



2023 - 2028



# OPEN SPACES ASSET MANAGEMENT PLAN



# EXECUTIVE SUMMARY

Outdoor Spaces serve the community in its entirety. Parks, Playgrounds, and Pathways are community spaces that promote healthy lifestyles, attract tourism and investment, and foster a socially-coherent community. The Open Spaces are maintained by the Town of Didsbury's Parks and Public Works departments who contribute to the safety and beautification of the Town.

The primary objectives of the Open Spaces Asset Management Plan are to maintain the current level of service that Outdoor Space assets provide, ensure the safety of all users of the Open Space assets, and establish fiscally responsible plans to maintain and replace Open Space assets accordingly. Subsequent objectives include improving overall departmental efficiency in the maintenance of inventory listings and promoting the sustainability of the Town's assets and infrastructure.

While Open Space assets vary substantially from other asset classes primarily due to the diversification of subclasses, the different elements collectively offer a unique user experience, as families can enjoy a variety of assets in a singular setting. At a park, assets such as playground equipment offer a form of entertainment, bike racks offer a sense of security for user's belongings, outdoor seating such as benches and picnic tables offer a way for families to sit back and relax, and garbage disposal options provide the freedom for users to bring their food, drinks, and even pets.

Although the assets are heterogeneous to one another, they share commonality in the way they each provide a level of service to the end user. Taking this into consideration, the replacement computation was modified to prioritize the maintenance and replacement of these assets. A risk assessment was conducted for

each asset which involved two major components: the likelihood of failure of the asset and the consequence of failure of the asset. This enabled the assets to be evaluated against one another, prioritizing assets that were dangerous and more expensive than assets that were safer and lower-priced.

The likelihood of failure was measured as a reflection of the condition of the asset, ranging from Good to Poor. Subsequently, the consequence of failure was measured as a reflection of the social and economic implications of the failure of the asset, ranging from Low to Serious. The lack of industry standards for Open Space assets calls for professional oversight in the determination of risk of failure. Professional judgement was used to assess deterioration expectation due to fluctuating factors such as the age, material, and construction of each asset. The product of these components identified the priority of the maintenance and replacement of each asset.

The Open Spaces Asset Management Plan serves as a baseline for informed decision making and will help drive the funding requirements for the long-term plans of Didsbury's Open Spaces.

#### Asset Management Plan Steps:

1. Obtain **accurate and detailed inventory listing** for Outdoor Space assets.
2. Evaluate the **condition** of each asset within the inventory listing.
3. Assess the **risk of failure** of each asset within the inventory listing.
4. Prepare **preventative maintenance and replacement plans** for Open Space assets.



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# INVENTORY COLLECTION

A detailed inventory list was developed for all Open Space assets in Didsbury, categorized into Ancillary Structures, Athletics, Landscaping, Natural Assets, Other Outdoor Furnishings, Outdoor Seating, Perimeters, Playgrounds, and Walkways.

The detailed inventory data was the first step to the Asset Management Plan process. Once all known assets were documented, they could be assessed and further formulated into a maintenance and replacement plan.

The inventory process included a collaboration between internal and external resources. The Town used internal capacity to inventory and evaluate outdoor furnishings, fencing, and athletic fields, and external contractors to inventory and assess Playgrounds (the Playground Guys), Pathways (ISL), and Trees (ForTrees).

Each item's material, measurements, location, corresponding department, and item number was documented. Further criteria was collected including each asset's estimated age and replacement cost. Through external resources, all pathways and trees were plotted on a geographic information system (GIS).

Each inventory item was accounted for following a unique naming convention designed to be as descriptive as possible while remaining concise. The following format was followed:

Department-Class-Location-Subclass-Item#

Examples:

72-05.PLAY.03.01.01

32.PATH.10.34.01

72-05.SPORT.33.24.01

72-05.PARK.10.08.02

72-15.CAMP.09.03.01

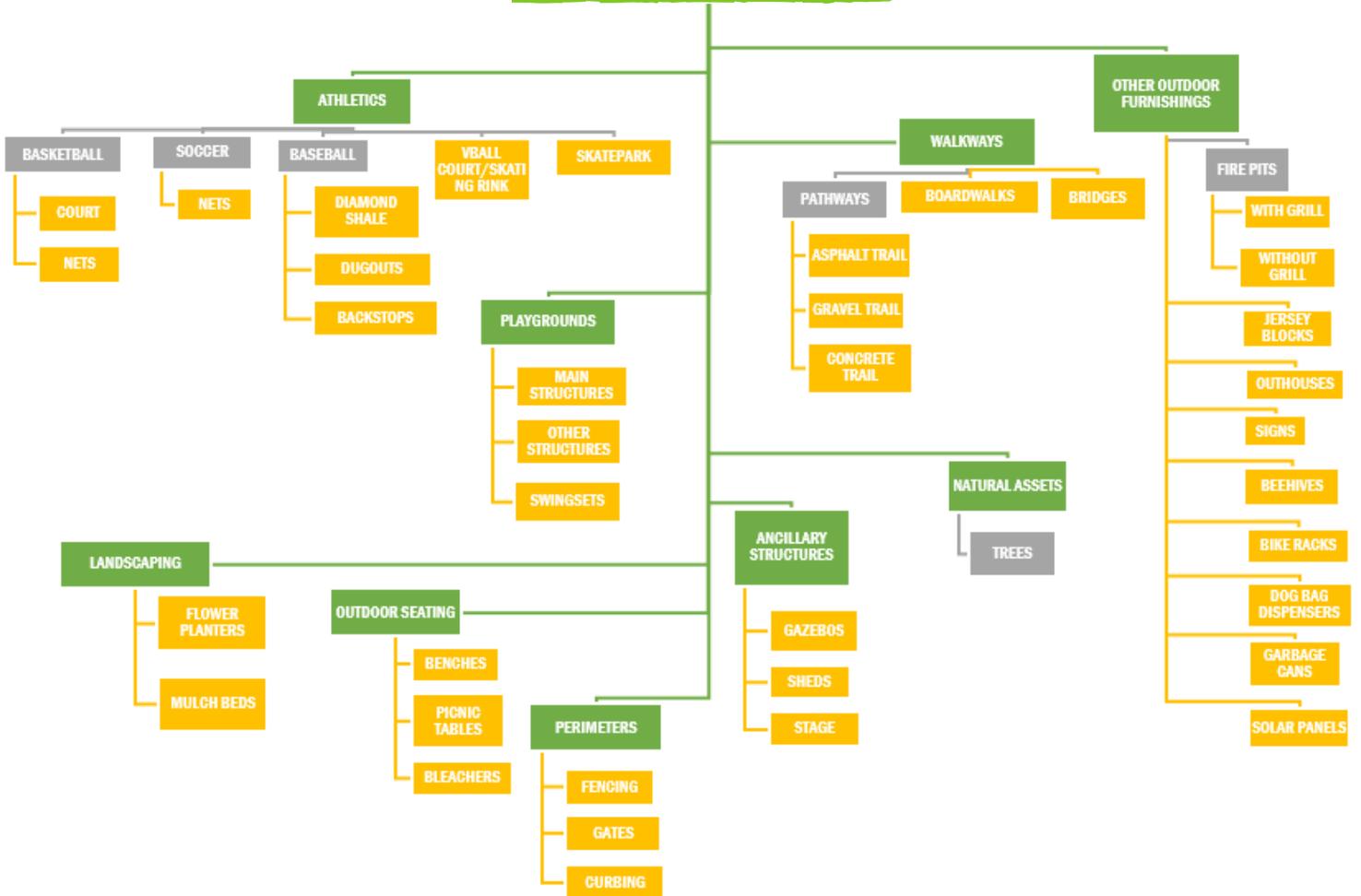
Please see Appendix A for the complete listing of all components of the naming convention.



# ASSET HIERARCHY

**2,487**

TOTAL OPEN SPACE ASSETS



# LEVEL OF SERVICE

Open Space assets vary substantially from other asset classes primarily due to the diversification of subclasses. Assets range from garbage cans to community signage, to basketball courts, which creates difficulty in determining metrics that can be comparable to one another. Each item in this unique asset class not only provides an individual level of service, but the strategic placement of Open Space assets can overall enhance user experience.

Example:

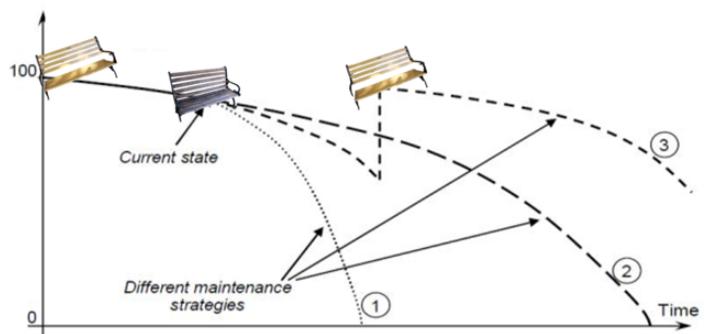
<i>Assets offering an individual level of service</i>	<i>Assets collectively enhancing level of service</i>
<b>Playground:</b> children can use the playground equipment for enjoyment.	<b>Playground, Bench, Picnic Table, and Garbage Can:</b> families can enjoy a day at the park; playground equipment to entertain children, outdoor seating and disposal options for family picnics.



To ensure the level of service that these assets provide is being maintained, the Parks and Public Works departments conduct inspections of assets, and repairs and maintenance are provided for assets as needed. To limit unexpected repair costs and ensure the future sustainability of Open Space assets, planning for preventative maintenance and repair work is a component of the asset management plan.

Example:

Benches deteriorate over time due to a variety of reasons, but most significantly from harsh climates. To extend the useful life of a bench, repainting with a weather-resistant coat of paint every two years will enhance the condition of the asset and repel it from future weather damage.



# CONDITION ASSESSMENT

Similar to the inventory process, the condition assessment was comprised of both internal and external evaluations. The Town assessed outdoor furnishings, fencing, and athletic fields, and external contractors assessed Parks (the Playground Guys), Pathways (ISL), and Trees (ForTrees). Regardless of who initiated the condition assessment, all assessments were amalgamated into the framework on this plan, ranking items as either Good, Fair, or Poor. Please see Appendices D-F for external assessments.

To remain as objective as possible when assessing the condition of each item internally, an initial assessment was conducted by an employee from the Parks department, followed by an independent review of the assessment. Externally, the internal assessments were compared to the assessments completed by the contractors, and amalgamated into the framework of this plan.

The purpose of conducting a condition assessment is to determine the current shape of all Open Space assets and plan for maintenance and replacement accordingly. Planning for future investment into Open Space assets will help drive funding requirements and eliminate unexpected repair bills.

It is important to highlight that the condition assessment of these assets is as of a specific point in time and will require continuous collaboration between departments to continue monitoring the condition and risk of each asset.



# RISK ASSESSMENT

The risk matrix was built to help develop a priority hierarchy for all assets in the Open Spaces plan to produce justifiable replacement plans. To calculate the risk of each individual item, the following formula was used:

**Risk = Likelihood of Failure x Consequence of Failure**

		Consequence		
		LOW (1)	NOTABLE (2)	SERIOUS (3)
Likelihood	IMPROBABLE (G)	1	2	3
	POSSIBLE (F)	2	4	6
	VERY LIKELY (P)	3	6	9

## Consequence of Failure

Consequence of failure was determined based on the severity of a potential failure. Each asset was cumulatively rated based on:

- Level of Service decrease (1)
- Safety concerns (1)
- Significant economic impact (> \$5,000) (1)

Low (1) = Any 1 of the above

Notable (2) = Any 2 of the above

Serious (3) = All 3 of the above

All assets will automatically receive minimum of 1 for Level of Service decrease since a potential failure of the asset would directly affect the usage of it. Every asset was then assessed for safety and economic impacts.

There are certain items that impact all 3, such as playgrounds. As an example, playground equipment is costly to replace (1), has safety concerns (1) due to its nature, and if failed would have a level of service impact (1). All play structures, for this reason, received a minimum consequence rating of 3.

Also note, that depending on the material of the item, the consequence of failure may change. As an example, chain-link fences are considered a safety hazard if failed (as there may be metal components sticking out) but a wood fence is considered safer. Professional judgement and oversight was used in the justification for consequence ratings.

In the following risk assessments for each category, the total number of assets that fall into each cell is documented.

To illustrate this, each component of the formula was further disaggregated.

## Likelihood of Failure

The Likelihood of Failure is associated with the condition of the asset. Each asset was rated either Good, Fair, or Poor, which translated to the following likelihood rating:

Good (1) = improbable to fail

Fair (2) = possible failure

Poor (3) = very likely to fail

# RISK ASSESSMENT: ANCILLARY STRUCTURES

The Ancillary Structures grouping is comprised of gazebos, the irrigation shed, and the stage located at Memorial Park. All assets were ranked as good condition (improbably failure) and low consequence of failure.

		<i>Consequence</i>		
		LOW (1)	NOTABLE (2)	SERIOUS (3)
<i>Likelihood</i>	IMPROBABLE (G)	<b>5 ASSETS</b>		
	POSSIBLE (F)			
	VERY LIKELY (P)			



The stage at Memorial Park is included on the replacement schedule (Appendix C) without an associated cost, as it is at the discretion of Council as to the level of service the future stage will provide. Ancillary Structures will be inspected annually for any changes in condition.

<b>ASSET ID</b>	72-15.CAMP.09.13.01	72-05.PARK.15.32.01	72-05.PARK.15.14.01	72-05.PARK.15.13.01	72-05.PARK.20.13.01
<b>MATRIX RESULT</b>	1	1	1	1	1



# RISK ASSESSMENT: ATHLETICS

The Athletics grouping is comprised of outdoor sporting amenities such as the basketball court, soccer field, baseball diamonds, volleyball court/skating rink, and the Skatepark. This list also includes the furnishings associated with each sport such as nets, shale, dugouts, and backstops. Most Athletics assets are in good condition (improbable failure) with low consequence, however, the dugouts at Ball Diamond 4 are ranked as poor condition (very likely failure) with low consequence. Contrarily, the Skatepark is ranked as good condition (improbable failure) with serious consequence of failure.

The preventative maintenance schedule (Appendix B) covers ball diamonds (outfield and shale leveling every two years) and the Skatepark (inspection and maintenance as required). The Soccer Pitch is not covered under the preventative maintenance plan as there are planned upgrades in 2026 through the replacement schedule (Appendix C).

		Consequence		
		LOW (1)	NOTABLE (2)	SERIOUS (3)
Likelihood	IMPROBABLE (G)	14 ASSETS	6 ASSETS	1 ASSETS
	POSSIBLE (F)			
	VERY LIKELY (P)	2 ASSETS		



ASSET ID	72-05.PLAY.05.19.01	72-05.PLAY.05.19.02	72-05.PARK.14.26.01	72-05.SPORT.33.24.01	72-05.SPORT.33.18.01	72-05.SPORT.33.18.02	72-05.SPORT.27.04.01	72-05.SPORT.28.04.01	72-05.SPORT.28.15.01	72-05.SPORT.28.15.02	72-05.SPORT.29.04.01	72-05.SPORT.29.15.01	72-05.SPORT.29.15.02	72-05.SPORT.30.15.01	72-05.SPORT.30.15.02	72-05.SPORT.30.04.01	72-05.SPORT.31.04.01	72-05.SPORT.32.28.01	72-05.SPORT.27.25.01	72-05.SPORT.28.25.01	72-05.SPORT.29.25.01	72-05.SPORT.30.25.01	72-05.SPORT.31.25.01
MATRIX RESULT	1	1	1	2	1	1	2	2	1	1	2	1	1	3	3	2	2	3	1	1	1	1	1

# RISK ASSESSMENT: LANDSCAPING

The Landscaping grouping is comprised of beautification items such as flower planters (standing and hanging) and mulch beds. These are all rated as good condition (improbable failure) with low consequence of failure.

		Consequence		
		LOW (1)	NOTABLE (2)	SERIOUS (3)
Likelihood	IMPROBABLE (G)	<b>76 ASSETS</b>		
	POSSIBLE (F)			
	VERY LIKELY (P)			



Mulch beds receive ongoing seasonal maintenance and planters receive annual replacement.

ASSET ID	72-05.PARK.11.22.01	72-05.PARK.11.22.02	72-05.PARK.11.22.03	72-05.PARK.11.22.04	72-05.PARK.11.22.05	72-05.PARK.07.22.01	72-05.PARK.07.22.02	72-05.PARK.07.22.03	72-05.PARK.07.22.04	72-05.PARK.07.22.05	72-05.PARK.26.22.01	72-05.PARK.26.22.02	72-05.PARK.26.22.03	72-05.PARK.26.22.04	72-05.PARK.26.22.05	72-05.PARK.26.22.06	72-05.PARK.26.22.07	72-05.PARK.23.22.01	72-05.PARK.23.22.02	72-05.PARK.23.22.03	72-05.PARK.34.33.X56
MATRIX RESULT	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

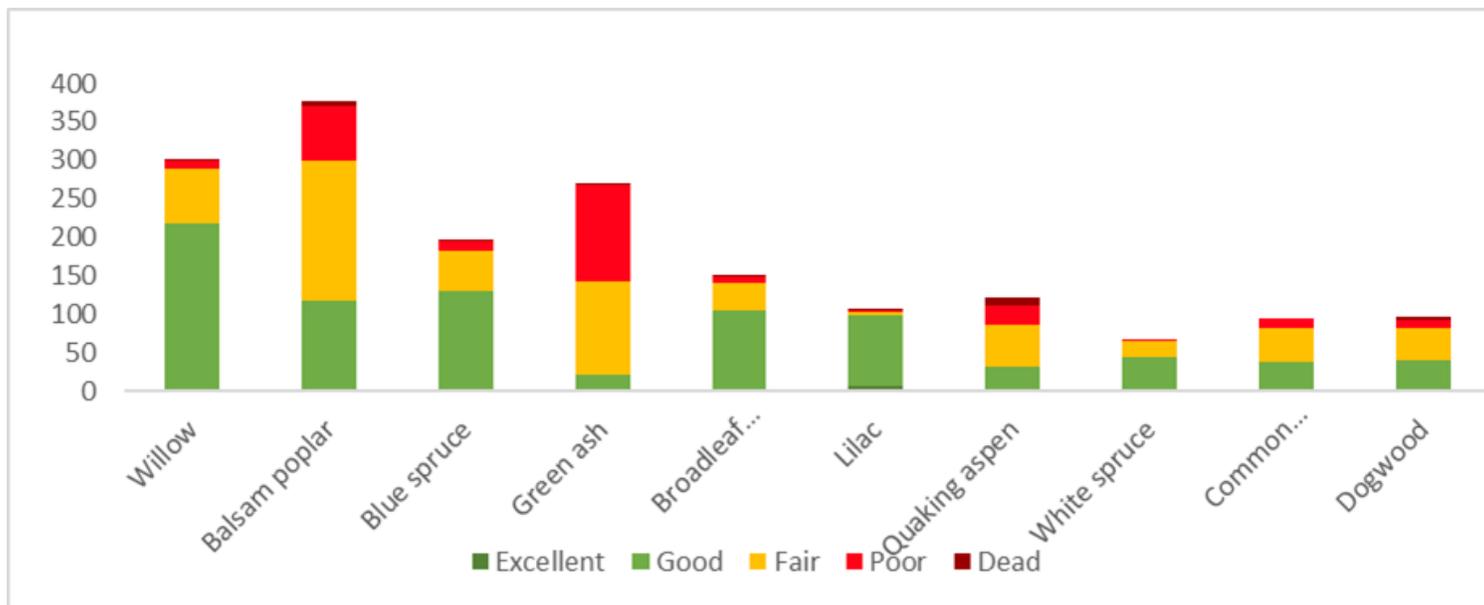
# RISK ASSESSMENT: NATURAL ASSETS

The Natural Assets grouping is comprised of the Town of Didsbury's trees. ForTrees Company Ltd (ForTrees) conducted a condition assessment of all trees; 2,090 in total, valued at ~ \$11,508,800 (Appendix D).

Translating the results from ForTree's condition assessment into the framework of this priority matrix revealed that 971 trees fell into the good condition (improbable failure) category, 764 fell into the fair condition (possible failure) category, and 355 fell into the poor condition (very likely failure) category. All trees were ranked as notable consequence due to economic implications of replacing such valuable trees. A significant concern is related to the Town's Green ash trees (~15.2% of total trees). There is potential for Emerald ash borer, a threatening insect, to infect all Green ash trees in Didsbury, depleting our inventory by 15%.

Tree maintenance is included on the preventative maintenance schedule (Appendix B), with tree pruning/preventative treatments to address the risk of Emerald ash borer entering into town, removal maintenance, and replacement maintenance.

		Consequence		
		LOW (1)	NOTABLE (2)	SERIOUS (3)
Likelihood	IMPROBABLE (G)		<b>971 ASSETS</b>	
	POSSIBLE (F)		<b>764 ASSETS</b>	
	VERY LIKELY (P)		<b>355 ASSETS</b>	







# RISK ASSESSMENT: PERIMETERS

The Perimeters grouping is comprised of all fencing, including gates, and curbing around outdoor spaces. Most of the Perimeters assets are ranked as good condition (improbable failure) with low to notable consequence. Some fencing and curbing are in fair condition (possible failure) with notable consequence, namely the fencing and curbing at Kinsmen park, and the curbing at Southridge park, Westhill park, and 15A park. Most concerning is the fencing at Eric’s park and Westheights park as they are ranked as poor condition (very likely failure) with notable consequence.

Fencing and curbing are included in the preventative maintenance schedule (Appendix B) with maintenance as needed as these items usually require small sections to be replaced at a time. Eric’s Park fencing will be included in the replacement plan- (Appendix C) as part of the scheduled park replacement in 2023.



		Consequence		
		LOW (1)	NOTABLE (2)	SERIOUS (3)
Likelihood	IMPROBABLE (G)	13 ASSETS	12 ASSETS	
	POSSIBLE (F)	4 ASSETS	5 ASSETS	
	VERY LIKELY (P)		3 ASSETS	

ASSET ID	72-05.PLAY.01.05.01	72-05.PLAY.01.17.01	72-05.PLAY.02.17.01	72-05.PLAY.02.05.01	72-05.PLAY.03.17.01	72-05.PLAY.04.17.01	72-05.PLAY.04.05.01	72-05.PLAY.04.05.02	72-05.PLAY.04.06.01	72-05.PLAY.05.05.01	72-05.PLAY.05.05.02	72-05.PLAY.05.05.03	72-05.PLAY.05.05.04	72-05.PLAY.06.05.01	72-05.PLAY.06.17.01	72-05.PLAY.07.17.01	72-05.PLAY.08.17.01	72-05.PLAY.08.05.01	72-15.CAMP.09.17.01	72-15.CAMP.09.05.01	72-05.PARK.13.05.01	72-05.PARK.14.05.01	72-05.SPORT.33.05.01	72-05.SPORT.27.06.01	72-05.SPORT.28.06.01	72-05.SPORT.29.06.01	72-05.SPORT.30.05.02	72-05.SPORT.30.06.01	72-05.SPORT.31.06.01	72-05.PARK.17.05.01	72-05.PARK.17.05.02	72-05.PARK.17.06.01	72-05.PARK.24.06.01	72-05.PARK.26.17.01	72-05.PARK.26.17.02	72-05.PARK.19.05.01	72-05.PARK.19.05.02	
MATRIX RESULT	4	4	2	6	4	4	2	2	2	6	6	1	1	2	4	1	1	1	2	1	2	1	1	2	2	2	2	2	1	1	1	1	1	2	2	2	2	2

# RISK ASSESSMENT: PLAYGROUNDS

The Playgrounds grouping is comprised of main structures, swing sets, and other structures, such as teeter totters, climbers, spring loaded toys, etc. There are nine playgrounds across Didsbury, each of which endured a formal assessment in 2016, and a follow-up assessment in 2022 by The Playground Guys (Appendix E). These assessments were translated into the framework of this priority matrix.

Most concerning are the 3 playgrounds that fell into the fair condition (possible failure) with serious consequence ranking. These include Eric's park's main structure, 15A park's main structure, and Valarosa park's other structure (elephant). This is primarily due to the age or installation of the equipment.

Playgrounds are included in the preventative maintenance schedule (Appendix B) receiving inspection and repairs as needed, as well as the replacement schedule (Appendix C) following the original recommendations made in 2016 with adjustments as per the 2022 risk assessment.

		Consequence		
		LOW (1)	NOTABLE (2)	SERIOUS (3)
Likelihood	IMPROBABLE (G)			<b>35 ASSETS</b>
	POSSIBLE (F)			<b>3 ASSETS</b>
	VERY LIKELY (P)			



All playgrounds received a minimum risk assessment ranking of 3. This is because, even if the play structure is in good condition, there would be serious consequence of failure. Keep in mind that consequence of failure was based on three factors: Level of Service, Safety, and Economic.

ASSET ID	72-05.PLAY.01.01.01	72-05.PLAY.01.01.02	72-05.PLAY.01.01.03	72-05.PLAY.01.02.01	72-05.PLAY.01.03.01	72-05.PLAY.01.03.02	72-05.PLAY.01.03.03	72-05.PLAY.02.01.01	72-05.PLAY.02.02.01	72-05.PLAY.02.02.02	72-05.PLAY.02.03.01	72-05.PLAY.03.01.01	72-05.PLAY.04.01.01	72-05.PLAY.04.02.01	72-05.PLAY.05.01.01	72-05.PLAY.05.02.01	72-05.PLAY.06.01.01	72-05.PLAY.06.01.02	72-05.PLAY.06.02.01	72-05.PLAY.06.03.01	72-05.PLAY.06.03.02	72-05.PLAY.07.01.01	72-05.PLAY.07.01.02	72-05.PLAY.07.01.03	72-05.PLAY.07.01.04	72-05.PLAY.07.02.01	72-05.PLAY.07.03.01	72-05.PLAY.07.03.02	72-05.PLAY.07.03.03	72-05.PLAY.07.03.04	72-05.PLAY.08.01.01	72-05.PLAY.08.03.01	72-05.PLAY.08.03.02	72-05.PLAY.08.03.03	72-05.PLAY.09.02.01	72-15.CAMP.09.03.01	72-15.CAMP.09.03.02	72-15.CAMP.09.03.03				
MATRIX RESULT	3	3	3	3	3	3	3	6	3	3	3	3	3	3	3	3	6	3	3	3	3	3	3	3	6	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

# RISK ASSESSMENT: WALKWAYS

The Walkways grouping is comprised of asphalt pathways, gravel pathways, concrete pathways, foot bridges, and boardwalks. ISL conducted a formal assessment of the Town's pathways ranking each asset using the following metrics: connectivity, accessibility, user experience, functionality, constructability, and safety (Appendix F).

		Consequence		
		LOW (1)	NOTABLE (2)	SERIOUS (3)
Likelihood	IMPROBABLE (G)		<b>6 ASSETS</b>	
	POSSIBLE (F)		<b>3 ASSETS</b>	
	VERY LIKELY (P)		<b>3 ASSETS</b>	

Translating the results from ISL's condition assessment into the framework of this priority matrix revealed that the pathways in Kildeer (15th Ave), Westhill, and Meadowview are ranked as poor condition (very likely failure) with notable consequence.

ASSET ID	32.PATH.15.34.01	32.PATH.11.34.01	32.PATH.12.34.01	32.PATH.25.34.01	32.PATH.18.34.01	32.PATH.04.34.01	32.PATH.21.34.01	32.PATH.10.34.01	32.PATH.17.34.01	72-05.PARK.10.21.01	72-05.PARK.15.30.01	72-05.PARK.15.30.02
MATRIX RESULT	2	2	4	4	6	6	6	2	4	2	2	2

Similarly, the pathways in Shantz, Hospital Hill, and Deer Coulee are ranked as fair condition (possible failure) with notable consequence.

Pathway maintenance is currently being informed by feedback submitted by users. Pathways are included as part of the preventative maintenance schedule (Appendix B), receiving inspection and maintenance/replacement as required.

Also note that Pathways are included in the replacement schedule (Appendix C) without an associated cost as there is potential for future pedestrian connectivity within Didsbury. If Didsbury is successful in receiving the Active Transportation Fund grant, then a Pedestrian Connectivity Master Plan will serve as guidance for new pathways, pathway replacement, and pathway maintenance and the Open Spaces Asset Management Plan will be adjusted.



# RISK ASSESSMENT: WALKWAYS CONTINUED

Value of Pathways by Condition

**\$1,553,690**

Good condition



**\$456,180**

Fair condition



**\$193,740**

Poor condition



# RISK ASSESSMENT: SUMMARY

## All Assets (except for trees)

		Consequence		
		LOW (1)	NOTABLE (2)	SERIOUS (3)
Likelihood	IMPROBABLE (G)	306 ASSETS	27 ASSETS	36 ASSETS
	POSSIBLE (F)	5 ASSETS	12 ASSETS	3 ASSETS
	VERY LIKELY (P)	2 ASSETS	6 ASSETS	0 ASSETS

## All Assets (including trees)

		Consequence		
		LOW (1)	NOTABLE (2)	SERIOUS (3)
Likelihood	IMPROBABLE (G)	306 ASSETS	998 ASSETS	36 ASSETS
	POSSIBLE (F)	5 ASSETS	776 ASSETS	3 ASSETS
	VERY LIKELY (P)	2 ASSETS	361 ASSETS	0 ASSETS



of all assets fall in the lower risk portion of the risk matrix



of all assets fall in the lower risk portion of the risk matrix

# CONCLUSION

Didsbury offers various Open Space amenities including playgrounds, athletic grounds, outdoor seating, walkways, perimeters, landscaping, natural assets, ancillary structures, and other outdoor furnishings. Each asset individually, and as a group, collectively, offer a level of service to residents and visitors alike.

To ensure the Town of Didsbury's Open Spaces are maintained and operating, the preventative maintenance (Appendix B) and replacement (Appendix C) schedules should be implemented into formal budget documents. These schedules prioritize the maintenance and replacement of Open Space assets based on their respective condition and risk assessments completed above.

It is important to keep in mind that Asset management is a continuous operation; asset conditions are constantly changing whether aging and/or other external factors, industry standards and best practices continue to evolve over time, and assets that receive maintenance or replacement require continuous documentation. Maintaining an up-to-date inventory listing including condition and risk assessments will help to drive priority-based budgeting.

The Open Spaces Asset Management Plan should be reviewed annually, with any necessary adjustments brought forward to guide informed decision making for the long-term goals and plans of Didsbury's Open Spaces.

