

## Capital Maintenance Strategy for Schools 2021

### 1.0 Introduction

The following document provides the strategy behind the continuing Capital Maintenance Programme for the Nottingham Schools' Trust (NST) schools that are LA maintained. This is an interim document specifically targeted at the needs of schools. As part of the City Council Recovery and Improvement Plan there is an ongoing review by CIPFA into the role of the Corporate Landlord. This is likely to lead to a wider Corporate Asset Management Plan for all property within the ownership of NCC. This document will be subsumed into the wider Asset Management Plan.

The majority of funding used within this programme will be the Capital Maintenance Grant, there are other funding sources that reflect the objectives of the Capital Maintenance Strategy and can be included in the funding mix.

The priorities for the Capital Maintenance programme are as follows:

- That it ensures that school buildings support the provision of a safe environment for children and staff and comply with all relevant regulations and legislation.
- Provide a warm and dry teaching and learning environment.
- Where appropriate and possible look to reduce the carbon footprint of the schools within the Trust.
- Where appropriate and possible to improve teaching and learning environments both internally and externally.
- Financial good management looking to maximise financial resources and to deliver a value for money programme.
- Healthy and inclusive environment to allow all pupils to be able to develop to the best of their ability.

There are a funding strategy and a procurement strategy that looks at how best to use the Capital Maintenance grant funding in conjunction with other funding sources that are available to maintain and improve the school estate. These strategies look at how the programme can provide value for money while meeting the key criteria of the programme to maintain and improve the school estate.

### 2.0 Vision

The vision is to provide a safe and appropriate teaching and learning environment for children and staff by delivering maintenance that is value for money, effective, focused on the requirements, responsive to schools needs and links to the Council Plan; all to underpin the aim of every Nottingham City child to be educated in a good or outstanding school.

### 3.0 Strategic Priorities for the Capital Maintenance Programme.

The requirement for maintenance of school premises, plant and equipment arises from the following:

- Preserving a functional and safe environment for children, staff and visitors.
- Complying with legislation and minimising health and safety risks.
- Responding to changing needs of the schools.
- To give an overall reduction in risk to the schools day to day operations being affected by the current deficiencies.
- Providing value for money.
- Minimising carbon emissions
- Prolonging the life of the school buildings
- Presenting a high quality corporate image.
- Preserving equal and safe access to premises.
- Supporting equality

The capital maintenance strategy aims to state how this will be achieved and identify the key priorities that drive the planning of the programme.

**3.1** Provide Safe and Secure buildings to allow the delivery of teaching and learning as identified in Outcome Four: Safer Nottingham, of the Strategic Council Plan 2021-23, linking with the council's aim of people feeling safe and secure in the city centre, their neighbourhood and their home. This is reiterated in outcome eight to improve the city, creating a city centre that is an attractive, vibrant and safe place for everyone to live, work and spend time in. It is important that the children and staff feel safe and secure in school and also important that the parents and carers of the children know that their children are safe and secure.

3.1.1 What type of works does this mean will be undertaken.

Examples of works associated with this priority are the removal or making safe and management of asbestos, structural repairs either to the frame or to the façade of the building, the provision of automatic fire alarms, fire strategy management and safe evacuation, provision of intruder alarms, safeguarding, fencing and helping schools meet their statutory requirements.

3.1.2 Why is this a priority?

It is a priority that the buildings support the provision of a safe environment for children and staff and comply with all relevant regulations both related to Health and Safety and to Safeguarding. Health and Safety and Safeguarding are a judgement

in the Ofsted inspection and so this supports the Council objective of all pupils being taught in a Good or Outstanding school.

The overarching objective of schools is to provide good teaching and learning, the environment that this occurs in can significantly influence the educational outcomes.

### 3.1.3 How will we meet this objective?

We will prioritise need and urgency by analysis of latest condition surveys and draw on compliance and inspection information collated by colleagues in NCC Building Services and Health and Safety teams respectively. In addition to this we will review the Estate Management Plans we have previously carried out for schools and our local knowledge of schools and the individual maintenance issues they have made Major Projects' officers aware of.

### 3.1.4 How will we know we have met this objective?

Works will be recorded and identified on the condition survey record to show the reduction in the condition liability for Nottingham schools.

We will support the outcome of Child friendly Nottingham by ensuring that any safeguarding schemes that are prioritised will be taken forward for approval. Children will be protected and feel safe in their school environment to enable them to learn and thrive. The physical wellbeing of children will be at the forefront of prioritisation.

## 3.2 Provide warm and dry buildings again this links with Outcome Four: Safer Nottingham of the Strategic Council Plan 2021-23, with the Councils aim of people feeling safe and secure in the city centre, their neighbourhood and their home.

### 3.2.1 What type of works does this mean will be undertaken.

Examples of works undertaken to keep buildings warm and dry are:

- Roofing repairs and replacements. Consideration needs to be given to the standard of insulation provided on the roofs. This is a significant potential area of the building fabric that could be upgraded. Adding an insulation thickness of 120mm will improve the existing U-value to 0.18 W/m<sup>2</sup>K, while adding 160mm of insulation will improve the U-value to 0.15 W/m<sup>2</sup>K. Evaluating the benefits shows increasing the insulation from 120mm to 160mm would currently cost an additional £4.80 per m<sup>2</sup>. Using this year's Rufford Primary re-roofing project as an example, shows an additional cost of £5,755.00 for increasing the insulation used from 120mm to 160mm on a project with a roofing costs of £152,400.00.
- Boiler repairs or replacements. This is another area where the Capital Maintenance programme needs to consider the wider building implications.

- Window replacements. Consideration needs to be given to the specification of windows and how it can support wider agendas and also provide better insulation and ventilation when the opportunity arises. We have evaluated the benefit of triple glazing compared to double glazing, which shows on average triple glazing to have a 65% cost increase over double glazing and will give an improvement in U-value of 0.2 W/m<sup>2</sup>K.

### 3.2.2 Why is this a priority?

These interventions will create a more appropriate teaching and learning environment and can support the wider objectives of the Council including educationally. They also potentially support the requirement to keep schools open.

Roof leaks cause damage to the building fabric and structure resulting in potentially more expenditure and reduced life of the building. Anecdotal evidence suggests that roof leaks also impact on the morale of the children and staff by affecting the learning environment. Pupils work is often damaged or ruined by leaks, creating an adverse educational impact.

A boiler failure will effectively close a school at least temporarily during winter while an alternative heating solution is procured. There is also a financial impact of temporary heating that will affect the school budget.

Windows in poor condition can be a health and safety concern with broken glass / falling components presenting a high risk. Windows which cannot open can cause ventilation issues and this is a particular concern with regard to the potential spread of Covid 19. Windows which are draughty and poorly insulated result in high heating bills for the schools and do not help to contribute toward achieving the Council's aim of being carbon neutral by 2028.

The Council's Outcome Nine aims for better housing noting that we have undertaken extensive works across the city to refit Council houses to make them more energy efficient with improvements such as loft insulation, cavity wall insulation, new boilers, new doors and windows, and over 4,000 solar panel arrays installed – we are taking these aims through to Nottingham City schools to also make them more energy efficient as part of the works which we carry out.

### 3.2.3 How will we meet this objective?

We will prioritise by analysis of latest condition surveys and for the heating schemes close liaison with NCC Building Services to gain a better and more detailed understanding of the condition, age and life expectancy of plant and equipment at all schools. Meetings and discussions with NCC Energy Services will help identify schemes where elements can be designed to help contribute to the carbon neutral target. Liaison will continue with schools.

We currently replace existing gas and oil fired boilers with modern gas boilers which are much more energy efficient. For the future we are researching and collaborating with colleagues in NCC Building Services and Energy Services, respectively to look at potentially replacing gas boilers with air source heat pumps or ground source heat pumps. The challenge with this technology is that the pumps supply a lower temperature heat into the building which then means that the insulation will need to be upgraded to external walls, windows, doors, and roofs to meet the temperature required in the school. In addition to this it is likely that the electrical infrastructure coming into the schools will need to be upgraded. An example to illustrate this is the low carbon heating feasibility study for Seely Primary School carried out in January 2021 by NCC Energy Services. This showed that a budget of £1.37 million would be required solely for the main works. Additional costs on top of the £1.37m would be incurred for surveys, related asbestos works, and management fees to fully deliver a scheme to convert from gas boilers to air source heat pumps. The cost of additional insulation measures plus the additional electrical infrastructure required would also need to be allowed for. It was estimated that that the total cost to deliver this scheme would be in excess of the annual capital maintenance grant received from the DFE. This would mean that no funding would be left for high priority works at other schools.

A recent study completed by the Department for Business, Energy and Industrial Strategy for the Nottingham City school sector estimated that a capital investment of £19,000,000 was required to decarbonise the existing heating systems by 2028. This figure did not however include allowances for works to the fabric of the building, surveys, any asbestos removal or project delivery.

It needs to be noted that the schools in Nottingham are a mix of Victorian, System build/Clasp and older traditional methods of construction. None of these construction methods currently have sufficient or appropriate insulation for the introduction of, for example, heat pumps. The buildings as they exist would not be able to reach the right temperature or retain the heat to the temperature required. Thus options need to be carefully analysed, and consideration needs to be given to a whole building approach which includes improving insulation

We also need to be aware of the costs for the selected method of heating, including energy bills to the end user, maintenance costs and the life expectancy of the chosen method of heating. A cost effective method of heating needs to be achieved at a time when schools are faced with ever increasing budget challenges.

### 3.2.4 How will we know we have met this objective?

Works will be recorded and identified on the condition survey record to show the reduction in the condition liability for Nottingham schools.

The monitoring of utility meter readings and bills will help establish if energy objectives are being met. The use of automatic data collection will be used to monitor and measure in order to compare old with new heating systems.

The recording of the number of roof leaks before and after works will be a way to monitor if outcomes have been met.

Establishing benefit realisation with end users is key to both monitoring success and gathering lessons learned to take forward to future schemes. We will engage with the schools, partners and interested stakeholders on how we are performing and listen to feedback on where we are doing well and what we can do better linking with the Councils Outcome Eleven: Serving People Well.

**3.3** To reduce the carbon footprint of maintained schools linking with the Council's ambition of being carbon neutral by 2028 as identified in Outcome Three of the Strategic Council Plan 2021-23

3.3.1 What type of works does this mean will be undertaken.

Potentially there are a whole range of works that could support this agenda, the following are some examples:

- Additional insulation on the roof, when roofing replacements are undertaken.
- Provision of photovoltaic panels on the roof when replacing roof coverings.
- LED lighting replacing standard lighting systems when asbestos is removed or fire alarms installed that necessitate new ceilings and consequentially the removal of existing lighting. Evaluating the benefits of replacing traditional lighting with LED lighting throughout a school show a reduction of 67% in energy usage and a 67% carbon saving for lighting. Following the move away from having to have NCC Robin Hood Energy contracts a few years ago, schools are now free to source their own supplier, so would need to check with each school directly if they buy green electricity and thus check any benefit to our carbon neutral objectives.
- Improve the insulation of buildings to retain heat better and thus reduce energy consumption. We are aware of the need to insulate the schools to a better standard to future proof them for potential changes in the way schools are heated. If it is decided that air source heat pumps are to be the method of heating schools then we first need to insulate the schools to a much greater level than they currently are, as air source heat pumps do not produce high enough temperatures to heat the buildings with current insulation, so the heat that is produced needs to be retained. Additional insulation would be to roofs, walls, windows and doors, and would have benefits in reducing carbon whichever heating option is chosen.
- Reducing water leaks from pipes.
- Consider alternatives when replacing gas boilers. Review whether air source / ground source heat pumps are viable and what else has to be done to the

building to make this a real solution as indicated above. Review whether Hydrogen a real possibility. Given that currently it is not clear the most effective way forward with heating sources where possible retain the existing systems rather than replace until an agreement is reached in the industry regarding the most effective way forward.

- Install better controls when replacing heating systems displaying smart metering to encourage schools to be more aware of energy usage and thus focus on saving energy where possible.
- Where possible offsetting city emissions through actions such as tree/hedge planting as part of other works.

### 3.3.2 Why is this a priority?

These interventions will support the wider City Council objective to be carbon neutral by 2028 and also supports potential reductions in operating costs. This has the aim of offsetting city emissions through a range of actions such as tree planting, improving the city’s natural environment and reducing carbon dioxide emissions across a variety of areas such as school heating and transport. Also linking with the improved energy and thermal efficiency in homes, extending this to School buildings.

### 3.3.3 How will we meet this objective?

We will ensure for any proposed schemes that during the design development stage, serious consideration will be given to how carbon emissions can be reduced to support this outcome. For example we will assess the practicality of decarbonising existing heating systems in schools by introducing carbon neutral heating interventions where possible. The use of new energy efficient boilers installed in the 2021 programme are 95% efficient compared to the old boilers which were 60% efficient, but these boilers are gas fuelled.

We are aware that hydrogen could be a key component in the decarbonisation of heat in buildings as it helps to address the issues that can be found when retrofitting buildings with other low carbon heat solutions. However, currently the Government haven’t released a roadmap of what a hydrogen rollout into the gas grid could look like, nor do we yet have a commitment to a timeline. Also there are currently no product or installation standards or regulations in place to approve hydrogen boilers and hydrogen ready boilers are not yet available on the market. For the future we are aware that we can choose to upgrade to a hydrogen-ready boiler which will be initially fuelled by natural gas but can be converted to hydrogen, when hydrogen is made available to the area. We will keep up-to-date with developments in hydrogen heating, but for the moment this is not an option we can choose.

We are also aware that a hybrid system could be selected in certain circumstances to combine two different heating technologies, often an electric heat pump and a gas boiler and offer advantages in achieving decarbonisation ambitions. We will work with colleagues in NCC Building Services and the Energy Services respectively to select the best option for each scheme.

We will work with colleagues in NCC Energy Services to undertake school energy surveys and low carbon feasibility reports where appropriate, to assess the viability of introducing energy saving interventions in a piecemeal way where the business model stacks up.

We will consider the option /compatibility of alternative heating and decarbonisation systems. We will review the learning outcomes already obtained from the desktop feasibility work that has been undertaken so far on the pilot school building as part of the DREEM / Energiesprong initiative. Noting that the school estate ranges from Victorian to traditional and Clasp systems.

We will use better heating and lighting controls, zoning and smart metering with software to encourage schools to save energy.

For any schemes which involve the replacement of lighting we will ensure that light fittings and/or lamps will be low carbon options such as T5s and LED lighting. Again, Salix funding or other grant sources will be utilised where a business model supports this.

We will use sustainable materials in the construction process where possible and materials that have good longevity to reduce the necessity to replace frequently.

We will ensure that all contractors have a satisfactory waste removal policy in place that looks to reuse or recycle waste in the first instance.

We will review the replacement of old pipework which is leaking and wasteful where it directly links to a scheme. This will improve the efficiency of the water supply and water treatment to reduce water demand.

We will consider tree / hedge planting as part of boundary security fencing works on main roads to filter pollution, sequester carbon and improve air quality in the school grounds.

We will consider the use of Salix funding, Public Sector Decarbonisation Scheme grant opportunities and bidding for any other grant funding to install energy saving options and related works to the fabric of building to help drive towards Carbon Neutral Nottingham for 2028. We will coordinate with NCC Energy Team who will help with identifying and securing suitable grant opportunities to help with our schemes.

### 3.3.4 How will we know we have met this objective?

Initial pilot schemes will be considered to put theory into practice and allow comparisons and close monitoring of results. Outcomes can then be reviewed and good practice and learning taken forward into future schemes. Changes to the energy rating for schools where interventions are installed will be calculated and recorded.

**3.4** Improving teaching and learning environments both internally and externally linking with the Councils ambition of being a child friendly Nottingham as identified in Outcome Five: Child-Friendly Nottingham and also linking with the Councils ambition of improving neighbourhoods as identified in Outcome One: Clean and Connected Communities. By maintaining and where possible improving school buildings we aim to give every child in Nottingham the best start in life, regardless of their circumstances. This work is important to support local children to thrive academically, emotionally and physically, ensuring equality of opportunity for all.

3.4.1 What type of works does this mean will be undertaken.

Examples of this would be around lighting, insulation, temperature control, ventilation, flooring and ceilings as well as the outdoor space. This could link into new LED lighting and replacement heating and controls. Natural and forced ventilation particularly linked to Covid risk but also concentration (impacted by levels of CO2 in the room), potentially automatic window opening. There is also the type of work that reduces the impact of vehicular transport, tree planting review options to use air filters for traffic fumes.

3.4.2 Why is this a priority?

These interventions will support the wider City Council objective to be carbon neutral by 2028 and also supports potential reductions in operating costs. It will contribute to increasing the air flow indoors and reducing the risk of germ spread. It will contribute to enabling children to learn and thrive in a healthier physical environment, and there will be an overall reduction in risk to the schools day to day operations being affected by deficiencies thus supporting and influencing the Councils ambition for all Nottingham schools to be rated “good” or “outstanding” by Ofsted.

3.4.3 How will we meet this objective?

We will ensure that schemes look to increase levels of insulation to the fabric of the building, ensure ventilation is considered in window / cladding schemes, ensure energy efficient lighting is specified and more energy efficient boilers and controls are specified for heating schemes. Schemes that involve works or adaptations to the building will meet building regulations and ensure that buildings are accessible for all, Supporting the Councils aim to ensure that children with additional needs can progress well, linking with the Councils ambition in Outcome Eleven: Serving People Well - ensuring that decisions, our services and developments take account of disability and that public spaces and buildings are easy to access.

3.4.4 How will we know we have met this objective?

Outcomes will be reviewed and follow up meetings will be held with the schools to monitor change in use and benefits noted which links with the Councils outcome one of connecting with local communities with regards to existing assets, whilst also ensuring lessons learned and good practice are taken forward into future schemes. We will analyse data from the Nottingham air quality website to look for improvements where data is recorded near to schools. Completion certificates will be

provided by NCC Building Control and any advisory notes considered and implemented where appropriate. We will carry out surveys to make sure decisions are evidence-based linking with the Councils Outcome Eleven: Serving People Well.

**3.5 Contributing to financial stability and linking with the Councils ambition of being Financially Stable as identified in Outcome Ten: Financial Stability**

**3.5.1 How will this be achieved?**

We will robustly manage our capital budget and review and ensure that the selected procurement route and delivery maximises value for money by providing comparisons between in house Building Services, Scape framework contractors and tendering options to show that we are scrutinising all possible procurement opportunities towards obtaining best financial value. We will review how we deliver key projects within the resources available to us to ensure we can continue to provide the modern, effective and value for money services people expect, again linking with the Council plan.

We will carry out option appraisals during the procurement stage to analyse the benefits and costs to meet the carbon neutral targets. We have a duty to ensure that best value is achieved not only with regard to initial cost but the application of value to all aspects of operations and lifecycle costs; having regard to efficiency, economy and effectiveness.

Best value will include awareness of the financial stability of the council, awareness of which jobs are best carried out in house and awareness of jobs which will provide Nottingham people with work, linking with the Councils ambition in Outcome Two: Keeping Nottingham Working, using the Council’s purchasing power to support local jobs, apprenticeships and businesses.

In order to be confident of value for money going forward we will obtain detailed feasibility studies on all the proposed schemes. We will ensure schemes are priced and presented in priority order. This will give confidence that we have robust feasibility costs and are aware of the most urgent schemes to take forward for approval to enable the best financial decisions to be made as to how, where and what the limited grant is spent on.

We will look at opportunities to use the budget to set up a condition based maintenance programme. We are aware this is problematic due the number of urgent projects and the limited budget provided, but this will be considered and instigated if at all possible. A brief summary of the maintenance methods with advantages and disadvantages is:

- **Corrective maintenance** - Maintenance is carried out following detection of a defect. This can result in an increase of health and safety incidents, schools out of action and higher costs for unplanned emergency works.
- **Preventative maintenance** - Maintenance carried out at predetermined intervals aimed at reducing the failure risk or performance degradation of the equipment. This method does not necessarily obtain the best life from building elements and can result in increased costs from replacement before end of life.
- **Risk based maintenance** – all building elements displaying abnormal values are replaced or refurbished. In this way it is possible to extend the useful life and guarantee over time high levels of reliability, safety and efficiency.
- **Condition based maintenance** - Maintenance based on the equipment and element performance monitoring and the control of the corrective actions taken as a result. We carry out condition surveys to provide information and this strategy, in the long term, allows reducing drastically the costs associated with maintenance, thereby minimizing the occurrence of serious faults and optimizing the available economic resources management. However although this is the aim, the limited funding we receive restricts this opportunity.

We are aware that with limited or even inadequate maintenance resources we encounter difficulties in bringing a building facility to original standard, and meeting with statutory requirements. The overall condition liability for schools in the City is significantly greater than the funding available and there is insufficient funding to complete all the necessary works to ensure all schools will not be at risk.

Understanding the relationships between the top management at the strategic level and maintenance personnel at the operational level are considered important for better management of building maintenance processes, thus our links with schools, maintenance contractors, surveyors and management allow all information to be considered and best choices made.

### 3.5.2 Why is this a priority?

The amount of yearly grant funding is limited and we have to ensure that the works that are carried out are of the highest priority and procured in a way that we are confident that we have achieved best financial value.

We are also aware that maintenance work is carried out to maintain the value of the physical assets of the building stocks and quality and will benefit the Council's financial position.

### 3.5.3 How will we meet this objective?

We will be confident that we have carried out all necessary actions to ensure we have obtained the most robust costs and made the right decisions in allocating priority works to the right place.

**3.5.4 How will we know we have met this objective?**

The final accounts on all of the schemes will be in line with the anticipated costs and we will ensure sufficient contingencies are in place to cover unknowns. We will ensure that the overall programme costs are managed within the allocated grant funding.

**3.6. Healthy and Inclusive Nottingham**

**3.6.1 How will this be achieved?**

We will ensure all our proposed schemes are supported by an equality impact assessment which will take account of any schemes that will impact on buildings and ensure that accessibility adheres to building control standards. Schemes that involve works or adaptations to building will meet building regulations and ensure that buildings are accessible for all.

Given the unprecedented global pandemic and what we have learned from this we will ensure that optimum ventilation is explored where appropriate on relevant schemes to create healthier learning environments for pupils to learn and thrive.

**3.6.2 Why is this a priority?**

These interventions aim to build on the public health agenda and healthy schools work already carried out by the Major Projects team. We are aware of health issues such as asthma which can be triggered by mould and damp in buildings; also obesity linking to lack of appropriate outdoor space, catering and travelling to school; pollution linking to fumes and how we manage this either through filtration or ventilation depending on circumstance. Studies show that increased natural ventilation improves children’s learning, also that given the unprecedented global pandemic and what we have learned we will ensure that optimum ventilation is explored where appropriate on any relevant proposals. We will also look to ensure that school buildings are safe and accessible for all, to promote a healthy and inclusive Nottingham. We will proactively support the school environment to be healthy and safe and be inclusive to all.

**3.6.3 How will we meet this objective?**

We will ensure that wherever possible the scope of projects includes interventions that will include improving the air quality of buildings. This could be by improving ventilation when we install new windows or when we carry out any works to the façade of the building. We will also consider the possibility of including cycle and scooter shelters and racks to encourage healthy travel to school where appropriate and seek learning from Transport colleagues who are delivering cycle lane schemes. This aim links with the Council’s initiative to make walking and cycling a more

attractive option by providing better cycling facilities, and linking with the new or improved routes around the city, as identified in outcome seven to keep Nottingham moving. This also support the Council’s carbon neutral 2028 ambitions through encouraging and enabling sustainable transport use.

Any schemes that involve works or adaptations to the buildings will be accessible for all.

#### 3.6.4 How will we know we have met this objective?

Outcomes will be reviewed and follow up meetings will be held with the schools to check on change in use and user behaviour. We will ensure lessons learned and good practice is taken forward into future schemes. Completion certificates will be provided by NCC Building Control and any advisory notes considered and implemented where possible. We will look for improvement in air quality and lower carbon emissions when the Council’s measure’s improvements in the city.

### 4.0 Prioritisation Process for the Capital Maintenance Programme.

We will carry out a thorough prioritisation process before making the recommendations of projects to take forward. The following steps will be undertaken as part of this process:

- Undertake a review of the schemes that were not taken forward in the previous year’s programme of works. These works will be updated with any further technical information or local information from the named schools.
- Undertake a review of each individual school’s condition survey to ascertain priority works that had been flagged.
- Undertake a review of each individual school’s estate review plan to consider the issues raised by the head teacher/business manager. This is the document that identifies the wider school priorities and may flag up issues related to healthy schools.
- Major Projects to work with the NCC school Health and Safety manager to discuss issues both are aware of and to assist in the prioritisation of works.
- Major Projects to work with NCC Building Services to review the potential heating/boiler and fire alarm schemes, looking at the information from the yearly inspection reports and taking into account the first-hand knowledge of the engineers who have visited school sites.
- Major Projects will work with the NCC Energy team to look at schemes that can impact on the energy usage and reduce the carbon footprint.

This information is then brought together with the strategic priorities for Major Projects to prioritise a programme of works and make recommendations going forward which will have the following prioritisation process:

1. Health and Safety schemes are likely to be priority 1 to ensure school buildings and associated services are in safe condition, fit for use and comply with the law and all statutory requirements. The works will include Safeguarding, asbestos removal / management, emergency lighting, structural repair, fabric repair, fire alarm, and fire risk assessment works.
2. Schemes to heating systems are likely to be priority 2, to keep schools warm and prevent unplanned closure of schools due to heating failure in the colder months. The works will include replacement of boilers, plant, equipment, distribution pipework and equipment.
3. Schemes to keep schools dry are likely to be priority 3, to protect the building fabric and the users. The works will include roof repair / renewal, and works to windows.
4. Once priorities 1 to 3 have been covered we will then look at other works identified in the condition surveys considering the priorities from these also how additional works can be included which link to the council plan and our vision, such as including additional insulation in a priority 3 roofing scheme or additional insulation in external cladding works.
5. Each scheme has to be evaluated and balanced against the others for all the schools to provide value and quality in meeting our vision.

The Capital Maintenance Strategy links and supports other Nottingham City Council strategies namely, The Council Plan 2021-23, Carbon Neutral Nottingham 2020 - 2028 Action Plan, Nottingham City Children and Young People’s Plan 2021-2023 and Nottingham City Council’s Strategy for Improving Outcomes for Children and Young People with SEND 2018-2023.

**5.0 Funding Strategy.**

To date the programme has always had to wait for the announcement in April to confirm the level of funding available for that financial year. While identifying funding from the previous year for early design works has at least allowed the design to progress the programme has not been able to contractually commit to any schemes until the funding has been announced. This has always put pressure on the ability to procure the works and to sign up contractors early. There is an opportunity this year following the increase in funding in 2021/22 which was not anticipated and therefore not prioritised, to commit to the programme much earlier.

**5.1 Confirmed Capital Maintenance Grant funding.**

The following is the confirmed Capital Maintenance Grant that has been received this year and last year was £3,152,120 and funded this year’s programme of works which committed £1,752,120 which had been the anticipated value of the grant. There is an uncommitted balance of £1,400,000 which we will accessed as soon as there is an Executive Board approval in place. This means that it will be possible to engage contractors and sign contracts much earlier, given the supply chain issues that are becoming apparent this will support delivery within the summer holidays.



## 5.2 Value for Money.

To date the programme has either used the Scape Framework or internal resources to deliver the works. While both these routes are direct appointments there is a significant element of competition as both routes use sub-contractors which are tendered.

Consideration has been given to whether there would be financial benefits of procuring a more consistent programme of works, for instance focusing solely on roofs for a year. This is not a preferred route as although it might gain potential savings by increasing the value and therefore getting savings related to volume of sales. It has two significant issues, the first is that the programme is driven by need and currently the liability is significantly greater than resources so it is difficult to justify a planned maintenance environment where items are changed early. Which would be how this would provide best value for money. The second issue is the capacity of a roofing company to manage 5 or 6 separate contracts in the 5 week summer holiday. The alternative of using more than one contractor will reduce the financial benefit.

## 5.3 Consideration of other Sources of Capital.

Consideration will be given to how best the Capital Maintenance Grant can be used as match funding for other grants which may support the wider programme activities. An example is the Carbon Reduction grants available through central government. This opportunity is supported by the position that the Council is now in of having grant funding in the bank for this year.

## 6.0 Procurement Strategy:

- SCAPE Framework Agreement, employing a main contractor such as Lindum who will obtain a minimum of three quote for all sub-contractor and specialist contractor works. The SCAPE Framework Agreement allows for early contractor involvement and an opportunity for collaborative working, free feasibility cost estimates, limited lead-in times for firm price quotation, building on going working relationships and understanding of NCC standards and requirements. The above are all well suited to the compressed programmes and challenging site environments of Schools Condition Works.
- In house Building Services, who will design M&E schemes for renewal of boiler and heating systems also renewal / installation of fire alarm systems, emergency lighting and lighting replacement schemes. They will carry out a combination of works themselves and tendering from a select list of contractors to achieve best value. Building Services carry out routine maintenance and servicing of schools M&E plant and equipment and so have a good knowledge of requirements.

- Tendering projects will allow us to obtain the most competitive price for schemes and so maximise budget potential. This method could be used with a package of works either for one year or for a number of years. This method can be used if early budget approval is obtained and the lead time is available for specifications to be produced and procurement procedures to be followed. The competitive prices will need to be balanced against potential contractors unfamiliar with schools work, and potential unknown quality of work. A variation on this would be to set up a roofing framework by tender a particular job but indicating that it would feed into a longer term programme possible 3-4 years with a minimum value of works.

For next year programme we propose to use a combination of the above, as follows:

For the heating schemes at Berridge Primary and Seely Primary Schools where the first phase(s) of work have been completed, we will continue with in house Building Services so that their existing designs are worked to, and warranties will continue through to the full works on completion. We will also liaise with Energy Services to look to source additional funding from Salix and Public Sector Decarbonisation Scheme grant opportunities

For the new heating scheme at the Nursery School and Training Centre we propose to use in house Building Services to design and install so that we can research, discuss and develop the practicalities of a possible carbon neutral option with help from the Energy Team, also to keep spend in house, contributing to the financial stability of the Council and help local labour is used. We will also liaise with Energy Services to look to source additional funding from Salix and Public Sector Decarbonisation Scheme grant opportunities.

Fire alarm scheme at Berridge Primary - again we propose to use the in house Building Services team to use their knowledge of the site to design and procure. This will also keep some spend within the Council.

Asbestos works at Southwold Primary - we propose to use in house Building Services to give us specialist knowledge of the asbestos works and the framework tender to obtain the best price from competition. We will also liaise with Energy Services to look to source additional funding from Salix and Public Sector Decarbonisation Scheme grant opportunities as we look to replace lights with energy efficient lights and additional insulation as part of these works.

Third phase of window refurbishment works at Claremont Primary - we propose to continue with Lindum as Scape framework contractor, to manage the works of their local specialist contractors on this listed building, ensuring local labour is used.

For the leaks at Walter Halls and following NMCN going in to administration, we propose to use Scape framework contractor Lindum to bring their experience and

supply chain and if needed design team, to help with investigation works, to identify defects and take to resolution.

Renewal of the hot and cold water supply pipework at Haydn Primary - we will use Lindum as Scape framework contractor to utilise their design contacts for this type of work, ensure that competitive quotations are received from their local supply chain and enable them to manage works on site. This will ensure local labour is used and competitive prices are sought.

Hempshill Hall Primary fire segregation / reconfiguration works - we propose to use Scape framework contractor Lindum to carry out surveys, feasibility, design, specification and provide costings for the scheme which subject to approval, will then be carried out the following year. This allows us to use Lindum in house design, Lindum experience of schools work with us and Lindum supply chain to obtain the best solution and price.

Haydn roof renewal – we will use this scheme to go through Procurement and the tender route looking to set up a framework for roofing projects, looking to obtain the most competitive price. As this route through Procurement has not been used before, we will be using this as a test for utilising this method more for future works, to assess its advantages and disadvantages over the other routes. We will also liaise with Energy Services to look to source additional funding from Salix and Public Sector Decarbonisation Scheme grant opportunities as we look to increase insulation levels.

The remaining funding will be used as a contingency for any additional emergency works that arise. If not required this saving will be used for a future years programme for heating schemes, when hopefully pricing will have come down, there is further technological development and knowledge is clearer on heat pumps and hydrogen solutions and there may be the opportunity to access more grant.

Next review 2022



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Author:	RC/CB/DS	Ref:	OFF07101
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