

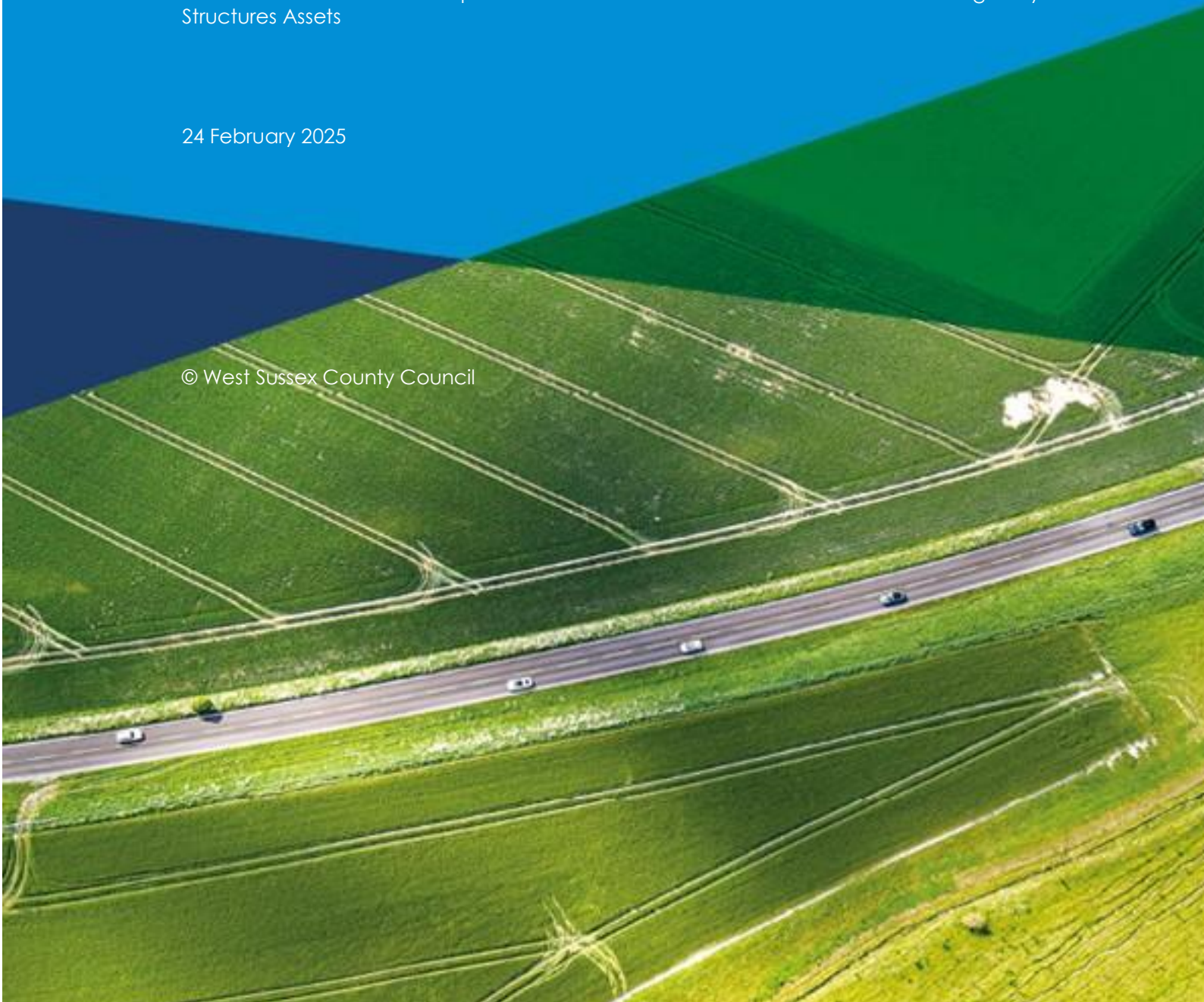
Document 02

CLIENT REQUIREMENTS

Provision of Underwater Inspections and Services for the Maintenance of Highway Structures Assets

24 February 2025

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DOCUMENT 02 – CLIENTS REQUIREMENTS
West Sussex County Council

**Provision of Underwater Inspections and Services
for the Maintenance of Highway Structures Assets**

1. BACKGROUND AND SCOPE

- 1.1 Under the provisions of the Highways Act 1981, the County Council (the **Client**) has a statutory obligation to ensure the highway is maintained so that it is "Fit for purpose" and "Safe for use".
- 1.2 The Specification referred to in the Tender shall be this Clients Requirements supplemented by the 'Specification for Highway Works'.
- 1.3 The Client is responsible for the management of 122 structures that require an underwater inspection as part of the Client's maintenance inspection programme. For details, please refer to the Cost Model document.
- 1.4 The key liabilities associated with these sites relates to the requirement to inspect all elements within touching distance at a period no greater than six years.
- 1.5 The list of Structures with Eastings and Northings split by year of inspection is detailed in Cost Model document.

2. BRIEF DESCRIPTION OF THE SERVICES

- 2.1 The Contractor will be responsible for carrying out the Client' underwater inspections and, when instructed, undertake repairs of the structures as listed within Cost Model document, and in accordance with the requirements of CS450.
- 2.2 The Contractor is to provide the service for 6 years commencing April 2025 and expiring 31 March 2031.
- 2.3 The Contractor may also be responsible for carrying out repairs identified from the inspections and this work will be instructed by the Client issuing a task order with the scope clearly defined.
- 2.4 The Contractor will be responsible for undertaking post-flood underwater inspections as instructed by the Client issuing a task order with the scope clearly defined.
- 2.5 The Contractor will be required to provide photographic records of the inspection and issue these to the client, with copies of the images in JPEG format. The Contractor will also be required to provide recordings any videos taken during the inspection. All photographic and video records shall comply with the requirements of CS450.
- 2.6 The Contractor will be required to provide all temporary pedestrian and vehicular traffic management to undertake the works.
- 2.7 Other underwater services will be required, as instructed by the Client, including but not limited to: Flap valve inspection and maintenance, (ii) reservoir vegetation clearance, and (iii) confined space inspections.

3. SERVICE PROVISION

- 3.1 The Contractor is required for the Contract Period to provide the Services at the structures as listed in Cost Model document.
- 3.2 Where no other specification is laid down in the Contract and where an appropriate Standard Specification or Standard Code of Practice, as issued by the British Standards Institution or EEC equivalent, is current at the date of the provision of the relevant Services and is appropriate to all or any part(s) of the Services to be carried out or provided, then as a minimum, such Services shall be carried out in accordance with that Standard Specification or Standard Code of Practice.
- 3.3 The Contractor is expected to provide the Services in accordance with, and having regard to, all relevant current Laws, including but not limited to:
- Health and Safety at Work etc. Act 1974
 - Diving at Work Regulations 1997
 - The Environmental Protection Act 1990
 - The Confined Spaces Regulations 1997
 - Construction (Design and Management) Regulations 2015 - CDM
 - The Dangerous Substances and Explosive Atmosphere Regulations 2002 (DSEAR)
- 3.4 The Contractor shall have comprehensive Approved Method Statements detailing its operational proposals for providing the Services.

4. DETAILED SERVICE REQUIREMENTS

- 4.1 For frequencies and other details of the structures to be inspected see Cost Model document.
- 4.2 Subject to paragraph 4.4, by no later than ten (10) Working Days before the start of each Month, the Contractor shall provide the Client with a detailed **Programme of Services** detailing:
- 4.2.1 The services to be carried out by the Contractor in the next Month, which shall be in line with the requirements of Cost Model document.
- 4.2.2 Any proposed maintenance services/works identified following the inspection, which the Contractor believes needs to be carried out during the following Month.
- (“**Contractors Plan**”). The Client will consider the proposed plan and confirm to the Contractor within Two (2) Weeks of receipt whether it is acceptable to the Client. The parties will work collaboratively to agree any changes to the Programme of Services required by the Client. The Client will monitor the Contractor’s implementation against the Programme of Services during the regular Contract monitoring and review meetings and by reviewing all of the Service Record Sheets and invoices produced by the Contractor, which should accord with the relevant agreed Programme of Services.
- 4.3 For the avoidance of doubt, no element of the Services shall be carried out by the Contractor, unless such Services have been agreed by the Client.

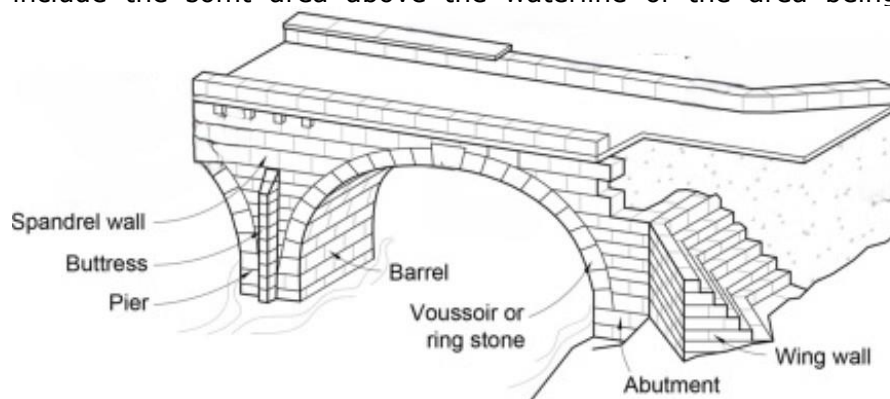
4.4 Following the Commencement Date, the Contractor shall be permitted a mobilisation period during which it shall develop, agree and adopt pro-forma documents for the Programme of Services and attend formal site inductions with the Client ("the Mobilisation Period"). The Mobilisation Period shall be completed no later than three (3) Months following the Commencement Date, however the Mobilisation Period may be much shorter than this. As soon as the pro-forma documents are agreed by the parties they shall be formally adopted by the Contractor, and as soon as the Contractor has attended a site induction, the relevant site inspection shall be formalised by the Contractor. During the Mobilisation Period the Contractor shall carry out the Services in accordance with this document and Cost Model document, but, for the avoidance of doubt, the Contractor shall not be required to produce the Programme of Services, until such a time as they have been formally adopted by the Client and the Contractor.

4.5 The following information provides details of the minimum tasks required for each element of the Services, which the Contractor shall carry out.

4.6 Underwater Inspections of Highway Structures

4.6.1 The structures to be inspected (see associated Note 1 and 2 below) are identified in Cost Model document, along with the required inspection year. The Contractor will be responsible for delivering the following aspects: -

1. Identifying scour and shoaling.
2. Determine if undermining of structural foundations has occurred.
3. Recording underwater structural conditions and defects, such as joints, cracks, fractures, damage, spalling, erosion, etc. This will also include above water structural conditions and defects where the element is above the area being inspected underwater. For example - For a multiple arch bridge this would include the soffit area above the waterline of the area being inspected.



4. Contacting landowners / Environment Agency to seek permission to access land necessary for undertaking the works.
5. Taking principal measurements, to enable structural assessment of the structure, and crack width measurements.
6. Taking digital photos of all defects elevations etc. as required and supplied to WSCC Site Engineer within one day of inspection.

Note 1. CS 450 (Section 5 - Records of maintenance Inspections), provides a clear list of the information that needs to be collected for the inspection.

Note 2. The guidance given in Appendix L of the Management of Highway Structures (A Code of Practice [ACoP]), shall be considered where relevant to each inspection.

- 4.6.2 At the time of each inspection, the Contractor shall give a detailed verbal report of any defects, indicating scale and position, to the WSCC Site Engineer who will be in attendance to record the information. For the avoidance of doubt, Inspection records shall be checked and uploaded onto the Client's asset information management system by the WSCC Site Engineer.
- 4.6.3 For each structure the Contractor shall measure, in addition to defects, crack size (using crack width scale where possible), location and chainage, the dimensions of the structure span at each end of the structure, the overall width and, if applicable, the arch rise at mid span and quarter points. Records will be provided to the WSCC Site Engineer in attendance.
- 4.6.4 If required by the WSCC Site Engineer, a written report with sketches, shall be sent to the Client within two (2) weeks of the site visit. In situations involving emergency works, the submission of reports and sketches will be sent within 24 hours or as agreed with the WSCC Site Engineer.
- 4.6.5 Where the inspection is by manhole access (Contractor to provide own keys and be responsible for removing covers and provide a safe means of escape tripod and harness), the Contractor shall supply, erect, man and maintain warning barriers, to guard against third party accidental entry into opened manholes.

Note, any works within or by access via manhole chambers, shall comply with the Confined Spaces Regulations 1997

- 4.6.6 All diving works shall be in accordance with current revisions of the Diving Operations at Work Regulations (1997) and the Confined Spaces Regulations (1997) and associated Approved Code of Practices (ACOP).
- 4.6.7 A generic Diving Project Plan shall be drafted for a typical structure/bridge prior to carrying out the inspections and be available on site for reference by the WSCC Site Engineer in attendance. This shall include a clear description of relevant Operational and Emergency Procedures. A site-specific Diving Project Plan will be required where the site conditions and environment are different to the generic Diving Project Plan, and submitted as an electronic copy to the Client, at least one (1) week prior to the inspection, for reference.

Note, Diving Project Plans shall be in accordance with Diving at Work Regulations 1997.

- 4.6.8 For structures sited over tidal water the inspection shall only be carried out during low tide and the Lead Diver shall assess the conditions at each location to determine a suitable time and date (when tides are low) for safe duration of inspection.

4.7 **Maintenance Works Method Statement and Consents**

- 4.7.1 Permissions from the Client and relevant bodies shall be obtained before any works are undertaken. Where the maintenance works affects a main River, the Contractor shall be required to prepare risk assessments and method statements and seek approval for the works from the Client and Environment Agency. Similarly, for works in other water courses the Contractor shall obtain Client and Ordinary Watercourses Consent. No works shall be started until such approval/consents have been obtained.
- 4.7.2 Copies of the existing structure records will be provided to the successful bidder from the commencement of the contract.
- 4.7.3 HSE Leptospirosis cards shall be carried by all divers and be available for inspection on site.

- 4.7.4 For structures requiring boat inspections the Contractor shall provide the boat and all safety equipment etc. needed for the inspection. For structures sited over tidal water the inspection shall only be carried out during high tide and the Lead Diver shall assess the conditions at each location to determine a suitable time and date (when tides are suitable) for safe duration of inspection. The Contractor shall be responsible for obtaining all permits as required from the relevant bodies. (e.g., the Harbour Master etc.)

4.8 Programme

- 4.8.1 The programme requirement for inspections is detailed within Cost Model document.
- 4.8.2 The inspections are to be carried out continuously, so far as possible, Monday to Friday inclusive. As indicated in 4.6.3, a WSCC Site Engineer will be in attendance for the inspections.
- 4.8.3 To ensure that inspections are adequate and thorough, only the structures allocated to particular days in the Contractor's schedule shall be inspected in any one day. If for any reason a structure cannot be inspected, it may be added to the next day's inspection with the agreement of the Client. If this is not possible (e.g., tidal water) then any un-inspected structures shall be undertaken at the end of the inspection cycle with the agreement of the Client. The Contractor shall allow for at least two additional days inspections in each year of inspections in their tender for this.

5. Progress Meetings and Liaison

- 5.1 Progress meetings shall be held monthly between the Client and the Contractor. The cost of these meetings shall be included in the tender sum.
- 5.2 Details of completed inspections and / or works, shall be emailed to the Client by the Contractor, at least two working days in advance of the above meetings.
- 5.3 All meetings as requested by the Client shall take place at the West Sussex County Council offices at County Hall, Chichester, West Sussex, PO19 1RG unless specifically agreed otherwise with the Client.

6. Technical and/or Professional Ability – Professional Qualifications

- 6.1 All staff involved in providing services shall be experienced and competent to work as a diver and have relevant qualification compliant with the Diving at Work Regulations 1997 List of Approved Diving Qualifications.
- 6.2 In providing the Services a Lead Diver shall be appointed who is able demonstrate an understanding and knowledge of basic structural engineering defects for highway structures. This can be met by at least one member of the dive team holding HSE Part I and an HND / HNC or degree in Civil or Structural Engineering.
- 6.3 A CV for all divers shall be provided by the Contractor and accepted by the client before the services are undertaken.

7. Reports

- 7.1 Where the defect is extensive, i.e., deep invert scour/cracking in substructure supports etc., and is of concern to the WSCC Site Engineer, a detailed report may be requested by the Client. The report shall be a maximum of 4 A4 sides describing the severity and extent of the defect e.g., invert scour. The report shall include an A3 drawing showing the details of the defect and relevant photographs. The report shall also include a recommended repair for the defect together with a budget cost and works duration.

8. Health & Safety

- 8.1 Tenderers are requested to submit a brief outline proposal demonstrating that Health and Safety has been adequately considered within your Tender with regard to:
- Working in and around water of varying depths and flows with regard to inspecting bridge structures especially with low headroom.
 - Working in and around water of varying depths and flows with regard to inspecting bridge structures requiring full diving equipment.
 - Working in and around water of varying depths and flows with regard to inspecting bridge structures defined as being confined space structures.
 - Example Pro Forma Risk Assessment and works method statement for scour protection of a two span arch bridge over a main river for carrying out maintenance invert repair works.

9. Key Performance Indicators (KPIs)

- 9.1 The Contractor's performance pursuant to the Contract will be measured against the KPIs detailed below. The purpose of the KPIs is to ensure the Contractor meets the following criteria as a minimum in performing the Contract in accordance with the requirements of the Contract and as detailed in this Specification.

Indicator No.	Performance Indicator	Monitoring Method	Target	Under-Performance Consequence and/ or Deduction
1.	Invoicing The Contractor will submit accurate invoices in a timely manner.	The Contractor will provide the Client with an electronic invoice monthly for works completed since previous invoice, with summary information to include sites visited, description of works completed and recommendations.	No more than 1 occasions of incorrect or late invoice submitted in any rolling 12 calendar month period.	<p>If the Contractor has submitted 2 incorrect and/or late invoices in any rolling 12 calendar month period, Contractor to review and, as necessary, revise its internal invoicing procedures and provide written explanation of the changes to the Clients designated 'Contract Manager' prior to the next scheduled Contract monitoring and review meeting.</p> <p>At 3 instances of failure in any rolling 12 calendar month period, The Client will issue formal reminder of practice to Contractor.</p> <p>At 4 instances of such failure, the Client may treat the failure as a Default in accordance with the Contract.</p>

Indicator No.	Performance Indicator	Monitoring Method	Target	Under-Performance Consequence and/ or Deduction
2.	Health and Safety The Contractor to comply in full at all times with the agreed H&S practices	Pass rate of spot checks to be conducted on ad-hoc basis by the Client's Representatives RIDDOR incidents Joint Annual Review	100% 0 100%	<p>Where spot checks by the Client's Representatives highlight inappropriate practice or a RIDDOR incident occurs, Contractor to review and revise its systems and practices as appropriate and provide written details of actions (or non-action) taken as a result to the Client's Contract Manager as soon as practicable and, in any case, within 2 weeks of the notification by the Client of the inappropriate practice unless the Client's notification has specified a different time deadline for the Contractor's response.</p> <p>Where, in the Client's reasonable opinion, a practice is or continues to be inappropriate and/or a review and revision proposed by the Contractor is insufficient to remedy the inappropriate practice, the Client may require the Contractor to discuss and agree with the Client's H&S Team an acceptable practice and the Contractor shall implement that practice. If the Contractor fails to agree and/or implement an acceptable practice the Client may invoke the Contract provisions relating to Health and Safety and/or treat the failure as a Default in accordance with the Contract.</p>

Indicator No.	Performance Indicator	Monitoring Method	Target	Under-Performance Consequence and/ or Deduction
3.	<p>Communication</p> <p>i) The Contractor will provide to the Client a detailed monthly programme of site inspections for approval in accordance with the Contractors Plan</p> <p>ii) The Contractor will notify the Project Manager of all, and any complaints raised by a member of the public or other third party</p>	<p>10 working days prior to the first site visit of the monthly inspection plan and monthly thereafter the Contractor will provide to the Client the monthly inspection plan</p> <p>A written notification passed to the Project Manager setting out the complainants contact details and the substance or nature of the complaint</p>	<p>Monthly</p> <p>Within 24-hours of such complaint being made</p>	<p>At 2 instances of failure to carry out i), The Client will issue formal reminder of practice to Contractor. At 3 instances of such failure, the Client may treat the failure as a Default in accordance with the Contract.</p> <p>At 3 instances of failure to carry out ii) in any rolling 12 calendar month period, The Client will issue formal reminder of practice to Contractor. At 6 instances of such failure, the Client may treat the failure as a Default in accordance with the Contract.</p>

4.	<p>Complaints</p> <p>For the Client not to receive any substantive complaints from the general public regarding the Contractor's work practices and behaviour</p>	<p>Reports received (whether written or otherwise) from members of the general public. Any reports received by the Client to be shared with the Contractor for investigation and remedial action where appropriate</p>	<p>No more than 2 substantiated and substantive complaints in any one year (beginning 01 Apr and ending 31 Mar)</p>	<p>On receipt of any substantive complaint the Client's Contract Managers will together review the circumstances of each complaint and the Contractor will be required to implement changes to its practice (where necessary) to the reasonable satisfaction of the Client's Contract Manager.</p> <p>At 3 complaints in any one year, and for each subsequent complaint in that year (or within 1 month of the start of the subsequent year), the Contractor's Contract Manager will, in addition to the above process, formally detail (within 5 Working Days of complaint notification to the Client's Contract Manager) all complaints, their circumstances and remedial actions undertaken, and also present this at the next quarterly meeting, where the issues can be discussed and remedial action agreed to the reasonable satisfaction of the Client's Contract Manager.</p> <p>Where more than one complaint arises in any one year (or within 1 month of the start of the subsequent year) in circumstances the Client's Contract Manager deems similar to another complaint, the Client may treat the failure as a Default in accordance with the Contract and a Default Notice and/or Remediation Notice may be served at the discretion of the Client's Contract Manager in accordance with the provisions of the Contract.</p>
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Indicator No.	Performance Indicator	Monitoring Method	Target	Under-Performance Consequence and/ or Deduction
5.	<p>Standards Timely delivery by the Contractor of all works in the programme.</p> <p>Compliant delivery by the Contractor of all works to the specification.</p>	<p>The Contractor will provide to the Client all site visit Record Sheets</p> <p>The Client may request up to two unannounced audits annually by a qualified 3rd party, of any site within 1-month of a service visit by the Contractor</p>	<p>Supplied within 14 days</p> <p>100%</p>	<p>At 3 instances of failure to deliver the site visit Record Sheets, Contractor to review and revise internal procedures as necessary. The review, proposed actions/changes and time frame for such actions/changes to be advised in writing to the Client's Contract Manager within 5 Working Days of notification.</p> <p>At 1 instance of audit failure to deliver the Works to specification, Contractor to review and revise internal procedures, as necessary, including (but not limited to) increased supervision and re-training of staff. The review, proposed actions/changes and time frame for such actions/changes to be advised in writing to the Client's Contract Manager within 5 Working Days of notification of the fourteenth failed/inadequate Works.</p> <p>At 2 instances of audit failure within any rolling 12 calendar month period, The Client will issue formal reminder of practice to Contractor.</p> <p>At 3 instances of such failure, the Client may treat the failure as a Default in accordance with the Contract.</p>
6.	<p>Maintenance Inspection Programme Timely delivery of the inspections and works</p>	Monitored against the agreed programme	100%	At the instance of failing to complete 10% of the annual programme (based on the past 12 month rolling programme) Contractor to review, revise and provide action plan to recover missed inspections within two weeks

Indicator No.	Performance Indicator	Monitoring Method	Target	Under-Performance Consequence and/ or Deduction
				<p>of the monthly progress meeting where instance first determined.</p> <p>At the instance of failing to complete 25% of the annual programme (based on the past 12 month rolling programme) Client will issue formal reminder of practice to Contractor. Contractor to review, revise and provide action plan to recover missed inspections within two weeks of the monthly progress meeting where instance first determined.</p> <p>At the instance of failing to complete 50% of the annual programme (based on the past 12 month rolling programme) Client may treat the failure as a Default in accordance with the contract. If the Client does not treat the instance as a Default in accordance with the contract, Contractor to review, revise and provide action plan to recover missed inspections within one week of the monthly progress meeting where instance first determined.</p>