

# Bourne Valley Flood Management Scheme

08/03/2017

## Schedule of costs for site work

Action reference	Location	Work Item	Priority and precursor (if any)	Undertaker	Budget Cost	
					Low	High
R1	Vernham Dean	Tanglewood' property blocks overland flow path. Modify boundary fence to improve flood route through the property	1	Householder	£1,000.00	£2,000.00
R2	Vernham Dean	Install culvert under cricket pitch car park to drain down the school play areas faster	1, R3	HCC	£3,000.00	£5,000.00
R3	Vernham Dean	Lower level of cricket field locally to increase flow velocity away from the village centre	1	HCC/landowners	£3,000.00	£5,000.00
R3A	Vernham Dean	Install interceptor drain across Dean Terrace and outfall to cricket pitch	1	HCC	£30,000.00	£50,000.00
R4	Vernham Dean	Flood route to be improved between Tanglewood and the cricket pitch by small scale re-grading and clearing obstacles from the flood path	1	HCC/landowners	£1,000.00	£2,000.00
R5	Vernham Dean	Reduce levels around the rear of car park to increase flow velocity to the cricket pitch	1	HCC/landowners	£500.00	£1,000.00
R5A	Vernham Dean	Create flood storage area using earthwork bunds connected by a drop board sluice. The sluice will be set so as not to restrict high but acceptable flow levels and then boards can be added to hold flow back in extreme conditions.	3	HCC/landowners	£20,000.00	£30,000.00
R6	Vernham Dean to Upton	Cut new ditches and grips to clear water from the highway during flooding events. These will need to be on private land behind the boundary hedges as the highway verge is of insufficient width. This work will increase downstream flood risk so cannot be implemented until the improvement work proposed downstream has been completed.	3, R7 onward	HCC/landowners. HCC.H *No date at present as low priority work. A maintenance plan would need to be in place for the ditches.	£30,000.00	£40,000.00
R7	Upton	Blocked road crossing pipe to be cleaned out	1	HCC.H advise works could be carried out in 17/18	£400.00	£800.00
R8	Upton	Re-profile road or add gullies to inside of bend to drain the highway to a new outfall into adjacent field. This is a highway safety risk as visibility is poor round the bend, water stands in the carriageway and can freeze and the verge is being eroded by splashback.	1	HCC.H advise that gullies could be installed in 17/18 but if re-profiling necessary would be in 18/19. Also concerns that the concrete channel has collapsed. This area to be added to planned survey to establish scope of works required.	£20,000.00	£40,000.00
R9	Upton	Existing ditches and grips to be re-cut. Detailed walk through required to identify extent.	1	HCC/landowners. HCC.H advise that this work could be done in 17/18. This area to be added to planned survey to establish scope of works required.	£3,000.00	£5,000.00
R10	Upton	Improve flood flow velocity through the section between The Cottage and the main road to drain the flood water down more quickly. This is all on private land and will need to be agreed with landowners. Proposals would be low impact actions such as lowering ground levels locally and modifying property boundary fences to make them more permeable to flood flow.	2	HCC/landowners.	£2,000.00	£10,000.00
R11/R12	Upton	Improve flood flow velocity from Stable Cottage to the stream bed beyond Upton House. The existing twin culverts under Upton House and the open highway culvert as well as the levels of the highway drainage in this area will need to be land surveyed to identify the best solution in this area.	2	HCC/landowners. HCC.H says happy to assist but as all within private land needs to be landowner led. This area to be added to planned survey to establish scope of works required.	£4,000.00	£8,000.00
R13	Upton	Re-grade stream bed to improve flow	2	HCC/landowners	£5,000.00	£10,000.00
R14	Upton	Extend highway drainage from Stable Cottage down the main road to form a new outfall into the stream downstream of Upton House	2	HCC.H advise that work could be carried out in 18/19 if resources permit - Operation Resilience to carry out work.	£20,000.00	£30,000.00
R14A	Ibthorpe	Culvert to be cleaned	1	HCC.H advise that work could be carried out once R15 done.	£1,000.00	£2,000.00
R15	Ibthorpe	Lower ground levels locally south of the pumping station to maximise flow through the highway culvert to drain down upstream flood water more quickly.	3	HCC/landowners	£5,000.00	£15,000.00
R16	Ibthorpe	Create flood storage area using earthwork bunds connected by a drop board sluice. The sluice will be set so as not to restrict high but acceptable flow levels and then boards can be added to hold flow back in extreme conditions.	3	HCC/landowners	£10,000.00	£20,000.00
R17	Ibthorpe	Create flood storage area using earthwork bunds connected by a drop board sluice. The sluice will be set so as not to restrict high but acceptable flow levels and then boards can be added to hold flow back in extreme conditions.	3	HCC/landowners	£15,000.00	£20,000.00
R18	Hurstbourne Tarrant	Install a manifold of pipes at 'The Crescent' to supplement the twin 300mm pipes at present so that the throttle in the 600mm diameter highway drain is removed. This will help drain down 'The Green' more quickly and improve the performance of the highway drains keeping flows off the highway.	1	HCC.H advise that work could be carried out by Operation Resilience in 18/19 if resources permit.	£10,000.00	£15,000.00
R19	Hurstbourne Tarrant to Stoke	Create flood storage area using earthwork bunds connected by a drop board sluice. The sluice will be set so as not to restrict high but acceptable flow levels and then boards can be added to hold flow back in extreme conditions.	2	HCC/landowners	£20,000.00	£30,000.00
R20	Hurstbourne Tarrant to Stoke	Create flood storage area using earthwork bunds connected by a drop board sluice. The sluice will be set so as not to restrict high but acceptable flow levels and then boards can be added to hold flow back in extreme conditions.	3	HCC/landowners	£20,000.00	£30,000.00

R21	Hurstbourne Tarrant to Stoke	Re-grade the stream bed level on the approach exit and under the road bridge to improve flow	1	PC/HCC/landowners	£10,000.00	£15,000.00
R22	Hurstbourne Tarrant to Stoke	Re-grade stream bed level to improve flow	1	PC/landowners	£15,000.00	£20,000.00
R23	Stoke	Cut grips through bund to allow the river to flood adjacent meadow in times of flood. The river has been re-routed in this area and this has resulted in a fast narrow and shallow section.	1	PC/landowners	£1,000.00	£2,000.00
R24	Stoke	Create flood storage area using earthwork bunds connected by a drop board sluice. The sluice will be set so as not to restrict high but acceptable flow levels and then boards can be added to hold flow back in extreme conditions.	3	HCC/landowners	£15,000.00	£20,000.00
R25	Stoke	Re-grade overgrown section of stream	2	PC/landowners	£10,000.00	£15,000.00
R26	Stoke	Remove tree blocking culvert bore	1	PC/landowners	£500.00	£1,000.00
R27	Stoke	Relocate fence across stream to present less of an obstruction	1	PC/landowners	£500.00	£1,000.00
R28	Stoke	Re-grade ditch to improve flow capacity	1, R30, R31, R32	PC/landowners	£2,000.00	£3,000.00
R29	Stoke	Create flood storage area using earthwork bunds connected by a drop board sluice. The sluice will be set so as not to restrict high but acceptable flow levels and then boards can be added to hold flow back in extreme conditions.	3	HCC/landowners	£15,000.00	£20,000.00
R30	Stoke	Harden roadside verge to provide a slipway for water to flow off the highway in to the ditch	1, R28, R31, R32	HCC.H advise that work could be carried out in 17/18 if resources permit.	£2,000.00	£3,000.00
R31	Stoke	Upsize culvert to 750mm diameter to increase flow under the highway	1, R28, R30, R32	HCC.H advise that work could be carried out by Operation Resilience in 18/19 if resources permit.	£4,000.00	£8,000.00
R32	Stoke	Re-grade ditch to improve flow capacity	1, R30, R31	PC/landowners	£2,000.00	£3,000.00
R33	Stoke	Re-grade stream bed level to improve flow	2, R35	PC/landowners	£10,000.00	£15,000.00
R34	Stoke	Create flood storage area using earthwork bunds connected by a drop board sluice. The sluice will be set so as not to restrict high but acceptable flow levels and then boards can be added to hold flow back in extreme conditions.	3	HCC/landowners	£20,000.00	£30,000.00
R35	Stoke	Reduce stream bed level under bridge. Foul sewer may need to be lowered.	1	PC/landowners	£5,000.00	£20,000.00
R36	Stoke/St Mary Bourne	Road edge cannot be seen during floods and stream is immediately adjacent. Install marker posts along edge of road.	2	HCC/PC	£1,000.00	£2,000.00
R37	Not used					
R38	Not used					
R39	St Mary Bourne	Reduce stream bed level under bridge	2	HCC/landowners	£2,000.00	£3,000.00
R40	St Mary Bourne	New kerbline adjacent Belle Vue Cottages to prevent flood water from highway entering the property.	2	HCC.H advise that work could be carried out in 17/18. The side access to the property may cause an issue.	£5,000.00	£8,000.00
R41	St Mary Bourne	High level overflow to be installed from stream to pond to speed up drain down from upstream when stream level at capacity	3	HCC/landowners	£2,000.00	£3,000.00
				Total	£345,900.00	£562,800.00

**Notes:**

2. HCC.H - Hampshire County Council Highways

4. Unless work stated to be carried out by HCC Operation Resilience it will be done through the Highways planned maintenance programme.

5. The new Highways contract starts August 2017 and the changover between contractors may lead to delays in the routine work being carried out.