

GREATER LONDON AUTHORITY

REQUEST FOR DIRECTOR DECISION – DD1250

Title: Drain London Programme 2014-16

Executive Summary:

A predicted 1.4 million properties in London are at risk from surface water flooding caused by heavy rainfall, including much of London's social, transport, emergency and utility infrastructure. Drain London is a GLA-led, £3.2m DEFRA-funded, London-wide programme to identify, prioritise and manage areas and assets at surface water flood risk. Exceptional rainfall in early 2014 has demonstrated the need for the Mayor to continue championing effective surface water management.

MD455 delegated authority from the Mayor to the Executive Director for Development, Enterprise and Environment to approve the Drain London work programme and associated expenditure. DD899 approved expenditure up to the end of March 2014. Approval is now sought to commit the remaining funds (approximately £1.06million) to the end of March 2016.

To date, the programme has enabled the creation of a pipeline of projects that are expected to secure up to £10 million of investment in flood risk management infrastructure. GLA officers have been successful in securing cost savings in excess of £100k, encouraging other partners to fund projects and obtaining more than £600k match funding. This has allowed the programme to be extended. The remaining budget will be used to complete existing projects, extend existing workstreams (for example flood risk assessments of critical infrastructure) and initiate new workstreams on developing a sustainable drainage action plan for London, undertaking drainage masterplans for OAPFS, undertaking a groundwater scoping study and co-funding green infrastructure.

Decision:

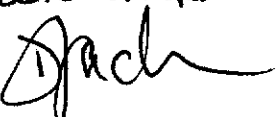
The Executive Director approves expenditure of up to £1.06m to deliver the Drain London work programme in 2014-15 and 2015-16 for the delivery of the projects and outcomes set out in this document

AUTHORISING DIRECTOR

I have reviewed the request and am satisfied it is correct and consistent with the Mayor's plans and priorities.

It has my approval.

^{PP}
Name: Fiona Fletcher-Smith
DEBBIE JACKSON

Signature: 

Position: Executive Director, Development, Enterprise and Environment

Date: 06.08.14

PART I - NON-CONFIDENTIAL FACTS AND ADVICE

Decision required – supporting report

1. Introduction and background

- 1.1 MD455 delegated authority from the Mayor to the Executive Director for Development, Enterprise and Environment to approve the Drain London work programme and associated expenditure. DD899 set out how the programme funding will be spent until the end of March 2014. This paper seeks approval to undertake work between April 2014 and March 2016 utilising the remaining project funds from the original Defra grant.
- 1.2 Surface water flooding occurs when heavy rainfall overcomes the capacity of the drainage systems (drains, sewers and rivers) to manage it. London has 14 of the top 15 areas nationally at risk of surface water flooding and 28 of the top 50 areas at risk in the UK are London boroughs. A predicted 1.4 million properties in London are at risk of flooding from an extreme rainstorm (such as Hull, Sheffield and Doncaster experienced in 2007 and Newcastle and Jedburgh in 2012). This includes a significant amount of the capital's social, health, utility, transport and emergency infrastructure. For example, the recent review of London's Regional Flood Risk Appraisal highlighted that 76 mainline stations and 217 km of mainline rail corridor in London is at risk of tidal/fluvial and/or surface water flooding. This represents 23% of London's stations and 27% of its rail corridor.
- 1.3 Drain London is a multi-year programme to manage surface water flood risk in London. The programme is funded by a grant of £3.2 million from Defra, which is managed by the GLA on behalf of the boroughs. The Drain London work programme has been developed and is managed by the Drain London Board (DLB), which is chaired by the GLA, and comprising senior level representation from Thames Water, the Environment Agency and London Councils. Project delivery is monitored by the Drain London Board and monthly dashboard reports to IPB.
- 1.4 The Drain London programme has six key aims; To:
 - Understand where surface water flooding may present a risk to people and property
 - Build the capacity of boroughs to undertake their statutory duty to manage surface water flood risk
 - Create a range of pilot projects that demonstrate the financial and quality of life benefits of proactive flood risk management
 - Create a pipeline of projects to secure significant investment in London
 - Identify critical social, health, utility, transport and emergency infrastructure at flood risk, understand the interdependencies between them, and work with key stakeholders develop action plans to manage these risks.
 - Understand the 'gap' between the level of rainfall London's drainage systems can cope with today and the level that London may need to cope with in the future, and identify measures to bridge the gap.
- 1.5 The Drain London work programme has been developed in three sequential 'Tiers' of work. Tier 1 collated and digitised relevant data on flood risk in London from boroughs and other stakeholders. Tier 2 produced a high-resolution flood risk map and surface water management plan (SWMP) for every borough. Tier 3 uses the outputs from the previous Tiers to develop and deliver a range of flood risk management projects. To date, the Drain London project has enabled the creation of a pipeline of 'delivery-ready' projects that are supporting around £10 million investment in London's flood risk management infrastructure.

Tier 3 workstreams completed to date include:

- 1.5.1 **Detailed flood risk investigations** that have led to designed and costed project specifications that can be used to bid for Environment Agency Flood Defence Grant in Aid or Local Flood Levy money for delivery. 14 investigations have been completed across London (namely: Enfield, Merton, Brent, Harrow, Bexley, Barnet, Lambeth and Southwark) and 17 are due to be completed in 2014-15 (namely: Hackney, Croydon, Tower Hamlets, Newham, Sutton, Hillingdon, Kingston, City of London).
- 1.5.2 **Community Flood Plan Programme** - a programme to help communities at high flood risk. This included developing 'pilot' plans and a range of tools to help boroughs replicate these with further communities at high-risk. Two plans have been completed and two further plans are in development.
- 1.5.3 **Greening the BIDs** - ten central London BIDs were funded to undertake 'green infrastructure audits', which identified opportunities for 300 rain gardens, 200 green walls and over 100 hectares of green roofs to help manage surface water. The programme also provided £100,000 funding to catalyse the delivery of 15 demonstration projects. This is expected to lever in £1million investment from the BIDs.
- 1.5.4 **Critical infrastructure assessment** - GLA officers have analysed the flood risk to critical infrastructure and undertaken detailed further investigations for infrastructure in areas of highest flood risk and/or of most strategic importance:
- 116 hospitals assessed, resulting in 11 detailed investigations
 - 115 fire stations assessed, resulting in 8 detailed investigations
 - 167 police stations assessed, resulting in 3 detailed investigations
 - 70 ambulance stations, resulting in 3 detailed investigations
 - 440 schools, resulting in 21 detailed investigations
- 1.5.5 **Greenstreets** - Detailed assessment of community Sustainable Drainage Systems (SuDS) options in an estate in Haringey as background work to inform the development of the Greenstreets programme. This has enabled the Environment Agency and LB Haringey to progress with the delivery of SuDS measures in the Campsbourne Estate.
- 1.5.6 **Raingain** - provision of £10,000 as match-funding to the €7m EU-funded project, which is developing quicker and more accurate localised flood warnings and testing the emergency responses to these warnings.
- 1.5.7 **Training** - Defra provided the GLA with an additional £10k to organise training for borough officers in securing SuDS through the planning system. Training will be required from 2014 onwards when boroughs become SuDS Approval Bodies (SABs).

2014-2016 programme of work:

- 1.6 We propose utilising the remaining project budget of approximately £1.06m over 2014-15 and 2015-16 to complete the Tier 3 workstream, continuing to build a pipeline of flood risk management projects that will be submitted to the Environment Agency for Flood Defence Grant in Aid or Local Flood Levy money for delivery.
- 1.7 We will also use funding to complete the objectives listed in Section 2.
- 1.8 The current and forecast spend for the Drain London programme is:

Project	Expenditure to 31.03.14	Budget 2014-15	Budget 2015-16
Tier 1 & 2 (incl Flood mapping, 33 SWMPs)	£1,214,219		
Tier 3 projects	£865,880		
Tier 3 phase 2 projects		£40,000	
Tier 3 phase 3 projects		£175,500	£20,000
Greenstreets phase 2		£100,000	£350,000
Managing flood risk to critical infrastructure		£15,000	£15,000
Sustainable drainage plan and associated actions (including SuDS opportunity mapping)		£95,000	£97,500
Drainage masterplans		£40,000	£42,000
Groundwater scoping study		£25,000	
Stockholm tree pits		£30,000	
SAB support to boroughs		£5,000	£10,000
TOTAL	£2,080,099	£525,500	£534,500

2. Objectives and expected outcomes

Drain London 2014-16 work programme

- 2.1 The DLB proposes the following programme of work, some of which includes ongoing activities. This work programme builds upon the previous workstreams of Drain London and enables further progression from analysis to delivery.
- 2.1.1 Completion of Tier 3 phase 2 and 3 projects
This includes the completion of ten projects that commenced in 2013-14 under Tier 3 of the Drain London programme, as well as up to £40,000 for a future project call to boroughs to encourage innovative sustainable drainage solutions in areas at high risk of surface water flooding.
- 2.1.2 Greenstreets – phase 2:
The loss of permeable surfaces in London to parking and development is putting additional pressure on London's drainage system and increasing flood risk. The GLA has already secured a commitment of £500k from both Thames Water and Environment Agency to work with communities to 're-green' their neighbourhoods in priority areas, demonstrating how retrofitted green infrastructure can help manage surface water. We propose using up to £450,000 to further develop the Greenstreets programme to help deliver SuDS based green infrastructure for managing rainwater and delivering wider benefits across London. We will investigate the opportunity of using Drain London funding to act as match funding or leverage to increase the scale of delivery through Greenstreets. For example, we will discuss opportunities with key stakeholders such as Thames Water (who intend to utilise up to £18m to deliver 20 hectares that will be sustainably drained by 2020¹).
- 2.1.3 Managing flood risk to critical infrastructure:
We propose to utilise up to £30,000 to enable partners to undertake detailed investigations and risk assessments to build a pipeline of flood management projects that will competitively compete for Environment Agency Flood Defence Grant in Aid or Local Flood Levy money, for delivery where needed most urgently in London.

¹ <http://www.thameswater.co.uk/pr14/CCG-for-Thames-Water-report-to-Ofwat.pdf>

- 2.1.4 **Sustainable drainage action plan:**
We will develop a strategic-level framework to deliver actions that better quantify what sustainable drainage could achieve in terms of reducing the burden on existing 'grey' drainage infrastructure and where it would be most effective. It will also promote sustainable drainage and, in particular, encourage retrofit. The framework will be developed with key stakeholders for surface water management, including the Environment Agency, Thames Water and London Boroughs (where support will be provided to aid their implementation of SuDS Approval Bodies). Funding will be used to develop the framework, produce the framework document and deliver some of the key actions, including sustainable drainage opportunity mapping.
- 2.1.5 **Sustainable drainage opportunity mapping:**
We will create a tool that will help quantify the potential for retrofit sustainable drainage measures to manage surface water in priority areas, such as drainage catchments where sewers are already at or near capacity. A project scope has been drafted and upon authorisation from this DD we shall go out to tender to determine a preferable method for quantifying the opportunities for sustainable drainage in London. This tool will be developed with key stakeholders from the London Boroughs, Environment Agency, Thames Water and other teams within the GLA Group. Thames Water has indicated that they are keen to match-fund such a tool.
- 2.1.6 **Securing sustainable drainage through the planning system:**
We will utilise approximately £80,000 to review opportunities including:
- Drainage masterplans for key Opportunity Areas, including: Vauxhall Nine Elms and Battersea, Old Oak Common, London Riverside and White City.
 - Ongoing flood risk support for key regeneration areas, including: Croydon, Tottenham, Royal Docks.
- 2.1.7 **Groundwater scoping study:**
Around £25,000 will be used to undertake a desk-based study of groundwater flood risk in London, providing additional detail to existing Environment Agency modelling and identifying potential further actions to reduce risk of groundwater flooding.
- 2.1.8 **Stockholm tree pits:**
Approximately £30,000 will be used to provide match funding for boroughs to plant up to 100 street trees with integrated sustainable drainage systems – predominantly engineered tree pits and raingardens. However, this project may be fully funded through the Mayor's Street Tree Initiative (to be confirmed in late 2014 subject to final round funding applications) and so only represents a potential cost to the Drain London project.
- 2.1.9 **SABs support to boroughs:**
Up to £15,000 will be used to support boroughs to successfully adopt new duties as SuDS Approval Bodies (SABs), when guidance is issued by Defra. This support is likely to take the form of training workshops and assessment of planning systems used.

3. Equality comments

- 3.1 The approval recommended in this decision form will enable a number of contracts to be awarded to meet the objectives of Drain London between 2014 and 2016. Procurement processes shall be undertaken in accordance with the Authority's Contracts and Funding Code; this process will be managed by TfL Procurement (see section 5.2).
- 3.2 The Authority, and TfL are subject to public sector equality duties, and any contracts that would be awarded, will be consistent with these duties, and with the Mayor's strategies and plans, including

those identified in section 4 below with associated equality impact assessments. No adverse impacts are identified for the proposed programme of works described in this DD. Meeting the objectives of this proposal is expected to bring positive contributions to equality arising through improving surface water management and reducing flood risk for diverse groups of Londoners across the city. Where appropriate, the Authority and partners will work with communities to share knowledge and understanding of surface water issues and encourage equality groups to participate in community-influenced projects. As part of helping to identify priority areas and appropriate actions to reduce risk, the sustainable drainage action plan will also investigate whether certain equality groups have either higher or lower than average vulnerability to the impacts of surface water flooding.

4. Other considerations

GLA Investment and Performance Board (IPB)

The IPB received a paper setting out the Drain London Work programme for 2014-2016 and seeking commitment of the remaining £1.06m funds from the original £3.2m DEFRA grant to fund these activities. This paper was discussed on 24th July 2014 and the work programme approved in principle.

a) Links to strategies and Mayoral and corporate priorities

The Mayor's highest priorities are creating employment, securing investment and saving money. The Drain London programme is assisting with the achievement of these three priorities through:

- creating a pipeline of 'delivery-ready' projects that to date have supported around £10 million investment in London's flood risk management infrastructure
- investing in 'green infrastructure' that not only will extend the life of existing 'grey infrastructure' (drains and sewers), but also attract investment through businesses and households wanting to locate and invest in an attractive location
- working with communities to improve their resilience to extreme weather, reducing their dependence on boroughs and enabling boroughs to more effectively target limited funding to areas / members of the community at highest risk
- increasing demand for employment through using consultants to design and consult on the projects. It is anticipated that jobs may be created through the future delivery of the projects, though it is too early to quantify these at this stage).

The programme will also help implement actions and policies in the Mayor's Climate Change Adaptation Strategy and the Mayor's Water Strategy as well as the London Plan.

b) Impact assessments and Consultation

The Drain London work programme has been developed by the DLB, which involves the key flood risk management stakeholders (London Councils representing the boroughs, the Environment Agency and Thames Water). The Drain London Forum, attended by borough officers, has been kept frequently informed of the development of the work programme and consulted to help inform the Drain London project.

c) Risk

There are 3 key risks:

- i. Financial risk: There is a risk that the costs of the programme could exceed the budget. This risk will be managed by the Drain London programme management team and the DLB. The project management team will report monthly on expenditure and commitments to Finance and to IPB. All procurement will comply with the GLA procurement code.
- ii. Reputational risk: There is a risk that the Mayor may be seen as responsible for managing flood risk in London. The GLA is not statutorily responsible for managing flood risk, but is uniquely positioned to identify strategic risks and to enable the collaboration of different partners to

manage these risks. The DLB will ensure that the projects are branded as 'Drain London' and that the Mayor is recognised as supporting the projects and providing strategic coordination, but not as responsible for managing flood risk.

- iii. Delivery risk: many capital projects rely on external funding. In order to deliver water management measures we need to enable delivery partners like the boroughs to secure funding from sources such as the Environment Agency Flood Defence Grant in Aid. Lack of accessibility to such funds will limit delivery.

5. Financial comments

- 5.1 Approval is being sought for the Executive Director of Development, Enterprise and Environment to approve the programme of work detailed in paragraph 1.6 to 1.8 and in section 2 above. Further approval is requested to spend up to £1.06m in relation to the delivery of this programme in 2014/15 and 2015/16 and to award, enter into and execute contracts and grants for delivery of the outputs identified in this decision.
- 5.2 The expenditure of up to £1.06m over the next two financial years is to be met from Environment's Drain London Reserves, which has a balance of £1.06m at 31 March 2014.
- 5.3 As this programme of works involves funding, officers are reminded to ensure that they liaise with both the Legal and Finance Teams in the preparation and execution of the funding agreements. In addition, the award, monitoring of the funding and associated payments must be in line with the Authority's Funding Agreement Toolkit.
- 5.4 If part of the programme relates to contracts, officers have to ensure that the requirements of the Authority's Contracts & Funding Code are adhered to. Also if any contracts are consultancy based, officers also have to ensure that the requirements relating to consultancy services within the Authority's Financial Regulations and Expenses & Benefits Framework are adhered to.
- 5.5 All requisite budget adjustments will be made and any changes to this proposal must be subject to further approval via the Authority's decision-making process.
- 5.6 The Environment Team within the Development, Enterprise and Environment Directorate will be responsible for managing this project and associated funding agreements.

6. Legal comments

- 6.1 The foregoing sections of this report indicate that:
 - 6.1.1 the decisions requested of the Director fall within the statutory powers of the Authority to do such things as may be considered facilitative of or conducive or incidental to the promotion of the improvement of the environment in Greater London; and
 - 6.1.2 in formulating the proposals in respect of which a decision is sought officers have complied with the Authority's related statutory duties to:
 - (a) pay due regard to the principle that there should be equality of opportunity for all people;
 - (b) consider how the proposals will promote the improvement of health of persons, health inequalities between persons and to contribute towards the achievement of sustainable development in the United Kingdom; and

- (c) consult with appropriate bodies.

6.2 Officers must ensure:

- 6.2.1 to the extent that grant funding is to be awarded to facilitate the delivery of the programme, that such funding is disbursed in manner which is fair, transparent, considered to afford value for money and accord with the requirements of the Authority's Contracts and Funding Code;
- 6.2.2 to the extent that services/supplies/works are required for the delivery of the programme, that they are procured by Transport for London Procurement who will determine the detail of the procurement strategy to be adopted in accordance with the Authority's Contracts and Funding Code; and
- 6.2.3 appropriate grant funding and contract documentation is put in place between and executed by the Authority and any funding recipient(s) and any contractors before any commitment to provide grant funding is made and/or the commencement of any services/supplies/works.

7. Planned delivery approach and next steps

Activity	Timeline
Tender process initiated for SuDS opportunity mapping	August 2014
Groundwater scoping study objectives defined and study initiated	Summer 2014
First draft of sustainable drainage action plan	Summer 2014
First tranche of drainage masterplans initiated	Autumn 2014
Funding requirement for Stockholm Tree Pits confirmed	Autumn 2014
Greenstreets programme – phase 2 year 1	Autumn 2014
Publication of sustainable drainage action plan	Winter 2014
Greenstreets programme – phase 2 year 2	Spring 2015
SABs borough support (training)	Spring 2015
Development of flood management projects for delivery	Late 2015
Project completion and closure	March 2016

Appendices and supporting papers: None

Public access to information

Information in this form (Part 1) is subject to the Freedom of Information Act 2000 (FOI Act) and will be made available on the GLA website within one working day of approval.

If immediate publication risks compromising the implementation of the decision (for example, to complete a procurement process), it can be deferred until a specific date. Deferral periods should be kept to the shortest length strictly necessary.

Note: This form (Part 1) will either be published within one working day after approval or on the defer date.

Part 1 Deferral:**Is the publication of Part 1 of this approval to be deferred? NO**

If YES, for what reason:

Until what date: (a date is required if deferring)

Part 2 Confidentiality: Only the facts or advice considered to be exempt from disclosure under the FOI Act should be in the separate Part 2 form, together with the legal rationale for non-publication.

Is there a part 2 form – NO

ORIGINATING OFFICER DECLARATION:

Drafting officer to
confirm the
following (✓)

Drafting officer:

Matt Thomas has drafted this report in accordance with GLA procedures and confirms that:

✓

Assistant Director/Head of Service:

Stephen Tate has reviewed the documentation and is satisfied for it to be referred to the Sponsoring Director for approval.

✓

Financial and Legal advice:

The Finance and Legal teams have commented on this proposal, and this decision reflects their comments.

✓

EXECUTIVE DIRECTOR, RESOURCES:

I confirm that financial and legal implications have been appropriately considered in the preparation of this report.

Signature

M. J. Allen

Date

6.8.14

