B.4 DA04 Hythe and Horn Street

Folkestone and Hythe Stage 1 SWMP : summary and recommendations
Drainage Area 04

Area overview

Area (km^2)	6.3

Drainage assets/systems	Type	Known Issues/problems	Responsibility
Brockhill Stream	Main River	There are recorded incidents of flooding from fluvial sources on Brockhill Stream in West Hythe prior to the construction of the defence scheme in 2000.	Environment Agency
Royal Military Canal	Main River	There were no recorded incidents reported on this stretch of water.	Environment Agency
Saltwood and Mill Lease Stream	Main River	No recorded incidents of flooding from fluvial sources on the Saltwood and Mill Lease Stream	Environment Agency
Seabrook Stream	Main River	Historically there are fluvial issues on Spring Lane, Cliff Road and Seabrook Road	Environment Agency
Drains	Ordinary Watercourse	Some historic risk within vicinity of drains	Kent County Council
Sewer network	Sewers (combined, foul and surface water)	Known problems of surcharging at locations across the drainage area.	Southern Water

Flood risk

Receptor	Source	Pathway	Historic Evidence
A: Orchard Valley	Heavy rainfall resulting in flooding from overloaded sewers and Brockhill Stream and/or Ordinary Watercourses	Southern Water sewers. The overland flow route comes from the north - north west following the route of the Brookhill Stream towards London Road where it reaches Orchard Valley. The elevated ground levels of the Royal Military Canal may act as a boundary to flow routes.	The is historic evidence of flooding in this area, both caused by fluvial sources (there has since been flood defence improvements) and by sewers overloading.
B: St Hilda's Road, Hythe	High tides and storms resulting in sewers tidelocking and wave overtopping	Southern Water sewers. Wave overtopping results in localised ponding of water around West Parade, Ormonde and Victoria Roads.	The is historic evidence of flooding in this area, caused by coastal sources (there has since been coastal protection improvements, 2004) and by sewers backing up due to tide locking.
C: Mill Road and Station Road	Blocked culvert along Saltwood and Mill Lease Stream	Flooding along the valley of the watercourse, accumulating in low spots around Station and Mill Road and East Street.	There is history of flooding in this area due to surface water, a result of a blocked culvert (which is main river).
D: Cannongate Road, Hythe	Heavy rainfall resulting in overloaded sewers	Southern Water sewers resulting in runoff along localised roads. Runoff from land to west of properties along Blackhouse Hill.	There are recorded incidents of flooding from overloaded sewer networks and runoff from adjacent rural land
E: Spring Lane, Horn Street	Heavy rainfall resulting in overloaded sewers, runoff and flooding from local watercourse	Southern Water sewers and flow paths along Spring Lane (the deep FMfSW also shows this as a key flow route for surface water)	There are recorded incidents of flooding from fluvial sources and overloading of the sewer network.

F: Seabrook	Heavy rainfall resulting in overloaded sewers and surface water runoff/ponding. Potentially fluvial sources but records are unclear. Wave overtopping.	Southern Water sewers. Records of fluvial flooding are disconnected from watercourses, which suggests these may be surface water incidents, the pathway for which is localised ponding along Seabrook Road / Sandgate Esplanade. Wave overtopping results in localised ponding and flow routes along Seagate Esplanade.	There is a history flooding from a variety of sources, coastal (there has since been coastal protection improvements, 2004), surface water, fluvial, groundwater (although location of fluvial and groundwater events suggest this may be surface water) and overloaded sewers.
G: Various (sewer)	Heavy rainfall resulting in overloaded sewers	Southern Water sewers	There are numerous incidents of sewer flooding across the drainage area (both internal and external).
H: Various (surface water)	Heavy rainfall resulting in surface water runoff	As well as showing flow routes along watercourse pathways, the FMfSW also suggests ponding to the north of the Royal Military Canal	Receptor relates only to residual risk shown by FMfSW, and aside from locations mentioned above, there are no records of historic flooding to substantiate risk.

Summary of Location-specific Actions

Area of benefit	Location of action	Action	Action owner	Priority
Cannongate Road/Sene Park/Cliff Close, Hythe	Cannongate Road/Sene Park/Cliff Close, Brockhill, Hythe	1. A CCTV study to investigate the condition of drains and gullies. 2. Ensure gullies, drains, sewers are cleared and cleansed within the same day. Signposting to inform locals of plans for gully and sewer jetting, would help to demonstrate that the RMAs were working together to help and improve the current problems. 3. Consider use of property resilience and resistance measures	KCC	1 & 2 = Short Term 3 = Medium Term
Cannongate Road/Sene Park/Cliff Close, Hythe	Land west of properties along Blackhouse Hill	Divert surface water runoff by using land raising or ditches to divert runoff to Saltwood and Mill Lease Stream	KCC	Long Term
Spring Lane, Horn Street	Spring Lane, Horn Street	1. Commission modelling study to better understand risk within Horn Street 2. Feasibility options could include green infrastructure along Spring Lane	KCC	1 & 2 = Long Term

North

SALTWOOD CP

HYTHE CP

HYTHE

A

B

C

D

E

F

Legend

- Main River (EA) - open channel
- Main River (EA) - culverted
- Ordinary Watercourse - open channel
- Ordinary Watercourse - culverted
- Surface Water Sewer (Southern Water)
- Foul Sewer (Southern Water)
- Combined Sewer (Southern Water)

Receptors

- **A** Orchard Valley
- **B** St Hilda's Road, Hythe
- **C** Mill Road and Station Road
- **D** Cannongate Road, Hythe
- **E** Spring Lane, Horn Street
- **F** Seabrook
- **G** Various (sewer)*
- **H** Various (surface water)*

* Illustrations not located on the map, as there are several receptor areas across the drainage area

Client: Kent County Council

Partners: Southern Water, Environment Agency, Folkestone Hythe & Romney Marsh Shepway District Council

Consultant: JBA consulting

Scale 1:16,000

Folkestone and Hythe SWMP Stage 1

Watercourses and Drainage Systems
DA04

North

SALTWOOD CP

HYTHE CP

HYTHE

Pennypot

Horn Street

Seabrook

A

B

C

D

E

F

Legend

- Main River (EA) - open channel
- Main River (EA) - culverted
- Ordinary Watercourse - open channel
- Ordinary Watercourse - culverted

Receptors

A	Orchard Valley
B	St Hilda's Road, Hythe
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D	Cannongate Road, Hythe
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Historic flooding (other RMAs)

- Other/Unknown
- Fluvial Flooding
- Groundwater
- Combined
- Surface Water
- Sewer

Sewer flooding incidents (Southern Water)*

Number of flood occurences per postcode area

- 1 - 5
- 6 - 15
- >16

* Polygons only represent the postcode area and not the flood extent

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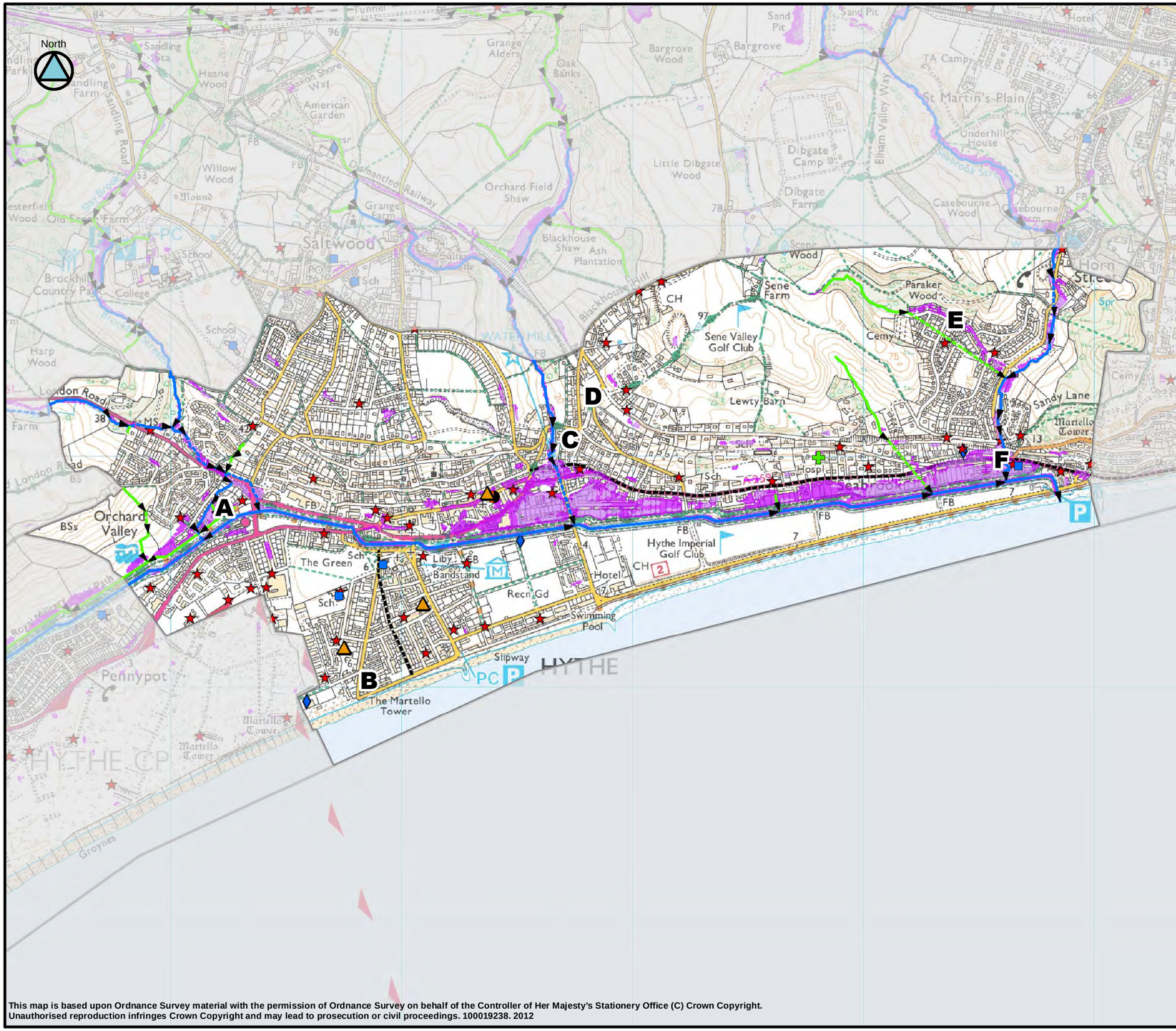
Folkestone and Hythe SWMP
Stage 1
Historic Flooding
DA04



Legend

- Main River (EA) - open channel
- Main River (EA) - culverted
- Ordinary Watercourse - open channel
- Ordinary Watercourse - culverted
- Education (Nursery, Primary School, Higher Education)
- Hospital
- Emergency Services (Ambulance, Fire and Police Stations)
- Nursing and Retirement Homes
- Water Utilities
- Electricity and Gas / Communications
- Military Barracks

Cleared gullies

- (based on data received from SDC)

Receptors

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FMfSW 1 in 30yr AEP

- > 0.3m deep

FMfSW 1 in 200yr AEP

- > 0.3m deep

Client: Kent County Council

Partners: Southern Water, Environment Agency, Folkestone Hythe & Romney Marsh Shepway District Council

Consultant: JBA consulting

Scale 1:16,000

Folkestone and Hythe SWMP Stage 1

Surface Water and Critical Infrastructure
DA04