

HAMPSHIRE COUNTY COUNCIL

Decision Report

Decision Maker:	Executive Lead Member for Economy, Transport and Environment
Date:	12 May 2022
Title:	Project Appraisal Update: A32 Farringdon and Chawton Flood Alleviation Scheme – Phase 2
Report From:	Director of Economy, Transport and Environment

Contact name: David Ryder / Paul Prowting

Tel: 07909 251438
0370 779 7880

Email: david.m.ryder@hants.gov.uk
paul.prowting@hants.gov.uk

Purpose of this Report

1. The purpose of this report is to request further funding approval for Phase 2 of the A32 Farringdon and Chawton Flood Alleviation Scheme.
2. A previous Project Appraisal was approved on 23 September 2021, but the scheme costs have risen significantly for a number of reasons. There are several factors associated with this:
 - early-stage estimates have been reviewed again in light of increased risk around more extensive A32 traffic management constraints, contractor resource availability, and complexities encountered with buried utility plant. Original estimates were too optimistic in this regard due to the early stage of design detail at that time; and
 - in addition, allowance has been made within this new scheme cost for the uncertainty with respect to cost increases being seen across the construction sector. Factors include material shortages, rising fuel costs and labour costs. The regional market has also seen high volumes of infrastructure schemes seeking to be delivered to similar timescales, and other national issues such as driver shortages have impacted the sector post-Covid. Evidence has been seen through tendering of other County Council projects of increasing costs due to these market forces and in such an uncertain market, accurate scheme costs have proven difficult to estimate.
3. As such, new estimates of potential risk have been increased to add robustness, along with having a more accurate assessment of current scheme costs given the complexities noted above.

Recommendations

4. That the Executive Lead Member for Economy, Transport and Environment approves the £0.795million increase in the capital programme value of the A32 Farringdon-Chawton Flood Alleviation Scheme (Phase 2) from £0.386million to £1.181million, with the increase to be funded by the County Council's Flood Risk and Coastal Defence Budget.
5. That the Executive Lead Member for Economy, Transport and Environment approves the Project Appraisal Update for A32 Farringdon-Chawton Flood Alleviation Scheme, as outlined in this report.
6. That approval be given to procure, spend and enter into necessary contractual arrangements, in consultation with the Head of Legal Services, to implement the proposed improvements to carry out survey and drainage works, as set out in this report, at an estimated capital cost of £1.181million to be funded from the County Council's Flood Risk and Coastal Defence (FRCD) Programme, Defra Flood Defence Grant in Aid (FDGiA) and Thames Regional Flood and Coastal Committee (RFCC) Local Levy.
7. That authority to make the arrangements to implement the scheme, including minor variations to the design or contract, be delegated to the Director of Economy, Transport and Environment.

Executive Summary

8. Phase 1 of this scheme was previously approved in September 2017. The aim of the flood alleviation scheme is to improve the management of both surface and groundwater conveyed by ordinary watercourses adjacent or near to the A32 highway through the village of Lower Farringdon and by a main river to Chawton village. Funding for a further phase of work (Phase 2), was requested in a Project Appraisal that was approved on 23 September 2021
9. The flood alleviation scheme will benefit the communities of Farringdon and Chawton and enable a major highway to remain open if a similar flood event to that which occurred in the winter of 2013/14 were to occur again. Although the scheme costs have risen, the protection of the A32 highway and reduction in flood risk to residents, businesses and landowners outweighs the option to reduce the scope of the planned work.
10. This scheme remains a priority in the face of rising costs for flood alleviation schemes and as the Highway Authority, Hampshire County Council has a duty to keep roads open and road users safe. The A32 highway is a key artery in keeping Hampshire moving and keeping this open is of significant strategic importance to the local economy.

Phase 2 Increase in Works Cost Estimate

11. Phase 2 of the A32 Farringdon and Chawton Flood Alleviation Scheme is made up of 16 discrete work areas stretching along a 5km length within the 88.1 km² water catchment area. It is unlike recently delivered schemes in the

flood management programme, due to its geographical extent, impact on an important principal highway route, the A32, and that half of the work areas are being delivered off the public highway on third party land.

12. Through working with the term highways contractor over the last 6 months, the County Council has undertaken further detailed site investigations through an extensive programme of trial holes. These investigations have identified deficiencies in the existing drainage system and complications from the presence of utility apparatus, including historic damage from their installation. The work with the term highway contractor and the investigations have also highlighted the additional complexities and logistical challenges of securing access to the remote work areas on third party land and the restrictive traffic management constraints along the A32.
13. The works cost estimate used to inform the September 2021 approval was compiled in Summer 2021. The findings of the most recent investigation, further development of the design, and unprecedented inflationary pressures in the construction market have driven the need for a thorough review of scheme costs. A new estimate was completed in March 2022 and this projects a significant increase in works and associated costs.
14. The increase is down to a number of factors. These include further design development and subsequent redesign due to the presence of extensive utility apparatus at unexpected depths, the requirement to replace additional parts of the existing drainage system, and the impact of working in 16 discrete work areas.
15. In addition, the unprecedented inflationary pressures in the construction market, due to factors including material shortages, rising fuel and labour costs and the current global situation had not reached the current levels at the time of producing the original estimate. The regional market has also seen high volumes of infrastructure schemes seeking to be delivered to similar timescales, and other national issues such as driver shortages have impacted the construction sector post-Covid. Evidence from the tendering of other County Council projects has confirmed increased costs due to these market forces and in such an uncertain market, accurate scheme costs have proven difficult to estimate.
16. To account for the growing risks and complications with the delivery of the works and current uncertainties in the construction industry, a risk contingency has been added to the works cost to improve its robustness and to reflect the difficulties in predicting outturn costs within the current market.

Summary of Phase 1 Completed Works and Proposed Delivery Strategy for Phase 2

17. Phase 1A involved extensive topographical and CCTV surveys, intrusive groundworks, and work to ditches, pipes, gullies and soakaways to determine the cause of the flooding from Mary Lane to Lumbry Park. Phase

1B reinstated some of the capacity and conveyance of the west side of the southern (upstream) part of the existing watercourse north from Mary Lane to Woodside Lane (north of the crossroads in Lower Farringdon). The location of the works in Phase 1 can be seen in Appendix A.

18. Phase 2 will continue to address flood throttles along the A32 corridor and north of the A31 to follow on from Phase 1 works and is planned to proceed via two delivery mechanisms to reduce delivery timescales, and to enable better coordination with the planned A32 Gosport Road re-surfacing.
19. Phase 2A (upstream of Woodside Lane) will be delivered under the Hampshire Highways Services Contract (HHSC) and will restore connectivity on the east side of the A32, add another culvert to cross the A32 and also add conveyance capacity in the highway system from Annetts Farm to the north end of Lower Farringdon, with minor additional highway works at Kitcombe. Much of this work will require localised temporary road closures as the contractor requires adequate working space to do the works, with the rest completed under lane closures. The traffic management requirements are complex due to the strategic nature of the A32, being used not only for diversion traffic from the A27, A31 and other major routes, but also as conveyance for traffic attending notable events in the area (Boomtown Fair being one of particular note). Ongoing discussions on how to optimally programme and deliver this work is underway with both the Local Network Coordinator and the contractor, taking into account third party factors in respect to timings.
20. Phase 2B will be delivered through the Generation 4.1 Construction Framework and will focus primarily on improvements to the remaining downstream length of the existing winterbourne from Woodside Lane to Chawton and on to Lumbry Park. The objective is to restore the impeded capacity conveyance of the 'main river' to manage surface water flow and improve discharge during periods of high groundwater levels. These downstream river works are primarily off highway but are in areas where groundwater is generally higher and more sensitive to weather conditions.
21. It is planned to carry out Phase 2A in Summer 2022, with works in Manor Farm Field envisaged to suit harvesting operations, and Phase 2B in the late Autumn of 2022 and Spring of 2023. A General Arrangement drawing showing the extent of Phase 2 can be seen in Appendix B of this report.
22. Once implemented, the measures will balance the conveyance of surface and groundwater exceedance, reducing the risk and severity of flooding primarily on the A32 and to adjacent properties and businesses.

Phase 2 Future Maintenance

23. The future success of the works undertaken in Phase 2 will be dependent on riparian owners undertaking regular maintenance works. The County Council expects riparian owners to fulfil their duties and obligations in this regard. If

they do not undertake robust maintenance post installation, there is a risk the system may fail locally. On such occasions the County Council and the Environment Agency may take enforcement action or carry out the required maintenance and re-charge the costs to the riparian owner.

Finance

24. In September 2021, approval was given by the Executive Member for Climate Change and Sustainability for the implementation of Phase 2 of the A32 Farringdon Flood Alleviation Measures utilising additional funding from the County Council's Flood Risk and Coastal Defence (FRCD) capital programme.
25. Subsequent to this approval, the works cost projection has significantly increased for the reasons set out in paragraphs 11-16 above. Therefore, a reduced scope scheme was considered and rejected. This would entail focusing works on or around those locations closest to residents and businesses to minimise their risk of flooding and ensure that they can safely access their properties in a long-term groundwater flood event. This would be at the detriment to keeping the A32 highway open and a significant portion of the additional funding is to resolve challenges within the existing drainage system under the A32. Based upon the 2013/14 flood event the proposed investment into this scheme could offset an estimated annual cost of damage if a similar event were to occur of around £1.63million compared with doing nothing.
26. Additional funding will be sought from other bodies and initial discussions have been undertaken with the Environment Agency in respect to the availability of further Defra Flood Defence Grant in Aid (GiA) and Thames RFCC Local Levy contributions. The Environment Agency recognises the impact that cost inflation has had on the viability of the flood and coastal risk management scheme. If other funding cannot be secured the County Council can underwrite the additional funding required utilising its Flood Risk and Coastal Defence Programme funding. If required, this will be at the expense of other flood alleviation schemes that would otherwise have come forward, but due to the importance of maintaining use of the A32 highway, this scheme is still considered to offer value for money.
27. This Project Appraisal Update seeks approval for Phase 2 at an estimated cost of £1.181million, an increase of £0.795million (of which £0.193million is associated with risk).

<u>Estimates</u>	<u>£'000</u>	<u>% of total</u>	<u>Funds Available</u>	<u>£'000</u>
Design	163.4	14	Flood Risk & Coastal	864.2
Client Fee	36.1	3	Defence Programme	
Supervision	53.8	5	Defra Flood Defence	
			Grant in Aid (GiA) and	317

			Thames RFCC Local Levy	
Construction	734.7	62		
Risk	193.2	16		
Total	1,181.2	100	Total	1,181.2

<u>Maintenance Implications</u>	<u>£'000</u>	<u>% Variation to Committee's budget</u>
Net increase in current expenditure	2.2	0.002%
Capital charges	114	0.075%

Programme

28. The programme of works is outlined below.

Delivery package	Date
HHSC Works (Phase 2A)	Summer - Autumn 2022
Gen 4.1 Construction Framework (Phase 2B)	Autumn 2022 / Spring 2023

Scheme Details

29. It is proposed that the work is undertaken in two delivery phases but some parts of each phase may occur in parallel due to seasonal restrictions, work around harvest periods, other works on the A32 and associated diversion routes, and need for completion of work before the 2022/23 winter period.
30. The HHSC contract delivery package will improve the capacity and conveyance of the east side of the southern (upstream) part of the existing watercourse from Mary Lane to Woodside Lane, including Lower Farringdon. The works are to be undertaken in a number of discrete work packages within a distance of approximately 2.5km and would include:
- restoration and improvement of existing ditches and pipework on the eastern side of the A32;
 - condition survey, improvement and clearance of all existing culverts and pipes; and
 - installation, replacement, upsizing or realignment of pipes/ditches/swales across private gardens and fields to provide continuity of the network.
31. The Gen 4.1 Framework delivery package will improve capacity and conveyance of the northern (downstream) part as well as the management

of the watercourse and winterbourne (main river) from north of Woodside Lane to Chawton and Lumbry Park. The works are to be undertaken in a number of discrete work packages within a distance of approximately 3km and would include:

- installation, replacement, upsizing or realignment of pipes / ditches / swales across private gardens and fields to provide continuity of the network;
- improvement and clearance of all existing culverts and pipes;
- installation of measures to manage the conveyance of the winterbourne and upstream issues in a passive manner; and
- removal of further vegetation (as necessary) to ensure flow paths are clear and unhindered.

32. A General Arrangement showing the extent of the proposals can be seen in Appendix B of this Project Appraisal report.
33. Once implemented, Phase 2 measures will improve the management of surface and groundwater conveyance, reducing the severity of flooding on the A32 and enabling it to remain open, and giving protection to homes.
34. It is planned to begin HHSC works in June 2022 with delivery by the Hampshire Highways Term Contractor (Milestone) given their tie in to scheduled resurfacing works on the A32. The downstream works will start later in the Summer and continue until Autumn 2022, and it is planned this will be delivered via the Generation 4-1 Construction Framework. Some minor works may occur between summer of 2022 and spring 2023 due to possible impacts on bird nesting season and/or groundwater levels.

Departures from Standards

35. There are no departures from standards.

Consultation and Equalities

36. Quarterly Multi-Agency meetings with the Parish Council, East Hampshire District Council, Environment Agency and Thames Water have been held to date, in addition to regular briefings with the Local Member, to inform them of progress. The Local Member Cllr Mark Kemp-Gee fully supports the proposed works outlined in this report.
37. An existing communications plan ensures the dissemination of information to the community, residents and landowners where access is required. Public notices will also be displayed leading up to and during the works. The work includes advice to update the community Flood Action Plans.
38. An Equalities Impact Assessment has been undertaken, and the impact on the public and groups with protected characteristics is considered neutral. During construction it is anticipated that the scheme may cause disruption to residents, pedestrians and road users as access to playing fields, pavement and roads may be restricted. Works will be planned carefully to minimise any disruption caused.

Climate Change Impact Assessments

39. Hampshire County Council utilises two decision-making tools to assess the carbon emissions and resilience of its projects and decisions. These tools provide a clear, robust, and transparent way of assessing how projects, policies and initiatives contribute towards the County Council's climate change targets of being carbon neutral and resilient to the impacts of a 2°C temperature rise by 2050. This process ensures that climate change considerations are built into everything the Authority does.
40. The assessment indicated that the key climate variable that the scheme could be vulnerable to is 'heavy rainfall and surface flooding'. Potential vulnerability of the scheme - once completed - is the ability of key infrastructure to withstand the combined impact of surface water flooding, high levels of groundwater (surcharging) and precipitation that exceed the 2013/14 flood events.
41. The flood alleviation scheme's key objective is to reduce flood risk as the area is at risk of river or surface or groundwater flood events, and there are natural points in the landscape on the project site where water could amass during periods of heavy rainfall. Mitigation will focus on connecting up the disparate drainage systems to function passively to reduce the depth and duration of future flooding on the homes and highway. Once completed, it will enhance the ability of key infrastructure to withstand the combined impact of surface water flooding, high levels of groundwater (surcharging) and precipitation that are similar to the 2013/14 flood events. The intention is to balance the overall drainage network to ensure flows in upstream and downstream catchments are managed to reduce the risk of flooding. The overall effect will be to reduce the flood risk to homes and keep the highway open, which aligns with the County Councils Strategic Aim: People in Hampshire live safe, healthy and independent lives i.e., 'Contributing to keeping you safer'.

Carbon Mitigation

42. Carbon emissions from this project arise from the use of materials for headwall construction e.g., concrete and steel, from plant and equipment required to undertake the work, and from stopped traffic or re-routing of traffic during operations which may require the closure of the A32. The carbon mitigation tool has identified there will be carbon emissions which are primarily linked with the installation of drainage pipes within the scheme area.
43. Carbon emissions will be mitigated by minimising the number of closures required through careful sequencing of construction operations, and by sourcing materials and plant locally wherever possible. These measures will be developed further with the appointed contractors.
44. The reduction of carbon emissions has been considered in the development of the scheme and plans for its delivery. If flooding were to occur again at the same level as historic events, there would be significant carbon emissions associated with the emergency response, the implementation of

traffic diversions and the necessary recovery and clear-up operations following the flood event. Avoiding these environmental, social and financial costs aligns with the wider strategic priorities of Hampshire County Council which include People in Hampshire live safe, healthy and independent lives i.e., 'Contributing to keeping you safer'.

Statutory Procedures

45. The works are considered permitted development under The Town and Country Planning (General Permitted Development) (England) Order 2015 as Hampshire County Council is the Highway Authority and the Lead Local Flood Authority (drainage body) as referred in Part 9 (Development relating to roads) and Part 13 (Water and sewerage). Ordinary Watercourse Land Drainage Consents and Environmental Permits will be obtained where necessary under existing delegations.

Land Requirements

46. There are no land purchase requirements necessary to implement the scheme. However, the respective contractors will need to access third party land to carry out works to reinstate/regrade land elevations to original lower levels. Section 100 of the Highways Act gives powers to the County Council to carry out works on third party land for highway drainage purposes. It is anticipated that where this applies, works will be undertaken using such powers, but consultations with the landowner will be carried out in advance of serving any notices.
47. Where works are required on third party land and Section 100 of the Highways Act does not apply, the County Council will work with the landowner to arrange access and if required, make formal arrangements via a licence or easement.

Maintenance Implications

48. Some additional drainage assets will be provided. These are standard items and will be added to the existing maintenance strategy with minimal impact.

Policy Objectives

National

National Flood and Coastal Erosion Risk Management Strategy for England (2020)

This strategy's long-term vision is for: a nation ready for, and resilient to, flooding and coastal change – today, tomorrow and to the year 2100.

It has 3 long-term ambitions, underpinned by evidence about future risk and investment needs. They are:

- climate resilient places: working with partners to bolster resilience to flooding and coastal change across the nation, both now and in the face of climate change
- today's growth and infrastructure resilient in tomorrow's climate: making the right investment and planning decisions to secure sustainable growth and environmental improvements, as well as infrastructure resilient to flooding and coastal change
- a nation ready to respond and adapt to flooding and coastal change: ensuring local people understand their risk to flooding and coastal change, and know their responsibilities and how to take action

The government's [Flood and Coastal Erosion Investment Plan](#) outlines how new flood and coastal schemes will better protect 336,000 properties by 2027, helping to avoid £32 billion in wider economic damages and reducing national flood risk by 11%.

Local

Hampshire County Council's Local Flood Risk Management Strategy (2020)

From working with communities developing new flood action plans, to improving the management of our natural resources, the County Council's ambition is to be at the forefront of flood risk and water management creating a safer, more resilient Hampshire.

Our priority is to protect people, homes, businesses and key infrastructure by:

- avoiding risks and managing water resources through effective planning and design,
- preventing future flooding by reducing or removing existing risks,
- adapting to flood risk in order to minimise the impact and enable normal life to return as soon as possible,
- enabling communities to be better prepared to react to flood events and recover more easily; and
- adopting effective practices that are sustainable and affordable now and in the future.

REQUIRED CORPORATE AND LEGAL INFORMATION:

Links to the Strategic Plan

Hampshire maintains strong and sustainable economic growth and prosperity:	yes
People in Hampshire live safe, healthy and independent lives:	yes
People in Hampshire enjoy a rich and diverse environment:	yes
People in Hampshire enjoy being part of strong, inclusive communities:	yes

Other Significant Links

Links to previous Member decisions:	
<u>Title</u>	<u>Date</u>
Executive Member for Environment and Transport - Project Appraisal: A32 Farringdon Flood Alleviation Measures	19/9/2017
Executive Member for Environment and Transport - Project Appraisal: A32 Farringdon Flood Alleviation Measures	23/9/2021
Direct links to specific legislation or Government Directives	
<u>Title</u>	<u>Date</u>
Flood and Water Management Act	2010
Land Drainage Act	1991

Section 100 D - Local Government Act 1972 - background documents	
<p>The following documents discuss facts or matters on which this report, or an important part of it, is based and have been relied upon to a material extent in the preparation of this report. (NB: the list excludes published works and any documents which disclose exempt or confidential information as defined in the Act.)</p>	
<u>Document</u>	<u>Location</u>
A32 Farringdon Feasibility Report	SharePoint document reference A1001001A17C092A0354B80279

EQUALITIES IMPACT ASSESSMENT:

1. Equality Duty

The County Council has a duty under Section 149 of the Equality Act 2010 ('the Act') to have due regard in the exercise of its functions to the need to:

- Eliminate discrimination, harassment and victimisation and any other conduct prohibited by or under the Act with regard to the protected characteristics as set out in section 4 of the Act (age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation);
- Advance equality of opportunity between persons who share a relevant protected characteristic within section 149(7) of the Act (age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex and sexual orientation) and those who do not share it;
- Foster good relations between persons who share a relevant protected characteristic within section 149(7) of the Act (see above) and persons who do not share it.

Due regard in this context involves having due regard in particular to:

- The need to remove or minimise disadvantages suffered by persons sharing a relevant protected characteristic that are connected to that characteristic;
- Take steps to meet the needs of persons sharing a relevant protected characteristic that are different from the needs of persons who do not share it;
- Encourage persons sharing a relevant protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionately low.

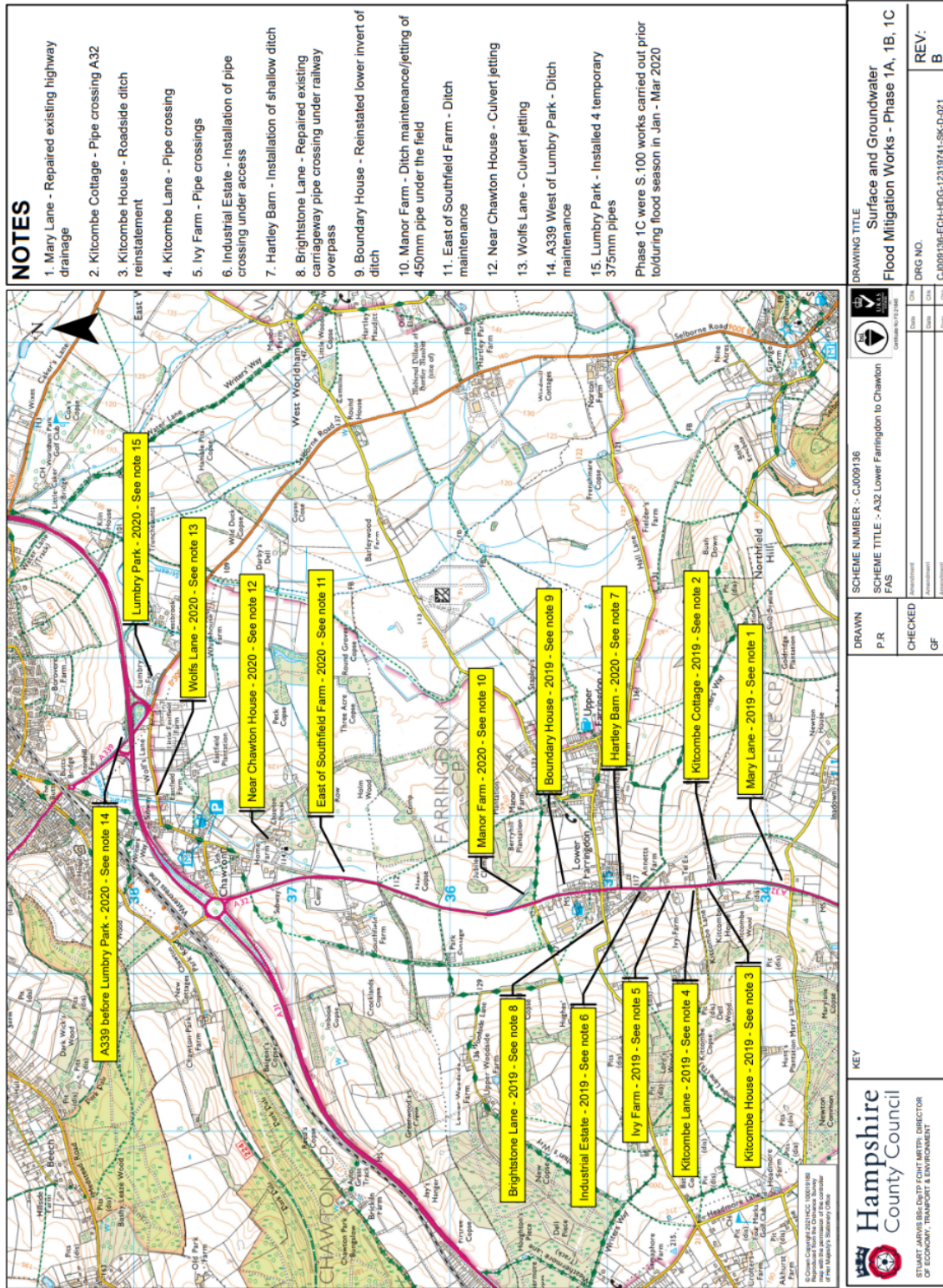
2. Equalities Impact Assessment

The current proposals have been developed in collaboration with the Environment Agency, East Hampshire District Council, Thames Water, Farringdon Parish Council and Chawton Parish Council (Multi Agency Group or MAG).

The impact on the public and groups with protected characteristics is considered neutral.

During construction it is anticipated that the scheme may cause disruption to residents, pedestrians and road users as access to playing fields, pavement and roads may be restricted. Works will be planned carefully to minimise any disruption caused.

Appendix A – General Arrangement – Location of completed Phase 1 works

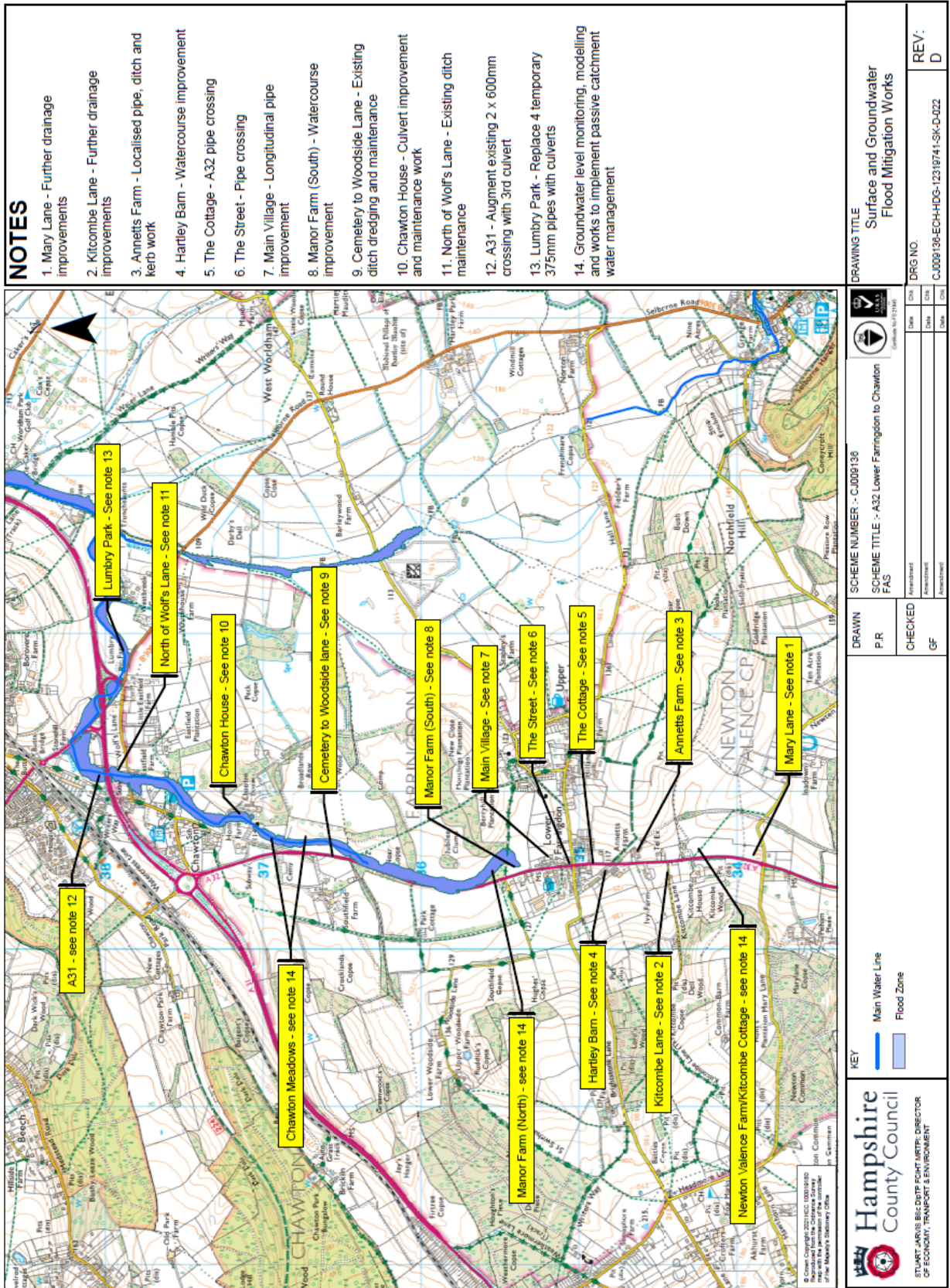


NOTES

1. Mary Lane - Repaired existing highway drainage
 2. Kitcombe Cottage - Pipe crossing A32
 3. Kitcombe House - Roadside ditch reinstatement
 4. Kitcombe Lane - Pipe crossing
 5. Ivy Farm - Pipe crossings
 6. Industrial Estate - Installation of pipe crossing under access
 7. Hartley Barn - Installation of shallow ditch
 8. Brightstone Lane - Repaired existing carriageway pipe crossing under railway overpass
 9. Boundary House - Reinstated lower invert of ditch
 10. Manor Farm - Ditch maintenance/jetting of 450mm pipe under the field
 11. East of Southfield Farm - Ditch maintenance
 12. Near Chawton House - Culvert jetting
 13. Wolfs Lane - Culvert jetting
 14. A339 West of Lumbry Park - Ditch maintenance
 15. Lumbry Park - Installed 4 temporary 375mm pipes
- Phase 1C were S.100 works carried out prior to/during flood season in Jan - Mar 2020

<p>KEY</p> <p>Hampshire County Council <small>OFFICE OF THE CHIEF EXECUTIVE OFFICER OF ECONOMY, TRANSPORT & ENVIRONMENT</small></p>		<p>SCHEME NUMBER : - CJ009136</p> <p>SCHEME TITLE : - A32 Lower Farrington to Chawton</p> <p>FAS</p>	<p>DRAWING TITLE Surface and Groundwater Flood Mitigation Works - Phase 1A, 1B, 1C</p>
<p>DRAWN P.R</p>	<p>CHECKED GF</p>	<p>DRG NO. CJ009136-ECH-HDG-12319741-SK-D-021</p>	<p>REV: B</p>

Appendix B – General Arrangement – Location of proposed Phase 2 works



NOTES

1. Mary Lane - Further drainage improvements
2. Kitcombe Lane - Further drainage improvements
3. Ammetts Farm - Localised pipe, ditch and kerb work
4. Hartley Barn - Watercourse improvement
5. The Cottage - A32 pipe crossing
6. The Street - Pipe crossing
7. Main Village - Longitudinal pipe improvement
8. Manor Farm (South) - Watercourse improvement
9. Cemetery to Woodside Lane - Existing ditch dredging and maintenance
10. Chawton House - Culvert improvement and maintenance work
11. North of Wolf's Lane - Existing ditch maintenance
12. A31 - Augment existing 2 x 600mm crossing with 3rd culvert
13. Lumby Park - Replace 4 temporary 375mm pipes with culverts
14. Groundwater level monitoring, modelling and works to implement passive catchment water management

DRAWING TITLE Surface and Groundwater Flood Mitigation Works		DRAWING NO. CJ009136	
SCHEME NUMBER - CJ009136		SCHEME TITLE - A32 Lower Farmington to Chawton	
FAS		FAS	
DRAWN P.R.		CHECKED G.F.	
DATE		DATE	
REV: D		REV: D	
Hampshire County Council		Hampshire County Council	
DIRECTOR OF HIGHWAYS		DIRECTOR OF HIGHWAYS	
DIRECTOR OF TRANSPORT & ENVIRONMENT		DIRECTOR OF TRANSPORT & ENVIRONMENT	