ASSET MANAGEMENT PROGRESS & 2017-2021 CAPITAL PLAN

VILLAGE OF TAHSIS
PUBLIC INFORMATION SESSION
MARCH 20th 2017

Presenter: Lisa Kristiansen
KRISTIANSEN & ASSOCIATES

THE VILLAGE'S CAPITAL ASSET GROUPS

7 CAPITAL ASSET GROUPS

CAPITAL ASSET GROUPS

BUILDINGS & OTHER STRUCTURES

MACHINERY & EQUIPMENT

ROADS & BRIDGES

DRAINAGE

WATER

SEWER

LAND

CORE CAPITAL ASSETS

Those that are fundamental to the delivery of essential services.

e.g. water treatment system.

3 CORE ASSET GROUPS

CORE ASSET GROUPS

ROADS & BRIDGES

WATER

SANITARY SEWER

CRITICAL ASSETS

CRITICAL ASSETS

Those with a relatively high risk of failure and major consequences (e.g. safety related) when they do fail.

ASSET MANAGEMENT

WHAT IS ASSET MANAGEMENT ABOUT?

Making sound decisions around the future repair or replacement of assets.

Preventing potential safety issues due to service disruptions.

Taking the communities desired LOS into consideration.

Accomplishing the above with limited resources.

REQUIREMENTS OF ASSET MANAGEMENT

information

decisions

execution plans

financial plan

ASSET INFORMATION IMPROVEMENT & CONSOLIDATION EFFORTS

2016 CORE ASSET INFORMATION PROJECT

The 2016 project consolidated & reorganized the Village's asset information using the following:

1: McElhanny Capital Works Planning Study for the Village in 2008.

2: Finance's accounting focused asset register content.

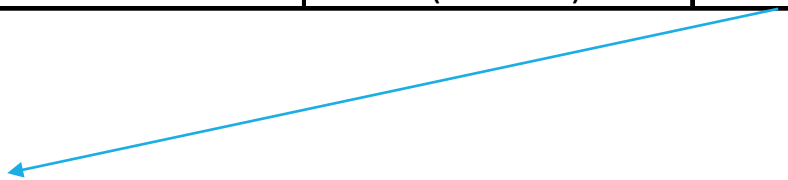
3: Public Works clarification/amendments to register content.

CONTENT OF WATER ASSET RECORDS BEFORE THE PROJECT

	Year acquired	Description	Useful life	
	1960	Barnacle Beach	40	
	1960	Cardiac Climb	40	
	1960	Churchill Drive	40	

CONTENT OF WATER ASSET RECORDS AFTER THE PROJECT

asset group	asset category_1	asset category_2	year added to inventory
water infrastructure	water works	hydrants	1955
water infrastructure	water works	hydrants	1960
water infrastructure	water works	valves (150mm)	1955
water infrastructure	water works	valves (150mm)	1960

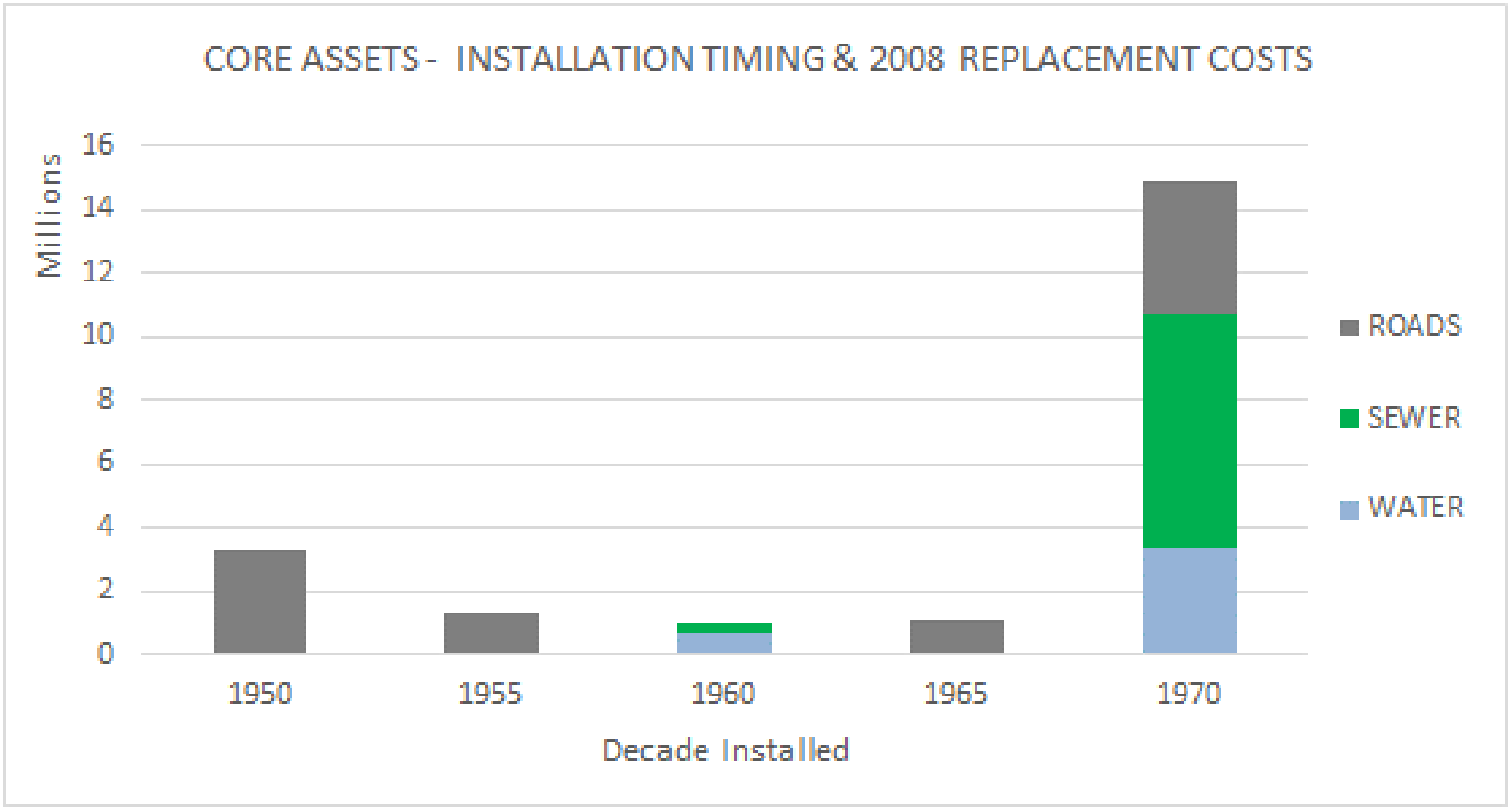


location_road	quantity meters or #units	price per meter or per unit	replacement cost = quantity x price	year replacement cost estimated
Rosea	1	3500	3500	2008
Barnacle Beach	1	3500	3500	2008
Rosea	2	1000	2000	2008
Cardiac Climb	1	1000	1000	2008

THE RENEWAL BACKLOG STUDY FINDINGS

CORE ASSETS NEAR END OF USEFUL LIFE

INSTALLATION TIMING AND 2008 REPLACEMENT COSTS



MAGNITUDE OF THE 2016 RENEWAL BACKLOG

2016 Replacement Costs by Asset Group

Year(s) Installed	WATER	SEWER	ROADS	ALL
1950	77906	0	3526688	3,604,594
1955	0	0	1453619	1,453,619
1960	802531	509685	224852	1,537,067
1965	0	0	1397247	1,397,247
1970	4356074	9406971	5322968	19,086,013
1980 +	369453	0	595382	964,835
TOTALS	5,236,511	9,916,656	12,520,755	**28,043,375**

* 2016 Renewal backlog (with 3.0 % construction cost inflation): sum of replacement costs for assets whose remaining useful life has expired prior to 2016 but have not been renewed or replaced.

** **Expected useful life** - the period over which a capital asset is expected to be used - useful life is used in the calculation of depreciation.

MAGNITUDE OF THE 2016 RENEWAL BACKLOG

2016 Replacement Costs by Asset Group

Year(s) Installed	WATER	SEWER	ROADS	ALL
1950				3,604,594
1955				1,453,619
1960		2016 Renewal Backlog = 27 M		1,537,067
1965				1,397,247
1970				19,086,013
1980 +	369453	0	595382	964,835
TOTALS	5,236,511	9,916,656	12,520,755	**28,043,375**

* 2016 Renewal backlog (with 3.0 % construction cost inflation): sum of replacement costs for assets whose remaining useful life has expired prior to 2016 but have not been renewed or replaced.

** **Expected useful life** - the period over which a capital asset is expected to be used - useful life is used in the calculation of depreciation.

IMPLICATIONS OF THE RENEWAL BACKLOG

IMPLICATIONS OF THE RENEWAL BACKLOG

- A large percentage of the Village's in-scope water, sewer, and roads assets have already exceeded their expected useful life and will soon require replacement or substantial renewal.

- The current level of funds available is wholly inadequate to meet the amounts required to cover these replacement needs.

- As such, these funding levels will be insufficient to continue to sustain existing services.

- It is clear that service levels in some areas will have to be reduced and/or external sources of funding or revenue increases will have to be considered.

THE 2017 CORE ASSET ASSESSMENTS

2017 CORE ASSET ASSESSMENTS

1: 2017 Water Leaks Detection Project

2: 2017 Rec Center Building Assessment Findings

3: 2017 Sewer System Assessment

CAPITAL PLANNING ACTIVITIES

CAPITAL PLANNING ACTIVITIES

project selection

development of execution plans

identifying source of financial means

CURRENT CAPITAL PROJECT LIST

HIGHEST PRIORITY PROJECTS

CORE ASSETS

ROADS

surface, structure, underlying water/sewer assets) **$ 2,590,000** (incl.)

WATER

water system, leak fixes, water meters) **$ 555,000** (incl.)

SEWER)

condition assessment of sewer assets **$ 25,000** (incl.)

LOWER PRIORITY PROJECTS

NON-CORE ASSETS

REC CENTER BUILDINGS

Pool leaks and resurface, siding replacement **$ 665,000** (excl.)

OTHER BUILDINGS

North reservoir buildings, docks (gov. & airline) **$ 425,000** (incl.)

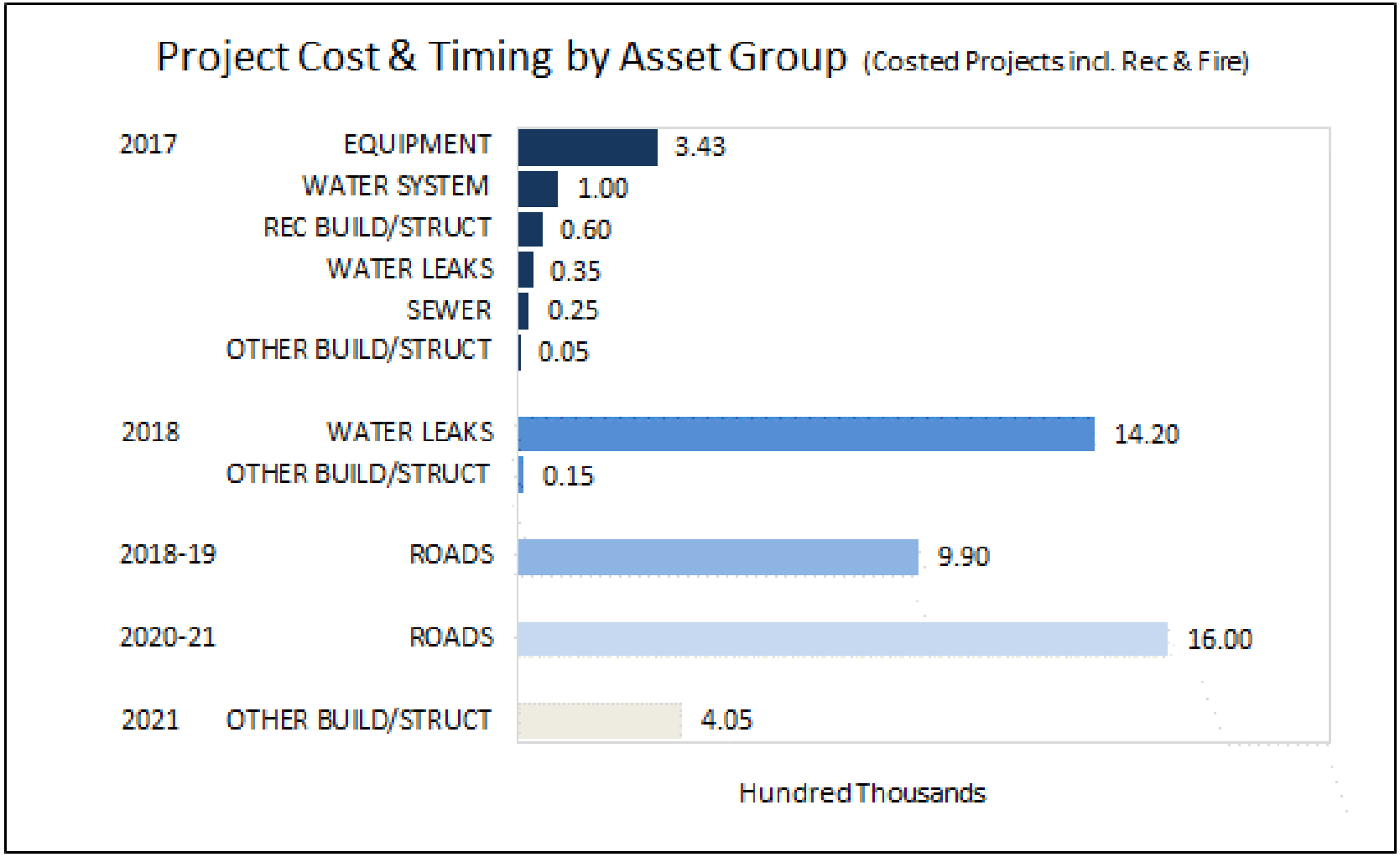
PW EQUIPMENT

Loader brake repairs **$ 12,000** (incl.)

PROJECT TIMING AND EXPENDITURES

PROJECT TIMELINE & EXPENDITURES

CAPITAL PLAN PROJECT ROLL-OUT



THE COST OF BORROWING

FUNDING TIMELINE

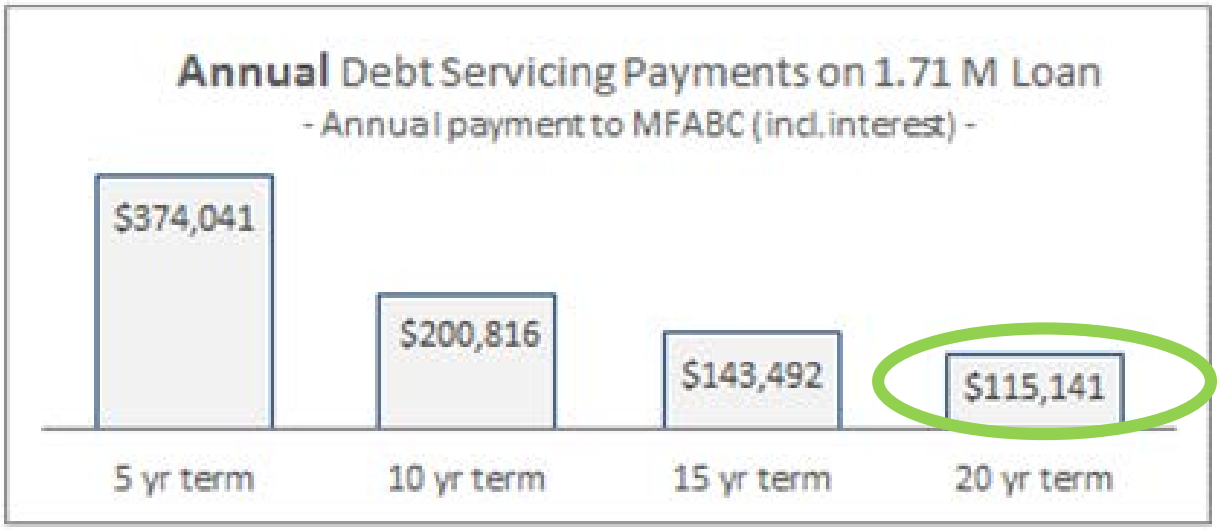
CAPITAL PLAN PROJECT EXPENDITURES

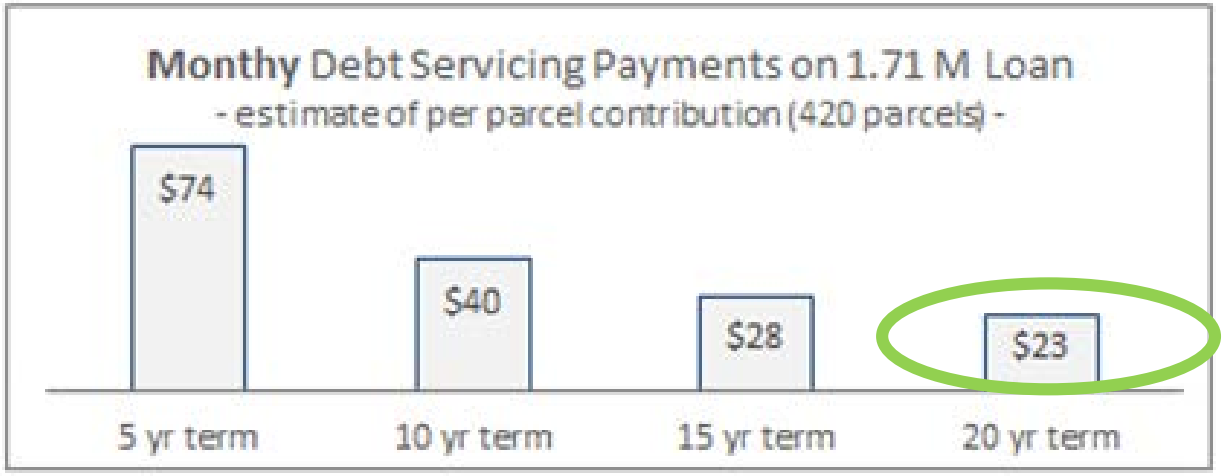
TIMELINE OF CAPITAL PROJECT FUNDING AVAILABILITY - 2017 TO 2021

Timeline	Funding Available	Funding Inputs
2017	$1,693,626	Capital Res + prior years surplus
2018	$1,516,554	50,000 - prior year surplus
2018-19	$1,131,554	50,000 - prior year surplus
2020-21	$191,493	50,000 - prior year surplus
2021	-$1,358,507	50,000 - prior year surplus
end point	**-$1,713,507**	

BORROWING OPTIONS

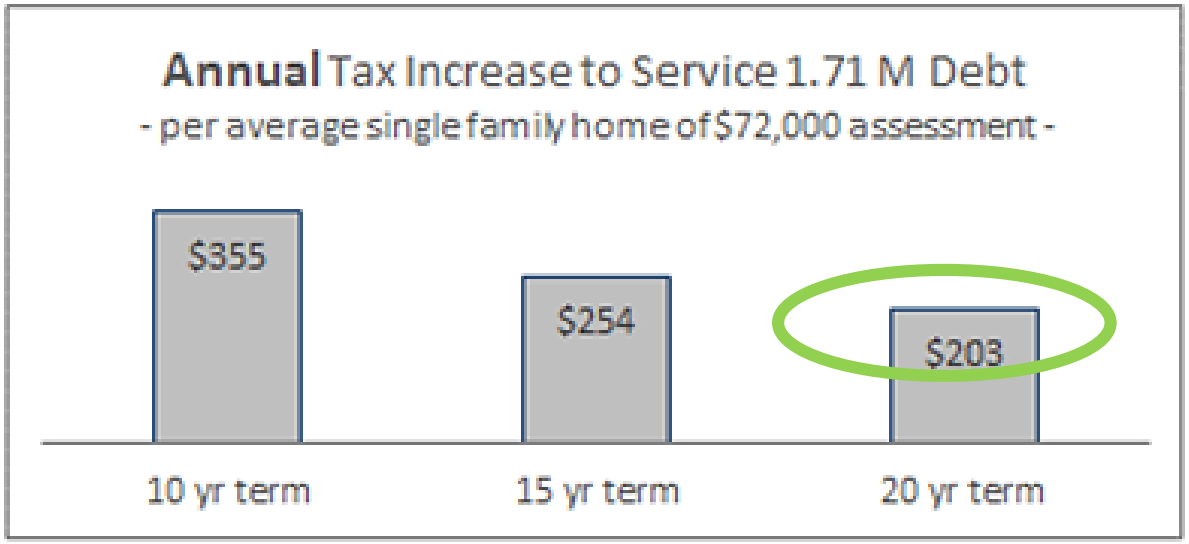
MEETING CAPITAL PLAN FUNDING NEEDS

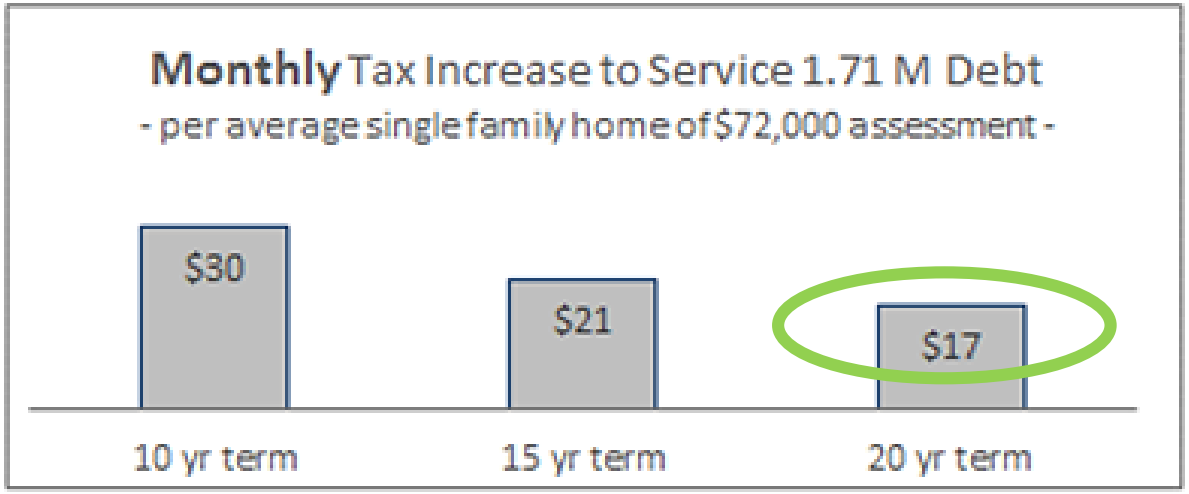




FUNDING OPTIONS

MEETING CAPITAL PLAN FUNDING NEEDS





FOOD FOR THOUGHT

LONG TERM CAPITAL PLANNING & FINANCIAL PLAN

The magnitude of the Villages asset renewal backlog and the challenges of meeting those needs with limited resources have highlighted the need to think beyond the 5 year planning cycle. The Village will need to consider creating an approach to long term capital and financial planning to ensure long term sustainability of assets and the services they deliver.

THE END – THANKS!