

CAPITAL FUND - 2017 Capital Projects

| | | 2017 | | | |
|---|---------------|-------------|----------|----------|----------|
| | | Budget | Formula | IT | |
| | | Recommended | Funding | Grants | Reserve |
| | | (\$000s) | (\$000s) | (\$000s) | (\$000s) |
| General Government | Page # | | | | |
| Administration | | | | | |
| Tourism Kiosk | 316 | 80 | 55 | 25 | |
| | | 80 | 55 | 25 | - |
| Community Energy Plan (CEP) Initiatives | | | | | |
| Energy Coordinator | 212 | 95 | 95 | | |
| Centralized Boiler System | 318 | 255 | 255 | | |
| Heat Distribution Piping to Water Treatment Plant | 348 | 150 | 150 | | |
| | | 500 | 500 | - | - |
| Information Technology | | | | | |
| Network Upgrades | 222 | 25 | | | 25 |
| GIS Enhancements | 222 | 50 | | | 50 |
| Server and Storage Replacements | 223 | 40 | | | 40 |
| Communication Infrastructure Renewal | 224 | 25 | | | 25 |
| Security Cameras | 224 | 20 | | | 20 |
| Secondary Site & Data Replication | 224 | 20 | | | 20 |
| Website Enhancements | 225 | 15 | | | 15 |
| Virtualization | 233 | 25 | | | 25 |
| Door Access Controls | 225 | 20 | | | 20 |
| Multi-function Devices and Printers | 226 | 50 | | | 50 |
| | | 290 | - | - | 290 |
| Subtotal | | 870 | 555 | 25 | 290 |

Department Corporate Services
Division Corporate Services and Risk Management
Project Heat Distribution Piping to Water Treatment Plant

Project Description

A 520kW pellet boiler at Pumphouse #1 would have surplus capacity during shoulder season to supply additional heat for the Water Treatment Plant.

Justification

Installing insulated pipes between the pellet boiler and Water Treatment Plant will enable the boiler to operate at higher capacity in September and October, before the City's water supply needs to be heated. Since pellets purchased in bulk cost only 30% of the cost of oil, replacing as much oil as possible with a pellet boiler increases the return on the boiler investment.

Operating Cost Impacts

Heating cost reduction of \$100,000

Project's Impact on Other Departments

The public works department would benefit from the cost savings

Project's Return on Investment

66%

City Council's Goals/Objectives/Actions

Goal #2: Stewards of our natural and built environment
Objective #2(c): Develop smart and sustainable approaches to energy, water and sewer, waste management and building systems.



CAPITAL FUND - 2017 Capital Projects

| Expenditures | Total Estimated Cost \$ | Prior Year Funding \$ | 2015 \$ | 2016 \$ | 2017 \$ |
|--------------------------|----------------------------|--------------------------|------------|------------|------------|
| Capital Cost | | | | | |
| Design | | | | | |
| Development | | | | | |
| Construction Engineering | 20,000 | | | | 20,000 |
| Construction | 60,000 | | | | 60,000 |
| Equipment | | | | | |
| Materials | 70,000 | | | | 70,000 |
| Total: | 150,000 | | | | 150,000 |

| Funding Sources | Total Estimated Cost \$ | Prior Year Funding \$ | 2015 \$ | 2016 \$ | 2017 \$ |
|-----------------|----------------------------|--------------------------|------------|------------|------------|
| Formula Funding | 150,000 | | | | 150,000 |
| | | | | | |
| | | | | | |
| Total: | 150,000 | | | | 150,000 |

CAPITAL FUND - 2017 Capital Projects

| | | 2017 | | |
|--|-------------|--------------|------------|-----------|
| | | Budget | Formula | |
| | | Recommended | Funding | Grants |
| | | (\$000s) | (\$000s) | (\$000s) |
| Community Services | Page | | | |
| Parks/Trails | | | | |
| Yellowknife Rotary Park -Trail Extension | 244 | 20 | 20 | |
| Surfacing of Niven Lake Trail | 351 | 195 | 195 | |
| Tennis Court Re-surfacing | 352 | 100 | 100 | |
| Spray Park at Sombe Ke Civic Plaza | 353 | 585 | 585 | |
| Pool | | | | |
| Refinishing the Floor | 355 | 100 | 20 | 80 |
| Subtotal | | 1,000 | 920 | 80 |



CAPITAL FUND - 2017 Capital Projects

Department **Community Services**
Division **Facilities**
Project **Surfacing of Niven Lake Trail**

Project Description

The Niven Lake Trail is approximately two kilometres in length and 2,764 square metres in area. Since the construction of this trail, the Niven Lake Subdivision has expanded, leading to dramatic increase in use of this trail. It is proposed to widen this trail from two to three metres and asphalt it, thus making the trail more adaptable and safer as a multi-use trail. Widening the trail to three metres would allow for the option of bicycle lanes. The cost to widen and pave the trail is \$195,000 (\$95 per square meter x 2,000 metres). This cost covers preparing the trail for asphalt and the asphalt itself.

Justification

This trail has now become the City's second main commuter trail and is used extensively by walkers, runners, and cyclists from the Niven Lake area.

Operating Cost Impact

There will be no additional costs for maintenance, as this will be covered under our normal operations budget.

Project's Impact on Other Departments

N/A

Project's Return on Investment

A second all-season trail would provide an important link for those who commute between Niven Lake Subdivision and the downtown core.

City Council's Goals/Objectives/Actions

- Goal #2: Stewards of our natural and built environment
- Objective #2(a): Maintain, respect, preserve and enhance the natural environment, natural heritage and green space
- Objective #2(b): Improve transit, roads, sidewalks, recreation facilities and trails with an emphasis on active and healthy living choices
- Objective #2(e): Maintain and enhance core services and adapt to changing needs

2017 Capital Cost: \$195,000

| Funding Sources | Total Estimated Cost \$ | Prior Year Funding \$ | 2015 \$ | 2016 \$ | 2017 \$ |
|------------------------|--------------------------------|------------------------------|----------------|----------------|----------------|
| Formula Funding | 195,000 | | | | 195,000 |
| | | | | | |
| | | | | | |
| Total: | 195,000 | | | | 195,000 |

CAPITAL FUND - 2017 Capital Projects

Department Community Services
Division Facilities
Project Tennis Courts – Re-surfacing

Project Description

The City has three tennis court locations in Yellowknife: three courts at Niven Beach, three courts at Somba K'e, and two courts at the City reservoir, all of which are widely used by the Yellowknife Tennis Club and drop-in users. Over the past few years, the protective rubber surface on these courts has started to peel away through a combination of use and age.

It is proposed to use a SportMaster 100% acrylic tennis court surface for this project. SportMaster tennis court surfaces are formulated to resist fading and withstand a variety of weather conditions, from ice and snow to intense heat and ultra-violet light.

Justification

As the tennis courts are among the City's most popular recreational facilities over the summer months, it is important that we have good

quality facilities.

Operating Cost Impact

No significant O/M impact will be felt.

Project's Impact on Other Departments

N/A

Project's Return on Investment

A long-lasting court surface that will serve the needs of the community

City Council's Goals/Objectives/Actions

Goal #2: Stewards of our natural and built environment

Objective #2(a): Maintain, respect, preserve and enhance the natural environment, natural heritage and green space

Objective #2(b): Improve transit, roads, sidewalks, recreation facilities and trails with an emphasis on active and healthy living choices

Objective #2(e): Maintain and enhance core services and adapt to changing needs

2017 Capital Cost: \$100,000

| Funding Sources | Total Estimated Cost \$ | Prior Year Funding \$ | 2015 \$ | 2016 \$ | 2017 \$ |
|-----------------|----------------------------|--------------------------|------------|------------|------------|
| Formula Funding | 100,000 | | | | 100,000 |
| | | | | | |
| Total: | 100,000 | | | | 100,000 |



CAPITAL FUND - 2017 Capital Projects

Department Community Services
Division Facilities
Project Spray Park at Somba K'e Civic Plaza

Project Description

To construct a 3,000 sq. ft. spray park in Somba K'e Civic Plaza in 2017. The Spray Park will be located between the play structure and the washroom. It will be a "drain-away" facility, which means that the used water will immediately flow into the drains and fresh water will be used to operate the equipment. This system requires less staff time for maintenance and health and safety checks.

Justification

The Spray Park will encourage families and young people to engage in healthy outdoor activity and attract more people to the downtown core of the city.

Operating Cost Impact

Operating costs should be minimal. Staff will clean the pad daily, inspect the equipment and do the necessary repairs. There will be water consumption to operate the equipment. This equipment would operate approximately 12 weeks a year, with two weeks of prep work at the start of the season and a week to winterize at the end of the season.

Project's Impact on Other Departments

None identified at this time

Project's Return on Investment

No monetary gain on the investment.

City Council's Goals/Objectives/Actions

Goal #2(b): Improve transit, roads, sidewalks, recreation facilities and trails with an emphasis on active and healthy living choices.

2017 Capital Cost: \$585,000



CAPITAL FUND - 2017 Capital Projects

| Funding Sources | Total Estimated Cost \$ | Prior Year Funding \$ | 2015 \$ | 2016 \$ | 2017 \$ |
|-----------------|----------------------------|--------------------------|------------|------------|------------|
| Formula Funding | 585,000 | | | | 585,000 |
| | | | | | |
| | | | | | |
| Total: | 585,000 | | | | 585,000 |



CAPITAL FUND - 2017 Capital Projects

Department **Community Services**
Division **Programs**
Project **Refinishing the Floor at Ruth Inch Memorial Pool**

Project Description

To retile the main floor of Ruth Inch Memorial Pool

Justification

Ruth Inch Memorial Pool opened its doors to the public in the fall of 1988. The pool continues to be popular among residents and visitors. In 2010, the City contracted an engineering firm for a life cycle analysis of the facility which identified items that needed to be addressed to ensure the pool meets or exceeds its life expectancy. As the floor finishes are deteriorating and the moisture barrier has failed in several spots, it is recommended to replace the floor finish and upgrade the moisture barrier at this time, as it would likely be less expensive. This option would prevent further damage to the concrete slab and minimize maintenance and operational problems in the future. Unless this work is undertaken, it is not likely that the existing floor finishes and moisture barrier can be maintained for an additional 20 years.

Operating Cost Impact

This project will have no impact on the operating costs of the pool.

Project's Impact on Other Departments

This project will have no impact on other Departments

Project's Return on Investment

Undertaking this project will ensure the facility achieves its full life expectancy.

City Council Goals/Objectives/Actions

Goal #2(b): Improve transit, roads, sidewalks, recreation facilities and trails with an emphasis on active and healthy living choices.

2017 Capital Cost: \$100,000

| Funding Sources | Total Estimated Cost \$ | Prior Year Funding \$ | 2015 \$ | 2016 \$ | 2017 \$ |
|------------------------|--------------------------------|------------------------------|----------------|----------------|----------------|
| Formula Funding | 20,000 | | | | 20,000 |
| Grant | 80,000 | | | | 80,000 |
| | | | | | |
| Total: | 100,000 | | | | 100,000 |

CAPITAL FUND - 2017 Capital Projects

| | | 2017 | |
|--|-------------|-------------|----------|
| | | Budget | Formula |
| | | Recommended | Funding |
| | | (\$000s) | (\$000s) |
| Public Safety | Page | | |
| Directorate | | | |
| Wildland Fire Mitigation -Emergency Measures | 253 | 100 | 100 |
| Fire & Ambulance | | | |
| Emergency Medical Services Training Manikin | 358 | 115 | 115 |
| Propane Fueled Fire Trainer | 359 | 90 | 90 |
| Subtotal | | 305 | 305 |

| | | 2017 | |
|--|-------------|-------------|----------|
| | | Budget | Formula |
| | | Recommended | Funding |
| | | (\$000s) | (\$000s) |
| Planning & Development | Page | | |
| Harbour Plan & Smart Growth Improvements | 262 | 700 | 700 |
| Streetscaping Initiatives | 264 | 700 | 700 |
| Subtotal | | 1,400 | 1,400 |





CAPITAL FUND - 2017 Capital Projects

Department Public Safety
Division Fire and Ambulance
Project Emergency Medical Services (EMS) Training Manikin

Project's Return on Investment

Better EMS delivery to the citizens of Yellowknife and beyond.

City Council's Goals/Objectives/Actions

Objective #2(e): Maintain and enhance core services and adapt to changing needs

Action #2.5: Develop a customer service model of excellence

2017 Capital Cost: \$115,000

Project Description

The EMS Training Manikin simulates a real person for training purposes.

Justification

This state-of-the-art training manikin will improve our EMS delivery to the general public. It simulates working with a real patient, giving our emergency responders a chance to train and refresh their skills based on actual medical situations. The manikin simulates all the medical problems and speaks to the emergency responders, describing what the patient is feeling to coincide with how the patient presents him or herself.

Operating Cost Impact

Minimal

Project's Impact on Other Departments

None

| Funding Sources | Total Estimated Cost \$ | Prior Year Funding \$ | 2015 \$ | 2016 \$ | 2017 \$ |
|-----------------|----------------------------|--------------------------|------------|------------|------------|
| Formula Funding | 115,000 | | | | 115,000 |
| | | | | | |
| Total: | 115,000 | | | | 115,000 |



CAPITAL FUND - 2017 Capital Projects

Department Public Safety
Division Fire and Ambulance
Project Propane-Fuelled Fire Trainer

Project's Return on Investment
 None

Project Description
 Propane-fired training appliance.

City Council's Goals/Objectives/Actions
 Objective #2(e): Maintain and enhance core services and adapt to changing needs
 Action #2.18: Create a safer, cleaner and vibrant city

Justification
 This training equipment would enable firefighters to complete National Fire Protection Association 1001 standards. The system currently in use for this training requires petroleum products, which have a harmful effect on the environment.

2017 Capital Cost: \$90,000

Operating Cost Impact
 Minimal, as the cost would fit into the current training budget.

Project's Impact on Other Departments
 None

| Funding Sources | Total Estimated Cost \$ | Prior Year Funding \$ | 2015 \$ | 2016 \$ | 2017 \$ |
|-----------------|----------------------------|--------------------------|------------|------------|------------|
| Formula Funding | 90,000 | | | | 90,000 |
| | | | | | |
| Total: | 90,000 | | | | 90,000 |

CAPITAL FUND - 2017 Capital Projects

| | 2017 | |
|---------------------------------------|-------------|----------|
| | Budget | M.E.R. |
| | Recommended | Reserve |
| | (\$000s) | (\$000s) |
| Public Works & Engineering | <u>Page</u> | |
| Fleet Management | 274 | |
| 1167-06 F250 4X4 | 65 | 65 |
| 1193-12 Polaris Snowmobile | 15 | 15 |
| 1194-12 Polaris Snowmobile | 15 | 15 |
| 1016-07 RAM 2500 | 65 | 65 |
| 1049-13 F-150 XLT | 55 | 55 |
| 1061-07 RAM 1500 | 35 | 35 |
| 1069-07 E-150 | 40 | 40 |
| 1072-07 Ranger 4x4 | 35 | 35 |
| 1075-07 RAM 1500 | 35 | 35 |
| 1158-05 F-550 Picker | 85 | 85 |
| 1159-05 F-550 Steamer | 85 | 85 |
| 1160-05 60" Exmark Mower | 15 | 15 |
| 2109-01 E-350 SD Ambulance | 175 | 175 |
| 2120-98 Ford LT8513 Water Tanker | 325 | 325 |
| | 1,045 | 1,045 |



CAPITAL FUND - 2017 Capital Projects

| | | 2017 | | | MACA |
|--|-----|-------------|----------|----------|---------------|
| | | Budget | Formula | M.E.R. | Gas Tax |
| | | Recommended | Funding | Reserve | Rebate |
| | | (\$000s) | (\$000s) | (\$000s) | (\$000s) |
| | | | | | Capital Grant |
| | | | | | (\$000s) |
| Engineering & Garage | | | | | |
| Traffic Lights Video Detection Equipment | 278 | 40 | 40 | | |
| Diagnostic Equipment & Specialty Tools for Mechanics | 280 | 20 | 20 | | |
| City Garage Building and Yard Improvements | 336 | 50 | 50 | | |
| Roads & Sidewalks | | | | | |
| Road Rehabilitation | 282 | 2,325 | 115 | | 2,210 |
| Drainage Improvements and Storm Sewer Repairs | 286 | 50 | 50 | | |
| | | 2,485 | 275 | - | - |
| | | | | | 2,210 |
| Solid Waste Management | | | | | |
| Landfill | | | | | |
| Baling Facility Mechanical Upgrades | 288 | 25 | | | 25 |
| Centralized Composting Program | 290 | 700 | | | 700 |
| | | 725 | - | - | 725 |
| | | | | | - |
| Pumphouses/Liftstations (PHs/LSs) | | | | | |
| Capital Upgrades | 298 | 65 | | | 65 |
| Potable Water Reservoir Flushing & Cleaning | 341 | 25 | | | 25 |
| Pump Replacement | 300 | 100 | | | 100 |
| Monitoring & Controls Maintenance and Upgrading | 302 | 75 | | | 75 |
| LS#5 Pipe Replacement | 344 | 300 | | | 300 |
| Other | | | | | |
| Water Meter Replacement and Upgrades | 304 | 25 | | | 25 |
| PH & LS - Genset Installation | 306 | 200 | | | 200 |
| CMP Replacement Program | | | | | |
| | 308 | 2,980 | | | 2,980 |
| | | 3,770 | - | - | 3,770 |
| | | 8,025 | 275 | 1,045 | 4,495 |
| PW Subtotal | | | | | 2,210 |

THIS PAGE LEFT BLANK INTENTIONALLY

