

Modbury Flood Improvement Scheme

Report of the Head of Planning, Transportation and Environment

Please note that the following recommendations are subject to consideration and determination by the Cabinet (and confirmation under the provisions of the Council's Constitution) before taking effect.

Recommendation: It is recommended that Cabinet:

- (a) approves the Modbury Flood Improvement scheme at an estimated cost of £1,132,088;**
- (b) increases the Planning, Transportation and Environment (PTE) 2017/18 capital programme by £427,784 and 2018/19 by £500,000, funded £150,000 from the DCC revenue budget for flood prevention works, £100,000 from the PTE revenue flood risk management budget, £150,000 from external contributions and, subject to approval, £527,784 from external grants;**
- (c) gives authority to acquire title and/or rights over the necessary land as required in order to deliver the scheme.**

1. Summary and Purpose of Report

The town of Modbury has experienced repeat flooding over recent years with the worst occurring in July 2012. Many of these properties have suffered further internal flooding on numerous occasions, prior to and since this significant event.

This report highlights this past history of flooding in Modbury and the ongoing high risk of future flood events. It also details the proposed scheme options that aim to significantly reduce this ongoing risk of flooding and recommends that Devon County Council (DCC) supports the delivery of these essential flood improvements through its capital programme, as set out in the recommendations above.

2. Background

The severe rainfall experienced in July 2012 caused internal flooding to at least 27 properties, with some flooded to a depth of more than 900mm. The affected properties included a number of businesses and the local health centre. The flooding also rendered the main through-roads, including the A379, impassable. Later that year 6 properties were flooded in November and a further 7 in December, many of which were repeat flooding of properties for the second or third time within the 5 month period. Since 2012 there have been a number of smaller events that have also caused flooding to some of the same properties; one, in particular, having flooded on over 20 separate occasions.

Detailed investigations and hydraulic modelling have been carried out to understand the risk of flooding within the town. This has indicated that up to 82 properties (50 residential and 32 commercial) are at risk from the 1 in 100 year event, (the benchmark for assessing flood risk). Based on the criteria set out in the Devon Local Flood Risk Management Strategy, Modbury is considered to be one of our highest priorities for flood improvements. On that basis, scheme proposals have been developed to afford properties with flood improvements, where possible, up to this benchmark standard of protection.

3. Scheme Proposals

DCC is proposing a number of improvements at various locations upstream of the town to reduce runoff, attenuate flows and restrict the residual flows through the built up area. The main elements of the scheme are:

- Constructing three earthworks bunds to create flood storage within existing green areas of Modbury. These will capture and restrict flows to the town by temporarily storing excess water. The water will then be released slowly once the water levels drop.
- Excavating a series of cut-off ditches around field boundaries to reduce flows and direct flows to where they will be managed by the earthworks bund.
- In addition modifications will be made to upstream watercourses, improvements to gullies and drainage and minor surface re-profiling to direct water away from properties.

Attached are two plans which illustrate these proposed flood improvement works.

4. Consultations/Representations/Technical Data

Throughout the investigation and design process there has been a close working relationship between DCC's Flood Risk Management team, the DCC Engineering Design Group, South Hams District Council, Modbury Parish Council, South West Water and relevant landowners. Regular updates have been provided to the Parish Council and residents of Modbury and a full 2-day public consultation/exhibition was provided in November 2016.

A full planning application was submitted for determination through the DCC Development Management Committee. This planning process included in-depth consultation with key disciplines and other bodies to ensure matters relating to ecology, landscape, water quality and biodiversity have been appropriately mitigated. Planning permission was approved on the 8th of June 2017.

5. Financial Considerations

A business case promoting the scheme to the Environment Agency will be submitted, imminently, to request funding support from Defra's Flood Defence Grant in Aid and Local Levy (collected from Lead Local Flood Authorities in Devon, Cornwall and the Isles of Scilly). The remaining funding will be provided by contributions sought from South West Water, and South Hams District Council, as well as by DCC's own dedicated flood risk budgets. This will be in addition to the significant investment made by DCC, to date, through the required investigation and scheme design / preparation work.

The full breakdown of funding sources for the scheme is shown below. Relevant revenue allocations will be capitalised and monitored through DCC's capital programme.

The proposed implementation of the scheme and allocation of funding through DCC's capital programme is subject to formal confirmation of the external grants and contributions.

Funding Source	Prior to 2017/18	2017/18	2018/19
Prior costs incurred by DCC	£204,304		
DCC PT&E Flood Risk Management revenue budget		£100,000	
Flood Defence Grant in Aid		£127,784	£300,000
Local Levy		£50,000	£50,000
DCC revenue budget for Flood Prevention Works		£100,000	£50,000
South Hams District Council		£50,000	
Other contributions – South West Water			£100,000
Total	£204,304	£427,784	£500,000

6. Sustainability, Equality and Public Health Considerations

All of the flood improvements mentioned in this report will be developed in accordance with the Equality and Environmental Assessments produced in support of the Devon Local Flood Risk Management Strategy. All elements of the scheme have been assessed at the appropriate stage using the corporate, integrated assessment tool, with relevant equality and environmental impacts identified and acted on as necessary.

The works outlined in this report are all designed to improve the protection afforded to the community and individual properties currently at particular risk of flooding and, thereby, support health and wellbeing. More than just protecting the properties alone, it should be noted that flood water has the potential for transporting contaminants, such as sewage; so, reducing flood risk has clear health benefits.

An environmental appraisal of the proposals indicates that, with appropriate mitigation, there will be limited impact upon landscape, historic and ecological interests. The scheme will also look to maximise any ecological opportunities. These issues implications were taken into account, in line with relevant policy considerations, through the planning process.

7. Legal Considerations

All works will be carried out in accordance with the powers and duties assigned to DCC under the Flood and Water Management Act 2010, the Land Drainage Act 1991 and any other relevant legislation. The lawful implications and consequences of the proposals and relevant actions have been considered through the planning process and will be addressed, as necessary, through the implementation of the scheme. This may involve a legal easement or purchase of land to enable construction and future maintenance of key elements within the proposed scheme.

8. Risk Management Considerations

The risks associated with flooding are set out in the Devon Local Risk Management Strategy and addressed through DCC, Local Resilience Forum and local community emergency plans. In addition, the corporate risk register identifies the risks linked to the implementation of DCC's role as Lead Local Flood Authority. The proposed works are designed to reduce these risks and align with these strategies and plans.

The current standard of protection to some properties is estimated to be as low as from the 1 in 1 year event and this scheme aims to improve the standard up to the 1 in 75 year, as a minimum, and, for many properties, up to the 1 in 100 year scenario.

9. Discussion

The delivery of these important flood improvements will provide a significantly greater standard of protection and reduce the frequent risk of flooding to over 80 properties in the town of Modbury, including many community assets, small independent businesses and the local health centre. The business case to be submitted to the Environment Agency justifies the intended level of investment in the proposed scheme in accordance with national objectives. It also has a high priority when considered against the criteria set out in the Devon Flood Risk Management Strategy.

10. Options/Alternatives

A number of other options that could improve the flood resilience of the town were considered, including natural flood risk management, large flood relief culverts and watercourse diversions. These were considered against a range of factors such as environmental impact, flood risk benefit, social impact, health and safety implications and economic affordability.

The assessment has indicated that the preferred option, and hence the proposed scheme, is deemed to provide the most advantageous and cost beneficial scheme that will give immediate benefit upon completion of the works. This will be fully scrutinised by the Environment Agency's National Project Assurance Service, as part of the business case approval process for Defra funding.

11. Reason for Recommendation/Conclusion

The severity of flooding experienced in Modbury in 2012 and the extent of ongoing threat to a large number of residential properties and businesses has placed the town high on the priority list for investment in flood risk management. It is, therefore, recommended that the proposed scheme is approved for delivery through the DCC capital programme to secure these essential flood improvements and, thereby, reduce the risk of flooding to the close community of Modbury.

Dave Black
Head of Planning, Transportation and Environment

Electoral Divisions: Salcombe

Cabinet Member for Community, Public Health, Transportation and Environmental Services:
Councillor Roger Croad

Chief Officer for Communities, Public Health, Environment and Prosperity: Virginia Pearson

Local Government Act 1972: List of Background Papers

Contact for enquiries: Martin Hutchings

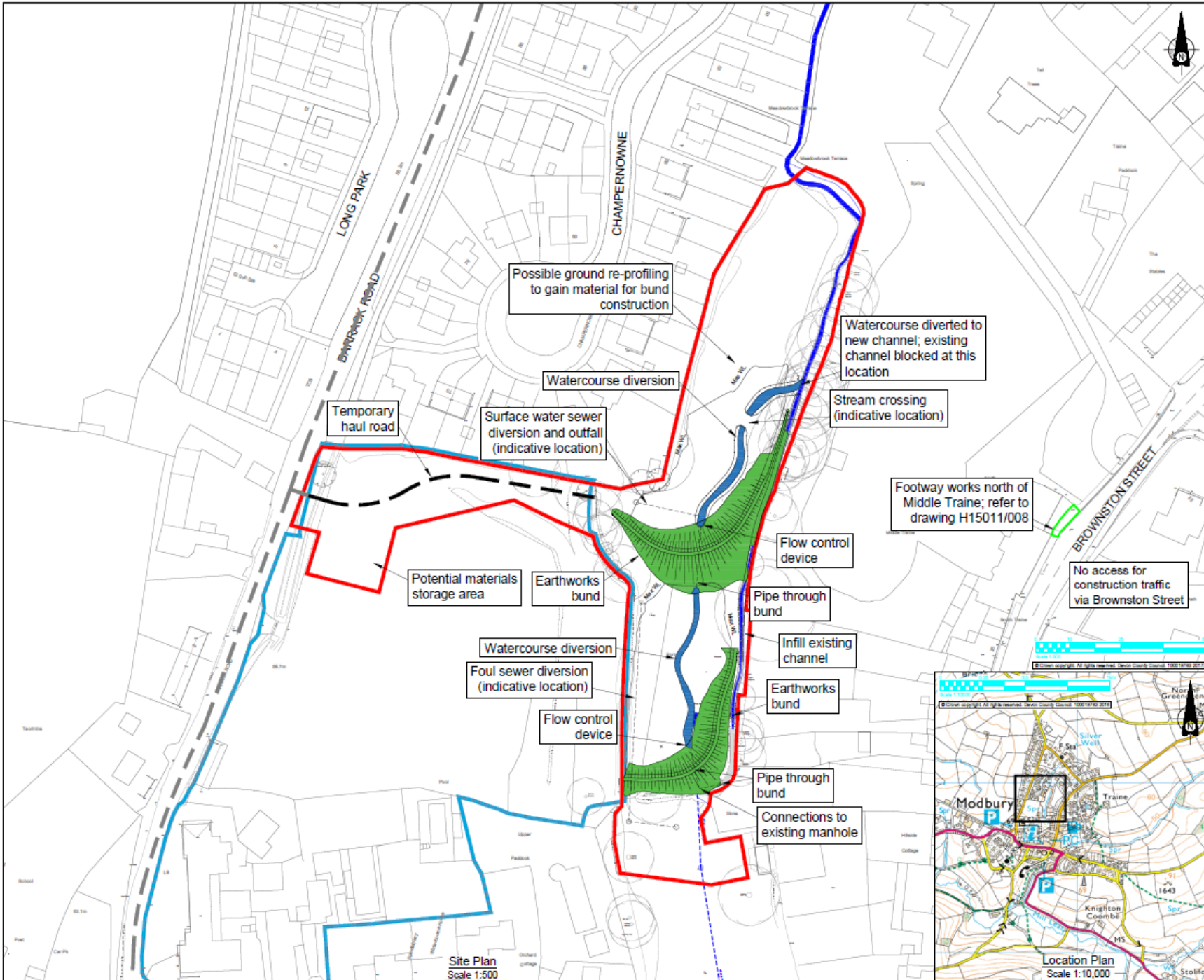
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Background Paper	Date	File Reference
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Nil

mh230617cab Modbury Flood Improvement Scheme
hk 02 290617



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KEY TO EXISTING FEATURES

- Extent of watercourse (taken as bottom of bank from topographical survey)
- Flood Zone 3 (no flood zone 3 within red line boundary)
- Tree / vegetation
- Downstream connecting pipework
- Land under ownership of Devon County Council

KEY TO PROPOSED FEATURES

- Planning red line boundary
- Development requiring planning permission
- Earthworks bund
- Watercourse diversion
- Access route to/from site
- Temporary haul road on land owned by Devon County Council
- Maximum water level
- Works being carried out at the same time under Permitted Development (these works do not form part of this Planning Application)

Rev.	Date	Drawn	Revisions	CSA
P0	20/09/16	DC	Issue for EIA Screening Option	JS
P1	30/09/16	DC	Minor revisions to bunds	JS
P2	16/12/16	DC	Minor revisions to bunds	JS
P3	14/03/17	DC	Issued for planning application	JS



Engineering Design Group

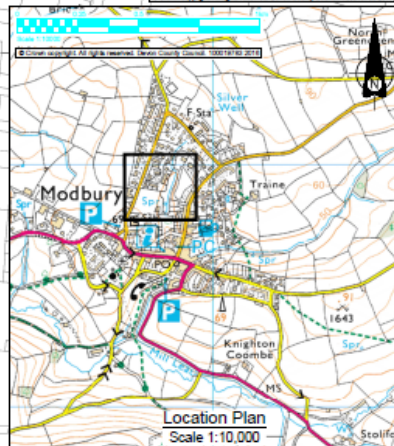
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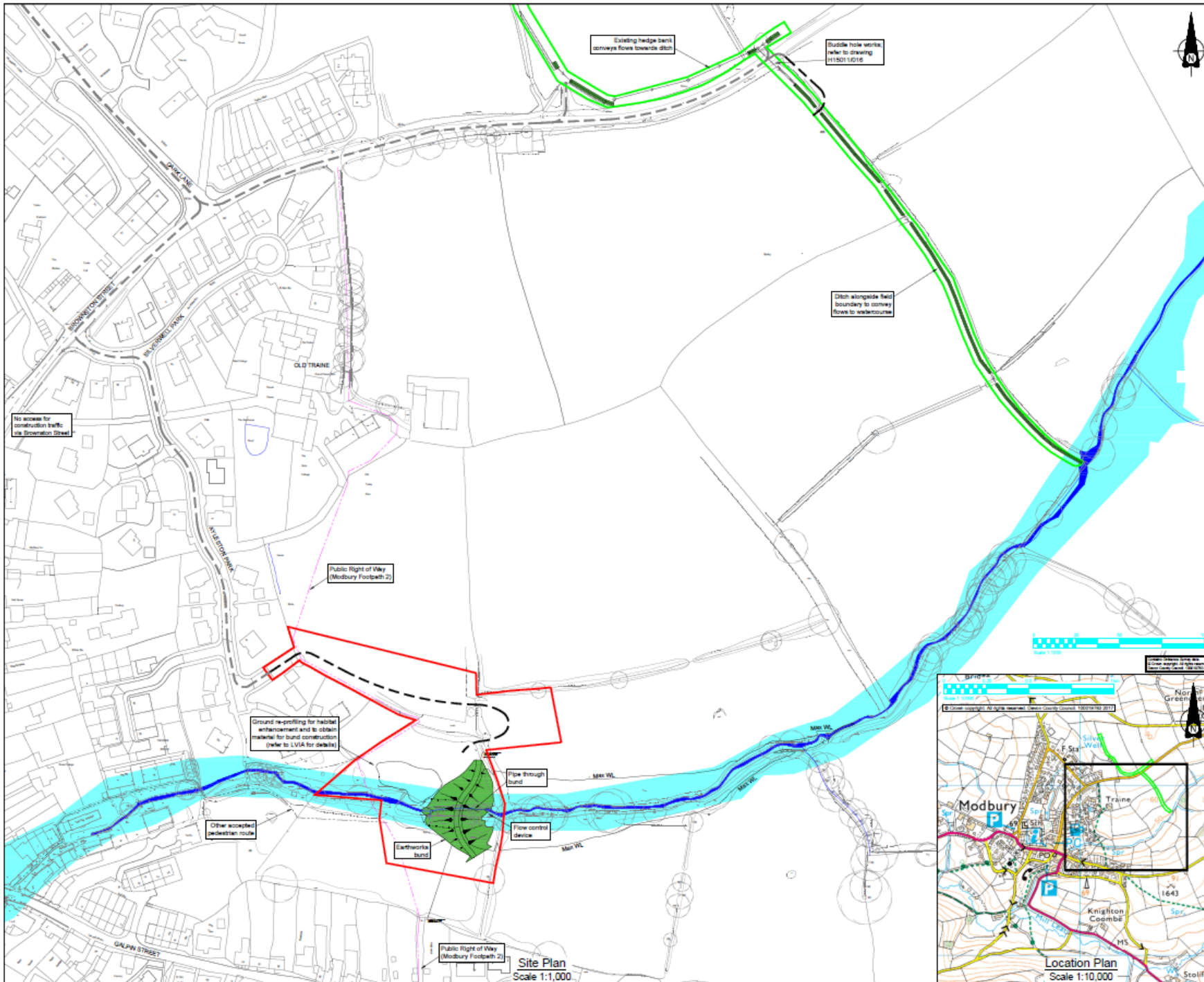
MODBURY FLOOD RISK MANAGEMENT

PLANNING APPLICATION AREA 1 (BACK STREET) LOCATION AND SITE PLAN

Drawing number	H15011/035	Rev	P3
Source	As shown	Rev	A1

Site Plan
Scale 1:500





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KEY TO EXISTING FEATURES

- Extent of watercourse (taken as bottom of bank from topographical survey)
- Flood Zone 3 (approximate extent, refer to EA Flood map for definitive boundary)
- Public Right Of Way (Modbury Footpath 2)
- Other accepted pedestrian route
- Tree / vegetation

KEY TO PROPOSED FEATURES

- Planning red line boundary
- Development requiring planning permission
- Earthworks bund
- Access route to/from site
- Temporary haul road on private land
- Max WL: Maximum water level at stated return period (years)
- Works being carried out at the same time under Permitted Development (these works do not form part of this Planning Application)

No.	Date	Drawn	Revisions	CHK
P0	20/09/16	DC	Final Issue	JIS
P1	16/01/16	DC	General revisions	JIS
P2	16/01/17	DC	Issued for planning	JIS
P3	17/09/17	DC	Ground re-profiling extent and public right of way route revised	JIS



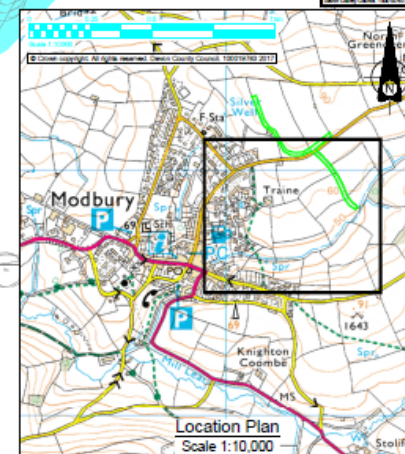
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MODBURY FLOOD RISK MANAGEMENT

PLANNING APPLICATION AREA 2 (BURNS LANE) LOCATION AND SITE PLAN

Drawing number	H15011/036	Rev	P3
Source	As shown	Rev	A1



Site Plan
Scale 1:1,000

Location Plan
Scale 1:10,000