

Committee(s): Streets and Walkways Sub – For Decision Natural Environment Board – For Information Planning and Transportation – For Information Projects and Procurement Sub – For Information	Date(s): 14 May 2024 16 May 2024 16 May 2024 10 June 2024
Subject: Cool Streets and Greening – programme update Unique Project Identifier(s): Cool Streets and Greening (PV ID 12267) Phase 3 City Greening and Biodiversity (PV ID 12332) Phase 4 Sustainable Drainage (PV ID 12377)	Public
Report of: Interim Executive Director, Environment Department	For Decision
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Summary

This report provides an update on the delivery of the Cool Streets and Greening programme (CSG), which is structured around four Phases. This programme is one of the ways that we are meeting the aim of the Climate Action Strategy to ensure that our public spaces and infrastructure are resilient to the impacts of climate change, as well as creating a greener and more pleasant City.

The four main phases of the programme are as follows:

- Phase One - Pilot projects to test the suitability of climate resilience measures in the City environment.
- Phase Two - Developed projects to adapt existing schemes to include climate resilience measures.
- Phase Three - City greening and biodiversity including re-landscaping of new sites, re-planting of existing gardens and street tree planting.
- Phase Four - Sustainable drainage projects.

The programme also contains a number of related workstreams including monitoring, mapping of infrastructure and catalogues and guidance for materials and planting. Since the programme inception in April 2021, the following progress has been made:

- 15 projects have been completed with 4 more currently under construction.
- A further 30 projects are planned to be implemented over the next 2 years, varying in scale from replanting of existing gardens with more climate resilient

plants to the complete re-landscaping of streets and spaces within the public realm.

- Around 10 related workstreams have been completed or are underway including a planting catalogue and a strategic flood risk assessment.

This report sets out the next steps in order to complete the programme by 2026 and includes recommendations to assist with this goal.

Recommendations

It is recommended that all Committees:

1. Note the content of this progress update.
2. Note the extension of the Cool Streets and Greening programme timeframes by 12 months to March 2026.

It is recommended that the Streets and Walkways Sub-Committee:

3. Agree to transfer the Cool Streets and Greening allocation of £350,000 from the Crescent project (which has been paused) to the next priority Cool Streets and Greening project which is Temple Avenue.
4. Agree to amend the funding allocations between the phases and projects and approve the required budget increases as set out in Appendix 1.
5. Agree the increase in the Cool Streets and Greening allocation for the Little Trinity Lane project of £150,000 to replace S106 funds that are no longer available and fund additional planting, utility works and the costed risk provision.
6. Delegate approval and drawdown of the Costed Risk Provision for the projects in the programme to the Chief Officer if one is sought at Gateway 5.

Main report

Background

1. The Climate Action Strategy (CAS) was adopted by the Court of Common Council on 8th October 2020 and provides for nine actions under 'Resilient Streets and Greening' and one action under Resilience co-ordination and training. The Cool Streets and Greening programme which takes these forward was initially approved by committees in April 2021 with a total budget of £6.8 million funded through On Street Parking Reserve.

2. Officers have developed the projects within the programme in close collaboration through the CAS Square Mile Project Board and through further co-ordination from the Climate Resilience Steering Group.
3. The primary focus of the programme is the piloting of different climate resilient interventions within the public realm. With the intention that the lessons learnt from this process will be used in future programmes and business as usual approaches.
4. The works have been divided into four phases (1:Pilot, 2:Developed, 3:Greening and Biodiversity, and 4:Sustainable Drainage). Outside of these phases the programme has undertaken works to support the primary aim as part of a development phase.
5. The Cool Streets and Greening workstream was originally intended to be a four-year programme (March 2021-March 2025). As part of wider agreements on the CAS it has been agreed to extend the timeframe by 12 months up to March 2026. This is to enable a longer period for collecting monitoring data, deliver the construction programme and embed lessons learnt.

Progress to date

6. The delivery of the programme is divided into four phases as follows:

Phase One (Pilot projects) – to ensure momentum and to get results on the ground as soon as possible, initial pilot projects were developed and schemes already underway were amended to incorporate climate resilience measures. This included sites at Bevis Marks, Jubilee Gardens, Cheapside, Vine Street and the riverside.

Phase Two (Developed projects) – The second phase integrated resilience measures into existing schemes at an earlier stage of development. This was to ensure value for money by jointly funding projects. This includes sites at Bank, Little Trinity Lane, Finsbury Circus Garden, Moor Lane, Crescent, and monitoring at the Barbican Podium.

Phase Three (City greening and biodiversity) – The third phase included sites where climate resilience measures would be most beneficial and to test strategic measures including creating green corridors. This phase includes re-landscaping, climate resilient planting schemes and tree planting works. This includes sites at London Wall/Moorgate, Fann Street, and St Peter Westcheap as well as a City-wide tree planting programme.

Phase Four (Sustainable drainage) – The fourth phase identified sites specifically for incorporation of sustainable drainage, where rainwater from the immediate catchment could be redirected into newly created raingardens reducing and slowing the flow into the sewer system, whilst providing more greenery in the public realm. This includes sites at Ludgate Broadway, St Andrews Hill, Bread Street, Knight rider Court, and Lloyds Avenue.

7. Table 1 provides a brief update on all the current projects in the programme. Further details on proposed adjustments to projects are set out in the paragraphs below.

Table 1: Summary of project progress

Phase	Project and brief description	Update
1 (Pilot)	Climate resilient planting (Pedestrian Priority): Planting at several parklets – City-wide	Completed April 2021.
	Riverside Planters: An innovative ‘dry garden’ was planted requiring less watering	Completed April 2022.
	Vine Street: 5 street trees were selected for their resilience to trial their suitability for the City	Completed April 2022.
	Bevis Marks/Dukes Place: rain gardens and permeable paving with a climate resilient planting palette.	Completed May 2023.
	Jubilee Gardens: As part of the re-landscaping of this City Garden, increased greenery and a more diverse and resilient planting palette is being introduced.	Works commenced January 2024. Issues have occurred with underground structures and the UKPN asset that required additional waterproofing, an adjustment to planting design and resulting project delay. Main works are planned for completion in autumn 2024.
	Greening Cheapside: Sustainable drainage and resilient planting is being introduced to this public space	Works commenced January 2024. Completion in spring 2024.
2 (Developed)	Bank: As part of the wider junction works, trees, rain gardens and planters are being added to several arms of the junction	Works commenced in 2023. Most of the planting will be completed in autumn 2024.
	Little Trinity Lane: A re-landscaping scheme to introduce more greenery and a number of sustainable drainage measures.	Design complete, works due to commence September 2024, subject to approval of Gateway 5 report by Chief Officer.
	Moor Lane: various elements are to be introduced including trees and raingardens	Design in progress, works due to commence in 2025

		subject to approval of Gateway 5 report.
	Finsbury Circus Garden: a major relandscaping project that will include resilient planting and sustainable drainage	Works commenced November 2023, completion due Jan 2025.
	Barbican Podium: shallow planting beds with a climate resilient palette.	Monitoring commenced August 2022
	Crescent: landscaping, tree planting and rain gardens as part of the creation of a new public space	Proposed to remove from programme and reallocate funding as the project has been paused due to the sale of adjacent property.
	Temple Avenue: Trees and planters to be introduced as part of the enhancement of the southern end of the street.	Proposed replacement for Crescent scheme. To be initiated in July 2024.
3 (Relandsca ping)	London Wall/ Moorgate: replacement of the lawn area that is in poor condition with a more climate resilient design along with additional tree planting and route through	Design complete, Gateway 5 approval planned in May. Works due to commence late September 2024
	Finsbury Circus Western Arm: Landscaping of the street to create a new public space.	Design complete, works due to commence July 2024
	Fann Street: extension of tree planting and introduction of new beds and climate resilience measures	Design in progress, works due to commence 2025 subject to approval of Gateway 5 report.
	St Peter Westcheap: relandscaping and measures to protect the existing tree	Design in progress, works due to commence 2025 subject to approval of Gateway 4 and 5 report.
3 (Tree planting)	Season 2022-23	Completed, 59 trial pits, 27 trees planted.
	Season 2023-24	Completed, 27 trial pits, 12 trees planted.
	Season 2024-25	Site identification underway.
	Season 2025-26	Not commenced – will include King William Street tree planting.

3 (Replanting)	John Carpenter Street	Completed February 2024.
	St Mary Aldermanbury	Completed September 2023.
	All Hallows on the Wall	Completed October 2023.
	Whittington Gardens	Completed December 2023.
	St Dunstan's on the Hill	Completed December 2023.
	Queen Street Place	Completed December 2023.
	Angel Lane	Completed December 2023.
	St Olave Silver Street	Design in progress.
	St Dunstan's in the East Churchyard	Site survey complete, design yet to commence
	Grants Quay	Design yet to commence
	Dark House Walk	Design yet to commence
	St Anne and St Agnes Churchyard	Surveys received
	St Mary Staining	Surveys commissioned
St Botolph's without Bishopsgate	Design yet to commence	
4 (Sustainable drainage)	Ludgate Broadway: raingarden, trees, seating and widened pavement alongside accessibility improvements	Design in progress, works due to commence late 2024 subject to approval of Gateway 4&5 report.
	Bread Street (South): raingarden and seating	Design in progress, works due to commence late 2024 subject to approval of Gateway 5 report by Chief Officer.
	Knightrider Court: raingarden, widened pavement and seating. Relocation of disabled parking bays	Design in progress, works due to commence late 2024 subject to approval of Gateway 5 report by Chief Officer.
	St Andrew Hill: raingarden, trees, and widened pavement	Design in progress, works due to commence early 2025 subject to approval of Gateway 5 report by Chief Officer.

	Lloyds Avenue: raingardens, trees, and seating	Design in progress, works due to commence early 2025 subject to approval of Gateway 4 & 5 report.
	St Andrew Undershaft Churchyard: Re-landscaping and sustainable drainage including capturing rainwater from church roof	Design in progress, works due to commence early 2025 subject to approval of Gateway 5 report, church and planning approvals.

8. The scheme at Finsbury Circus Garden was originally agreed as part of Phase 2 as a monitoring only project. Following this, a number of climate resilience measures have been identified including lawn drainage, soil remediation and smart irrigation. It has been agreed by the Climate Director and Square Mile Project Board to therefore provide additional funding for interventions (£157,000) at this site beyond monitoring (total £177,000).
9. The scheme at Crescent was originally agreed as part of Phase 2. However, due to the project being paused because of adjacent building ownership changes, it is highly unlikely that that project would be deliverable within the programme's timeframe. It is therefore proposed that this funding (£350,000) be reallocated to deliver greening and tree planting at Temple Avenue (south) which has been identified as a priority project as part of the approved Fleet Street Area Healthy Streets Plan. Temple Avenue is within one of the planned future 'green corridors' and in a location with currently limited greening. It is therefore the next priority site within the programme. An issues report on the Crescent project will be submitted to Committees later this year, after the adjacent property matter is clarified.
10. The scheme at Little Trinity Lane is approaching Gateway 5. It is proposed to increase the Cool Streets and Greening funding allocation for this project by £150,000 in order to fund additional utility costs to enable more sustainable drainage and trees to be introduced, as well as cover a shortfall of £15,000 due to S106 funds no longer being available due to a requirement to spend it on TfL bus stop works. Funding for a costed risk provision is also required.

Update on other workstreams:

11. The Cool Streets and Greening programme included from the onset a number of supplementary workstreams to enable the main aims of the programme and also provide strategic direction and policy guidance. This included the following:

- **Climate Sensors network** – A series of sensors have been installed across the Square Mile collecting data on temperature, pressure, humidity, and water entering gullies. This information will be used to monitor the success of interventions.
- **Strategic Flood Risk Assessment** – The 2023 review undertook an assessment of existing flood modelling. Whilst it was determined that no new modelling was needed at the time, the existing flood modelling has been used in the selection of sites.
- **Heat resistant materials review** – A desktop literature review was undertaken in to consider the options for making highway surfaces more resilient to heat. Given the balance of considerations in material selection it was determined that shading offered the best opportunity.
- **Square Mile water footprint** – The water footprint works in being undertaken in conjunction with region partners as part of the Subregional Integrated Water Management Strategy for East London.
- **Natural Flood Management (NFM) toolkit** – Whilst there will be limited opportunities from NFM in the Square Mile, a toolkit is being developed for use in the Natural Environments and learning used as appropriate.
- **Climate Resilient Measures Catalogue** – The first version of the catalogue was developed at the beginning of the programme, and it incorporates the interventions being piloted. An updated version was developed in April 2023.
- **Climate Resilient Planting Catalogue** – The first version of the catalogue was published in Spring 2024. It incorporates industry best practise and includes plants used in already completed replanting schemes. It will be updated before the end of the programme.
- **Materials Selection Catalogue** – The catalogue sets out how paving materials should be selected for climate resilience and fed into the development of the City Public Realm Toolkit which was approved in November 2023.
- **Cubic Mile Project** – Was a joint project (November 2021-22) between the City Corporation and the British Geological Survey. It sought to map underground assets to better identify locations for climate resilience interventions. This mapping has been used in site identification.
- **SuDS and Tree Opportunity Mapping** - The Cubic Mile mapping has been refined to focus on locating sustainable drainage and trees. These maps will continue to be updated throughout the programme.
- **External funding bids** – Three applications for external funding have been successful to supplement the work of the programme, this has enabled additional trees to be planted in Middlesex Street, biodiversity works to be undertaken at Noble Street and Whittington Gardens and an Arboricultural Project Officer has been appointed.

Programme development and management

12. From its initiation the programme has been developed with involvement from the CAS Square Mile Project Board, with guidance from the Climate Resilience Steering Group and has directly involved a cross Environment Department Officer Delivery group of staff from Environmental Resilience, Projects and Programmes, City Gardens and Cleansing, and Highways.
13. The CAS Square Mile Project Board has agreed to the extension of the programme by 12 months to March 2026. This has been done to enable a longer period for data collection and time to interpret this data into best practice. The extension will also enable the full delivery of the projects in the programme. Whilst the majority of works are still due to complete before March 2025, some projects including a number of Phase 3 sites, Phase 4 sites and Temple Avenue will need more time to be implemented.
14. The primary aim of the programme has been to trial different climate resilience measures to ascertain which could be most appropriate for us in the context of the Square Mile. At the end of the programme a number of design approaches will have been developed to enable lessons learnt to be incorporated as business as usual.
15. In view of the success of the programme and in order to continue to deliver on its objectives and achieve the strategic aims of a greener and more resilient City, it is likely that a future programme of similar interventions and workstreams will be advisable. Officers will set out options for future measures next year for Members' consideration.

Corporate & Strategic implications

16. The Cool Streets and Greening programme contributes to three outcomes identified in the Corporate Plan 2024 -29 (leading sustainable environments, flourishing public spaces, and vibrant thriving destination). The programme includes actions to create a climate resilient City by reducing the risk of overheating and flooding, ensuring our open spaces enrich people's lives, and making the City's streets more accessible.

Financial implications

17. The entire programme is funded through the On-Street Parking Reserve (£6.8m). Several projects within the programme combine funding from other sources including S106s and S278s in order to deliver wider benefits.
18. As the programme has developed, the costs of individual projects within each phase have been refined. Whilst the overall programme budget remains unchanged, there is a need to transfer some funds between phases and projects as described earlier in this report and detailed in the finance tables in Appendix 1.

19. It has also been necessary to utilise a portion of the programme budget for costed risk provisions for the various individual projects. A further programme report in spring 2025 will provide an update on spend to date and remaining works.

Legal implications

20. There are no new legal implications arising from this update.

Climate implications

21. The Cool Streets and Greening programme is one of the ways that the City Corporation is meeting the aim of the Climate Action Strategy to ensure that our buildings, public spaces and infrastructure are resilient to the impacts of climate change.

Risk implications

22. The top five programme risks are set out below:

Risk	Response
Unknown below ground utilities and structures restricts ability to implement greening and sustainable drainage	Radar surveys are carried out which identify the majority of underground restrictions. Trial holes are also used to reduce this risk. Designs can often be adapted to avoid underground restrictions. This risk has had a significant impact on Phase 4 of the programme. This is also the main risk that requires a costed risk provision.
Project timescales are delayed by external factors	Nearby developments or other projects can sometimes restrict access to sites and delay projects. Project programmes can be adjusted to adapt to these occurrences. It is important to liaise with the highways team to coordinate the programming of works.
Design changes required following public consultation	Changes to designs are frequently required following consultation. The majority of these changes are minor, but some scope changes can be significant. Therefore, it is important to consult at an early stage to avoid significant scope changes and reduce costs.
Cost increases as a result of inflation	This is a high risk given the current rates of inflation, particularly in the construction industry. Delays to projects also increase costs. Cost estimates need to take account of inflation from the outset and delays are to be avoided where possible.

<p>Maintenance costs are not affordable within the budget available</p>	<p>Maintenance costs for planting have been higher than originally anticipated when the programme was first approved, partly as a result of inflation, which has put pressure on the programme budget. In several cases, other funding sources have been identified from joint-funded projects to cover these costs. In other cases, planting has had to be reduced, in order to remain affordable within the budget.</p>
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Conclusion

23. The Cool Streets and Greening Programme is a key deliverable of the Climate Action Strategy and includes a raft of projects and workstreams to help prepare the City to be resilient to the impacts of climate change. To date, several projects have been completed or are underway that make the City a greener, more pleasant and more resilient place for the benefit of residents, workers and visitors.

Appendix:

Appendix 1: Finance Tables

Appendix 2 : Selected Visuals/ maps

Other relevant documents:

London Wall /Moorgate relandscaping, Gateway 5 report (14 May 2024 Streets and Walkway Sub-Committee)

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Appendix One – Finance Tables

Table 1: Expenditure to Date			
Description	Approved Budget (£)	Expenditure (£)	Balance (£)
16800454: CAS - Cool Streets & Greening			
Env Servs Staff Costs	80,000	73,003	6,997
Open Spaces Staff Costs	15,000	10,964	4,036
P&T Staff Costs	115,000	86,028	28,972
P&T Fees	355,000	316,297	38,703
Smart Sensors	155,000	83,379	71,621
Total 16800454	720,000	569,671	150,329
16100454: CAS - Cool Streets & Greening			
P&T Fees	65,000	-	65,000
Total 16100454	65,000	-	65,000
GRAND TOTAL	785,000	569,671	215,329

Table 2: Adjustment Required to reach the next Gateway			
Description	Approved Budget (£)	Adjustment Resources Required (£)	Revised Budget (£)
16800454: CAS - Cool Streets & Greening			
Env Servs Staff Costs	80,000	21,000	101,000
Open Spaces Staff Costs	15,000	-	15,000
P&T Staff Costs	115,000	25,000	140,000
P&T Fees	355,000	24,000	379,000
Smart Sensors	155,000	10,000	165,000
Total 16800454	720,000	80,000	800,000
16100454: CAS - Cool Streets & Greening			
P&T Fees	65,000	(55,000)	10,000
Total 16100454	65,000	(55,000)	10,000
GRAND TOTAL	785,000	25,000	810,000

Table 3: Revised Funding Allocation			
Funding Source	Current Funding Allocation (£)	Funding Adjustments (£)	Revised Funding Allocation (£)
Climate Action Strategy - OSPR	785,000	25,000	810,000
TOTAL	785,000	25,000	810,000

Table 4: Expenditure to Date			
Description	Approved Budget (£)	Expenditure (£)	Balance (£)
16800467: City Greening & Biodiversity			
P&T Staff Costs	27,677	27,676	1
P&T Fees	30,000	28,974	1,026
Total 16800467	57,677	56,650	1,027
16100467: City Greening & Biodiversity			
P&T Fees	79,000	23,745	55,255
Env Servs Staff Costs	46,000	8,830	37,170
Open Spaces Staff Costs	28,000	13,013	14,987
P&T Staff Costs	84,323	83,916	407
Env Servs Works	170,000	98,771	71,229
Open Spaces Works	175,000	61,793	113,207
Costed Risk Provision	45,000	-	45,000
Total 16100467	627,323	290,068	337,255
16100502: Climate Resilient Replanting Sites			
Open Spaces Staff Costs	53,500	7,775	45,725
Open Spaces Works	300,000	73,848	226,152
Total 16100502	353,500	81,624	271,876
GRAND TOTAL	1,038,500	428,341	610,159

Table 5: Adjustment Required to reach the next Gateway			
Description	Approved Budget (£)	Adjustment Resources Required (£)	Revised Budget (£)
16800467: City Greening & Biodiversity			
P&T Staff Costs	27,677	-	27,677
P&T Fees	30,000	(1,025)	28,975
Total 16800467	57,677	(1,025)	56,652
16100467: City Greening & Biodiversity			
P&T Fees	79,000	-	79,000
Env Servs Staff Costs	46,000	-	46,000
Open Spaces Staff Costs	28,000	-	28,000
P&T Staff Costs	84,323	25,000	109,323
Env Servs Works	170,000	-	170,000
Open Spaces Works	175,000	-	175,000
Costed Risk Provision	45,000	-	45,000
Total 16100467	627,323	25,000	652,323
16100502: Climate Resilient Replanting Sites			
Open Spaces Staff Costs	53,500	-	53,500
Open Spaces Works	300,000	-	300,000
Total 16100502	353,500	-	353,500
GRAND TOTAL	1,038,500	23,975	1,062,475

Table 6: Revised Funding Allocation			
Funding Source	Current Funding Allocation (£)	Funding Adjustments (£)	Revised Funding Allocation (£)
Climate Action Strategy - OSPR	1,038,500	23,975	1,062,475
TOTAL	1,038,500	23,975	1,062,475

Table 7: Programme Summary

CAS: Cool Streets and Greening		Allocations		
		Approved	Earmarked	Total
Phase	Activity	£	£	£
Development	Framework development	50,000	-	50,000
	Resilience measures catalogue	10,000	-	10,000
	Smart sensors and monitoring	85,000	-	85,000
	Data collection and analysis	20,000	-	20,000
	Opportunity mapping and data gaps	75,000	-	75,000
	Site identification and prioritisation	30,000	-	30,000
	Staff costs (public realm/highways/CG)	50,000	-	50,000
Development Total		320,000	-	320,000
Phase 1	Bevis Marks	270,000	-	270,000
	Jubilee Gardens	165,000	-	165,000
	Greening Cheapside	180,000	-	180,000
	Riverside Planters	55,000	-	55,000
Phase 1 Total		670,000	-	670,000
Phase 2	Design to G5	120,000	-	120,000
	Little Trinity Lane	-	505,000	505,000
	Temple Avenue	-	350,000	350,000
	Bank	165,000	-	165,000
	Moor Lane	110,000	-	110,000
	Finsbury Circus	177,000	-	177,000
	Barbican Podium	20,000	-	20,000
Phase 2 Total		592,000	855,000	1,447,000
Phase 3	Design to G4	80,000	-	80,000
	Design to G5	95,000	-	95,000

	London Wall/ Moorgate	-	443,000	443,000
	Finsbury Circus Western Arm	438,178	-	438,178
	Fann Street	-	150,000	150,000
	St Peter Westcheap	-	180,000	180,000
	Treeplanting	800,000	23,975	823,975
	Replanting	400,000	-	400,000
Phase 3 Total		1,813,178	796,975	2,610,153
Phase 4	Design to G4	185,000	-	185,000
	Design to G5	140,000	25,000	165,000
	Ludgate Broadway	-	250,000	250,000
	St Andrew Undershaft Churchyard	-	250,000	250,000
	St Andrew Hill	-	200,000	200,000
	Bread Street (South)	-	120,000	120,000
	Knightrider Court	-	211,822	211,822
	Lloyds Avenue	-	371,025	371,025
Phase 4 Total		325,000	1,427,847	1,752,847
Grand Total		3,720,178	3,079,822	6,800,000