



# **Project Narrative**

**Nicholson Catholic College & St. Michaels Catholic School**

**Presented By:**

**Seneca**

# Our Mission

**To create a fun and engaging outdoor space that emphasizes education, physical activity, and a greater environmental connectedness. We aim to inspire youth through a variety of mediums including Indigenous arts, hands on play, and native plantings.**



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# Approach

**The school environment should offer more than just an education. School should be a place where both learning and play can coexist and should create an atmosphere where children are excited to come to school each day. In order to foster this type of environment, our Seneca team has designed a revitalized school yard that invokes all five senses, natural habitat for native plants and wildlife, and effectively manages and utilizes rainwater. Along with the helpful input from staff and students at Nicholson Catholic College and St. Michael Catholic School, we have created a brand-new school yard that students can enjoy for many years to come.**



Professor Jane Davey

# Introduction

The main goal for us on the Seneca team is to transform what was once a gray, uninspiring location into a whimsical, colorful and highly interactive play space. We wish to create an opportunity for students to engage with their school grounds and to learn and explore various natural environments. The inclusion of native plantings will encourage students' investigations into the natural world around them and help to create a sense of belonging in their current space.

Through the integration of elements that encourage the use of all five senses, Seneca has created an inclusive plan that will cater to all. Hands on play along with education opportunities and spaces are of the highest priority and the proposed changes aim to incorporate as many elements as possible to achieve these goals. While each area will have its own individual identity, it is important to create cohesion across the school grounds. Consistent themes across the five proposed areas are important to maintain a unified sense of school identity.



# Three Areas of Focus

## Main Features

- Soccer field
- Bioswales
- Concrete & tire seating planters
- New other tree
- Gazebo classrooms
- Basketball court
- Tire seating planters
- Painted bee-themed walkway
- Murals
- New plantings
- Painted rainbow



## One Tree



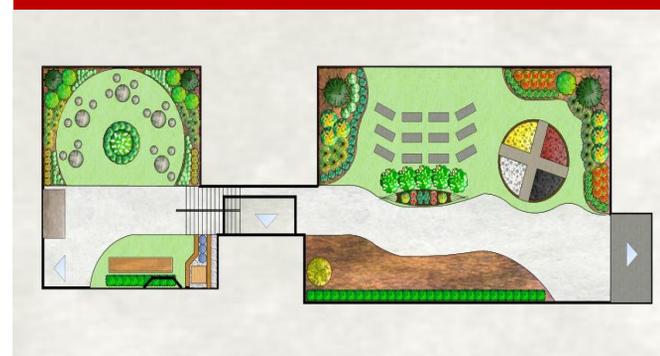
## Main Features

- Concrete seating planters
- Outdoor classroom
- Tire seating planters
- Long jump game
- Murals
- Balance and hop game
- Freethrow basketball court
- Four square games

## Main Features

- Stone seating area
- Garbage cans
- Vegetable planter
- Rain barrels w/ decorative piping
- Tool storage
- Pollinator garden
- Outdoor classroom w/ chalkboard
- Canoe planters
- Space for art displays
- Medicine wheel garden

## Courtyard



# St. Michael's Yard

## *Between Two Schools*

The removal of the portables in the central area of the proposal offers a great opportunity to introduce plenty of green space and seating areas. This will be a fantastic area for students to meet and hang out with their friends. This central area will help create a cohesive environment between the two schools and allow plenty of opportunities for outdoor learning as well as play. It was requested that there remain a way to separate the two school yards, for this reason we decided to maintain the original large gate and add access for both schools into the area. We introduced four gazebos to act as outdoor classroom areas. The hedging along the sides softens the fencing and helps act as a sound barrier. Various planters add color, seating and plant interest, while additional lawn area helps mitigate excessive foot traffic on the soccer field. A large painted rainbow breaks through the gate separating the schoolyards adding connectivity, inclusiveness and whimsy.



# Continued...

## *Front of School*

The front area of the two schools has seen a bit of a facelift. In order to create a more welcoming environment that emphasizes education and play, there needs to be an entrance that exhibits these qualities. The addition of native tree, shrub and perennial plantings in a new large raised planter at the front of St. Michaels will add an infusion of life and color, allowing students and parents alike to engage with nature as soon as they enter the property. The planter and plant material will help add emphasis and scale to a tall beautiful stone building.

## *Playground Area*

As there was recently a large amount of work and money invested into revitalizing the playground, we felt major changes were not necessary. However, that did not prevent the inclusion of perennials in new planters, as well as additional new seating areas.



## *Field Area*

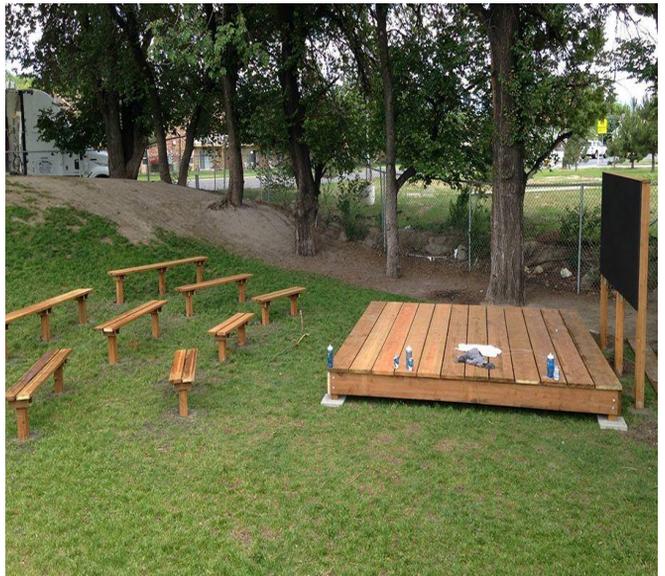
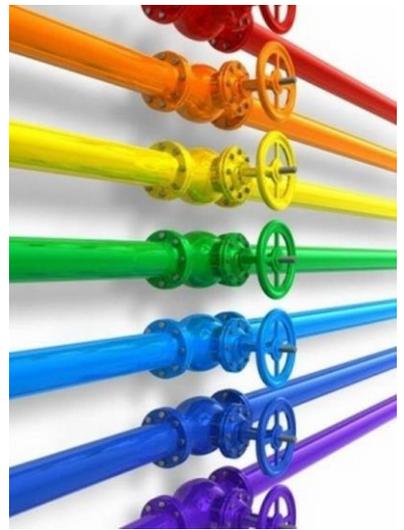
This was an area in dire need of a clean up. Often underused, the students desired an open area in which to play soccer or simply run around. So, to address this need, the area has seen some small but impactful improvements. The added lawn areas in both the central portable area and one tree area will help limit excessive traffic. Two soccer nets have been installed. Lastly, it seemed as though the field was having issues with drainage, to address this, the strategic placement of six bioswales were added to contain excess water runoff and treat it.



# Courtyard



The courtyard is an area where high school students can gather to hang out with their friends, engage with native plantings, and take part in outdoor education. This area has been designed to create a welcoming environment for all who use it. The inclusion of a medicine wheel garden creates a bond with Indigenous heritage as well as introduces a learning opportunity for students by creating an interactive garden application. With plenty of seating areas, the goal is for this area to become the preferred hangout spot for students for lunch, homework or downtime. A mulched area was left empty to allow for the displaying of student artwork to allow for deeper connectedness. Water collection from the roof of the school will be transported to rain barrels by pipes artistically oriented.



# One Tree

This area has undergone a transformation from what was once a bland, concrete laden area, into an area that provides plenty of opportunities for both education and play. The inclusion of an outdoor classroom under the large, main tree creates an opportunity for teachers to take advantage of nice weather and provide their students with fresh air while they learn. Also, what was once a parking lot, has now become a basketball court and outdoor play area, with painted games as well as a permanent basketball hoop and basketball key painted on the ground. One thing the students made clear was their desire for a basketball court, of which we at Seneca felt this area was the perfect place to include one. Opportunities for outdoor seating and places to hangout with friends were dramatically increased, as planters that double as seating were placed throughout the upper area of this location. The renovated retaining wall has also been transformed from a strict utility into ledge seating as well.



The previously retained area is now graded downward creating a natural slope and has a meandering path for accessibility. Additionally, native tree plantings are installed to improve the canopy for this side of the property. One current issue that the school was facing occurred during the winter season, as snow removal was placing large amounts of snow into the upper area. To prevent this, a smaller entrance from the water tower area was installed, as the goal is to allow year long access and utility of the improvements placed in the area. As safety is one of the most important aspects, we have maintained a six-meter clearance from the school to allow for a fire route.

# Plant List

Perennials and Grasses	
<i>Pulsatilla vulgaris</i>	Pasque Flower
<i>Aquilegia</i>	Columbine
<i>Mukgenia</i>	Mukgenia
<i>Campanula carpatica</i>	Bellflower
<i>Tradescantia</i>	Spiderwort
<i>Knautia macedonica</i>	Knautia
<i>Trollius chinensis</i>	Globe Flower
<i>Gentiana dahurica</i>	Gentian
<i>Chelone lyonia</i>	Turtlehead
<i>Lobelia cardinalis</i>	Cardinal Flower
<i>Rudbeckia hirta</i>	Black Eyed Susan
<i>Monarda didyma</i>	Bee Balm
<i>Echinacea</i>	Purple Coneflower
<i>Fragaria vesca</i>	Wild Strawberry
<i>Penstemon digitalis</i>	Foxglove Beardtongue
<i>Penstemon hirsutus</i>	Hairy Beardtongue
<i>Monarda fistulosa</i>	Wild Bergamot
<i>Achillea millefolium</i>	Yarrow
<i>Verbena hastata</i>	Blue Vervain
<i>Liatris cylindracea</i>	Cylindric Blazing Star
<i>Asclepias tuberosa</i>	Butterfly Milkweed
Trees and Shrubs	
<i>Liriodendron tulipifera</i>	Tulip Tree
<i>Acer saccharum</i>	Sugar Maple
<i>Quercus alba</i>	White Oak
<i>Tsuga canadensis</i>	Eastern Hemlock
<i>Pinus strobus</i>	Eastern White Pine
<i>Picea glauca</i>	White Spruce
<i>Celtis occidentalis</i>	Hackberry
<i>Cornus stolonifera</i>	Red-osier Dogwood
<i>Taxus x media</i>	Yew
<i>Tsuga canadensis</i>	Canadian Hemlock
<i>Enkianthus campanulatus</i>	Redvein Enkianthus

# Phasing & Budget

## PHASE 1

## PHASE 2

Item	Quantity	Unit Cost	Total Cost
Paint for Games/Murals (Assorted Colours)	10 gal	\$30.98/gal	\$309.80
Basketball Net	1 unit	-	\$1,560.00
Large Seating Rock	6 units	\$60.00/unit	\$360.00
Mulch	740m <sup>2</sup>	\$20.00/m <sup>2</sup>	\$14,800.00
Garbage Disposal Unit	1 unit	-	\$710.00
Cedar Arch	1 unit	-	\$1002.00
Large Curved Wooden Bench	3 units	\$4,238.00/unit	\$12,714.00
Concrete Stairs (6 steps, 1' tread)	1 unit	-	\$1,300.00
Asphalt Pathway	103m <sup>2</sup>	\$85.00/m <sup>2</sup>	\$8,755.00
Concrete Planter	3 units	\$582.00/unit	\$1,746.00
Tractor Tire Planter	4 units	\$1,712.50/unit	\$6,850.00
Large Trees <6'	6 unit	\$825.00/unit	\$4,950.00
Small Trees >6'	3 unit	\$525.00/unit	\$1,575.00
Perennial	21 units	\$31.00/unit	\$651.00
Grasse	6 units	\$31.00/unit	\$186.00
Shrub	35 units	\$52.00/unit	\$1,820.00
Concrete/Asphalt Removal	139m <sup>2</sup>	\$160.00/m <sup>2</sup>	\$22,240.00
Subtotal			\$81,528.80

Item	Quantity	Unit Cost	Total Cost
Rain Barrel 50 gal.	3 units	\$120.00/unit	\$360.00
Shrub	18 units	\$52.00/unit	\$936.00
Multi-Stem Shrub	2 units	\$360.00/unit	\$720.00
Hedge	25 units	\$52.00/unit	\$1,300.00
Grasse	28 units	\$31.00/unit	\$868.00
Perennial	81 units	\$31.00/unit	\$2,511.00
Tree	2 units	\$525.00/unit	\$1050
Mulch	115m <sup>2</sup>	\$20.00/m <sup>2</sup>	\$2,300.00
Garbage Disposal Unit	1 unit	-	\$710.00
Storage Unit (60"x32"x47")	1 unit	-	\$483.00
Canoe 17'	1 unit	-	\$600.00
Asphalt Pathway	101.26m <sup>2</sup>	\$85.00/m <sup>2</sup>	\$8,607.10
Precast Plant Bed	1 unit	-	\$582.00
Plant Beds @ St.Michaels	2 units	\$8302.83	\$16,605.65
Cast Stone Bench	12 units	\$809.99/unit	\$9,719.88
Table with Seats	5 units	\$828.85/unit	\$4,144.25
Wall Mounted Chalkboard	1 unit	-	\$207.99
Mural	1	\$TBD	\$TBD
Concrete/Asphalt Removal	≈90m <sup>2</sup>	\$160.00/m <sup>2</sup>	\$14,400.00
Subtotal =			\$66,104.87

## TOTAL COST

## PHASE 3

The design that the team at Seneca has presented will be completed in three stages. Phase one will be the one tree area, as this is an area in dire need of renovation and will be more accessible for all. Phase two will include the courtyard and the front of St. Michael Catholic School. Finally, phase 3 will encompass the soccer field and playground area.

**\$211,844.16**

Item	Quantity	Unit Cost	Total Cost
Concrete Planter	7 units	\$582.00/unit	\$4,074.00
Garbage Disposal Unit	1 unit	-	\$710.00
Topsoil and Sod for Soccer Field	641m <sup>2</sup>	\$12.75/m <sup>2</sup>	\$8,172.75
12'x4' Soccer Net	2 units	\$619.99/unit	\$1,239.98
Bioswale	6 units	Est. \$2000	Est. \$12,000
Pergola	4 units	\$1144.44/unit	\$4,577.76
Hedge	137 units	\$52.00/unit	\$7,124.00
Multi-stem Shrub	4 units	\$360/unit	\$1,440.00
Large Curved Wooden Bench	4 units	\$4238.00/unit	\$16,952.00
Tree	1 unit	-	\$525.00
Asphalt Walkway	87m <sup>2</sup>	\$85.00/m <sup>2</sup>	\$7,395.00
Subtotal			\$64,210.49

# A Message from the Designers



*"This was a fantastic opportunity to get real world experience in the field of landscape design. It was also a great opportunity to help provide a fantastic environment for children to both learn and play. Being part of the Seneca team has been a great experience both working collaboratively and individually, and overall, I thoroughly enjoyed this design challenge and would recommend it to any students considering taking part in the future."*



*"Working on a large-scale design and focusing on every consideration, was at times overwhelming, intimidating and challenging. Near the end there was a sense of pride and accomplishment, not only for what our team was able to create, but the amount we learned along the way. Looking back and being the nitpicker I am, there are aspects I wish we had more time for; however, I couldn't be prouder of what we managed to accomplish from sitting in front of our computers! I hope we have presented ourselves and ideas clearly and concisely. Thank you for this opportunity to make a difference for the youth of both schools, we hope our work inspires them and you."*



*"This design challenge has been a wonderful and challenging experience in the year of 2020. When we got asked, I begged my professor to be a part of this challenge as it was an opportunity to work with a design team and create a beautiful landscape for so many kids. Although we couldn't be on site to meet the kids and see the schools, it is still all coming to place and we all can't wait to see the kids faces when our team can bring colors and excitement into a beautiful outdoor space for them. Thank you for giving us this opportunity and experience, we look forward to seeing you all smile in a space that you can make memories and have fun together."*

# Continued...



*"This has been the first time working on a design of this scale and has been an exhilarating experience. This has taught me a lot about how to design for large spaces and dealing with budgets and specific criteria. We are hoping our design can bring some color and life to the area for students attending now and for years to come. We want this to be a space where all can feel safe and have fun."*



*"Crazy how designing an outdoors space has been done mostly indoors in front of a computer. I thoroughly enjoyed applying skills and knowledge I have learned in the classroom in the making of this design proposal. Regardless of the outcome, I'm excited that so many students will have a space to connect with nature."*

# Thank You