Schedule 3: Call-Off Contract

PART 1 – ORDER FORM

UK Research and Innovation
Registered No. ZA333592

and

Dell Corporation Limited whose registered office is at 1st & 2nd Floor One Creechurch Place London EC3A 5AF (Registered No. **02081369**)

13/02/2025

Dear Sirs

Call-Off Contract No. DDaT24417 for the supply of Goods, Services and/or Software

1 Further to the Framework Agreement dated 1st February 2023, we wish to instruct you to supply the Goods and Services described below in accordance with the terms of the Framework Agreement, this Order Form and the Call-Off Terms and Conditions, as further set out and described in Brief attached at Annex A.

2 The particulars of this Call-Off Contract are set out below:

Item	**Description**
Order Form Reference: (Front page of Call-Off Terms and Conditions)	1 The Order Form Reference is DDaT24417 - HPC system "QUASAR", support and maintenance
Parties	**Between**: (1) **UK Research and Innovation,** company number ZA3333592 whose registered office is at Polaris House, North Star Avenue, Swindon SN2 1FF (**Customer**); and (2) **Dell Corporation Limited** company number 02081369 whose registered office is at 1st & 2nd Floor One Creechurch Place London EC3A 5AF (**Supplier**)
Call-Off KPIs (Cl. **Error! R**	

eference source not found.)

Performance Target	Key Indicator	Performance Measure
Guarantee to deliver all Goods covered under this Contract within the lead-times specified to member locations throughout the UK.	Delivery of Goods	99% of Goods delivered on time in full
Stock availability of products listed in the catalogue throughout the Term (of this Contract)	Product Availability	99% of Goods available at all times
Product reliability	Failure rate of Goods under warranty	Less than 1% of Goods provided have reported faults
Respond to all operational enquiries within four working hours.	Provision of Response	95%
Invoice accuracy.	Accuracy	95% of all invoices are submitted accurately
Invoice timeliness.	Timeliness	95% of all invoices are submitted on time
Reliability of all ordering systems utilised under this Contract including online ordering system, telephone, email.	Availability and Down Time	Ordering systems are reliable 97% of the time during the Term (of this Contract) (excluding pre-notified maintenance periods)

Charges
(Cl.1.1)

The Charge(s) for this Order is: **£3,249,993.87 excluding VAT as detailed in the Annex A- Charges and** the Milestone Payment Schedule below:

Milestone	Payment Percentage
[redacted]	

	[redacted]
Access Date (Cl.1.1)	Not Applicable
Adjustments to the Charges (Cl.1.1)	The Charge(s) are fixed for the duration of this Call-Off Contract.
Contract End Date (Cl. **Error! R eference source not found.**)	Contract end date for Goods delivery: Monday , 31st March 2025
Customer Liability Cap (Cl. 1.1)	100% of the Order value, means the amount of **£3,249,993.87 excluding VAT**
Delivery Date(s) (Cl. **Error! R eference source not found.**)	The Supplier shall deliver the Goods by the following date(s): st [redacted]
Defects Rectification Period (Cl. **Error! R eference source not found.**)	In respect of the Goods to be supplied under this Call-Off Contract, the period ending 12 (twelve) months after the Contract End Date, or in respect of any Goods that are repaired or replaced under Clause 6.6 of the Call-Off Terms and Conditions, the period ending 12 (twelve) months after replacement of such Goods.
Goods (Cl. **Error! R**	The Goods to be supplied under this Call-Off Contract are as follows:

eference source not found.)	[redacted]
Installation Date (Cl. **Error! R eference source not found.**)	[redacted] ***As detailed in the Annex A-*** [redacted]
Premises (Cl. **Error! R eference source not found.**)	The Goods are to be delivered to and/or the Services are to be supplied at: [redacted] R121 NQCC Rutherford Appleton Laboratory Didcot OX11 0QX
Services (Cl. **Error! R eference source not found.**)	The Services (where applicable) to be supplied under this Call-Off Contract are as follows: **Maintenance and Support** [redacted]
Software (Cl. **Error! R eference source not found.**)	The Software to be supplied under this Call-Off Contract is as follows: [redacted]
Software Specification (Cl. **Error! R eference source not found.**)	The Software shall meet the following technical/functional specification: [redacted]
Software Warranty Period (Cl. **Error! R**	Not Applicable

eference source not found.)	
Services Commencement Date (Cl. **Error! R eference source not found.**)	Supply of the Services is to commence on: Supply of the Services is to commence immediately upon delivery and installation of the goods.
Services End Date (Cl. **Error! R eference source not found.**)	Supply of the Services is to end by the end of the 3rd Year after the Delivery and Installation date of the goods. The Customer and the Supplier will keep a clear record of the delivery and the installation date for the above purpose. The Contract can be extended 2 (two) additional periods of 12 months each subject to budget availability The overall contract term could therefore be up to 5 years. Should the CA utilise any of the optional extension period, the service End Date will be amended.
Supplier Liability Cap (Cl. 1.1)	As stated in the Agreement unless mutually agreed otherwise by the Customer and the Supplier (complete below) Means the amount of **£3,249,993.87 excluding VAT**
Instalments (Cl. **Error! R eference source not found.**)	The stages of payment described in Clause **Error! Reference source not found.** of the Call-Off Terms and Conditions are as detailed under the Milestone payment of the charges: Milestone | Payment Percentage [redacted]

Notices (Clause 19.3)	Any written notice provided under Clause 18 shall be sent: In the case of the Customer: To: UKRI , Polaris House, North Star Avenue, Swindon SN2 1FF Marked for the attention of: [redacted] In the case of the Supplier: To: Dell Corporation Ltd, c/o 1st & 2nd Floor, One Creechurch Place, London, EC3A 5AF, United Kingdom [redacted] Marked for the attention of: [redacted]
Data Protection Particulars (Schedule 4)	*Not applicable*

The subject matter and duration of the Processing	The parties will Process Personal Data in the context of: *The subject matter and duration of the Processing shall be in accordance with the relevant order for Goods and/or Services.*
The nature and purpose of the Processing	The Processing will be for the purposes of: Nature of Processing: *• IT support: Processor mainly processes IP-addresses, MAC-addresses or other technical IDs of IT-systems that are possibly assigned to a person. This generally happens, if necessary, by analyzing error-logs.* *• Support services: Processor personnel may come into contact with Personal Data, contingent of*

			Controller's internal policies, on the occasion of providing the customer and technical support services. This may happen by providing remote support or when entering Controller's premises to do hardware repair. In these occasions, the person incidentally may see documents, name tags, content on screens. The same may apply in cases of remote support screen sharing (e.g. via webex), if the Controller has not closed the relevant programs/software before the connection is established. *• Trace dump files: For certain products and in certain support situations a trace dump file may be analysed to assess the problem. A trace dump contains the read/write or transfer activity associated with an error. The content is generally written in OS error format and is agnostic to file types. Reconstruction of files and their potential content is not part of the analysis. It is highly unlikely that any personal information will be readable during the analysis.* *• Data storage devices: Return or refurbishing of hardware storage devices (e.g. HDDs, SSDs, etc.), all data contained will be deleted or destroyed in automated processes.* Purpose of Processing: *Personal Data will be processed for the purpose of providing warranty- and support- related and/or deployment services, as relevant and defined by the selected service levels and support options. The Agreement and the relevant service descriptions and statements of work shall apply for the specifics and possible additional services.*	

	The type of Personal Data being Processed	The Personal Data will include: • *Contact details: which may include name, address, email address, telephone, fax, other contact details, emergency contact details, associated local time zone information.* • *Customer details: which may include contact details, invoicing and credit related data.* • *IT systems and operational information: which may include personal identifiers, voice, video and data recordings, user ID and password details, computer name, email address, domain name, user names, passwords, IP address, permission data (according to job roles), account and delegate information for communication services, individual mailboxes and directories, chat communication data, software and hardware inventory, tracking information regarding patterns of software and internet usage (e.g. cookies), and information recorded for operational and/or training purposes).* • *Data subjects' email content and traffic/transmission data; online interactive and voice communications (such as blogs, chat, webcam and networking sessions); support services (incidental access may include accessing the content of email communications and data relating to the sending, routing and delivery of emails).* • *Other: Any other Personal Data submitted by Customer to Provider as Customer's Processor.*	
	The categories of Data Subjects	The Data Subjects will include: • *The data subjects are Customer's end users, employees, contractors, suppliers*	

			and other third parties relevant to the Services.	

3 This Call-Off Contract incorporates all the terms and conditions of the Framework Agreement.

4 For the avoidance of doubt where you have carried out any work prior to the date of this Call-Off Contract in any way related to the Goods and Services to be supplied under this Call-Off Contract the terms and conditions of this Call-Off Contract and the Framework Agreement shall apply in respect of such work.

5 Words and expressions which are defined in the Framework Agreement shall have the same meaning in this Call-Off Contract unless expressly defined otherwise here.

6 You must not make any amendments to the Call-Off Terms and Conditions.

7 Nothing in this Call-Off Contract shall confer or purport to confer on any third party any benefit or the right to enforce any term of this letter pursuant to the Contracts (Rights of Third Parties) Act 1999.

Please sign and return the attached copy of this Order Form to signify your acceptance of its contents;

Please also sign and return the attached two copies of the Call-Off Terms and Conditions. We will sign Call-Off Terms and Conditions and date them as agreed between ourselves and will return one of the dated copies to yourselves.

Date: 21/02/2025	Date: 21 February 2025

Annex A: Brief

1. **Specification**

Introduction

The UK's National Quantum Computing Centre (NQCC) aims at building quantum computers which will be made available to end users.
The NQCC has a requirement to provide a number of computational resources in the form of a core HPC (High Performance Computing) system, using Operating Systems Software, Networking, and Storage capability for supporting the development of Quantum Computing Hardware and Software development by NQCC developers (primarily), but also specific stakeholders.
The HPC System is called "**QUASAR**", and the requirement comprises of:

1. **HPC System**, Operating System and Software, Cabling, local Storage ("scratch") [SSD etc.]. A variety of HPC compute performance is required in the form of CPU and GPU (mixed) fat nodes focussing on large memory, high bandwidth, multi-CPU/GPU for quantum simulation workloads. A variety of GPU manufacturers are required, to allow competitive scaling and porting compatibility. At least two or more GPU manufacturers (e.g. NVIDIA, AMD, INTEL) **must** be used. The most scalable, compatible and performant collection of mixed fat nodes is required.

2. **Global Storage system** ("global") [acting as parallel filesystem, network-attached storage or object-based storage], with features which allow users working on Windows and Linux operating laptops/desktops to access the **same** files, and the ability to extend the storage partitions to cloud-based services (e.g. AWS, AZURE, GCP) for end-to-end data processing. Main storage **must** operate between the **two** NQCC facility locations (split ratio), and withstand power / network outage, and continue to maintain operations for 30-mins before re-synchronisation. The capacity of the overall storage **must** be a minimum of **two** Petabytes (usable) across both facilities.

3. **Network** (core) and switches for HPC, Storage and links for HPC node-to-node (low latency) communications. Compatibility with Fortinet Switches is preferred.

4. **Interactive Secure Linux-based Desktop** (Thin-Clients or remote desktop solution) across the two NQCC facility user locations.

5. **Maintenance and Support** (**must** be for 3-years, with on-site support, including a (minimum) 2 x Technical HW staff who are/can be put through SC clearance. The vendor staff will be working in tandem with NQCC admins.

This tender is aimed at the purchase of all FIVE parts of QUASAR, as described above, as specified in Section 6. The delivery, installation and commissioning of QUASAR **must** be **before the 31st of March 2025**, due to the limitation of current budget constraints, and the significant technology development work required, and the lead times for these specialist HPC systems to be constructed.

Introduction

Background / Aims: The UK's National Quantum Computing Centre (NQCC) aims at building quantum computers which will be made available to end users. The NQCC was established in 2020 through a UK Research and Innovation (UKRI) collaborative programme between Engineering and Physical Sciences Research Council (EPSRC) and Science and Technology Facilities Council (STFC) to address the challenges of scaling in quantum computing. One can reflect that this early vision was very much technology focused. However, increasingly the NQCC has been turning its attention to scaling not only the technology but also the user community, recognising the need for access to real quantum machines, upskilling users and developing clear and impactful use cases for quantum computing. The NQCC is pursuing three primary platforms of quantum computing, one based on superconductors, one based on trapped ions, and one based on cold atom tweezer arrays, as these are currently the most mature candidates for a quantum computing system.

Integration with current (classical) HPC technologies is essential for quantum technologies to deliver their performance throughout the quantum technology stack. [redacted]

Objectives (summary)

The NQCC has a requirement to provide several computational resources in the form of a core HPC (High Performance Computing) system, the key objectives are:

a. Provide large nodes consisting of CPU and GPU mix, which enable different users to simulate (using state-vector (SV) quantum simulation) a minimum of 35-qubits at one-time in node memory, accessible by both CPU and GPU. Local node memory **must** be at least 550GB, excluding per GPU memory (*which is to be maximised, where possible).*

b. A diversity of CPU and GPU's from **at least two** or more manufacturers (incl. NVIDIA, AMD, INTEL or other) are to be provided.

c. For throughput, a minimum of 8 x GPU (of one manufacturer type) is required within a large memory node.

d. [redacted].

g. The maintenance of all components **must** be covered for three years, with option to extend.

Further Reading References
https://www.nqcc.ac.uk/mission-and-vision/ ,
https://www.nqcc.ac.uk/what-is-quantum-computing/ ,
https://www.nqcc.ac.uk/annual-reports/

Objectives (detailed):

The NQCC has a requirement to provide several computational resources in the form of a core HPC (High Performance Computing) system, using Operating Systems Software, Networking and Storage capability for supporting the development of Quantum Computing Hardware and

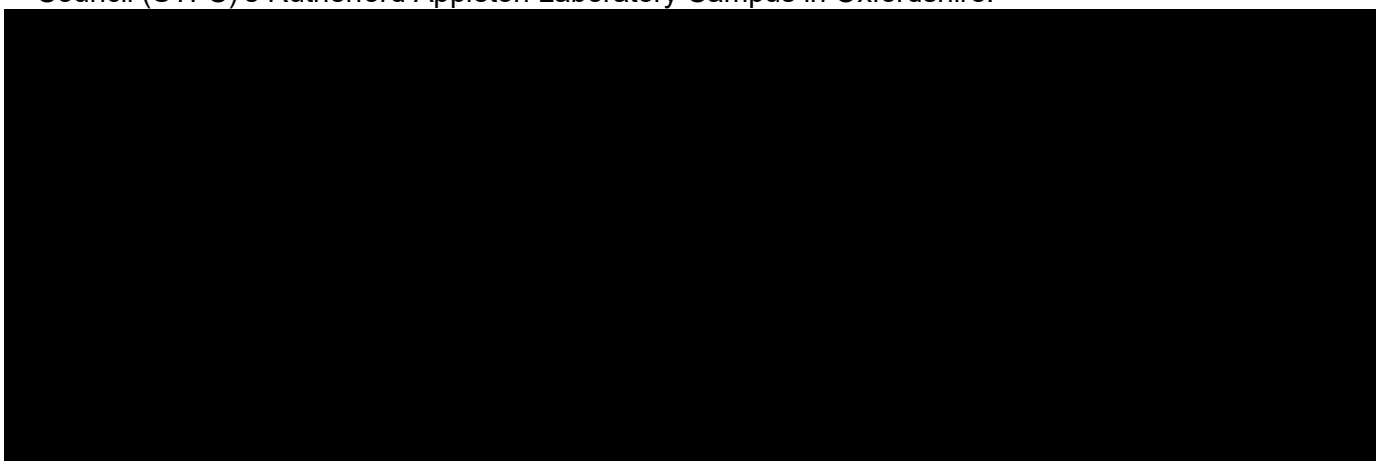
Background to the Requirements

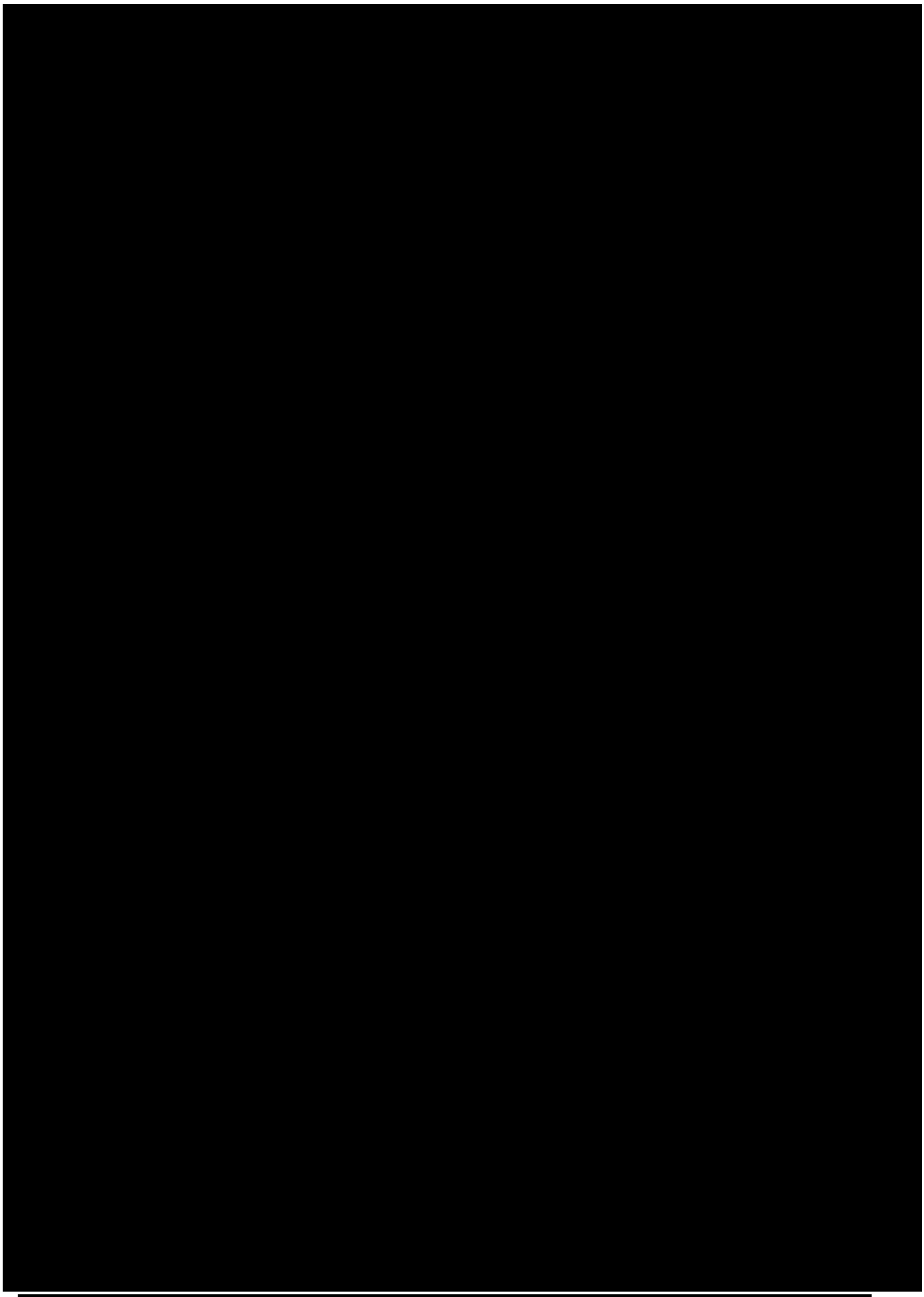
The NQCC seeks to enhance the UK's global leadership in quantum computing, to help translate UK research strengths into innovation, and to enable the creation of the first generation of quantum computers, helping to build a resilient future economy.
The NQCC is the first UKRI Centre funded directly by UKRI and is dedicated to accelerating the development of quantum computing by addressing the challenges of scaling – technological and user adoption. The NQCC delivers quantum computing for the UK National Quantum Technologies Programme (NQTP), which has already established the UK as a quantum

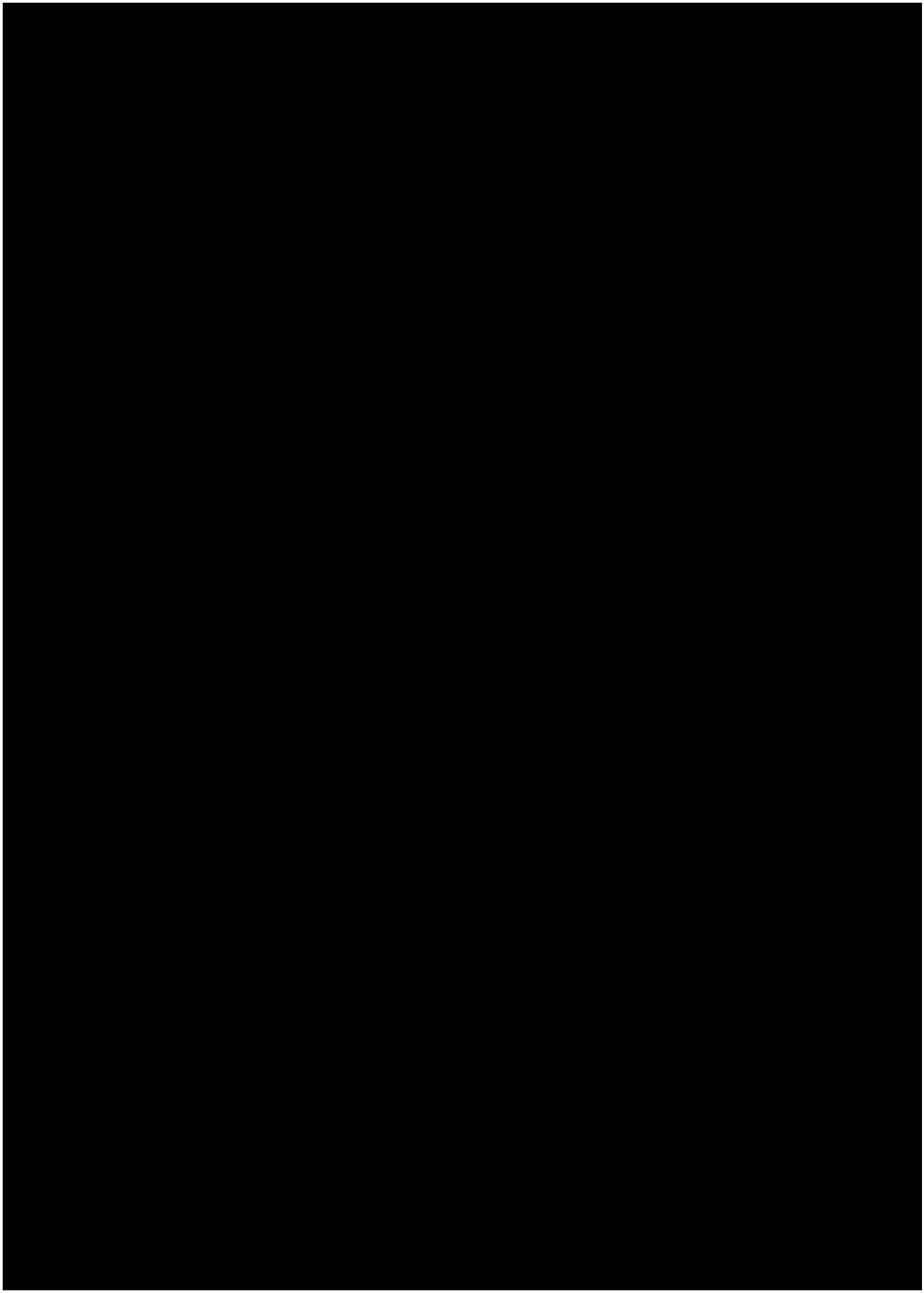
technology global leader. Through its combined £2.5bn of public and private sector investment over ten years, the programme will develop and deliver quantum technologies across the areas of sensing, timing, imaging, communications, and computing.

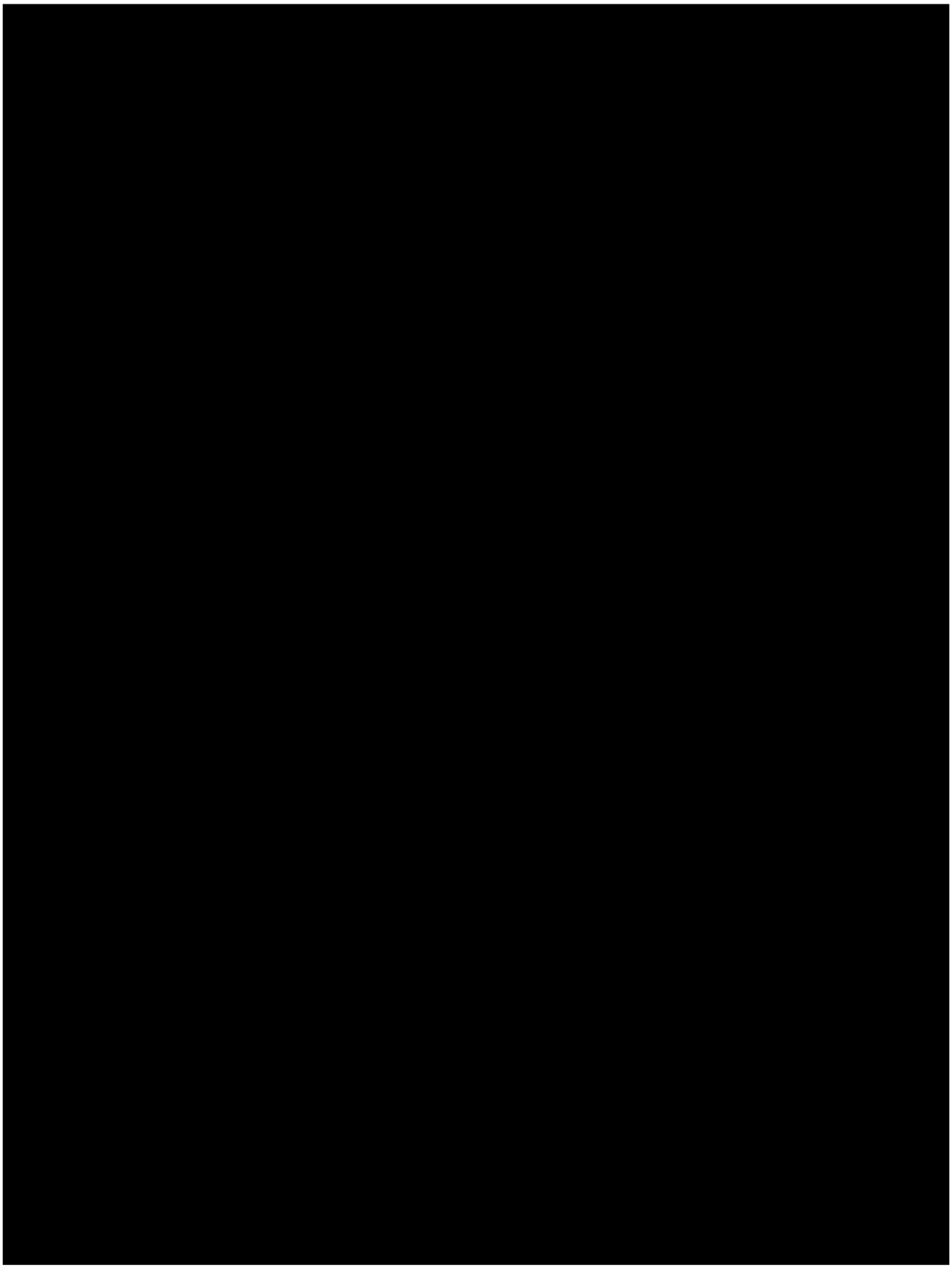
The NQCC is pursuing three primary platforms of quantum computing, one based on superconductors, one based on trapped ions, and one based on cold atom tweezer arrays, as these are currently the most mature candidates for a quantum computing system.

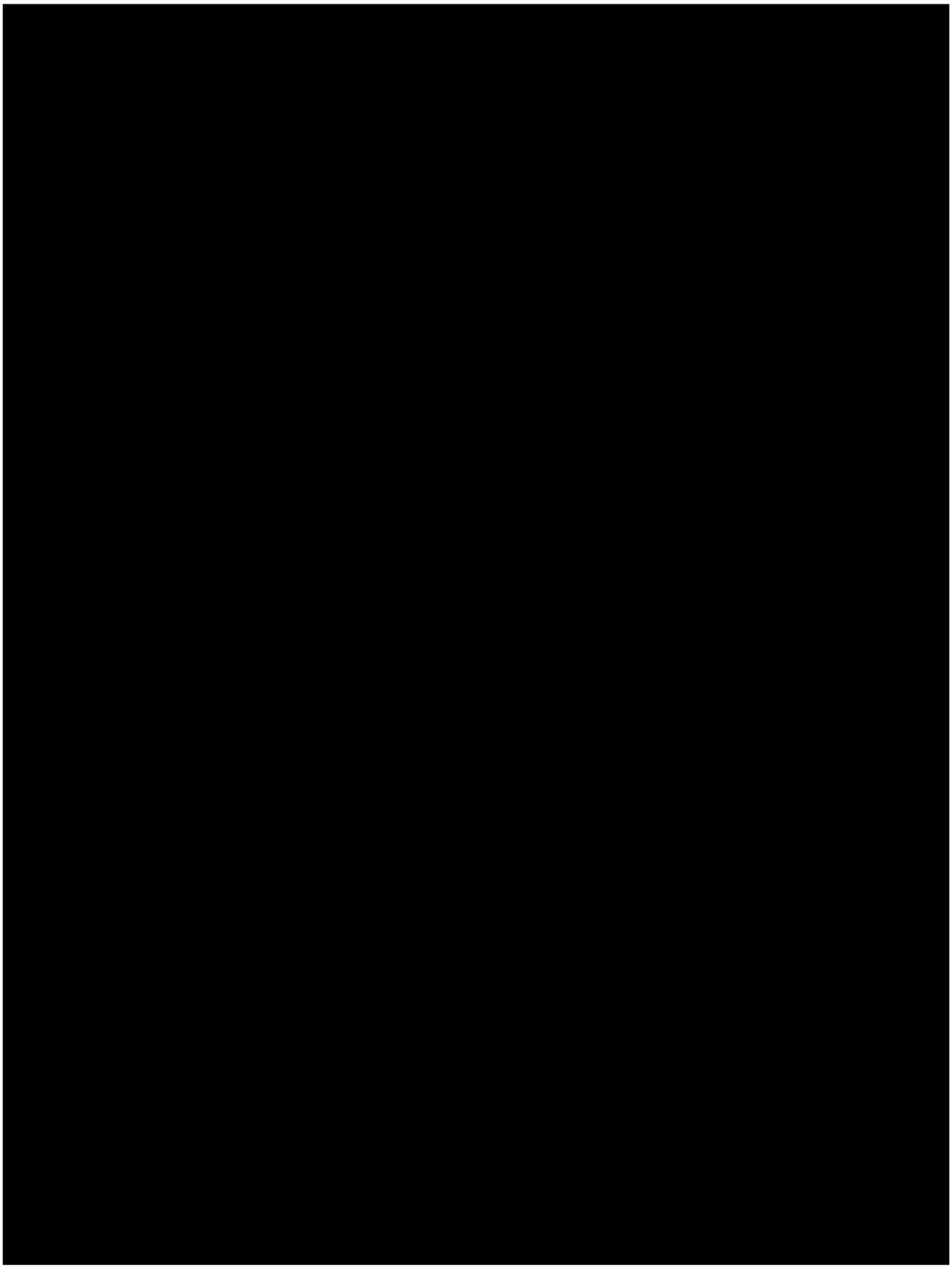
The centre is headquartered in a purpose-built facility at the Science and Technology Facilities Council (STFC)'s Rutherford Appleton Laboratory Campus in Oxfordshire.

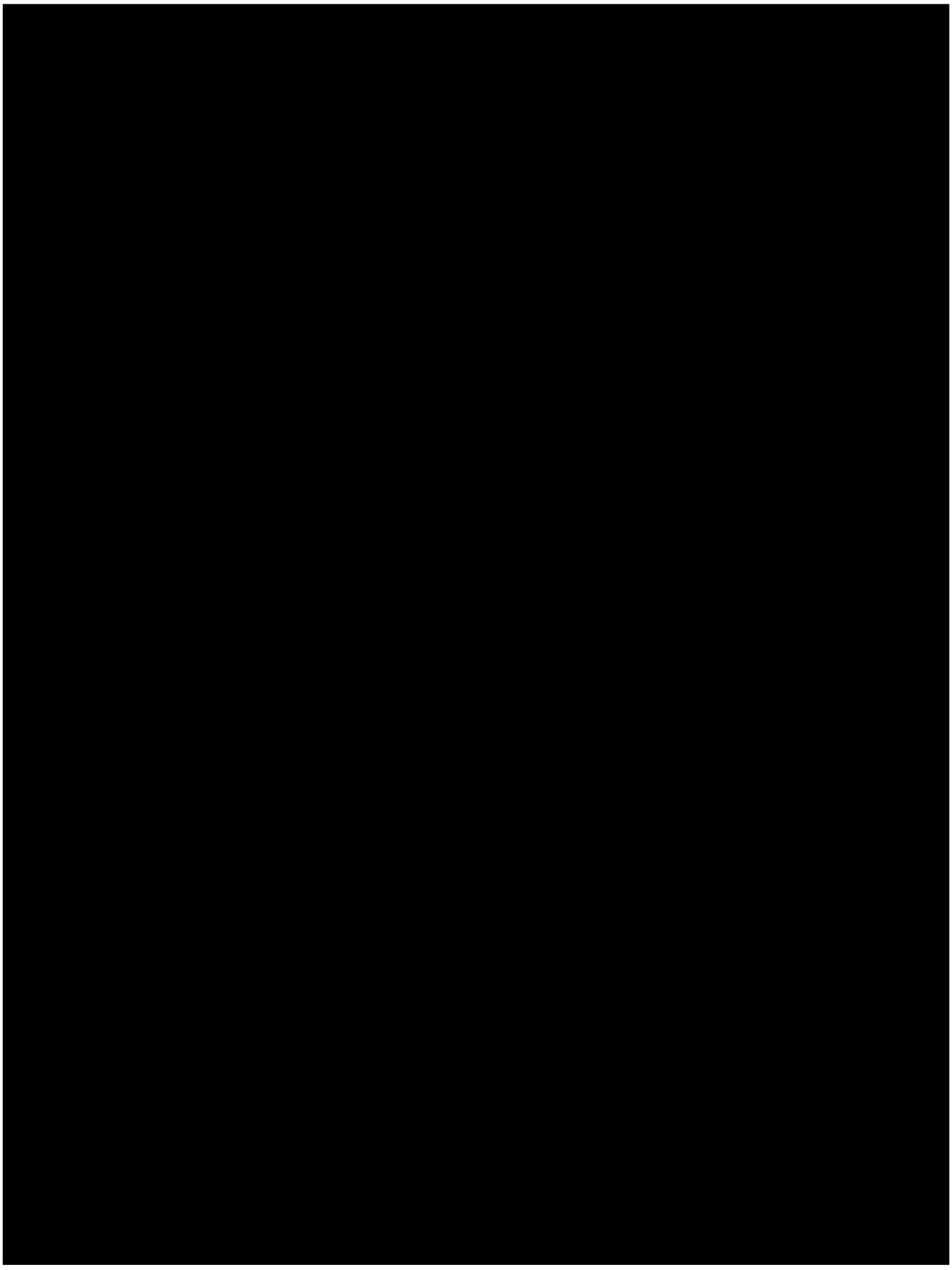


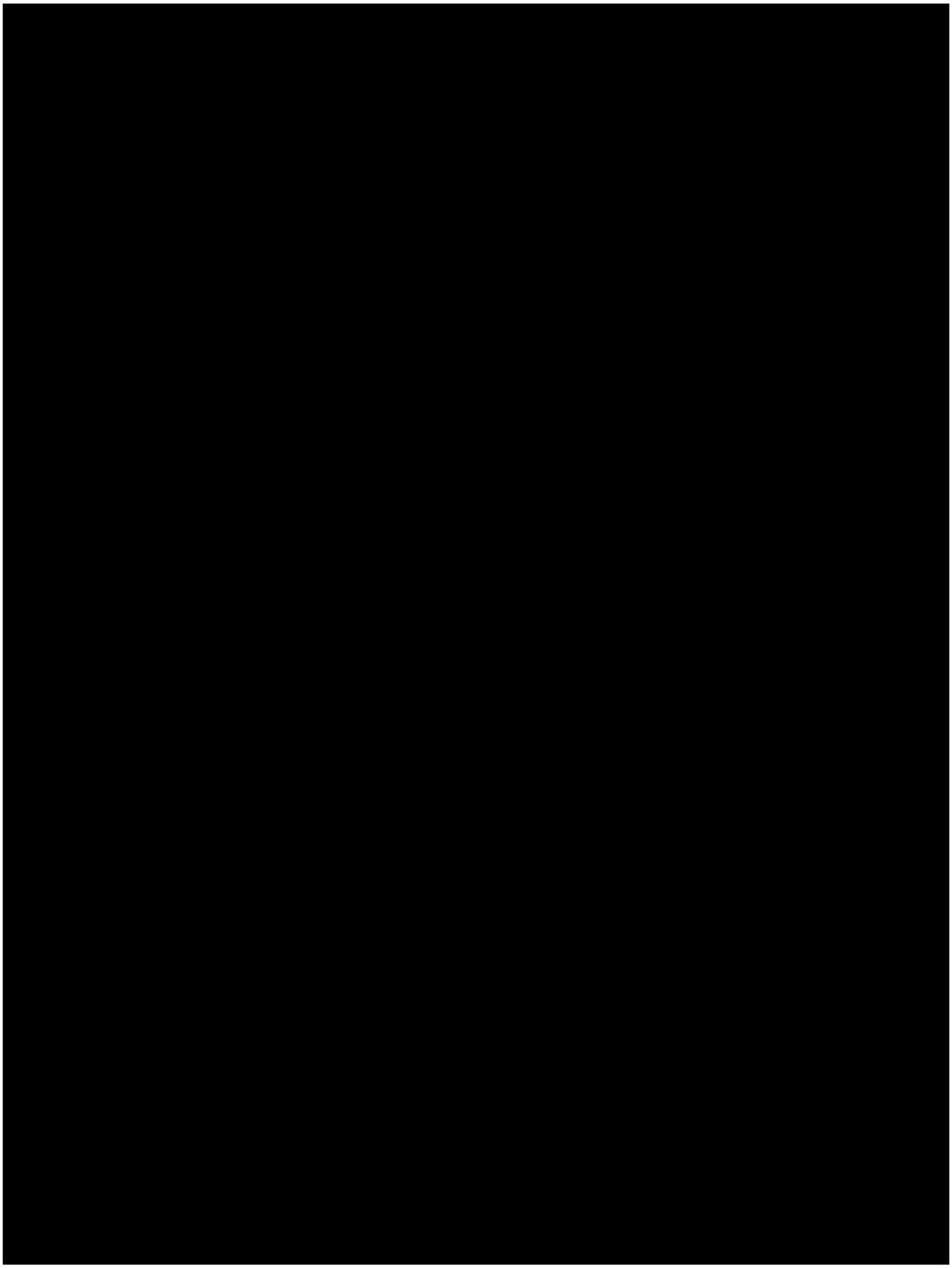


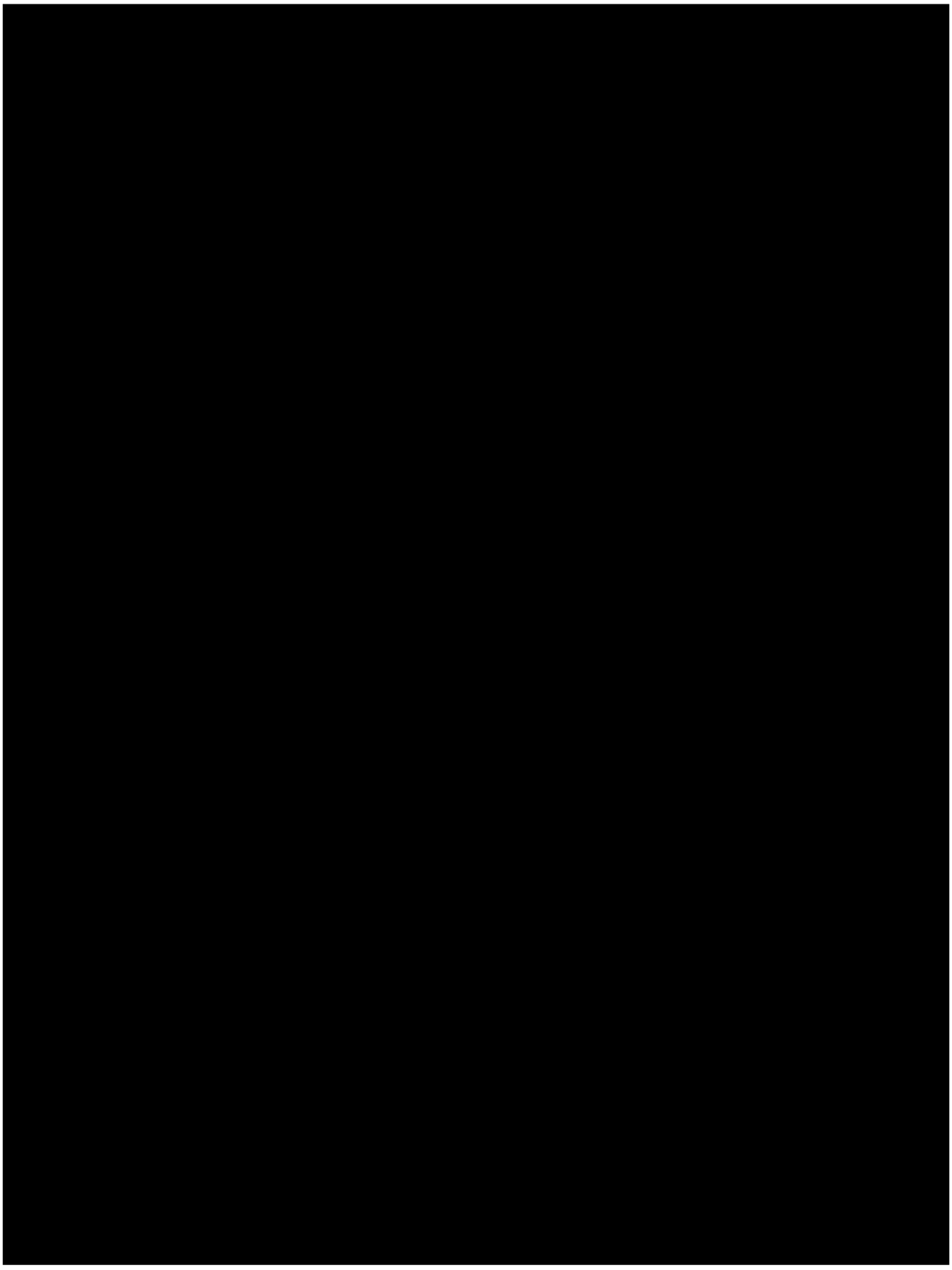


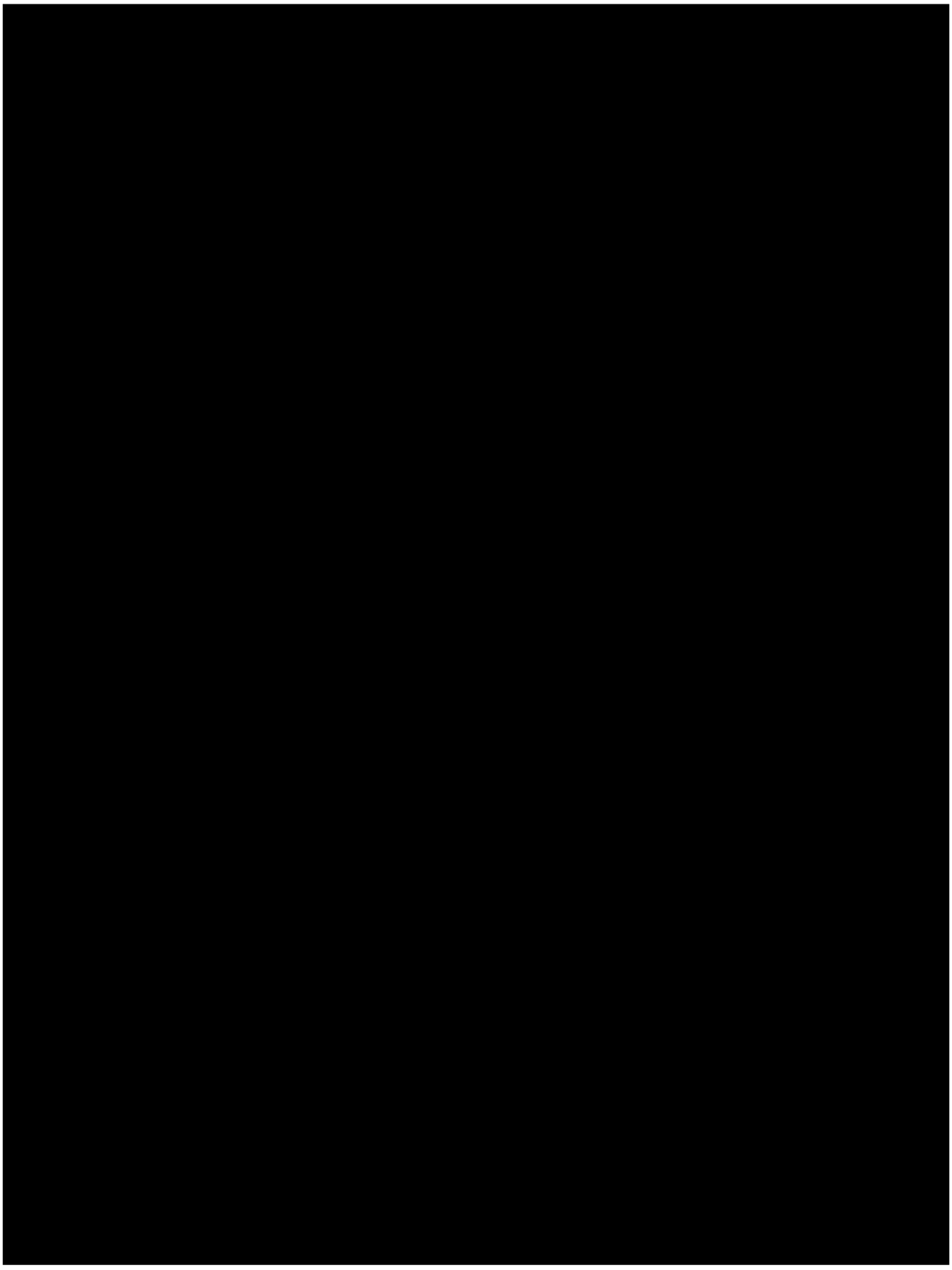


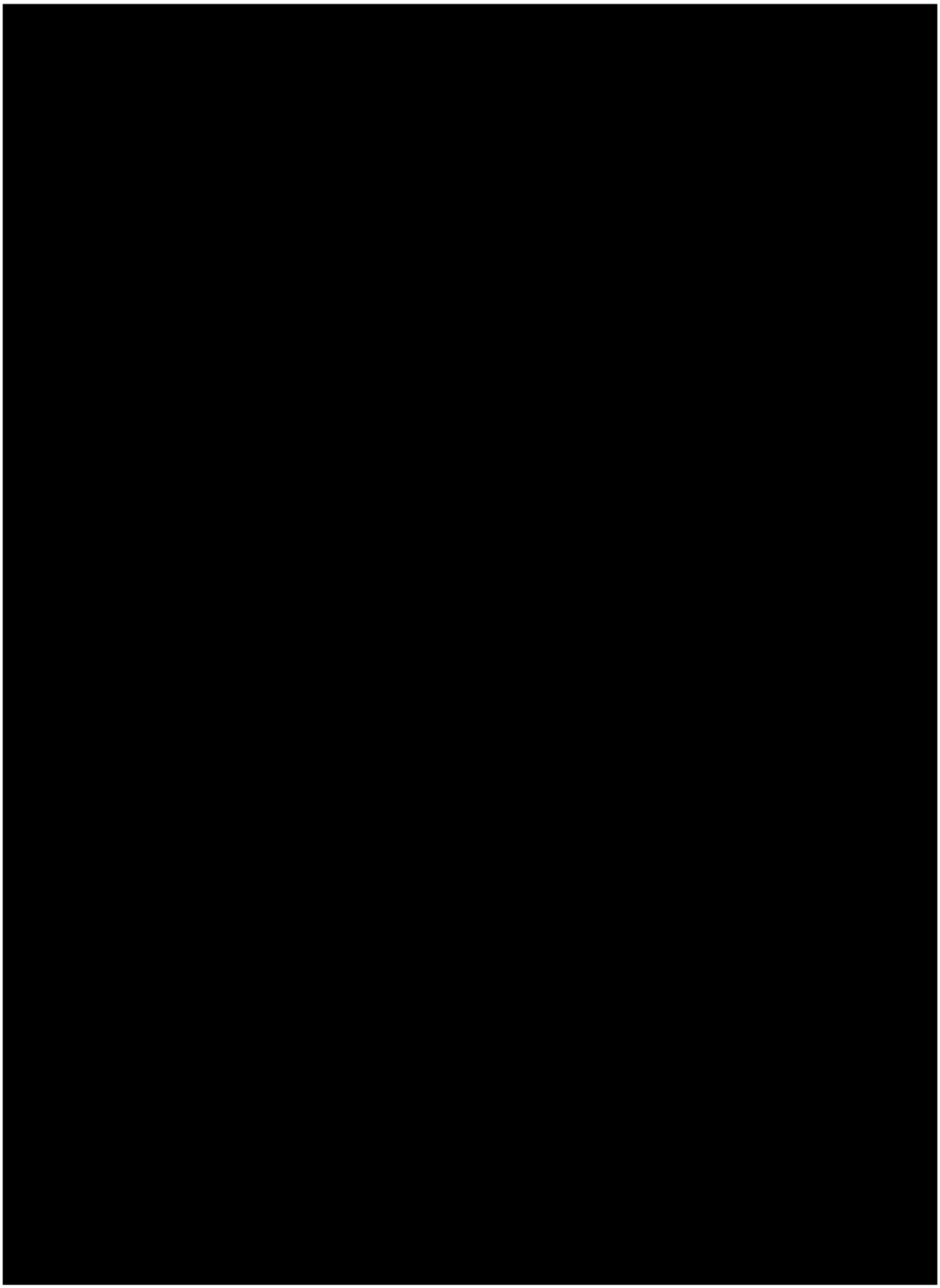












Contract term

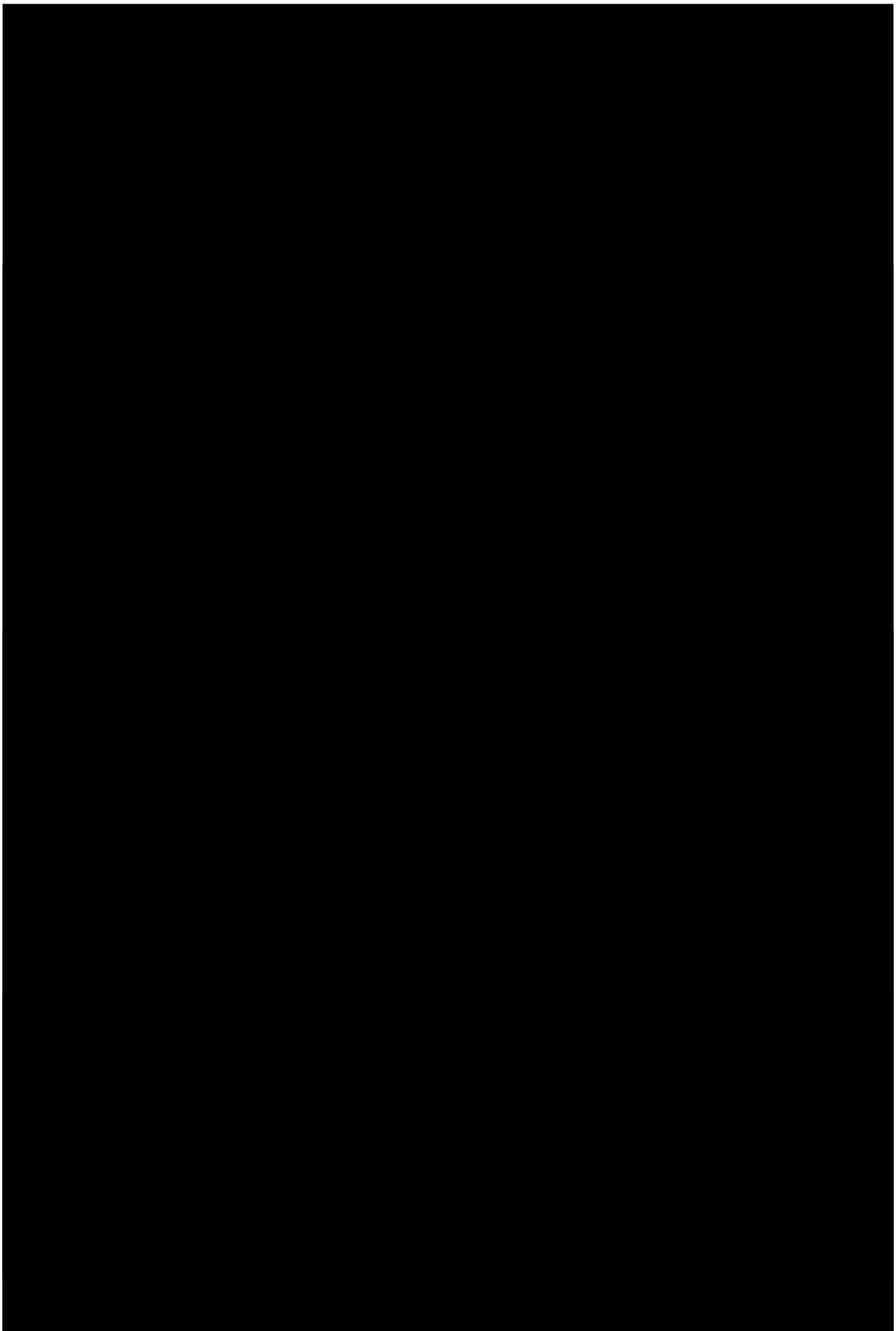
- The equipment Delivery, installation and Commissioning should be all completed by 31st March 2025
- With 3 years of support and maintenance, with an option to extend for 2 (two) additional periods, of 12 months each.
- The overall contract term could therefore be up to 5 years.
-

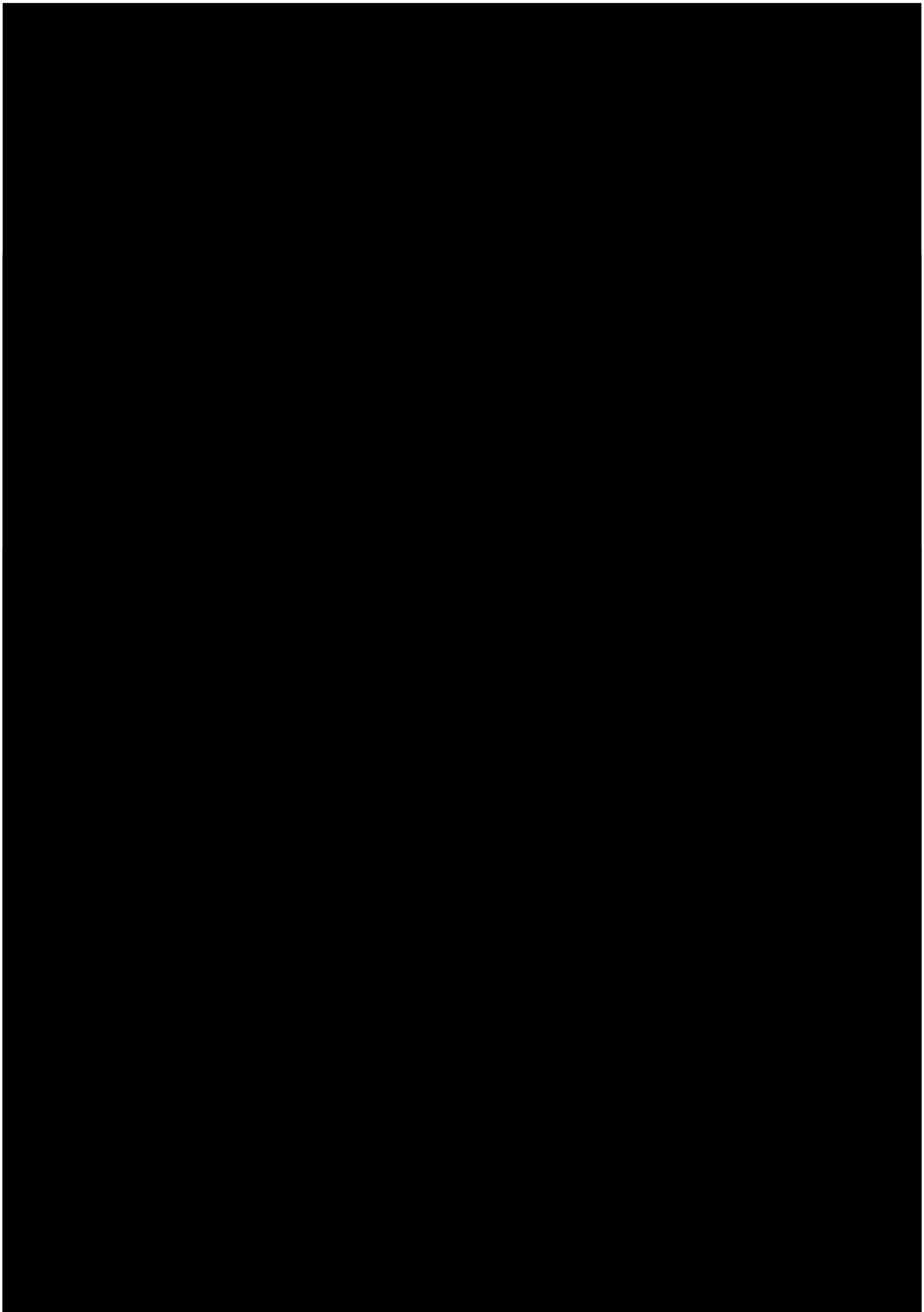
Terms and conditions

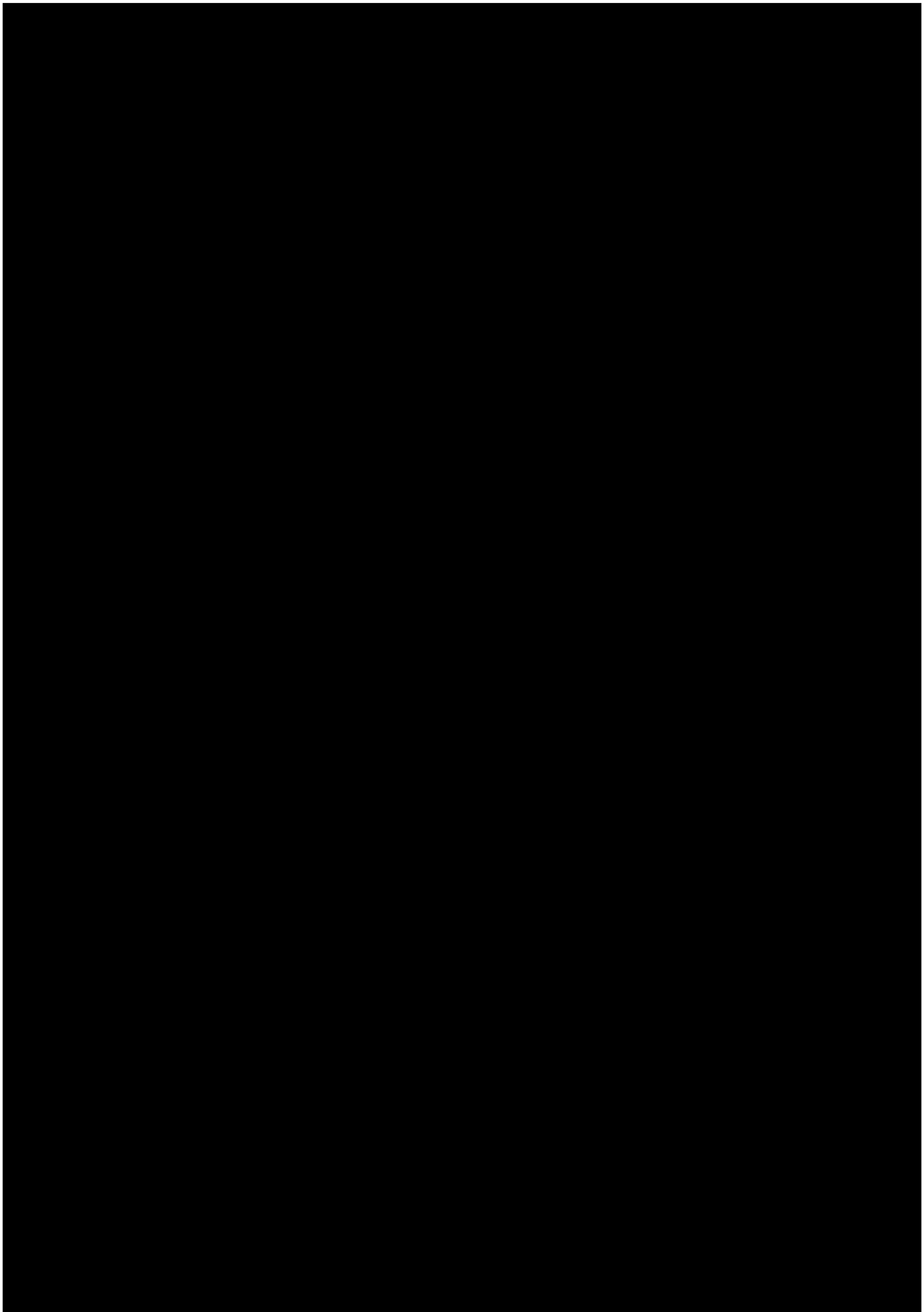
The Terms and Conditions that will apply for this procurement are as per SSSNA Framework, Lot 4. The Call-Off Order form has been enclosed in the tender documents for reference.

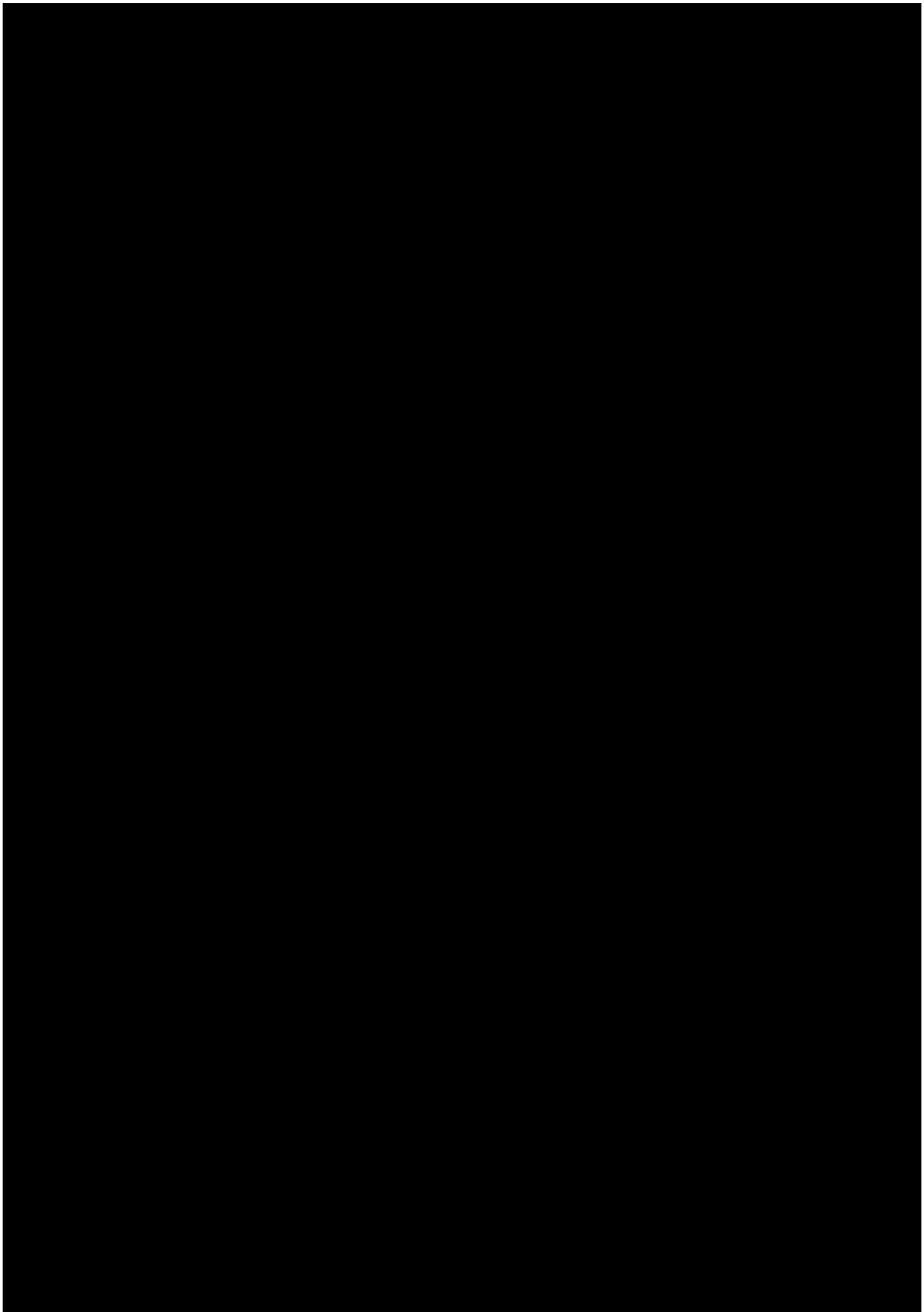
Bidders are to note that any requested modifications to the Contracting Authority Terms and Conditions on the grounds of statutory and legal matters only, shall be raised as a formal clarification during the permitted clarification period

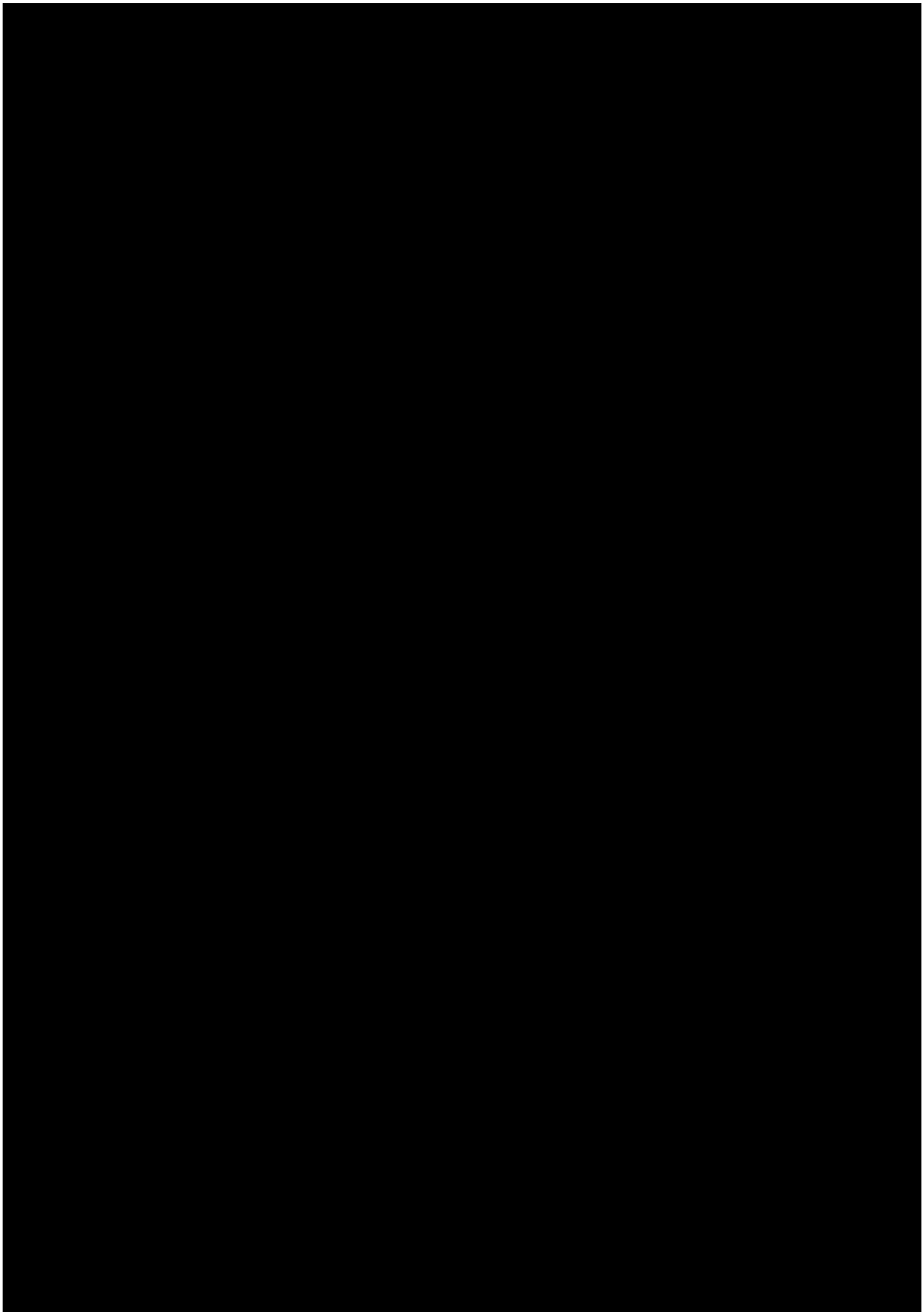
1. **Tender (Supplier Response)**

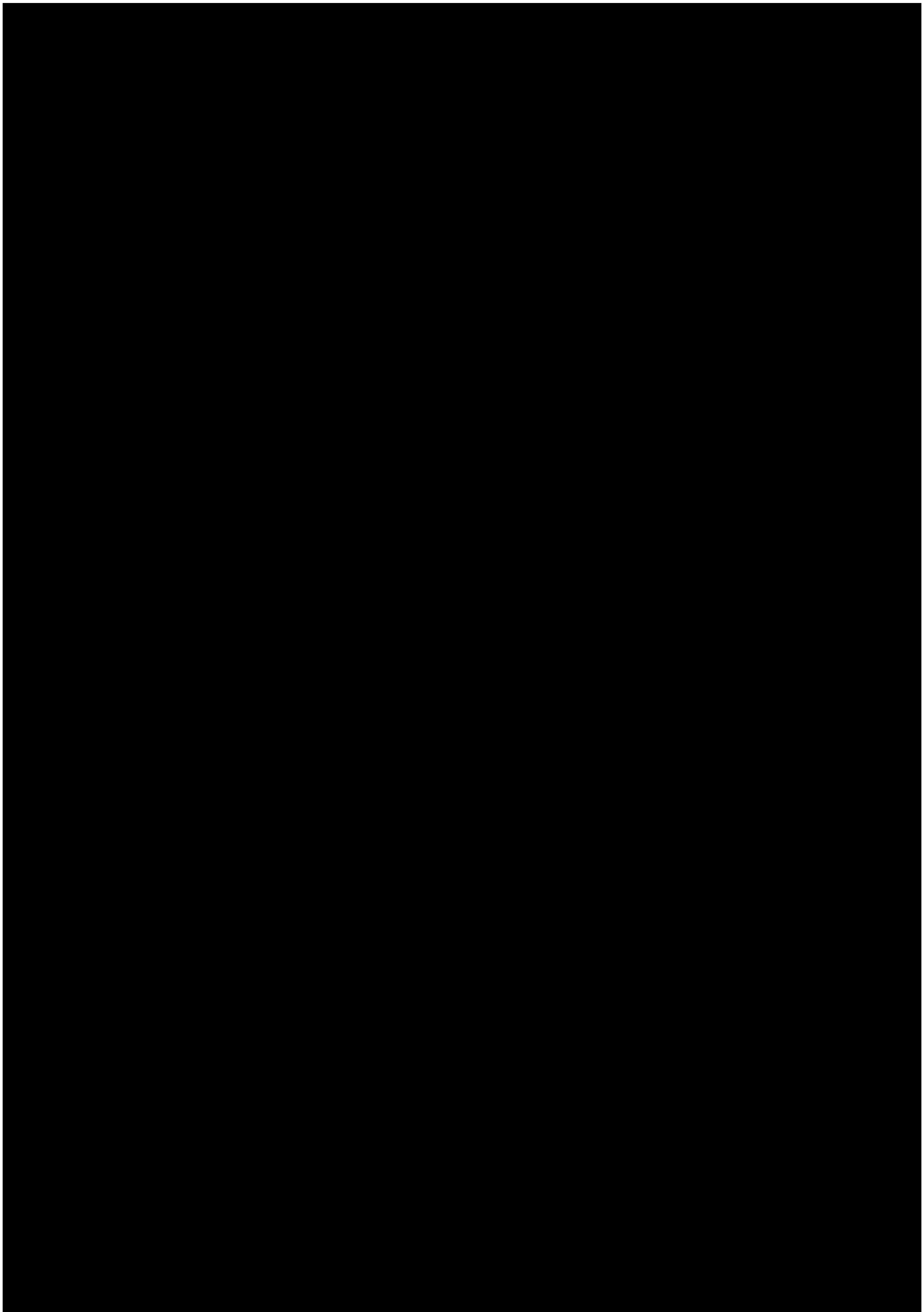


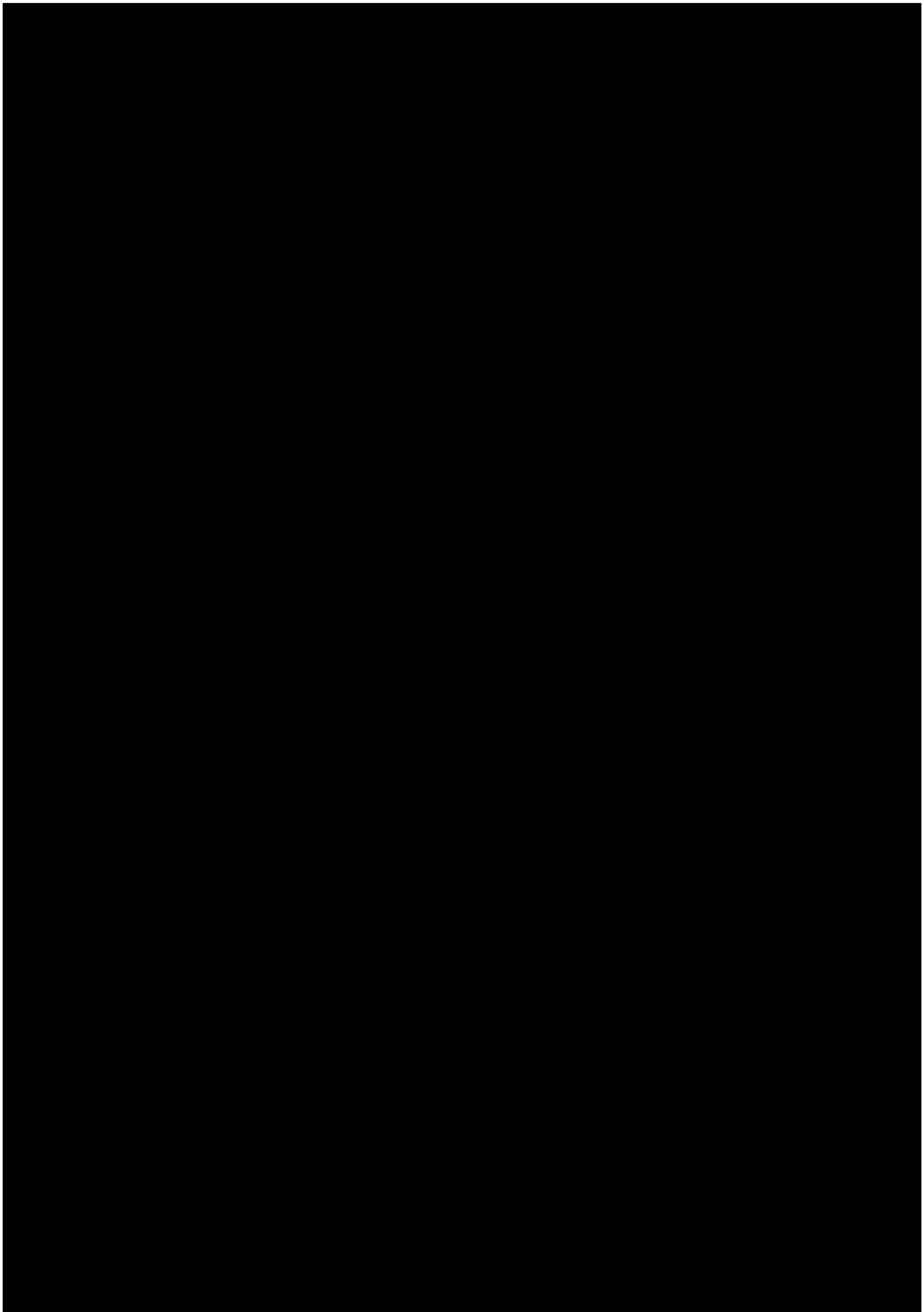


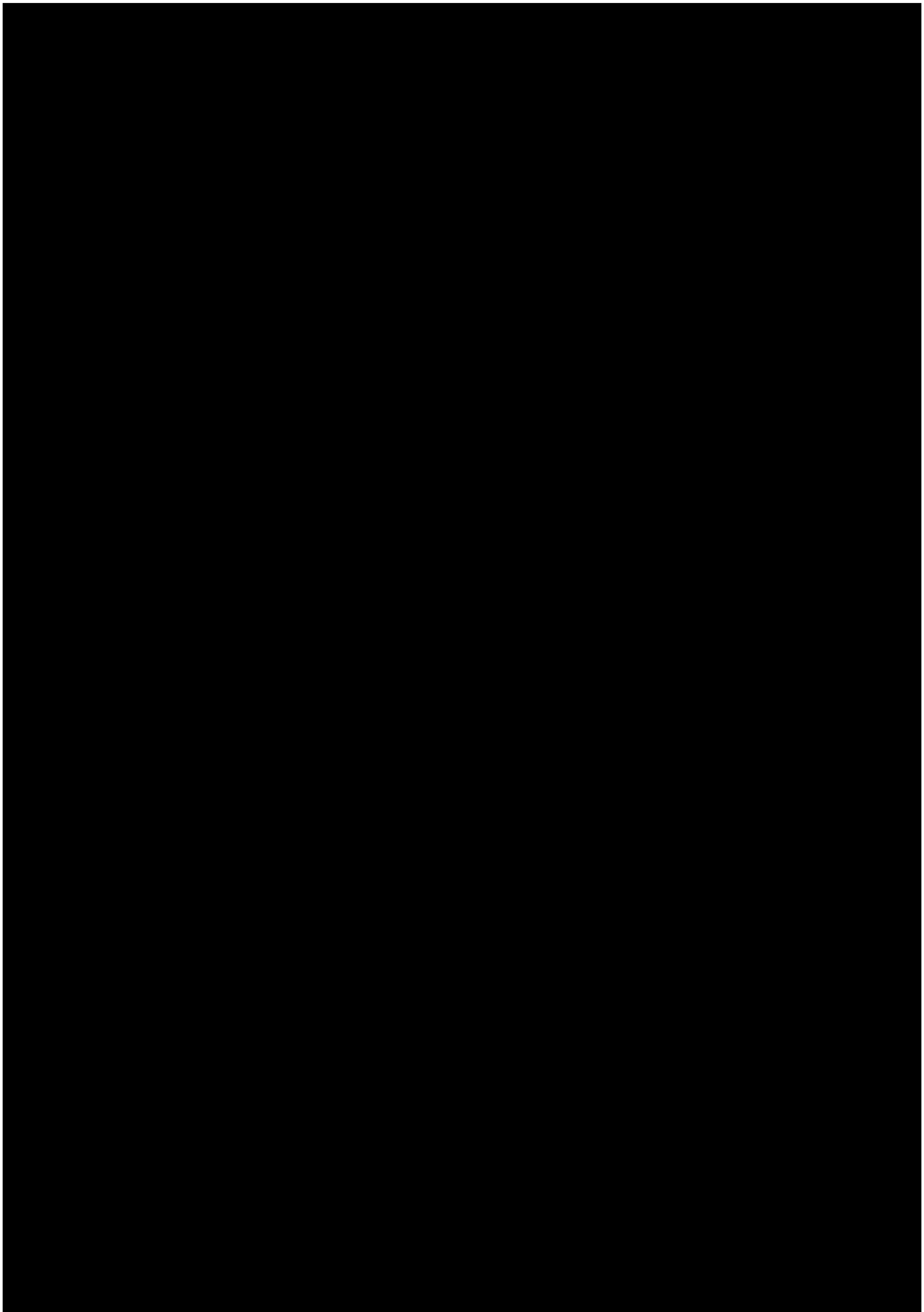


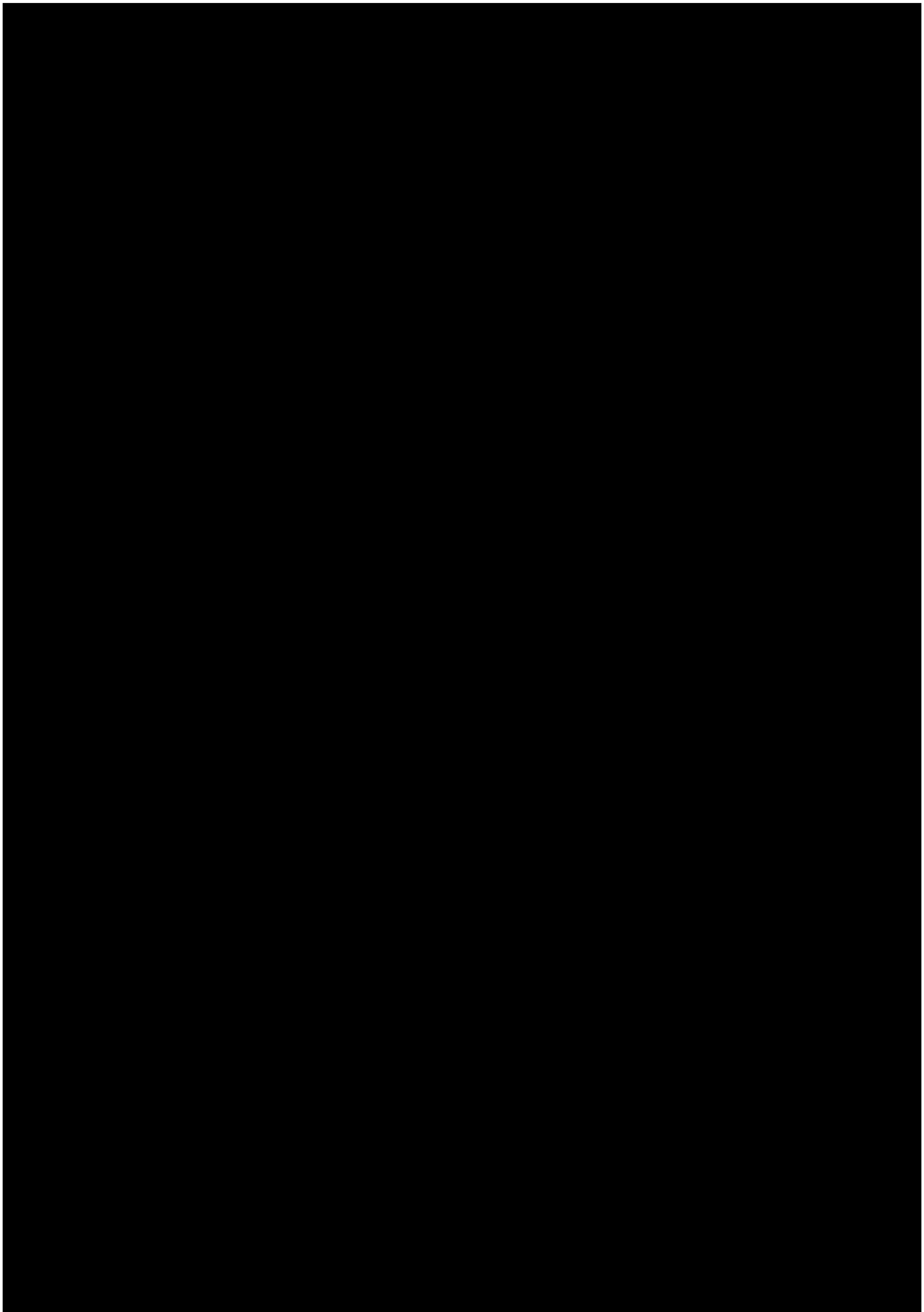


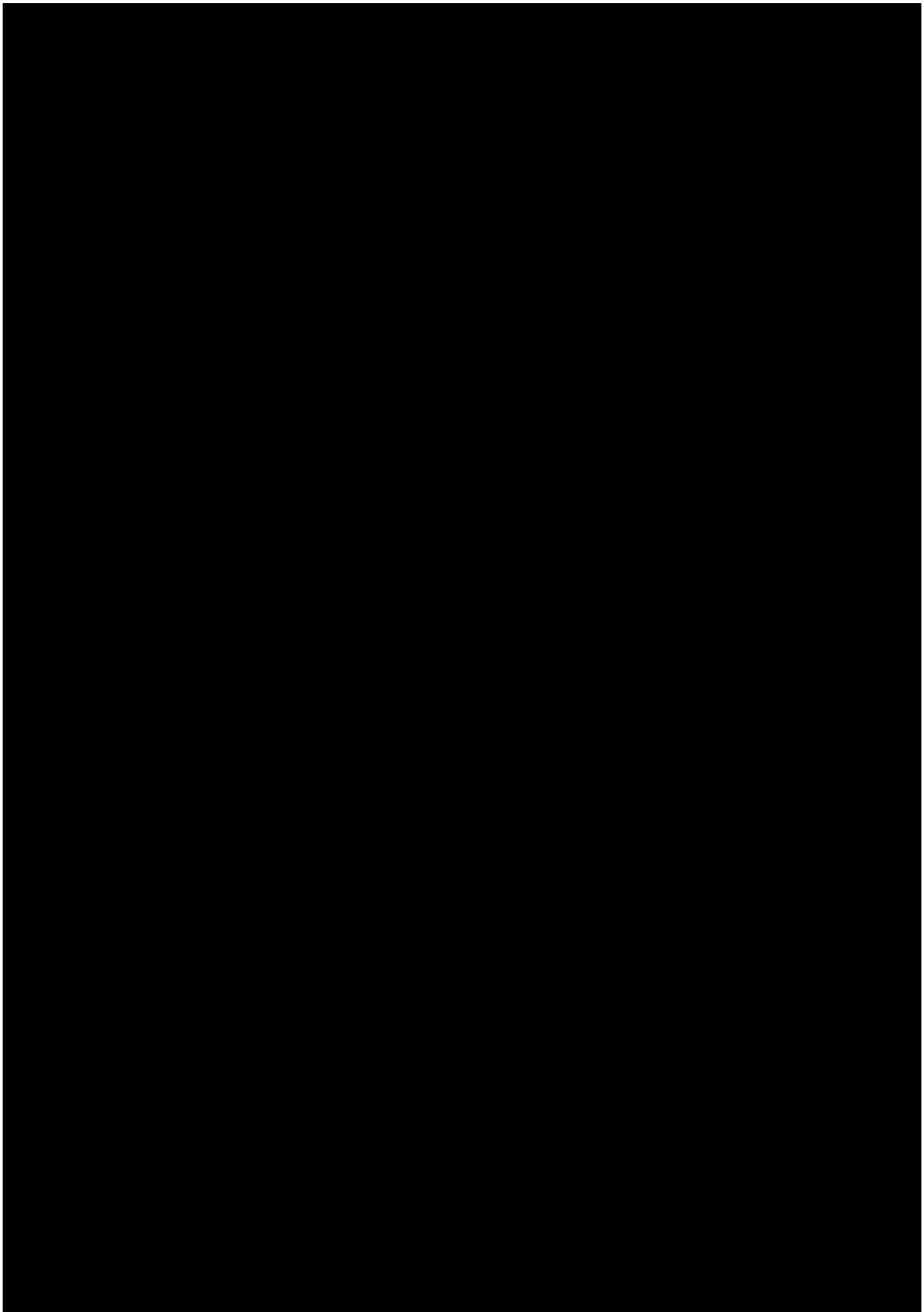


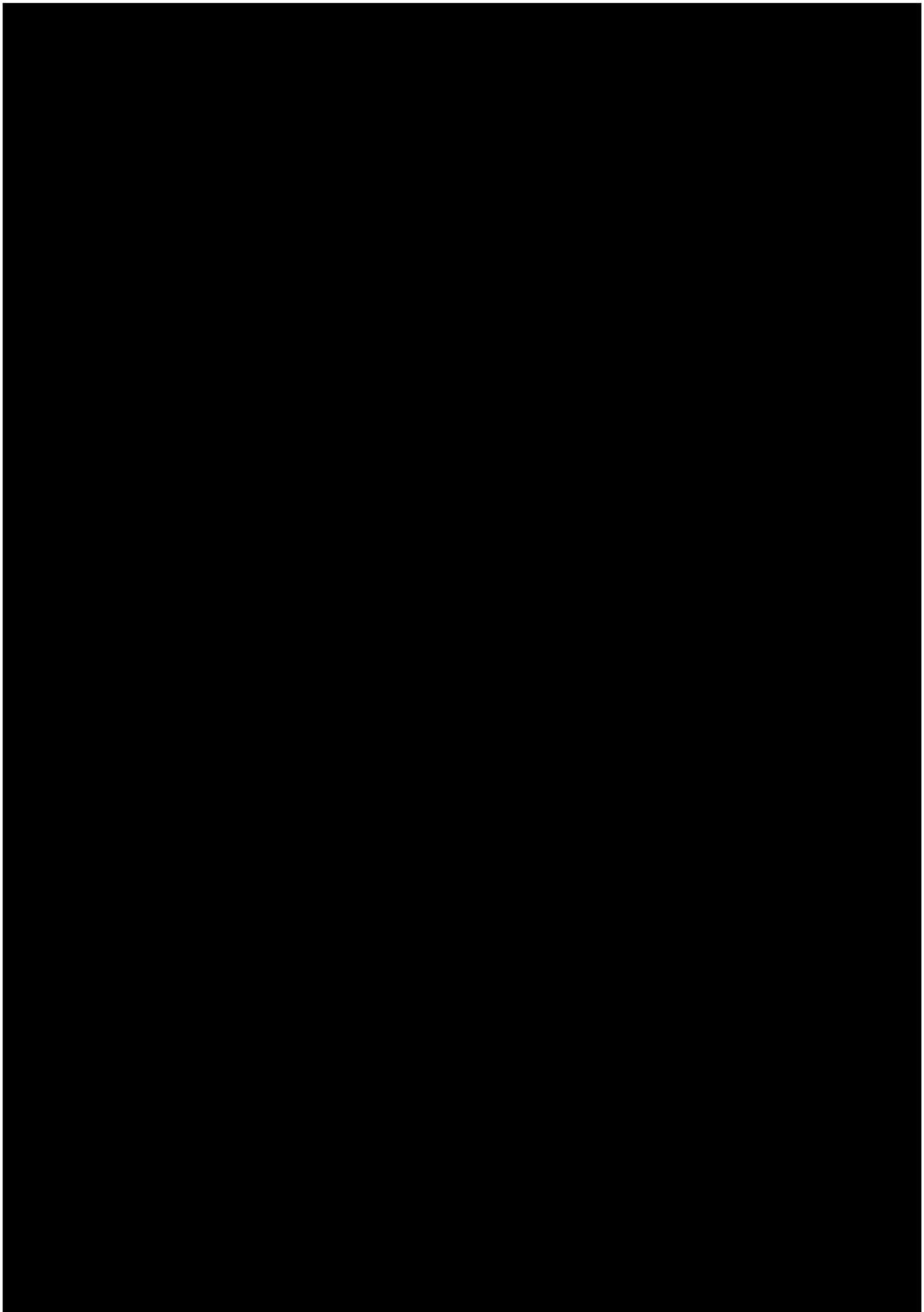


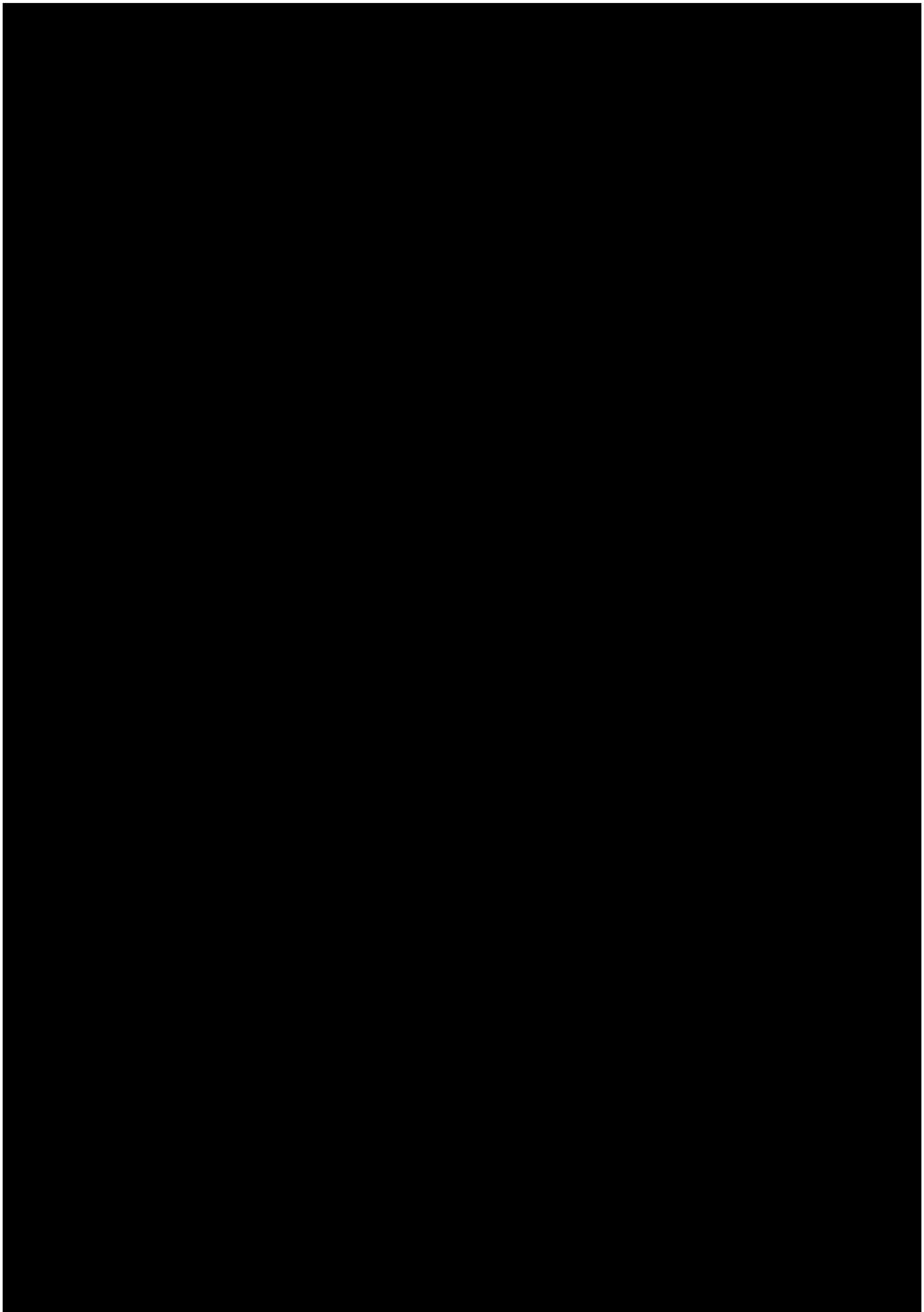


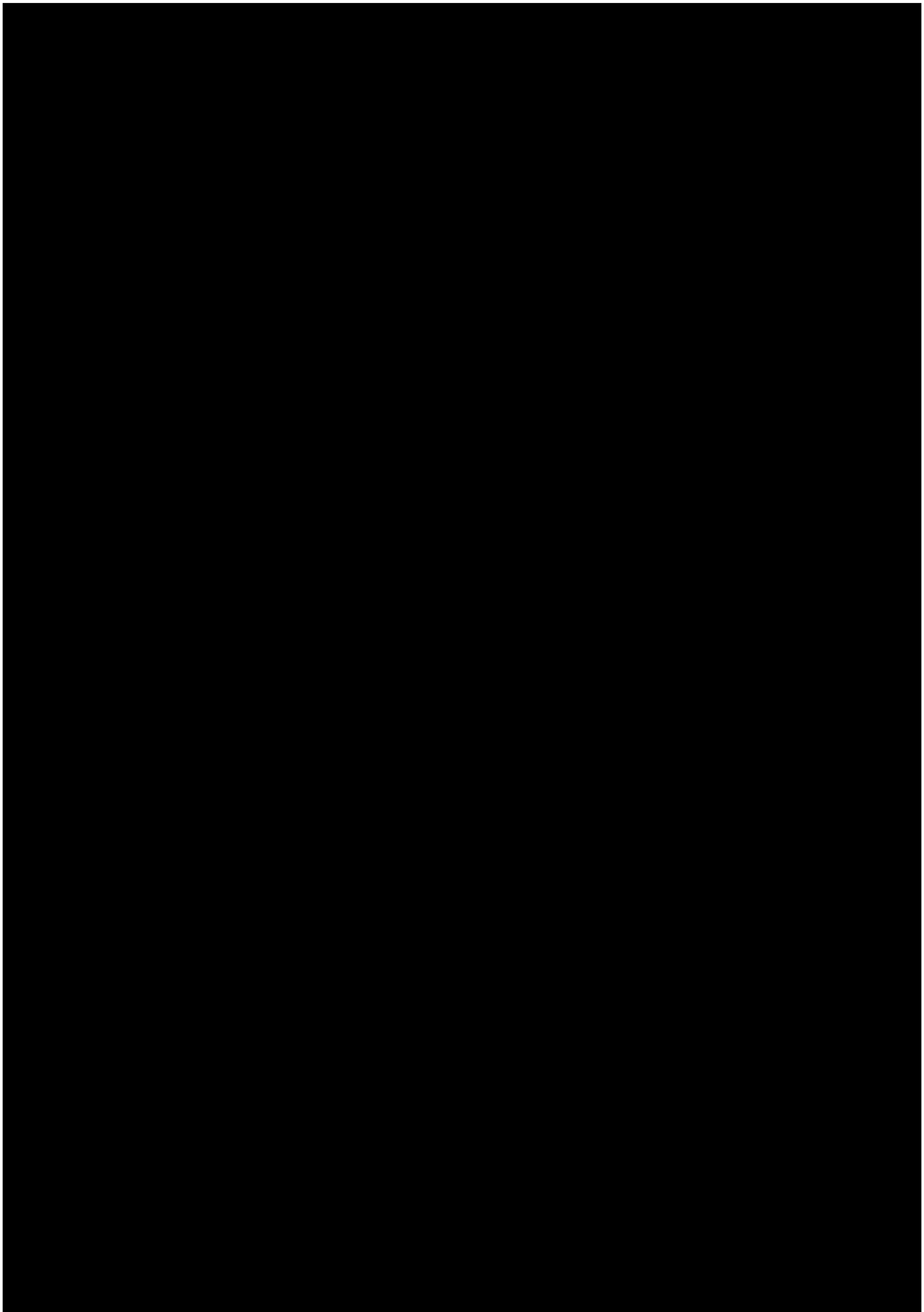


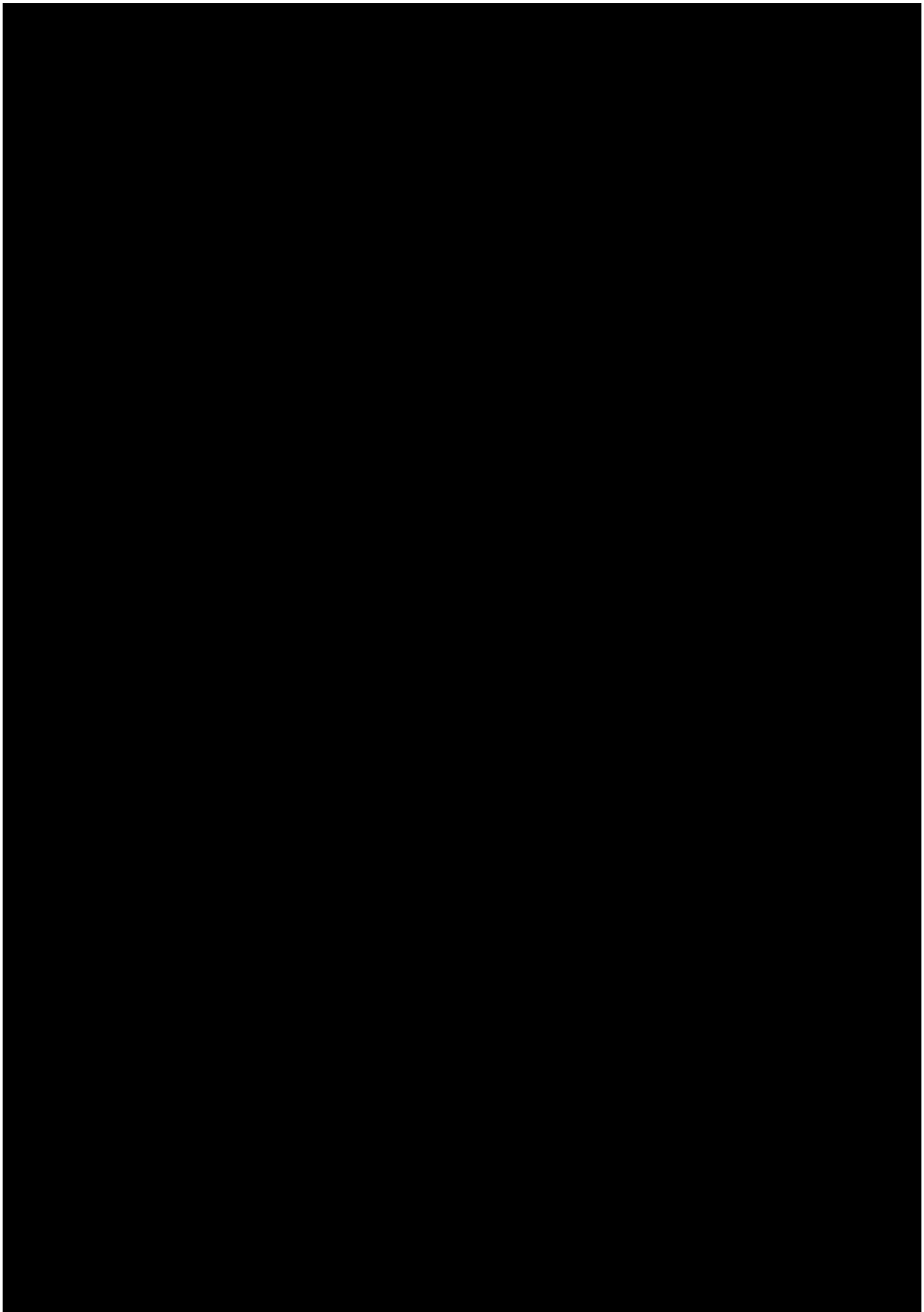


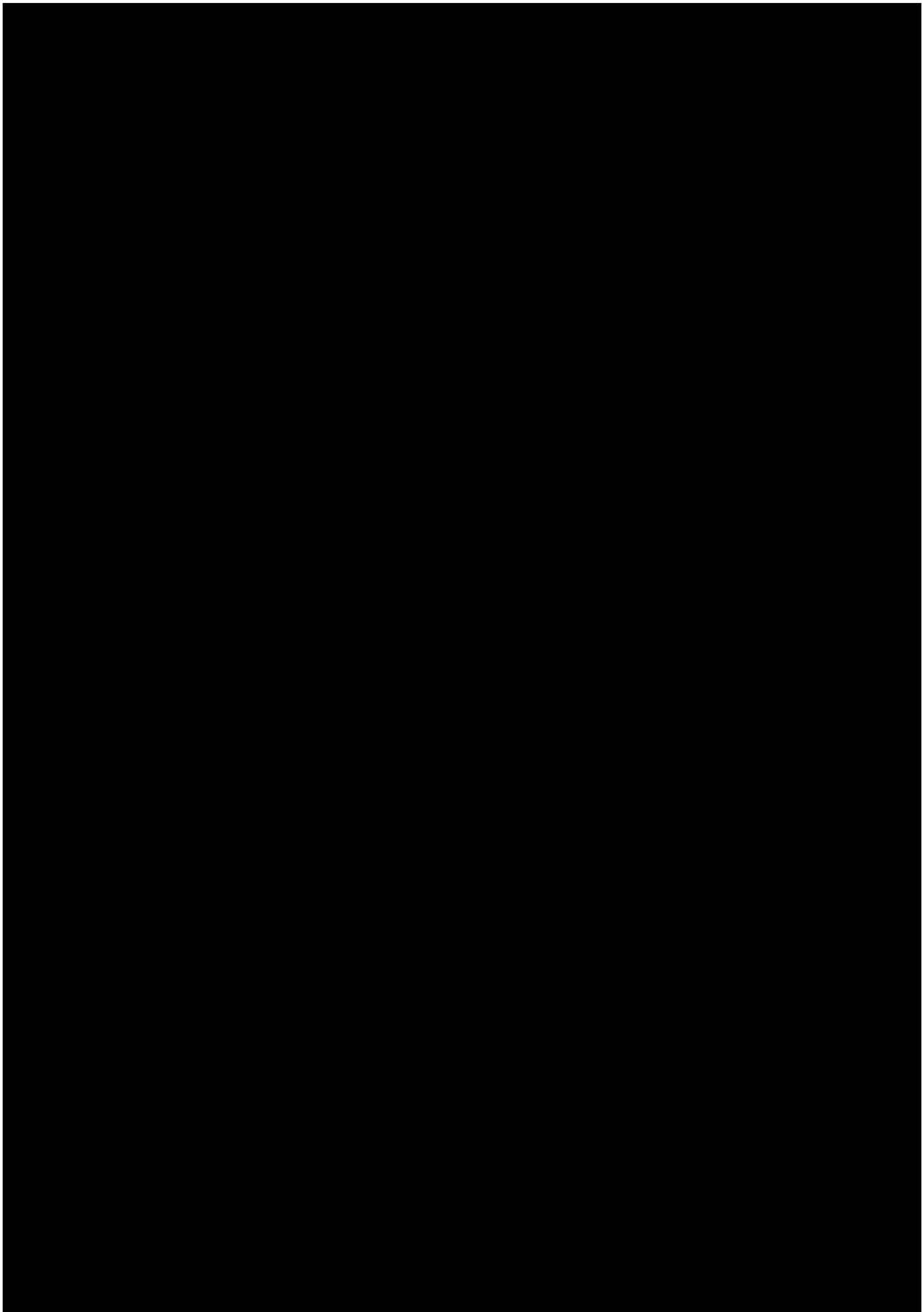


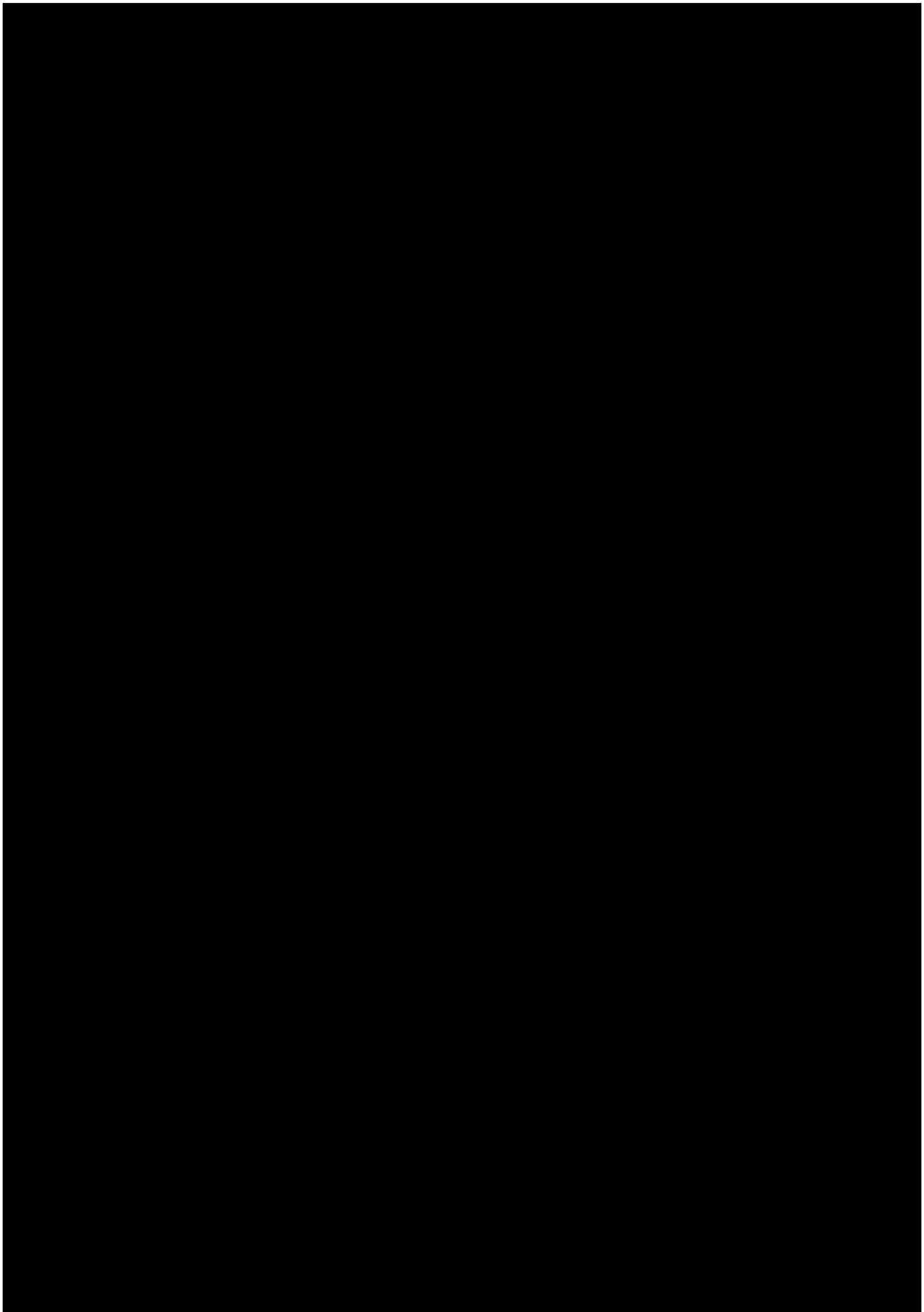












[redacted]

2. **Charges**
   As detailed below and in the attached Quotations:
   The Charge(s) for this Order is: **£3,249,993.87 excluding VAT as detailed in the below** [redacted]

[redacted]