ESSEX POLICE, FIRE AND CRIME COMMISSIONER FIRE & RESCUE AUTHORITY

Essex County Fire & Rescue Service



Classification	Official (Sensitive – Commercial)					
Meeting	Strategic Board	A	Agenda r	10.	9	
Meeting Date	16 March 2023					
Report Authors	Director of Corporate Services					
Presented By	Director of Corporate Services					
Subject	Strategic Property Update					
Type of Report	Information					
PFCC Action Point No.	n/a	For Publication	on	Yes		

RECOMMENDATIONS

Members of the Strategic Board are asked to note: -

- The progression to date and next steps against each of the key strategic deliverables
- 2. The estimated total capital funding requirements that require further planning in terms of identification of funding streams.

EXECUTIVE SUMMARY

The ECFRS estates strategy was approved in December 2021 and takes the organisation through a five-year period of progressive estates changes as outlined against the key deliverables below (diagram1.)



The governance, oversight and scrutiny of all Estates related activities takes place through the forums shown below (diagram 2).



BACKGROUND

Live Fire Training Relocation

The requirement for ECFRS to relocate from Wethersfield MOD site by the end of 2025 remains unchanged. In a recent meeting, the MOD confirmed that they are still on schedule to vacate the site by late 2023. This has presented three areas of challenge for ECFRS to mitigate, these being: -

- Current utilities supply (Electricity & Water) would become the responsibility of ECFRS to maintain.
- ✓ Gated/Site security would cease and therefore the site exposed to unlawful trespass.
- ✓ The current entrance into the site would be permanently closed and ECFRS would have to access through an alternative area of the site.

Whilst the above aspects are in progress to mitigate as practically as possible, planning continues to take place for the relocation of live fire training facilities to ECFRS HQ, Kelvedon Park. The status of this project is as follows: -

- ✓ On-Site Land Surveys have commenced. These include topographical, geological and ecological evaluations and are due to complete by the end of March 2023.
- ✓ Following the above, a gateway decision sheet will be presented to the commissioner for approval to progress to RIBA Stage 3 which is to commence with the application for planning permission – due May 2023.
- ✓ Initial design workshops with key stakeholders have been undertaken to assess outline design requirements.
- ✓ The programme is on track to present the full business case by Q1 2024 which
 if approved will allow commencement to build with an estimated completion
 timeline of 18 months and will lead up to the end of 2025.

For illustration purposes an outline design concept has been developed to show how the required live-fire training facilities could be accommodated at ECFRS HQ. See diagram 3 below.



OPTIONS & ANALYSIS

Strategic Asset Management Plan (SAMP)

The SAMP is a planning tool to clarify intentions, priorities, and practices to be adopted. It takes a long-term view and considers the combination of organisational needs, community and stakeholder expectations and the realities of existing assets and asset management capabilities.

Asset management is a systematic process of acquiring, developing, operating, maintaining, and upgrading, of assets in the most cost-effective manner. The broad objective of asset management is to maximise property usage, value, and investment returns. This means reducing expenditure when possible, finding the most consistent and highest sources of revenue, and mitigating liability and risk, among other aspects.

- Supporting the delivery of strategic goals and objectives through the use of property assets.
- Setting a vision of where you want to be and mapping out the journey to that place.
- Identifying where value can be added and where investment is needed to achieve objectives.

ECFRS has commissioned Bailey Garner (multi-disciplinary construction consultancy) to undertake a proof-of-concept SAMP which looks to review a key location and establish a range of potential opportunities. These could include: -

- ✓ Re-development of the current site to leverage existing capital land opportunities.
- ✓ Leasing of unused space to local community/businesses.

✓ Re-location to a new site with expected return on investment and sale of land.

Subject to review of the proof-of-concept report, will determine the viability for a whole estate assessment. The proof-of-concept SAMP will be completed by the end of May 2023.

The SAMP is an integral part of the Wholetime Station Modernisation programme as both are aligned to one another in terms of the future development of sites. However, ECFRS recognise that it is essential that this does not delay the works required to progress the four main strands of modernising stations. These being, the creation of individual private spaces, modern training room facilities, modern rest/wellbeing areas and the overall decoration/air conditioning of buildings. The funding to complete the WT station modernisation work has been allocated to each year's asset protection capital funding and spans over a six-year period. This timeline may be able to be reduced subject to further funding stream initiatives to provide the required capital investment.





Shoebury Fire Station

Successful procurement and award of contract for works to commence for the redevelopment of Shoeburyness Fire Station was provided in March 2022. ECFRS is on track to complete works by mid-summer of 2023.



Old Harlow Fire Station

Work continues to progress with regards to looking at available options for a new site for Old Harlow Fire Station. A feasibility and associated cost review is taking place to determine both re-development of the current site and/or re-development of property located adjacent to the station (formerly the St John Ambulance site). These option will be available to review in March 2023 and a decision made to progress the most cost effective and feasible option.



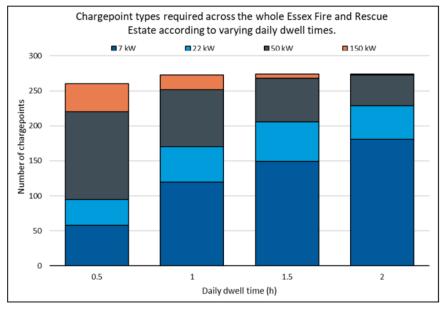
Environmental Strategy

There are several key environmental actions that are taking place, with a view to producing a full decarbonisation plan that will take the service through to 2050. The most recent activity completed was that of the joint Essex Police and Essex County Fire and Rescue Service CENEX review into electrical vehicle charging infrastructure. Through analysis of both organisations fleet size and usage the review has determined the optimal number of charging points of varying Kw to facilitate a full light vehicle (car/van) electric fleet.

The review has also provided some outline costs for consideration that provide an understanding of the investment required as technology moves to non-combusting engines. A separate report that provides further detail to this is being progressed through Strategic Board.

EV Charging Infrastructure Requirements

The table below shows the total number and type of chargepoint required to transition the entire fleet to battery electric vehicles assuming different daily dwell times for response vehicles ranging from half an hour to two hours.



In total Essex Fire & Rescue could require between £2m and £4m for chargepoints excluding grid upgrades.

In terms of Fire Appliance Technology there are a number of trials taking place across the UK that is testing infrastructure and vehicle requirements to assess the feasibility of electric fire appliances. This is still evolving and ECFRS is ensuring that this is part of future fleet and property planning requirements. The information below provides an oversight of the current fire appliance proof of concept trials.

Emergency One E1 EV0 - London Fire Brigade and Scottish Fire & Rescue Service





In Oct 2020, Emergency One announced the E1 EV0, a battery electric pumping appliance compliant with BS EN1846 (Firefighting and Rescue Service Vehicles) including the requirement to pump water continuously for four hours.

- 16t rigid truck chassis with a crew cab.
- · 280 kWh battery, up to 150 kW PTO.
- · 200 mile range, rapid charge in under 2 hours.
- Optional internal combustion engine range extender for pumping water at prolonged incidents.
- 1,750 litre water capacity.

London Fire Brigade and Scottish Fire & Rescue Service plan to trial the vehicle in 2022 / 2023.

ULEMCo - Oxfordshire Fire & Rescue Service



In May 2022, ULEMCo, Oxfordshire County Council, and Oxfordshire Fire & Rescue Service shared findings of a feasibility study into zero emission fire appliances.

- 220 kWh battery with a fuel cell range extender and 8 kg of hydrogen required to meet driving and four hour pumping requirement.
- Equivalent to a ~350 kWh battery electric vehicle.

The next step is to secure funding to build a prototype fire appliance.

Rosenbauer RTX - Los Angeles



A range extended electric fire appliance produced by Rosenbauer has been in operation in Los Angeles since May 2022.

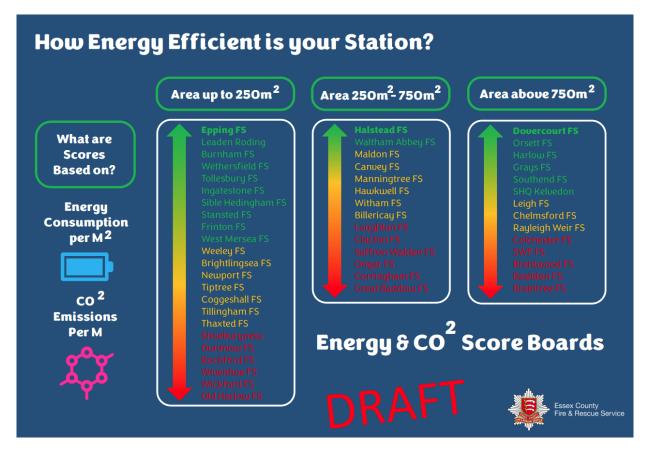
- · 132 kWh battery, 150 kW DC charging.
- 3 litre diesel internal combustion engine from BMW starts at 20% state of charge and can recharge the battery in 45 minutes.
- Two motors for propulsion, one motor for on-board water pump, and another connected to the range extender.

Whilst the Fire Appliance EV Technology evolves, ECFRS is focusing on the conversion of light fleet (cars/vans) to both Hybrid and fully electric models. ECFRS has recently procured twenty Volvo XC40 Hybrid EV which will be distributed to flexi-officers and will allow for disposal of twenty diesel vehicles. This will allow us to start testing and learning the requirements of an EV fleet and infrastructure. To support this ECFRS are installing a number of EV charging points at Kelvedon Park as part of the wider EV charging point programme, following the CENEX report.

Estates Assets

Upgrading to smart meters is part of a national commitment to reducing energy use in Great Britain. The UK Government has set a requirement for all suppliers to install smart meters in all domestic and commercial buildings by the end of 2025. Smart Meters are key to reaching net zero by 2050, reducing carbon emissions by as much as 45 million tonnes, the equivalent of taking 26 million cars off of the road.

ECFRS has undertaken an initial energy consumption evaluation against each of our stations to determine those that range from the most to least energy efficient. There are a number of contributing factors to this, such as insulation, fabric of building, heating system, glazing, air tightness etc, but there is equally human intervention and actions that can assist through closing windows, turning lights off, reducing heating when not required. The below diagram is part of a communication strategy reaching out to our staff to encourage them in actively helping us to reduce our carbon footprint.



ECFRS is exploring the market to procure specific expertise in sustainability measures to allow us to build and deliver a long-term Net Carbon Zero by 2050 plan that considers all aspects of service.

Collaboration Projects

Joint Fleet workshop

At the end of 2022 the joint operating models and organisational design review was presented to EP and ECFRS by Real-World HR specialists. They had engaged and worked with both Police and Fire Rescue fleet teams and set out several options that will direct the full business case for the operating model of the new joint function.

The options include:

- Single site co-location
- Arms-length entity
- ❖ Dual site collaboration leading to future combination.

Colleagues from both Essex County Fire and Rescue Service and Essex Police have been working with several other services across the UK to understand more about their organisational models. A joint team undertook a number of visits to understand the benefits and challenges faced with different models, to help shape our own next steps. Those visits included Humberside (who operate within an 'arm's length entity' model), South Yorkshire (who share a site as fire and police but still operate in different buildings) and Northamptonshire.

The options developed were also presented back in person to the fleet workshop teams, and a high-level overview was included in the continued monthly Joint Communications to the employees.

Next steps

The second phase of building design and initial planning feasibility is underway with our planning and construction partners Baily Garner, which linked with the overall Boreham master plan, is currently in progress with Essex Police. Once the feasibility aspect is completed the building design work will commence. In the meantime, a specification is being developed for an external specialist consultancy to develop the full business case.

The indicative timeline is still programmed for the full business case to be ready for November 2023. All efforts are being taken to accelerate the FBC to an earlier date. At present, assuming that planning is approved and progresses, it is anticipated the new build will be completed by the end of 2025.



Dovercourt Joint Site

Work is progressing with the new Dovercourt Police station, with the Stage 3 RIBA design which has been completed by the contractor Concertus.

Essex Police Estates team are leading on the design and delivery of the proposed station.

Stage 4 technical design is currently being reviewed by Baily Garner to ascertain the best route to meet the time frames and have a clearer certainty of delivery budget in the current climate which has had some recent pricing volatility.

As part of the commissioning of this next stage, EP estates have been working closely with the ECFRS estates team to minimise planning issues ahead of submitting.

Construction on the site is due to commence, subject to planning January 2024, with the occupation planned for Winter 2024

Regular meetings are held with the Joint SROs of this project and agreements are due to be finalised on the shared use aspects of the site, working closely with local managers and senior officers.

Estates Collaboration with EEAST

ECFRS is continuing to work and develop a programme of Estate sharing opportunities working with EEAST supporting its Integrated Transformation Plan. The main aim is to transform its current estates to a 'Hub and Spoke' model. Current ECFRS locations align favourably to this model and opportunities to support and provide Ambulance Station Response Post (ASRP) have been requested by EEAST.

Benefits for providing suitable welfare provision for employees and improved service delivery for EEAST can also be of benefit to ECFRS payment of rent to support property costs and utilisation of stations, as well as the non-financial benefits of close collaboration working with emergency services colleagues.

EEAST have also agreed to provide the value of the capital receipts that these collaborations have enabled, although non cashable, can be recorded as a enabling benefit through collaboration and an overall saving to the public.

Frinton Fire station has been the first of these new waves of collaborations, with the leases for the use of the facilities currently being finalised, which will be the blueprint of future leases to fast track the process going forward.

Great Dunmow and Braintree stations are also currently in the process of the specifications being finalised to work alongside the primary operation of the site.

A programme of work is being currently developed to align with ECFRS station maintenance and the EEAST transformation delivery plan. Aligning the following Hub development

- Chelmsford Hub
- Southend Hub
- ❖ Basildon Hub
- Harlow Hub
- Colchester Hub

Asset Protection Works

There is an ongoing programme of Asset Protection Works that is formulated from the Property Services Annual Building Inspection. There works are there to ensure that our buildings are maintained to a good standard and meet a number of regulatory and legislative requirements. The issue of effective capital planning remains a challenge and ECFRS are moving away from an "in year" planning cycle to a five-year capital planning cycle so that delivery of capital commences earlier in the financial year as opposed to the planning taking place in the first three quarters to then try and deliver in the activities in the last quarter of the year. This change of approach requires more effective planning and is incorporated into the property services review.

Project Management support has now been resourced to build the project planning requirements for delivery of the Estates Strategy. All activities relating to Property including that of Asset Protection will be formulated into a project plan that will report through the required governance channels. This will provide improved visibility and scrutiny of each workstream.

One of the key activities that sits within this area has been the refurbishment of our Breathing Apparatus (BA) Chambers. Three phases were identified, and the requirements were able to be matched against the Essex County Council Construction Framework.

- Phase 1 Grays, Southend, South Woodham Ferrers and Chelmsford Complete
- Phase 2 Brentwood, Braintree Complete
- **Phase 3** Clacton, Harlow and Saffron Walden due to commence April 2023 and complete by September 2023.

FINANCIAL IMPLICATIONS

Each of the 6 key Estates Strategic deliverables has an associated cost delivery plan. In the first instance it has been necessary to understand the high-level requirements and business cases associated with each deliverable. The below table provides the indicative costs that are forecast against each programme of works. It should be noted that these span over a 5 to 6 years delivery timeframe. Whilst it is recognised that the service has been able to allocate some of the funding through use of reserves and capital planning, there are areas that are currently unfunded. ECFRS is exploring the different funding opportunities, through savings and efficiencies, capital receipts from the strategic asset management plan (SAMP) and potentially the need to increase borrowing, although this option is not the preferred approach.

Estate Deliverable	Associated Costs
Fleet Workshops	£10M
Training Facilities	£11M
Environmental Net Zero	£5M
Modernisation Works	£6M
On-Call Station	
Investments	£0.5M
Asset Protection	£0.3M
Total	£32.8M

The key to success to delivery of these strategic objectives is to ensure that right resources are in place to deliver the activities within the five-year strategy. A full revie of the structure and function within property services has been undertaken and it is envisaged that this will be available to explore further within Q1 of 2023-24. This Work will establish what the key resource requirements are and it is envisaged that a further proposal/business case will be presented to SLT that will provide a "right size" option for progression.

EQUALITY AND DIVERSITY IMPLICATIONS

We have considered whether individuals with protected characteristics will be disadvantaged as a consequence of the actions being taken. Due regard has also been given to whether there is impact on people who identify as being part of each of the following protected groups as defined within the Equality Act 2010:

Race	n	Religion or belief	n
Sex	n	Gender reassignment	n
Age	n	Pregnancy & maternity	n
Disability	n	Marriage and Civil Partnership	n
Sexual orientation	n		

The Core Code of Ethics Fire Standard has been fully considered and incorporated into the proposals outlined in this paper.

STAFFING IMPLICATIONS

With all of the key deliverables there are a number of staff engagement sessions to ensure that all staff are aware of any change in workplace requirements/construction that may impact on their working environment.

LEGAL IMPLICATIONS

Throughout the design and delivery of each business case, legal assistance has been sought to ensure that ECFRS is compliant with all legislative requirements and equally that all contracts are reviewed from a legal perspective prior to approval.

HEALTH AND SAFETY IMPLICATIONS

Health & Safety is a key part of all building and construction works and ECFRS will ensure that Health & Safety standards are monitored and actioned where required.

FUTURE PLANS

As set out above.

LIST OF BACKGROUND PAPERS AND APPENDICES

Quarterly Property Update papers to Strategic Board.