



Framework:

Supplier:

**Company Number:** 

Geographical Area: Contract Name:

Project Number:

Contract Type:

Option:

**Contract Number:** 

Stage:

**Collaborative Delivery Framework** 

Midlands

**Islip Sluice Refurbishment** 

**Engineering Construction Contract** 

**Option C** 

Construction

Revision	Status	Originator	Reviewer	Date	

## ENGINEERING AND CONSTRUCTION CONTRACT under the Collaborative Delivery Framework CONTRACT DATA

Project Name Islip Sluice Refurbishment

Project Number

ENV0004974C

This contract is made on 17 August 2023 between the *Client* and the *Contractor* 

- This contract is made pursuant to the Framework Agreement (the "Agreement") dated 01st day of April 2019 and Framework Agreement Extension dated and signed 1st April 2023 between the *Client* and the *Contractor* in relation to the Collaborative Delivery Framework. The entire agreement and the following Schedules are incorporated into this Contract by reference
- Schedules 1 to 23 inclusive of the Framework schedules are relied upon within this contract.
- The following documents are incorporated into this contract by reference LIT 13260 CDT NEC4 ECC Scope Islip V5 FINAL 31.03.23

## Part One - Data provided by the *Client* Statements given in

## all Contracts 1 General

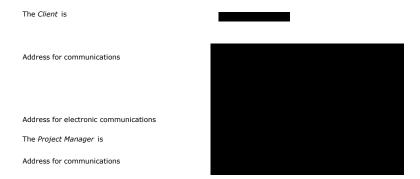
The conditions of contract are the core clauses and the clauses for the following main Option, the Option for resolving and avoiding disputes and the secondary Options of the NEC4 Engineering and Construction Contract June 2017.

Option for resolving and Option C W2 Option avoiding disputes Secondary Options X2: Changes in the law X7: Delay damages X9: Transfer of rights X10: Information modelling X11: Termination by the Client X15: Contractor's design X18 Limitation of Liability X20: Key Performance Indicators Y(UK)2: The Housing Grants, Construction and Regeneration Act 1996 Y(UK)3: The Contracts (Rights of Third Parties) Act 1999

Z: Additional conditions of contract

The works are

To carry out urgent contingency works; the contingency works shall introduce measures which allow the water levels of the River Nene to be managed should the sluice gate fail to operate properly.





Address for electronic communications

The  $\ensuremath{\textit{Supervisor}}$  is

Address for communications

Address for electronic communications

The Scope is in

LIT 13260 - CDT NEC4 ECC Scope - Islip V5 FINAL 31.03.23

The Site Information is in Islip - Site Information 30.03.23

The boundaries of the site are

Islip - Site Boundaries - V1

The language of the contract is English

The law of the contract is

the law of England and Wales, subject to the jurisdiction of the courts of England and Wales

The period for reply is 2 weeks

The following matters will be included in the Early Warning Register

Early warning meetings are to be held at intervals no longer than

#### 2 The ${\it Contractor's}\ {\it main}\ {\it responsibilities}$

The key dates and conditions to be met are

condition to be met key date

'none set' 'none set'

'none set' 'none set'

'none set' 'none set'

The *Contractor* prepares forecasts of the total Defined Cost for the whole of the *works* at intervals no longer than 4 weeks

#### 3 Time

The starting date is 31 July 2023

The access dates are

part of the Site date

Islip Sluice 14 August 2023

The Contractor submits revised programmes at

intervals no longer than 4 weeks

The Completion Date for the whole of the works is 26 April 2024

The Client is not willing to take over the works before the Completion Date

4 weeks

#### 4 Quality management

The period after the Contract Date within which the Contractor is to submit a quality plan is

4 weeks

The period between Completion of the whole of the works and the

52 weeks

The defect correction period is except that • The defect correction period for • The defect correction period for is

#### 5 Payment

The currency of the contract is the £ sterling

The assessment interval is Monthly

The Client set total of the Prices is £484,562.00

The interest rate is 2.00% per annum (not less than 2) above the rate of the Bank of England

Base

The Contractor's share percentages and the share ranges are

share range Contractor's share percentage 80 % less than 0 % 120 % as set out in Schedule 17 from 80 % to

greater than 120 % as set out in Schedule 17

#### 6 Compensation events

Denford Weather Station (52 3742, -0.5445) The place where weather is to be recorded is

The weather measurements to be recorder for each calendar month are

- the cumulative rainfall (mm)
- the number of days with rainfall more than 5mm
- $\bullet\,$  the number of days with minimum air temperature less than 0 degrees Celsius
- hours • the number of days with snow lying at 09:00 GMT

and these measurements:

- 1.
- 2. 3.
- 4.
- 5.

The weather measurements are supplied by Met Office
The weather data are the records of past weather measurement for each calendar month

Denford Weather Station which were recorded at and which are available from Met Office

Assumed values for the ten year weather return weather data for each weather measurement for each calendar month are

Jan Jul Feb Aug Mar Sep Oct Apr Nov May

These are additional compensation events

- Carbon Methodology Adherence to and compliance with the Carbon Methodology dated 08 June 2023
- A Strong Stream notification is issued on the river that delays works detailed on the Accepted Programme

- Works to operate the gates on a sluice and/or removal of dam boards and Equipment from the lock during high flows following a formal notification from the regulatory authority
- 4. Wind speeds over 10m/s as recorded on site during the works.
- 5. 'not used'

#### 8 Liabilities and insurance

These are additional Client's liabilities

- 1 'not used'
- 2 'not used'
- 3 'not used

The minimum amount of cover for insurance against loss of or damage to property (except the *works*, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the *Contractor*) arising from or in connection with the *Contractor* Providing the Works for any one event is

The minimum amount of cover for insurance against death of or bodily injury to employees of the Contractor arising out of and in the course of their employment in connection with the contract for any one event is

not less than the amount required by law

The insurance against loss of or damage to the works, Plant and Materials is to include cover for Plant and Materials provided by the Client for an amount of

#### Resolving and avoiding disputes

The *tribunal* is litigation in the courts

The *Senior Representatives* of the *Client* are

Address for communications

Address for electronic communications

Name

Address for communications

Address for electronic communications

The *Adjudicator* is 'to be confirmed'

Address for communications 'to be confirmed'

#### Z Clauses

#### **Z1** Correctness of Site Information and other documents

Address for electronic communications

The Adjudicator nominating body is

21.1 Site Information about the ground, subsoil, ducts, cables, pipes and structures is provided in good faith by the Client, but is not warranted correct. Clause 60.3 does not apply to such Site Information and the Contractor is responsible for checking the correctness of any such Site Information they rely on for the purpose of pricing for or providing the works.

21.2 Information regarding construction methods or processes referred to in pre contract health and safety plans are provided in good faith by the Client but are not warranted correct (except for the purpose of promoting high standards of health and safety) and the Contractor is responsible for checking the correctness of any such information they rely on for the purpose of pricing for, or providing the works.

'to be confirmed'

The Institution of Civil Engineers

#### Z 2A: Risk transfer: Physical conditions within the Site

Clause 60.1 (12) is deleted from this contract.

#### Z3 Prevention: No change to prices

Delete first sentence of clause 62.2 and replace with:

"Quotations for compensation events except for the compensation event described in 60.1(19) comprise proposed changes to the Prices and any delay to the Completion Date and Key Dates assessed by the Contractor. Quotations for the compensation event described in 60.1(19) comprise any delay to the Completion Date and Key Dates assessed by the Contractor. Delete 'The' At start of clause 63.1 and replace with:

"For the compensation event described in 60.1(19) the Prices are not changed. For other compensation events the..."

#### Z 4 The Schedule of Cost Components

The Schedule of Cost Components is as detailed in the Framework Schedule 9.

#### Z 6 Payment for Work

Delete existing clause 11.2 (31) and replace with:

"11.2 (31) The Price for Work Done to Date is the total Defined Cost which the *Project Manager* forecasts will have been paid by the *Contractor* before the next assessment date plus the Fee. In all instances and circumstances the Price for Work Done to Date shall not exceed the forecast for the same as provided under clause 20.4."

#### Z7 Contractor's share

After cl54.2 and before cl54.3, insert the following additional clause:

54.2A If, prior to Completion of the whole of the works, the Price for Work Done to Date exceeds 111% of the total of the Prices, the amount in excess of 111% of the total of the Prices is retained from the Contractor.

#### Z10 Payments to subcontractors, sub consultants and

The Contractor will use the NEC4 contract on all subcontracts for works unless another alternative and appropriate form is proposed and agreed in accordance with clause 26.3. Payment to subcontractors will be 28 days from the assessment date.

If the Contractor does not achieve payments within these timescales then the Client reserves the right to delay payments to the Contractor in respect of subcontracted work, services or

Failure to pay subcontractors and suppliers within contracted times scales will also adversely affect the Contractor's opportunities to work on framework contracts.

#### Z11Y(UK) 3 The Contracts (Rights of Third Parties) Act

Z11.1 The Contractor warrants all design complies with the contract whether undertaken by the Contractor or by sub-contractors. Z11.2 All contracts for design employed by the Contractor must include:

- Y(UK)3 The Contracts Rights of Third Parties) Act 1999
- A requirement for the Contractor's sub-contractor to hold Professional indemnity insurance to the same level as the cover specified for the Contractor in this Call-off contract
- A clause to give the Client ( the right to enforce the provisions of the Contracts (Right of Third Parties) Act 1999,
  A clause to ensure that neither the Contractor nor their sub-contractor can alter the provisions of their sub-contract without the consent of the Client
- A clause to ensure that the Client's rights against the sub-contractor under this agreement shall be subject to the same conditions, limitations and exclusions as apply to the
- Contractor's rights against the design consultant under this agreement

   A clause to state that except as provided in clause Z11.1, the agreement does not create any right enforceable by any person who is not a party to it (Other Party) under the Contracts
- (Rights of Third Parties) Act 1999, but the clause does not affect any right or remedy of any other party which exists or is available apart from that Act.

#### **Z16 Disallowed Costs**

- Add the following bullets to clause 11.2 (26) Disallowed costs

   was incurred due to a breach of safety requirements, or due to additional work to comply with safety requirements.
- was incurred as a result of the client issuing a Yellow or Red Card to prepare a Performance Improvement Plan.
  was incurred as a result of rectifying a non-compliance with the Framework Agreement and/or any call off contracts following an audit.

#### **Z21** Requirement for Invoice

Add the following sentence to the end of clause 51.1:
The Party to which payment is due submits an invoice to the other Party for the amount to be paid within one week of the *Project Manager's* certificate.

Delete existing clause 51.2:

51.2 Each certified payment is made by the later of

- one week after the paying Party receives an invoice from the other Party and

• three weeks after the assessment date, or, if a different period is stated in the Contract Data, within the period stated.

If a certified payment is late, or if a payment is late because the Project Manager has not issued a certificate which should be issued, interest is paid on the late payment. Interest is assessed from the date by which the late payment should have been made until the date when the late payment is made, and is included in the first assessment after the late payment is

#### **Z22 Resolving Disputes**

Delete W2.1

#### **Z23** Risks and insurance

Replace clause 84.1 with the following

Insurance certificates are to be submitted to the Client on an annual basis.

#### **Z30 Material Price Volatility**

The Client recognises the ongoing pricing uncertainty in relation to materials for the period from 1 July 2021 to 30 June 2023 the Client will mitigate this additional cost through this clause. Payment is made per assessment based upon a general average material proportion within assessments, calculated at 40%.

Z30.1 Defined terms

a) The Latest Index (L) is the latest index as issued by the Client. The L, which is at the discretion of the Client, is based upon the issued consumer price index ((CPI) based upon the 12month rate) before the date of assessment of an amount due.

b) The Price Volatility Provision (PVP) at each date of assessment of an amount due is the total of the Material Factor as defined below multiplied by L for the index linked to it. c) Material Factor (MF) 40% is used, based on a general average material proportion across our programme. The volatility provision is only associated with material element. No volatility

provision is applicable to any other component of costs.

#### Z30.2 Price Volatility Provision

Through a Compensation Event the Client shall pay the PVP. PVP is calculated as:

If an index is changed after it has been used in calculating a PVP, the calculation is not changed and remains based upon the rate issued by the Client. The PVP calculated at the last assessment before 30 June 2023 is used for calculating the price increase after that date.

#### Z30.3 Price Increase

Each time the amount due is assessed, an amount for price increase is added to the total of the Prices which is the change in the Price for Work Done to Date for the materials component only (and the corresponding proportion) since the last assessment of the amount due multiplied PVP for the date of the current assessment.

#### Z30.4 Compensation Events

The Contractor shall submit a compensation event for the PVP on a monthly basis (where applicable) capturing Defined Cost only for the PWDD increase in month. Forecasted costs should only be considered for the June 2023 period compensation event.

Assessment Date	Defined Cost?	Forecasted Cost?
31 July 2021	In period costs only	No
31 August 2021	In period costs only	No
30 September 2021	In period costs only	No
31 October 2021	In period costs only	No
30 November 2021	In period costs only	No
31 December 2021	In period costs only	No
31 January 2022	In period costs only	No
28 February 2022	In period costs only	No
31 March 2022	In period costs only	No
30 April 2022	In period costs only	No
31 May 2022	In period costs only	No
30 June 2022	In period costs only	No
31 July 2022	In period costs only	No
31 August 2022	In period costs only	No
30 September 2022	In period costs only	No
31 October 2022	In period costs only	No
30 November 2022	In period costs only	No
31 December 2022	In period costs only	No
31 January 2023	In period costs only	No
28 February 2023	In period costs only	No
31 March 2023	In period costs only	No
30 April 2023	In period costs only	No
31 May 2023	In period costs only	No
30 June 2023	In period costs only	Forecasted costs for remainder of
		contract

- The Defined Cost for compensation events is assessed using the Defined Cost at *base date* levels for amounts calculated from rates stated in the Contract Data for People and Equipment and
- the Defined Cost current at the date the compensation event was notified, adjusted to the base date by 1+PVP for the last assessment of the amount due before that date, for other amounts.

#### Z31 ECC - Price Adjustment for Inflation

The Client recognises the ongoing pricing uncertainty with regards to inflation. The Client will mitigate this uncertainty through this clause.

#### Z31.1 Defined terms:

- a) The index is Office for National Statistics (ONS) CPI (UK, 2015=100)
- b) The Base Date Index (B) is the latest available index published by ONS prior to the Contract Date.
- c) The Latest Index (L) is the latest available index published by ONS before the date of assessment of an amount due.
  d) The Price Adjustment Factor (PAF) at each date of assessment of an amount due is 0.9((L-B)/B).

#### Z31.2 Application rules.

The provisions of this clause [Z31] shall apply provided that:

- a) The Price for Work Done to Date is less than or equal to the total of the Prices
- b) Inflation remains positive i.e. L is greater than B.

#### Z31.3 Price Adjustment Factor.

If an index is changed after it has been used in calculating a PAF, the calculation is not changed. The PAF calculated at the last assessment date before the Completion Date for the whole of the works is used for calculating an amount for price adjustment after that date.

## Z31.4 Price adjustment Options A and B. ${\bf NOT\ USED}$

Z31.5 Price adjustment Options C and D.

Each time the amount due is assessed, an amount for price adjustment is added to the total of the Prices which is the change in the Price for Work Done to Date since the last assessment of the amount due multiplied by (PAF/(1+PAF)).

#### Z31.6 Compensation events.

#### NOT USED

#### Z111 ECC - Fee adjustment for non compliance with Scope

Delete existing 11.2 (10) and replace with the following clause

The Fee is the amount calculated by applying the fee percentage to the Defined Cost excluding the cost of Sub-contractors that have not complied with procurement by best value processes as defined in the Scope. 80% of the fee percentage is applied to the amount of the Defined Cost for Sub-contractors that have not complied with procurement by best value processes as defined in the Scope.

#### **Z120 ECC – Carbon reduction**

Ref. (Clause No.)	Clause words
11 2 Definitions	Add as Clause 11.2(36) (36) The Performance Table states the targets the <i>Contractor</i> is to achieve in Providing the Works and sets out the adjustment to payment if a measured performance is higher, the same or lower than its target. The Performance Table is the <i>performance table</i> unless later changed in accordance with the contract.
15.1 Early Warnings	In Clause 15.1 add as a new bullet between the second and third bullet: "• result in a target in the Performance Table not being met,"
Performance Measurements	
57	Add as Clause 57:
57.1	`From the starting date until the Completion Date, the Contractor reports to the Project Manager its performance against the targets in the Performance Table. Reports are provided at the intervals stated in the Performance Table.
57 2	If the Contractor's performance against a target in the Performance Table is not achieving or is forecast not to achieve the performance target stated, it submits to the Project Manager for acceptance its proposals for improving performance.  A reason for not accepting the proposals is that they will not provide the improvement in performance needed to achieve the
	target in the Performance Table.
57 3	At the dates stated in the Performance Table,  • if the relevant performance does not meet the target stated in the Performance Table, the Contractor pays the amount stated in the Performance Table,
	• if the relevant performance exceeds or meets the target stated in the Performance Table, the <i>Contractor</i> is paid the amount stated in the Performance Table.
57.4	Information in the Performance Table is not Scope.
X18	X18.5 add as a new bullet after the fourth bullet:  • low performance damages if the Performance Table applies

The performance table is <u>ECC-carbon-performance-table.xlsx</u>

the Performance Table for this contract type [form, Partner, Stage] as set out in the Carbon Methodology dated 08 June 2023

#### **Secondary Options**

#### **OPTION X2: Changes in the law**

The *law of the project* is the law of England and Wales, subject to the jurisdiction of the courts of England and Wales

#### **OPTION X7: Delay damages**

**X7 only** Delay damages for Completion of the whole of the works are

per day

#### **OPTION X10: Information modelling**

The period after the Contract Date within which the *Contractor* is to submit a first Information Execution Plan for acceptance is

2 weeks

The minimum amount of insurance cover for claims made against the *Contractor* arising out of its failure to use skill and care normally used by professional providing information similar to the Project Information is, in respect of each claim

maintains insurance for claims made against it arising out of its failure to use the skill and care is

The period following Completion of the whole of the *works* or earlier termination for which the *Contractor* 

6 years

#### OPTION X15: The Contractor's design

The *period for retention* following Completion of the whole of the *works* or earlier termination is

6 years

The minimum amount of insurance cover for claims made against the *Contractor* arising out of its failure to use skill and care normally used by professionals designing works similar to the *works* is, in respect of each claim

The period following Completion of the whole of the *works* or earlier termination for which the *Contractor* maintains insurance for claims made against it arising out of its failure to use the skill and care is

6 years

#### **OPTION X18: Limitation of liability**

The Contractor's liability to the Client for indirect or consequential loss is limited to

For any one event, the Contractor's liability to the Client for loss or damage to the Client's property is limited to

The Contractor's liability for Defects due to its design which are not listed on the Defects Certificate is limited to

The Contractor's total liability to the Client for all matters arising under or in connection with the contract, other than excluded matters, is limited to

The *end of liability date is* 6 years after the Completion of the whole of the *works* 

#### OPTION X20: Key Performance Indicators (not used with Option X12)

The incentive schedule for Key Performance Indicators is in Schedule 17.

A report of performance against each Key Performance Indicator is provided at intervals of 3 months.

#### Y(UK2): The Housing Grants, Construction and Regeneration Act 1996

The period for payment is 14 days after the date on which payment becomes due

#### Y(UK3): The Contracts ( Rights of Third Parties Act) 1999

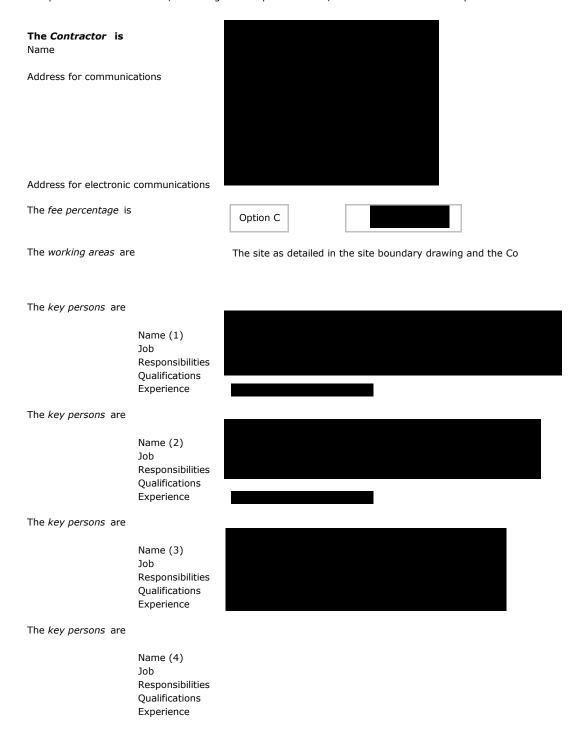
term beneficiary

not used not used

#### Part Two - Data provided by the Contractor

Completion of the data in full, according to the Options chosen, is essential to create a complete contract.

#### 1 General



The following matters will be included in the Early Warning Register

#### 2 The Contractor's main responsibilities

The Scope provided by the *Contractor* for its design is in

N/A

3 Time

The programme identified in the Contract Data is

Islip 31 July Start.pdf

**5 Payment** 

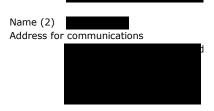
The activity schedule is Islip Activity Schedule-20230725

#### Resolving and avoiding disputes

The  $Senior\ Representatives\ of\ the\ Contractor\ are$ 



Address for electronic communications



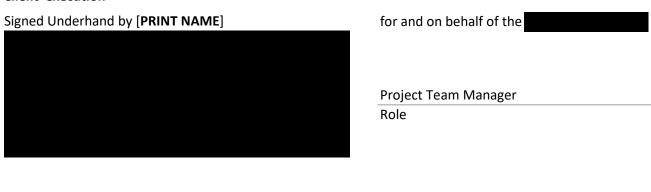
Address for electronic communications

#### X10: Information Modelling

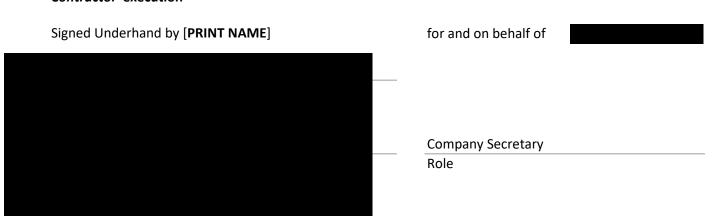
The  $information\ execution\ plan\ identified\ in\ the\ Contract\ Data\ is$ 

## **Contract Execution**

Client execution



#### **Contractor** execution





NEC4 engineering and construction contract (ECC)

LIT 13260

**Document category: COMPULSORY** 

Use the template on the pages that follow to assist you when preparing the Scope for an NEC4 engineering and construction contract (ECC).

# NEC4 engineering and construction contract (ECC) Scope

### Project / contract information

Project name	Islip Sluice Refurbishment
Project SOP reference	
Contract reference	
Date	31/03/2023
Version number	5
Author	

#### **Revision history**

Revision date	Summary of changes	Version number
28/09/22	First issue	1
02/11/22	Updated following Defra Group Commercial Review	2
22/12/22	Updated following supplier review	3
22/03/23	Final	4
31/03/23	Updated in line with update scope - CDF extension	5

This Scope should be read in conjunction with the version of the Minimum Technical Requirements and Exchange Information Requirements current at the Contract Date. In the event of conflict, this Scope shall prevail. The *service* is to be compliant with the following version of the Minimum Technical Requirements and Exchange Information Requirements:

Document	Document Title	Version No	Issue date
LIT 13258	Minimum Technical Requirements	12	December 2021  MTR library
LIT 17641	Exchange Information Requirements	3	February 2023 <u>EIR library</u>



Part 2:	Non-returnable	À
Docum	ants	

NEC - ECC

**Section 8 Scope** 

#### **Contents List**

S 100	Description of the works
S 200	General constraints on how the <i>Contractor</i> provides the <i>works</i>
S 300	Contractor's design
S 400	Completion
S 500	Programme
S 600	Quality management
S 700	Tests and inspections
S 800	Management of the works
S 900	Working with the <i>Client</i> and Others
S 1000	Services and other things to be provided
S 1100	Health and safety
S 1200	Subcontracting
S 1300	Title
S 1400	Acceptance or procurement procedure (Options C and E)
S 1500	Accounts and records (Options C and E)
S 1600	Parent Company Guarantee (Option X4)
S 1700	Client's work specifications and drawings Project specific
changes	to the MTR

Appendix 1 BIM Protocol – Production and Delivery Table
Appendix 2 BIM Protocol – Employers Information requirements

### S 100 Description of the works

### S 101 Description of the works

Islip sluice is made up of a sluice gate and tilting weir (Figure 1). The sluice reduces flood risk to Islip and Thrapston in conjunction with a wider Flood Alleviation Scheme (FAS). The sluice gate is the sole flood risk management asset protecting 2 residential properties that without the sluice would flood on an annual basis. The asset also has a role in maintaining water levels for navigation. A local landowner has installed a hydropower scheme between the sluice gate and the weir.



Figure 1 - Configuration of assets around Islip Sluice

The asset has been identified as being in a poor condition and at significant risk of failure. The purpose of this work is to carry out urgent contingency work to mitigate the anticipated failure of the Islip sluice. This project is part of the Asset Recovery Programme of Works (ARPoW).

This is a design and build contract to carry out urgent contingency work. The *Contractor* shall deliver the *works* below:

- The *Contractor* shall design, build and install stop logs to create a permanent fixed weir at Islip. The stop logs will be placed in the existing concrete stop log guides. The stop logs shall compromise of 2 sections, the top section should be moveable to allow management of the water levels.
- The Contractor shall design, build and install a lifting mechanism and supporting structure which allows the lifting of the stop log to allow water level management.
- The Contractor shall install the associated electrics and controls associated
  with the lifting mechanism. The controls will include an emergency stop button
  and will be located in a control cabinet in a location which has line of sight to
  the stop logs. The Contractor shall carry out factory acceptance testing during
  the works and will commission the works ahead of handing the asset back to
  the Client.
- The Contractor shall install a gauge board upstream of the stop logs.
- The Contractor shall install scour protection of up to 5 rock bags to the area of scour identified in the previous diver survey, on the non-control side upstream bank.
- The Contractor shall conduct a dive survey to:
- Investigate the non-control side erosion upstream of the concrete stop log groove.
- Survey the sill area between the concrete stop log grooves.
- Survey stop log grooves below water line to ensure there is no change from 2013 survey.
- Clear all upstream debris.
- Determine the extent of the scour hole on upstream non control side bank.

The *works* have been developed by the *Contractor* through early supplier engagement. The *works* shall be delivered in line with the sketches included in Appendix 3.

The *Client* recognises that the scope has been developed without any structural surveys being completed. Due to the lack of structural survey, this scope has been developed under the assumption that the existing concrete structure and stop log grooves can withstand the *works*.

The contingency works shall introduce measures which allow the water levels of the River Nene to be managed should the sluice gate fail to operate properly. This solution requires a minimum of 10-year asset life. A short-term solution is being

implemented as in the longer term; the Nene Structures strategy will impact how the sluice at Islip is managed.

The design shall be informed by previous work carried out, including the previous asset inspection carried out in 2013 (Appendix 4), the initial assessment produced in 2020 (Appendix 5), the dive survey report (Appendix 6) and any work done as part of the original sluice replacement project.

The baseline setting out information is on drawing x. The Contractor will establish these lines on 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.

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

The aim of the project is to implement a contingency solution to allow the river levels in the River Nene to be managed and reduce flood risk should the sluice fail.

The key objectives for the project are:

- To protect the integrity of the navigation of the River Nene and continue compliance with the Anglian Water Authority Act.
- To reduce flood risk to two properties and the surrounding area.
- To extend the life of the asset for a minimum of 10 years to enable a longterm solution to be agreed.

The works should consider the hydropower scheme which has been installed in the vicinity of the sluice asset, and the landowner should be kept informed of the impact of the works.

## S 200 General constraints on how the *Contractor* provides the *works*S 201 General constraints

Working hours for the *Contractor* shall be in accordance with the Collaborative Delivery Framework.

The *Contractor* shall arrange access to site with the help of the *Client* if access is not public.

The *Contractor* shall provide four weeks' notice ahead of starting the works to allow notice of entry to be issued.

The *Contractor* shall provide details of the proposed *works*, working methods and any compound locations to allow the *Client* to engage with local landowners.

Before planning site visits or inspections; the *Contractor* must contact the *Client* and relevant field team to best plan inspections around water levels.

Prior to undertaking a principal inspection, the *Contractor* must review all of the available structure records to familiarise themselves with the characteristics of the structure; any hazards, the condition at the time of the last inspection; any worsening defects over time; and any significant maintenance/modifications since the last inspection.

The *Contractor* shall consult the local authority and highway authority for any constraints on how the *works* are to be provided.

The *Contractor's* working method must be planned with consideration that the access bridges are unsafe so cannot be used for delivery of the *works*.

An Environmental Action Plan (EAP) will be produced by the Lot 1 Consultant. The *Contractor* shall deliver the *works* in line with the environmental action plan (EAP). Any specific measures which are not covered by the scope or minimum technical requirements will be dealt with as a compensation event.

### 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 services only with the *Client's* written permission.

#### S 203 Security and protection on the site

The *Contractor* is responsible for the security of the Site and of vehicles and pedestrians entering and leaving the Site.

### S 204 Security and identification of people

The level of security and procedures for identification of personnel on Site is to be determined by the *Contractor*.

#### S 205 Protection of existing structures and services

The whole of the Site is to be handed over to the *Contractor*.

The *Contractor* takes care to avoid disturbance and damage to existing features and assets, including the existing flood defences, outfalls, roads, footpaths, habitats, private property, street furniture, services, signage and embankments.

Refer to the Site Information for the location of existing services and assets. The *Contractor* shall ensure that there is sufficient information on existing services and assets ahead of carrying out the *works*.

The *Contractor* is responsible for undertaking utility searches as part of the design process and verifying the service locations ahead of conducting the *works*. Refer to the Site Information for any existing knowledge on services and assets.

#### S 206 Protection of the works

The *Contractor* applies for a Flood Risk Activity Permit (Environmental Permit) and operates within the received permits conditions.

The *Contractor* registers with the *Client's* Flood Incident Management team before commencing *works* on Site and gives them telephone numbers where Flood Warnings can be sent.

The *Contractor* keeps up to date with Flood Warnings and cooperates with the *Client* to ensure the works and existing structures are protected in the case of emergency.

The *Contractor* provides the *Client* with an emergency contact and ensures someone is available 24/7 to allow removal of Plant and Equipment in a flood situation.

The *Client* is not liable for any consequences if it is unable to provide either flood warnings or other weather forecasts, or if they prove inaccurate.

#### S 207 Cleanliness of the roads

The majority of the *works* will be carried out from the channel. The *Contractor* shall consult with the Highways Authority on any requirements for protecting and cleaning of access roads to the Site/Compound.

#### S 208 Traffic Management

The *Contractor* shall liaise with the Local Planning Authority and Highways Authority if any traffic management and road closures are required.

#### S 209 Condition survey

The *Contractor* is required to complete a condition survey of the area surrounding the site, including photographs, this shall be completed prior to starting the *works* and at Completion.

The *Contractor* is required to reinstate all Working Areas in line with the precondition survey or alternative agreement.

The survey record should be stored in the BIM archive.

#### S 2010 Consideration of Others

The *Contractor* shall consider the local landowner and the hydropower scheme during the design phase.

All public relations activities shall be led by the *Client* with the *Contractor's* support.

The *Contractor* shall execute the *works* in a manner such that disruption to local residents, landowners and the general public is kept to a minimum.

The *Contractor* shall arrange any public right of way diversions or closures required to carry out the *works*.

#### S 2011 Control of site personnel

N/A

#### S 2012 Site cleanliness

The *Contractor* keeps the Working Areas tidy and promptly removes rubbish, waste and surplus.

Materials, Plant and Equipment are positioned, stored and stacked in a safe and orderly manner.

#### S 2013 Waste materials

The *Contractor* applies best practice regarding materials handling, waste minimisation and waste recycling on-site.

The *Contractor* prepares a Site Waste Management Plan (SWMP) in the *Client's* standard format prior to commencement of the *works*.

#### S 2014 Deleterious and hazardous materials

#### S 2015 Carbon

A completed project must aim to minimise carbon emissions by:

- 1. Agreeing to a target (forecast) of emissions from construction that is set out in a verified carbon assessment with business case approval.
- 2. Exploiting the most likely opportunities for further reductions to the agreed forecast during construction.
- 3. Reporting the outturn of actual emissions against the agreed forecast and further reductions in a verified 'as built' update to the carbon assessment at project completion.

The project should be looking at how to minimise actual carbon emissions against the agreed forecast throughout the construction stage working with their suppliers on lower carbon products and services that meet the project scope and deliverables. A monthly report must be provided via FastDraft (using the carbon form – see application for payment section) providing:

- 1. actual emissions to date,
- 2. (latest) outturn forecast (based on actuals and remaining emissions to outturn) and
- 3. (Latest) outturn budget / target (set to the verified forecast)

The FastDraft carbon form may be supported by details of actual emissions to date against an agreed breakdown of asset/service/product lines taken from the verified carbon assessment.

This will inform the EA of progress in reducing carbon during construction in the form of a variance between a latest outturn forecast (reported on FastDraft) and verified forecast. The EA may require the project to set out actions to mitigate significant variances or where there is a significant change in scope to provide 'updated' versions of the carbon assessment, carbon budget and carbon appendix that will reset the construction stage outturn forecast and outturn budget.

Projects at completion must provide via Asite an 'as built' carbon appendix supported by an updated carbon assessment with outturn actual emissions reported against a previously verified forecast. The 'as built' carbon appendix and updated assessment must be verified by an EA appointed carbon specialist before completion of the project is approved. The verification process requires project team engagement with the verifier and may result in actions to:

- 1. update the carbon appendix and supporting carbon assessment and budget (i.e. ERIC).
- set out the reasons for outturn actuals emissions being above/below the verified forecast

The verified outturn actuals and forecast from this process will be required for the performance measure set out in this contract as well as for an EA process of carbon budget authorisation managed by EA Project Sponsor.

S 300 Contractor's design

S 301 Design responsibility

#### Clause 21.1

The *Contractor* shall develop a detailed design for the stop logs, gantry and electric hoist.

This is a design & build contract.

#### S 302 Design submission procedures

Clause 21.2 As above

#### S 303 Design approval from Others

Clause 27.1

The Asset Performance Senior User is to review and accept the design ahead of any *works* being carried out.

#### S 304 Client's requirements

The *Contractor* shall comply with the Scope, Minimum Technical Requirements and most recent Safety, Health, Environment and Wellbeing Code of Practice (SHEW COP).

The *Contractor* shall comply with all Mechanical, Electrical, Instrumentation, Control and Automation (MEICA) standards – LIT 13219.

The *Contractor's* design shall comply with but not be limited to the following limitations and criteria current at the contract date:

- Relevant specifications, including the MTR's
- Design standard and codes of practice
- Environmental standards
- Sustainability requirements
- Collection of permanent works design criteria for BIM archive
- The Corporate Requirement for carbon reduction and specific requirement to meet the EA NZC target for 2030

#### S 305 Design co-ordination

In developing the design, as a minimum the *Contractor* shall consult with:

- Environment Agency FCERM team (Operational Field Team, Asset Performance Team, Senior User, PCM and NEAS/FBG)
- Legal and Estates Team
- Principal Designer

#### S 306 Requirements of Others

Not applicable.

#### S 307 Copyright/licence

Clause 22.1

### S 308 Access to information following Completion

The *Contractor* shall ensure that all information is provided to the *Client* ahead of Completion.

#### S 309 Site investigations

The *Contractor* obtains soils information as necessary for the design of the *works*. The *Contractor* specifies, procures, manages and undertakes site investigations to inform the detailed design of the works and to manage their risk of unforeseen ground conditions during construction. The *Contractor* undertakes laboratory testing of samples, and longer term monitoring of site conditions as required. This supplements the information provided in the Site Information.

The *Contractor* liaises with all historic environment stakeholders as required to ensure that the heritage and archaeological risks are identified and appropriately managed. The *Contractor* obtains all necessary consents and approvals.

The *Contractor* provides the *Project Manager* with the final Factual Report of the investigation in digital format.

The *Contractor* reviews and analyses the data within the factual report and prepares an interpretative report to support their detailed design. The *Contractor* provides the *Project Manager* with the final interpretative report in digital format.

The *Contractor* informs the *Project Manager* of the proposed works a minimum two weeks before the investigation is undertaken and complies with the access to the Site conditions.

#### 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*:

- 1 hard copy of Health and Safety File and one electronic version
- 1 hard copy of operating and maintenance manuals and one electronic version.
- 1 hard copy of As Built drawings and one electronic version
- Population of the Client's latest version of the Project Cost and Carbon Tool (PCCT), or its successor
- Transfer to the Client databases of BIM data
- Delivery of the Final Carbon Appendix

Clause 11.2(2) Work to be done by the Completion Date.

#### S 402 Sectional Completion definition

Option X5, X5.1 Work to be done for each Sectional Completion.

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

- Transfer to the Client databases of BIM data
- Delivery of the carbon differentials between alternative design solution options at appraisal stage (if appraisal, design and build)
- Delivery of carbon considerations in PAR (if appraisal, design and build)
- Completion and Delivery of Carbon optimisation report at Gateway 3 (if design and build)

N/A

#### S 403 Training

The *Contractor* shall provide in any operational system installed as part of the project.

#### S 404 Final Clean

All debris, unused materials and temporary works are to be cleared and dismantled from Site to allow the Site to return to its natural state.

#### S 405 Security

Following final inspection of the *works*, the project will be handed over to the *Client*. There are no security requirements once the project is handed over to the *Client*.

#### S 406 Correcting Defects

During the *defects* period the *Contractor* will be required to liaise with the *Client* to arrange when corrective work can be undertaken.

#### **S 407** Pre-Completion arrangements

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

#### S 408 Take over

The *Client* does not require any part of the *works* to be made available prior to Completion.

#### S 500 Programme

#### S 501 Programme requirements

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

#### S 502 Programme arrangement

The programme shall be submitted on Fast Draft as well as submitted to the *Project Manager* in its native format (Microsoft Project format). A clear critical path shall be shown.

#### S 503 Methodology statement

Methodology statements to be submitted to the Principal Designer for review and comment.

The *Contractor* shall allow the period for reply for review of method statement prior to work commencing.

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

Activities to be undertaken by the *Client* or Others shall be clearly identified on the programme.

#### S 505 Information required

Clause 31.2

#### S 506 Revised programme

In addition to the requirements of Clause 32 of the condition of contract, the *Contractor* shall provide a brief explanation of changes to each programme activity, sufficient to enable the *Project Manager* and *Client* to understand the cause and impact of change.

The *Contractor* will hold monthly programme review meetings with the *Project Manager* and ensure the relevant members of the design and construction team are present when required.

#### S 507 Monthly reports

In managing the service the *Contractor* shall:

- Contribute monthly to the updates to the project risk register.
- Provide input to project efficiency CERT Form.
- Produce monthly financial updates and forecasts meeting the Client's project reporting timetable together with progress reports. Monthly financial updates and forecasts to meet EA deadlines provided by no later than the 10<sup>th</sup> day of each month, or otherwise agreed at the project start up meeting.
- Deliver a monthly progress report in the *Client's* standard template giving progress against programme, deliverables received and expected, financial summary against programme and forecast project carbon.
- Commission capital forecast profile to be entered on FastDraft monthly & project forecast outturn carbon profile to be entered onto FastDraft monthly. The Contractor is required to provide a monthly forecast on FastDraft for both carbon and cost in accordance with Framework Heads Up (FHU) 224 Commercial Clarification 54 and FHU 256 Commercial Clarification 57.
- Attend project board meetings as required.
- Ensure quarterly input into framework performance assessment/environmental performance measures.
- Maintain and show how accurate and up to date information on the wholelife cost and carbon of options is driving optimum solutions at all stages of design development.
- Capture lessons learnt relevant to scheme delivery.

## S 600 Quality management

### S 601 Samples

Not applicable.

#### S 602 Quality Statement

Contractor to provide reliability data for all installed equipment.

### S 603 Quality management system

Not applicable.

### S 604 BIM requirements

The BIM Information Manager is the Client Project Manager.

Deliverables shall be submitted via the *Client's* common data environment for acceptance.

A 3D model is not required on this project. If this decision changes, it will be dealt with through the compensation event process. Drawings and reports will be required to meet the *Client's* BIM requirements.

## S 700 Tests and inspections

## S 701 Tests and inspections

Clause 40.1, 40.2, 41.1 and 60.1 (16).

To be carried out with the *Client* Asset Performance Team and MEICA team in accordance with the MEICA Standards – LIT 13219.

The *Contractor, Supervisor* and Others undertake the tests and inspections as detailed in the *Client's* Minimum Technical Requirements or as agreed with the *Project Manager.* 

#### S 702 Management of tests and inspections

Tests and inspections to be carried out once all works are complete.

The *Client* Asset Performance and MEICA teams are to be given 10 days' notice of when the tests and inspections are to be carried out.

#### S 703 Covering up completed work

No operation shall be carried out or covered up without full and complete notice being given to the *Supervisor* by the *Contractor*, sufficiently in advance of the time of the operation to enable the *Supervisor* to make such arrangements as deemed necessary for inspection and checking.

Works to be covered once tests have been completed.

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

The *Contractor* to agree with the *Supervisor* and *Project Manager*, the dates and times for carrying out inspections.

#### S 800 Management of the works

#### S 801 Project team – Others

The *Client's* project team will include:

- Asset Performance Senior User
- Partnership and Strategic Overview Senior User
- Project Manager
- Project Executive
- Site Supervisor
- ECC Project Manager

#### S 802 Communications

The Contractor shall document all forms of communication with third parties.

The *Contractor* shall attend monthly progress meetings that are chaired by the *Client* who produces the agenda. The minutes are to be prepared by the *Contractor*.

The *Contractor* shall upload all files to be shared with other parties to Asite, the *Client's* collaboration tool.

The Contractor, Project Manager and Supervisor shall use the Client's contractual collaborative working tool, FastDraft.

#### S 900 Working with the *Client* and Others

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

Clauses 25.1 and 60.1(5)

The *Contractor* is responsible for the *Working Areas* and is required to co-operate with the *Client* and Others in sharing the *Working Areas* when required.

Where access through the Working Areas is required for others, the *Client* shall agree with the *Contractor* access two weeks in advance.

#### S 902 Co-operation

The *Contractor* co-operates with affected residents and businesses to enable efficient execution of the *works* with minimal disturbance to the local community.

The Contractor co-operates with the Principal Designer.

#### S 903 Co-ordination

The Contractor will liaise with the Project Manager.

#### S 904 Authorities and utilities providers

The *Contractor* shall identify, programme and coordinate work to be carried out by authorities and utility providers within the Working Area.

The *Contractor* shall be responsible for arranging and managing all of the works by utility providers.

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

The *Contractor* shall engage with Others to create a diverse and inclusive environment throughout the duration of the project.

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* 

Clause 25.2

No additional services to be provided.

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

As above.

### S 1100 Health and safety

#### **S 1101** Health and safety requirements

Clause 27.4

The Contractor shall comply with:

- All current Health and Safety legislation
- Client's Minimum Technical Requirements
- All policies and procedures as set out in the Environment Agency's 'Safety, Health, Environment and Wellbeing Code of Practice' (SHEW COP) current at the contract date
- Contractor's own Safe Systems of Work

The *Contractor* notifies the *Project Manager* immediately following any damage or injury arising out of the execution of the *works* or on Site.

#### S 1102 Method statements

Risk Assessments and Method Statements (RAMS) are to be submitted to the *Supervisor* and Principal Designer for review and comment.

The *Contractor* undertakes the works in accordance with the reviewed method statements. Review of any method statement does not relieve the *Contractor* of their contractual and health and safety responsibilities.

#### S 1103 Legal requirements

The Construction (Design and Management) Regulations 2015 apply.

The Client Duties under the CDM Regulations 2015 shall be undertaken by the *Client*.

The *Contractor* and Principal Contractor duties under the CDM Regulations 2015 shall be undertaken by the *Contractor*.

The Designer duties under the CDM Regulations 2015 shall be undertaken by the *Contractor*.

The Principal Designer Duties under the CDM Regulations 2015 shall be undertaken by TBC. The *Contractor* shall copy the *Project Manager* in all their correspondence with the Principal Designer.

## S 1104 Inspections

The *Project Manager* may require to inspect the *Contractor's* Health and Safety documentation at any time and should be made available by the *Contractor*.

The *Supervisor* will undertake regular checks on the *Contractor's* health and safety procedures including record of site inductions, tool box talks and certifications and PPE.

#### S 1200 Subcontracting

#### S 1201 Restrictions or requirements for subcontracting

Sub-contractors need to be selected using best value processes. This requires the *Contractor* to demonstrate that they have made reasonable attempts to obtain three competitive tenders for all work in excess of £25,000. The only exception to this is work which has been accepted (in writing) by the hub Commercial Services Manager for strategy suppliers or for emergency work.

The *Contractor* shall use the NEC4 contract on all subcontracts for works. Where appropriate, the provisions of clause 26.3 would apply for the acceptance of non NEC4 contracts.

### S 1202 Acceptance procedures

Clauses 26.3 and 11.2(25)

S 1300 Title

S 1301 Marking

None required.

S 1302 Materials from Excavation and demolition

Clause 73.2

No additional restriction or requirements.

#### S 1400 Acceptance or procurement procedure

Not used.

#### S 1500 Accounts and records

#### S 1501 Additional Records

Clause 52.2

Additional records to be kept by the *Contractor:* 

- Timesheets and site allocation sheets,
- Equipment records,
- Forecasts of total Defined Cost (forecasts are to include, but not be limited to costs to date, cost to completion including detailed breakdown of staff, sub-contract and major material items).

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

#### S 1502 Application for Payment/Invoice

The *Contractor* is required to provide the backup to their application for payment in the following format:

Worksheet actual Carbon and Cost CDF Lot 2

Submission of an application for payment without this format of backup sheet will **not** be recognised or treated as a compliant submission.

A monthly report must be provided via FastDraft (using the carbon form) providing:

- 1. actual emissions to date,
- 2. (latest) outturn forecast (based on actuals and remaining emissions to outturn)
- 3. (Latest) outturn budget / target (set to the verified forecast)

The FastDraft carbon form may be supported by details of actual emissions to date against an agreed breakdown of asset/service/product lines taken from the verified carbon assessment.

This will inform the EA of progress in reducing carbon during construction in the form of a variance between a latest outturn forecast (reported on FastDraft) and verified forecast.

S 1600	Parent Company Guarantee (Option X4)
Not appl	icable.

## S 1700 Client's work specifications and drawings

## S 1701 Client's work specification

Refer to Minimum Technical Requirements.

## S 1702 Drawings

Contractor to provide document list.

## S 1703 Standards the Contractor will comply with

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

Ref	Report Name	Where used
	Project Cost and Carbon Tool	Costs
	Carbon Tools for budget calculation and reporting	Carbon
	Sustainability Measures Form	Design & Delivery
LIT_11052	Timber Policy Documents	Design & Delivery
LIT_12507	SHE handbook for managing capital projects	Design & Delivery
LIT_16559	SHEW Code of Practice	Design & Delivery
LIT_13219	Mechanical, Electrical, Instrumentation, Control and Automation (MEICA) standards	Design & Delivery
	Access for all design guide	Design

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

The	Contractor	shall	adhere	to	the		<b>Employers</b>	Information	Requirements	(EIR)
frame	ework level	minim	um tech	nica	al rec	uirements.				

All *Client* issued information referenced within the Information Delivery Plan (IDP) requires verifying by the *Contractor* unless it is referenced elsewhere within the Scope.

The *Contractor* shall register for an Asite Account and request access to the project workspace to view the IDP and update to create the MIDP.

Guidance on the IDP can be found here

https://www.asite.com/login-home