# **ECC Scope Template**

# **Environment Agency**

NEC4 engineering and construction contract (ECC)

412\_13\_SD03

# NEC4 engineering and construction contract (ECC) Scope

# Project / contract information

Project name	River Sowy and King's Sedgemoor Drain Enhancements Scheme: Phase 1b
Project 1B1S reference	ENVRESW001353
Contract reference	Project_32236
Date	11/08/2021
Version number	P02
Author	

# **Revision history**

Revision date	Summary of changes	Version number
30/03/21	Phase 1b revision – First Issue	P01
11/08/21	Final issue which has incorporated Contractor's comments along with final revisions to drawings	P02

This Scope should be read in conjunction with the version of the Minimum Technical Requirements current at the Contract Date. In the event of conflict, this Scope shall prevail. The works are to be compliant with the following version of the Minimum Technical Requirements:

Document	Document Title	Version No	Issue date
LIT 13258	Minimum Technical Requirements	11	04/05/2021



# Part 2: Non-returnable Documents NEC - ECC 4th Ed.

Section 8 Scope

# **Contents List**

Description of the works
General constraints on how the Contractor provides the works
Contractor's design
Completion
Programme
Quality management
Tests and inspections
Management of the works
Working with the <i>Client</i> and Others
Services and other things to be provided
Health and safety
Subcontracting
Title
Acceptance or procurement procedure (Options C and E)
Accounts and records (Options C and E)
Parent Company Guarantee (Option X4)
Client's work specifications and drawings

Appendix 1 BIM Protocol – Production and Delivery Table

Appendix 2 BIM Protocol – Client's Information requirements

Appendix 3 Drawings

Appendix 4 Not used for Phase 1b

Appendix 5 Not used for Phase 1b

Appendix 6 Temporary Fencing Layout for Badger Setts

Appendix 7 Environmental Action Plan (ENVRESW001353-CH2-XX-400-RP-EN-1090)

Appendix 8 Requirements for tree removal and working in vicinity of trees (ENVRESW001353-CH2-XX-400-MS-EN-1120) & (ENVRESW001353-CH2-XX-400-MS-RP-1118)

Appendix 9 Requirements for working in vicinity of Badger Setts (ENVRESW001353-CH2-XX-400-MS-EN-1122)

Appendix 10 Requirements for working in vicinity of reptiles (ENVRESW001353-CH2-XX-400-MS-EN-1110)

Appendix 11 Invasive Non-Native Species Survey Report (ENVRESW001353-CH2-XX-400-RP-EN-1117).

# Appendix 12 Flood Risk Activity Permit Appendix 13 SSSI Assents

# S 100 Description of the works

# S 101 Description of the works

The drawings describing the works are listed in S 17012 and included in Appendix 3.

This Scope is for the Phase 1b works only (). Phase 1b works have been listed below and predominantly comprise flood bank raising works along the Lower Sowy and KSD, excavation of WFD features, all landscaping and reinstatement works and any modification works required to the outfall structures along the KSD and Sowy River.

The Phase 1b works consist of the:

- Raising of the existing bank level at both Cossington Right and Chilton Right outfalls (located on the right bank of the King's Sedgemoor Drain (KSD)). These works will involve the:
  - Removal of the trench sheets wing walls;
  - o Erection of new steel sheet pile walls;
  - Capping of the new steel sheet piles; and
  - Erection of timber fencing;
- Excavation of Water Framework Directive (WFD) enhancements at 7 locations along the KSD and River Sowy (Lower) (as shown on drawings ENVRESW001353-CH2-ZZ-4KS-DR-C-2011 and ENVRESW001353-CH2-ZZ-4LS-DR-C-2012). The Contractor shall plan and programme their works for the reuse of this material for the raising of the flood banks along the KSD and Lower Sowy;
- Material excavated from WFD locations 1, 2, 3, 6 & 7 is to be deposited on the bank as slurry
  and will need to be stockpiled as a shaped mound on the bank adjacent to the area of
  excavation and allowed to dry out for some weeks until it is suitable for re-use i.e.
  recognisable as a soft or very soft soil;
- A weekly visual inspection of these stockpiles will be carried out, by the Client's Geotechnical Engineer on the excavated material from within the stockpile for visual inspection. If lumps can be dug that hold together and don't fall apart and that are considered to be able to be placed and lightly compacted, then this will be considered to be acceptable for use within the flood banks; The Contractor must gain the Client's acceptance before using any of this material.
- Spoil that is excavated from above the water table or river water level is not expected to be
  retrieved as slurry, the weekly visual inspections from the *Client's* Geotechnical Engineer
  shall also confirm the suitability of this material i.e. is very soft to soft and that it is considered
  to be able to be placed as Landscape fill with light compaction to remove voids; The
  Contractor must gain the Client's acceptance before using any of this material
- A proportion of the site won material to be used to form the flood banks will be sourced from the identified area on the right bank of the KSD (see Drawing ENVRESW001353-CH2-ZZ-4KS-DR-C-2011 for available fill location),;
- Should the amount of suitable material on site not be enough to construct the flood banks this will constitute a Compensation Event. Any material not deemed suitable for reuse is to be placed, on the landward side of the newly raised flood embankments and seeded;

- Material excavated from WFD locations 4 & 5, has been determined as not suitable for reuse and is to be placed, on the landward side of the newly raised flood embankments and seeded.
- Design levels for the raising of the flood banks is shown on drawings ENVRESW001353-CH2-ZZ-4KS-DR-C-2003; ENVRESW001353-CH2-ZZ-4KS-DR-C-2006 and ENVRESW001353-CH2-ZZ-4US-DR-C-3003.
- Landscaping, planting and seeding of the WFD areas and raised banks works as per the
  Landscape Management Plan (LMP), Landscape Maintenance Management Plan (LMMP),
  Landscape Specification and associated planting schedule ENVRESW001353-CH2-XX-400DR-EN-5425 to 5435; ENVRESW001353-CH2-ZZ-400-PL-EN-1096 and ENVRESW001353CH2-XX-400-SP-L-1085.

NOTE - Tracked dumpers are to be used to minimise any potential compaction to the Scheduled Monument area. Transfer of fill material is to be carried out using wheeled and tracked dumper trucks (50:50 split in use across the project)

- Completing of water vole displacement activities along the River Sowy and KSD right bank.
   NOTE:
  - Others will undertake vegetation clearance for the 7 WFD areas and Cossington Right and Chilton Right outfall structures up to and including the last week in August 2021 for water vole displacement (grass length to be maintained to 100mm or less).
  - The Contractor shall assume responsibility for continuing the vegetation clearance activities in these areas after this period (cuts to be carried out every two week). Vegetation maintenance will be continued every two weeks until such time as the Contractor is ready to carry out the final displacement of water voles, by means of collapsing any remaining burrows.
  - Before these final displacement activities can be carried out the cleared sites will be re-surveyed by the *Client's* water vole ecologist for fresh signs of Water Vole activity for a period of seven days (minimum) after the last maintenance cut. If fresh signs of activity are observed the monitoring period may need to be extended and further vegetation clearance may be required.
  - If evidence of water vole presence are recorded outside of the displacement window, then further cuts shall not be carried out without first consulting with the *Client's* accredited water vole ecologist.
  - Should no fresh signs of Water Vole use be observed, the Contractor (under the supervision of the Client's Water vole ecologist) shall dig out any identified burrows within the WFD area using a long reach excavator. The burrows shall be scraped back in shallow 50mm 100mm increments or as advised by the Client's accredited ecologist. After each scrape the ground will be inspected for presence of Water Vole. If any animals are encountered during the destructive search, they shall be relocated into adjacent unaffected habitat areas as soon as possible. Where no Water Vole burrows are located within the cleared area, no destructive search will be required.
  - The Contractor shall provide 2 weeks' notice (minimum) to the Client so the Client can arrange for their accredited water vole ecologist to attend the Site to conduct the survey, locate and mark out the water burrows, prior to burrow collapsing being undertaken.

Removal of any remaining vegetation, to facilitate access along either the left or right bank, is
to be checked prior to clearing for any protected species. If any protected species are
encountered during the vegetation clearance, the *Contractor* shall stop work immediately and
seek advice from the Environmental Clerk of Works (ECW).

#### NOTE

- Vegetation clearance work is required to facilitate bank raising works, and to provide clear access along complete length of the River Sowy and KSD left bank from Beer Wall (A361) up to Parchey Bridge (Ward Lane).
- Active grass snakes and slow worms on the River Sowy and KSD left bank have been observed (Jacobs 2019), meaning the presence of active reptiles within the footprint of the Working Areas cannot be ruled out.
- To ensure legal compliance under the relative wildlife legislation, care will be required when clearing any vegetation during Phase 1b. The *Contractor* shall follow the required approach to vegetation manipulation as set out in ENVRESW001353-CH2-XX-400-MS-EN-1110 (Appendix 10)
- Removal and disposal of any dilapidated/temporary stock proof fencing to facilitate plant
  movements and the bank raising works. Upon completion of the left bank raising works and
  the landscape maintenance period, the removed sections of the perpendicular field
  boundaries are to be reinstated with new post and rail fencing that conforms to BS 17227:2006. See Client's works specification (S 1700) for details.

#### NOTE

 Timber posts to be treated softwood and driven into the ground. If the posts are not able to be driven into the ground post can be set into ST4 concrete not less than 450mm x 450mm x 600mm deep.

The *Contractor* shall comply with all relevant parts of the Environmental Action Plan as appropriate to the Phase 1b works (See ENVRESW001353-CH2-XX-400-RP-EN-1090 Appendix 7).

The *Contractor* shall maintain the erected blue rope and cone fencing to protect all identified badger setts fenced off for Phase 1a, located along the KSD (see Appendix 6). This shall be maintained until completion of Phase 1b works.

#### S 102 Purpose of the Works/ Outcome required

This project is part of the River Sowy and King's Sedgemoor Drain Enhancements Scheme: Phase 1 which will:

- Increase the capacity of the River Parrett Flood Relief channel (KSD and River Sowy system);
- Minimise and mitigate for adverse environmental effects as a result of the scheme design;
- Minimise adverse impacts on economic activity, tourism, recreation and other human activity
  adjacent to the KSD and River Sowy. The increased capacity within the channel will help
  retain more water within the channel system, reducing flooding in frequency and severity of
  areas adjacent to the channel;
- Minimise health and safety risks throughout the life of the scheme; and
- Support and contribute to the objectives of the Water Framework Directive (WFD) for the relevant water bodies and the associated mitigation measures in the South West River Basin Management Plan;

 Provide greater control over water networks in the Somerset Levels and Moors during flood events enabling enhanced operational flexibility.

Environmental Objectives of the project are recorded in the Environmental Action Plan ENVRESW001353-CH2-XX-400-RP-EN-1090, which the *Contractor* must comply with (See Appendix 7). Where these impact on the *works*, specific actions are indicated in the Scope, including within the *Client's* works specification (S 1700).

# **Outcome Required**

The strategic objective of this contract is to carry out the *works* resulting in the delivery of the optimum increase in conveyance along the River Sowy and King's Sedgemoor Drain with the available LEP and SRA match funding.

The *Contractor* shall maximise positive environmental outcomes and demonstrate mitigation has been considered.

The *Contractor* shall safeguard the Site, the *works*, products, materials, and any existing structures affected by the *works* from damage and theft.

6

# S 200 General constraints on how the *Contractor* provides the *works*

# S 201 General constraints

The following programme and spatial constraints apply:

# 1) Programme

Activity	Constraint			
Project planning and resolution of consent conditions	The Contractor prepares the following. The documents are prepared by the Contractor and submitted to the Client and Others for acceptance, allowing a minimum one-week review period by the Client and Others, as indicated below, prior to acceptance by the Project Manager.			
	Document to be prepared by the     For acceptance by the       Contractor     Project Manager in association with:			
	Materials Management Plan in accordance with best practice and the CL:AIRE Definition of waste Code of Practice.	Client		
	Site Environmental Emergency Plan as required by the SHEW CoP	Client		
	Site Waste Management Plan	Client		
	Construction Environmental Management Plan	Client		
	Traffic Management Plan	Client		
	The <i>Contractor</i> prepares and presents the following for acceptance week prior to construction of specific parts of the <i>works</i> affected by documents and samples covered.			
	Item to be prepared by the Contractor	For acceptance by the Project Manager in association with:		
	A Pre-construction Photographic Schedule of Condition survey (Refer to S 209 below)	The Client's Estates Dept		
Water vole displacement (Cossington Right and Chilton Right Rhyne Outfalls)	The presence of any water vole burrows that may be affected by the proposed outfall pile removal activities, will be confirmed by the <i>Client</i> 's appointed water vole ecologist prior to any works commencing (minimum of 7 days). If burrows are present, the <i>Contractor</i> shall collapse the burrows, supervised by a <i>Client</i> appointed water vole ecologist. There is no requirement to collapse any water vole burrows in this Scope, and any change to this requirement will be dealt with via a Compensation Event.			

Activity	Constraint
Over-wintering birds	The Contractor shall plan their activities to complete the <i>works</i> prior to any wintering birds arriving at the Site (31st October). In case there is a need for any <i>works</i> to continue into the wintering bird season the Environmental Action Plan (Appendix 7) contains measures, such as monitoring presence of birds, works limited to daylight hours, watching brief etc. Should it become unfeasible to complete the outstanding works within these stipulations these works will need to be carried out in the following year. They would need to be programmed for the next suitable window after the over wintering birds' season, in accordance with the requirements of the bird nesting season and any other relevant environmental constraints i.e. most likely between August to October.
Designated protected areas i.e. SSSI's and SACs	Any works within these areas need to be completed within the periods stated upon the relevant SSSI Assents (Appendix 13).  Vegetation Clearance and Tree Removal – 19/07/21 to 30/09/21
Service diversions and protection measures	The <i>Contractor</i> allows sufficient time within their programme to investigate, positively identify and record all known service clashes as early as practically possible following Commencement.

# 2) Possession

The *Contractor* has possession of the Site during the *works*. However, the *Contractor* allows for the *Client's* and *Others* access to undertake the following:

Activity	Constraint
Water vole	Supervision of the destructive searches for water vole burrows, prior to the <i>works</i> to both the Chilton Right and Cossington Right outfalls. The <i>Contractor</i> permits the <i>Client or</i> Other's to carry out any vegetation clearance operations required to displace water vole for the 7 WFD areas and both the Chilton Right and Cossington Right outfalls until such time as the <i>Contractor</i> commences work in these areas
Construction	The Contractor permits the Client or Others to undertake maintenance works on all areas of the Site.
Badger	The <i>Contractor</i> permits the <i>Client</i> or Others to undertake all activities associated with closing or mitigating impacts to badger setts.
Accessing control structures	The Contractor maintains access to the following structures: Beer Wall sluice, Chilton Right, Cossington Right, Shap wick, Parchey Sluice, Langacre Sluice, Bimpits Sluice and Blindmans Gate structures. Any obstructions for the operation and maintenance of the structure are to be agreed with the Environment Agency.
Public Safety Risk Assessment (PSRA) Assessor	A Public Safety Risk Assessment (PSRA) arranged by the <i>Client</i> is to be allowed prior to the works being completed on the Site.

Activity	Constraint
Ministerial visits	The Contractor permits the Client or Others to escort any Government officials around the Site to meet funding publicity requirements.
Site Visits	As part of the <i>Client's</i> Stakeholder Management strategy, the <i>Client</i> has offered the Parish Councils and some of the stakeholders the opportunity of a site visit to view the works and for press coverage. The <i>Contractor</i> shall proactively work with the <i>Client</i> to meet these obligations.
Landowner requirements	Pedestrian access for landowners is to be maintained throughout the works for the footbridge located at ST 37197 35452, across the KSD. This is required to permit local landowners, located on the left bank of the KSD, to use the bridge to cross the KSD twice a day to check on the wellbeing of their cattle located on the right bank of the KSD

The *Contractor* provides appropriate measures (including temporary fencing) to prevent public access to the Site and the Working Areas (including existing operations and work undertaken by *Others* as listed above) and acts as Principal Contractor under the CDM Regulations 2015. If in providing the above appropriate measures, the *Contractor* prevents a landowner's stock i.e. cattle from drinking from an existing watercourse the *Contractor* shall provide pasture pumps or similar apparatus to maintain the landowner's ability to water their stock.

#### 3) Access to the Site

Existing roads, cycleways and footways shall remain open to the public during the *works*. The *Contractor* is responsible for managing the interface between their operations and the public when gaining access to the Working Areas along routes that are open to the public. The *Contractor* shall be responsible for obtaining any Temporary Traffic Regulation Orders, temporary closures or diversions required for any footpaths or highways affected through their proposed method of working.

In arranging temporary road and footpath closures, the *Contractor* manages closure requests and bookings through Somerset County Council's application portal on behalf of the *Client*. The *Contractor* accounts for this in the Traffic Management Plan (Refer also to S 201 (11)).

Normal working hours will be from 07:00 to 19:00 Monday to Friday. Where practicable, operations which may cause noise and or vibration disturbance shall be scheduled for daylight working.

Traffic constraints include, but are not limited to, the following:

- Parchey Bridge Access between Ward Lane and the left and right banks of KSD. Poor junction visibility due to sharp corner and vegetation.
- Bimpits Lane Access between Oliver's Road and the left and right banks of River Sowy.
   Sharp turn onto/from high speed Oliver's Road.
- A361 Access between the A361 and the left and right banks of River Sowy. Sharp turn onto/from very high speed A361.

- Sandy Lane Access between A361 and the left and right banks of River Sowy. Sharp turn onto/from very high speed A361. Poor junction visibility due to vegetation.
- Owery Farm lane Access between A361 and the left and right banks of River Sowy. Sharp turn onto/from very high speed A361.
- A372 at Beer Wall Access between A372 and the left and right banks of River Sowy.
   Sharp turn onto/from very high speed A372.
- Church Drove Access between A372 and the right banks of River Sowy via Church Path. Poor junction visibility due to vegetation and adjacent buildings.

# 4) Retained Trees/Hedges/Shrubs/Grassed Areas

The *Contractor* adequately protects and preserves all existing trees and their root protection areas, hedges shrubs and grassed areas, except where identified for felling as shown on drawings ENVRESW001353-CH2-ZZ-4KS-DR-C-2011 and ENVRESW001353-CH2-ZZ-4KS-DR-C-2012 and referenced within the Requirements for tree removal and working in vicinity of trees (ENVRESW001353-CH2-XX-400-MS-EN-1120) & (ENVRESW001353-CH2-XX-400-MS-RP-1118) Appendix 8

The *Contractor* replaces or treats any trees, hedges, shrubs, or grass areas that are damaged or removed without approval. Any mature trees and shrubs which, due to the *Contractor's* negligence, are uprooted, destroyed, or damaged beyond reasonable chance of survival in their original shape, are replaced with semi mature specimens of a similar type. Protection measures shall include avoidance of:

- Dumping of spoil or rubbish, excavation or disturbance of topsoil, parking of vehicles or plant, storage of materials or placement of temporary accommodation within the branch spread.
- Severance of roots exceeding 25mm in diameter.
- Changing the level of ground.
- Lighting of bonfires.
- Use of rippers or rotovator to break up the ground, or machinery which will cause compaction.
- Use of the trees as an anchor for ropes.
- Alteration of the drainage characteristics or water table by any site operations under the control of the Contractor within an area 3m beyond the branch spread.

For grass-cutting requirements, see S 201 (6c).

#### 5) Archaeology

The Site includes a Registered Battlefield (List Entry Number: 1000032) and a Scheduled Monument (Entry Number: 1014430), refer to section SI 100 of the Site Information. The *Contractor* shall carry out the *works* in accordance with the associated requirements of the Scheduled Monument Consent. The Consent conditions have been included in the Environmental Action Plan (ENVRESW001353-CH2-XX-400-RP-EN-1090) found in Appendix 7.

# 6) Protected Species

In carrying out the *works* and obtaining any temporary consents required for each part of the *works*, including the arrangement of temporary access routes within or close to watercourses, the *Contractor* considers the following:

- · Impact on protected species and their habitat
- Impact on fish, particularly those migrating and spawning in the river channels at potential crossing points

For information regarding potential impacts on fish, refer to the Environmental Action Plan (ENVRESW001353-CH2-XX-400-RP-EN-1090) found in Appendix 7

Further considerations for protected species are as follows:

#### a. Water voles

The *Contractor* avoids working within five metres of the edge of all water surfaces at the summer penning level (penning level varies by watercourse, see following table), except at the seven WFD enhancement areas and the two outfall structures where the *Contractor* may need to undertake collapsing any identified burrows (destructive searches).

Water level control structure	Grid ref.	Summer pen level (m ODN)	
King's Sedgemoor Drain and Sowy	1		
Dunball Sluice	ST 3099 4072	2.60 - 2.65	
Beer Wall Tilting Weir	ST 3918 3152	3.80 - 4.00	
Langacre Rhyne (King's Sedgemoor SSSI)			
Langacre Sluices	ST 3803 3509	3.45	
Blind Man's Gate Sluices	ST 3925 3394	3.65	
Beer Wall Sluices	ST 3922 3151	3.80	
King's Sedgemoor Drain Back Ditch (Moorlinch SSSI)			
Parchey Tilting Weir	ST 3520 3780	3.10	
KSD Back Ditch (Chilton Right) Penning Bay	ST 3750 3580	3.30 - 3.35	

Reference document: King's Sedgemoor and Aller Moor Water Level Management Plan – Parrett Internal Drainage Board- Approved July 2010

The *Contractor* complies with the *Client's* operational water vole licence for the destruction of any water vole burrows. The *Contractor* shall allow for destructive searches to be carried out before any *works* are undertaken on the seven WFD enhancement areas and the two outfall structures. The searches will be supervised by the *Client's* water vole ecologist.

#### b. Badgers

The Contractor shall be responsible for the following mitigation measures;

The *Contractor* is required to maintain for the entire duration of these works, any erected temporary fencing (blue rope and cones) as installed during Phase 1a works to protect badger setts, as identified within the Badger survey report (these can be found in section

S1 205 of the Site Information). The fencing shall act as a guide for construction plant to prevent plant from tracking over the setts.

For Badger mitigation, during the works the Contractor shall:

- Not move the fencing without prior agreement from the Client
- Not track plant on the King's Sedgemoor Drain side of the fencing
- Not park or store materials on the King's Sedgemoor Drain side of the fencing
- Shall report any new Badger excavation to the *Client's* ECW found on the tracking route side

The fencing shall be removed upon Completion.

The *Contractor* completes *works* in accordance with the Requirements for working in the vicinity of Badger Setts (ENVRESW001353-CH2-XX-400-MS-EN-1122) (Appendix 9)

#### c. Reptiles

The *Contractor* follows the methodology and restrictions outlined in the Construction Environmental Management Plan , (refer to S 201 (11) and in accordance with the Environmental Action Plan (ENVRESW001353-CH2-XX-400-RP-EN-1090) and Appendix 10 Requirements for working in the vicinity of reptiles (ENVRESW001353-CH2-XX-400-MS-EN-1110)

#### d. Invasive and non-native species

The *Contractor* follows the methodology and restrictions outlined in the Construction Environmental Management Plan (refer to S 201 (11) and in accordance with the Environmental Action Plan (ENVRESW001353-CH2-XX-400-RP-EN-1090) found in Appendix 7.

# e. Over wintering birds

The *Contractor* follows the methodology and restrictions outlined in the Construction Environmental Management Plan (refer to S 201 (11), in accordance with the Environmental Action Plan (ENVRESW001353-CH2-XX-400-RP-EN-1090) and the advice and instruction given by Natural England on such matters.

# f. Nesting birds

The *Contractor* follows the methodology and restrictions outlined in the Construction Environmental Management Plan (refer to S 201 (11) and in accordance with the Environmental Action Plan (ENVRESW001353-CH2-XX-400-RP-EN-1090).

#### g. Breeding birds

The *Contractor* follows the methodology and restrictions outlined in the Construction Environmental Management Plan (refer to S 201 (11) and in accordance with the Environmental Action Plan (ENVRESW001353-CH2-XX-400-RP-EN-1090).

#### h. Bats

The *Contractor* follows the methodology and restrictions outlined in the Construction Environmental Management Plan (refer to S 201 (11) and in accordance with the Environmental Action Plan (ENVRESW001353-CH2-XX-400-RP-EN-1090).

#### i. Invertebrates

The *Contractor* follows the methodology and restrictions outlined in the Construction Environmental Management Plan (refer to S 201 (11) and in accordance with the Environmental Action Plan (ENVRESW001353-CH2-XX-400-RP-EN-1090).

#### 7) Protective Fencing

The Contractor prevents public access to all Working Areas of the Site.

# 8) Information Signs

The *Contractor* erects and maintains signage at all Working Areas to inform the local community of the nature of the *works* taking place and likely access restrictions. This shall include funding stream publicity banners (3m long by 1.5m high) to be provided by the *Client* to be located in positions to be agreed with the *Project Manager*.

# 9) Lighting

Where, for safety or operational reasons, the *Contractor* uses artificial lighting on the Site, lighting units are shrouded, and lighting is directed away from residential properties, hedgerows, and trees.

# 10) Setting Out

The setting out for the project will be provided to the *Contractor* in the form of a 3D model data:

KSD Left bank: ENVRESW001353-CH2-ZZ-4KS-M3-C-2701
KSD Right bank: ENVRESW001353-CH2-ZZ-4KS-M3-C-2702
Lower Sowy Left bank: ENVRESW001353-CH2-ZZ-4LS-M3-C-3701
Lower Sowy right bank: ENVRESW001353-CH2-ZZ-4LS-M3-C-3702
Upper Sowy right bank: ENVRESW001353-CH2-ZZ-4US-M3-C-4701

This information has been supplemented in places with some additional 2D co-ordinated tabulated data with associated levels to Above Ordnance Datum (Newlyn) as shown on the drawings. The *Contractor* will establish these lines on the Site and confirm the position with the *Supervisor* before commencement of any construction works. The *Contractor* shall check the provision of any level reference points shown on the drawings and confirm the position and level with the *Supervisor* before use for setting out the *works*. The *Contractor* shall inform the *Project Manager* when all setting out reference points have been agreed, checked, and confirmed.

# 11) Documentation

The *Contractor* prepares the following prior to commencement of the *works* for acceptance by the *Project Manager*. Refer also to section S 201 (1).

- CDM 2015 Construction Phase Plan ;
- Construction Environmental Management Plan (including pollution response measures and environmental incident reporting and Invasive Non-Native Species Management plan) – in developing this working document, the *Contractor* shall consider the recommendations in the following documents (refer to Appendices):
  - o Environmental Action Plan (Appendix 7)
  - Requirements for tree removal and working in vicinity of trees (ENVRESW001353-CH2-XX-400-MS-EN-1120) & (ENVRESW001353-CH2-XX-400-MS-RP-1118)(Appendix 8)
  - Archaeological Written Scheme of Investigation (Appendix 5)
  - Requirements for working in vicinity of Badger Setts (ENVRESW001353-CH2-XX-400-MS-EN-1122) (Appendix 9)
  - Requirements for working in vicinity of reptiles (ENVRESW001353-CH2-XX-400-MS-EN-1110) (Appendix 10)
  - Section 5.2 of the Invasive Non-Native Species Survey Report (ENVRESW001353-CH2-XX-400-RP-EN-1117). Appendix 11
- Traffic Management Plan;
- Site Waste Management Plan;
- Materials Management Plan;
- Site Environmental Emergency Plan as required by the SHEW CoP.

In planning each construction activity, Method Statements and Risk Assessments are prepared by the *Contractor* in reference to the above documentation. Where any conflict exists between the activity-specific requirements and the above documents, this is brought to the attention of the *Project Manager*.

# S 202 Confidentiality

The *Contractor* does not disclose information in connection with the *works* except when necessary to carry out their duties under the contract or their obligations under the contract.

The Contractor may publicise the works only with the Client's written permission.

## S 203 Security and protection on the Site

Refer to section S 201 (7). No other specific requirements.

#### S 204 Security and identification of people

The *Contractor* manages the safety of the Site. This includes the incorporation of the safety, security, and identification of those entering the Site within his Health and Safety procedures.

#### S 205 Protection of existing structures and services throughout the Site

The *Contractor* shall be responsible for all protection measures required to protect the existing services Refer also to clause 1.31 of the MTR (Environment Agency's Minimum Technical Requirements (LIT 13258, dated 04/05/2021), hereafter referred to as the MTR).

#### S 206 Protection of the works

Refer to S 201 (7). No other specific requirements.

#### S 207 Cleanliness of the roads

The shall comply with clause 1.36 of the MTR.

# S 208 Traffic management

The *Contractor* shall prepare a Traffic Management Plan to cover the *works*. Any updates to this document, resulting from this Scope, shall be submitted to the *Project Manager* for acceptance under the contract and submitted to the Highway Authority, Somerset County Council for their approval as their requirements may dictate. Refer also to section S 201 (1). The Plan shall demonstrate arrangements for safe management of all forms of traffic in the vicinity of the Site where these may be affected by the *works*, including site personnel and plant, road vehicles of all kinds, cyclists, and pedestrians.

## S 209 Condition survey

Refer to clause 1.7 of CESWI (7<sup>th</sup> Edition, referred to hereafter as CESWI) and clause 1.34 of the MTR and section S 1701.

The *Contractor* shall provide the *Project Manager* the data files within 1 week of them being taken and not 4 weeks as stated with clause 1.34 of the MTR.

#### S 210 Consideration of Others

In managing the interface between haul routes and the highway, cycleway and footpath networks, the *Contractor* establishes and maintains traffic management and crossing points that limit delays to the public that shall be defined under the accepted Traffic Management Plan (See section S 201 (1)). The *Contractor* shall arrange and implement diversion routes (in coordination with the Somerset County Council) that are clearly signed for a period commencing two weeks prior to diversions commencing until the end of the associated construction works.

Refer also to S 201 (3).

# S 211 Control of site personnel

No specific requirements.

# S 212 Site cleanliness

Refer to clause 1.5 of both the MTR and CESWI for requirements.

#### S 213 Waste materials

Refer to clause 1.40 of the MTR for requirements, the Site Waste Management plan, shall be updated accordingly with the requirements of this Scope, implemented and complied with for all other aspects as required.

#### S 214 Deleterious and hazardous materials

Refer to clauses 2.168 of the MTR for requirements.

# S 300 Contractor's design

## S 301 Design responsibility

The *Contractor* is responsible for the design of all temporary works.

#### S 302 Design submission procedures

The Contractor's design submissions include the following:

- Component specifications, including materials, fixings, and reference to relevant standards.
- Design standards and codes of practice.
- Size and/or space limitations.
- · Fabrication drawings.
- Loading and capacity requirements and calculations.
- Design philosophy statement.
- Designers Risk Assessments.
- Public Safety Risk Assessments.
- · Operation and maintenance procedures.
- Electronic copies of all drawings and specifications for BIM archive.

The design of all *Contractor* designed temporary works are submitted by the *Contractor* to the *Project Manager* for acceptance.

# S 303 Design approval from Others

The *Contractor* gains temporary works design acceptance from the *Project Manager* and Others as follows:

- Utilities companies for all protection measures necessary to complete the works and maintain safe and continuous supply of services.
- Environment Agency Flood and Coastal Erosion Risk Management Department for all temporary works and support to existing structures affected by the works through a formal Temporary Flood Risk Activity Permit application.
- Owners of existing structures for all potential impacts and management of the works on existing structures. Ownership is as follows:
  - o All private riverbanks Information is included in SI 305 Public Information
  - o All highway bridges Somerset County Council
  - Cossington Right outfall and Chilton Right outfall Environment Agency Estates Department

# S 304 Client's requirements

No specific requirements.

# S 305 Design co-ordination

No specific requirements.

# S 306 Requirements of Others

The *Contractor* designs the temporary works and constructs the *works* in cooperation with *Others* to comply with Permanent Works Flood Risk Activity Permit (Appendix 12).

17

# S 307 Copyright/licence

No specific requirements.

# S 308 Access to information following Completion

No specific requirements.

# S 309 Site investigations

No specific requirements.

# S 400 Completion

## S 401 Completion definition

The following are absolute requirement for Completion to be certified, without these items the *Client* is unable to use the *works*:

- Provide all information to the Principal Designer, if the Principal Designer is compiling the Health and Safety File.
- Population of the Client's latest version of the Project Cost Tool, or its successor
- Transfer to the Client databases of BIM data
- Delivery of the Final Carbon Report

The *Contractor* provides marked up drawings to the designer (Jacobs) and liaises with them to enable them to prepare as-built record drawings.

The *Contractor* shall update the LB Vegetation Clearance Schedule with updated photos following the vegetation clearance works.

## S 402 Sectional Completion definition

No specific requirements.

#### S 403 Training

No specific requirements.

#### S 404 Final Clean

No specific requirements.

# S 405 Security

No specific requirements.

## S 406 Correcting Defects

No specific requirements.

# S 407 Pre-Completion arrangements

Prior to the *works* being offered for take over or Completion the *Contractor* shall arrange a joint inspection with the *Supervisor*, *Project Manager*, *Client* (scheme *Project Manager*) and *Client's* Senior User. The initial inspection shall take place a minimum of two weeks in advance of the planned take over or Completion.

#### S 408 Take over

Operation of any part of the *works* as a flood defence before Completion has been certified does not represent take over in accordance with Clause 35.2 any damage to the *Contractor's* works resulting from operation of any part of the *works* as a flood defence would not be classed as a Defect.

# S 500 Programme

## S 501 Programme requirements

The programme complies with the requirements of Clause 31.2 and includes submission of the BIM Execution Plan (BEP) and Master Information Delivery Plan (MIDP).

## S 502 Programme arrangement

Working hours are stated in S 1701. Amended from standard to allow flexibility in construction.

# S 503 Methodology statement

Refer to clauses 1.40 of the MTR and the Construction (Design and Management) Regulations 2015.

#### S 504 Work of the Client and Others

The order and timing of the work of the *Client* and Others to be included in the programme and information to be provided. Refer as necessary to sections S 901 and S 902.

# S 505 Information required

All method statements and Risk Assessments are provided by the *Contractor* to the *Project Manager* and other statutory consultees for acceptance a minimum of one week prior to the planned commencement date of the activities covered.

# S 506 Revised programme

No specific requirements.

# S 600 Quality management

# S 601 Samples

No specific requirements

## S 602 Quality Statement

No specific requirements.

# S 603 Quality management system

The *Contractor* constructs the *works* in accordance with a formal and independently audited quality management system, and in accordance with the Collaborative Delivery Framework (CDF) agreement.

The *Contractor* appoints a named member of staff who is responsible for delivery of the *works* in accordance with the Scope, the Quality Management System and the CDM 2015 Construction Phase Plan. The *Contractor* monitors and audits the delivery of all parts of the *works* being undertaken in reference to the Scope and reports to the *Project Manager* each week with the results of any audits undertaken. These audits are to include proposals regarding any corrective actions instructed to ensure compliance.

## S 604 BIM requirements

The BIM Information Manager is the Client Project Manager.

# S 700 Tests and inspections

# S 701 Tests and inspections

Refer to project specification in (S 1701).

# S 702 Management of tests and inspections

Refer to project specification in (S 1701).

# S 703 Covering up completed work

Refer to project specification in (S 1701).

# S 704 Supervisor's procedures for inspections and watching tests

Refer to project specification in (S 1701).

# S 800 Management of the works

## S 801 Project team – Others

The following do not have a named role under the NEC4 ECC conditions of contract but act to advise the *Project Manager* and *Supervisor* in the undertaking of their duties.

- Environment Agency staff Provides advice
- Environmental Clerk of Works (ECW) Provides general advice on Environmental Impact Assessment and Ecological matters
- Landscape Architect Provides advice on landscape matters
- Geomorphologist Provides advice on creation of WFD features
- Geotechnical Engineer Provides advice on suitability of use of site won excavated material
- Ecologist Provides advice on works which may impact fauna
- Arboriculturalist Provides advice on management of trees, hedges, and shrubs

All the above staff are allowed to visit and inspect the Site and the *works*, but act within the constraints of the *Contractor's* health and safety procedures.

In developing safety plans, construction methodologies and obtaining relevant permissions for land access and to complete the *works* in accordance with their requirements, the *Contractor* supports the *Client* and *Project Manager* in liaising with the following organisations:

Landowners and/or tenants

#### S 802 Communications

The contract is administered using the standard forms and schedules that are incorporated into the Collaborative Delivery Framework (CDF) agreement and administered via the Fast Draft platform.

The Contractor is required to submit the following to the Project Manager.

- Fortnightly programmes.
- Weekly progress updates (informal).
- Attendance at Monthly progress meetings with a formal progress report issued in advance of meeting.
- Financial forecasts submitted on a fortnightly alongside the programme.

# S 900 Working with the *Client* and Others

# S 901 Sharing the Working Areas with the *Client* and Others

Refer to sections S 201 (1) and S 201 (2) No other specific requirements.

#### S 902 Co-operation

The *Contractor* provides such updates and photos as required to the Somerset Rivers Authority to assist them in with their publicity obligations as required by the LEP Growth Deal Funding.

## S 903 Co-ordination

Refer to section S 201 (1). No other specific requirements.

# S 904 Authorities and utilities providers

Refer to sections S 201 (1) and S 501. No other specific requirements.

# S 905 Diversity and working with the *Client*, Others, and the public

The *Contractor* appoints a named member of staff to take the role of Stakeholder Manager, who is responsible for all stakeholder and public liaison relating to the *works*.

The *Contractor* records and manages all communications with stakeholders and the public, including complaints and objections, and reports to the *Project Manager* each week with a summary

The *Contractor* shall ensure that any Public Rights of Way diversions (refer to S 201 (2)) remain accessible for all members of the public.

Through the use of signage and public liaison, the *Contractor* ensures that all stakeholders and landowners are aware of the programming of all the *works* and their potential impact.

# S 1000 Services and other things to be provided

# S 1001 Services and other things for the use of the *Client, Project Manager* or Others to be provided by the *Contractor*

Refer to clause 1.2 of CESWI and project specification (S 1701).

## S 1002 Services and other things to be provided by the Client

3 no Funding stream publicity banners (3.0m by 1.0m) shall be provided to the *Contractor* for erection at suitable locations on the Site for maximum visibility to be agreed with the *Project Manager*. These banners shall be maintained in good condition throughout the period of the Contract and returned to the *Client* on completion of the Contract.

# S 1100 Health and safety

# S 1101 Health and safety requirements

Refer to the *Client's* work specification and to the Construction (Design and Management) (CDM) Regulations 2015. CDM Pre-Construction Information (PCI) has been issued as a separate document to this Scope.

#### S 1102 Method statements

Refer to section S 505.

#### S 1103 Legal requirements

No specific requirements.

## S 1104 Inspections

The Contractor undertakes regular Health and Safety Inspections and reports results to the *Project Manager*. The *Client* shall carry out such inspections as required by the *Client's* SHEW Code of Practice and policy. Refer to section S 603.

# S 1200 Subcontracting

# S 1201 Restrictions or requirements for subcontracting

The *Contractor* appoints, manages and supervises Subcontractors and other suppliers to ensure Completion of the *works* in accordance with the Scope, their Quality Management System and the CDM 2015 Construction Phase Plan. The *Contractor* monitors and audits the performance of Subcontractors and reports to the *Project Manager* each week with the results of any audits and makes proposals regarding any corrective actions instructed to ensure compliance. Refer also to section § 603.

# **Acceptance procedures**

No specific requirements.

# **S 1300** Title

# S 1301 Marking

No specific requirements.

## S 1302 Materials from Excavation and demolition

The *Client* will retain ownership of the arising's from the WFD excavations for re-use as part of Phase 1b works in the bank raising operations. The *Contractor* shall ensure this material is deposited on the bank in accordance with the requirements of this Scope and specification and that the material does not obstruct any existing access tracks or routes.

S 1400 Acceptance or procurement procedure (Options C and E)

No Specific requirements.

# S 1500 Accounts and records (Options C and E)

#### S 1501 Additional Records

The *Contractor* provides a continuous record of the following, updated daily where changes occur to the information provided, which is used as a single agreed source of information by the *Contractor*, *Client*, *Project Manager* and *Supervisor*.

## Health and Safety:

- · Incidents and Near Misses.
- Issues/Comments:
- Any suspected instances of COVID 19 within the Contractors resources on the Site.
- Any records required for compliance of the Client's SHEW Code of Practice.

#### Environmental:

- Incidents and Near Misses (Call EA Environmental hotline 0800 169 2103).
- Updating the initial 'Materials Management Plan' originally prepared by the Contractor as part of the ESE PSC Scope, as a working document throughout this contract period.
- Issues/Comments:

#### Welfare:

- Record of accommodation and facilities.
- Issues/Comments:

#### Weather:

- Brief report of conditions on the Site, including ground conditions.
- Daily Rain fall throughout the contract period.
- Issues/Comments relating to impact of weather on the works:

# Plant on site:

- List of all plant and equipment, including subcontractor's plant.
- Issues/Comments relating to suitability, serviceability, and availability.

#### Staff/Subcontractors on the Site:

- List of all staff and organisations on the Site.
- Issues/Comments relating to performance and availability.

# Progress:

- Brief description of the works in progress.
- Works completed.
- Overall programme implications.

# Quality:

• Audits, checks and inspections undertaken.

- · Potential defects raised.
- Resolution of previous defects.

#### Public/stakeholder liaison:

- People/organisations/landowners visiting the Site or that have been visited by the Contractor.
- Phone calls and emails.
- Issues raised/concerns/complaints.

# Photographs:

• Weekly Progress photographs

The format and presentation of records to be kept are to be accepted by the *Project Manager*.

S 1600 Parent Company Guarantee (Option X4)

# S 1700 Client's work specifications and drawings

#### S 1701 Client's work specification

The *Client's* work specification is the Civil Engineering Specification for the Water Industry (CESWI) 7th Edition, with amendments and addenda of the Environment Agency's Minimum Technical Requirements (Ref 412\_13\_SD01 version 9, dated 18/03/2020)), and amendments and addenda of project specific specification defined in this section.

The numbering of the project-specific specification clauses follows the numbering system of the Minimum Technical Requirements, which itself follows the numbering system in CESWI.

Where any conflict exists between the documents, the Minimum Technical Requirements shall prevail over CESWI, and the project specific specification listed in this section shall prevail over the Minimum Technical Requirements. The *Project Manager* shall be informed of any inconsistencies.

#### Section 1 General

## 1.26 Noise Control and Working Hours

- 1. The *Contractor* shall liaise with the Local Authority (Sedgemoor District Council, Environmental Services) and comply with their requirements for noise control, if relevant.
- 2. Normal working hours will be from 0700 to 1900 Monday to Sunday, the *Contractor* is responsible for compliance with Working Time Directive 2003. Deviation from the EA SHEW COP working times is to provide the *Contractor* the greatest chance at completing the works in this year working window inclusive of taking advantage of good weather windows. Where practicable, operations which may cause noise and or vibration disturbance should be scheduled for daylight working. The *Contractor* must comply with working hour restrictions as outlined in the Environmental Action Plan.

#### Section 2 Materials

#### 2.56 Grass Seed

Not required.

#### 2.60 Handrails and Balusters

Not required

#### 2.89 Permanent fencing

- 1. Timber posts to be treated softwood.
- Concrete to conform to BS 8500 If the posts are not able to be driven into the ground post can be set into ST4 concrete not less than 450mm x 450mm x 600mm deep.
- 3. All nails to be galvanised; and
- 4. Fencing shall be 2 post and 4 rails.

#### 2.121 Steel Sheet Piles

Not required.

#### 2.126 Timber and Preservation of Timber

- 9. Timber capping on steel sheet pile walls shall be British grown, Western Red Cedar, machine planed or similar to ensure that it is splinter-free, tanalised, double vacuum treated softwood, to comply with Environment Agency timber procurement requirements. Capping beam to be 350mm wide x 100mm thick with 20mm x 20mm chamfered finish on all edges. Countersunk M12 bolts at spacings to suit board lengths fixed to 100 x 100 x 10mm equal angles welded to the outpans of the piles at spacings to suit board lengths, with nuts and washers. Gaps at joints between beam lengths shall be a maximum of 2mm.
- 10. Details of all timber to be used in the *works* shall be submitted to the *Project Manager* for acceptance.

#### 2.127 Trees and Shrubs

7. Trees and shrubs are specified on the landscape drawings. Refer also to clause 12.2 in the Minimum Technical Requirements and to the project-specific landscape specification

# 2.174 Concreting Against Existing Surfaces

1. Where the Contract requires that concrete be placed against an existing concrete face or surface then, prior to the erection of any reinforcement or formwork in front of the existing surface, the face shall be cleaned of all vegetable matter, dirt and loose cement or mortar using wire brushing and high-pressure water jetting. The Supervisor shall be given the opportunity to inspect the face and his acceptance shall be obtained before the face is covered or obstructed. Where a new concrete structure is to be cast onto an existing concrete structure a bonding compound such as Fosroc Nitobond EP or similar approved shall be applied to horizontal joints in accordance with manufacturer's instructions.

# 2.175 Welding

Not required

# 2.176 Fixings for Timber

- 1. Bolt holes in timber should have a diameter not more than 1 mm larger than the bolt. Bolt holes in steel plates should have a diameter not more than 2 mm or 0.1d (whichever is the greater) larger than the bolt diameter d.
- 2. Washers with a side length or a diameter of at least 3d and a thickness of at least 0.3d should be used under the head and nut. Washers should have a full bearing area.
- Bolts and lag screws should be tightened so that the members fit closely, and they should be re-tightened if necessary when the timber has reached equilibrium moisture content to ensure that the load-carrying capacity and stiffness of the structure is maintained.
- 4. The minimum diameter requirements of bolts and timber connectors are given in BS EN 1995-1-1 Table 10.1, below.

dc is the connector diameter, in mm;

d is the bolt diameter, in mm

d<sub>1</sub> is the diameter of centre hole of connector.

Type of connector EN 912	$d_{\rm c}$	<i>d</i> minimum	<i>d</i> maximum
	mm	mm	mm
A1 – A6	≤ 130	12	24
A1, A4, A6	> 130	0,1 d <sub>c</sub>	24
В		d <sub>1</sub> -1	$d_1$

#### Section 3 Excavation, Backfilling and Restoration

## 3.10 Trees

- No trees or shrubs shall be pruned or cleared from site until setting-out work in the relevant area has been completed unless such clearance is itself necessary for completion of setting out and has been explicitly approved by the *Project Manager*.
- 7. Prior to any pruning or felling operations, all specimens affected shall be clearly marked by means of an easily visible band of paint, and such markings shall be approved by the *Project Manager* as "essential" before such operations are undertaken.
- 8. Where trees are specified for removal, tree roots shall not be grubbed up. Tree stumps shall be cut to ground level.

#### 3.13 Filling Above Ground

- 4. Fill for raising of embankments shall be locally won from the seven WFD areas and the identified borrow area, or external sites as agreed with the *Project Manager*.
- 5. Fill placed in order to raise embankments shall be placed in the locations described in the contract Drawings and shall be placed and compacted in accordance with the requirements of the SHW for Class 4 fill to Landscape Areas.
- 6. The degree of compaction of fill material shall be sufficient to remove large voids and to produce a coherent mass whilst preventing over-compaction and any build-up of excess pore pressures.

# 3.23 Testing of Fill Material

- 1. Tests comparable to those specified will be necessary for any equivalent work, goods or materials proposed by the *Contractor*.
- 2. (N) indicates that a test report or certificate is required from a UKAS (NAMAS) accredited source.
- 3. Unless otherwise shown, tests for work, goods or materials as scheduled under any one Clause are required for all such work, goods, or materials in the *works*.

4. All sampling and testing will be carried out by the Contractor.

Testing	Frequency
MC/Bulk density (N) in accordance with BS 1377: Part 2	1 per 500m <sup>3</sup>
Soil chemical suite E (soil) (N)	1 per 500m <sup>3</sup>

**Section 4 Concrete and Formwork** 

# **Identity Testing**

3. The concrete mixes shall be designed mixes in accordance with the limits stated in the Tables below. The mixes shall be designed to achieve dense durable concrete.

	In-situ Concrete	
Otaca ath Ocada	020/40	
Strength Grade	C32/40	
Consistence Class	S3	
Type of mix	Designed	
Cement Type	CEM I, SPRC, IIA, IIB-S,	
	IIB-V, IIB+SR, IIIA, IIIA+SR, IIIB, IIIB+SR	
Type of aggregate:	Freeze/thaw resistant	
(see BS 8500-2)		
Nominal Max aggregate Size (mm)	20	
Design Chemical Class	DC-1	
Chloride Class for cement	CL 0,40	
Exposure Class (all applicable)	XC3/4	
Minimum cement content (kg/m³)	300	
Maximum cement content (kg/m³)	N/A	
Sampling rate	1 sample (2 cubes) from first load each day	
Max free water-cement ratio	0.55	
Permitted Admixtures	See Clause 2.3	
Additives	See Clause 2.3	

# 4.20 Construction Joints

8. 1.4401 stainless steel dowel bars, 20mm diameter, 200mm long at 300mm centres. Dowels to be grouted into headwall using Weber Five Star Grout or other similar products.

# S 1702 Drawings

The following drawings are included in the Scope.

Title	Drawing ref	Rev
KSD General Arrangement plan	ENVRESW001353-CH2-ZZ-4KS-DR-C-2011	C07
Lower Sowy General Arrangement plan	ENVRESW001353-CH2-ZZ-4LS-DR-C-2012	C08
Typical Detail Two-Stage Channel Works	ENVRESW001353-CH2-ZZ-4KS-DR-C-2003	C05
Typical Detail Backwater Channel Works	ENVRESW001353-CH2-ZZ-4KS-DR-C-2006	C05
Typical Detail Embayment Channel Works	ENVRESW001353-CH2-ZZ-4US-DR-C-3003	C05
Chilton Right Outfall Details	ENVRESW001353-CH2-XX-4KS-DR-C-2009	C03
Cossington Right Outfall Details	ENVRESW001353-CH2-XX-4KS-DR-C-2010	C03
Typical Detail Raised Embankment Works	ENVRESW001353-CH2-ZZ-4KS-DR-C-5005	C03
Landscape Masterplan (LMP) Section Numbers 1 and 2 – Sheet 1 of 8	ENVRESW001353-CH2-XX-400-DR-EN-5425	C01
Landscape Masterplan (LMP) Section Numbers 3 and 4 – Sheet 2 of 8	ENVRESW001353-CH2-XX-400-DR-EN-5426	C01
Landscape Masterplan (LMP) Section Numbers 5 and 6 – Sheet 3 of 8	ENVRESW001353-CH2-XX-400-DR-EN-5427	C01
Landscape Masterplan (LMP) Section Numbers 7 and 8 – Sheet 4 of 8	ENVRESW001353-CH2-XX-400-DR-EN-5428	C01
Landscape Masterplan (LMP) Section Numbers 9 and 10 – Sheet 5 of 8	ENVRESW001353-CH2-XX-400-DR-EN-5429	C01
Landscape Masterplan (LMP) Section Numbers 11 and S12 – Sheet 6 of 8	ENVRESW001353-CH2-XX-400-DR-EN-5430	C01
Landscape Masterplan (LMP) Section Numbers 13 and 14 – Sheet 7 of 8	ENVRESW001353-CH2-XX-400-DR-EN-5431	C01
Landscape Masterplan (LMP) Section Numbers 15 and 16 – Sheet 8 of 8	ENVRESW001353-CH2-XX-400-DR-EN-5432	C01
Landscape Masterplan (LMP) Typical Detail KSD Backwater	ENVRESW001353-CH2-XX-400-DR-EN-5433	C01
Landscape Masterplan (LMP) Typical Detail KSD Embayment	ENVRESW001353-CH2-XX-400-DR-EN-5434	C01
Landscape Masterplan (LMP) Typical Detail KSD Two-Stage Channel	ENVRESW001353-CH2-XX-400-DR-EN-5435	C01
Landscape Masterplan (LMP) Typical Detail Sowy Embankment	ENVRESW001353-CH2-XX-400-DR-EN-5436	C01
Landscape Masterplan (LMP) Typical Detail Showy Two-Stage Channel	ENVRESW001353-CH2-XX-400-DR-EN-5437	C01
Landscape Masterplan (LMP) Planting and Seeding Schedules	ENVRESW001353-CH2-XX-400-DR-EN-5438	P03
Farm Access Track Plan and Section Detail	ENVRESW001353-CH2-RZ-4LS-DR-C-3600	P01
Location of the Proposed Scheme	ENVRESW001353-CH2-XX-400-DR-EN-1072	P01
Boundaries of the Site	ENVRESW001353-CH2-XX-400-DR-GEN- 1126	P01
Track Work rev 3 (Access Tracks)	N/A	N/A

# \$ 1703 Standards the Contractor will comply with

The Contractor shall carry out their work using the following guidance.

Ref	Report Name	Where used
	Project Cost Tool (CCD-Contractors Cost Data)	Costs
	300_10 SHE handbook for managing capital projects	
	300_10_SD27 SHE Code of Practice	

# **Appendix 1 BIM Protocol – Information Production and Delivery Table**

All *Client* issued information referenced within the Information Delivery Plan remains within the *Site Information* unless it is referenced elsewhere within the *Scope* 

www.Pow.bim4.info

You need google chrome for this link to work. Once the table is completed it should be printed for issue in the tender document, so that the correct baseline position can be seen by suppliers.