

Building Maintenance Division Forecast

Department of Public Works - Building Maintenance Division

October 2019

Mission Statement

- ▶ Without a reliable routine planned maintenance program and a scheduled preventive maintenance plan the town cannot effectively maintain its facilities. This program is not a short-term commitment but an ongoing continued work task, assessment of conditions, and development and implementation of preventive and corrective measures. The results of such a program can affect the town's facilities by reduction of overall costs, lessening the need for reactive response measures, providing stable conditions, increased service life of equipment and buildings, and accurate budgeting. It is our intention to build the preventive maintenance program in response to the desire of the community to protect its investment in the public buildings.

Building Maintenance Division

▶ Facilities Manager

Wayne Walkden

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▶ Operations Manager

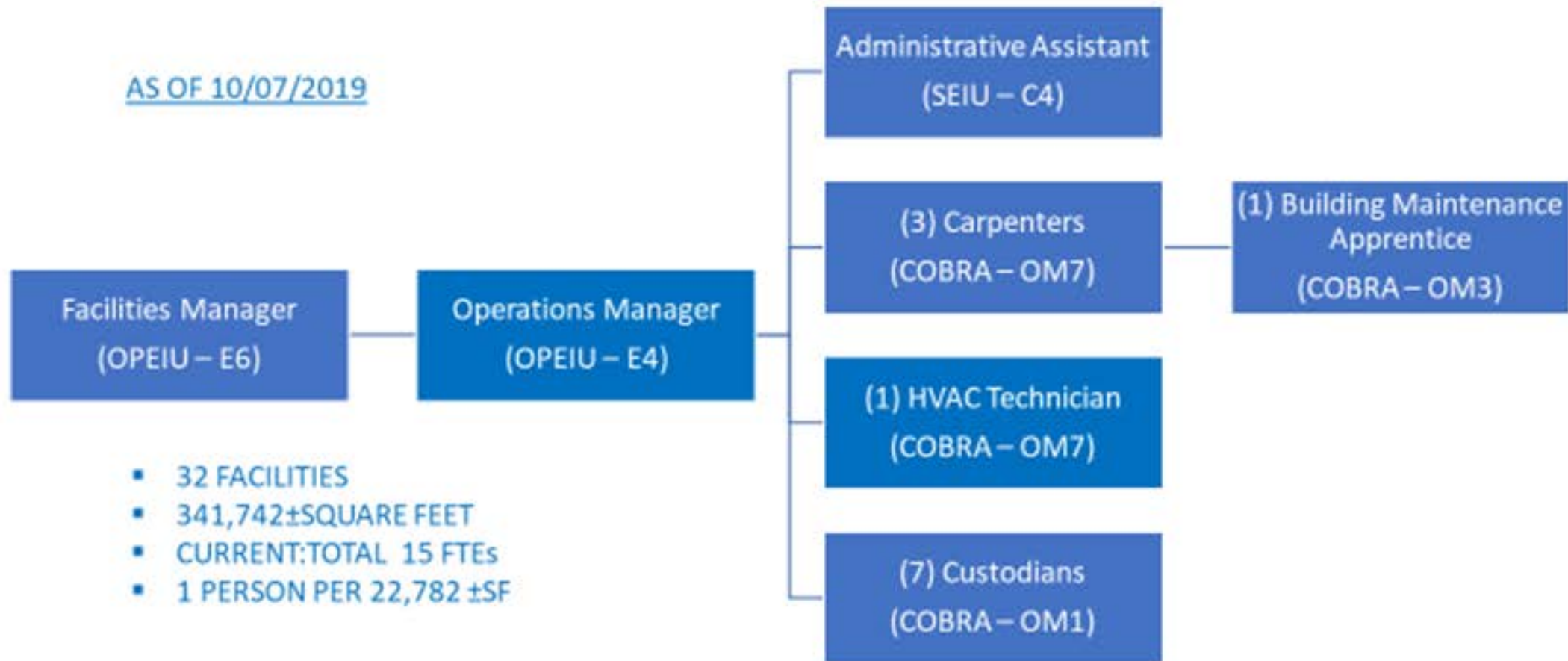
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DPW Building Maintenance Division Existing Staffing Plan

AS OF 10/07/2019



Components of 3 Year Plan

- ▶ These items detailed in the stand alone Three Year Preventive Maintenance Plan Fiscal Year 2020-2022

1. Building Maintenance Division Mission Statement and Goals.....	
2. Building Maintenance Division Organization Chart.....	
3. Staffing Responsibilities.....	
4. Work Order Process – Dude Solutions 2019.....	
5. Maintenance Priorities.....	
6. Short & Long-Term Goals.....	
6.1 Staffing.....	
6.2 Written Maintenance Manual.....	
6.3 Predictive/Preventive Maintenance.....	
6.4 Work Order System.....	
6.5 Budgeting.....	
6.6 Facilities Condition Index (FCI).....	
6.7 Building Inspections Plan.....	
6.8 Long-Term Ten-Year Facility Capital Improvement Plan.....	
6.9 Facility Staff participation in Capital Projects.....	
6.10 Segregated Local Capital Projects Fund.....	
6.11 Commissioning, re-commissioning and retro-commissioning.....	
6.12 Energy Conservation and Indoor Environmental Quality.....	
6.13 Performance.....	
7. Future Staffing Recommendations for the Building Maintenance Division – “Wish List”.....	
8. Additional Objectives.....	
Appendix A – Listing of Equipment Inventory.....	
Appendix B – Listing of Preventive Maintenance Tasks 2020.....	

Topics for Today

- ▶ Communication
- ▶ Dude Solutions - Work Order Process
- ▶ Maintenance Priorities
- ▶ Investment Prioritization
- ▶ Future Staffing Recommendations
- ▶ Budgeting for the Future
- ▶ Long Term Capital Planning
- ▶ Listing of Equipment Inventories - Example
- ▶ Listing of Preventive Maintenance Tasks - Example
- ▶ Questions?

Communications



Between building operators and the Building Maintenance Division



Between building operators and Dude Solutions software



Follow up notification system



Between Building Maintenance staff and managers - digital future



Building Maintenance Division managers to Town Supervisors, local boards & commissions, and the public - transparency, accuracy



Documentation, logs, comments - Dude Solutions software

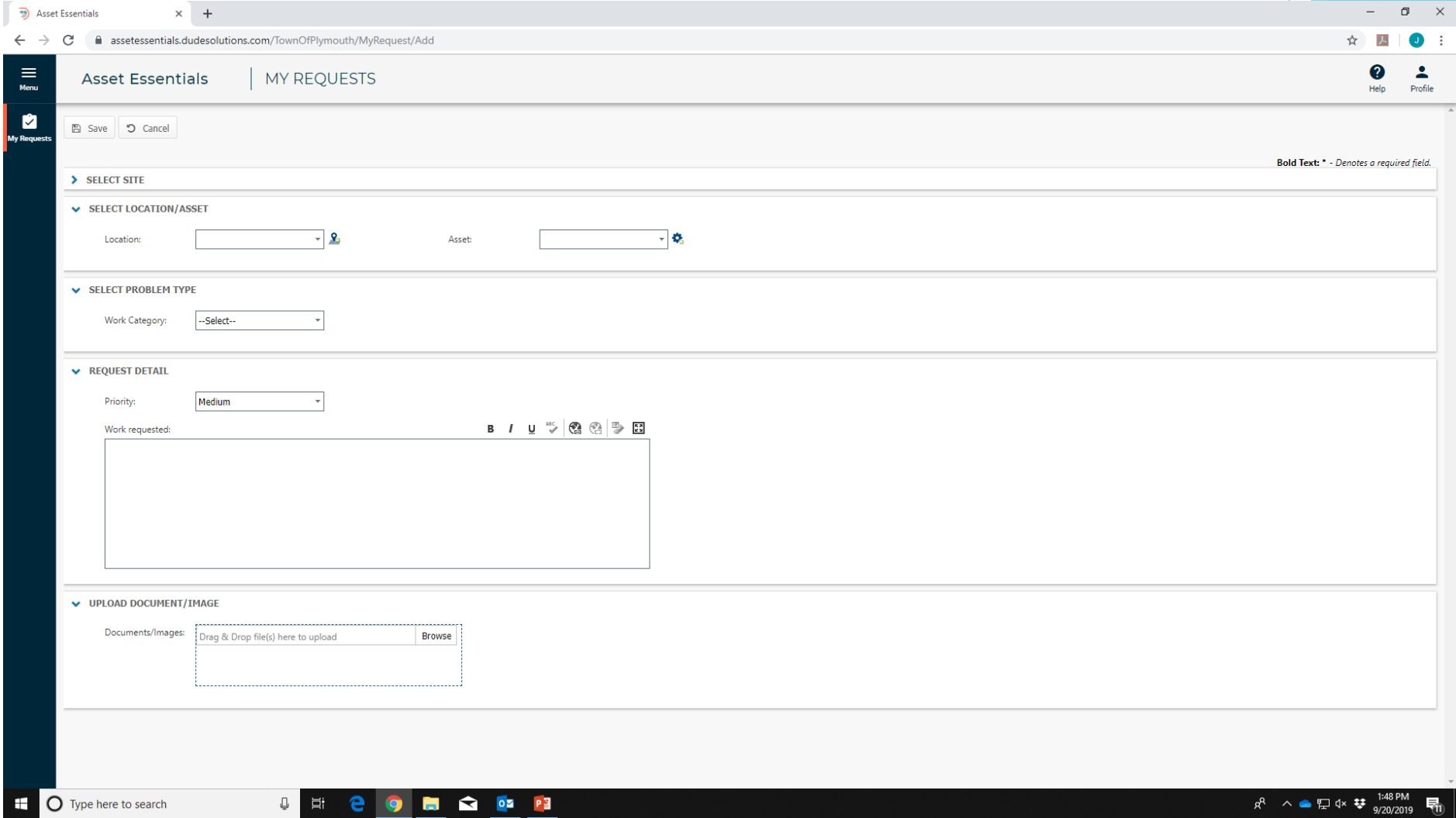
Work Order Request Tracking Page

The screenshot shows a web browser window with the URL `assetessentials.dudesolutions.com/TownOfPlymouth/MyRequest/Management`. The page title is "Asset Essentials | MY REQUESTS". The interface includes a navigation menu on the left, a top header with "Asset Essentials" and "MY REQUESTS", and a toolbar with buttons for "+ New", "Delete", "More ...", and "Print/Report". On the right side of the toolbar, there are options for "Columns", "View", "No View - Default", and "Advanced Filters".

<input type="checkbox"/>	Work Order #	Title	WO Status	Source Asset	Source Location	Originated
No data to display						

The Windows taskbar at the bottom shows the search bar with "Type here to search", several application icons (Task View, File Explorer, Edge, Mail, Teams, PowerPoint), and system tray icons including the clock showing 1:44 PM on 9/20/2019.

Work Order Request Page



Request Format Information

- ▶ Requester: *First Name Last Name, Email, Phone Number (Cell#)*
- ▶ Location: *Building, Room #, Asset Location*
- ▶ Date of Request: *(MM,DD,YYYY)*
- ▶ Description: *Brief, but detailed description of request for work/requirement/deficiency.*
- ▶ Priority: *Critical, High, Medium, Low*

Priority Codes Definitions

- ▶ **Critical**: *Situations which require immediate action to prevent loss or damage to Town property, restore essential services that have been disrupted, and restore operational capability. Work primarily identified to prevent immediate danger to personnel and equipment. Respond Immediately and mitigate within 24 hours.*
- ▶ **High**: *Eliminates any potential safety hazard to personnel. Potential for service disruption if not mitigated. Work identified primarily for safety reasons. Respond within 5 calendar days of approving request.*
- ▶ **Medium**: *Normal degree of urgency for work. Work that is not of an emergent nature but effects the conditions of the facility and delays services. Work primarily identified to repair/replace component capabilities Respond within 14 calendar days of approving request.*
- ▶ **Low**: *Low degree of urgency for requested work. Work that is relatively minor in scope, requires minimal amount of planning and processing, and does NOT delay services. Work primarily for preserving or upgrading the appearance of a facility. Respond within 30 calendar days of approving request.*

Work Order Status Definitions

- ▶ **New Request:** *Request has been submitted to DPW.*
- ▶ **New Request Pending Approval:** *Request has been reviewed by Operations Manager and is awaiting approval. (Request is contingent upon funding, priority, scope of work and man-power availability)*
- ▶ **New Work Order:** *Request has been approved by Operations Manager and is now a work order. (Clock starts for work order completion timeframe)*
- ▶ **Declined:** *Request has been reviewed by Operations Manager and denied. (Explanations will be clarified in the comments section of Request)*
- ▶ **In Progress:** *Work Order has been assigned to crew members and work is in progress.*
- ▶ **Pending:** *Work Order has been assigned to contractors and contingent upon scope of work and scheduling.*
- ▶ **On Hold:** *Work Order is on an on-hold status. (Explanations will be clarified in the comments section of Work Order)*
- ▶ **Parts on Order:** *Necessary materials and/or tools have been ordered to complete the Work Order. (Bill of Materials and lead time will be in comments section of Work Order)*
- ▶ **Completed:** *Work Order is completed. (Work Order will not be considered Completed until job sheet is signed by Requester signifying work requested is completed to satisfactory standard)*
- ▶ **Closed:** *Only used in Preventative Maintenance Work Orders for dynamic and non-dynamic assets. Recurring work is considered Closed once asset is decommissioned or replaced.*

Investment Prioritization Matrix

		Critical			Essential					Low	
		Structure	Roofing	Exterior walls, windows, doors	HVAC	Plumbing	Electrical	Fire Protection	Conveying	Interior Walls, Stairs & Doors	Interior Finishes & Floor covering
Facility Criticality	Critical (85-100)	1	1	1	2	2	2	2	2	3	3
	Significant (70-84)	1	1	1	2	2	2	2	2	3	3
	Relevant (55-69)	2	2	2	3	3	3	3	3	4	4
	Moderate (40-54)	3	3	3	4	4	4	4	4	5	5
	Low (1-39)	4	4	4	5	5	5	5	5	5	5

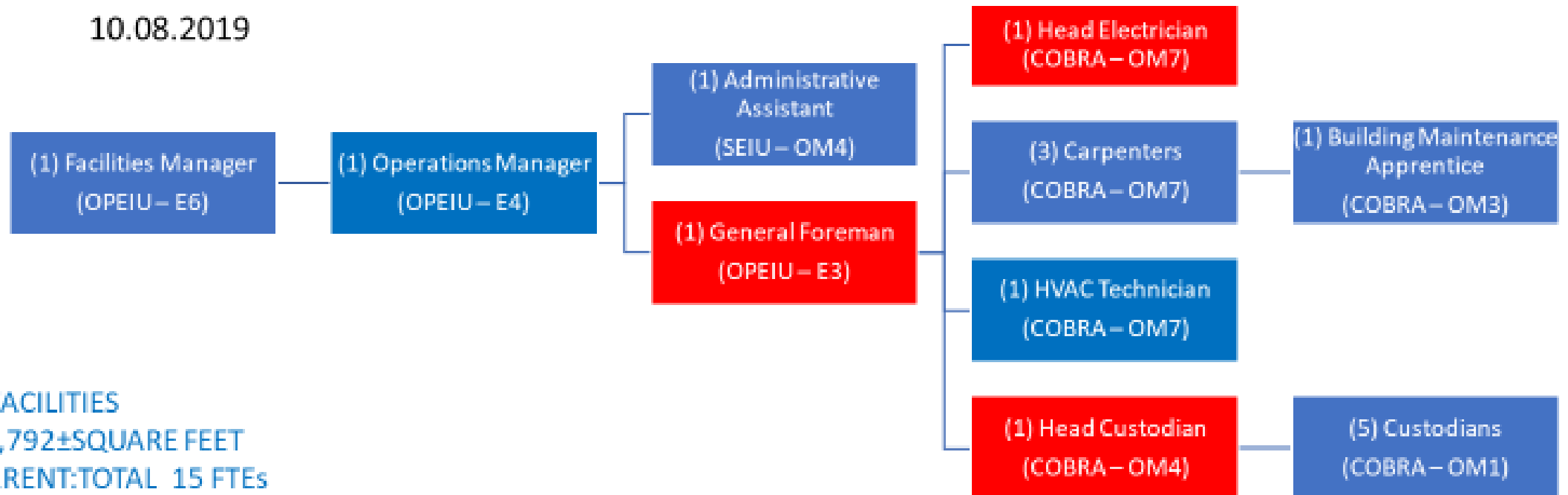
Investment Codes (1-5)

Investment Codes			Budget
Target Investment	1	Required	75%
	2	Significant	
Defer Investment	3	Moderate	25%
	4	Minor	
	5	Low	

Investment Priorities

DPW Building Maintenance Division – Future Town Facilities Staffing Plan

Revised
10.08.2019



New positions in red

- 32 FACILITIES
- 341,792±SQUARE FEET
- CURRENT:TOTAL 15 FTEs
- PROPOSED TOTAL: 16 FTEs
- 1 PERSON PER 21,359 ±SF

Budgeting for the Future

The Building Maintenance Division's FY20 Operations Budget is \$661,538. It is our belief the annual DPW Building Maintenance Operations Budget should be based upon 2.5% of the grand total Cost Replacement Value (CRV) of the town buildings. ($\$86,508,365.76 \times .025 = \$2,162,709.14$) Currently, the operating budget is approximately 30% of the annual requirement. Understanding the town cannot increase the budget that amount at one time, an increase of \$253,000 or 12% to \$914,538 or 42% of the annual requirement will be requested at the FATM2019. We plan to request annual increases of +/- 10% to the Operational Budget to ensure the town building and equipment needs are given high priority by the town.

Long-Term Ten-Year Capital Improvement Plan - Key Components

- a listing of improvements, the number of years expected for completion and an estimated cost of each improvement
- a ranking by priority, based on the expected remaining life of building systems and/or program needs
- an assessment of the financial resources required to fund and operate the desired improvements
- coordination with municipal officials, a link to the budget, routine review for implementation and dedicated funding

Equipment Listing Page 1 Example

Equipment List

Item Number	Location	Manufacturer	Est. Replace Date	# Open Needs
Description	Bldg./Unit		Days Until Replacement	
Status	Area Type		Est. Replace Cost	
01_ALM_001	01 - 1749 Court House		1/1/2025	0
Fire Alarm System,			1913	
			\$18,956.70	
01_BFP_001	01 - 1749 Court House		1/1/2020	0
Backflow Preventer, 1			86	
			\$2,233.02	
01_BLR_001	01 - 1749 Court House	H.B. Smith	1/1/2025	0
Boiler, Gas, 520 MBH			1913	
			\$41,721.52	
01_HTR_001	01 - 1749 Court House		1/1/2023	0
Unit Heater, 50 MBH			1182	
			\$6,650.98	
01_HTR_002	01 - 1749 Court House		1/1/2030	0
Radiator, Hydronic			3739	
			\$10,455.64	
01_PMP_001	01 - 1749 Court House		1/1/2025	0
Sewage Ejector Pump,			1913	
			\$10,477.46	
01_PNL_001	01 - 1749 Court House	Silent Knight	1/1/2025	0
Fire Alarm Control			1913	
			\$7,497.61	
02_ALM_001	02-Animal Shelter		1/1/2023	0
Fire Alarm System,			1182	
			\$9,077.74	
02_FAN_001	02-Animal Shelter		1/1/2021	0
Exhaust Fan and ERU,			452	
			\$36,900.37	
02_FRN_001	02-Animal Shelter	Carrier	1/1/2025	0
Furnace, Electric, 86			1913	
			\$10,341.36	
02_FRN_002	02-Animal Shelter	Ruud	1/1/2023	0
Furnace, Electric, 86			1182	
			\$10,341.36	
02_PNL_001	02-Animal Shelter	Notifier	1/1/2025	0
Fire Alarm Control			1913	
			\$35,520.78	
02_PNL_002	02-Animal Shelter		1/1/2030	0
Distribution Panel, 200			3739	
			\$13,835.85	

Listing Example of Preventive Maintenance Tasks for 2020 - (454 items in total)

	Town of Plymouth		
	Department of Public Works		
	Prepared by Wayne Walkden and James Doherty		
	Date: 09/13/2019		
	Town of Plymouth FY20 Preventive Maintenance Report		
Item #	Location	Asset	Title
1	01-1749 Court House	Sewage Ejector Pump, 1 HP	(3 MO) Pump PM (01)
2	01-1749 Court House	Boiler, Gas, 520 MBH	(3 MO) Boiler PM (01)
3	01-1749 Court House	Unit Heater, 50 MBH	(1 YR) Unit Heater PM (01)
4	01-1749 Court House	Fire Alarm Control Panel, Multiplex	(1 YR) Panel, Fire PM (01)
5	01-1749 Court House	Radiator, Hydronic Baseboard (per LF)	(1 YR) Heater PM (01)
6	01-1749 Court House	Fire Alarm System, Office Building	(1 YR) Fire Alarm System PM (01)
7	01-1749 Court House	Backflow Preventer, 1 INCH	(1 YR) Backflow Preventer PM (01)
8	01-1749 Court House	Boiler, Gas, 520 MBH	(1 MO) Boiler PM (01)
9	02-Animal Shelter	Exhaust Fan and ERU, 2100 CFM	(6 MO) Fan, Exhaust PM (02)
10	02-Animal Shelter	Ductless Split System, 2 TON	(3 MO) Split System PM (02)
11	02-Animal Shelter	Furnace, Electric, 86 to 100 MBH	(3 MO) Furnace PM (02)
12	02-Animal Shelter	Water Heater, 40 GAL	(1 YR) Water Heater PM (02)
13	02-Animal Shelter	Sprinkler System, Full Retrofit, Office (per SF)	(1 YR) Sprinkler System PM (02)
14	02-Animal Shelter	Fire Alarm Control Panel, Addressable	(1 YR) Panel, Fire PM (02)
15	02-Animal Shelter	Distribution Panel, 200 AMP	(1 YR) Panel PM (02)
16	02-Animal Shelter	Fire Alarm System, Office Building	(1 YR) Fire Alarm System PM (02)
17	02-Animal Shelter	Exhaust Fan and ERU, 2100 CFM	(1 YR) Fan, Exhaust PM (02)
18	02-Animal Shelter	Sprinkler System, Full Retrofit, Office (per SF)	(1 MO) Sprinkler System PM (02)
19	03-Cedarville Garage	Furnace, Gas, 51 to 100 MBH	(3 MO) Furnace PM (03)



Questions ?
Thank you
for listening!