#### Agenda item 4

For decision - Proposal for compact tractor for managing Open Spaces following devolution Author: Rob Holden, Environment Manager

### Summary

In June 2025 FTC took on 57 new sites from SC through the devolution process. To provide the extra ranger capacity needed to manage these new sites FTC budgeted to take on a new ride-on mower, two new ranger posts and one extra electrical vehicle. Following a summer of managing the new sites we are now able to make a more detailed assessment of the appropriate resource needed to manage the sites.

The assessment is that rather than increasing capacity through two new posts a significant long-term saving can be made by purchasing a compact tractor. This will particularly help with freeing ranger time with hedge management as well as making a marked improvement to ranger welfare. With additional attachments the tractor can deliver further efficiency savings across a range of work tasks. The cost of the tractor and attachments would be more than met by the savings in this year alone in ranger salaries. The cost of tractor fuel can be met by the savings gained by using red diesel.

## Background

In 2024 an Open Spaces devolution review considered which sites FTC should take on from SC, together with the resource implications. The recommendation was for FTC to take 57 new sites (including 8 play areas) – see map below.

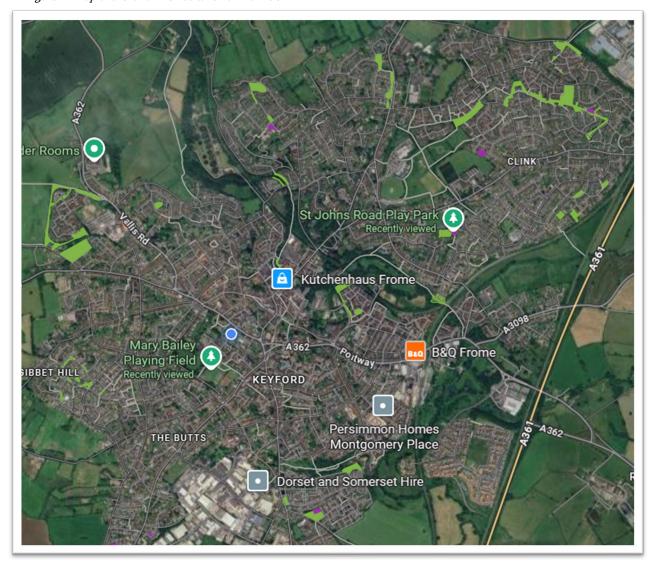


Figure 1 - Map of the land FTC has taken on from SC

To manage the significant increase in land that is widely spread across town, it was recognised that this would require and increase in capacity to be met by extra staff, vehicles and equipment. An assessment of the possible specific resources was produced, on the basis that this would be updated once actual management had started. This proposal was adopted at an Open Spaces devolution workshop (18 October 2024) with the budget ratified by Council on 15 January 2025 – see details below:

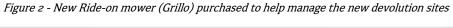
Devolution: Extra vehicles as agreed in OS	£8ok
workshop with Cllrs (18 October 2024):	
Grillo mower (£50k) and G4 EV (£30k)	
2 rangers: one employed for the full year and	£67k
one recruited after half a year.	

The decision to manage these Open Spaces was ratified by Council on 12 February 2025:

"Delegation of authority to the Environment Manager to procure the equipment necessary for the maintenance of open spaces and play parks utilising the budgets agreed by Council" The legal transfer of the land from SC to FTC is currently in the final stages of completion. In terms of FTC's practical management of these sites, this was enabled with a management agreement with SC that came into force from 1 June 2025: FTC has now been managing these new sites for over 3 months.

By managing the sites through the summer we have gained a detailed understanding of the capacity challenges and the appropriate resource changes that could address the extra capacity needed.

To date a 2<sup>nd</sup> ride-on mower (Grillo) has been purchased and is in active use. From the planned spend this leaves the allocation for 2 rangers and 1 vehicle.





The main resource implications for management of the new devolution site together with Adderwell Water Meadow and the Community Woodland, are grass cutting, hedge cutting and tree management together with the resulting logistics. Of these the biggest challenge is the hedge management.

Currently this is managed primarily though manual hedge cutting.



Figure 3 - Cutting a hedge manually with pole hedge-cutter at Marleys way

Two sites (Showfield and Birchill), which have good accessibility, are managed by contractor. However, contractor management is not appropriate in most situations due to the large full-sized tractors and attachments that are used which require wide tree-free access routes and have a significant impact on ground conditions.

The extent of the current hedge network on existing FTC land extends to 4,300m. These hedges range greatly in size, and hence complexity to cut: some are only person height while others reach up to 20' high. Managing a hedge requires cutting of both sides and extra cuts at the top.

Of this 4km+ network approx. 1.4km are managed by contractor and 2.9km are managed by hand. In terms of time the annual hedge management takes 490 hours (13 person weeks)

Turning to the devolution and other new land, there is an additional 1.6km of hedging that we will be managing for the first time this autumn. Adding this new hedge network to what already exists makes for a total hedge network of **5.9km** (see map below): equivalent to a hedge running from the Town Hall to the other side of Beckington, that needs up to four cutting passes (both sides and two shaping the top).

White Scaffolding

Para add Pa

Figure 4 - Hedge network on FTC land. Yellow is existing land, Blue is devolution land, Red is currently cut by contractors

See full details of hedge network in appendix 1 below.

To manage these extra hedges under this hand cutting regime would result in an almost **doubling of time**: an extra 440 hours on top of the current 490 hours.

Such an increase has important implications for not only ranger capacity but also welfare. Hedge cutting by hand uses machines that have the highest harm arm vibration rating (of the machines used by rangers). There are safety limits governing the level of exposure of vibrating hand tools before the risk of a health condition known as white-finger (where long term blood circulation is impacted). By the end of winter, the work as it stands is reaching the limit of what is safe for wellbeing. Nearly doubling the level of exposure is not seen as a viable option.

The alternative option of using large contractor tractors is not practical due to access constraints or the detrimental impact their use would have on the land.

An alternative to cutting by hand is to use a smaller compact tractor, which has much better access and lower ground impact. This would be used with a compact flail attachment. See below

Figure 5 – Example of a 2000kg Tractor – Kubota L2-622





Figure 6 - Example of McConnell hedge flail with 4.5m reach





# PA4330

A compact tractor would be able access 78% of the hedge network (4,600m of the 5,900m).

The time taken to manage the hedge network if using a compact tractor that can access over <sup>3</sup>/<sub>4</sub> of the land, would consist of:

- time continuing to manage the non-accessible hedges by hand and,
- the tractor operation, including an additional ranger acting as banksman (both for safety and to cut hard to reach areas manually with hedge trimmer / brush cutter)

The table below summarises the time needed to manage the entire hedge network (the combined total across both the devolved land and existing land) showing the difference when compared to the use of a compact tractor.

		Tractor hours	Manual Hours	TOTAL Hours	
	Currently: hou	rs to manage <i>existi</i>	ing hedges manually	y ~ 3km	
Existing – by		0	490	490	
hand				, -	
	Hours to manage all hedges (existing + devo) ~6km				
Manually (no		0	930	930	
Tractor - the					
status quo)					
With Tractor		280	250	530	
Saving with				400	
Tractor				7	

## Welfare impact

In terms of **welfare**, without the use of a compact tractor the exposure levels on vibrating hedge trimmers nearly doubles (490 hours to 930 hours). This is not seen as a viable option.

In contrast, with the use of a compact tractor, the manual time cutting hedges drops to about a quarter of this (260 vs 930 hours).

Put another way, with the use of a tractor, levels of exposure to hedge trimmer vibration would actually drop to nearly half current levels (250 vs 490) even despite the hedge network nearly doubling. This would mark a really significant improvement to staff welfare.

#### **Efficiency Saving**

In terms of **efficiency**, the total time saving cutting the hedge with the support of a manual tractor compared to the situation (managed entirely by hand) is **400 hours** (530 instead of 930 hours). This represents **21% of an FTE (full time equivalent) ranger**.

Because we would be able to manage the contractor hedges (Showfield and Birchill) ourselves (this is included in the above calculations) there is also the financial saving on contractors: saving £2k/year.

# Further benefits of a compact tractor

In addition to the welfare and efficiency effects of a tractor hedge cutting operation, a compact tractor with specific attachments would support the year-round land management operation in a variety of ways.

Excavator (back hoe)	£5,600	Digging operations for removing remnant concrete fencing foundations, tree stumps, creating holes for larger tree planting, drainage ditches			
Topper (flail mower)	£4,500	Periodic cutting of large or rough fields including Adderwell, Rodden Meadow, Showfield, Birchill, Dippy			
Front loader	£5,000	Lifting of volume into trailer or on-site such as top soil, sand, gravel, stone, mulch			
Front forks	£1k	Moving pallets of weight within depot and taking deliveries on pallets			
Tipping Trailer	£3,500	Ability to load and move machinery (as a flatbed trailer with the sides removed) and material in volume (with trailer sides on) within town			
ATTACHMENTS TOTAL	£19,000				

#### Saving on new ranger posts

With the capacity saving on hedge cutting combined with productivity gains in a wide variety of other areas, the proposal is that if we purchase a compact tractor we do not need at this stage need to change the ranger staff resource.

In purchasing the tractor this would eliminate the need for one of the two budgeted new ranger posts. This would save £45k this year but also continue to be an ongoing future saving of £45k in future years.

It may be that the other of the two budgeted ranger posts may still be required at some point in the future, together with the already budgeted extra vehicle if we take on one more post. However, this would be reviewed once the tractor was in use and would mean that there would be **no recruitment in this financial year**.

In terms of savings for this year, this means that if a tractor were purchased this could be offset by the fact that none of this year's remaining budgeted spend (£67k salaries and £30k vehicle) would be needed.

#### Cost of ownership

The main cost associated with running a tractor will be the **fuel**. However, this cost can be offset by savings that can be made on existing fuel usage. We currently use normal (white) diesel with full duty applied – last year total spend on diesel was £2,600. However, our machines that work off-road (mowers and the tractor if purchased) qualify for using red diesel (agricultural diesel with a red die that is sold with very low duty).

The cost of low-duty red diesel is about half the price of diesel bought on the forecourt. The saving on the fuel used for the ride-on mowers would therefor cover most of the cost of red diesel for the tractor.

To use red diesel we would have to invest in a bunded tank with a pump. In this way we can take bulk delivery of red diesel. Somerset Council have confirmed that we can store diesel in a bunded tank in the depot.

Not only would this reduce costs but also the time needed to fill up gerry cans (the current fuelling method).

An annual service of the tractor (or once usage levels reach 300 hours) would be £750.

#### Cost and Budget

The tractor with the proposed attachments to purchase initially would cost as follows:

2000kg Compact tractor – e.g. Kubota L2- 622 (61hp) with agricultural tyres	£41,000
McConnell Flail PA4330 (4.5m reach), 1m	£15,000
head, elec. controls	

Other Attachments	£19,000
Extended 5 year Warranty	£1.500
Bunded 2500l diesel tank with pump	£2,500
TOTAL	£79,000

As mentioned, the funding for the tractor and attachments would come from the savings in the devolution budget for ranger salaries: recruiting no rangers this year and only the possibility of only one (not two) rangers at some point in the future.

The option of an extra vehicle, budgeted at £30k, is only needed if we take on an extra member of staff. Therefor this would be a further saving.

Item	2025/26 devolution budget	Proposed spend	Saving this year	Saving future years
1.5 Rangers	£67k	£o	£67k	£45k Definite- £90k Possible
Extra Vehicle	£30k	£o	£30k	Possible future £33k purchase
Contractor Hedge Cutting			£2k	
Tractor + warranty + attachments	£o	£68k	-£79k	
Overall Saving			£20k	£47k-£92k

# Summary Pros and Cons of purchasing tractor

Pros	Cons
Enables a sustainable approach to managing	Training will be needed for all tractor
6km of hedging	operatives. Likely hedge cutting capability
	training will initially be restricted to a limited
	number of staff
Efficiency saving as one ranger will not be	An extra member of staff offers great
recruited at all and one will only be reviewed	flexibility as it would increase capacity
in the next financial year	across all project tasks
Cost will come from savings made to	£79k cost of purchase (but this is more than
devolution budget (no salary spend or	covered by £99k savings in year 1 as well as
vehicle purchase this year)	a minimum of $£45k$ in each successive year)
A bunded fuel store will allow the use of red	Will need to undertake a full risk assessment
diesel which will cover the main cost of the	and follow best practice with the bunded
tractor fuel	tank installation
A tractor attachments will improve ranger	Storage space needed for implements
capacity and capability across a wide range	(though there is space for this in the depot)
of tasks including vegetation cutting on	
rough ground, hole digging for trees with	
root balls, removal of underground	
obstacles, drainage trench digging, scooping	
material in volume (woodchip, stone, sand,	
soil), moving items in the depot on pallets	

## Recommendation

Purchase a 2000kg tractor (such as a Kubota L2-622) with flail and attachments together with a bunded tank for fuel storage as detailed in the report at a cost of £79k from budget code 400-7949.

# Appendix: Hedge network

			Time/ho	Tractor	Time w
DEVOLUTION hedges	Metres	Comments	urs	access	tractor
Hawksworth	108	Resident 5'	12	N	12
RR - bottom footpath	50	Shrub shaping	4	N	4
MW - Outer hedge w FP above		20' tall - combined with abov	0	N	0
Chedar Close	35	6' and under	8	N	8
Linsvale Close	30	10'	12	N	12
Masons Way	10	6' shrubs	2	N	2
Coruts Barton (2 sites)	0	8' shrubs	4	N	4
Marley's Way - Inside nature resreve	О	Shrub and grass	28	N	28
Marley's Way - Area behind housing complex - community	О	If not doing - leave	0	N	0
Rodenbury Close	0	Shrub	4	N	4
TOTAL DEVO by Hand	278		74		74
Wellow Drive Nature Res	250	20' tall in places	42	Yes	14
Marley's Way - Main entrance from Vallis Way Roundabo	150	20-30' tall (huge!)	35	Yes	8
Lower Padock	135	Large scale boundary supres	14	Yes	4
Marley's Way - Hazel corridor Footpath to Egford	114	Boundary suppression	8	Yes	1
Green Lung	102	Over 10' high in places	21	Yes	8
linsvale Close	100	10'	28	Yes	14
MW - Perimtere bottom hedge	81	12'	28	Yes	28
Dragonfly Close	80	Boundary supression	4	Yes	2
Rivers Reach	71	Road boundary to Lidl	8	Yes	2
Northcote Crescent	65	20' tall - half has tractor acce	28	Yes	18
Marley's Way - Egford land footpath access area	54	15' tall	20	Yes	8
Blackbird Way	50	5' tall	12	Yes	6
Marley's Way - Service Entrance (main gates off Egford)	47	25' tall (huge field boundary)	90	yes	14
Marley's Way - Northern Boundary Hedge	46		8	Yes	2
Marleys Way Nature Reserve Timber Gate	11	15' tall	4	Yes	1
Cabel Road	0	8'	3	Yes	1
Marley's Way - Roundabout area at back near houses	О	Shurbs need shaping into bal	14	Yes	8
TOTAL DEVO accessible by Tractor	1356		367		139
DEVO TOTAL	1634		441		213

			Time/ho	Tractor		Time w
EXISTING FTC Land hedges	Metres	Comments	urs	access	Partial?	tractor
Vic Park borders and boundaries	540	Circular route shrubs	112	N		112
Weylands	150		8	N		8
Rodden Path	130	Pedestrian bounary suppresi	8	N		8
HW Riverside	115		21	N		21
Mary Baily - Ticklebury Lane	60		12	N		12
Welshmill Play Area	25	Shaping	4	N		4
Chateau Gontier	15		8	N		8
Vic Park - Islands	О	Tree clusters in VP, shaping	12	N		12
TOTAL EXISTING by hand	1035		185			185
Showfield - Hedges and boundary supressions		Contractor saving		Yes		14
Birch Hill	165	Contractor saving		Yes		8
Vic Park - Somerset Road	306	Challenges with Parking- Saf	35	Yes	2/3	20
Welshmill Allotment	200	Large scale	35	Yes	3/4	12
Birch hill laid hedge	200	_	21	Yes		6
Mary Baily	136		24	Yes		8
Hospital laid hedge	136	Laid hedge	8	Yes		4
Vic Park and MB - Central central footpath	135		16	Yes		4
Hospital	125	Plus shrubs in car park	36	Yes		16
Vic Park - Toddler Play Area	123	6'-8'	28	Yes		17
New Road Play Area	122		24	Yes		6
Vic Park - Bowls Club	100		21	Yes	2/3	8
Vic Park - Weymouth Road	100		16	Yes		4
Welshmill Roadside	75		24	Yes		6
Packsadlle lower perimter hedge	45		8	Yes		2
Packsaddle play area residentrial boundary	25	15' high	10	Yes		2
TOTAL EXISTING by Tractor	3193		306			137
EXISTING TOTAL	4228		491			322
OVERALL TOTAL	5862		932			535