

Peacehaven Brighton Wastewater System - Outline Options Appraisal

Generic Option	Location of Risk	Planning Objective and Description of Risk	Option Reference	Description	Further Description	Unconstrained Option?	Constrained Option?	Feasible Option?	Net Benefits	Estimated Cost	Preferred Option	Best value / Least cost or Reasons for Rejection
Control/ Reduce surface water entering the sewers	BRIG FC01_1 - Middle Road,	PO4 and PO7 Flooding	BRIG.SC01.1	Surface Water Separation	DAP Option.	No						
Control/ Reduce surface water entering the sewers	BRIG FC02_1 - The Ridgeway,	PO4 and PO7 Flooding	BRIG.SC01.2	Surface Water Separation	DAP Option.	No						
Control/ Reduce surface water entering the sewers	BRIG FC03_1 - Tongdean Lane,	PO4 and PO7 Flooding	BRIG.SC01.3	Surface Water Separation	DAP Option.	No						
Control/ Reduce surface water entering the sewers	BRIG FC04_1 - South Coast Road,	PO4 and PO7 Flooding	BRIG.SC01.4	Surface Water Separation	DAP Option.	No						
Control/ Reduce surface water entering the sewers	BRIG FC05_1 - Preston / New England Rd,	PO4 and PO7 Flooding	BRIG.SC01.5	Surface Water Separation	DAP Option.	No						
Control/ Reduce surface water entering the sewers	BRIG FC06_1 - Wilbury Crescent,	PO4 and PO7 Flooding	BRIG.SC01.6	Surface Water Separation	DAP Option.	No						
Control/ Reduce surface water entering the sewers	BRIG FC07_1 - Warmdene Road,	PO4 and PO7 Flooding	BRIG.SC01.7	Surface Water Separation	DAP Option.	No						
Control / Reduce groundwater infiltration												
Improve quality of wastewater entering sewers (inc reducing FOG, RAG, pre-treatment, trade waste)	Catchment Wide	PO1- Internal Flooding	BRIG.SC03.1	Customer Education Programme	Customer education programme to reduce the risk.	Yes	Yes	Yes	Minor Positive +	£115K	Yes	Best Value
Control / Reduce the quantity / flow of wastewater entering sewer system												
Network Improvements (eg increase capacity, storage, conveyance)	MARINE DRIVE BRIGHTON WPS	PO1- Internal Flooding	BRIG.PW01.1	Maintenance Programme	An efficient maintenance programme for pumping stations and/Treatment works.	No						Risk and uncertainty - future resilience
Network Improvements (eg increase capacity, storage, conveyance)	Hotspot 1 - Preston Park Hotspot 2 - The Lanes Hotspot 3 - Peacehaven	PO1- Internal Flooding	BRIG.PW01.2	Additional Storage	Additional Storage.	No						Do customer support it
Network Improvements (eg increase capacity, storage, conveyance)	Catchment Wide	PO1- Internal Flooding	BRIG.PW01.3	Pipe Rehabilitation Programme	Pipe Rehabilitation Programme.	No						Risk and uncertainty - future resilience
Network Improvements (eg increase capacity, storage, conveyance)	Falmer- Goldstone (Priority Catchment)- Lewes Road (Priority Catchment)- Patcham- Surrenden (Priority Catchment)- Balsdean- Housedean- Newmarket (B,C and D)-	PO12- Ground Water Pollution	BRIG.PW01.4	Pipe Rehabilitation Programme	Total length of sewer within protection zones-0km.	Yes	Yes	Yes	Minor Positive +	£10,400K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	Catchment Wide	PO1- Internal Flooding	BRIG.PW01.5	Jetting Programme	Jetting Programme.	Yes	Yes	Yes	Minor Positive +	£810K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC01_1 - Middle Road,	PO4 and PO7 Flooding	BRIG.PW01.6	Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£5,930K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC02_1 - The Ridgeway,	PO4 and PO7 Flooding	BRIG.PW01.7	Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£6,735K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC03_1 - Tongdean Lane,	PO4 and PO7 Flooding	BRIG.PW01.8	Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£3,310K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC04_1 - South Coast Road,	PO4 and PO7 Flooding	BRIG.PW01.9	Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£2,280K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC05_1 - Preston / New England Rd,	PO4 and PO7 Flooding	BRIG.PW01.10	Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£1,250K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC06_1 - Wilbury Crescent,	PO4 and PO7 Flooding	BRIG.PW01.11	Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£735K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC07_1 - Warmdene Road,	PO4 and PO7 Flooding	BRIG.PW01.12	Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£8,755K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC01 Clarendon Villas	PO4, PO7 and PO1 - Flooding	BRIG.PW01.13	Upsizing and Online Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£TBC - With Partners	No	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC02 Clarendon Villas	PO4, PO7 and PO1 - Flooding	BRIG.PW01.14	Upsizing and Offline Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£1,470K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC03 Godwin Road	PO4, PO7 and PO1 - Flooding	BRIG.PW01.15	Upsizing	DAP Option.	Yes	Yes	Yes	Major Positive +++	£TBC - With Partners	No	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC04 Godwin Road	PO4, PO7 and PO1 - Flooding	BRIG.PW01.16	Upsizing and Offline Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£450K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC05 Millyard Crescent	PO4, PO7 and PO1 - Flooding	BRIG.PW01.17	Upsizing and Online Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£1,295K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC06 Millyard Crescent	PO4, PO7 and PO1 - Flooding	BRIG.PW01.18	Upsizing and Offline Storage	DAP Option.	No						
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC07 Ovingdean Road	PO4 and PO7 - Flooding	BRIG.PW01.19	Upsizing and Online Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£TBC - With Partners	No	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC07 Ovingdean Road	PO4 and PO7 - Flooding	BRIG.PW01.20	Upsizing and Offline Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£985K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC08 Stanmer Villas	PO4, PO7 and PO1 - Flooding	BRIG.PW01.21	Upsizing and Offline Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£1,840K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC09 Stanmer Villas	PO4, PO7 and PO1 - Flooding	BRIG.PW01.22	Upsizing and Offline Storage	DAP Option.	No						
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC011 Woodland Drive	PO4, PO7 and PO1 - Flooding	BRIG.PW01.23	Upsizing and Offline Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£165K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC012 Woodland Drive	PO4, PO7 and PO1 - Flooding	BRIG.PW01.24	Offline Storage	DAP Option.	No						
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC013 Montreal Close	PO4, PO7 and PO1 - Flooding	BRIG.PW01.25	New sewers and Offline Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£475K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC014 Tongdean Lane/Valley Drive	PO4, PO7 and PO1 - Flooding	BRIG.PW01.26	Upsizing, Online and Offline Storage	DAP Option.	No						
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC015 Tongdean Lane/Valley Drive	PO4, PO7 and PO1 - Flooding	BRIG.PW01.27	Upsizing, Online and Offline Storage	DAP Option.	No						
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC016 Willbury Crescent	PO4, PO7 and PO1 - Flooding	BRIG.PW01.28	Upsizing, Online Storage and Offline Storage	DAP Option.	No						
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC017 Willbury Crescent	PO4, PO7 and PO1 - Flooding	BRIG.PW01.29	Upsizing and Offline Storage	DAP Option.	No						
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC018 Preston Road	PO4, PO7 and PO1 - Flooding	BRIG.PW01.30	Upsizing and Offline Storage	DAP Option.	No						

Peacehaven Brighton Wastewater System - Outline Options Appraisal

Generic Option	Location of Risk	Planning Objective and Description of Risk	Option Reference	Description	Further Description	Unconstrained Option?	Constrained Option?	Feasible Option?	Net Benefits	Estimated Cost	Preferred Option	Best value / Least cost or Reasons for Rejection
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC019 Clarendon Villas	PO4 and PO7 - Growth	BRIG.PW01.31	Upsizing and Offline Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£2,385K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC020 Woodland Drive	PO4 and PO7 - Growth	BRIG.PW01.32	Upsizing and Offline Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£2,385K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC021 Preston Road	PO4 and PO7 - Growth	BRIG.PW01.33	Upsizing and 2 new storages	DAP Option.	Yes	Yes	Yes	Major Positive +++	£2,385K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC022 Brighton	PO4 and PO7 - Growth	BRIG.PW01.34	Upsizing, Relay and 2 new Offline Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£2,385K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC023 Brighton	PO4 and PO7 - Growth	BRIG.PW01.35	Upsizing	DAP Option.	Yes	Yes	Yes	Major Positive +++	£2,385K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC024 Brighton	PO4 and PO7 - Growth	BRIG.PW01.36	Upsizing and Offline Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£2,385K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC025 Millyard Crescent and Ovingdean Road	PO4 and PO7 - Growth	BRIG.PW01.37	Upsizing and Offline Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£2,385K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC026 Montreal Close	PO4 and PO7 - Growth	BRIG.PW01.38	Upsizing	DAP Option.	Yes	Yes	Yes	Major Positive +++	£2,385K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	BRIG FC027 Brighton Marina CEO	PO4, PO7 and PO5 - Growth	BRIG.PW01.39	Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£2,385K	Yes	Best Value
Improve treatment (capacity and quality at existing works or develop new WTWs)												
Wastewater Transfer												
Mitigate impacts on Air Quality (e.g. Carbon neutrality, noise, odour)												Not included in the first round of DWMPs
Improve Land and Soils												Not included in the first round of DWMPs
Mitigate impacts on Water Quality												
Reduce consequences Properties (e.g. Property Flood Resilience)	Hotspot 1 - Preston Park Hotspot 2 - The Lanes Hotspot 3 - Peacehaven	PO1- Internal Flooding	BRIG.RC04.1	Property Flood Mitigation / Resistance	Short-term property level protection ahead of flood alleviation scheme.	No						Risk and uncertainty - future resilience
Study/ investigation to gather more data	Hotspot 4 - Hove Hotspot 5 - Brighton City Centre Hotspot 6 - Kemp Town Hotspot 7 - Preston Park Hotspot 8 - Hanover	PO1- Internal Flooding	BRIG.OT01.1	Investigation into causes	Further investigation to identify the cause of the internal flooding incident.	No						Cost Effective
Study/ investigation to gather more data	Falmer- Goldstone (Priority Catchment)- Lewes Road (Priority Catchment)- Patcham- Surrenden (Priority Catchment)- Balsdean- Housedean- Newmarket (B,C and D)-	PO12- Ground Water Pollution	BRIG.OT01.2	Study and Investigations	Total length of sewer within protection zones-421.	No						Cost Effective
Study/ investigation to gather more data	MARINE DRIVE BRIGHTON WPS	PO5 Storm Overflow	BRIG.OT01.3	Storage	Storage.	Yes	Yes	Yes	Minor Positive +	£1,000K	Yes	Best Value
Study/ investigation to gather more data	Catchment Wide	PO4- 1 in 50 year PO5- Storm Overflow PO7- Hydraulic Overload PO10- Surface Water Management	BRIG.OT01.4	Improve Hydraulic Model	Improve Hydraulic Model.	Yes	Yes	Yes	Minor Positive +	£800K	Yes	Best Value