BEDFORD GROUP OF DRAINAGE BOARDS

PLANT REPLACEMENT POLICY

FINANCIAL

Review date: April 2022 To be reviewed every 3 years Next review date: April 2025 Reviewed by: Joint Management Committee

Adopted by:

Alconbury & Ellington Internal Drainage Board Bedfordshire & River Ivel Internal Drainage Board Buckingham & River Ouzel Internal Drainage Board



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Policy Objectives:

The objective of this policy is to ensure Bedford IDB's plant, vehicles and other mechanical equipment are available in good working order to achieve the best cost benefits for Bedford IDB. The aim of the Plant and Equipment Replacement Policy is to:

- Follow replacement guidelines and principle of life cycle costs to assess replacement of the plant and equipment.
- Maximize inputs from operators & maintenance team to prepare plant replacement requisition.
- Reduce down time for operation staff as well as costly maintenance costs compared with asset replacement.
- Avoid repeated & time-consuming evaluation for plant and equipment that is in good working order.
- Project a 3-year replacement program for high value plant and equipment & review the Replacement Program to act in accordance with Bedford IDB's requirements.
- To purchase equipment in line with the Board's financial regulations for both purchase of equipment and sale of goods.
- To improve the Board's Health, Safety, and wellbeing and to help achieve its Environmental goals

Policy Statement:

Replacement Requisition:

- Replacement request must include following:
 - a. Reference to standard replacement cycle
 - b. Specific reasons (if doesn't match with standard replacement cycle)
 - c. Number of hours/ kilometers/miles & Years of plant being replaced
 - d. Annual maintenance cost since procurement (where possible)
 - e. Life cycle cost



- f. Safety related concern (if any)
- g. Major maintenance requirements (if any)
- h. New purchase price/quotes/specification/requirements

Board to sign off proposed category A purchases required at board meeting, unless for emergency situations where chairman and vice chairman approval will be obtained. The Board will receive the plant replacement programme in the budget JMC meeting each year. The Board will also receive information on utilization information in quarter one from the previous financial year. The Board will seek to achieve value for money with sale of goods in line with the Boards financial regulations.

Replacement Periods:

- Replacement periods will be set to provide the best economic turnover result for Bedford IDB whilst also considering Bedford IDB's operational requirements and financial resources. The following plant replacement cycle has been adopted and is based on discussions with the Chief Exec, Operations Manager, Works Manager, and the Board. This replacement cycle can be reviewed annually or as per the discretion of the Board.
- All plant (excluding small plant) should be reviewed at least 12 months prior to the Recommended Replacement Cycle or if usage/condition dictates an earlier review.
- Plant and equipment with occasional, limited usage will be individually assessed and recommended for replacement where their one-time maintenance cost reaches 50% of the current value.
- The replacement cycles are to be considered as a guide and plant and vehicles may be replaced earlier or later depending on market value, condition, and requirements. The overriding objective is to ensure the maximum return and value for the Board.



- The Operations Manager, in consultation with the Works Manager, will review replacement cycles as outlined below on a case-by-case basis as part of the Board's 3-year replacement projections, and make appropriate recommendations to the Board for the replacement.
- Consideration may also be given to machines that experience high levels of maintenance and repair costs.
- Consider extended warranties and buy backs/part exchange value.

Plant Replacement Cycles by Plant Category:

Group A - Very High value, hours-based work, minimal visible wear and tear, high repair cost.

All plant in group A, are deemed as very high value. The work these machines undertake are repetitive and hardworking, cost can be high when maintaining these machines and it is advisable to replace these items of plant as shown below to ensure the Board get the operational best out of the items of plant. Where applicable it would be advantageous to the Board to agree a buy back deal with the suppliers of the plant to ensure the Board received the best deal, however this would only be applicable if a replacement item of plant is purchased from the same supplier/manufacturers as that being sold. If not, the Boards policy for sale of equipment will follow Bedford IDB's financial regulations.

- Excavators. The proposed replacement for all excavators is 8 years/10,000 hours. It
 has been noted from previous repair and maintenance costs, that the maintenance
 costs start to accelerate once 10,000 hours are reached. The tracks, hydraulic rams &
 other expensive parts, tend to need replacing. The Board should consider extended
 warranty as well as Repairs & Maintenance contracts.
- Tractors/towing vehicle. Any new tractor should be changed every 8 years/7000 hours and new tractors purchased by the Board should try to get an extended warranty.



Group B - **Medium value, visible wear and tear, moderate repair cost, used as site support.** All plant in group B, are deemed as medium value. These vehicles and items of plant assist with transporting, maintenance, and operational duties.

- 1. Trailers that are used for moving machinery, carting silt, soil, stone, all materials, attachments etc. (excluding towable bowsers) are used to transport materials across the drainage district, assisting with various operations. These trailers are frequently used year-round, the general maintenance costs for these trailers are minor, with wearing parts the biggest cost. Providing the state of the trailer is in suitable condition, and there is no damage to the trailer, the replacement will be as and when required but a minimum of 8-10 years as a guide.
- 2. The 4x4 Trucks are used for site transport for supervision and maintenance purposes. These vehicles will be replaced after the warranty period expires (5 years or 100,000 miles) depending on condition. It's quite often that when new vehicles are purchased after 5 years, the 5-year-old vehicles are kept as pool vehicles with minimal use for another 5 years. The vehicles that are 10 years old are then sold.
- 3. Specialist attachments including tree shear, weed basket with heavy use: The proposed replacement period for specialist attachments is 5 years. These are costly to maintain and keep good value after 5 years' service. Maintenance and servicing can often cost up to 25% of the value of these assets with wearing parts. Instead of selling after 5 years, it may be better to reduce usage after replacement and sell older models where parts are limited.
- 4. Specialist attachment such as a hedge knife. These are again costly to maintain but receive lighter use than tree shears and weed basket. After 10 years, welding and new pipes are often required so this is considered a sensible time for replacement.
- 5. Flails will be replaced after 5 years or when the machinery/tractor is replaced if a higher value item or permanently attached to machine, however a condition survey will be undertaken to decide if it is necessary to change the item of plant at that time or not.



- Telehandler & forklift. The proposed replacement for the telehandler is 12 years/7000 hours as this tends to have limited hours of use but is an item used most days.
- 7. Chippers- proposed replacement 7 years. If larger/higher value chipper is purchased, this should move up to Group A.
- 8. Towable bowser- due to the risk of these items carrying fuel on the road, these should be separate to trailer replacement and be replaced every 7 years.

Group C – Hours based work, low use, low repair cost, frequent maintenance required.

All the plant in group C, is more specialist plant that will not necessary be used for long periods of time but are essential for the operational procedures to be delivered as part of the maintenance programme. This plant will have an annual conditional assessment and it will be reassessed as to whether it may require changing in the next financial plant renewal year, or it will be replaced if there are unforeseen circumstances why it is not suitable for operational works. Indicative replacement cycle of at least 10 years for all items in this category. For the Bedford IDB, this includes Aebi and other bank mowers, weed boat, Mulchers, Pump.



SUMMARY OF PLANT REPLACEMENT CYCLES

GROUP A	Very High value, hours-based work, minimal visible wear and tear, high repair cost.			
ASSET TYPE	YEARS	HOURS	COMMENTS	
Excavators	8	10,000		
Tractor	8	7,000		

GROUP B	Medium value, visible wear and tear, moderate repair cost, used as site support.		
ASSET TYPE	YEARS	MILES	
Trailers	8-10	Annually inspected and reviewed	
4x4 Truck	5	100,000	
Specialist Attachments	5	n/a	
Flails (attached)	5	n/a	
Weed Basket	5	n/a	
Towable Bowser	7	N/a	
Flail	5	n/a	
Telehandler & Forklift	12	7,000 hours	
Chipper	7	n/a	

GROUP C	Hours based work, low use, low repair cost, frequent maintenance required. High lump sum value to replace.		
ASSET TYPE	YEARS		
Aebi	10+	Annually inspected and reviewed	
Pumps	10+	Annually inspected and reviewed	
Weed boat	10+	Annually inspected and reviewed	
Various Specialist Plant	10+	Annually inspected and reviewed	
Mulcher	10+	Annually inspected and reviewed	



Version Control

Version	Changes made	Date
Version 1	n/a	August 2021