



**Environment
Agency**

Conditions of Contract Services

**North East Area Magnesian Limestone Conceptual Model and
Source Protection Zone Updates**

Document Version: October 2019



1. DEFINITIONS

1.1. In the Contract, unless the context otherwise requires the following words and expressions shall have the following meanings assigned to them.

1.1.1. Agency

The Environment Agency, its successors and assigns.

1.1.2. Agency Property

All property issued or made available for use by the Agency to the Contractor in connection with the Contract.

1.1.3. The Appendix

The Appendix to these Conditions.

1.1.4. The Contract

These Conditions including the Appendix, any Special Conditions, Specification, Pricing Schedule, Contractor's tender, acceptance letter and any relevant documents agreeing modifications exchanged before the Contract is awarded, and any subsequent amendments or variations agreed in writing.

1.1.5. The Contractor

The person, firm company or body who undertakes to supply the Services to the Agency as defined in the Contract.

1.1.6. Contract Period

The time period stated in the Appendix or otherwise provided in the Contract, for the performance of the Services.

1.1.7. Contractor Personnel

means all directors, officers, employees, agents, consultants and contractors of the Contractor and/or of any sub-contractor engaged in the performance of its obligations under this Contract

1.1.8. Contract Price

The price exclusive of VAT set out in the Contract for which the Contractor has agreed to supply the services.

1.1.9. Contract Supervisor

Any duly authorised representative of the Agency notified in writing to the Contractor for all purposes connected with the Contract. Any Notice or other written instruction given by or made to the Contract Supervisor, shall be taken as given by or made to the Agency.

1.1.10. Contracting Authority

means any contracting authorities (other than the Environment Agency) as defined in regulation 2 of the Public Contract Regulations 2015 (SI 2015/102) (as amended).

1.1.11. Data Protection Legislation

means: (i) the General Data Protection Regulation (Regulation (EU) 2016/679) or GDPR, the Law Enforcement Directive (Directive (EU) 2016/680) ("LED") and any applicable national implementing Laws as amended from time to time (ii) the Data Protection Act 1998 ("DPA 1998") and/or the Data Protection Act 2018 ("DPA 2018") to the extent that it relates

to processing of personal data and privacy; (iii) all applicable Law about the processing of personal data and privacy

1.1.12.Data Protection Schedule

The Schedule attached to this Contract describing how the Parties will comply with the Data Protection Legislation.

1.1.13.Intellectual Property Rights

All Intellectual Property Rights including without limitation, patents, patent applications, design rights, registered designs, utility models, trade and service marks and applications for same, copyright know-how, rights in semi-conductor chip topography, and in each case whether protectable at law or not, and if protectable, whether an application has been made for such protection or not, and all similar industrial, commercial, monopoly or other intellectual property rights whether present or future, vested or contingent wherever protected.

1.1.14.Law

means any law, subordinate legislation within the meaning of Section 21(1) of the Interpretation Act 1978, bye-law, enforceable right within the meaning of Section 2 of the European Communities Act 1972, regulation, order, regulatory policy, mandatory guidance or code of practice, judgment of a relevant court of law, or directives or requirements with which the Contractor is bound to comply

1.1.15.Notice

Any written instruction or notice given to the Contractor by the Contract Supervisor, delivered by:

i. fax, or hand delivery to the Contractor's registered office or other address notified for the purposes of the Contract and deemed to have been served at the date and time of delivery;

First class post to the Contractor's registered office. Such Notices are deemed to have been served 48 hours after posting.

1.1.16.Results

All things produced in performing the Services including maps, plans, photographs, drawings, tapes, statistical data, experimental results, field data, analysis of results, published and unpublished results and reports, inventions, computer programmes and user documentation.

1.1.17.The Resulting Rights

All Intellectual Property Rights in the Results that are originated, conceived, written or made by the Contractor, whether alone or with others in the performance of the Services or otherwise resulting from the Contract.

1.1.18.Permission

Express permission given in writing before the act being permitted.

1.1.19.Services

All Services detailed in the Specification including any additions or substitutions as may be requested by the Contract Supervisor.

1.1.20.Regulations

Means the Public Contract Regulations 2015 (SI 2015/102) as amended.

1.2. Except as set out above and in the Data Protection Schedule, the Contract shall be interpreted in accordance with the Interpretation Act 1988.

1.3. All headings in these Conditions are for ease of reference only, and shall not affect the construction of the Contract.

1.4. Any reference in these Conditions to a statutory provision will include all subsequent modifications.

1.5. All undefined words and expressions are to be given their normal English meaning within the context of this Contract. Any dispute as to the interpretation of such undefined words and expressions shall be settled by reference to the definition in the Shorter Oxford English Dictionary.

2. PRECEDENCE

To the extent that the following documents form the Contract, in the case of conflict of content, they shall have the following order of precedence:

- Conditions of Contract including Appendix, Data Protection Schedule and any Special Conditions;
- Specification;
- Pricing Schedule;
- Drawings, maps or other diagrams.

3. CONTRACT SUPERVISOR

The Contractor shall strictly comply with any instruction given by the Contract Supervisor concerning or about the Contract provided such instructions are reasonable and consistent with the nature, scope and value of the Contract. All such instructions shall be in writing. The Contractor is not obliged to comply with any verbal instruction from the Contract Supervisor that is not confirmed in writing within 7 working days.

4. THE SERVICES

4.1. The Contractor shall provide all staff, equipment, materials and any other requirements necessary for the performance of the Contract using reasonable skill, care and diligence, and to the reasonable satisfaction of the Contract Supervisor.

4.2. The Contractor shall only employ in the execution and superintendence of the Contract persons who are suitable and appropriately skilled and experienced. The Contract Supervisor shall be at liberty to object to and require the Contractor to remove any person employed in or about the Contract who is unsuitable, misconducts himself, is incompetent or negligent in the performance of his duties or persists in conduct which could endanger the health or safety of others. Such persons shall not be employed again on the Contract without the Permission of the Contract Supervisor.

5. ASSIGNMENT

- 5.1. The Contractor shall not assign, transfer or sub-contract the Contract, or any part of it, without the Permission of the Contract Supervisor.
- 5.2. Any assignment, transfer or sub-contract entered into, shall not relieve the Contractor of any of his obligations or duties under the Contract.
- 5.3. Nothing in this Contract confers or purports to confer on any third party any benefit or any right to enforce any term of the Contract.

6. CONTRACT PERIOD

The Contractor shall perform the Services within the time stated in the Appendix, subject to any changes arising from Condition 10 (Variations,) and/or Condition 11 (Extensions of time.).

7. PROPERTY

- 7.1. All property issued by the Agency to the Contractor in connection with the Contract shall remain the property of the Agency, and shall be used in the execution of the Contract, and for no other purpose whatsoever without the prior approval of the Contract Supervisor.
- 7.2. The Contractor shall keep all Agency Property in safe custody and good condition, set aside and clearly marked as the property of the Agency.
- 7.3. On expiry or earlier termination of the Contract the Contractor shall, if so required, either surrender such property to the Agency or otherwise dispose of it as instructed by the Contract Supervisor.

8. MATERIALS

- 8.1. The Contractor shall be responsible for establishing his own sources of supply for goods and materials and will be responsible for ensuring the reasonable and proper conduct by his suppliers and staff whilst on the Agency's premises.
- 8.2. The Contractor shall not place, or cause to be placed, any orders with suppliers or otherwise incur liabilities in the name of the Agency or any representative of the Agency.

9. SECURITY

- 9.1. The Contractor shall be responsible for the security of all goods and equipment belonging to the Agency and used by the Contractor in the provision of the Services,

belonging to the Contractor, or Contractors staff, or sub-contractors whilst on Agency premises.

9.2. This Condition shall not prejudice the Agency's rights under Condition 15.

10. VARIATIONS

10.1. The Contract Supervisor may vary the Contract by adding to, deleting or otherwise modifying the Services to be supplied, by written order to the Contractor provided such variations are reasonable and consistent with the nature, scope and value of the Contract.

10.2. The value of any such variation, other than any variation arising out of Condition 10.3, shall be determined by reference to the rates contained in the Pricing Schedule. Where the Services so ordered are not covered in the Pricing Schedule, they shall be valued at a fair and reasonable rate agreed between the Contract Supervisor and the Contractor.

10.3. Where a variation is the result of some default or breach of the Contract by the Contractor or some other cause for which he is solely responsible, any additional cost attributable to the variation shall be borne by the Contractor.

10.4. The Contractor may also propose a variation to the Services but no such variation shall take effect unless agreed and confirmed in writing by the Contract Supervisor.

10.5. No variation shall have the effect of invalidating the Contract, or placing the Contract at large, if that variation is reasonably consistent with the nature, scope and value of the Contract. The Agency may vary the Contract to comply with a change in English Law. Such a change will be effected by the Contract Supervisor notifying the Contractor in writing.

10.6. The Agency may assign, novate or otherwise dispose of its rights and obligations under the Contract or any part thereof to:

10.6.1. any Contracting Authority; or

10.6.2. any other body established by the Crown or under statute in order substantially to perform any of the functions that had previously been performed by the Agency; or

10.6.3. any private sector body which substantially performs the functions of the Agency, provided that any such assignment, novation or other disposal shall not increase the burden of the Contractor's obligations under the Contract.

10.7. Any change in the legal status of the Agency such that it ceases to be a Contracting Authority shall not affect the validity of the Contract. In such circumstances the Contract shall bind and inure to the benefit of any successor body to the Agency.

11. EXTENSIONS OF TIME

11.1. Should the performance of the Contract be directly delayed by any cause beyond the reasonable control of the Contractor, and provided that the Contractor shall first have given

the Contract Supervisor written notice within five working days after becoming aware that such delay was likely to occur, then the Contract Supervisor, if satisfied that this Condition applies:

11.1.1. in the case of any delay of which the Agency is not the cause, may grant the Contractor such extension of time, as in his opinion is reasonable, having regard without limitation, to any other delays or extensions of time that may have occurred or been granted under the Contract. The Contract Price shall not increase as a result of such an extension of time.

11.1.2. in the case of any delay of which the Agency is the cause, shall grant the Contractor a reasonable extension of time to take account of the delay.

11.2. No extension of time shall be granted where in the opinion of the Agency the Contractor has failed to use reasonable endeavours to avoid or reduce the cause and/or effects of the delay.

11.3. Any extension of time granted under this Condition shall not affect the Agency's rights to terminate or determine the Contract under Conditions 13 and 14.

12. DEFAULT

12.1. The Contractor shall be in default if he:

12.1.1. fails to perform the Contract with due skill, care, diligence and timeliness;

12.1.2. refuses or neglects to comply with any reasonable written instruction given by the Contract Supervisor;

12.1.3. is in breach of the Contract.

12.2. Where in the opinion of the Contract Supervisor, the Contractor is in default, the Contract Supervisor may serve a Notice giving at least five working days in which to remedy the default.

12.3. If the Contractor fails to comply with such a Notice the Contract Supervisor may, without prejudice to any other rights or remedies under the Contract, take over for as such a period as is necessary the performance of the relevant part of the Contract and make other arrangements for its completion. Any extra costs arising from this action, will be paid by the Contractor or deducted from any monies owing to him.

13. TERMINATION

13.1. The Agency may immediately, without prejudice to any other rights and remedies under the Contract, terminate all or any part of the Contract by Notice in writing to the Contractor, Receiver, Liquidator or to any other person in whom the Contract may become vested, if the Contractor:

13.1.1. fails in the opinion of the Contract Supervisor to comply with (or take reasonable steps to comply with) a Notice under Condition 12.2.

13.1.2. becomes bankrupt or insolvent, or has a receiving order made against him, or makes an arrangement with his creditors or (being a corporation) commences to be wound up, not being a voluntary winding up for the purpose of reconstruction or amalgamation, or has a receiver, administrator, or administrative receiver appointed by a Court.

'Termination under the Regulations'

13.2. The Agency may terminate the Contract on written Notice to the Contractor if:

13.2.1. the contract has been subject to a substantial modification which requires a new procurement procedure pursuant to regulation 72(9) of the Regulations;

13.2.2. the Contractor was, at the time the Contract was awarded, in one of the situations specified in regulation 57(1) of the Regulations, including as a result of the application of regulation 57(2), and should therefore have been excluded from the procurement procedure which resulted in its award of the Contract; or

13.2.3. The Contract should not have been awarded to the Contractor in view of a serious infringement of the obligations under the Treaties and the Regulations that has been declared by the Court of Justice of the European Union in a procedure under Article 258 of the TFEU.

14. DETERMINATION

14.1. Without prejudice to any other rights or remedies under the Contract, the Agency reserves the right to determine the Contract at any time by giving not less than one month's Notice, (or such other time period as may be appropriate).

14.2. The Agency shall pay the Contractor such amounts as may be necessary to cover his reasonable costs and outstanding and unavoidable commitments necessarily and solely incurred in properly performing the Contract prior to determination.

14.3. The Agency will not pay for any costs or commitments that the Contractor is able to mitigate and shall only pay those costs that the Agency has validated to its satisfaction. The Agency's total liability under this Condition shall not in any circumstances exceed the Contract Price that would have been payable for the Services if the Contract had not been determined.

15. INDEMNITY

15.1. Without prejudice to the Agency's remedies for breach of Contract, the Contractor shall fully indemnify the Agency and its staff against any legally enforceable and reasonably mitigated liability, loss, costs, expenses, claims or proceedings in respect of:

15.1.1. death or injury to any person;

15.1.2. loss or damage to any property excluding indirect and consequential loss;

15.1.3. infringement of third party Intellectual Property Rights which might arise as a direct consequence of the actions or negligence of the Contractor, his staff or agents in the execution of the Contract.

15.2. This Condition shall not apply where the damage, injury or death is a direct result of the actions, or negligence of the Agency or its staff.

16. LIMIT OF CONTRACTOR'S LIABILITY

16.1. The limit of the Contractor's liability for each and every claim by the Agency, other than for death or personal injury, whether by way of indemnity or by reason of breach of contract, or statutory duty, or by reason of any tort shall be:

16.1.1. the sum stated in the Appendix;

16.1.2. if no sum is stated, the Contract Price or five million pounds whichever is the greater.

17. INSURANCE

17.1. The Contractor shall insure and maintain insurance against liabilities under Condition 15 (Indemnity) in the manner and to the values listed in the Appendix to these Conditions. If no sum is stated, the value insured shall be £5M (five million pounds.)

17.2. If specifically required by the Agency, nominated insurances shall be in the joint names of the Contractor and the Agency.

17.3. The Contractor shall, upon request, produce to the Contract Supervisor documentary evidence that the insurances required are fully paid up and valid for the duration of the Contract.

18. PREVENTION OF FRAUD AND CORRUPTION

18.1. The Contractor shall not offer, give, or agree to give anything, to any person an inducement or reward for doing, refraining from doing, or for having done or refrained from doing, any act in relation to the obtaining or execution of the Contract or for showing or refraining from showing favour or disfavour to any person in relation to the Contract.

18.2. The Contractor shall take all reasonable steps, in accordance with good industry practice, to prevent fraud by the Contractor's staff and the Contractor (including its shareholders, members and directors) in connection with the Contract and shall notify the Agency immediately if it has reason to suspect that any fraud has occurred or is occurring or is likely to occur.

18.3. If the Contractor or the Contractor's staff engages in conduct prohibited by this clause 18 or commits fraud in relation to the Contract or any other contract with the Crown (including the Agency) the Agency may:

18.3.1. terminate the Contract and recover from the Contractor the amount of any loss suffered by the Agency resulting from the termination, including the cost reasonably incurred by the Agency of making other arrangements for the supply of the Goods and any additional expenditure incurred by the Agency throughout the remainder of the Contract; or

18.3.2. recover in full from the Contractor any other loss sustained by the Agency in consequence of any breach of this clause.

18.4. The Contractor shall not, directly or indirectly through intermediaries commit any offence under the Bribery Act 2010 (as amended), in any of its dealings with the Agency.

19. MONITORING AND AUDIT

19.1. The Contract Supervisor may inspect and examine the Services being carried out on the Agency's premises, or elsewhere at any reasonable time. Where the Services are being performed on other than the Agency's premises, reasonable notice to inspect shall be given to the Contractor. The Contractor shall give all such facilities as the Contract Supervisor may reasonably require for such inspection and examination.

20. CONTRACT PRICE

20.1. The Contract Price will be paid by the Agency to the Contractor as amended by any Variations ordered under Condition 10 (Variations).

20.2. In addition to the Contract Price, the Agency will pay to the Contractor such Value Added Tax (if any) as may properly be chargeable at rates ruling at the time of invoice.

21. INVOICING AND PAYMENT

21.1. Invoices shall only be submitted for work already satisfactorily completed, and accompanied by such information as the Contract Supervisor may reasonably require to verify the Contractor's entitlement to payment. Such invoices will be paid in 30 days from receipt by the Agency.

21.2. If any sum is payable under the Contract by the Contractor to the Agency, whether by deduction from the Contract or otherwise, it will be deducted from the next available invoice.

21.3. If the Contractor enters into a sub-contract with a supplier for the purpose of performing its obligations under the Contract, it shall ensure that a provision is included in the sub-contract which requires payment to be made of all sums due from it to the sub-contractor within 30 days from the receipt of a valid invoice.

22. INTELLECTUAL PROPERTY RIGHTS

22.1. All Prior Rights used in connection with the Services shall remain the property of the party introducing them. Details of each party's Prior Rights are set out in the Prior Right Schedule to this contract.

22.2. All Results shall be the property of the Agency.

22.3. The Resulting Rights in any Results, and any interim results shall, from the time they arise, be the property of the Agency and the Agency shall be free, should it so wish, to apply at its own expense for patent or other protection in respect of the Results or any interim results. The Agency's intention to apply for such patent or other protection shall be notified to the Contractor. Such applications for patents or other registered intellectual property rights shall be filed in the name of the Agency.

Unless otherwise agreed in writing between the Contractor and the Agency, the Contractor hereby:

22.3.1. assigns to the Agency all Resulting Rights

22.3.2. grants the Agency a non-exclusive, non-transferable (save for the purposes of sub-licensing, reorganisation or transfer to a successor body, for the purposes of all the successor body's normal business use), irrevocable, royalty free perpetual licence to the Agency in respect of all the Contractor's Prior Rights necessary in order for the Agency to use or exploit the Resulting Rights.

22.4. The Contractor undertakes to the Agency not to use, exploit or deal with any of the Agency's Prior Rights, other than in the performance of the Contract unless the Contractor has first obtained a written licence from the Agency, in specific terms to do so.

22.5. The Agency undertakes to the Contractor not to use or exploit the Contractor's Prior Rights, save as provided in Condition 22.3.2.

22.6. The Contractor warrants to the Agency that the performance of the Services, the Contractor's Prior Rights and the Results shall not in any way infringe any intellectual property rights of any third party.

22.7. If the Contractor is prevented from carrying out his obligations under the Contract due to any infringement or alleged infringement of any Intellectual Property Rights, the Agency may without prejudice to any other rights and remedies under the Contract, exercise the powers and remedies available to it under Conditions 13 and 14, Termination and Determination respectively.

22.8. The Contractor shall not be liable if such infringement arises from the use of any design, technique or method of working provided by or specified by the Agency.

22.9. The Contractor waives in favour of the Agency its rights to object to derogatory treatment of the Results of the Work and the Contractor also agrees that he will not assert or seek to enforce against the Agency and/or any other person, firm or company any of its moral rights as defined in the Copyright Designs and Patents Act 1988 (as amended) without the prior agreement of the Agency.

22.10. The Contractor shall not be liable for any consequential losses, damage or injuries arising from third party misuse of the Results, of which the Contractor is not aware.

23. WARRANTY

The Contractor warrants that the Services supplied by him will be discharged with reasonable skill, care and diligence.

24. STATUTORY REQUIREMENTS

The Contractor shall fully comply with all relevant statutory requirements in the performance of the Contract, including, but not limited to the giving of all necessary notices and the paying of all fees.

25. ENVIRONMENT, SUSTAINABILITY AND DIVERSITY

25.1. The Contractor in the performance of this Contract should adopt a sound proactive environmental approach, designed to minimise harm to the environment, to conserve energy, water, wood, paper and other resources, reduce waste and phase out the use of single-use plastic, ozone depleting substances and minimise the release of greenhouse gases, volatile organic compounds and other substances damaging to health and/or the environment, and be able to provide proof of so doing to the Agency on demand.

25.2. The Agency is committed to ensuring that workers employed within its supply chains are treated fairly, humanely and equitably. The Agency expects the Contractor to share this commitment and to understand any areas of risk associated with this and work to ensure they are meeting International Labour Standards. The Contractor ensures that it and its sub-contractors and its supply chain:

25.2.1. comply with the provisions of the Modern Slavery Act 2015;

25.2.2. pay staff fair wages (and pays its staff in the UK not less than the Foundation Living Wage Rate); and

25.2.3. Implement fair shift arrangements, providing sufficient gaps between shifts, adequate rest breaks and reasonable shift length, and other best practices for staff welfare and performance.

25.3. The Contractor should support the Agency to achieve its Public Sector Equality Duty by complying with the Agency's policies (as amended from time to time) on Equality, Diversity and Inclusion (EDI). This includes ensuring that the Contractor (and their sub-contractors) in the delivery of its obligations under this Contract:

25.3.1. eliminates discrimination, harassment, victimisation and any other conduct that is prohibited by or under the Equality Act 2010;

25.3.2. advances equality of opportunity between people who share a protected characteristic and those who do not; and

25.3.3. fosters good relations between people who share a protected characteristic and those who do not.

25. PUBLICITY

The Contractor shall not advertise or publicly announce that he is supplying Services or undertaking work for the Agency without the Permission of the Contract Supervisor.

26. LAW

This Contract shall be governed and construed in accordance with the Law, and subject to the jurisdiction of the courts of England.

27. WAIVER

27.1. No delay, neglect or forbearance by the Agency in enforcing any provision of the Contract shall be deemed to be a waiver, or in any other way prejudice the rights of the Agency under the Contract.

27.2. No waiver by the Agency shall be effective unless made in writing.

27.3. No waiver by the Agency of a breach of the Contract shall constitute a waiver of any subsequent breach.

28. ENFORCEABILITY AND SURVIVORSHIP

28.1. If any part of the Contract is found by a court of competent jurisdiction or other competent authority to be invalid or legally unenforceable, that part will be severed from the remainder of the Contract which will continue to be valid and enforceable to the fullest extent permitted by law.

28.2. The following clauses shall survive termination of the Contract, howsoever caused: 13, 14, 15, 22, 23, 24, 27, 29, 30, 31, 32 and 33.

29. DISPUTE RESOLUTION

29.1. All disputes under or in connection with this agreement shall be referred first to negotiators nominated at a suitable and appropriate working level by the Agency and the Contractor.

29.2. If the parties' negotiators are unable to resolve the dispute within a period of forty five days from its being referred to them, the dispute shall be referred at the instance of either party to the parties' respective senior managers or directors (supported as necessary by their advisers).

29.3. If the parties' respective senior managers or directors are unable to resolve the dispute within forty five days the dispute shall be referred to the Centre for Dispute Resolution who shall appoint a mediator and the parties shall then submit to the mediator's supervision of the resolution of the dispute.

29.4. Recourse to this dispute resolution procedure shall be binding on the parties as to submission to the mediation but not as to its outcome. Accordingly all negotiations connected with the dispute shall be conducted in strict confidence and without prejudice to

the rights of the parties in any future legal proceedings. Except for any party's right to seek interlocutory relief in the courts, no party may commence other legal proceedings under the jurisdiction of the courts or any other form of arbitration until forty five days after the appointment of the mediator.

29.5. If, with the assistance of the mediator, the parties reach a settlement, such settlement shall be put in writing and, once signed by a duly authorised representative of each of the parties, shall remain binding on the parties.

29.6. The parties shall bear their own legal costs of this dispute resolution procedure, but the costs and expenses of mediation shall be borne by the parties equally.

29.7. Any of the time limits in Conditions 30 may be extended by mutual agreement. Such agreed extension shall not prejudice the right of either party to proceed to the next stage of resolution.

30. GENERAL

30.1. Neither party to the Contract will be liable to the other for any delay in performing or failing to perform its obligations (other than a payment obligation) under the Contract because of any cause outside its reasonable control. Such delay or failure will not constitute a breach of the Contract and the time for performance of the affected obligation will be extended by a reasonable period.

30.2. The Contract contains the whole agreement between the parties and supersedes all previous communications, representations and arrangements, written or oral. It is accepted that the Contract has not been entered into on the basis of any representations that are not expressly contained in the Contract.

31. FREEDOM OF INFORMATION ACT

31.1. The Agency is committed to open government and to meeting its responsibilities under the Freedom of Information Act 2000 (as amended) ('Act') and the Environmental Information Regulations 2004 (as amended) (Regulations').

31.2. The Contractor agrees that:

31.2.1. All information submitted to the Agency may need to be disclosed by the Agency in response to a request under the Act or the Regulations; and

31.2.2. The Agency may include information submitted (in whole or in part) in the publication scheme which it maintains under the Act or publish the Contract, including from time to time agreed changes to the Contract, to the public.

31.3. If the Contractor considers that any of the information included in its tender, or that it has submitted to the Agency or that is otherwise contained in the Contract, is commercially sensitive, it shall identify and explain (in broad terms) what harm may result from disclosure if a request is received, and the time period applicable to that sensitivity. The Contractor acknowledges that if it has indicated that information is commercially sensitive, such information may still be required to be disclosed by the Agency under the Act or the

Regulations. The receipt of any material marked 'confidential' or equivalent by the Agency shall not be deemed to infer that the Agency agrees any duty of confidentiality by virtue of that marking.

32. DATA PROTECTION

32.1. In the event that the Contract requires data to be processed within the meaning of the Data Protection Legislation the Data Protection Schedule shall be completed by the Parties and provisions and definitions therein shall apply and bind the Parties as part of this Contract.

33. BREAK CLAUSE

DEFINITION

33.1 Price – Means the price submitted by the Contractor as outlined in the pricing schedule.

33.2 Year – Means a financial year, which runs from 1 April to 31 March.

33.2 Subject to the Agency's full discretion, Year 2 shall follow the completion of Year 1. The Agency shall inform the Contractor by written communication, no later than 30 days prior to the start of the new Year, whether the Agency wishes to proceed with Year 2. The Consultant should respond within two weeks to confirm that they are able to undertake the work defined as Year 2, for the price submitted in their bid.

34.5 Following award for Year 1, the Contractor has submitted and the Agency has accepted the supply price for Year 2, should the later Year be required. No costs incurred up to and for works associated with Year 2 shall be chargeable to the Agency, should they decide not to proceed with Year 2.

Appendix to Conditions Services

Ref: [REDACTED]

Title: North East Area Magnesian Limestone Conceptual Model and Source Protection Zone Updates

Condition
3

1 Contact Supervisor

[REDACTED]

2 Contractor

WSP Environment & Infrastructure Solutions UK Ltd

[REDACTED]

3 Completion

6

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

The Agency will enter into the Contract on the basis that it requires the Services for the Initial Contract Period. However, in entering into the Contract, both Parties acknowledge that circumstances may prevent the Agency from fulfilling the funding requirements of the Contract for the Initial Contract Period. In these circumstances, the Parties undertake to discuss the future scope of the Contract before the end of February 2023.

4 Delivery

11

Address:-

Insert delivery address if different to above

5 Insurance

17

Professional Indemnity Min. Cover £1 million

Third Party Minimum Cover £1 million

Public Liability Min. Cover £1 million

6 Limit on Liability

16

Limit on Contractors Liability £ 1 million

SCHEDULE 1 – SPECIFICATION

Procurement Title: North East Area Magnesian Limestone Conceptual Model (MLCM) and Groundwater Source Protection Zones (SPZs) Update

1.1 The Customer

The contract will be managed by the Environment Agency's (EA) North East Area Groundwater, Hydrology and Contaminated Land Team (GHCL), the customer. The team is a multi-disciplinary team providing specialist technical support on water quality, water resources and land contamination. As well as providing support to area and national teams internally the team works with external stakeholders to undertake catchment based and scientific research-based projects in order to support the Agency's environmental goals.

GHCL sits within the Water Land and Biodiversity (WLB) Regulation department alongside Environment Management teams who lead on environmental incident response and permit compliance and enforcement.

North East Area extends from the Scottish border in the north to North Yorkshire in the south, the coast in the east and Alston (Pennines) in the west. The work of GHCL covers the whole of North East Area. The main EA offices in the area are located in Newcastle and Darlington.

1.2 Contract Length

It is anticipated that this contract will be awarded to one supplier to cover a period of up to 9 months to end no later than 30/06/2023. The EA would prefer the contract to be delivered in its entirety by the end of March 2023 but if the Tenderer believes a longer period is required to deliver the tasks outlined in the Specification, then they may propose to deliver task 7 and 8 in the first three months of next financial period (2023/24). Should this be the proposed programme, then a break clause will be included in the contract to allow the Agency to terminate at the end of March 2023, as funding is not guaranteed beyond this point. Prices will remain fixed for the duration of the contract award period. We may at our sole discretion extend this contract to include related or further work. Any extension shall be agreed in advance of any work commencing and may be subject to further competition.

1.3 Project Manager

This contract shall be managed on behalf of the Agency by Diane Steele.

1.4 Requirement Statement

We are looking for one contractor to complete work for the following overlapping projects:

- NE Area Magnesian Limestone Conceptual Model (MLCM) Report update
- NE Area Groundwater Source Projection Zones (SPZs) update

Magnesian Limestone Conceptual Model Update

The MLCM report was originally produced by ESI Ltd consultants in 2009 and comprises of a main document, numerous appendices and a number of GIS shapefiles. The report focuses on the Permian Magnesian Limestone aquifer located in North East Area, extending from South Shields in the North to Hartlepool in east and Darlington in the west. Figure 1 shows the extent of the magnesian limestone in NE Area:



Since 2019 much work has been carried out by the Agency and partners, with improved knowledge of the aquifer gained therefore an updated conceptual model is required in order to consolidate and synthesise this updated understanding.

Work to update the document commenced in 2020 however there was insufficient resource to complete the work in house therefore only a few sections were updated, focussing mainly on the hydrology of the aquifer and water company abstractions. Wood Group UK Ltd were contracted to review part of the hydrogeology section of the report and produced updated groundwater contours. Further work is required to complete the hydrology section and to review and update the remainder of the document. Part of the work will entail collating, reviewing and summarising recent monitoring data and knowledge gained from recent technical reports.

In collaboration with The Coal Authority a conceptual model for the Coal Measures across North East Area is currently being produced. Some sections of the Magnesian Limestone will also feed into the Coal Measures conceptual model where connectivity between the aquifers needs to be considered.

Primary sections of the MLCM that we are looking to be reviewed and updated are:

- Hydrogeology
- Water quality
- Groundwater-surface water interaction
- Groundwater recharge and water balance

The water quality section will require review of long-term water quality data in order to identify baseline chemistry and any pollutants of concern. Nitrate, mine water and saline intrusion

are known to have impacted the aquifer, a summary of the impact (historic and current) of each will need to be written, with supporting maps and figures.

A number of recent studies have been undertaken in relation to saline intrusion, mine water risks and groundwater-surface water connectivity across the aquifer, the findings of these (in numerous technical reports) will need to be summarised as part of this work.

Water company abstractions at Stillington and Dalton Piercy are known to be impacted by elevated sulphate concentrations. As part of the conceptual model review work (as case studies) should be undertaken to determine whether the impact is natural (gypsum/anhydrite) and/or anthropogenic (abstraction related) and if/how the impact can be managed.

The primary audience for the completed report will be hydrogeologists within the GHCL team and key stakeholders such as Northumbrian Water, Hartlepool Water and the Coal Authority. Representatives from each organisation sit on a steering group for the project and have committed time to provide data/information for the update and to review sections for comment before they are finalised, if required.

The documents and associated outputs will also be available via a Freedom of Information request by members of the public therefore it is essential that it is clearly written. On a day to day basis the document will be used to train internal staff on the hydrogeological properties, complexities and state of the Magnesian Limestone aquifer to aid our statutory regulatory work to protect and enhance controlled waters.

NE Area Groundwater Source Protection Zone Update

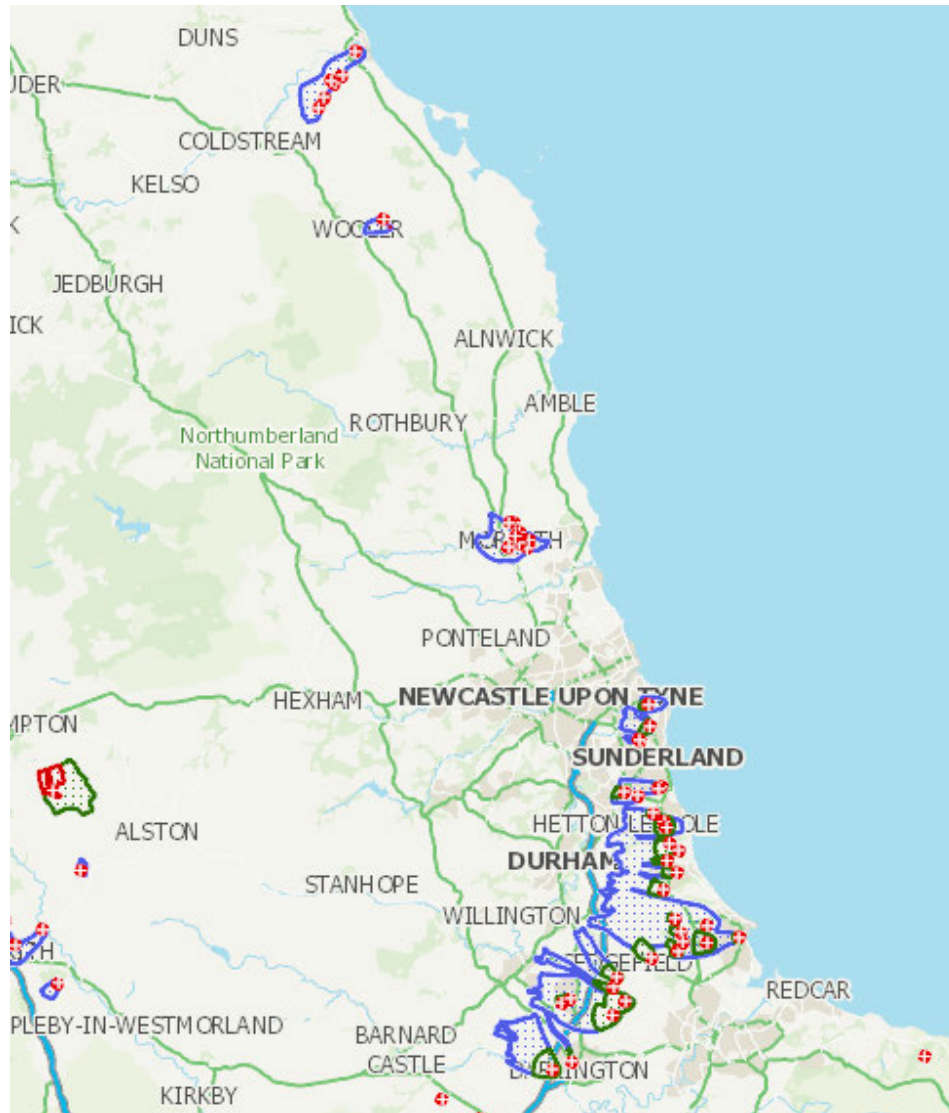
Groundwater Source Protection Zones (SPZs) are areas of groundwater where there is a particular sensitivity to pollution risks due to the closeness of a drinking water source and how the groundwater flows. They are used to protect abstractions used for public water supply and other forms of distribution to the public such as mineral and bottled water plants, breweries and food production plants. SPZs are not statutory but they do relate to distances and zones defined in legislation where certain activities that pose a risk to groundwater are restricted.

Each EA area Groundwater and Contaminated Land team is responsible for the production and update of SPZs in their area. Updates to SPZs are to be undertaken as and when required but should reflect current understanding of groundwater flows and travel times.

SPZs comprise of up to three main zones:

- SPZ1 inner protection zone, defined by a 50-day travel time for pollution (mainly bacterial) from any point below the water table to reach the abstraction source. This zone has a minimum radius of 50 metres.
- SPZ2 outer protection zone, defined by a 400-day travel time from a point below the water table. This zone has a minimum radius of 250 or 500 metres around the abstraction source, depending on the size of the abstraction.
- SPZ3 source catchment protection zone, defined as the area around an abstraction source within which all groundwater can potentially feed into the abstraction source.

Figure 2 shows the location of current SPZs (shown as red, blue and green areas) in NE Area:



The majority of the SPZs in NE Area are located on the Magnesian Limestone and Fell Sandstone principal aquifers, this is where the majority of the public water supply abstractions are located. Although there is also a large, combined zone in Morpeth which covers a number of bottling supplies e.g. Coca Cola.

The majority of the existing NE Area SPZs were hand drawn in the 1990s, with only the Morpeth zone(s) being completed at a later date in 2005. Our conceptual understanding of the areas aquifers has changed and improved vastly over the past 20-30 years and the water environment is very different. As such, the existing zones are known to be out of date, with many being too small. For example, recent water resources investigations on the Magnesian Limestone have shown that abstracts impact groundwater levels at a greater distance than previously thought and also there is impact from north to south rather than just from west to east. In addition, some existing zones are no longer required as the abstractions have been decommissioned and some new zones we be required to cover NWL's spring supplies e.g. Tosson.

This project will require the following work to be undertaken:

- Review all existing SPZs – de-designate (remove) any unnecessary zones e.g. abstraction no longer active, re-define combined zones, expand zones that are too small

- Identify and create new zones – review existing potable supplies, identifying where new zones are required, produce new zones using agreed methodology

Due to the complexity of the aquifers the following work is expected to be able to complete the SPZ update:

- **Magnesian Limestone SPZ Work**

Work to update the magnesian limestone SPZs should be completed alongside or after the completion of the MLCM report update to provide good background knowledge of the hydrogeology of the aquifer.

There are two existing numerical models covering the aquifer. The Sunderland groundwater model was produced by Wood for Northumbrian Water in 2012, whilst the Skerne groundwater model was produced by Wood for Anglian Water in 2021/22. Both models were produced to determine the impact of public water supply abstractions on groundwater levels and base flow to rivers. A review and potential refinement of the models is likely to be required following update of the MLCM report in order to successfully produce SPZs. The aquifer is known to be fracture dominant and karstic in places which is likely to impact SPZ size and shape.

There are a number of existing SPZs in the Sunderland supply zone and around Newton Aycliffe which will need to be removed as the abstractions are no longer operational. Most are located within combined zones that will need to be de-defined.

- **Fell Sandstone SPZ Work**

Work is on-going with the British Geological Survey (BGS) and Northumbrian Water to improve the geology and hydrogeology of the Fell Sandstone. Updated geological maps and a groundwater numerical model for the Berwick water supply zone have been produced in recent years and the water company has undertaken a number of pumping tests to determine the sustainability of their abstractions. This information will need to be reviewed in order to update the existing SPZs. Current SPZs for the water company abstractions do not currently have an SPZ 2, instead they have a larger (250 m) SPZ 1 – a review of whether this methodology is still relevant will need to be undertaken as part of the review

- **Morpeth – Millstone Grit and Coal Measures SPZ Work**

We have been working in partnership with the Coal Authority to better understand the hydrogeology of the coal measures and mining blocks across NE Area, producing a series of maps and reports for each mining block. In addition, a number of additional abstractions have been drilled within the Morpeth area in recent years. New data will need to be reviewed to determine whether the existing SPZ needs to be revised. It is known that some of the abstractions are no longer operational therefore SPZ 1's are no longer required and the total zone (SPZ 3) may be too big.

1.5 Estimated Timetable

| Activity Ref | Activity Title | Date (Time) |
|--------------|---|---------------------------|
| 1 | Opportunity Notice published in Contracts Finder and Bidder Pack released | 19 August 2022 |
| 2 | Deadline for clarification questions | 08 September 2022 (17:00) |
| 3 | Deadline for Responses | 15 September 2022 (17:00) |
| 4 | Evaluation of Tender | 22 September 2022 |
| 5 | Contract award notification | 27 September 2022 |
| 6 | Contract award | 30 September 2022 |
| 7 | Contract start date | 01 October 2022 |
| 8 | Contract end date | 30 June 2023 |

The EA would prefer the contract to be delivered in its entirety by the end of March 2023 but if the Tenderer believes a longer period is required to deliver the tasks outlined in the Specification, then they may propose to deliver task 7 and 8 in the first three months of the next financial period (2023/24). Should this be the proposed programme, then a break clause will be included in the contract to allow the Agency to terminate at the end of March 2023, as funding is not guaranteed beyond this point.

1.6 Objectives

The objectives of the work are:

- To review, update and finalise the Magnesian Limestone Conceptual Model Report for North East Area – bringing the existing conceptual model up to date with current and updated data, literature and understanding.
- To review and amend and create new groundwater Source Protection Zones for potable supplies in North East Area.

1.7 Deliverables

The following table presents the outputs that are expected to be delivered at various stages as the project is being completed. Anticipated dates of completion after Contract Start are also provided as a guide, though these can be adjusted in the proposed project programme requested in the Technical Questionnaire.

| Deliverable | Responsible parties | Anticipated date of completion after Contract Start |
|-------------|---------------------|---|
| | | |

| | | |
|---|------------|--------------|
| Provision of known project data sets | Agency | 1 month |
| Literature and data review and case studies for Magnesian Limestone Conceptual Model Report | Consultant | 1 – 3 months |
| Completion of Magnesian Limestone Conceptual Model Report review and update | Consultant | 3-6 months |
| Review of water company numerical models | Consultant | 3-5 months |
| Agreed methodology of SPZ review and update | Consultant | 3-5 months |
| Completion of SPZ review and update (Magnesian Limestone) | Consultant | 6 months |
| Completion of SPZ review and update (Secondary aquifers) | Consultant | 6-9 months |
| Completion of SPZ review and update (Fell Sandstone) | Consultant | 6-9 months |
| Provision of SPZ GIS shapefiles and SPZ summary report | Consultant | 6-9 months |

All tools and files developed under this project should be compatible with the following Environment Agency's systems listed below and must be capable of functioning seamlessly with any future update of the applicable software products:

| Software | Current Network Version |
|--------------------|-------------------------|
| Windows Version | Windows 10 |
| ArcGIS | ArcMap 10.4.1 |
| Groundwater Vistas | Version 8.11 Build 11 |
| Microsoft Office | Microsoft Office 365 |

Intellectual Property Rights - background rights for all data and information used within the project(s) will be retained by the original owner. The Environment Agency will obtain foreground rights for the deliverables of the project, including the Magnesian Limestone Conceptual Model Report and Source Protection Zone shapefiles, methodology and summary report(s).

1.8 Work scope summary

| Task | Purpose | Overview | Outcomes |
|--|--|---|--|
| Task 1 <i>Review existing Magnesian Limestone Conceptual Model (MLCM) Report(s)</i> | To understand what work has been completed to date and identify where updates are required | Review full ESI 2009 report and 2020/21 updates of the hydrology, GW abstraction, hydrogeology and GW-SW interaction sections to gain an understanding what work has been completed to date, gain an understanding of the Magnesian Limestone aquifer in the North East and to understand what further work is required to complete an update of the conceptual model | Improved understanding of the Magnesian Limestone and work completed to date Detailed understanding of work required to complete the conceptual model update |
| Task 2 <i>Collate, review and analyse all available data, information and technical reports for the Magnesian Limestone aquifer</i> | To pull together data and information obtained/collected since 2009 MLCM report produced | Gather all available data and information required to complete the conceptual model update Collate, analyse and summarise recent data and information, identifying where understanding is updated from 2009 | Identification of which data and information will feed into the update of the MLCM, which sections are to be updated and where conceptual understanding of the aquifer as improved/changed |
| Task 3 <i>Produce an updated Magnesian Limestone Conceptual Model Report</i> | To complete the update of the MLCM report and figures | Use knowledge, data and information obtained from completing Tasks 1 and 2 to complete an update to all MLCM report and figures | Finalised MLCM |

| Task | Purpose | Overview | Outcomes |
|--|--|---|--|
| Task 4 <i>Review water company groundwater numerical models</i> | To identify whether the numerical models can aid in the production of SPZs for the Magnesian Limestone | Review NWL's Sunderland groundwater model and AWS's Skerne groundwater model. Determine whether they suitably reflect the conceptual understanding of the aquifer and can be used to support the update of SPZs for the Magnesian Limestone | Technical review of both numerical groundwater models – conclusion of whether they can be utilised to update the SPZs for the Magnesian Limestone and a summary of any limitations in their conceptual understanding of the aquifer and any recommendations for improvements |
| Task 5 <i>Review existing NE Area Magnesian Limestone SPZs, agree methodology and complete update</i> | To review and update SPZs for the Magnesian Limestone aquifer | Use conceptual understanding of the geology and hydrogeology of the Magnesian Limestone to come up with an agreed methodology of updating the SPZs. Complete a review of existing SPZs – identify where existing zones need to be de-designated or amended in shape and size and/or where additional zones are required. Use the agreed methodology to complete the review and produce a GIS shapefile of mew/amended SPZs | <p>Agreed SPZ methodology for updating SPZs for the Magnesian Limestone</p> <p>GIS shapefile of mew/amended SPZs on the Magnesian Limestone</p> |
| Task 6 <i>Review NE Area Secondary Aquifer SPZs, agree methodology and complete update</i> | To review and update SPZs on Secondary aquifers in NE Area | <p>Complete a review of existing SPZs on Secondary aquifers in NE Area, predominantly the Millstone Grit and Coal Measures in Morpeth – identify where existing zones need to be de-designated or amended in shape and size and/or where additional zones are required.</p> <p>Obtain and review relevant technical/aquifer information to come up with an appropriate methodology. Use the agreed methodology to complete the review and produce a GIS shapefile of mew/amended SPZs</p> <p>No SPZ 2's were designated for the Morpeth abstractions, larger SPZ 1's were designated as a result. The review will need to determine whether this is still the correct methodology/approach.</p> | <p>Agreed SPZ methodology for updating SPZs for Secondary aquifers</p> <p>GIS shapefile of mew/amended SPZs on NE Area's Secondary aquifers</p> |

| Task | Purpose | Overview | Outcomes |
|--|--|---|---|
| Task 7 <i>Review existing NE Area Fell Sandstone SPZs, agree methodology and complete update</i> | To review and update SPZs for the Fell Sandstone aquifer | <p>Review recent geology and hydrogeology reports produced by the EA, BGS and NWL on the Fell Sandstone.</p> <p>Use improved conceptual understanding of the Fell Sandstone to come up with an agreed methodology of updating the SPZs. Complete a review of existing SPZs – identify where existing zones need to be de-designated or amended in shape and size and/or where additional zones are required. Use the agreed methodology to complete the review and produce a GIS shapefile of new/amended SPZs</p> <p>No SPZ 2's were designated for the Fell Sandstone abstractions, larger SPZ 1's were designated as a result. The review will need to determine whether this is still the correct methodology/approach.</p> | <p>Agreed SPZ methodology for updating SPZs for the Fell Sandstone</p> <p>GIS shapefile of new/amended SPZs on the Fell Sandstone</p> |
| Task 8 <i>Complete final SPZ GIS shapefiles and summary report</i> | Provide EA with completed SPZs following update/review and understanding of work completed | <p>Submission of all updated/reviewed SPZs to EA as GIS shapefiles, for all aquifers</p> <p>Production of summary report/technical note explaining work undertaken – including explanation of methodology and approach, decisions made and summary of changes made to SPZs. Document should include figures of updated and finalized SPZs</p> | <p>GIS shapefiles of all updated/reviewed SPZs</p> <p>Summary technical report/note</p> |

1.9 Data Available

A significant amount of data, information and literature are available to support completion of the required work, including but not limited to:

| Data Source | Comments and Constraints |
|---|--|
| Magnesian Limestone Conceptual Model Report Sections and Figures | <p>Original Magnesian Limestone Conceptual model report produced by ESI in 2009 will be provided</p> <p>The report includes the following key sections:</p> <ul style="list-style-type: none"> • Main Report • Appendix A references and Literature review |

| Data Source | Comments and Constraints |
|--|--|
| | <ul style="list-style-type: none"> • Appendix B Geology • Appendix C Hydrology • Appendix D Abstractions# • Appendix E Mine water • Appendix F Hydrogeology • Appendix G Groundwater Quality • Appendix H Recharge • Appendix I River – Aquifer Interaction • Appendix J Groundwater Balances <p>A copy of partially updated (2020-21) Appendix C Hydrology and Climate, Appendix D GW Abstractions and Appendix F Hydrogeology and Appendix I River – Aquifer Interaction can be provided – these are to be reviewed and finalised as part of the project</p> |
| Abstraction details and returns | <p>Abstraction datasets from 1970 to 2021 are available. Data for water company and private abstractors can be provided, if available</p> <p>Locations of existing abstractions can be provided for the project area(s)</p> |
| Discharges | <p>STW permit limits and some return data (for larger sites) is available</p> |
| Groundwater Levels | <p>The Environment Agency monitors groundwater levels at a network of sites across NE Area. Many sites have long-term data from the 1990s. A handful of sites have monthly dip data, but most are continuously monitored via loggers every 15 mins or hourly.</p> <p>There are approximately 75 EA level sites monitoring the Magnesian Limestone and 17 the Fell Sandstone</p> <p>Some groundwater level data is also available for the Sherwood Sandstone, Carboniferous Limestone and Coal Measures.</p> <p>Mine water level data collated by the Coal Authority can be provided, if required</p> <p>Water level and abstraction volumes from water companies is also available</p> |
| River Flows | <p>Mean daily flows for gauging stations on the Magnesian Limestone and Fell Sandstone can be supplied at the start of the project if needed</p> |
| Spot flow data | <p>Spot flow data is available for a number of locations in the Skerne catchment and Durham Coastal Streams on the Magnesian Limestone and for the Newbiggin Dean and Horncliffe Mill Burn on the Fell Sandstone</p> |
| Rainfall | <p>Daily rain gauge readings for rainfall stations present in the project area can be provided where available as a WISKI csv or Excel export.</p> |

| Data Source | Comments and Constraints |
|--|---|
| Potential Evaporation | EA- Potential Evapotranspiration (PET) gridded data is available |
| Springs | A dataset of springs identified via OS is available for the area if required |
| Borehole Logs | Borehole logs are available for all EA monitoring boreholes, all water company abstractions and all private/industrial abstractions |
| Groundwater Contours | Hand drawn and Surfer derived contours for the Magnesian Limestone were produced in 2006 and can be provided as GIS shapefiles 'High' and 'Low' groundwater contours for the Magnesian Limestone were produced in 2020/21 and can be provided as GIS shapefiles |
| Groundwater Quality Data | Groundwater quality data collected from the Environment Agency's quality network could also be compiled for the project for conceptual model works where required. |
| Geographical Information Systems (GIS) Datasets | In order to aid the conceptual model update a number of datasets can be compiled such as: <ul style="list-style-type: none"> • Bedrock, Superficial and Linear geological maps • Land use datasets (Land Cover Map [LCM] for various years) • Soils data (National Soil Resources Institute [NSRI]) • BGS Superficial Thickness |
| AWS Skerne Groundwater Model | Access to Anglian Water's numerical groundwater model (2021/22) can be arranged, covering their Hartlepool Water sources in the southern extent of the Magnesian Limestone in NE Area, within the Skerne catchment |
| NWL Sunderland Groundwater Model | Access to Northumbrian Water's numerical groundwater model can be arranged, covering their Sunderland sources in the northern extent of the Magnesian Limestone in NE Area, within the Wear catchment Technical reports for both models are available and can be supplied |
| Technical Reports | Copies of numerous technical reports can be provided, recent reports will need to be reviewed and summarised as part of the project: Magnesian Limestone <ul style="list-style-type: none"> • Hartlepool Saline Intrusion Project (JBA 2018) • Wear Magnesian Limestone WFD Saline Intrusion Test (EA 2012) |

| Data Source | Comments and Constraints |
|--------------------------------|---|
| | <ul style="list-style-type: none"> • Groundwater Quality Trend and Drinking Water Protected Area Test, Sodium and Chloride (EA 2012) • Characterising the hyporheic zones in the Skerne catchment (BGS 2019) • A hydrochemical assessment of groundwater-surface water interaction in the Woodham Burn, a Magnesian Limestone catchment in County Durham (BGS 2020) • Skerne WFD Flow Investigations Phase 1 and 2 (numerous) (EA 2010-12) • Skerne Magnesian Limestone, Skerne Catchment Assessment (JBA 2018) • Report on Magnesian Limestone Aquifer Fracture Surveys (Newcastle Uni 2006) • Hurworth Burn Reservoir Technical Note (JBA 2018) • River Skerne Ecology Report (EA 2020) • Preliminary estimates of recharge and river-aquifer interaction in the South of Butterknowle Fault area (ESI 2007) • Revised geological maps of Darlington based on new borehole information: explanation and description (BGS 2000) • Hopper House Pumping Test (EA and AWS 2011) • Mine Water Contamination of the Permian Aquifer South of the Butterknowle Fault (WYG 2006) • Analysis of mine water plume data (WYG 2007) • NWL Stonygate nitrate investigation (NWL 2022) • NWL saline intrusion investigation (NWL 2022) <p>Fell Sandstone</p> <ul style="list-style-type: none"> • Geological characterisation and cross-section study of the Fell Sandstone Formation in the Berwick-upon-Tweed area, Northumberland (BGS 2019) • Fell Sandstone, Northumbria Data analysis and groundwater modelling (BGS 2018) • Fell Sandstone groundwater modelling: Phase 2 (BGS 2020) • NWL Fell Sandstone sustainability investigation (NWL 2022) |
| Source Protection Zones | <p>GIS shapefile of existing EA SPZs</p> <p>Paper files detailing original SPZ designation process, calculations and decisions (only one copy so may need to review at EA Tyneside House, Newcastle office)</p> <p>Summary, initial drawings and designation document for Morpeth SPZ</p> <p>Manual for the production of Groundwater Source Protection Zones (EA 2019)</p> |

2.0 Pricing and Payment Strategy

The pricing strategy for this project will be fixed price. The dates of the payment milestones will be established in the tender process and by the programme of works submitted by the successful bidder.

The pricing schedule will comprise fixed priced daily inputs from named staff, to deliver each task. Payment will be made to the successful bidder after receipt and acceptance of the agreed deliverables by the Environment Agency Project Manager.

2.1 Project Management and Governance

Project Management Requirements:

- Provide monthly spend forecast detailing work completed, matched against budget.
- Share updated risk register when changes are applied

Governance/Meeting Requirements:

- Monthly progress update with steering group via Teams

2.2 Skills of Personnel Required

Essential Skills and Experience:

- Hydrogeologist(s) with a minimum of 3 years work experience to undertake key technical tasks, apart from data collation and GIS work. Individuals should be qualified to at least degree standard (or equivalent) in a relevant discipline.
- GIS, experience of producing and manipulating shapefiles and figures using ArcMap and other similar packages.
- Good working knowledge and experience of North East Area aquifers from previous hydrogeology and conceptual modelling work; especially of the Permian Magnesian Limestone
- Working knowledge of EA groundwater Source Protection Zone – purpose and standard methodology
- Analysis of groundwater data– ability to interpret geological and hydrogeological data, particularly to turn large data sets into meaningful summaries of risks and issues.
- Geochemistry – a good understanding of aquifer processes, with the ability to explain the mechanisms behind geological and hydrogeological systems.
- Groundwater risk assessment – experience of interpreting and modelling groundwater risk
- Groundwater Modelling – experience of reviewing and producing conceptual and numerical groundwater models. Experience of a range of modelling packages.
- Data management – proven track record of record keeping, basic database and spreadsheet management
- Excellent verbal and written communication skills, along with a passion for problem solving and delivering outcomes and the ability to work relatively independently. Experience of writing technical reports for technical and non-technical audiences

Desirable Skills and Experience

- Chartered member of a relevant organisation
- Significant knowledge and experience of the Magnesian Limestone aquifer

- Experience and a working knowledge of the Carboniferous Coal Measures and mine water risks/impacts, the Fell Sandstone and Millstone Grit aquifers
- Experience of producing EA groundwater Source Protection Zones, including coming up with an appropriate, aquifer specific, methodology
- Working knowledge of the hyporheic zone, groundwater-surface water connectivity and saline intrusion risks
- Experience of reviewing and analysing abstraction and pump test data
- An understanding of environmental legislation relating to groundwater such as Water Framework Directive and Daughter Directive, Abstraction Licensing Regime, Environmental Protection Act and Environmental Permitting Regulations
- Dependent on technical background, a working knowledge of other software packages, for example: Surfer

2.3 Working Arrangements

Copies of all relevant documents and data required to undertake the work will be provided by the Agency's Project Manager. Direct access to Environment Agency IT systems will not be possible given the time restrictions and short duration of the contract.

Some of the original SPZ designation information is only available in paper format, within numerous ring binders. We would prefer these to be reviewed in person at our Tyneside House, Newcastle office. This office is open 9-5 pm Monday to Friday. Copies of relevant sections of the folders can be made and taken away for subsequent use.

Work can be undertaken on any day of the week, though Monday to Friday is preferred.

Communication between the Agency and consultant will be via e-mail, webex and/or MS Teams. Large documents are expected to be transferred via Sharefile or similar. The consultant will need their own access to Microsoft Office including Excel, Word and PowerPoint, ArcMap, a contouring package that can produce GIS shapefiles and ideally Surfer and a package that can create piper diagrams. There will be no direct access to the Agency's internal IT systems though files and data will be supplied as required.

SCHEDULE 3 – CHANGE CONTROL NOTE



Department
for Environment
Food & Rural Affairs

CONTRACT CHANGE NOTE

| | |
|--|--|
| Contract Change Note Number | |
| Contract Reference Number and Title | |
| Variation Title | |
| Number of Pages | |

Whereas the [Contractor] and the Authority entered into a Contract for the provision of [contract title] dated [dd/mm/yyyy] (the "Original Contract") and now wish to amend the Original Contract.

It is agreed as follows:

1. With effect from [dd/mm/yyyy] the Original Contract shall be amended as set out in this Contract Change Note:

| | | |
|--|---------------------------|---|
| Change Requestor / Originator | | |
| Summary of Change | | |
| Reason for Change | | |
| Revised Contract Price | Original Contract Value | £ |
| | Previous Contract Changes | £ |
| | Contract Change Note [x] | £ |
| | New Contract Value | £ |
| Revised Payment Schedule | | |
| Revised Specification (see Annex A) | | |
| Revised Contract Period | | |
| Change in Contract Manager(s) | | |
| Other Changes | | |

2. Save as herein amended all other terms and conditions of the Original Contract shall remain in full force and effect.

Execution of the Contract Change Note is carried out in accordance with EU Directive 99/93 (Community framework for electronic signatures) and the Electronic Communications Act 2000. The revised Contract is formed on the date on which both Parties communicate acceptance of its terms on the Authority's electronic contract management system ("Bravo").

SCHEDULE 4 – DATA PROTECTION

Schedule 4 – Data Protection

Definitions – the definitions in this Schedule and the Contract shall apply:

Annex 1: the Schedule of Processing, Personal Data and Data Subjects attached to this Data Protection Schedule.

Annex 2: Joint Controller Agreement (where required).

Party: a Party to this Contract.

Data Protection Impact Assessment: an assessment by the Controller of the impact of the envisaged processing on the protection of Personal Data.

Controller, Processor, Data Subject, Personal Data, Personal Data Breach, Data Protection Officer: takes the meaning given in the GDPR.

Data Loss Event: any event that results, or may result, in unauthorised access to Personal Data held by the Processor under this Contract, and/or actual or potential loss and/or destruction of Personal Data in breach of this Contract, including any Personal Data Breach.

Data Subject Request: a request made by, or on behalf of, a Data Subject in accordance with rights granted pursuant to the Data Protection Legislation to access their Personal Data.

Joint Controllers: where two or more Controllers jointly determine the purposes and means of processing.

Protective Measures: appropriate technical and organisational measures which may include: the use of pseudonyms and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the such measures adopted by it including those outlined in Annex 1 (Security).

Sub-processor: any third Party appointed to process Personal Data on behalf of the Processor related to this Contract.

1. DATA PROTECTION

- 1.1 The Parties acknowledge that for the purposes of the Data Protection Legislation, the Agency is the Controller and the Contractor is the Processor unless otherwise specified in Annex 1. The only processing that the Processor is authorised to do is listed in Annex 1 by the Controller and may not be determined by the Processor.
- 1.2 The Processor shall notify the Controller immediately if it considers that any of the Controller's instructions infringe the Data Protection Legislation.
- 1.3 The Processor shall provide all reasonable assistance to the Controller in the preparation of any Data Protection Impact Assessment prior to commencing any processing. Such assistance may, at the discretion of the Controller, include:

- (a) a systematic description of the envisaged processing operations and the purpose of the processing;

- (b) an assessment of the necessity and proportionality of the processing operations in relation to the Services;
- (c) an assessment of the risks to the rights and freedoms of Data Subjects; and
- (d) the measures envisaged to address the risks, including safeguards, security measures and mechanisms to ensure the protection of Personal Data.

1.4 The Processor shall, in relation to any Personal Data processed in connection with its obligations under this Contract:

- (a) process that Personal Data only in accordance with Annex 1, unless the Processor is required to do otherwise by Law. If it is so required the Processor shall promptly notify the Controller before processing the Personal Data unless prohibited by Law;
- (b) ensure that it has in place Protective Measures, which are appropriate to protect against a Data Loss Event, which the Controller may reasonably reject (but failure to reject shall not amount to approval by the Controller of the adequacy of the Protective Measures), having taken account of the:
 - (i) nature of the data to be protected;
 - (ii) harm that might result from a Data Loss Event;
 - (iii) state of technological development; and
 - (iv) cost of implementing any measures;
- (c) ensure that :
 - (i) the Contractor Personnel do not process Personal Data except in accordance with this Contract (and in particular Annex 1);
 - (ii) it takes all reasonable steps to ensure the reliability and integrity of any Contractor Personnel who have access to the Personal Data and ensure that they:
 - (A) are aware of and comply with the Processor's duties under this clause;
 - (B) are subject to appropriate confidentiality undertakings with the Processor or any Sub-processor;
 - (C) are informed of the confidential nature of the Personal Data and do not publish, disclose or divulge any of the Personal Data to any third Party unless directed in writing to do so by the Controller or as otherwise permitted by this Contract; and
 - (D) have undergone adequate training in the use, care, protection and handling of Personal Data; and
- (d) not transfer Personal Data outside of the EU unless the prior written consent of the Controller has been obtained and the following conditions are fulfilled:
 - (i) the Controller or the Processor has provided appropriate safeguards in relation to the transfer (whether in accordance with GDPR Article 46 or LED Article 37) as determined by the Controller;

- (ii) the Data Subject has enforceable rights and effective legal remedies;
 - (iii) the Processor complies with its obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred (or, if it is not so bound, uses its best endeavours to assist the Controller in meeting its obligations); and
 - (iv) the Processor complies with any reasonable instructions notified to it in advance by the Controller with respect to the processing of the Personal Data;
- (e) at the written direction of the Controller, delete or return Personal Data (and any copies of it) to the Controller on termination of the Contract unless the Processor is required by Law to retain the Personal Data.

1.5 Subject to clause 1.6, the Processor shall notify the Controller immediately if it:

- (a) receives a Data Subject Request (or purported Data Subject Request);
- (b) receives a request to rectify, block or erase any Personal Data;
- (c) receives any other request, complaint or communication relating to either Party's obligations under the Data Protection Legislation;
- (d) receives any communication from the Information Commissioner or any other regulatory authority in connection with Personal Data processed under this Contract;
- (e) receives a request from any third Party for disclosure of Personal Data where compliance with such request is required or purported to be required by Law; or
- (f) becomes aware of a Data Loss Event.

1.6 The Processor's obligation to notify under clause 1.5 shall include the provision of further information to the Controller in phases, as details become available.

1.7 Taking into account the nature of the processing, the Processor shall provide the Controller with full assistance in relation to either Party's obligations under Data Protection Legislation and any complaint, communication or request made under clause 1.5 (and insofar as possible within the timescales reasonably required by the Controller) including by promptly providing:

- (a) the Controller with full details and copies of the complaint, communication or request;
- (b) such assistance as is reasonably requested by the Controller to enable the Controller to comply with a Data Subject Request within the relevant timescales set out in the Data Protection Legislation;
- (c) the Controller, at its request, with any Personal Data it holds in relation to a Data Subject;
- (d) assistance as requested by the Controller following any Data Loss Event;

- (e) assistance as requested by the Controller with respect to any request from the Information Commissioner's Office, or any consultation by the Controller with the Information Commissioner's Office.

1.8 The Processor shall maintain complete and accurate records and information to demonstrate its compliance with this clause. This requirement does not apply where the Processor employs fewer than 250 staff, unless:

- (a) the Controller determines that the processing is not occasional;
- (b) the Controller determines the processing includes special categories of data as referred to in Article 9(1) of the GDPR or Personal Data relating to criminal convictions and offences referred to in Article 10 of the GDPR; or
- (c) the Controller determines that the processing is likely to result in a risk to the rights and freedoms of Data Subjects.

1.9 The Processor shall allow for audits of its Data Processing activity by the Controller or the Controller's designated auditor.

1.10 Each Party shall designate its own data protection officer if required by the Data Protection Legislation.

1.11 Before allowing any Sub-processor to process any Personal Data related to this Contract, the Processor must:

- (a) notify the Controller in writing of the intended Sub-processor and processing;
- (b) obtain the written consent of the Controller;
- (c) enter into a written agreement with the Sub-processor which gives effect to the terms set out in this Schedule such that they apply to the Sub-processor; and
- (d) provide the Controller with such information regarding the Sub-processor as the Controller may reasonably require.

1.12 The Processor shall remain fully liable for all acts or omissions of any of its Sub-processors.

1.13 The Controller may, at any time on not less than 30 Working Days' notice, revise this clause by replacing it with any applicable controller to processor standard clauses or similar terms forming part of an applicable certification scheme (which shall apply when incorporated by attachment to this Contract).

1.14 The Parties agree to take account of any guidance issued by the Information Commissioner's Office. The Controller may on not less than 30 Working Days' notice to the Processor amend this Contract to ensure that it complies with any guidance issued by the Information Commissioner's Office.

1.15 Where the Parties include two or more Joint Controllers as identified in Annex 1 in accordance with GDPR Article 26, those Parties shall enter into a Joint Controller Agreement based on the terms outlined in Annex 2 in replacement of Clauses 1.1-1.14 for the Personal Data under Joint Control.

Annex 2 - Schedule of Processing, Personal Data and Data Subjects Processing, Personal Data and Data Subjects

This Schedule shall be completed by the Controller, who may take account of the view of the Processor, however the final decision as to the content of this Schedule shall be with the Controller at its absolute discretion.

1. The contact details of the Controller's Data Protection Officer are:



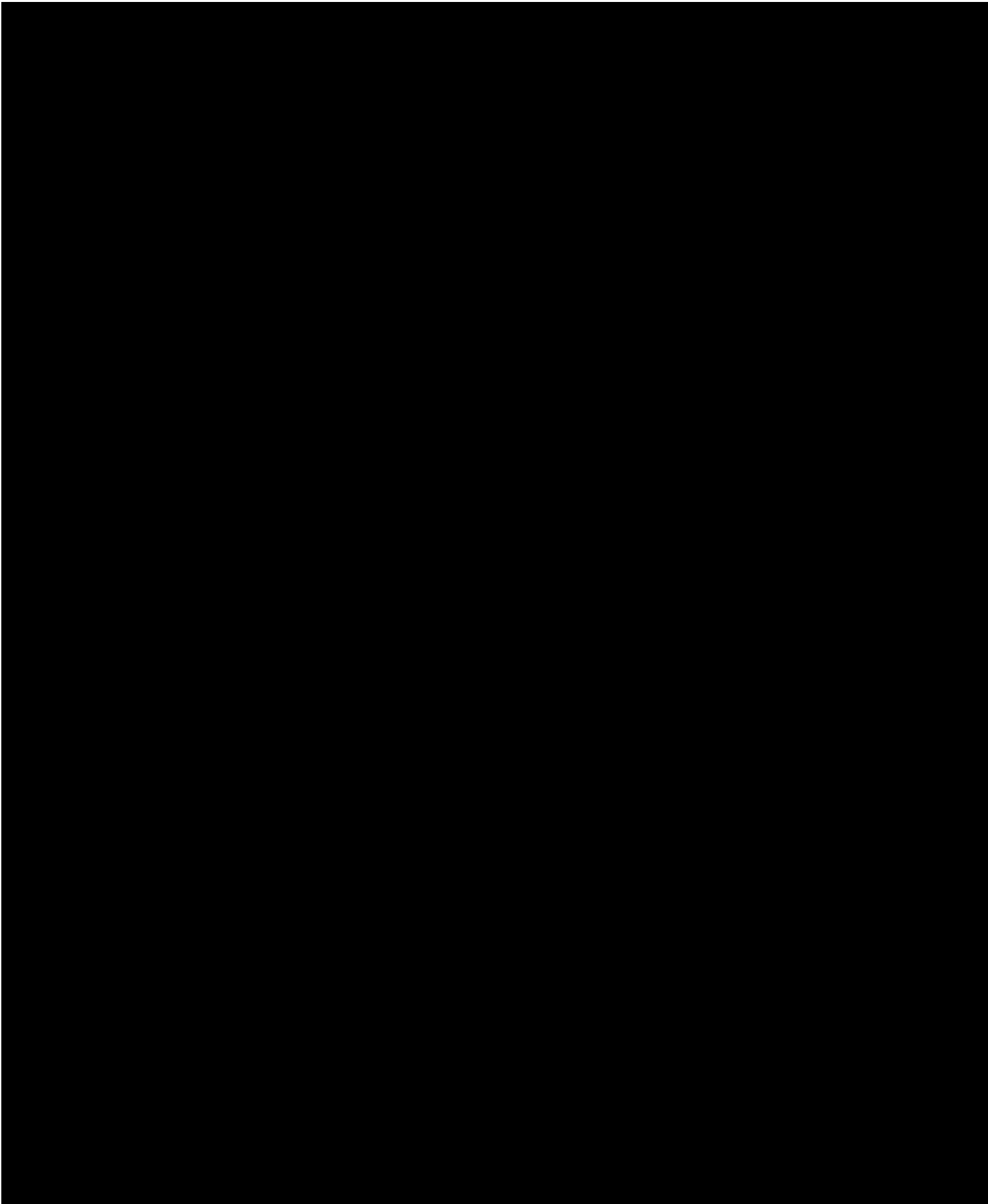
2. The contact details of the Processor's Data Protection Officer are:

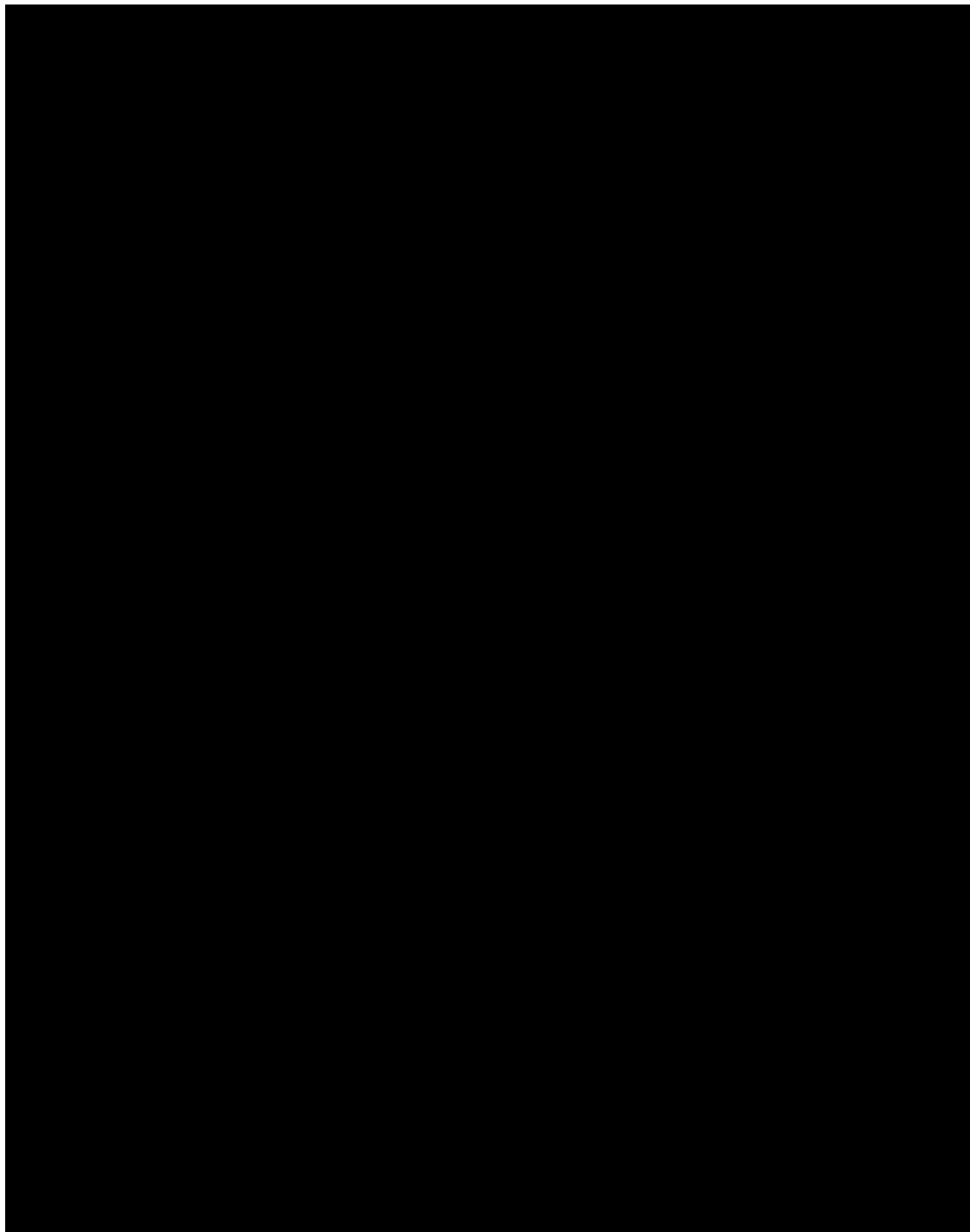
3. The Processor shall comply with any further written instructions with respect to processing by the Controller.

4. Any such further instructions shall be incorporated into this Annex 1.

| Description | Details |
|---|---|
| Identity of the Controller and Processor | The Parties acknowledge that for the purposes of the Data Protection Legislation, the Agency is the Controller and the Contractor is the Processor in accordance with Clause 1.1. |
| Subject matter of the processing | <i>No Personal Data will be collected through the activities defined in this Contract.</i> |
| Duration of the processing | <i>No Personal Data will be collected through the activities defined in this Contract.</i> |
| Nature and purposes of the processing | <i>No Personal Data will be collected through the activities defined in this Contract.</i> |
| Type of Personal Data being Processed | <i>None</i> |
| Categories of Data Subject | <i>None</i> |
| Plan for return and destruction of the data once the processing is complete UNLESS requirement under union or member state law to preserve that type of data | <i>No Personal Data will be collected through the activities defined in this Contract.</i> |

ANNEX A – BIDDERS PROPOSAL





The first part of the paper discusses the importance of the research and the objectives of the study. It then presents a literature review of the existing research on the topic. The next section describes the methodology used in the study, including the data sources and the statistical techniques employed. The results of the study are then presented, followed by a discussion of the findings and their implications. Finally, the paper concludes with a summary of the main points and suggestions for future research.

The research was conducted using a quantitative approach, with data collected from a large sample of participants. The results show a significant positive correlation between the variables studied, indicating that the hypothesis was supported. The findings have important implications for the field and suggest that further research is needed to explore the underlying mechanisms.

In conclusion, the study provides valuable insights into the relationship between the variables and highlights the need for continued research in this area. The results are consistent with previous findings and offer new perspectives on the topic.

