Engineering and Construction Short Contract

Contract Data Forms

June 2017
(with amendments January 2023)

NEC4 Engineering and Construction Short Contract

A contract between	**The Environment Agency** **Horizon House** **Deanery Road** **Bristol** **BS1 5AH**
And	[redacted]
For	**Dakyn Road Flood Storage Reservoir (FSR) Desilting and Masonry Repairs** **Dakyn Road Flood Storage Reservoir, Dakyn Road, Leicester, LE5 2ED**
	Contract Forms - **Contract Data** - **The *Contractor's* Offer and *Client's* Acceptance** - **Price List** - **Scope** - **Site Information**

Contract Data

The *Client's* Contract Data

	The *Client* is	
Name	Environment Agency	
Address for communications	Rothley Office 56 Town Green Street, Rothley, Leicestershire, LE7 7NW	
Address for electronic communications	[redacted]	
The *works* are	A design and build project to remove of accumulated silt to improve conveyance into the flood storage reservoir, empty the silt trap for the reservoir, then carry out concrete repairs to the reservoir structures. Silt removal shall also aid proper inspection by the reservoir supervising engineer.	
The *site* is	Dakyn Road Flood Storage Reservoir, Dakyn Road, Leicester, LE5 2ED.	
The *starting date* is	16/06/2025 (earliest)	
The *completion date* is	24/11/2025 (latest)	
The *delay damages* are	[redacted]	Per day
The *period* for reply is	2	weeks
The *defects date* is	52	weeks after Completion
The *defects correction period* is	4	weeks
The *assessment day* is	the last working day	of each month

The *retention* is	nil	%

The United Kingdom Housing Grants, Construction and Regeneration Act (1996) **does** apply

The *Adjudicator* is :

In the event that a first dispute is referred to adjudication, the referring Party at the same time applies to the Institution of Civil Engineers to appoint an *Adjudicator*. The application to the Institution includes a copy of this definition of the *Adjudicator*. The referring Party pays the administrative charge made by the Institution. The person appointed is also *Adjudicator* for later disputes.

Contract Data

The *Client's* Contract Data

The interest rate on late payment is		% per complete week of delay.

Insert a rate only if a rate less than 0.5% per week of delay has been agreed.

For any one event, the liability of the *Contractor* to the *Client* for loss of or damage to the *Client's* property is limited to	The Contract Price.
The *Client* provides this insurance	None

Insurance Table

Event	**Cover**	**Cover provided until**
Loss of or damage to the *works*	Replacement Cost	The *Client's* certificate of Completion has been issued
Loss of or damage to Equipment, Plant and Materials	Replacement Cost	The defects Certificate has been issued
The *Contractor's* liability for loss of or damage to property (except the *works*, Plant and Materials and Equipment) and for bodily injury to or death of a person (not an employee of	Minimum £5,000,000 in respect of every claim	

the *Contractor*) arising from or in connection with the *Contractor's* Providing the *Works*	without limit to the number of claims	
Liability for death of or bodily injury to employees of the *Contractor* arising out of and in the course of their employment in connection with this contract	The amount required by the applicable law	
Failure of the *Contractor* to use the skill and care normally used by professionals providing *works* similar to the *works*	Minimum Contract Price in respect of every claim without limit to the number of claims	6 years following Completion of the whole of the *works* or earlier termination

The *Adjudicator nominating body* is	The Institution of Civil Engineers
The *tribunal* is	litigation in the courts

The *conditions of contract* are the NEC4 Engineering and Construction Short Contract June 2017 (including 2023 amendments) and the following additional conditions

Only enter details here if additional conditions are required.

Z1.0	Sub-contracting
Z1.1	The *Contractor* submits the name of each proposed subcontractor to the *Client* for acceptance. A reason for not accepting the subcontractor is that their appointment will not allow the *Contractor* to Provide the *Works*. The *Contractor* does not appoint a proposed subcontractor until the *Client* has accepted them.
Z1.2	Payment to subcontractors and suppliers will be no more than 30 days from receipt of correct invoice.
Z2.0	Environment Agency as a regulatory authority
Z2.1	The Environment Agency's position as a regulatory authority and as *Client* under the contract is separate and distinct. Actions taken in one capacity are deemed not to be taken in the other.
Z2.2	Where statutory consents must be obtained from the Environment Agency in its capacity as a regulatory authority, the *Contractor* is responsible for obtaining these and paying fees (unless stated otherwise in the Scope). The ***Client's*** acceptance of a tender and the ***Client's*** instruction or variation of the *works* does not constitute statutory approval or consent.
Z2.3	An action by the Environment Agency as regulatory authority is not in its capacity as *Client* and is not a compensation event.
Z3.0	Confidentiality & Publicity
Z3.1	The *Contractor* may publicise the *works* only with the ***Client's*** written agreement.
Z4.0	Correctness of Site Information
Z4.1	Site Information about the ground, subsoil, ducts, cables, pipes and structures is provided in good faith by the *Client* but is not warranted correct. The *Contractor* checks the correctness of any such Site Information they rely on for the purpose of Providing the *Works*.
Z5.0	The Contracts (Rights of Third Parties) Act 1999
Z5.1	For the purposes of the Contracts (Rights of Third Parties) Act 1999, nothing in this contract confers or purports to confer on a third party any benefit or any right to enforce a term of this contract.
Z6.0	Design
Z6.1	Where design is undertaken, it is the obligation of the *Contractor* to ensure the use of skill and care normally used by professionals providing similar design services.

Z6.2	The *Contractor* designs the parts of the *works* which the Scope states they are to design.
Z6.3	The *Contractor* submits the particulars of their design as the Scope requires to the *Client* for acceptance. A reason for not accepting the *Contractor's* design is that it does not comply with either the Scope or the applicable law. The *Contractor* does not proceed with the relevant *work* until the *Client* has accepted this design.
Z6.4	The *Contractor* may submit their design for acceptance in parts if the design of each part can be assessed fully.
Z7.0	Change to Compensation Events
Z7.1	Delete the text of Clause 60.1(11) and replace by: The *works* are affected by any one of the following events • War, civil war, rebellion revolution, insurrection, military or usurped power • Strikes, riots and civil commotion not confined to the employees of the *Contractor* and sub-contractors • Ionising radiation or radioactive contamination from nuclear fuel or nuclear waste resulting from the combustion of nuclear fuel • Radioactive, toxic, explosive or other hazardous properties of an explosive nuclear device • Natural disaster • Fire and explosion • Impact by aircraft or other device or thing dropped from them
Z8.0	Framework Agreement
Z8.1	The *Contractor* shall ensure at all times during this contract it complies with all the obligations and conditions of the Framework Agreement made with the *Client*.
Z9.0	Termination
Z9.1	Delete the text of Clause 92.3 and replace with: If the *Contractor* terminates for Reason 1 or 6, the amount due on termination also includes 5% of any excess of a forecast of the amount due at Completion had there been no termination over the amount due on termination assessed as for normal payments.
Z10.0	Data Protection
Z10.1	The requirements of the Data Protection Schedule shall be incorporated into this contract
Z11.0	Liabilities and Insurance
Z11.1	Civil data protection claims and regulatory fines for breaches of Data Protection Legislation are excluded from any limit of liability stated.

Contract Data

The *Contractor's* Contract Data

	The *Contractor* is	
Name	[redacted]	
Address for communications	[redacted]	
Address for electronic communications	[redacted]	
The *fee* percentage is	[redacted]	%
The *people rates* are	As per AOMR Framework	
category of person	unit	rate
The *published list of Equipment* is	As per AOMR Framework	
The *percentage for adjustment for Equipment* is		

Contract Data

The *Contractor's* Offer and *Client's* Acceptance

The *Contractor* offers to Provide the *Works* in accordance with these *conditions of contract* for an amount to be determined in accordance with these *conditions of contract*.

The offered total of the Prices is	[redacted]
	[redacted]

Signed on behalf of the *Contractor*

Name	[redacted]
Position	[redacted]
Signature	[redacted]
Date	[redacted]

The *Client* accepts the *Contractor's* Offer to Provide the *Works*
Signed on behalf of the *Client*

Name	[redacted]
Position	[redacted]
Signature	[redacted]

Date	[redacted]

Price List

Entries in the first four columns in this Price List are made either by the *Client* or the tenderer.

If the *Contractor* is to be paid an amount for the item which is not adjusted if the quantity of *work* in the item changes, the tenderer enters the amount in the Price Column only: the Unit, Quantity and rate columns being left blank.

If the *Contractor* is to be paid an amount for the item of *work* which is the rate for the *work* multiplied by the quantity completed, the tenderer enters the rate which is then multiplied by the expected quantity to produce the Price, which is also entered.

Two potential access routes exist, the *Contractor* shall price for both routes and the *Client shall* assess and decide which option to use.

Item Number	Description	Unit	Quantity	Rate	Price
1a	Mobilisation (using access route through park) - Project management - Flood Risk Activity Permit (FRAP) application (if applicable). - Plant/machinery Manpower - Site set up (Fence/Track mats) - Identification and demarcation of services - Survey of site conditions prior to mobilisation. - Establish site welfare facilities, etc. - Temporary *works* - Other(s)	sum	1		
1b	Mobilisation (using access route through football ground) - Project management - Flood Risk Activity Permit (FRAP) application (if applicable). - Plant/machinery Manpower - Site set up (Fence/Track mats)	sum	1		[redacted]

	- Identification and demarcation of services - Survey of site conditions prior to mobilisation. - Establish site welfare facilities, etc. - Temporary *works* - Other(s)				
2a	Desilting (using access route through park) - Inlet converging channels silt trap. - Hand digging to remove silt/soils (Thurnby and Bushby Brook wingwalls). - Concrete lined channel at bottom of inlet flume. - Hand digging to remove silt/soils (Main channel culvert inlet wingwalls).	Tonne Tonne Tonne Tonne	70.5 8.7 117.5 6.4		
2b	Desilting (using access route through football ground) - Inlet converging channels silt trap. - Hand digging to remove silt/soils (Thurnby and Bushby Brook wingwalls). - Concrete lined channel at bottom of inlet flume. - Hand digging to remove silt/soils (Main channel culvert inlet wingwalls).	Tonne Tonne Tonne Tonne	70.5 8.7 117.5 6.4		[redacted] [redacted] [redacted] [redacted]
3a	Weir and walls (inlet) concrete and joint repairs (using access route through park) - Removal, repair and replacement of existing sealant in 20no. vertical joints. - Treatment of 7no. locations of exposed rebar. - Repair concrete spalling and damage to walls.	sum sum sum			
3b	Weir and walls (inlet) concrete and joint repairs (using access route through football ground) - Removal, repair and replacement of existing sealant in 20no. vertical joints. - Treatment of 7no. locations of exposed	sum sum			[redacted] [redacted]

	rebar. - Repair concrete spalling and damage to walls.	sum			[redacted]
4	Spillway bowl concrete and joint repairs - Removal, repair and replacement of existing sealant in all 13no. vertical wall joints. - Removal, repair and replacement of existing sealant in all 13no. linear slab joints. - Removal, repair and replacement of existing sealant in all 6no. radial slab joints. - Repair concrete spalling and damage to slabs and walls.	sum sum sum sum			[redacted]
5	Weir and walls (outlet) concrete and joint repairs - Removal, repair and replacement of existing sealant in 4no.vertical joints. - Repair concrete spalling and damage to walls.	sum sum			[redacted]
6	Main channel culvert concrete and joint repairs - Removal, repair and replacement of existing sealant in damaged joint of culvert. - Removal of loose delaminated concrete and treatment of exposed rebar. - Repair concrete spalling and damaged area.	sum sum sum			[redacted]
7a	Demobilisation and final clean (using access route through park) - Removal of all remaining equipment and temporary *works* related to scheme. - Final clean and reinstatement - Completion.	sum	1		

7b	Demobilisation and final clean (using access route through football ground) - Removal of all remaining equipment and temporary *works* related to scheme. - Final clean and reinstatement. - Completion.	sum	1		[redacted]
8	Design drawing of concrete repairs and sealant detail	Sum	1		[redacted]
9	Prepare and submit CPP /RAMS	Sum	1		[redacted]
				The total of the Prices	[redacted]

The method and rules used to compile the Price List are

Civil Engineering Standard Method of Measurement 4th edition (CESMM4) as per the Framework Price Workbook.

[redacted]

[redacted]

.

Scope

The Scope should be a complete and precise statement of the *Client's* requirements. If it is incomplete or imprecise there is a risk that the *Contractor* will interpret it differently from the *Client's* intention.

1. Description of the *works*

Give a detailed description of what the *Contractor* is required to do and of any *work* the *Contractor* is to design.

1.0 Background
The aim of these *works* is to improve the conveyance of Bushby Brook into the flood storage reservoir and repair the concrete structures of the flood storage reservoir where required. Removing the accumulated silt at the base of and emptying the silt trap above the inlet flume for the reservoir, as well as at identified wingwalls of concrete structures shall aid proper inspection by the reservoir supervising engineer and facilitate repairs to failed expansion joint seals and concrete repairs. The repairs have been raised as actions to be completed in the reservoir supervising engineers 2022 and 2023 section 12 reports.

The Dakyn Road Flood Storage Reservoir (FSR) protects approximately 2,000 residential properties and 300 commercial properties in Leicester from flood risk.

This scheme may require a Flood Risk Activity Permit (FRAP) methodology which the successful *Contractor* shall apply for if necessary. Due to the length of time it will take to obtain the permit, it is necessary to issue the Invitation to Tender in advance of the *works* start date.

The *works* include desilting and concrete repairs. The *Contractor* shall choose how to programme the *works,* however, desilting must happen prior to repair works in any given location.

The *works* shall be priced for the full scope of the project; however, the *Client* reserves the right to descope areas of the project if the cost to complete certain activities becomes inhibitive.

2.0 Description of the *works*
A. Performance Specification

- The *Contractor* shall be responsible for reviewing the identified defects as detailed within the Pre Construction Information (PCI) document.
- The *Contractor* shall be responsible for designing repairs. They shall submit standard details of the repairs to the *Client* for acceptance prior to commencing planning and construction of the repairs.
- The *Contractor* shall be responsible for demonstrating, through these standard designs, the following:
    - The design life of the different repairs.
    - As per section 4.28 of the Civil Engineering Specification for the Water Industry 7th Edition (CESWI 7) all concrete repairs are to be undertaken in accordance with BS EN 1504-10.
    - Full details of all the products to be used in the concrete repairs and their method of application, demonstrating compliance with BS EN 1504. This should include demonstration of

the mortar class and how it is applicable for the site exposure conditions as defined in BS 8500-1 Eurocode 2.

- Full details of treatments and primers to be applied to exposed rebar and bonding primers to be used to ensure the concrete repair fully bonds to the existing substrate and is protected from further damage.
- Full details of sealant repairs including all material specifications, design life, replacement of compressible filler board, debonding tape at the filler board/sealant interface, and selection of the sealant material itself demonstrating its suitability for the exposure conditions. We require a method statement detailing how the sealant product shall be installed in accordance with manufacturer's instructions including joint preparation, cleaning, priming and application to the correct width and depth ratio. This is required due to past poor performance on joint repairs, which have been attributed to lack of de-bonding with the filler board, lack of priming and surface preparation, incorrect width to depth ratio for the utilised sealant, all leading to premature failure of the sealant.

B. <u>Desilting works</u>

Removal of accumulated silt, sediment and vegetation within the concrete lined channel area of Bushby Brook at the inlet of the Dakyn Road Flood Storage Reservoir (FSR) and entrance to main channel culvert under Dakyn Road as shown in the drawings and PCI appendices.

The design flowrate for the Brook at the inlet for the reservoir is 0.05287m^3/s.

The concrete expansion joints have been surveyed and shown to contain asbestos in the mastic sealant. During the desilt, care shall need to be taken when removing the silt to avoid damaging the existing expansion joint seals which run vertically up the full extent of the channel walls and horizontally crossing the channel bed from bank to bank.

All the *works* undertaken within this project must comply with SHEW CoP.

This desilt shall include but may not be limited to:

Converging Channels (inlet) (Grid ref: SK6401604687)

Removal of accumulated silt from the two converging channels at the top of the reservoir inlet flume.

- Approximately 88m^2 at estimated depth of 300mm, estimated silt weight 55.4 tonnes.
- Approximately 12m^2 at estimated depth of 600mm, estimated silt weight 15.1 tonnes.
- Removal of any accumulated silt from the remaining area at the time of mobilisation.
- Actual silt tonnage removed shall be measured using the transfer notes.

Hand tools removal of accumulated silt/soil with grass from the channel inlet wing walls.

- Thurnby Brook - 14m^2 at estimated depth of 200mm, estimated silt weight 4.5 tonnes.
- Bushby Brook - 13m^2 at estimated depth of 200mm, estimated silt weight 4.2 tonnes.
- Actual silt tonnage removed shall be measured using the transfer notes.

Concrete Lined Channel (Grid ref: SK6397004718)

Removal of accumulated silt from the concrete lined channel at the bottom of the reservoir inlet flume inclusive of the two central "silt islands".

- Approximate 110m^2 at estimated depth of 600mm, estimated silt weight 106 tonnes dependent of dry/wet ratio.
- Potentially remove an additional area up to approximately 12m^2 downstream of assessed "silt island" area depending on the extent of the concrete channel sides found once the initial agreed silt is removed from the area. Estimated 11.5 tonnes.
- Actual silt tonnage removed shall be measured using the transfer notes.

Flume Weir (Grid ref: SK6399304702)

Removal of any accumulated silt and vegetation from the sloped inlet weir to the reservoir present at the time of the *works*.

- Actual silt tonnage removed shall be measured using the transfer notes.

Main Channel Culvert Inlet (Grid ref: SK6380104809)
Hand tools removal of accumulated silt/soil with grass from the culvert inlet wing walls.

- 20m^2 at an estimated depth of 200mm, estimated silt weight 6.4 tonnes.
- Actual silt tonnage removed shall be measured using the transfer notes.

Weir and walls (outlet) – (Grid ref: SK6374904863)
Removal of any accumulated silt and vegetation from the outlet weir present at the time of the *works*.
If any, actual silt tonnage removed shall be measured using the transfer notes.

C. <u>Concrete and Seal Repairs</u>
Remove and replace of old sealant in expansion joints, replacing all expansion joint materials with new where required due to damage. Treat exposed re-bar with anti-corrosion product and repair. Repair spalled and damaged concrete.

Performance specifications and designs for the repairs and materials being used shall need to be agreed with the Reservoir Supervising Engineer David Scopes
prior to use.

Concrete wall assets 142256 & 402997 have been surveyed and shown to contain asbestos in the mastic sealant. It is likely that all joints of the same age shall contain asbestos in the mastic sealant and require removal. Additionally, based on experience of similar assets within the East Midlands area there is the potential for further asbestos containing material (ACMs) (insultation board etc…) to be found beneath the surface layer of sealant.

The *Contractor* shall allow for safe removal and disposal of any ACMs found within the expansion joint sealant. This should be followed by encapsulation, using a suitable product, of any suspect material found within the expansion joint and below the existing surface layer of sealant that cannot be otherwise safely removed.

All the *works* undertaken within this project must comply with SHEW CoP.

This shall include but may not be limited to:

Weir and walls (inlet) (Grid ref: SK6401604687)
Removal, repair and replacement of existing sealant in all vertical joints.

- 20no. vertical joints to be repaired.
- Joints are approximately up to 3m in height channel side.
- Channel side joints should be removed and repaired down to slab level.
- Joints are approximately up to 1m in height land side.
- Land side joints should be removed and repaired down to 0.3m below existing ground level.
- Assuming the waterbar in each joint is not damaged, repair should include for replacements of the filler board, de-bonding tape and mastic sealant. Where the waterbar is damaged, a repair solution shall be required for this too.
- During joint resealing, seal any exposed rebar that cannot otherwise be more permanently repaired.
- During joint repairs, if existing sealant in joints across the channel bed that are found to be damaged, these may be included in the scope of *works* upon confirmation from the *Client*.

Treatment of exposed rebar with anti-corrosion product prior to a mortar repair. See “Exposed rebar” photos in Appendix D of the PCI.

Repair concrete spalling and damage to walls.

- Repairs to concrete to include sealing of treated rebar, where this is not possible another design solution shall be required. See “Exposed rebar” photos in Appendix D of the PCI.
- Any sealant damaged during concrete repair *work* will need resealing.

Concrete Spillway Bowl (Grid ref: SK6381604837)

Removal of existing sealant in all slab joints and all wall joints following the same asbestos procedures as at the inlet section.

- 6no. linear slab joints approx. 7m in length
- 6no. linear slab joints approx. 5m in length
- 1no. linear slab joint approx. 4m in length
- 6no. radial slab joints approx. 11m in length
- All slab joints to be removed and repaired.
- 13no. wall joints to be repaired.
- Wall joints are approximately 1m in height inside the bowl and an approximate average of 1.5m on external side of bowl wall.
- The wall joints should be removed from the slab over the wall and down to 0.3m below existing ground level.
- Assuming the waterbar in each joint is not damaged, repair should include for replacements of the filler board, de-bonding tape and mastic sealant. Where the waterbar is damaged, a repair solution will be required for this too.

Repair concrete spalling in main slab sections and concrete damage near culvert inlet.

Weir and Walls (outlet) (Grid ref: SK6374904863)
Removal of existing sealant and vegetation from all vertical wall joints.

- 4no. vertical joints to be repaired.
- Joints are approximately up to 2m in height channel side.
- Channel side joints should be removed and repaired down to slab level.
- Joints to culvert are approximately up to 0.2m in height land side.
- Joints between wall sections are approximately up to 1m in height land side.
- Land side joints should be removed and repaired down to 0.3m below existing ground level.
- Assuming the waterbar in each joint is not damaged, repair should include for replacements of the filler board, de-bonding tape and mastic sealant. Where the waterbar is damaged, a repair solution shall be required for this too.
- During joint resealing, seal any exposed rebar that cannot otherwise be more permanently repaired.
- During joint repairs, if existing sealant in joints across the channel bed that are found to be damaged, these may be included in the scope of *works* upon confirmation from the *Client*.

Main Channel Culvert (Grid ref: SK6378704828)
Repairs within the main channel culvert, beneath the *Client's* control kiosk. See "Culvert" photos in Appendix D of the PCI.

- Culvert dimensions are approximately 3m wide and 1.5m high.
- Exposed rebar in the underside of floor slabs above the control structure chamber at ground level. All loose/delaminated material to be removed in case the extent of spalling is greater than is visible.
- Treat rebar then patch repair to affected area of the slabs to protect and increase durability.
- At culvert level, there is damaged joint sealant at a joint downstream of the control structure which will need repairing. Only the damaged section shall require replacement and repair, which should be assessed when removing to determine full length.
- Asbestos methodology as with other seals applies to this *work*.

3.0 Construction *works*
To carry out the *works* the C*ontractor* shall:

- Undertake a pre-condition survey prior to the start of *works* (to include as a minimum accesses, adjacent land, storage and compounds). These areas must be reinstated prior to the *Contractor* leaving site.
- Provide a Construction Programme.
- Start Up Meeting including the *Client* and *Principal Designer (PD)* (where required).
- Ongoing liaison with the *Principal Designer* (if *PD* is required) and any another subcontractor/C*ontractor* on site.

- Removal and disposal at an appropriate facility all waste materials arising from the *works*. Transfer notes to be provided to the *Environment Agency (the Client)*.
- Prepare and complete a Site Management Waste Plan (SWMP).
- Weekly submission of the progress report with photographs. Photographs supplied will then be owned and kept on record by the *Client.*
- Supply of a Health & Safety File for the completed *works* including as-built drawings with topographic details. The final supplied Health & Safety File will be owned and kept on record by the *Client*

4.0 Access to the Site

Access to the Site/Working Areas will be arranged by the *Client.* The *Contractor* shall notify *the Client* 2 weeks in advance of their intention to first enter or occupy each area of ownership or occupation within the site.

The *Contractor* shall provide the following information to the *Client* no less than 2 weeks prior to intended first entry to each area of ownership or occupation with the Working Areas:

- *The Client* shall provide layout plan showing the location of the working area including access and site compound for welfare facilities.
- *Contractor* to review the site layout plan provided by the *Client* and inform of any changes.
- Duration of the *works* and entry requirements.
- Details of the *works* to be undertaken.
- Access arrangements.
- Site safety requirements per Notification of Entry.

The *Contractor* shall maintain safe access and egress routes for pedestrians and vehicles where existing routes are affected by the *works*. The safe access and egress route will be agreed with the *Client* at least two weeks before the *works* in the relevant part of the site commence.

5.0 Services

The *Contractor* shall positively locate, mark and guard all services with suitable control measures (overhead and underground) within the vicinity of the *works* even if they do not appear to be located within the immediate working area.

Details of a recent services search are contained with the PCI but cannot be guaranteed of accuracy.

6.0 Survey Requirements

All survey *work* including topographical and as-built surveys are to be carried out in accordance with the Environment Agency National Standard Technical Specifications for Surveying Services, Version 4.0.

7.0 Construction (Design and Management) Regulations (CDM) Requirements

If applicable, the *Contractor* shall assume the role of Principal *Contractor* upon award of the Contract.

- The *Principal Designer* is to be provided by the *Client* (to be confirmed after project award), the *Contractor* shall carry out the liaison with regards to the project health and safety paperwork.
- The *Contractor* shall be cognisant of the CDM Pre-Construction Information (PCI), the *Environment Agency (the Client)*'s Health and Safety Policies and the 'SHEW Handbook' and must ensure full compliance with the *Client's* 'Safety is Paramount' code of practice. The *Contractor* shall ensure that all parties under sub-contract are cognisant of the requirements of these documents.
- The *Client* supplied a pre-Construction Information (PCI).
- The *Contractor* shall prepare the Health and Safety (Construction Phase) Plan before *work* commences on site. The Health and Safety (Construction Phase) Plan must be checked and accepted by the *Principal Designer* (if appointed) and the *Client* before *work* can commence on site.

8.0 Methodology statement

Prior to the start of construction *work*, the *Contractor* shall produce a Construction Phase Health and Safety Plan that, amongst other things, contains:

- A schedule of activities for which risk assessments and method statements must be prepared.
- The *Contractor's* arrangements for the preparation and approval of risk assessments and method statements.
- The schedule of risk assessments and method statements must meet the requirements of the Construction Design and Management Regulations; and the *Contractor* shall be free to add to the schedule as the *work* progresses.
- The *Contractor* shall ensure the risk assessments and method statements for each operation includes;
    - Risk assessments of the *work*;
    - People and resources proposed;
    - Timing and sequencing of construction, materials, plant and equipment;
    - Details of temporary *works* if required;
    - Indication of activities that represent a higher level of safety, health and environmental risk;
    - Safety, health and environmental controls proposed; and
    - Any permit to *work* proposals.

The *Contractor* submits the required risk assessments and method statements to the *Client Project Manager* and the *Principal Designer* two weeks before starting the tasks to which they refer. The *Contractor* shall ensure that risk assessments and method statements are approved by the authorised individual within their own organisation before submission.

Method statements shall include full particulars of the methods, timing and sequence of construction.

The *Contractor* must carry out the *work* in accordance with the method statement.

The *Contractor* shall obtain any Construction Phase Plan (CPP) approvals required by a PD where appointed or by the *Client*.

The *Client)* shall provide no other services or provisions.

9.0 Materials from existing fence/gates, excavation and demolition

The *Contractor* is responsible for the removal and appropriate disposal of all waste from the working areas and to provide the *Client* with the corresponding transfer notes. The *Contractor* is not allowed to leave loose materials within the access and working area.

10.0 Correcting Defects

Access for the correction of any Defects is to be arranged with the *Client*. Two weeks' notice period is required unless otherwise agreed with the *Client.*

11.0 Final Clean

On Completion, the *Contractor* returns the roads, footpaths, car parks and any other areas affected by the *works* to a condition not inferior to that pertaining at the commencement of the *works*. All debris, unused materials, equipment and temporary *works* are to be dismantled and cleared from the site.

12.0 Completion

The *works* required to be done by the Completion Date is:

- The whole of the *works*.

Prior to Completion, the *Contractor* shall provide the following information in electronic format to the or *Principal Designer* (if appointed) for inclusion in the Health & Safety File:

- Description of the *works;* including quantities of materials and photographs
- Accurate drawings showing 'as-constructed' details.
- Design criteria – details of all *Contractor*'s own design criteria relevant to the design and the way in which the structures are to be managed in the future, key structural principal and safe working loads.
- Materials used – details of all materials used, data sheets are to be supplied to support the information provided.
- Public/private utilities & services – unchartered services to be marked up on record drawings, chartered service positions to be confirmed on record drawings, overhead services to be confirmed on record drawings.
- Control of substances hazardous for health (COSHH) – lists substances hazardous to health & specific precautions that must be taken as a result of their presence.
- Information relevant to demolition of the structure in the future.
- Information on any unforeseen hazards encountered during construction.
- Residual hazards & risk assessment.
- *Contractor* to undertake a photographic condition survey on completion of the *works* and provide a copy to the *Client*.

The following are absolute requirement for Completion to be certified.

- Electronic copies of the Health and Safety File in both pdf and MS Word
- Electronic copies of the As Built drawings and one electronic version in both pdf and dwg files.

The above list is not exhaustive and reference is required to *Environment Agency's* Health & Safety File requirements. The *Contractor* shall make allowance in the programme for liaison with the *Principal Designer* and the *Client* in providing the relevant information for the Health & Safety File prior to Completion.

Sustainability

The *Contractor* shall consider using the closest licensed tip to reduced emissions from vehicle movement.

2. Drawings

List the drawings that apply to the contract.

Drawing Number	Revision	Title
Dakyn-HM-002	**001**	**Dakyn-HM-002 - Hazard Map**
PCI, Appendix C		**Appendix C - Utility Service Plans**

3. Specifications

List the specifications which apply to the contract.

Title	Date or Revision	Tick if publicly available
Environment Agency Blockage Management Guide (Gov.uk)	12/2019	✓
Latest Ciria Guidance: Culvert, screen and outfall manual - New CIRIA guidance	12/2019	✓
Environment Agency – SHEW - COP	2018	
Civil Engineering Specification for the Water Industry	7th Edition	✓
Manual of Contract Documents for Highway Works, Volume 1, Series 600, Earthworks	Latest	✓

4. Constraints on how the *Contractor* Provides the *Works*

State any constraints on the sequence and timing of *work* and on the methods and conduct of *work* including the requirements for any *work* by the *Client*.

1. The *Contractor* shall prepare, for the *Client's* acceptance, the Construction Phase Plan (CPP) and the Environmental Action Plan (EAP) prior to starting the *works.*
2. The *Contractor* shall not commence any *work* on the site until the *Client*, or their representative, has accepted the Construction Phase Plan, including method statements and risk assessments. Acceptance

shall be by way of a written communication from the *Client* confirming the *Contractor* may take possession of the site from the agreed starting date.

3. All accidents, near misses, dangerous occurrences and environmental incidents will be notified to the *Client*, or their representative in writing.

4. Any Waste from the *works* must be disposed of at a licensed facility.

5. The *Contractor* shall refer to the safety and environmental hazards within the PCI *client* pack including hazard maps for additional constraints that may affect the *works.*

6. The *Contractor* shall refer to the location plan for access routes. Any deviation from this must be confirmed with the *Client* prior to changes.

7. *Works* taking place to any known Asbestos containing materials (ACMs) must be undertaken by a fully licensed and qualified person(s).

Working times
The *Contractor* shall be permitted to *work* between 8.00am and 5.00pm on weekdays (Monday to Friday). Between the hours of 0815-0900 and 1445-1545, large, heavy or loud machinery should not be in use near the access point of Thurnby Mead Primary Academy on Dakyn Road for drop-off or collection times. Equally, full footpath access at these times should allow school children and families to pass safely when going to or from school. These restrictions will also apply to deliveries.

5. Requirements for the programme

State whether a programme is required and, if it is, state what form it is to be in, what information is to be shown on it, when it is to be submitted and when it is to be updated.

State what the use of the *works* is intended to be at their Completion as defined in clause 11.2(1).

The *Contractor* submits their programme with the *Contractor's* Offer for acceptance. The *Contractor* shows on each programme which they submits for acceptance (in form of Gantt chart showing the critical path, proposed order and timing to undertake the *works* and proposed plant and labour resources) the following:

(a) Period required for mobilisation/ planning & post contract award

(b) starting date

(c) Each of the activities listed within the Price List

(d) Any key third party interfaces: lead in periods for materials and sub-contractors; time required to obtain consents/waste permits; stated constraints; *Contractor's* risks.

(e) Completion date

6. Services and other things provided by the *Client*

Describe what the *Client* shall provide, such as services (including water and electricity) and "free issue" Plant and Materials and equipment.

Item	**Date by which it will be provided**
Statutory Notices of Entry for access across the private land to access working area.	**7 days prior to possession dates.**
Provide support to all communications with Landowners and another *Contractor* on site.	**Where required.**
Utility Service Plans	**With pre-construction information (PCI).**

Site Information

Please see supplied pre-construction information, drawing plans and associated appendices.

- PCI Client Pack - Dakyn Road FSR Desilting and Masonry Repairs
  - Appendix A – Nearest A&E Hospital
  - Appendix B – Hazard Map
  - Appendix C – Utility Service Plans
  - Appendix D – Photographs
  - Appendix E – Previous Project Files
  - Appendix F – ELENs and HASLEs
  - Appendix G – Biodiversity and Ecology

Proposed sub-contractors

	Name and address of proposed subcontractor	Nature and extent of *work*

1.	Intelligent Drainage Solutions Ltd Unit 3 London Road Business Park East Retford Notts DN22 6HG Form of Contract:	Removal of Silt deposits from silt trap and upstream channels utilising vacuum tanker. Temporary damming and over pumping to facilitate the works. NEC4 Short subcontract
2.	EX-WORX Ltd Unit 38, Century Business Park, Manvers Way, Manvers, Rotherham, S63 5DA Form of Contract:	Removal of silt island deposits using an excavator. NEC4 Short subcontract
3.	SL2 (Squared) Ltd Unit 5a Amberley Court 103 Effingham Street Rotherham S65 1BL Form of Contract:	Asbestos removal in sealant joints NEC4 Short subcontract
4.	Grassform group Bonemill lane ,Worksop S81 7AU Form of Contract:	Installation and removal of temporary track matting NEC4 Short subcontract