ☒ Yes ☐ No		Location: **Exterior – Main Entrance**						
Tag/Lock-out box: ☐ Yes ☒ No		Location:						
Alarm Panel: ☒ Yes ☐ No		Location: **FA Panel – Main Entrance**						

Building Systems Notes:

Electrical Service:

Components:	Phase:	Type:	Capacity:
Main Entrance	**1**	**120/240V**	**400A**
Generator:	**N/A**	**N/A**	**N/A**
Com/Data	☐ Phone ☐ Fax ☐ Internet		

Electrical Distribution:

Panel board:	
Conduit:	☐ Yes ☐ No
Conductors	Type:

Electrical Notes:

Service Entrance switch replaced within the last 10 years due to arc.

Fire, Health and Safety:

Fire alarm: ☒ Yes ☐ No	Monitored: ☒ Yes ☐ No	Company: **dBm monitors, Troy Fire and Safety services**
Pull Stations: ☒ Yes ☐ No	Annunciator: ☒ Yes ☐ No	Smoke Detectors: ☒ Yes ☐ No
Fire Evacuation Plan Posted: ☒ Yes ☐ No	Health & Safety Program: ☐ Yes ☒ No	Building Hazards Posted and clearly marked: ☐ Yes ☒ No Type:
System Test Last Date: **Annually**		Last Fire Drill Date: **Annually**

Sprinkler System:	☒ Yes ☐ No	Type: ☒ Wet ☐ Dry	Water Storage/Supply:
Stand Pipe System	☐ Yes ☐ No	Valves:	Hose Cabinets:
Fire Extinguishers	☒ Yes ☐ No	Type:	Insp. Date: **Annually**
Locations and Quantity:			
First Aid Station:	☐ Yes ☒ No	Supplies: Low Fair Good	Insp. Date:
First Aid Poster:	☐ Yes ☒ No	Up to date: ☐ Yes ☐ No	
Eye Wash Station:	☒ Yes ☐ No	Type:	Condition: Poor Fair Good
Worksite Inspection Checklist	☐ Yes ☒ No	Sym2dut Site Inventory List: ☐ Yes ☐ No	
WHMIS Binders:	☐ Yes ☒ No	Up to date: ☐ Yes ☐ No	
Emergency Lighting:	☒ Yes ☐ No	Type: **Wall packs with battery and remote heads**	
Exit Signs:	☒ Yes ☐ No	Type: **Red "EXIT"**	
Security Alarm:	☒ Yes ☐ No	Monitored: ☒ Yes ☐ No	Company: **Dorey**
Motion Sensors:	☐ Yes ☒ No	Locations:	
Security Camera:	☐ Yes ☒ No	Exterior:	Interior:

Fire, Health and Safety Notes:

HVAC Equipment:

Components:	Delivery Type:	Fuel Type	Condition:			IBEX Check
HW TANK	**GIANT 2002**	**ELECTRIC (Life Exp)**	**Poor**	**Fair**	Good	☐ Yes ☐ No
PLUMBING FIXTURE	**OPERATIONAL**		**Poor**	Fair	Good	☐ Yes ☐ No
			Poor	Fair	Good	☐ Yes ☐ No
			Poor	Fair	Good	☐ Yes ☐ No
			Poor	Fair	Good	☐ Yes ☐ No
			Poor	Fair	Good	☐ Yes ☐ No
			Poor	Fair	Good	☐ Yes ☐ No
			Poor	Fair	Good	☐ Yes ☐ No
			Poor	Fair	Good	☐ Yes ☐ No
			Poor	Fair	Good	☐ Yes ☐ No

HVAC Equipment Inventory

Components:	Manufacturer:	Model Number:	Serial Number:	Age:
Furnace				
Boiler				
Burner				
A/C unit				

Mechanical Equipment Notes:

USED AS DAYCARE, NO TEMPERING VALVES ON FAUCETS, NOT INSULATED PIPING. NO AIRFLOW OR EQUIPMENT INSTALLED

Exterior Façade:

Components	North Elevation	South Elevation	East Elevation	West Elevation
Cladding	**VINYL**	**VINYL**	**VINYL**	**VINYL**
Windows	**PVC**	**PVC**	**PVC**	**PVC**
Glazing				
Man Doors	**STEEL**		**STEEL**	n/a
Garage Doors	n/a	Overhead Door	Overhead Door	n/a
Trims				
Sealants	**Poor** Fair Good	**Poor** Fair Good	**Poor** Fair Good	**Poor** Fair Good

Exterior Façade Notes:

Exterior vinyl siding is falling off the building. Needs replacement. Sealant/caulking to be replaced.

Foundation/Basement:						
Components:	Type:	Finish:	Condition:			Comments:
Primary Structure	**FOOTINGS**	**Concrete**	Poor	Fair	**Good**	
			Poor	Fair	Good	
			Poor	Fair	Good	

Interior Ground Floor Notes:

Structure appear to be in good shape. Crawl space to be cleaned and new insulation and vapour barrier to be installed. Change rooms and hallway leading to the rink have been covered with rubber floor. condition's. Rest of the slab on grade is in good condition's. Ceramic tile in Canteen

Interior 1st Floor:						
Components:	Type:	Finish:	Condition:			Comments:
Flooring	**Wood**	**Vinyl Tile**	Poor	Fair	**Good**	**Rotten Wood floor by entrance.**
			Poor	Fair	**Good**	
			Poor	Fair	**Good**	
			Poor	Fair	Good	
			Poor	Fair	Good	

Interior Ground Floor Notes:

Vinyl Tile is delaminating from wood subfloor. Several leaks throughout the building are reported. Urinal in male washroom is leaking.

Building Upgrades & Maintenance History:	
Year	Description

Repair/Maintenance Recommendations Summary:

- **BUILDING IS OFTEN USED FOR GROUP ACTIVITES, EVENTS, DAYCARE, ETC., WITH NO OUTDOOR AIR VENTILATION INSTALLED, DOES NOT MEET CODE.**
- **NO INSULATED DOMESTIC PIPING, HOT WATER TANK NEEDS REPLACING, TEMPERING VALVES NEED INSTALLED FOR WASHROOMS USED BY DAYCATE TO MEET CODE. STEPHEN FULLARTON.**
- **Replace vinyl siding, insulate all exterior walls and crawl space. Install new vapour barrier. Caulk all openings Prevent ant water infiltrations. Replace all exterior doors and install new flashings and weather-stripping.**

Inspector: _____

APPENDIX C
PUMPING STATION DATA

EASTPOINT ENGINEERING

Pump Station Summary Sheet
Barrington Pump Stations

PS#	1	2	3	4	5	6	7	8	9	10	11
type	submersible	submersible	submersible	submersible	submersible	submersible	submersible	submersible	submersible	submersible	submersible
# of pumps	2	2	3	2	2	2	2	2	2	2	2
make	Flygt	Flygt	Flygt	Flygt	Flygt	Flygt	Flygt	Flygt	flygt	flygt	flygt
pump type	3085	3085	3085	3085	3085	3085	3085		3085	3127	3085
power, HP	2.5	2.5	2.5	2.5	2.5	2.5	2.5	20	3	10	3
electrical	208, 3phase,17A	208, 3phase	208, 3phase	230, 1phase,9.5A	208, 3phase,15A	208, 3phase,17A	208, 3phase,17A		208,3P,9.6A	208,3P,	208,3P,11A
impeller	NA	NA	NA	NA	NA	NA	NA		462	462	NA
wetwell											
diameter, feet	6	6	6	6	6	6	6	6	6	6	6
material	concrete	concrete	concrete	concrete	concrete	concrete	concrete	concrete	concrete	concrete	concrete
condition	good	good	good	good	good	good	good	good	good	good	good
ventilated	no	no	no	no	no	no	no	no	no	no	no
rails and chains	good	good	good	good	good	good	good	good	good	good	good
overflow	yes infrequent	no	no	no	no	no	no	no	no	no	no
hatches											
number	2	2	2	2	2	2	2	2	2	2	2
condition	fair	fair	poor	good	fair	good	fair	good	poor	good	good
safety grating	no	no	no	no	no	no	no	no	no	yes	yes
Control panel											
type	flygt	L&B electric	flygt	flygt	flygt	flygt	L&B electric	Flygt/L&B	flygt	flygt	flygt
condition	poor	fair	poor	fair	good	poor	good	fair	fair	fair	poor
controller	relays	relays	relays	FMC200	relays	relays	relays	relays	FMC200	relays	relays
service	208 V, 3 phase, 40A	208 V, 3 phase, 60A	208 V, 3 phase, 30A	208 V, 3 phase, 30A	208 V, 3 phase, 30A	208 V, 3 phase, 30A	208, 3P, 30A	208V,150A,3P	208,3P,30A	208,3P,100A	208,3P,30A
electical isolation	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
power	40A	60A	40A	30A	30A	30A	30A	150A	30A	100A	30A
starters	capacitor start	direct	capacitor start	direct	direct	direct	direct	direct	direct	direct	capacitor start
scada/alarm system	none	none	none	modem	modem	none	none	none	modem	none	modem
emergency power	no	no	no	no	no	no	no	no	no	no	no
monument type	concrete	concrete	concrete	concrete	concrete	concrete	concrete	concrete	concrete	concrete	concrete
comments											
Forcemain											
material	ductile iron	PVC	PVC	PVC	PVC	PVC	PVC	PVC/ductile	PVC	PVC	PVC
internal piping dia, inch	4	4	4	4	4	4	4	6	4	4	4
internal pipe condition	fair	good	good	good	fair	fair	fair	fair	fair	fair	fair
forcemain material	PVC	PVC	PVC	PVC	PVC	PVC	PVC	PVC	PVC	PVC	PVC
forcemain diameter,inch	6	6	6	6	6	6	6	6	4	6	6
forcemain condition	good	good	good	good	good	good	good	good	good	good	good
comment				frequent breaks							
Valves											
separate valve chamber	no	no	no	no	no	no	no	no	no	no	no
check vavles	2	2	2	2	2	2	2	2	2	2	2
isolation valves	2	2	2	2	2	2	2	2	2	2	2
Instrumentation											
floats	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
hour meters	no	no	no	yes	yes	no	no	no	yes	no	no
current	no	no	no	yes		no	no	no	no	no	no

recommendation	new panel	new panel, new hatches	new panel	new panel	Bus box electrical safety issues, new hatch	new panel	

12	13	14	15
submersible	submersible	submersible	submersible
2	2	2	2
flygt	flygt	flygt	flygt
3085	3702	3085	3127
5	5	2.2	10
208,3P,	208,3P,	208,3P,7.3A	208,3P,30.5A
NA	NA	NA	NA
6	6	6	6
concrete	concrete	concrete	concrete
good	good	good	good
no	no	no	no
good	good		good
no	no		yes
2	2	2	2
good	fair	fair	good
yes	no	no	yes
flygt/panel shop	flygt	flygt	flygt
fair	fair	fair	fair
relays	relays	FMC200	FMC200
208,3P,50A	208,3P,60A	208,3P,30A	208,3P,80A
yes	yes	yes	yes
50A	60A	60A	60A
direct	direct	direct	direct
none	none	modem	modem
no	no	no	no
concrete	concrete	concrete	concrete
PVC	PVC	PVC	PVC
4	4	4	4
fair	fair	fair	fair
PVC	PVC	PVC	PVC
6	6	6	6
good	good	good	good
no	no	no	no
2	2	2	2
2	2	2	2
yes	yes	yes	yes
no	no	yes	yes
no	no	no	no
corrosion of bus box	corrosion of bus box	couldn't get into WW and location is dangerous	

Pump Station Summary Sheet
Woods Harbour Pump Stations

PS#	9	8	7	6	5	4	3	2	1
type	submersible	submersible	submersible	submersible	submersible	submersible	submersible	submersible	submersible
# of pumps	2	1	1	2	2	1	2	1	2
make	Flygt	Flygt	Flygt	Flygt	Flygt	Flygt	Flygt	Flygt	flygt
pump type	3085	3085	3085	3085	3102	3085	3085	3085	3127-180-6004
power, HP	2.2	2.2	2.2	2.2	5	2.2	5	2.2	10
electrical	208, 3phase	208, 3phase	208, 3phase	230, 1phase,9.5A	208, 3phase,15A	208, 3phase,11A	208, 3phase,15A	240, 1phase,14A	208,3P,28.6A
impeller	NA	grinder	grinder	257	412	grinder		grinder	432
wetwell									
diameter, feet	6	4	4	5	6	4	6	4	6
material	concrete	concrete	concrete	concrete	concrete	concrete	concrete	concrete	concrete
condition	good	good	good	good	good	good	good	good	good
ventilated	no	no	no	no	no	no	no	no	no
rails and chains	good	good	good	good	good	good	good	good	good
overflow	no	no	no	no	no	no set below grade	no	no	no
hatches									
number	2	manhole	manhole	1	2	1	2	1	2
condition	fair	good	good	good	fair	good	fair	good	poor
safety grating	no	no	no	no	no	no	no	no	no
Control panel									
type	surfline	L&B electric	L&B electric	surfline	surfline	L&B electric	Surfline	Surfline	Surfline
condition	good	fair	fair	good	good	good	poor	poor	poor
controller	9015	toshiba VF S11	toshiba VF S11	9015	9015	toshiba VF S11	9015	9015	9015
service	208 V, 3 phase, 40A	240V,1P,22A	240V,1P,22A	230 V, 1 phase, 50A	208 V, 3 phase, 60A	240V,1P,22A	208, 3P, 60A	240V,1P,40A	208,3P,100A
electical isolation	no	no	no	no	no	no	no	no	no
power	40A	60A	60A	40A	40A		60A	40A	60A
starters	direct	VFD	VFD	direct	direct	VFD	direct	direct	direct
scada/alarm system	alarm dialer	alarm dialer	alarm dialer	alarm dialer	alarm dialer	alarm dialer	alarm dialer	alarm dialer	alarm dialer
emergency power	no	no	no	no	no	no	no	no	no
monument type	concrete, good	pole mount	pole mount	concrete, good	concrete, good	concrete, good	concrete, good	concrete, good	concrete, good
comments					new panel planned	has newer panel	panel is showing corrosion		panel badly corroded
Forcemain									
material	ductile iron	PVC	PVC	galv steel	ductile iron	galv steel	ductile	galv steel	ductile
internal piping dia, inches	4	2	2	2	4	2	4	2	4
internal pipe condition	fair	good	good	fair	fair	fair	fair	fair	fair
forcemain material	PVC	PVC	PVC	PVC	PVC	PVC	PVC	PVC	PVC
forcemain diameter,inches	6	2	2	2	6	2	6	2	6
forcemain condition	good	good	good	poor	good	good	good	good	good
comment				frequent breaks					
Valves									
separate valve chamber	no	no	no	no	no	no	no	no	no
check vavles	2	1	1	2	2	1	2	1	2
isolation valves	2	1	1	2	2	1	2	1	2
Instrumentation									
floats	yes	yes	yes	yes	yes	yes	yes	yes	yes
hour meters	yes	no	no	yes	yes	yes	yes	yes	yes
current						yes	yes	yes	yes
recommendation				needs upgrade to forcemain and PS		hatch should be raised above grade	frequent overflows out top	replace panel	replace panel and hatches
Specific Upgrades required	none	none	none	replace forcemain replace pump station	replace panel	regrade site elevations	replace panel increase pump capacity	replace panel	replace panel and hatches

Allocation Report - Municipality of Barrington

Sun, Sep 01, 2019 - Fri, Apr 17, 2020 (Prime Time)

Summary

Total unused hours for period : **11450.5**

Total used for the period: : **1429.5**

Total hours for the period : **12880**

Allocation By Venue

Venue	Unused	Used Hours	Total Hours	% Used
Sandy Wicken	530	1080.0000	1610	67.08 %
Hospitality Room	1533	77.0000	1610	4.78 %
Rec Centre Lg Hall	1432	178.0000	1610	11.06 %
Rec Centre Sm Hal	1515.5	94.5000	1610	5.87 %
Barrington Ballfield	1610	0	1610	0.00 %
Sherose Isl. Ballfield	1610	0	1610	0.00 %
South Side Ballfield	1610	0	1610	0.00 %
MOB Multipurpose	1610	0	1610	0.00 %
Total	**11450.5**	**1429.5**	**12880**	**11.10 %**

Allocation Report - Municipality of Barrington

Sun, Sep 01, 2019 - Fri, Apr 17, 2020 (Non-prime Time)

Summary

Total unused hours for period : **9086.6667**

Total used for the period: : **458.3333**

Total hours for the period : **9545**

Allocation By Venue

Venue	Unused	Used Hours	Total Hours	% Used
Sandy Wicken	1864.6667	435.3333	2300	18.93 %
Hospitality Room	1034	1.0000	1035	0.10 %
Rec Centre Lg Hall	1013	22.0000	1035	2.13 %
Rec Centre Sm Hal	1035	0	1035	0.00 %
Barrington Ballfield	1035	0	1035	0.00 %
Sherose Isl. Ballfield	1035	0	1035	0.00 %
South Side Ballfield	1035	0	1035	0.00 %
MOB Multipurpose	1035	0	1035	0.00 %
Total	**9086.6667**	**458.3333**	**9545**	**4.80 %**