Prestwick Strategic Study Stakeholder Workshop

Friday 23rd October 2020

Introductions

Terms of Reference

DATE: 23rd October 2020
VENUE: Teams Meeting
CHAIR: Dr Phillipa Whitford MP

OBJECTIVES

Meeting as part of the Prestwick Strategic Study to update work undertaken on short list of options to reduce flooding in Prestwick.

ATTENDEES

- Scottish Water – Communities, Flooding Team
- Elected Members – MP, MSP, Councillors, Council Provost
- Ayrshire Roads Alliance
- Prestwick North and South Community Councils
- P-RAAF
- Plus any other invitee as agreed

INPUTS

- Key Information from the hydraulic model summarising the existing sewer network.
- Google Earth to aid discussions.
- Others, as required

OUTPUTS

- Meeting record circulated within 3 weeks of meeting
- Action log circulated to attendees

GROUND RULES

- Come prepared
- Each individual is responsible for delivering their own actions
- Minimise background noise (please go on mute when not speaking)
- Start and finish on time
- Respect everyone's opinion

10.00	**START** • Welcome and introductions • Review of report and actions from previous Stakeholder meeting.
10.15	**UPDATE ON SHORT LIST OF OPTIONS** • Zone A – West of the railway • Zone B – East of the railway (north) • Zone C – East of the railway (south)
11.15	**BREAK**
11.30	**SURFACE WATER MANAGEMENT INITIATIVE**
12.00	**ANY OTHER BUSINESS**
12.15	**CONCLUSION AND ACTION PLANNING**
12.30	**FINISH**

Scottish Water
Trusted to serve Scotland

South Ayrshire Council

Review of actions from previous Stakeholder meeting

Review of Actions from Prestwick Strategic Study Stakeholder Group Meeting on 19th June 2020

Item	Action	Owner	Update
1	South Ayrshire Council Planning Department to be encouraged to attend future Prestwick Strategic Study Meetings.	Helen Moonie	
2	Determine if South Ayrshire Council have any projects that may interface with any proposals to manage surface water.	Scott Greig	South Ayrshire Council/Ayrshire Roads Alliance have no current projects that interface with proposals to manage surface water.

Review of Actions from Prestwick Strategic Study Stakeholder Group Meeting on 19th June 2020

Item	Action	Owner	Update
3	Come up with ideas on how we can best engage with customers and the community to promote property level management of surface water. Report any ideas to Bill Elliot who will collate ahead of the next meeting.	All	**Philippa Whitford :** Public information campaign on alternatives such as gravel, drainable monoblock or mesh supported grass with a price comparison and comparison of flood reduction to common driveway surfaces such as tarmac, monoblock or paving. A Local Authority supported programme (similar to one for compost bins) to provide cheap water butts due to bulk purchasing. **Ian Cochrane:** Could you sponsor a scheme to offer free/discounted water butts/ rain gardens for residents of problem streets. Perhaps engage Energy Agency to promote and administer it on behalf of SW. **Scottish Water:** Prestwick Pilot being developed for implementing surface water management measures. Details will be shared as part of this meeting.

Review of Actions from Prestwick Strategic Study Stakeholder Group Meeting on 19th June 2020

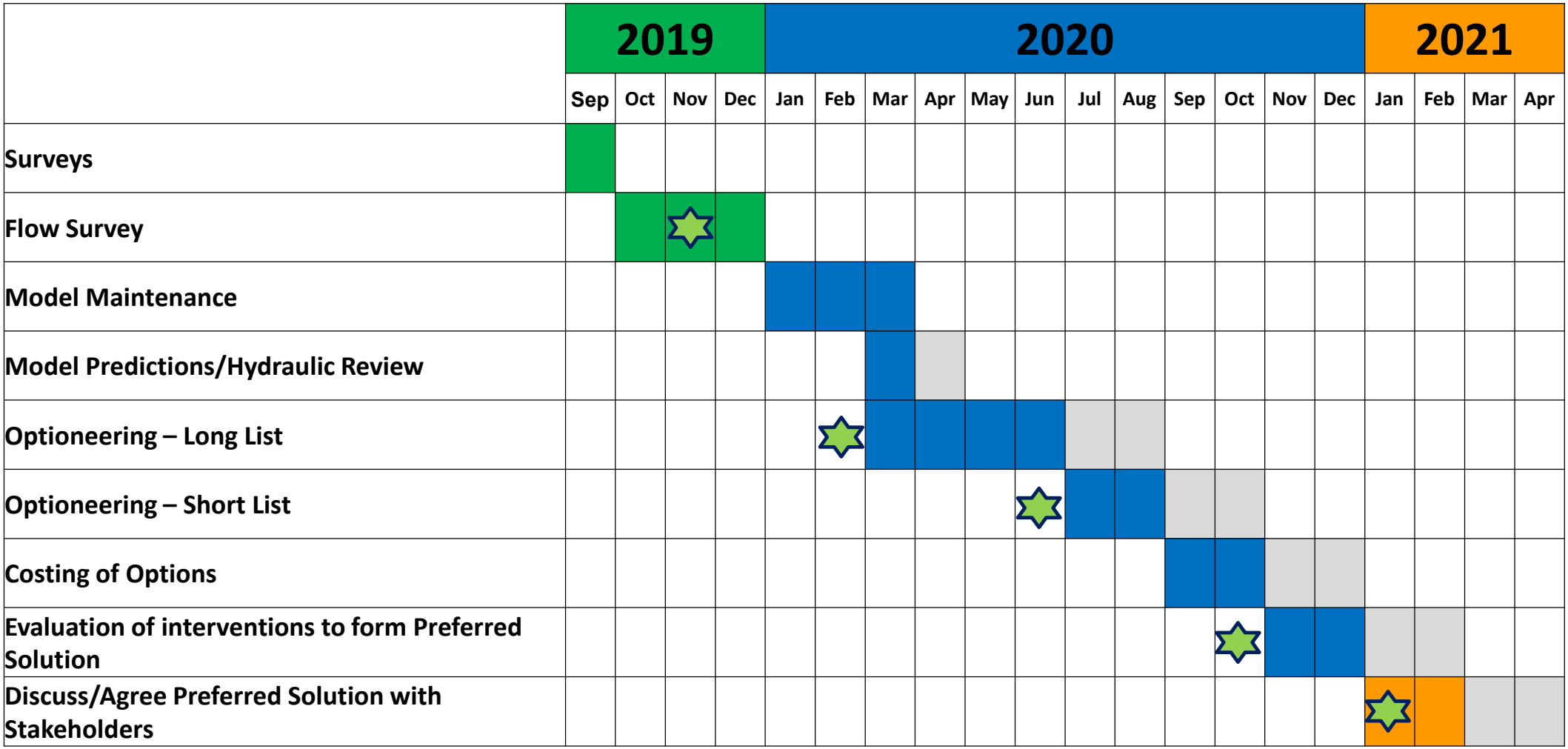
Item	Action	Owner	Update
4	Scottish Water to send out information on rain water management measures such as that provided by Central Scotland Green Network.	Bill Elliot	Emailed out 10th July 2020.
5	Next Meeting of Stakeholder Group to be arranged to evaluate the further developed options. Date provisionally agreed for 23rd Oct 2020.	Bill Elliot	Placeholder emailed out 10th July 2020.

Update on Mitigations

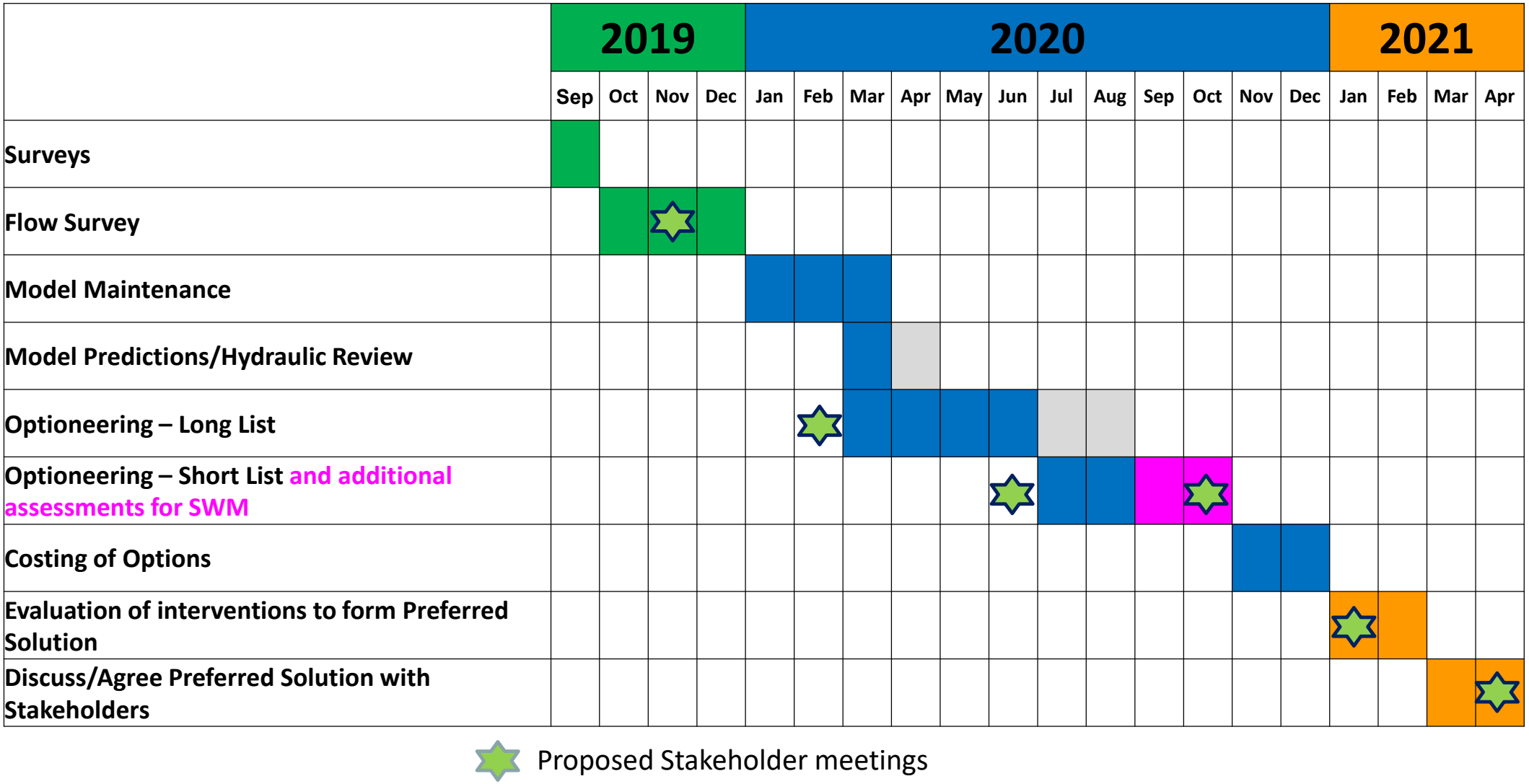
- Speed tables installed
- Temporary Storage Area constructed
- Permanent Storage at Brandon Gardens and St Nicholas Rd
  – Delivery Partner scheduling works

Timeline

Prestwick Strategic Study Timeline



Prestwick Strategic Study Revised Timeline



Why we are here

Project Update

Progress since summer meeting

1. Developing shortlist options

2. Assessing impact of storm water management solutions

Shortlist

Zone	Long list item	Take to shortlist
A – West of Railway	Preventing and slowing entry of surface water	Yes
	Pass-forward and storage (Esplanade)	Yes
	Pass-forward and storage (Parking and pool area)	No
B – East of Railway (north)	Preventing and slowing entry of surface water (roads)	Yes
	Preventing and slowing entry of surface water (roof and parking)	Yes
	Transfer to Pow Burn catchment	Yes
	Pass-forward to zone A (Links Road)	No
	Pass-forward to zone A (Bridge Street)	Yes
	Below ground storage in zone B	No
C – East of Railway (south)	Preventing and slowing entry of surface water (park)	Yes
	Preventing and slowing entry of surface water (road)	Yes
	Transfer to Pow Burn catchment	Yes
	Below ground storage (combined sewage)	No
	Pass-forward to zone A	Yes
Catchment wide	Preventing and slowing entry of surface water (source control)	Yes

Preventing and slowing entry of surface water

Description

- Basins in St Ninian's Park to direct roof runoff away from combined sewers
- Parking areas to follow

Advantages

- Small reduction in flood risk on Ayr Road and Carrick Place
- Small reduction in flood risk in Brandon Gardens
- Low carbon solution
- Potentially quicker delivery than traditional solutions

Disadvantages

- Doesn't reduce flow enough to stop flooding alone

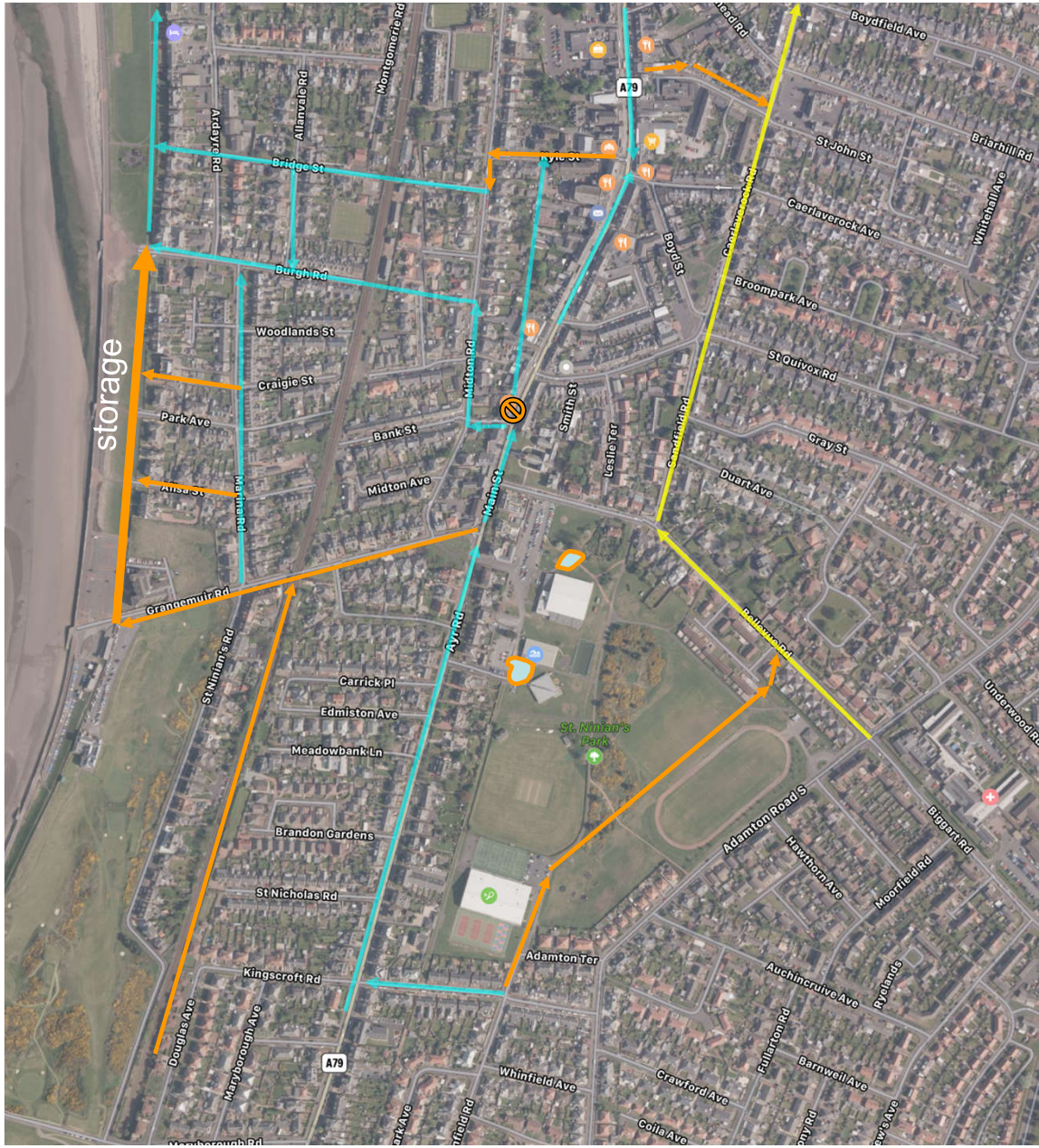
Shortlist progress

1. Work will be required on Ayr Road – measures around it help but are insufficient

2. Work required on Main Street – provision of capacity downstream helps but not enough

Next step:

Assessing impact of ways to prevent and slow entry of surface water



Need for further appraisal of surface flooding

1. Flooding descriptions from stakeholders

2. Findings of other projects (best practice)

3. Risk that traditional options alone may not be effective

4. More extreme events – climate change

- **Additional appraisal needed to represent existing catchment and options**

An urban catchment

Standard approach

- Represented simplistically

An urban catchment

Standard approach

- Represented simplistically

An urban catchment

Two main sources:

1. **Roofs** + foul

An urban catchment

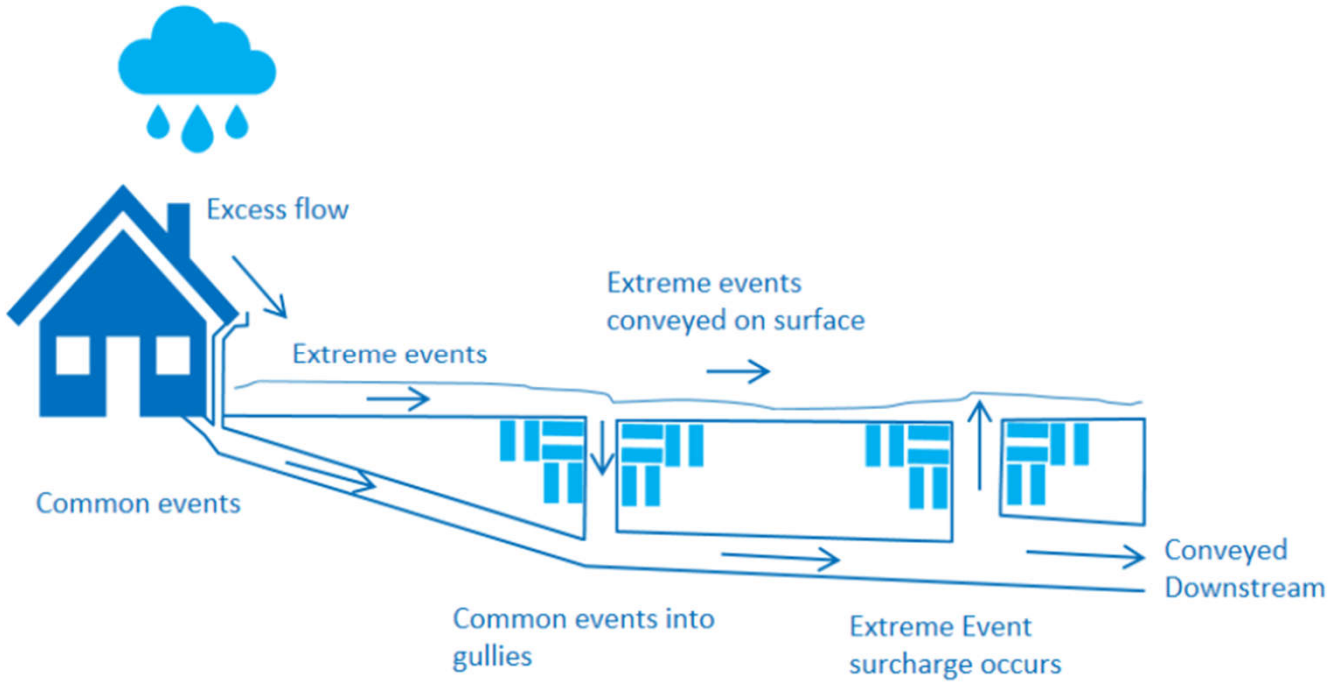
Two main sources:

1. Roofs + foul

2. Roads, pavements and paved driveways

Progress

- Built additional detail into model
- Better able to represent extreme events
- Trial scenarios of shortlist options



Findings

- Even with unlimited sewer size, flood risk remains
  - Not all rainfall gets into the sewer
  - Avoided something that won't work
- Need to deal with the water that stays on the surface
  - Even more important than we expected
- Better able to accurately size what will reduce risk

Shortlist

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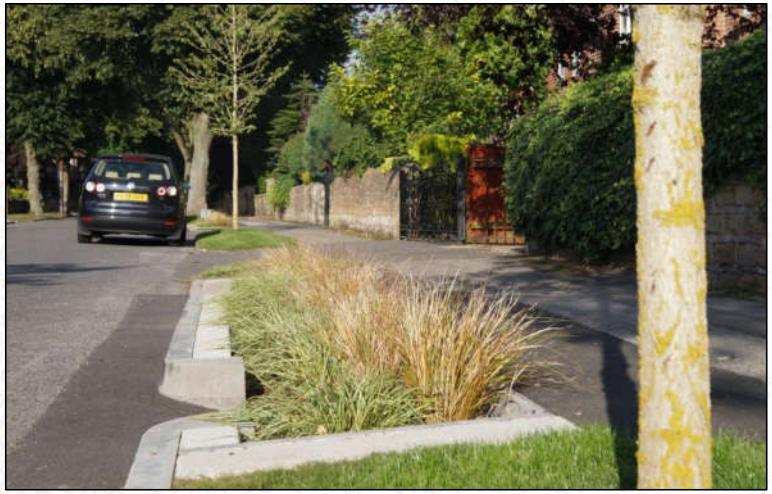
	Transfer to Pow Burn catchment	Yes
	Pass-forward to zone A (Links Road)	No
	Pass-forward to zone A (Bridge Street)	Yes
	Below ground storage in zone B	No
C – East of Railway (south)	Preventing and slowing entry of surface water (park)	Yes
	Preventing and slowing entry of surface water (road)	Yes
	Transfer to Pow Burn catchment	Yes
	Below ground storage (combined sewage)	No
	Pass-forward to zone A	Yes
Catchment wide	Preventing and slowing entry of surface water (source control)	Yes

Shortlist

Preventing and slowing entry of surface water (road)



Shortlist

Preventing and slowing entry of surface water

Catchment info

- 160 houses
  - 16,000m^2 of roofs

  = 800m^3 of water from roofs

- 1.1 miles of road
  - 18,000m^2 of road and pavement

  = 900m^3 of water

= 1,700m^3 of water

Equivalent of kerb to kerb of Ayr Road from Grangemuir Road to Kingscroft road at 0.5m deep. At least knee height!

Preventing and slowing entry of surface water (Road)

Benefits

Risks

Preventing and slowing entry of surface water (Roof)

Benefits

Risks

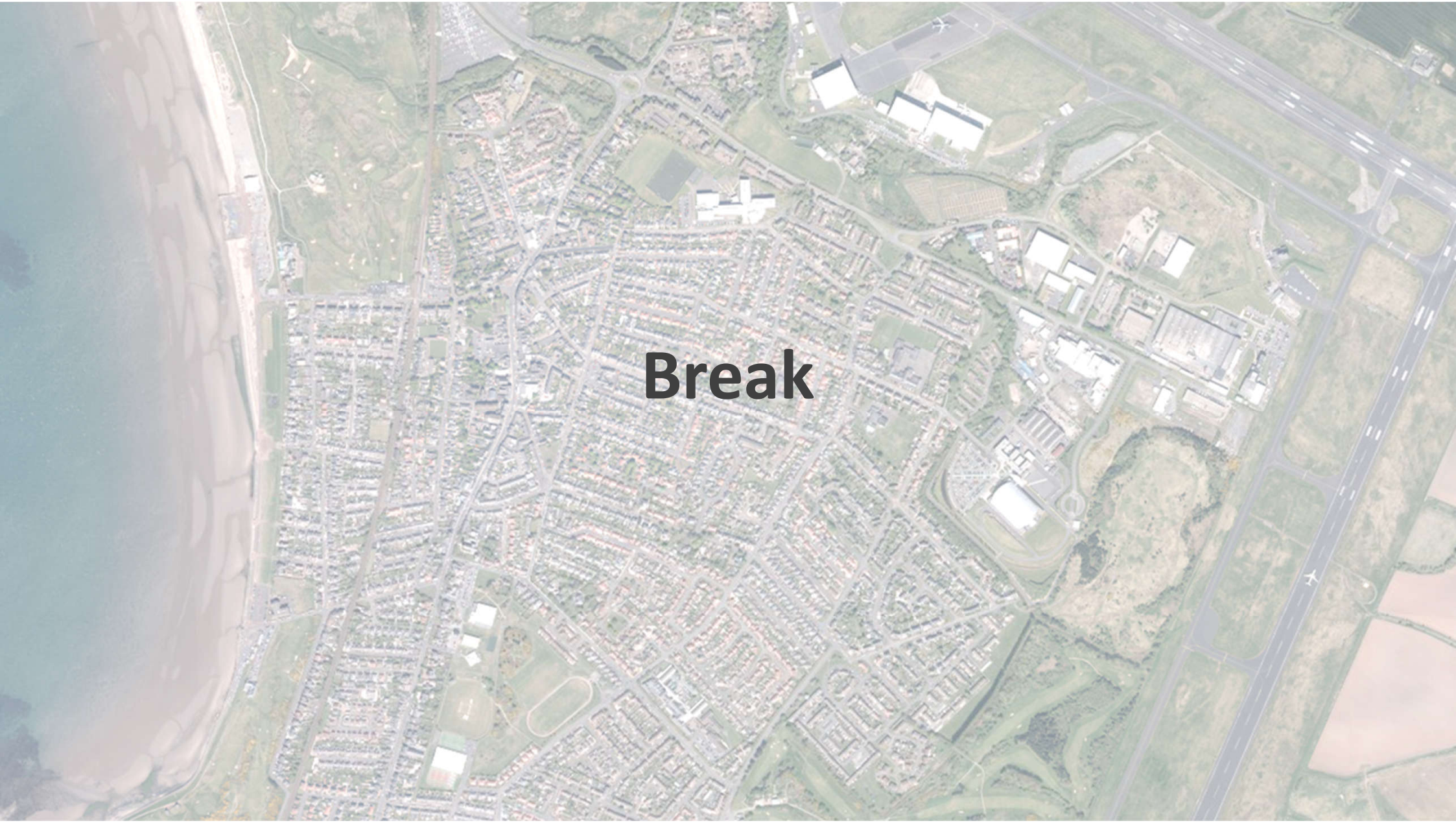
Residual flooding predicted

	All roads connected	25% of road area disconnected	50% of road area disconnected	75% of road area disconnected	All roads removed
All roofs connected	1,500	1,100	750	400	0
75% roofs connected (40 removed)	1,150	800	400	0	0
50% roofs connected (80 removed)	850	450	0	0	0
25% roofs connected (120 removed)	500	0	0	0	0
All roofs removed (160 removed)	150	0	0	0	0

Progress since summer meeting

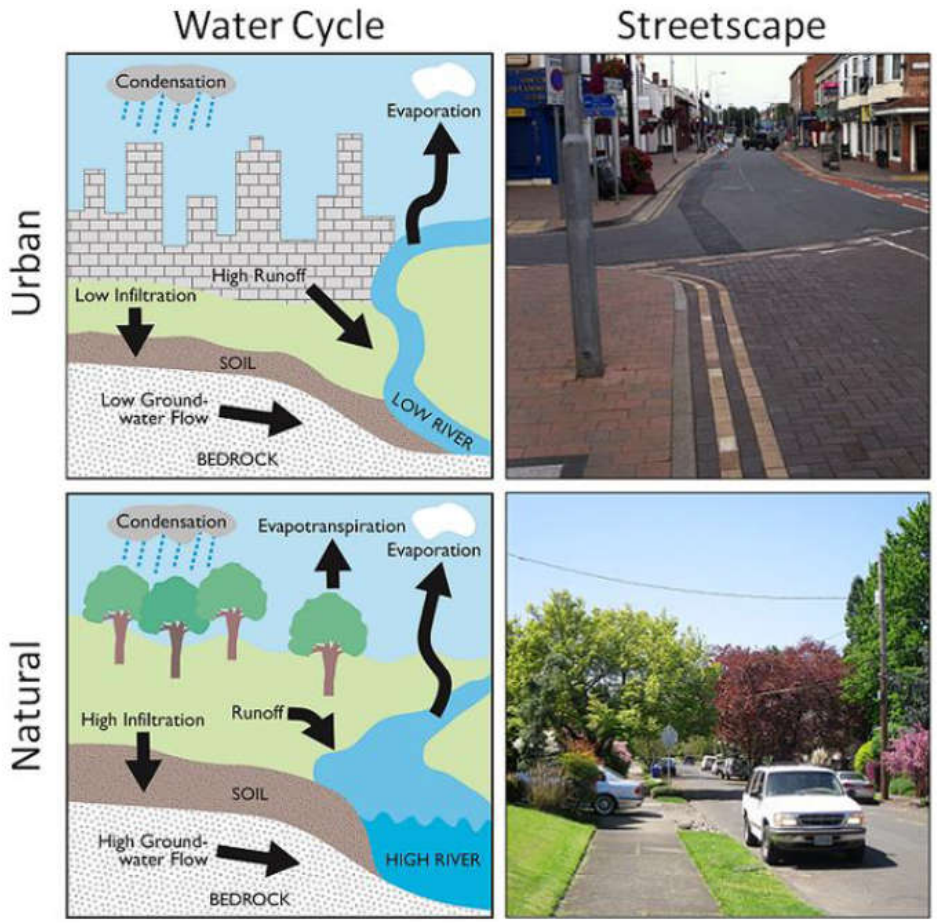
1. Developing shortlist options

2. Assessing impact of storm water management solutions


Break

Surface Water Management Initiative

Surface Water Management Initiative
- What is Blue/Green Infrastructure?



BLUE- **GREEN**

Surface Water Management Initiative
- Pilot Initiative for town of Prestwick

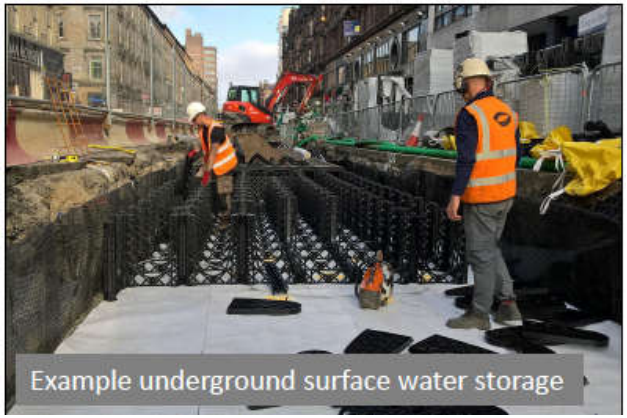
- Large scale application of Blue/Green infrastructure
- Flood Risk Reduction
- Bring agencies together to engage the community and develop a programme for the large scale application of multiple Blue/Green across the town.
- Community engagement – perception of surface water responsibilities and appetite for Blue/Green infrastructure.
- Planning of locations and choices for source control measures
- Specialist teams to assess/design and implement measures.

Surface Water Management Initiative
- What might it involve?

- Remove /attenuate rain water from large roofs
- Target buildings under control of public bodies
- Remove/attenuate rain water from car parks

Surface Water Management Initiative - What might it involve?

- Remove /attenuate rain water from roads/pavements
- Attenuation ponds
- Underground surface water storage



Surface Water Management Initiative
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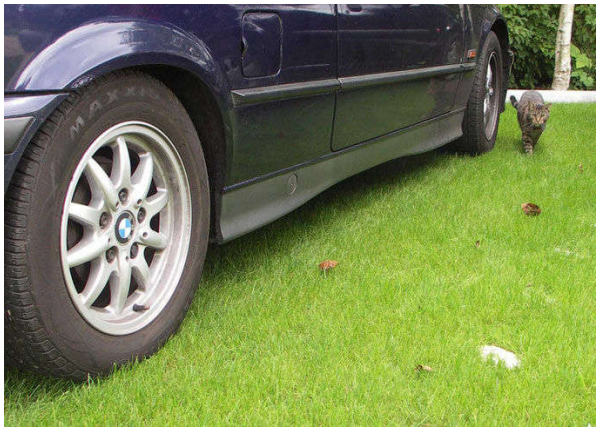
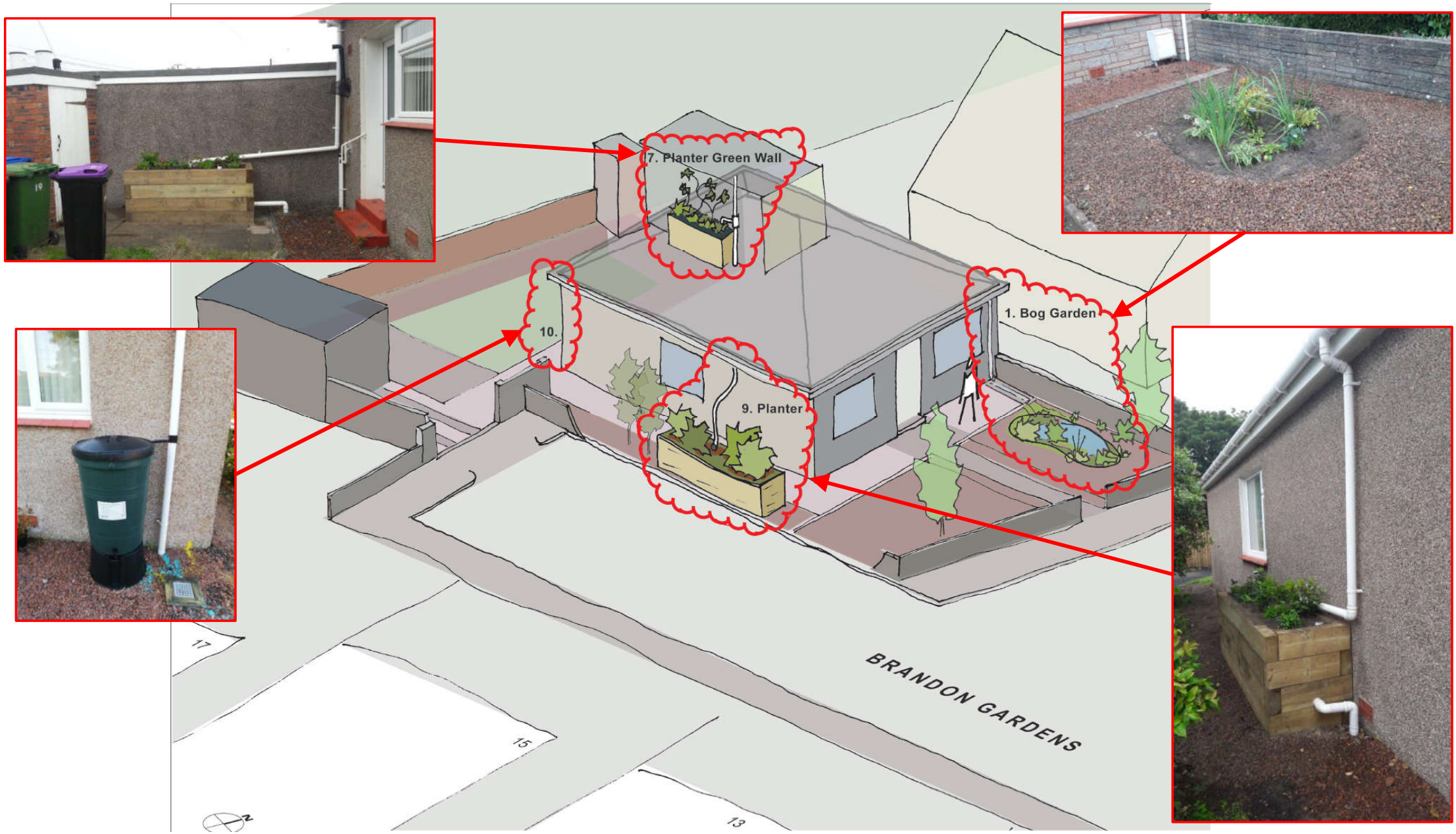


- Property level attenuation - Greening driveways

Surface Water Management Initiative
- What might it involve?

- Property level attenuation – planters/rain gardens


7. Planter Green Wall
1. Bog Garden
10.
9. Planter
BRANDON GARDENS
17
15
13
N

Conclusions, action planning and round-up