PS_n = Actual Planned Services achieved and delivered in Accounting Period n, a percentage expressed as a fraction of the Planned Services required by the Activity Plan;

PQ_n = Actual Planned Services Quality inspections passed in Accounting Period n, a percentage expressed as a fraction of the maximum Planned Services Quality inspections completed by the Company as set out in Schedule 3, Appendix 2;

PSQ_n = Passed Second Planned Service Quality Inspection from Accounting Period n-1 that is delivered during Accounting Period n as set out in paragraph [2.1.9] of Schedule 12 and a percentage expressed as a fraction of the maximum Planned Services Quality inspections completed by the Company in Accounting Period n-1;

$£PSC_n$ = Service Charges for Planned Services for Accounting Period n;

UCW_n = Undelivered Completed Work from Accounting Period n-1 that is delivered during Accounting Period n as set out in paragraph [2.1.5] of Schedule 12 and a percentage expressed as a fraction of the Planned Services required by the Activity Plan in Accounting Period n-1;

$£PSC_{n-1}$ = Service Charges for Planned Services for Accounting Period n-1;

$£RSC_n$ = Service Charges for Reactive Services for Accounting Period n;

$£RSD_n$ = Deduction (in £s) for Reactive Services in the Accounting Period n;

RQ_n = Reactive Services Quality inspections passed in Accounting Period n, a percentage expressed as a fraction of the maximum Reactive Services Quality inspections completed by the Company as set out in Schedule 3, Appendix 2;

CAP_n = The cap on deductions for the Reactive Services in the Accounting Period, expressed as a monetary value and as described in paragraph 8 of Schedule 12 (Supplier Performance);

RSQ_n = Passed Second Reactive Service Quality Inspection from Accounting Period n-1 that is delivered during Accounting Period n as set out in paragraph 3.2.12 of Schedule 12 (Supplier Performance) and a percentage expressed as a fraction of the maximum Reactive Services Quality inspections completed by the Company in Accounting Period n-1;

RPF^{i}_{n} = Reactive Services Faults rectified for Accounting Period n, which is obtained by selecting the percentage value expressed as a fraction in the second column of Table 6, 0 where 'i' = (FTmrect / FTrect) being the fraction of Faults rectified within the Rectification Time (Table 6, 0 first column);

Also:

FT_{mrect} = Number of faults in the Accounting Period that met the Rectification Time as set out in Table 5 of Schedule 12 (Supplier Performance)0;

FT_{rect} = Number of faults in the Accounting Period assigned a Rectification Time as set out in Table 5 of Schedule 12 (Supplier Performance); and

All calculations shall be made to two decimal places.

Worked Example

Supplier 'A':

i) completes 97% of Planned Services for Accounting Period 2;

ii) delivers 2% of Accounting Period 1's Planned Services during Accounting Period 2, i.e. one Accounting Period in arrears;

iii) passes 86 of a total of 95 Planned Service Quality Inspections in Period 2 being 90.52% successfully passed quality inspections;

iv) achieves passes where the Company has re-inspected non conformant works in 5 of a total of 90 Planned Service Quality Inspections from Period 1 being known as "Passed Second Quality Inspections" being 5.55% successfully passed quality inspection second time around;

v) meets the Rectification or Response Time for 58 of 60 faults assigned a Rectification or Response Time, i.e. 2 Faults are not responded to or rectified within the set times;

vi) passes 19 of a total of 20 Reactive Service Quality Inspections in Period 2;

vii) achieves passes where the Company has permitted re-inspected non conformant works in 4 of a total of 25 Reactive Service Quality Inspections from Period 1 being known as "Passed Second Quality Inspections";

viii) the Service Charge for Planned Services for Accounting Periods 1 and 2 ($£PSC_n$ and $£PSC_{n-1}$) is £500,000;

ix) the Service Charge for Reactive Services (£RSC) for Accounting Periods 1 and 2 is £300,000; and

x) the Supplier's declared profit margin for the Accounting Period 2 is £16,000.

In this example, the Service Payment for an Accounting Period is calculated as follows:

To calculate the Actual Planned Service payment for delivery of the planned service (worth a maximum of 80% of the Service Change) and successfully passed quality inspections (worth a maximum of 20%);

(97% x (£500,000 x 80%)) + (90.52% x (£500,000 x 20%)) = £478,520.

The Actual Planned Service and non compliant quality inspections conducted by the Company and inspections passed in the current period but dating from the previous period:

(2% x (£500,000 x 80%)) + (5.55% x (£500,000 x 20%)) = £13,550.

The Actual Reactive Service and Quality Inspections payment has to be compared with the declared profit margin for the Supplier. In this example 58 Faults meet the Reactive Services KPI (FTmrect) out of a total 60 assigned Faults (FTrect) i.e. 2 Faults do not meet that KPI. 19 of 20 quality inspections were passed in the period i.e. 1 quality inspection of Reactive works is non conformant.

The number of Faults which met the response and rectification KPI is 58 / 60 = 96.67%. Looking up 96.67% in Table 6 (column 1) of Schedule 12 results in payment of 96% or a deduction of 4% of the 80% eligible Reactive Service Charge for the Accounting Period.

1 – (19 /20) = 5% reactive service quality inspections were non conformant

The Reactive Service Deduction is therefore:

(4% x (£300,000 x 80%)) + (5% x (£300,000 x 20%)) = £12,600.

Compare this figure with the profit margin declared by the Supplier for the Accounting Period n. and in this example assume it is above the capped amount in accordance with paragraph 7.1 of Schedule 12.

The Reactive Service Charge for the Period is therefore:

(96% x (£300,000 x 80%)) + (95% x (£300,000 x 20%)) = £287,400.

The Actual Reactive Services non compliant quality inspections conducted by the Company in the current period but dating from the previous period are "Passed Second Quality Inspection" for faults:

4 /25 = 20% and therefore (20% x (£300,000 x 20%)) = £12,000.

The Service Payment due to Supplier 'A' in this example is the sum of Planned and Reactive Services and Quality inspections:

SP_n = £478,520 + £13,550 + £287,400 + £12,000 = £791,470.

If, in the above example, the calculated deduction for Reactive Services in £s when compared with the Supplier's declared profit margin is greater than the profit margin the cap level profit margin is substituted for the Reactive Services deduction the Service Payment is;

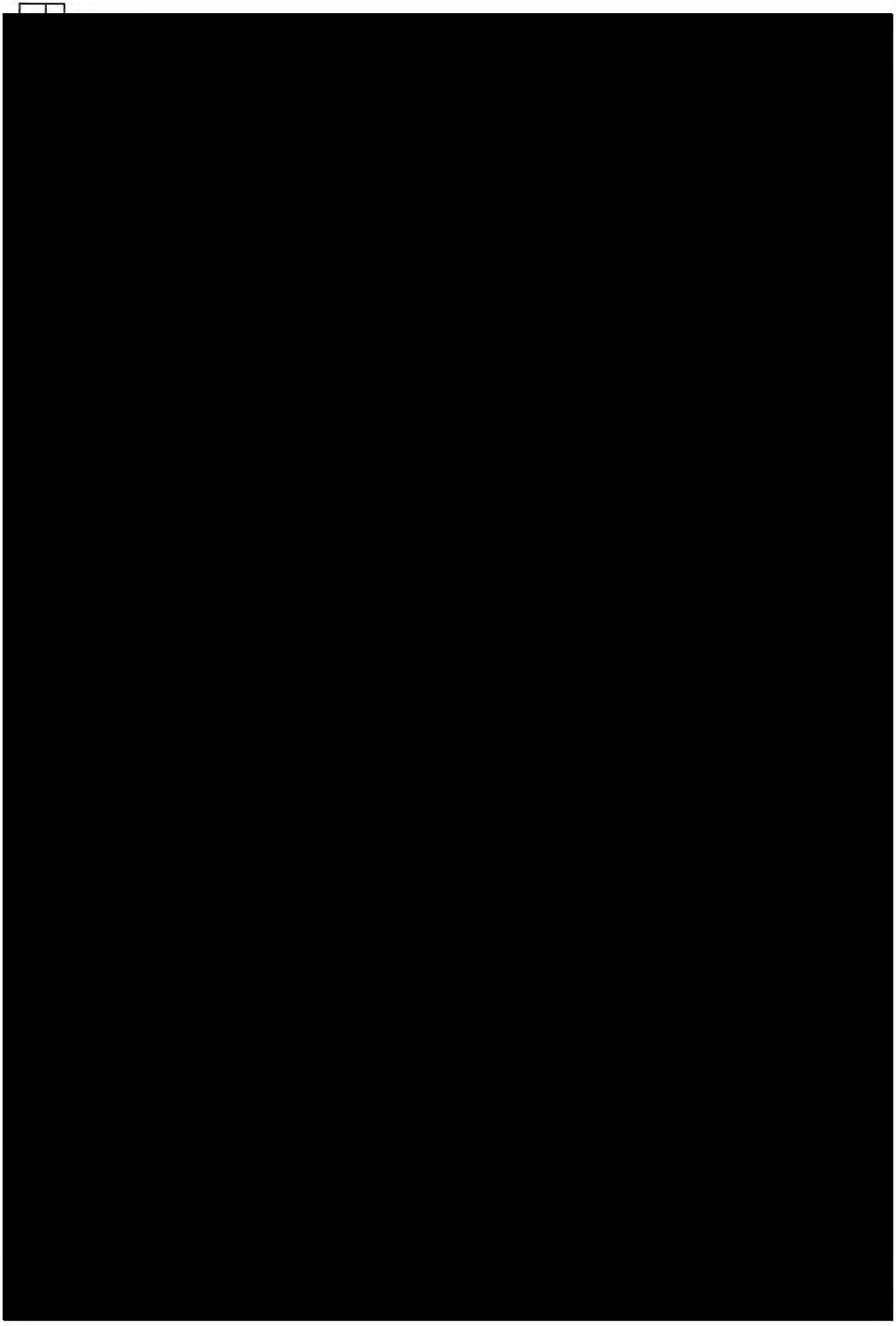
SP_n = £478,520 + £13,550 + (£300,000 - £16,000) + £12,000 = £788,070.

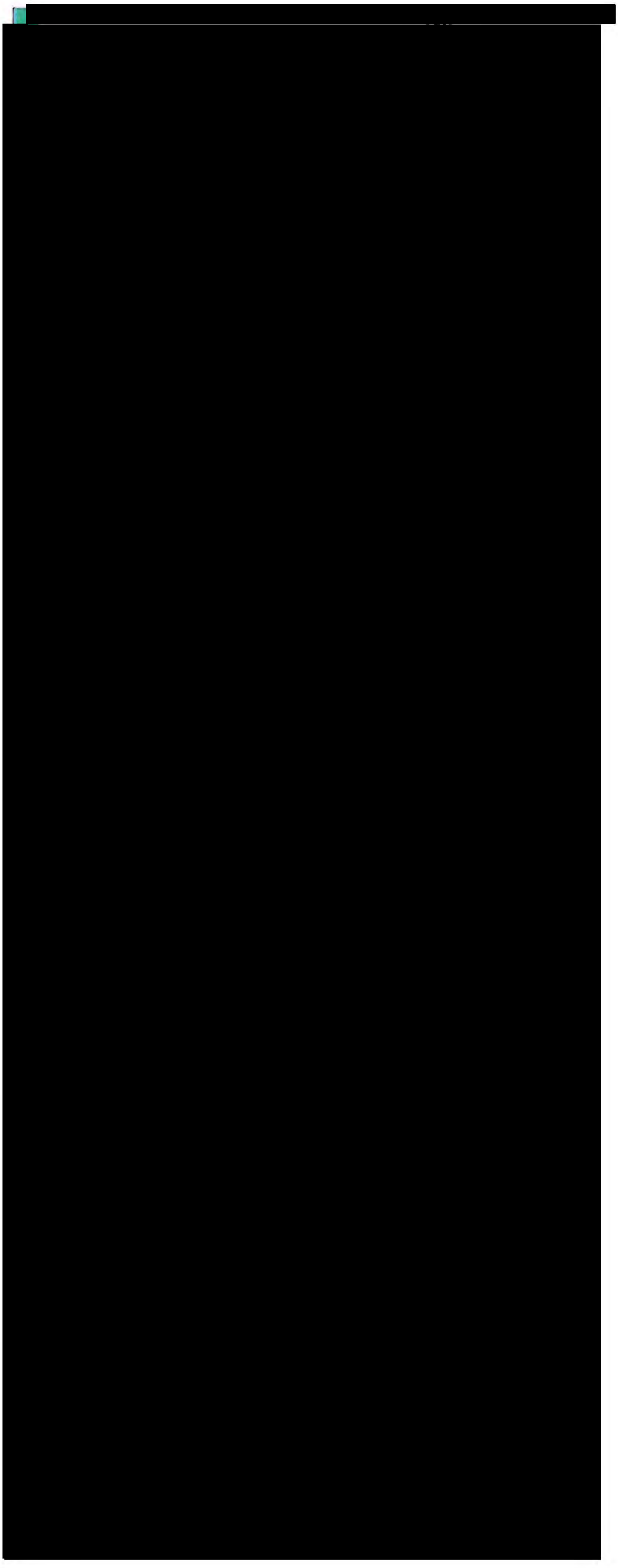
1.3 The AFP submitted by the Supplier will be clear, concise, accurate, and adequately descriptive and in the format agreed with the Company.

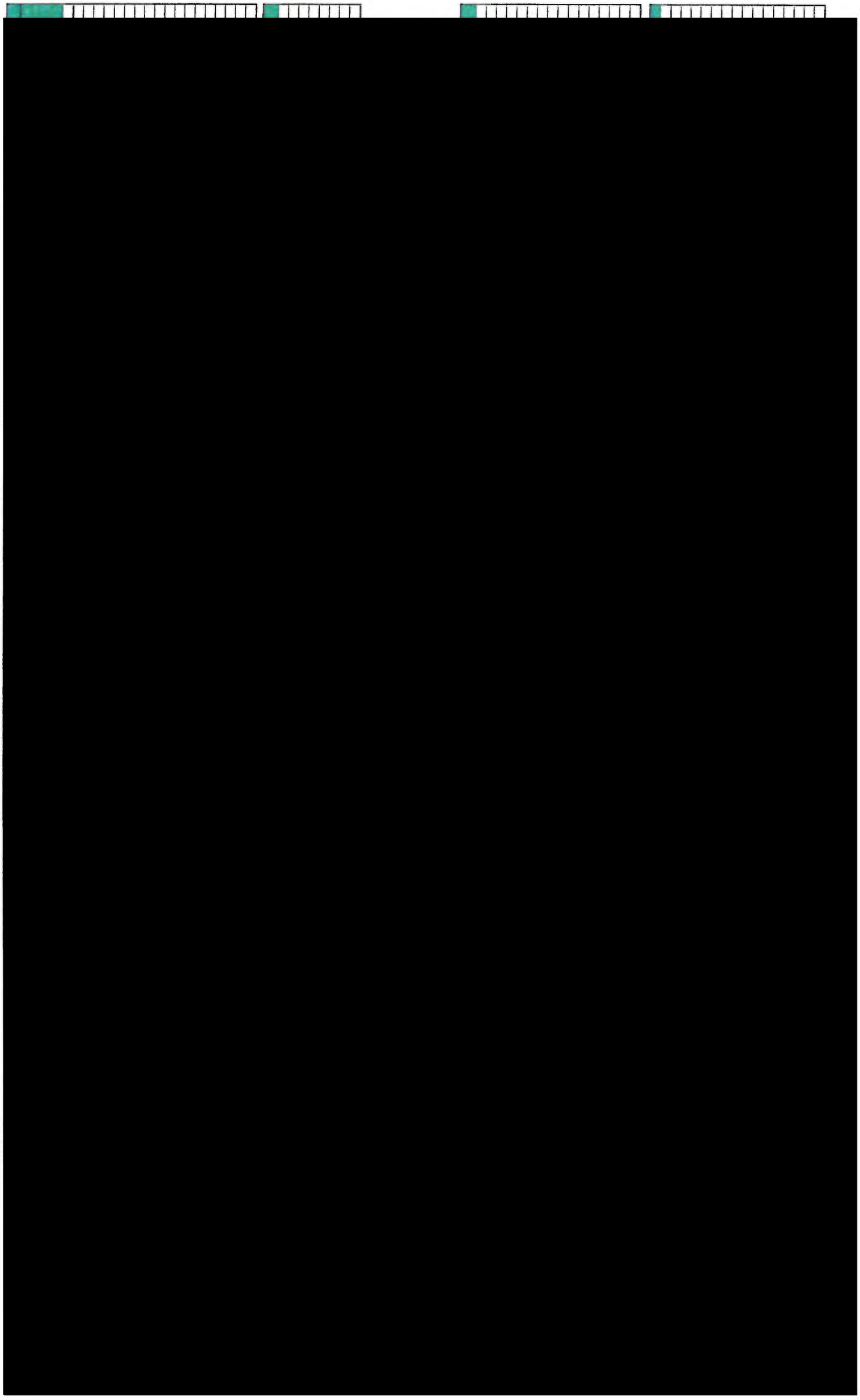
1.4 Failure on the part of the Supplier to submit a clear, concise, accurate and adequately descriptive statement in the required format may lead to delays in processing the AFP and subsequent payment of invoices. Any loss or additional expenses incurred by the Supplier in the correction or re-submission of an AFP or invoice will be at the Supplier's own expense.

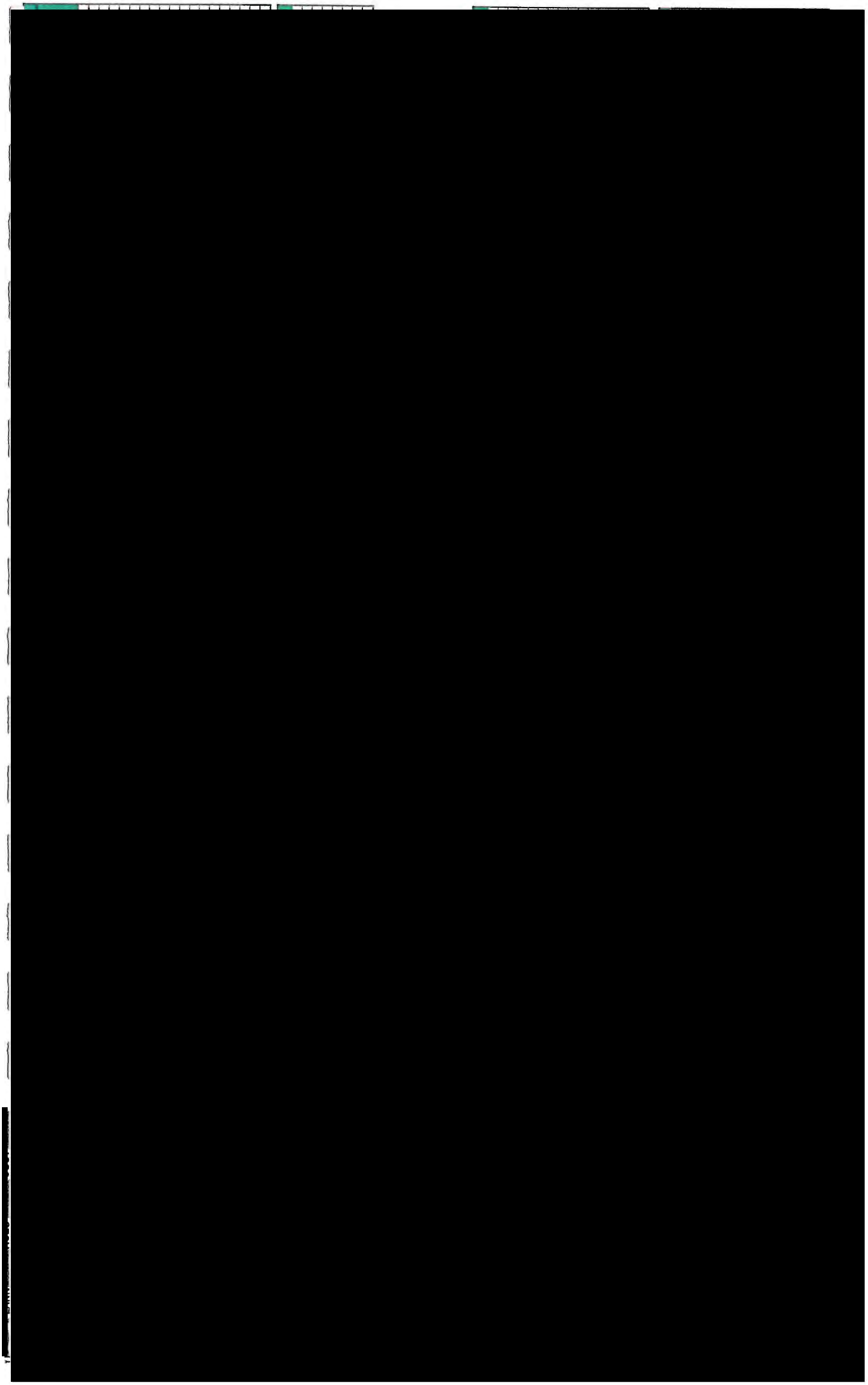
1.5 Upon receipt of the CPAF, the Supplier may raise an invoice for the Service Payment so certified and, attaching one copy of the CPAF to each such invoice, send each Invoice to the address below or such other address as is notified by the Company to the Supplier from time to time:

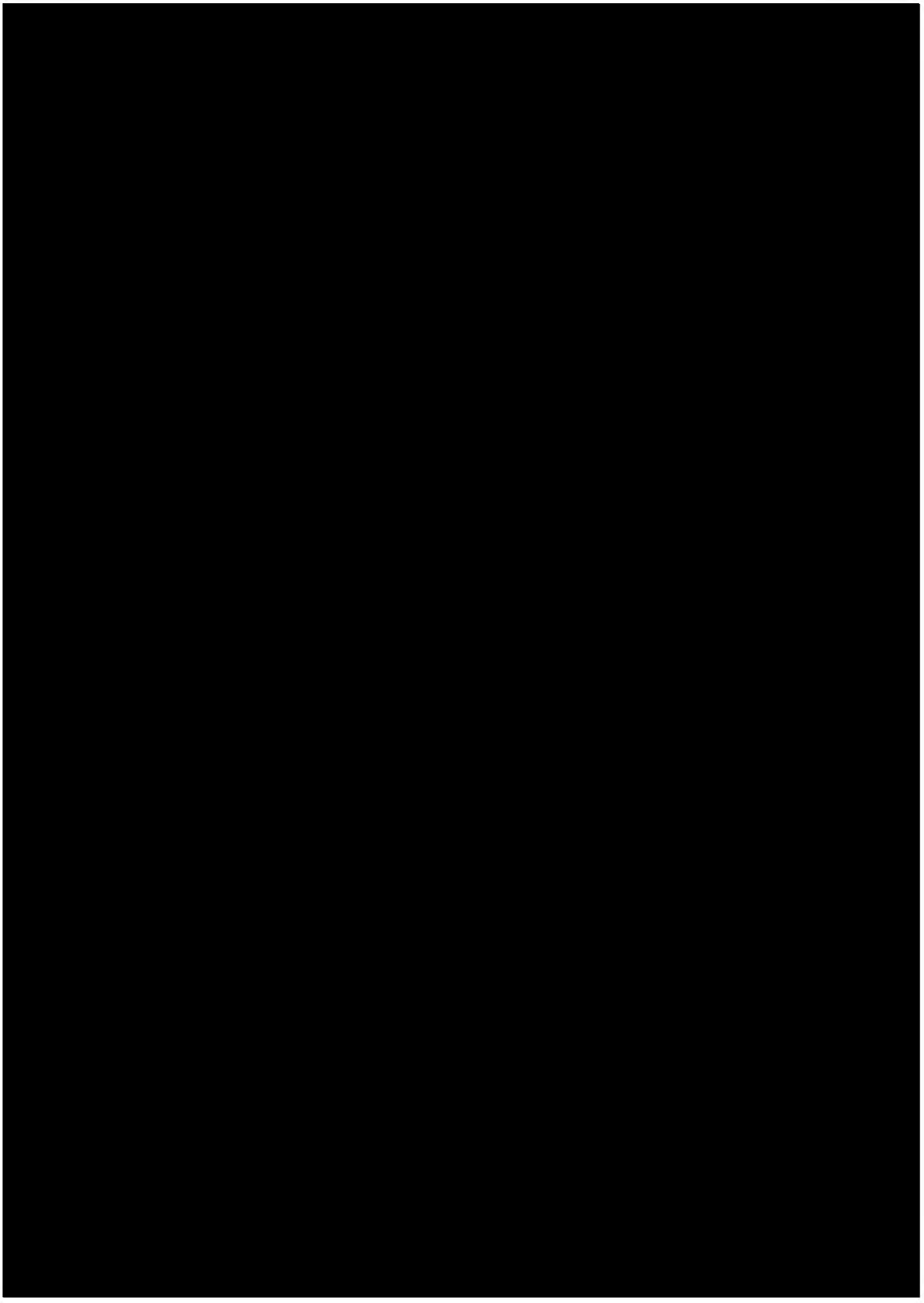
Transport for London – Accounts Payable
14 Pier Walk
London
SE10 0ES

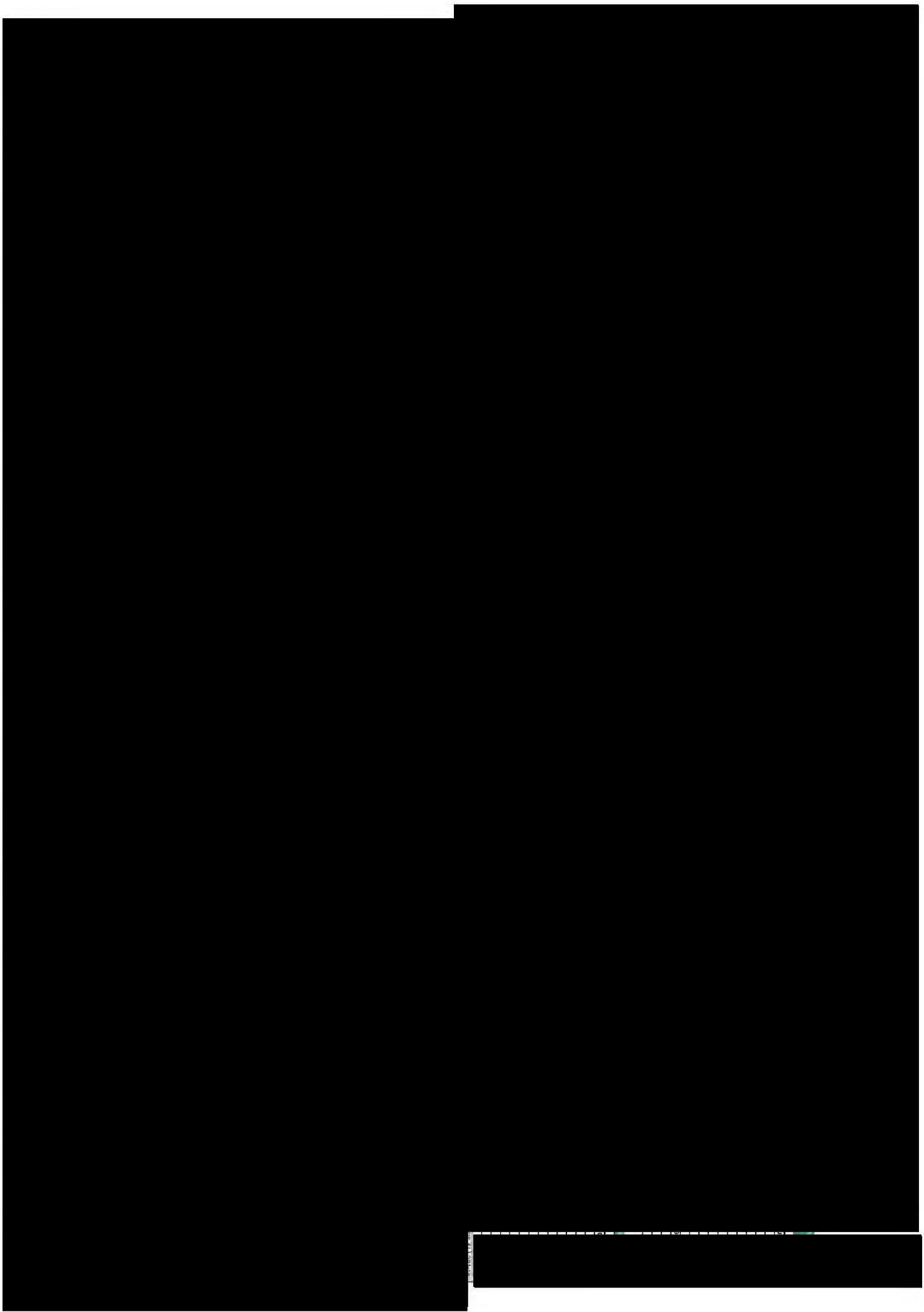


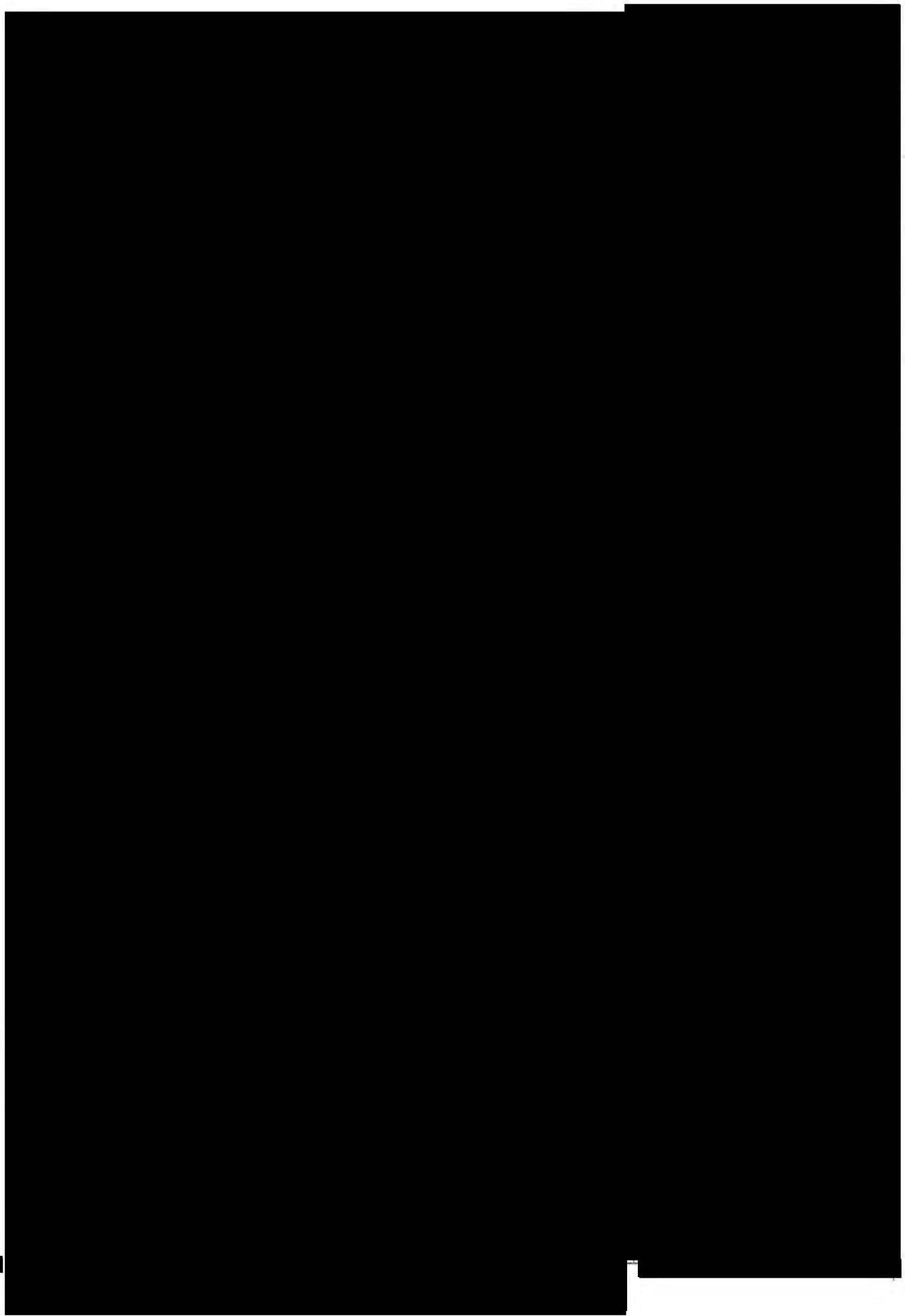


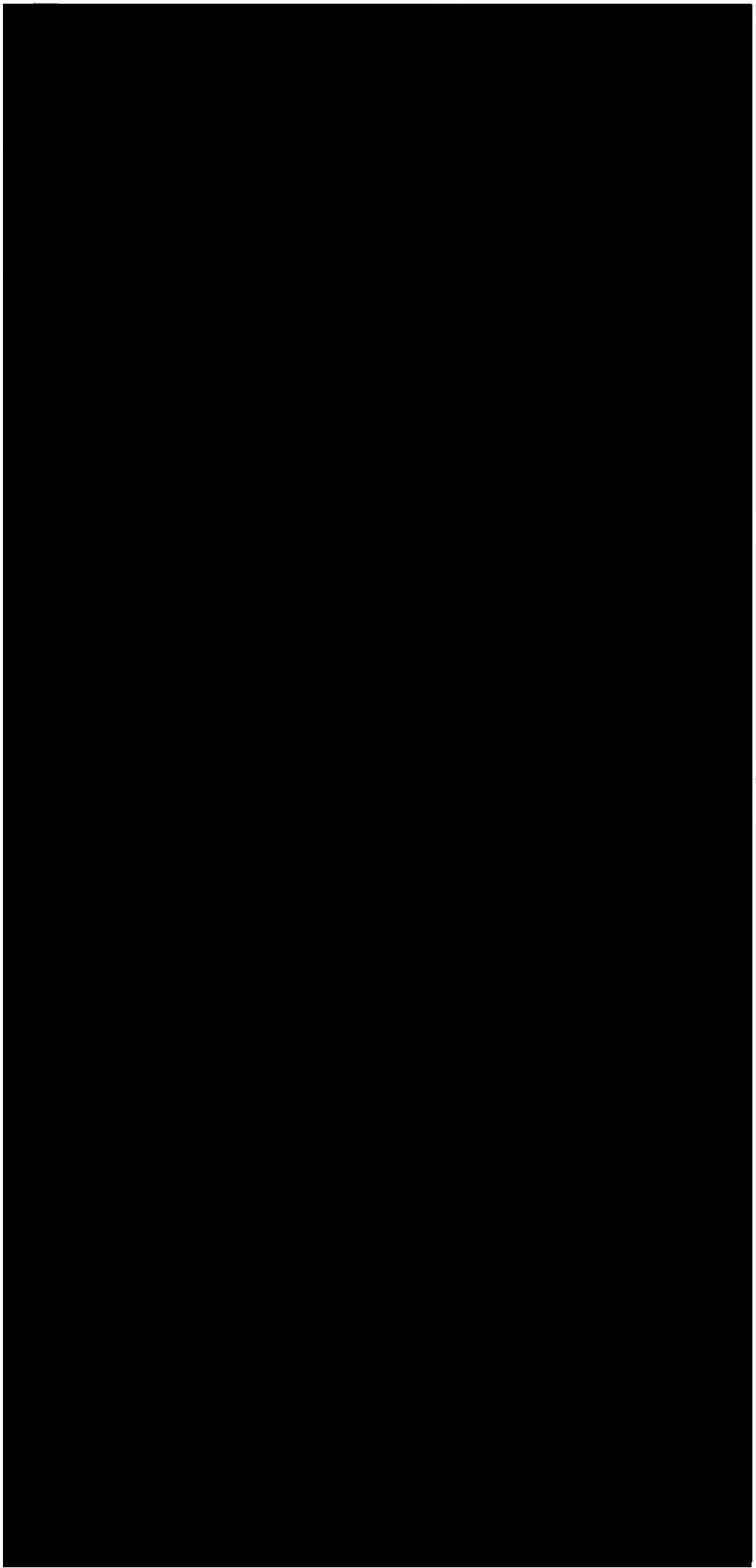


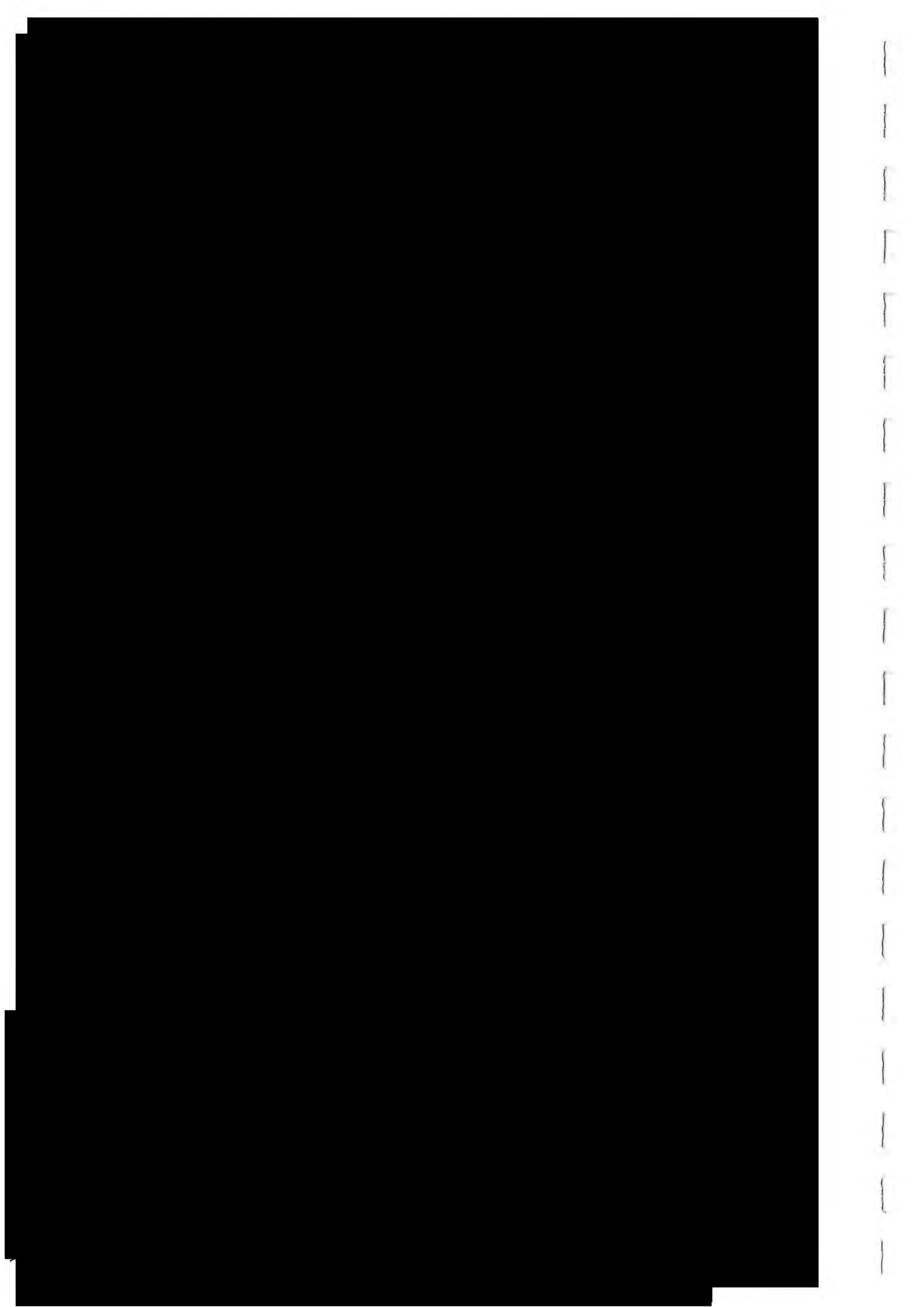


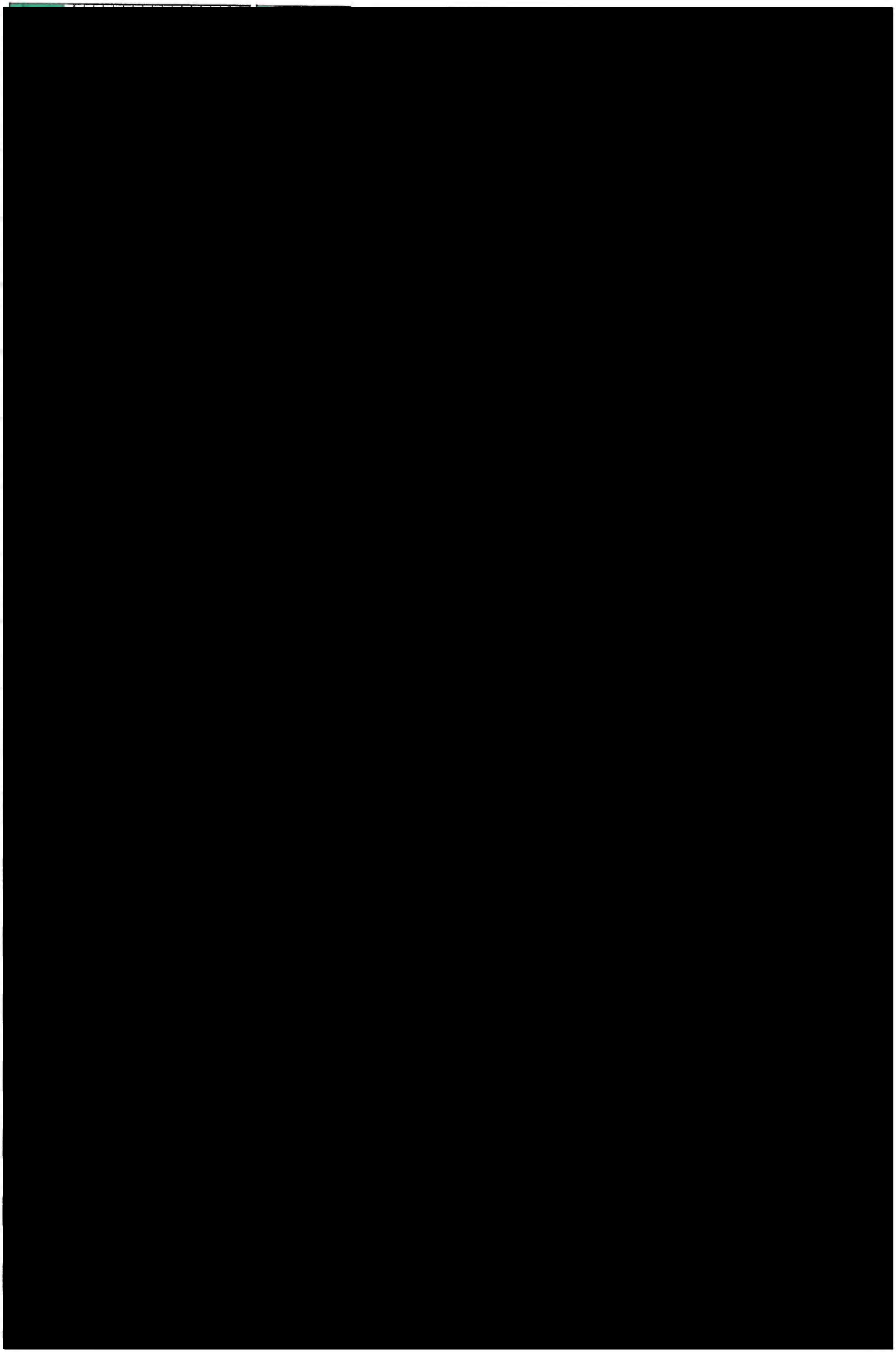


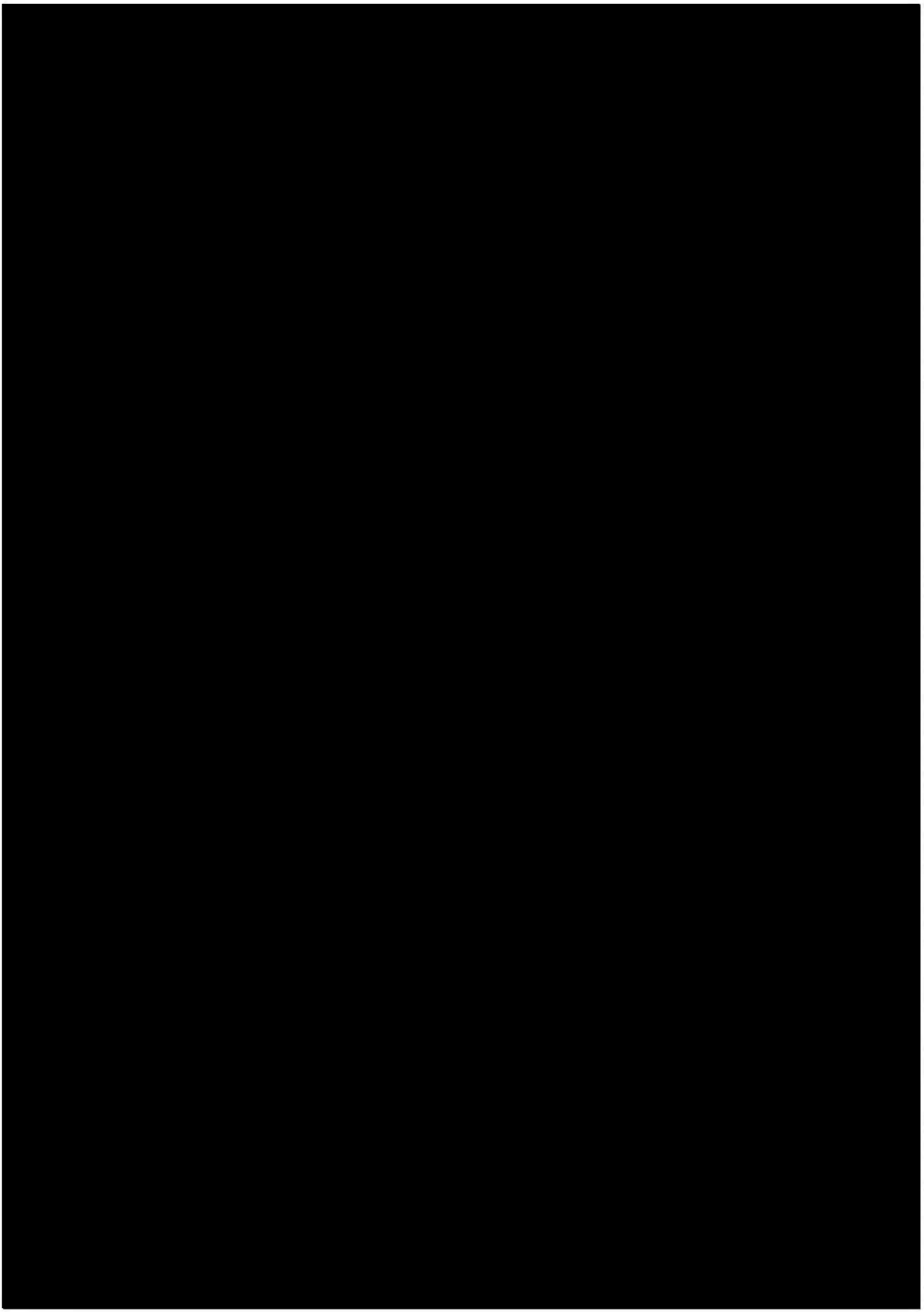


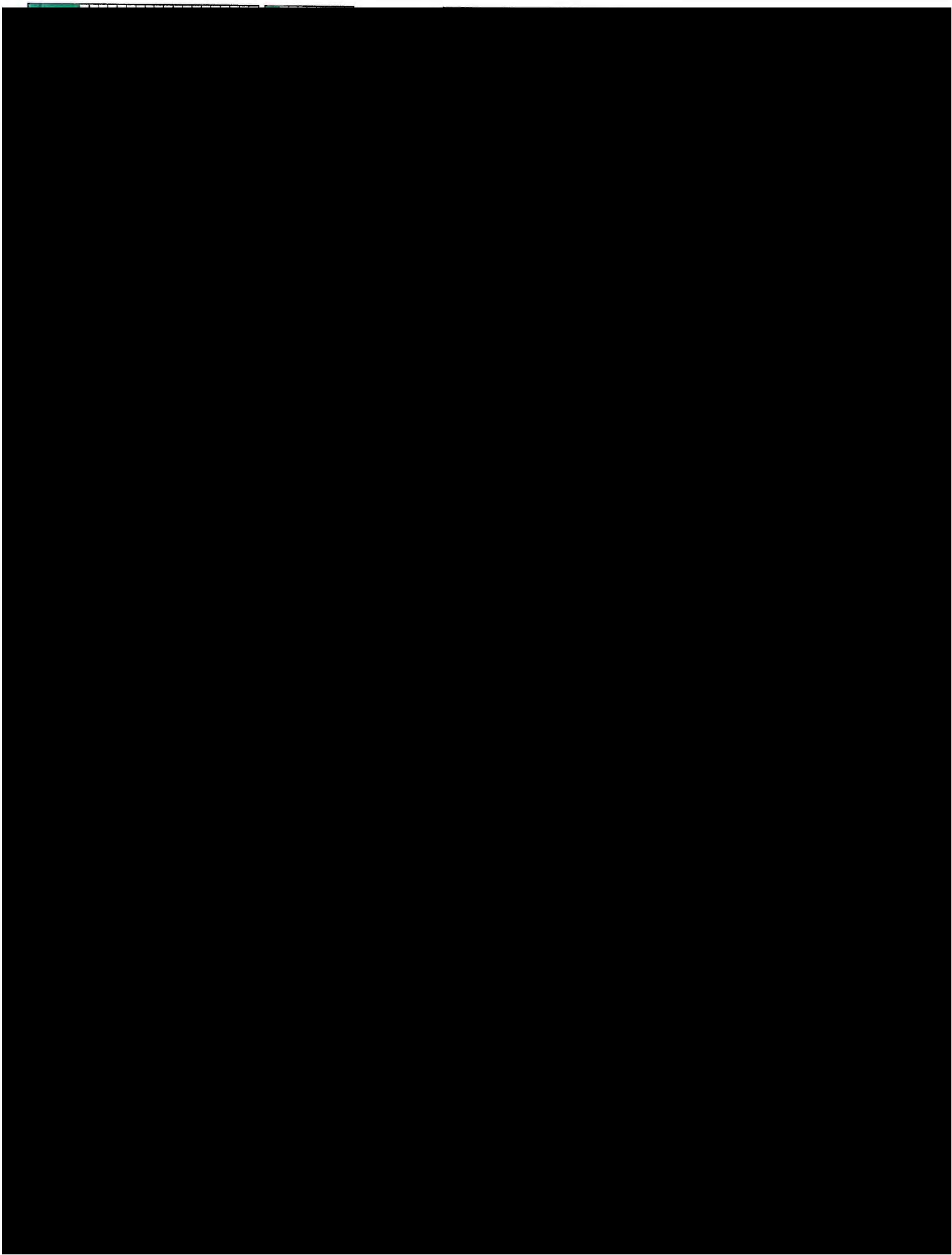


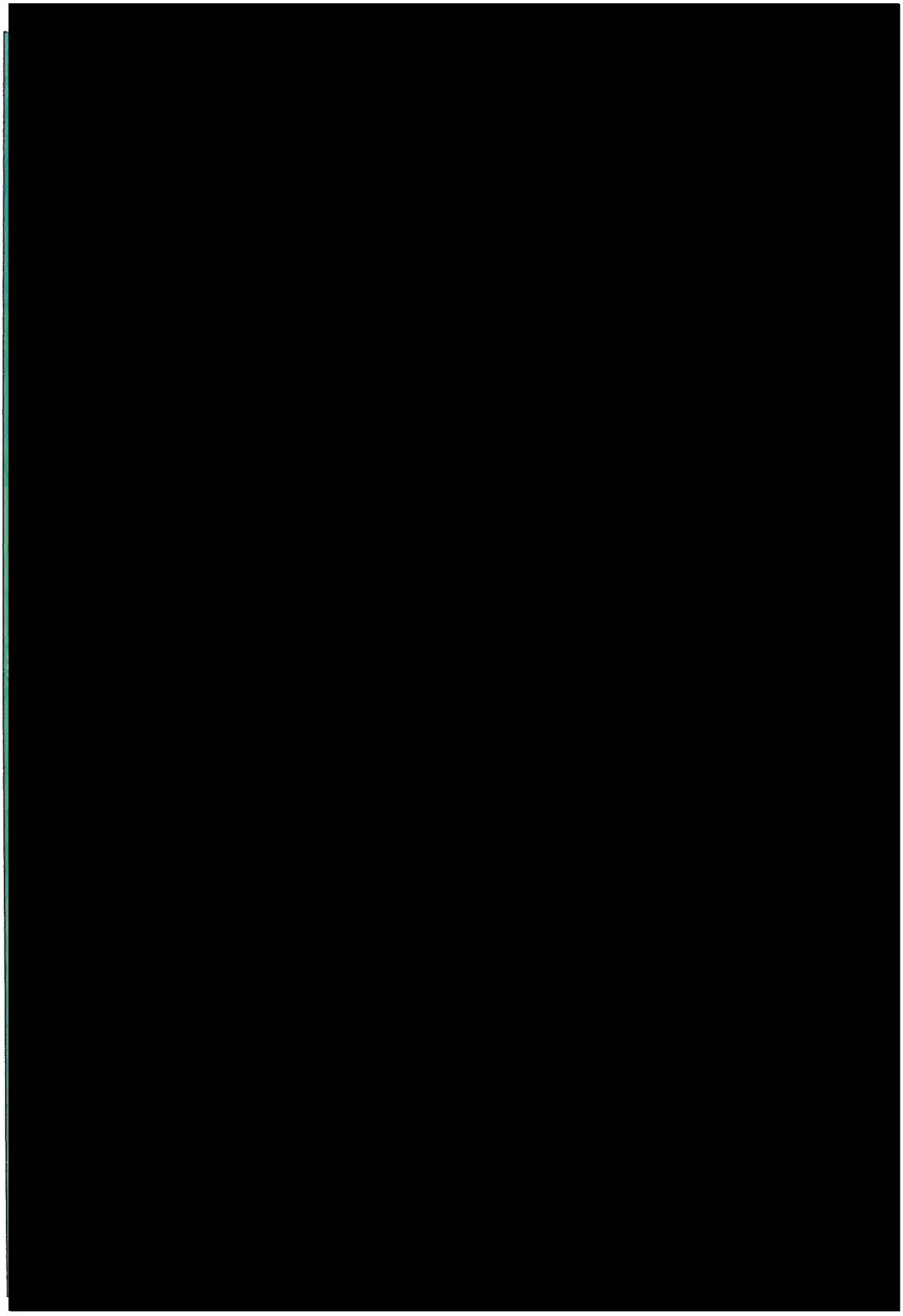


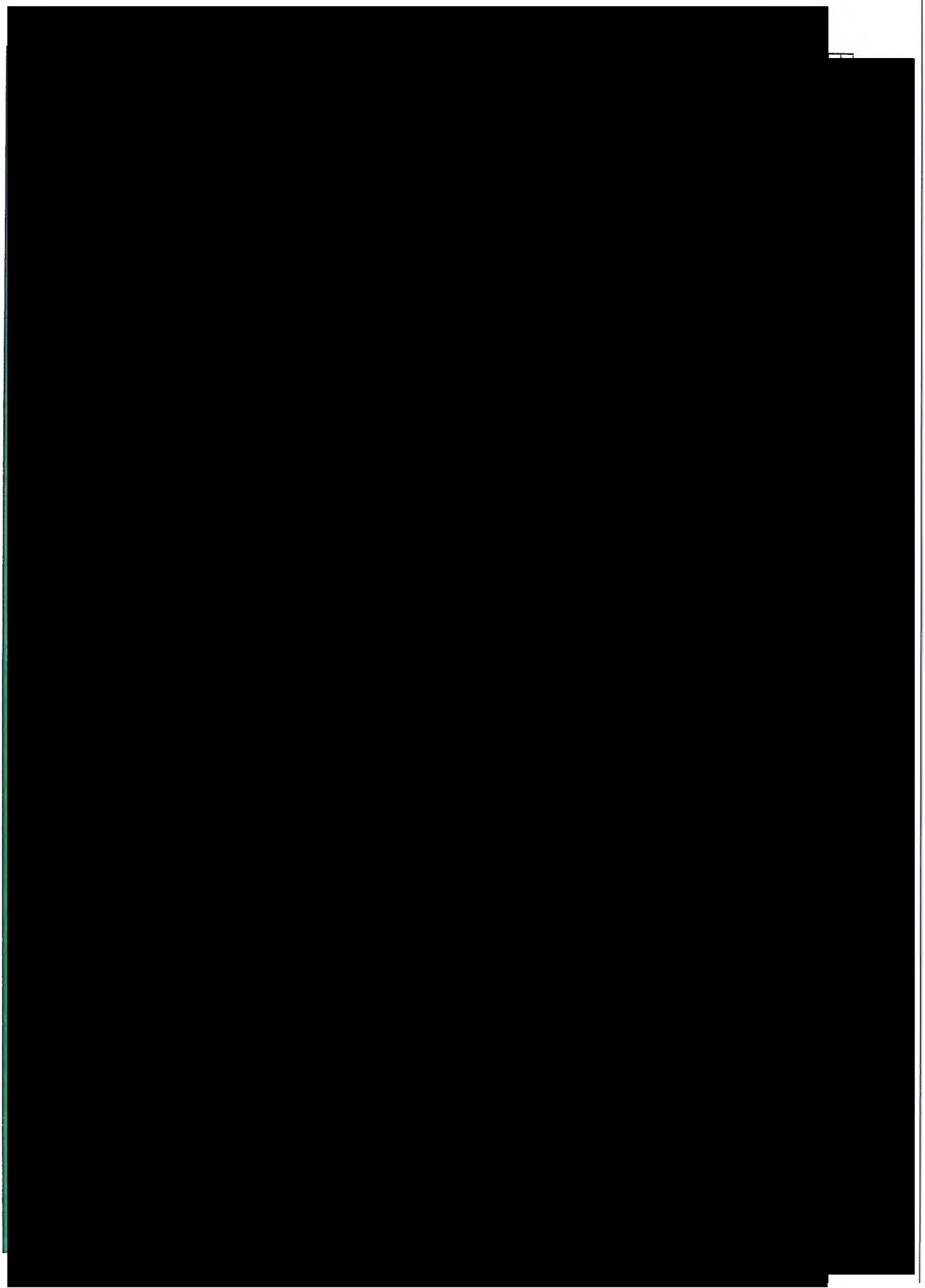


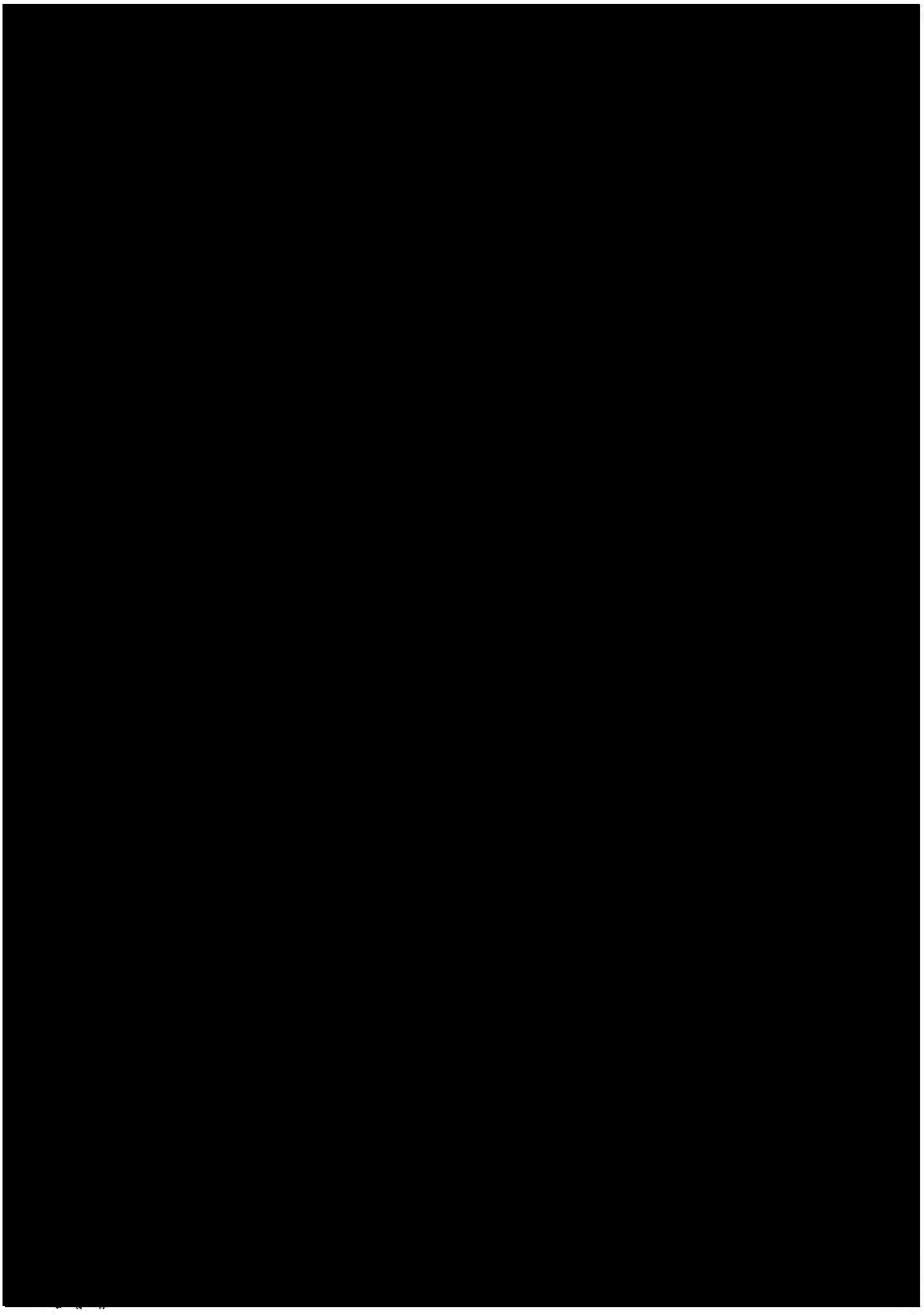


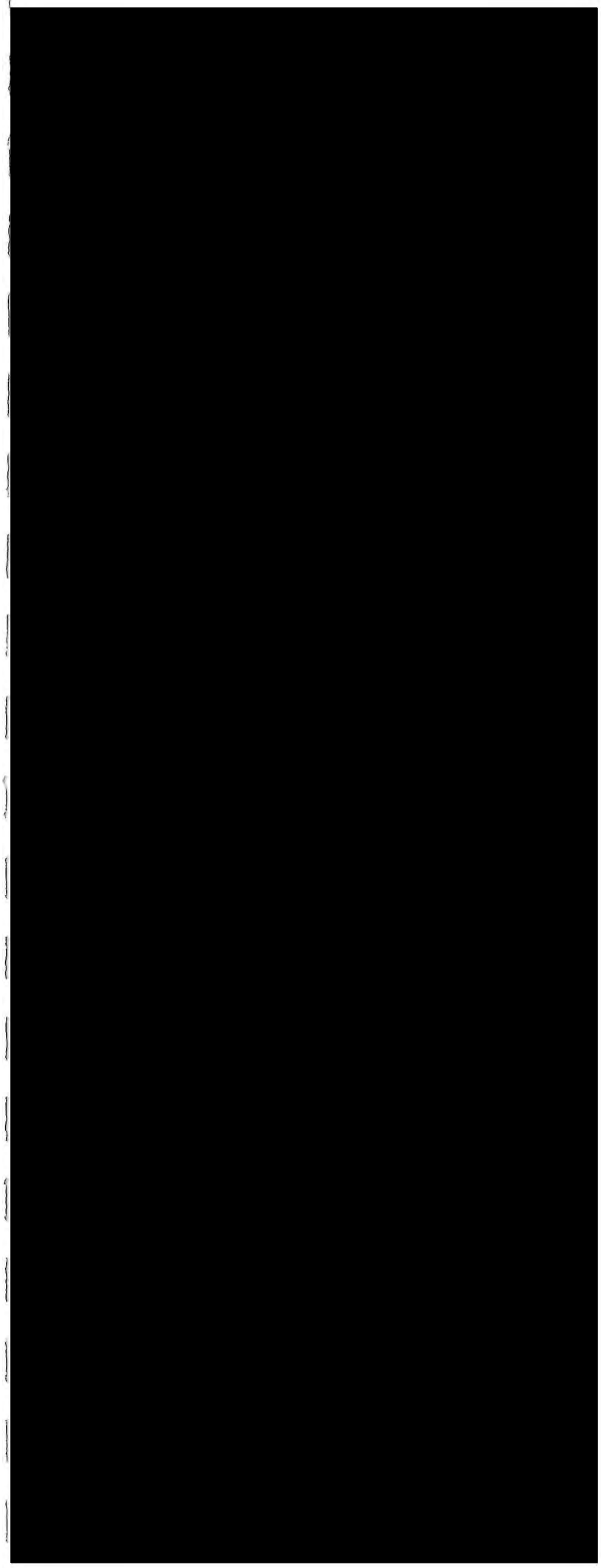


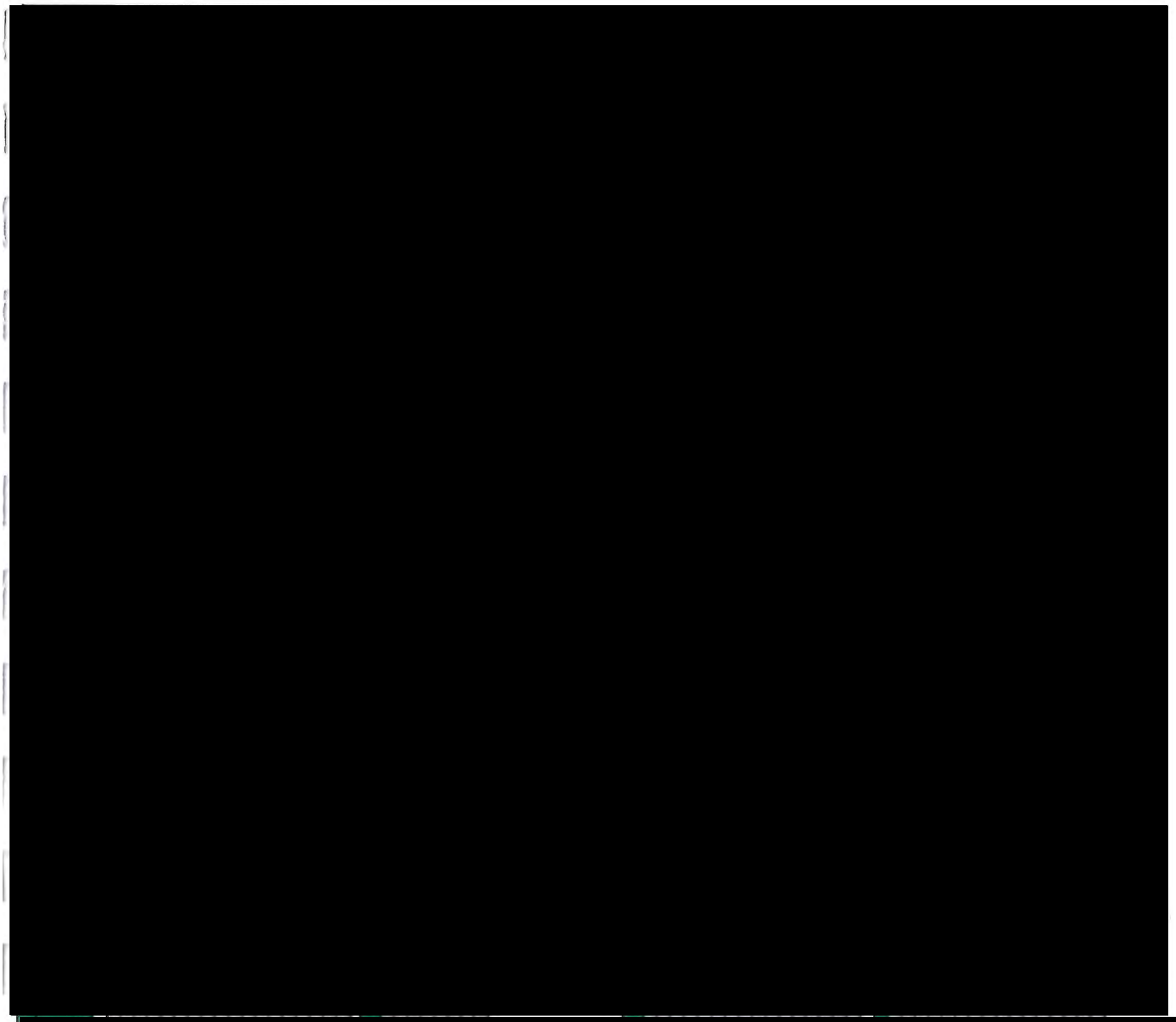


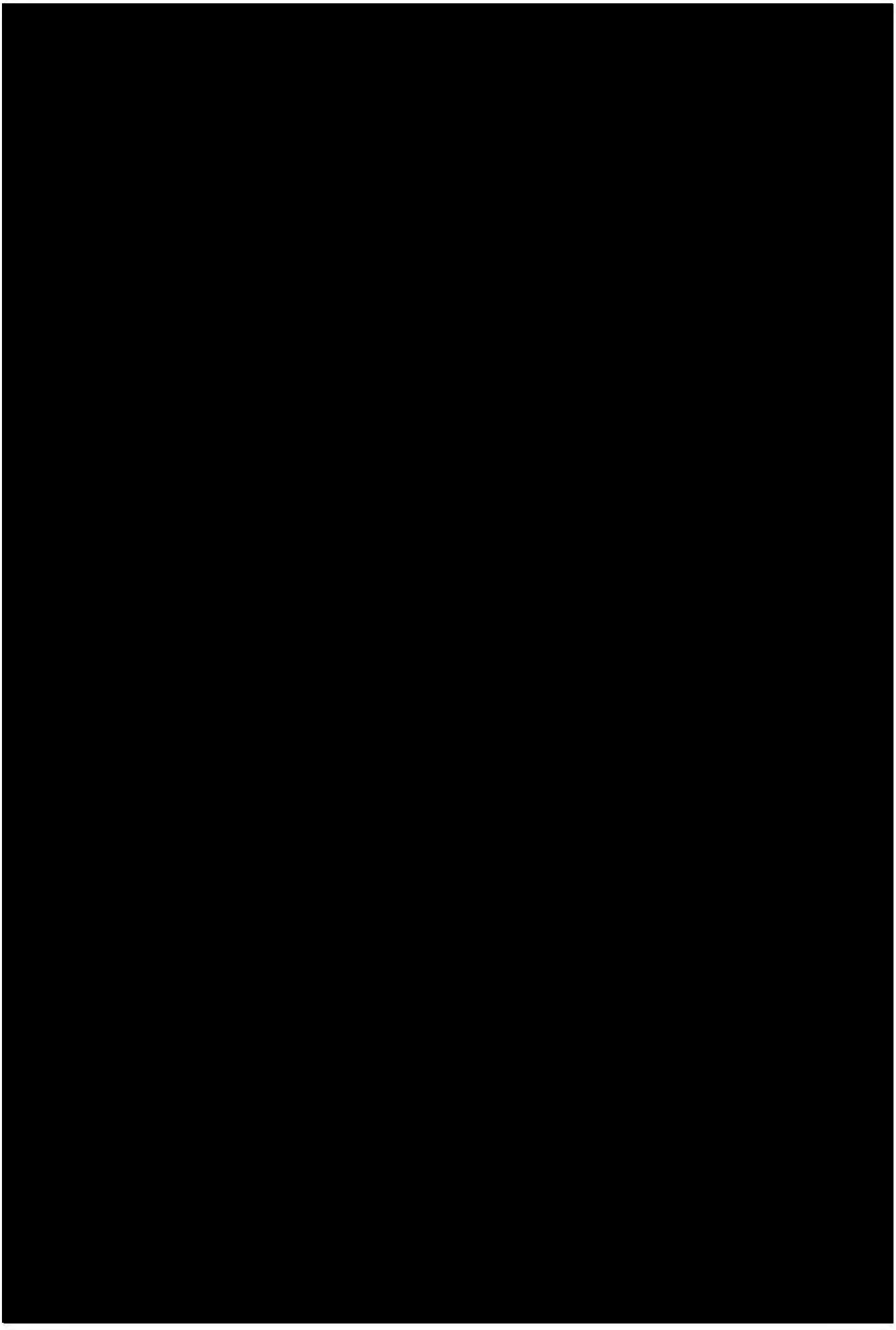


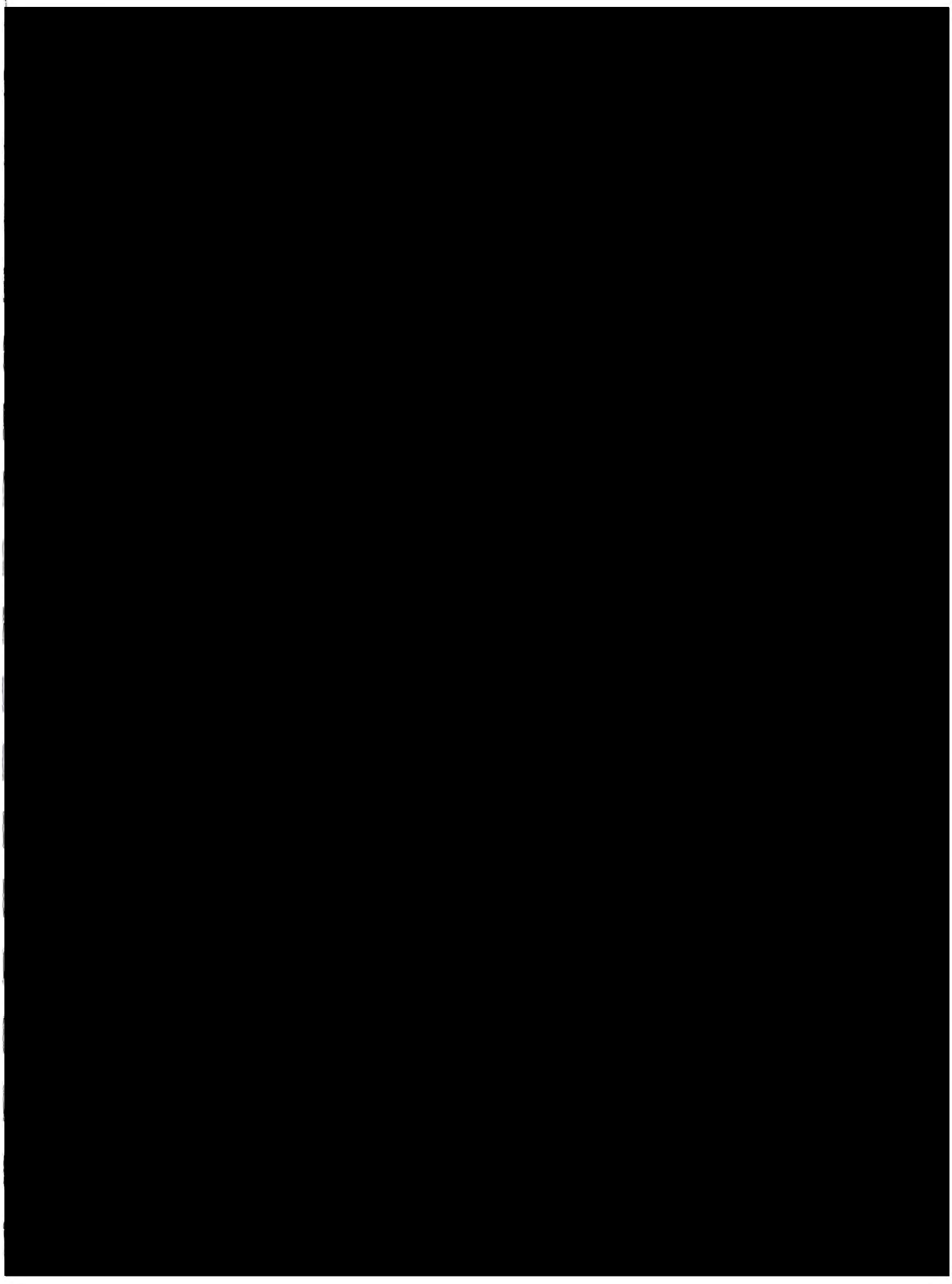


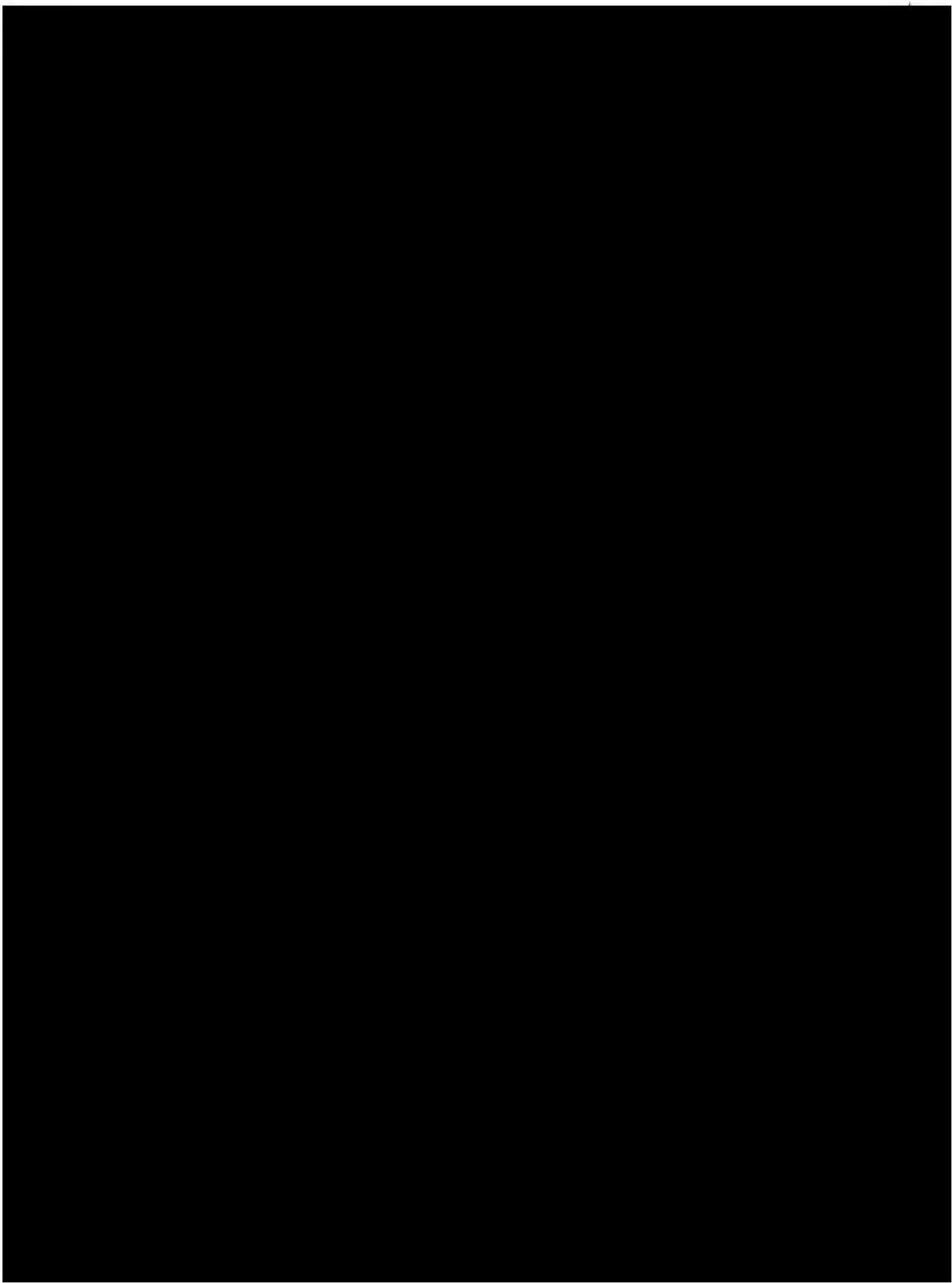


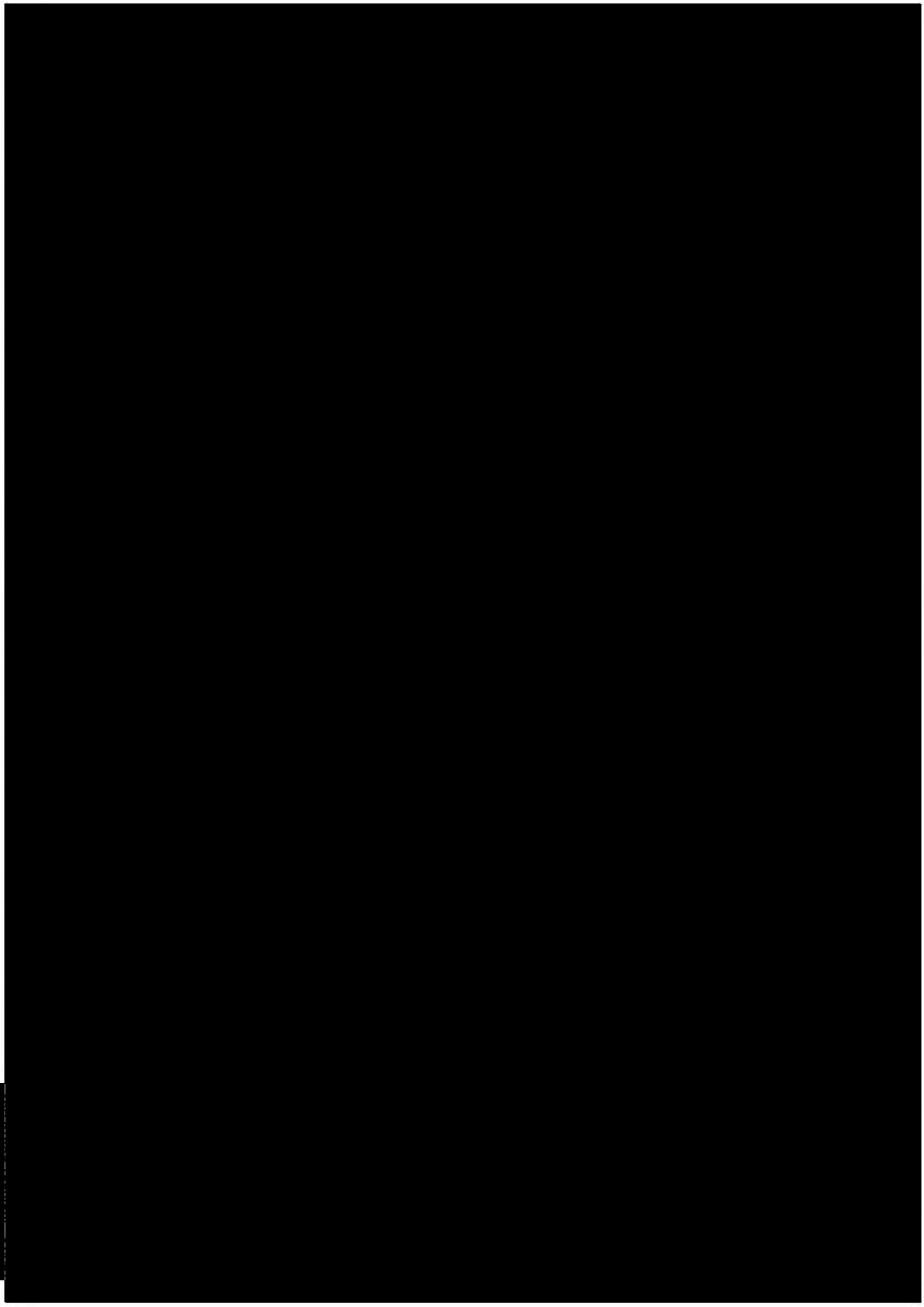


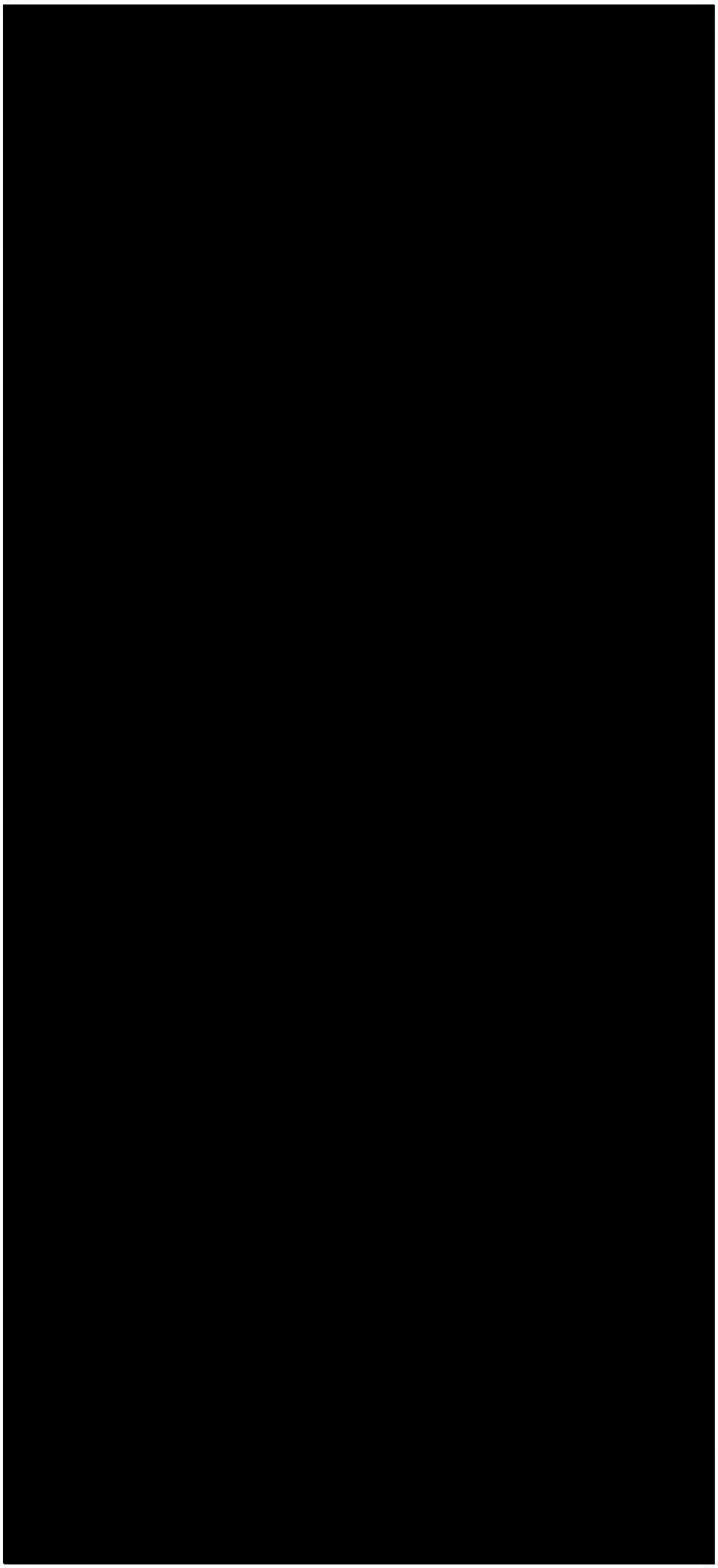












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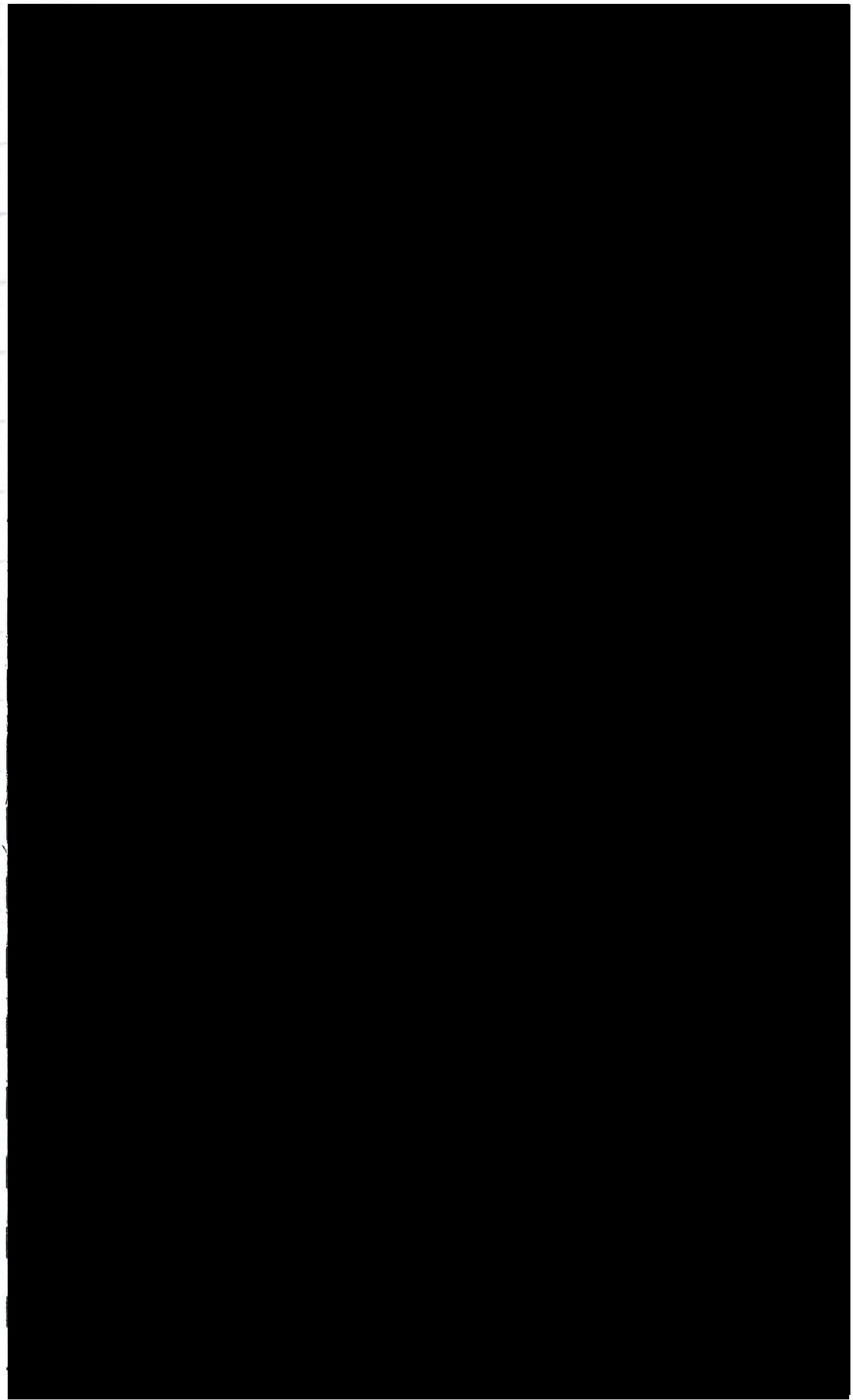
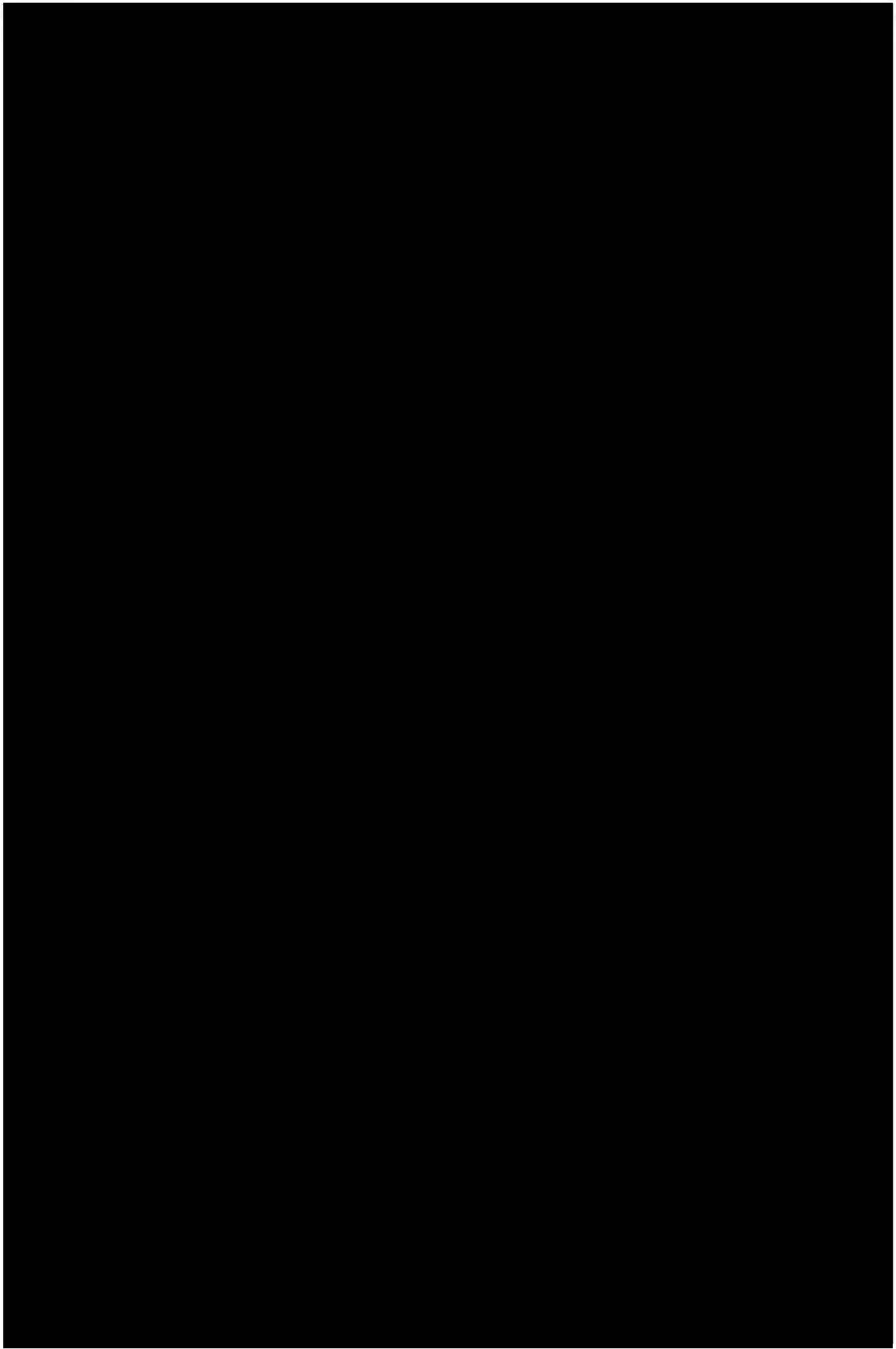
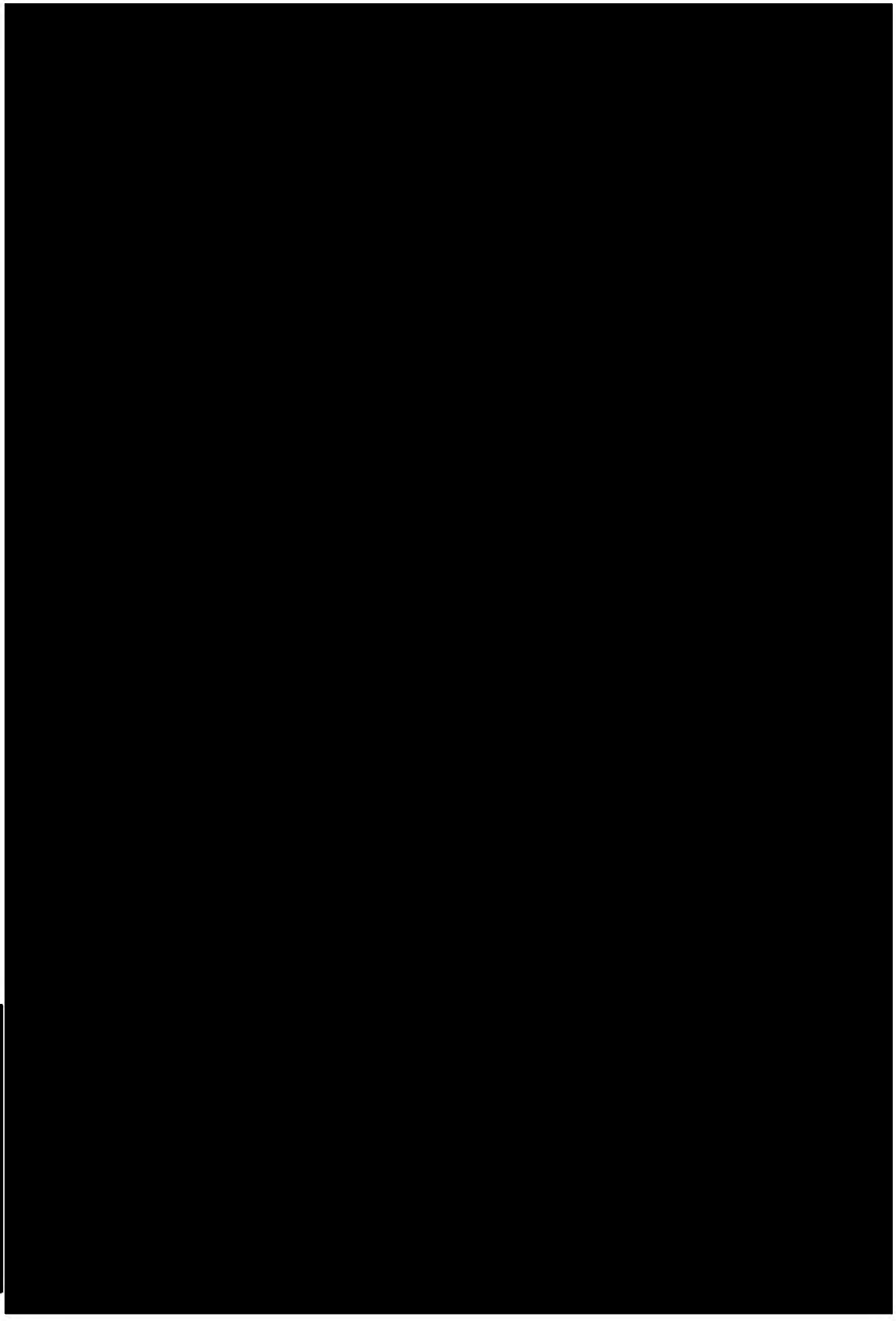
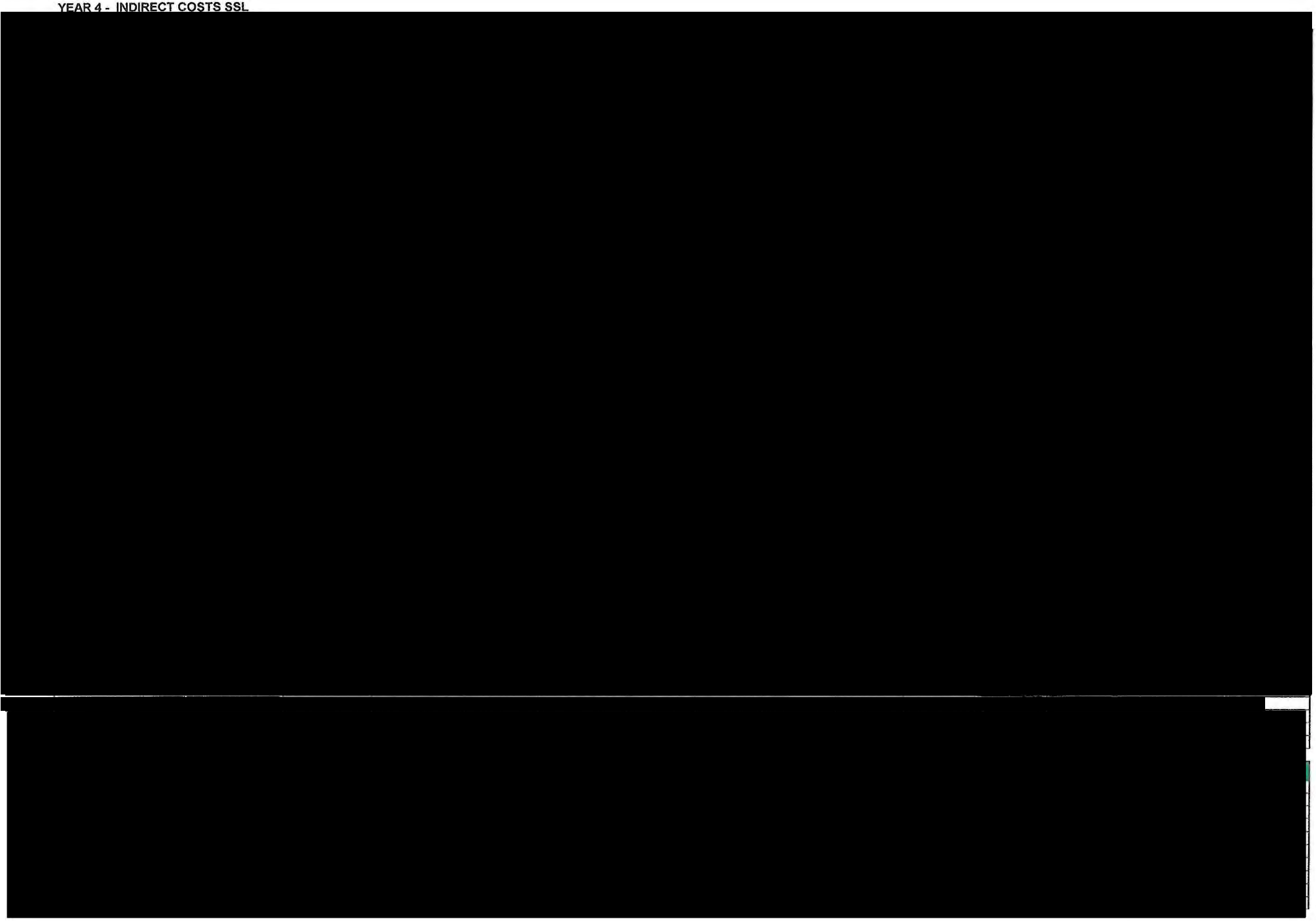
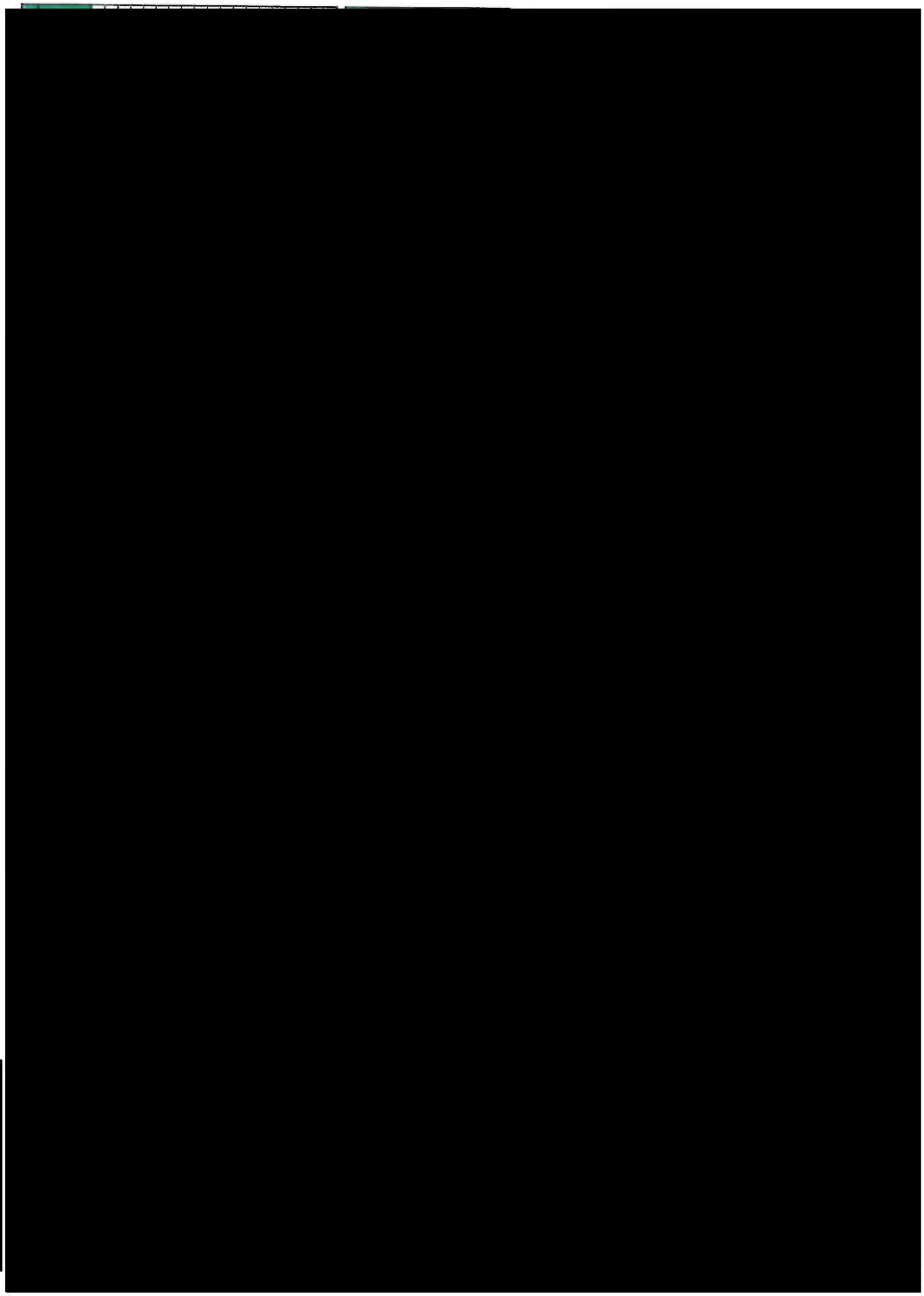


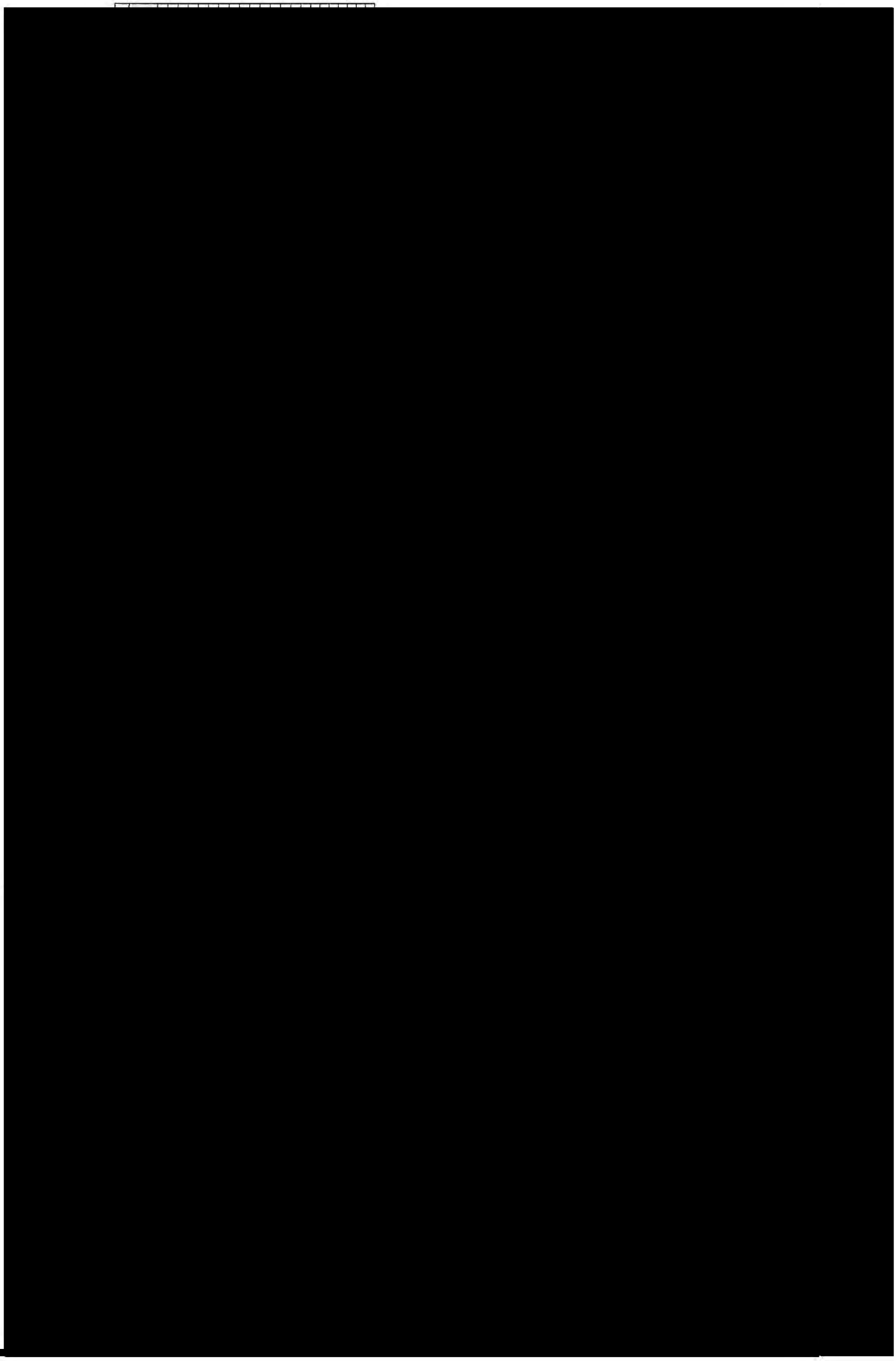


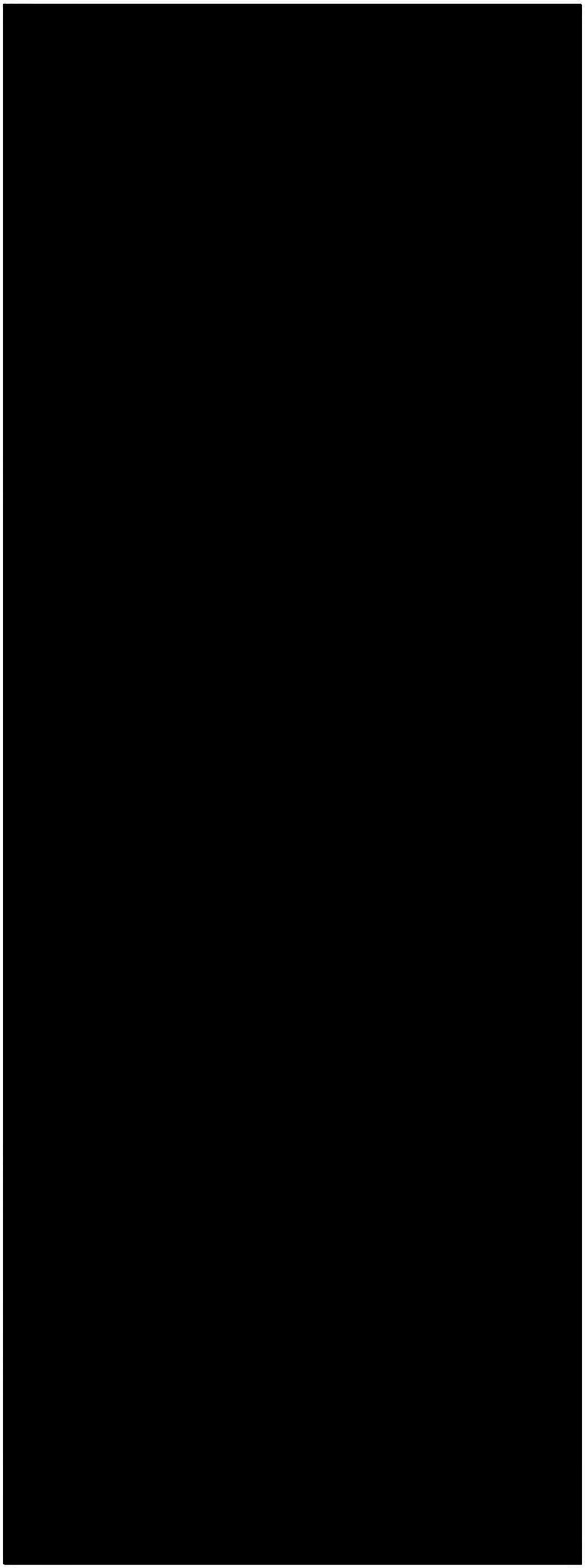


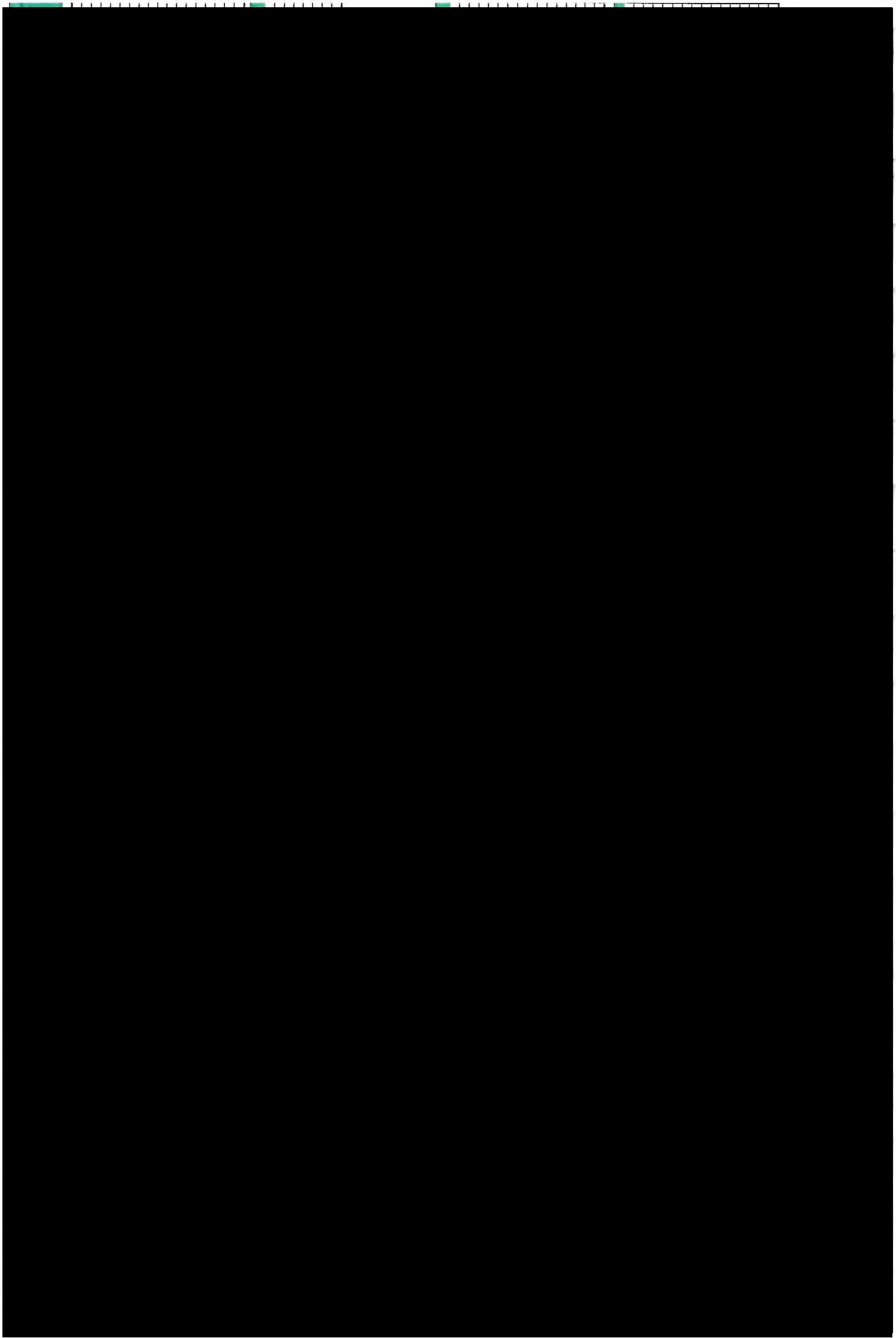
YEAR 4 - INDIRECT COSTS SSL

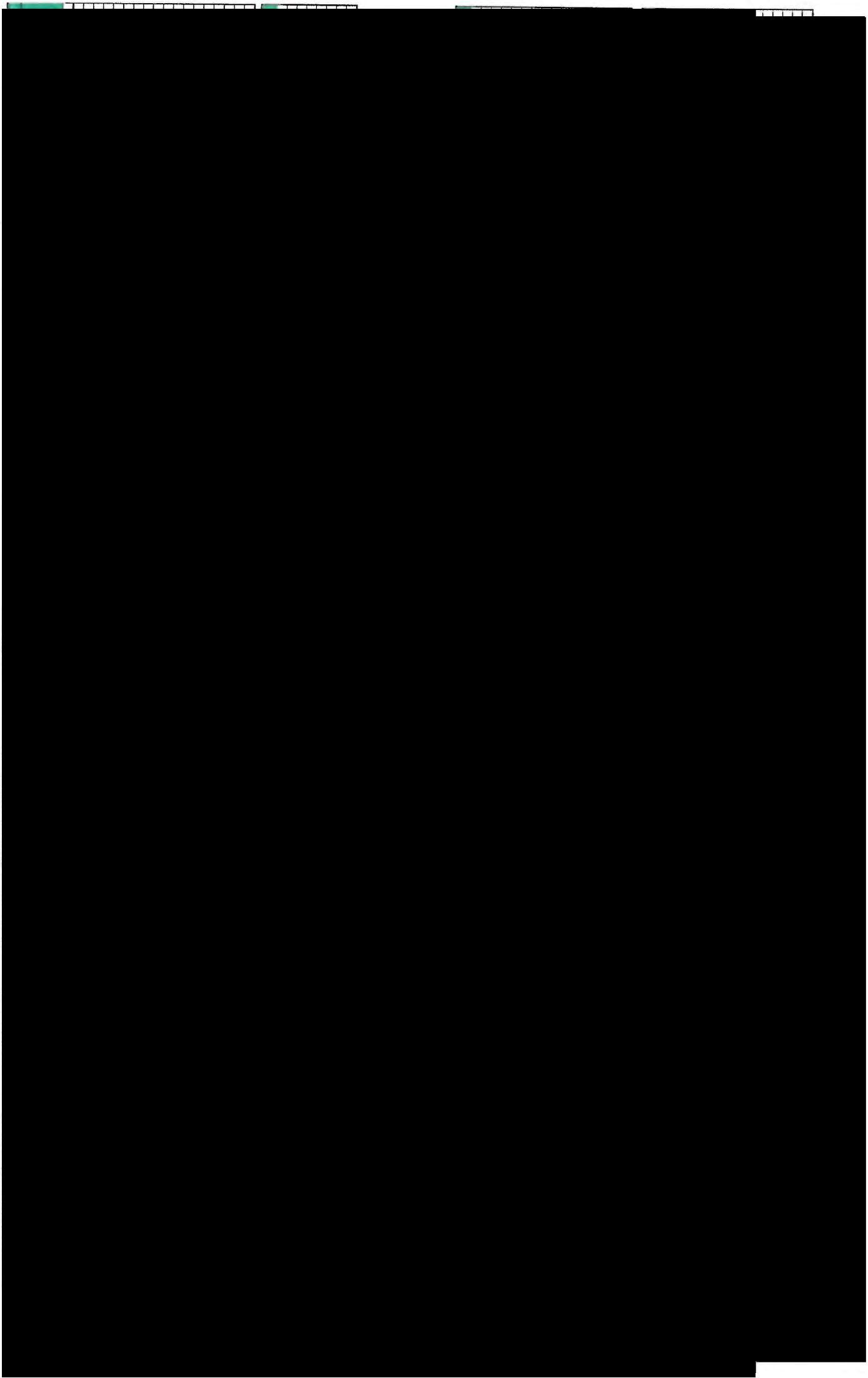


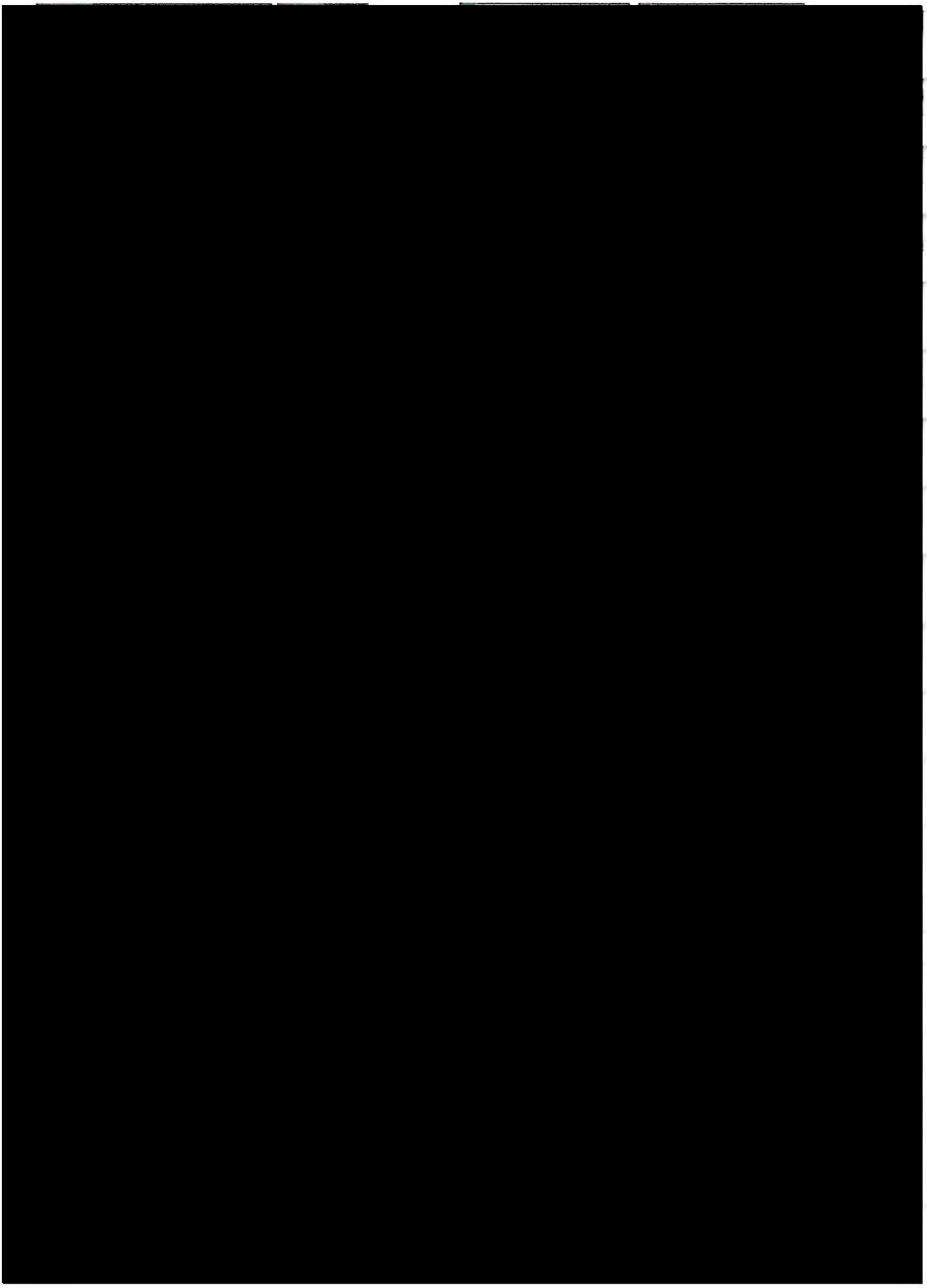


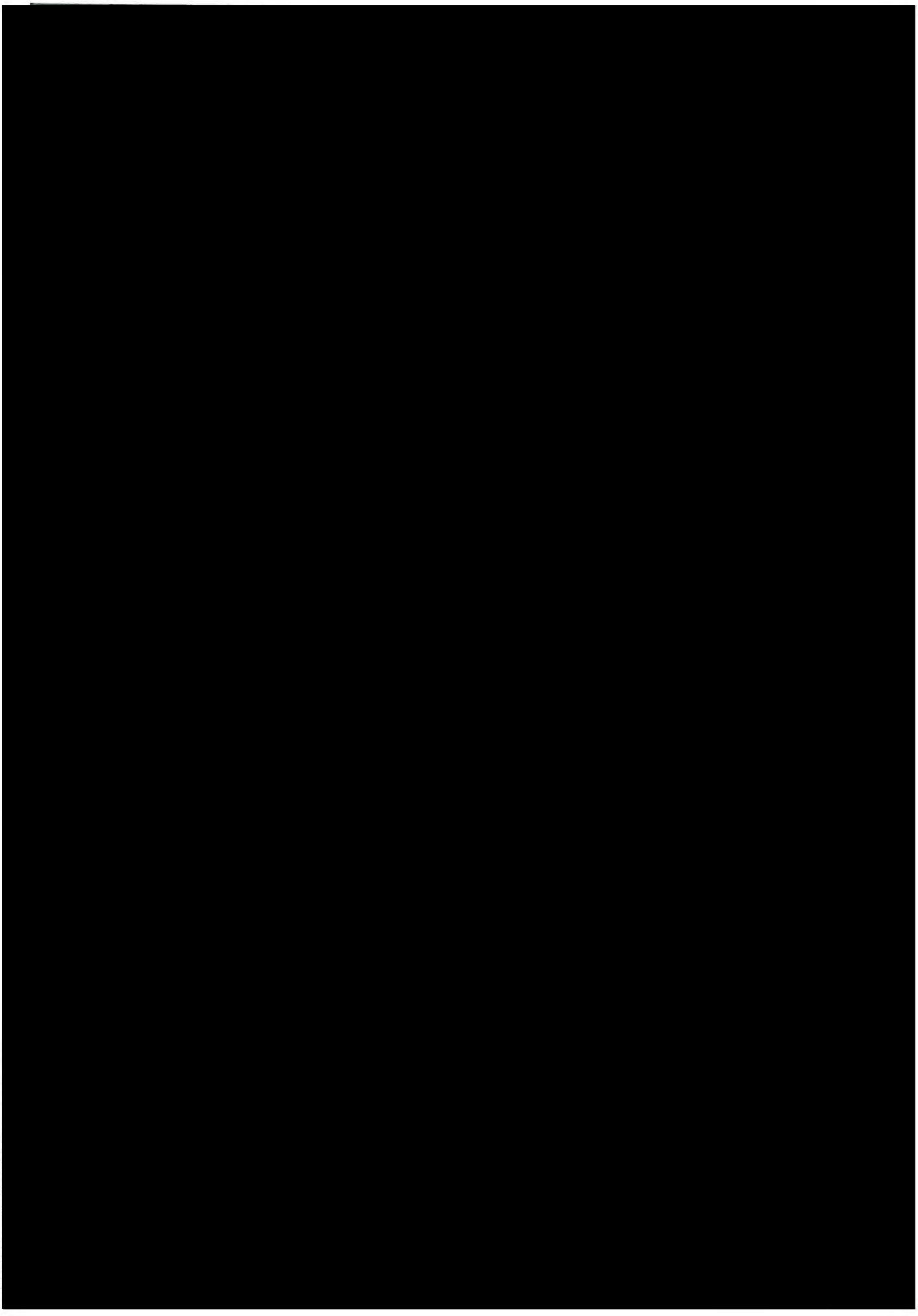


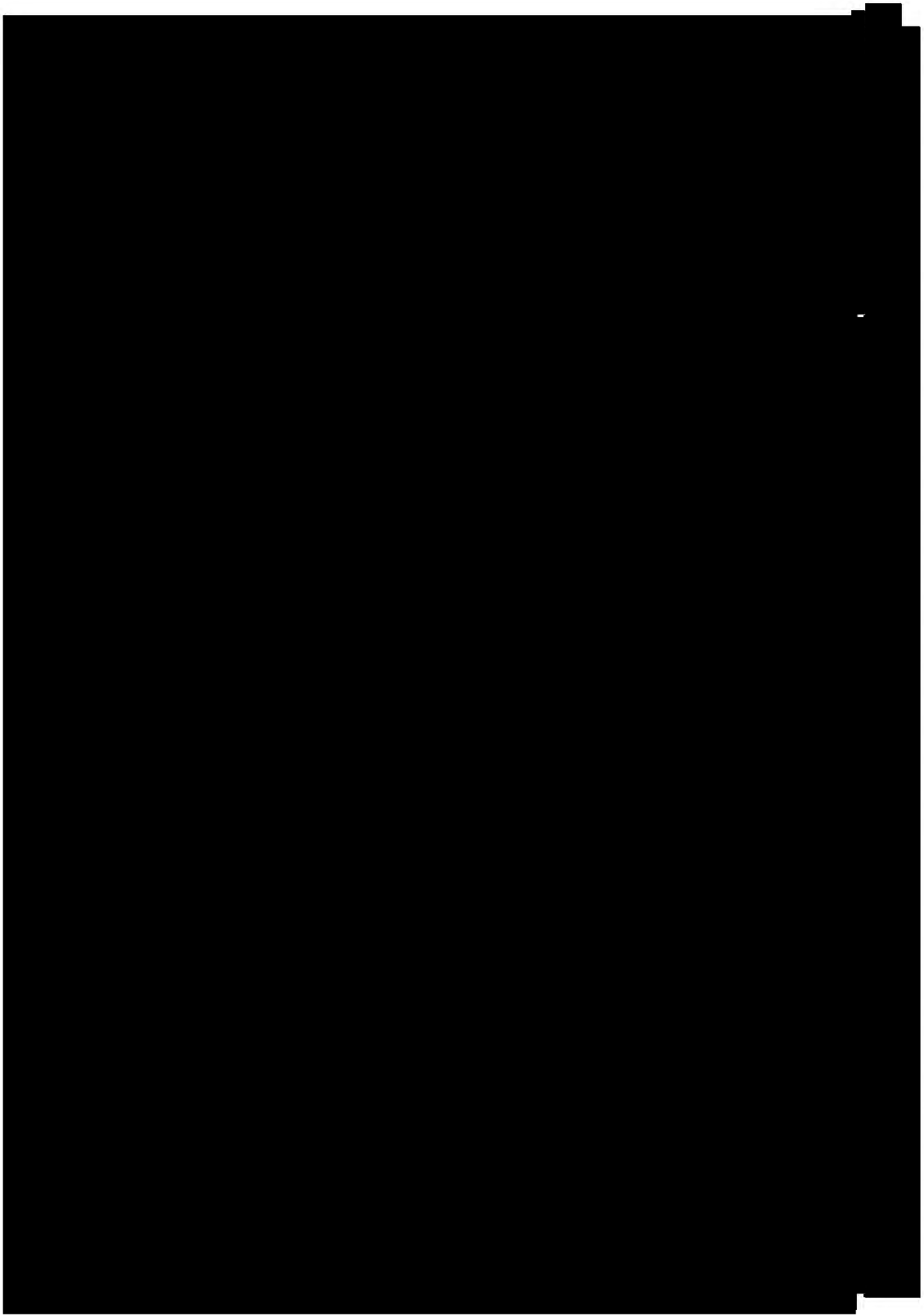


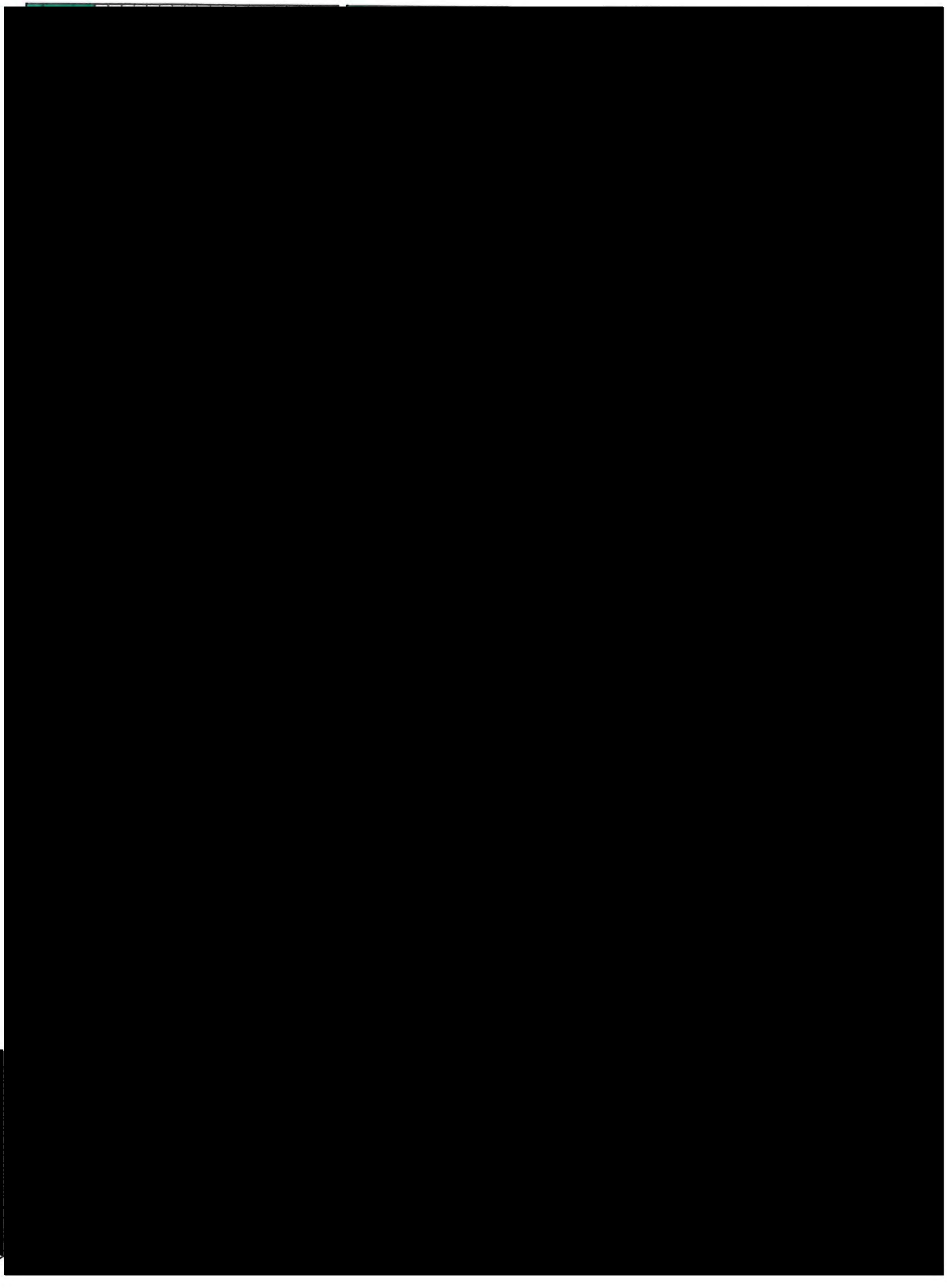


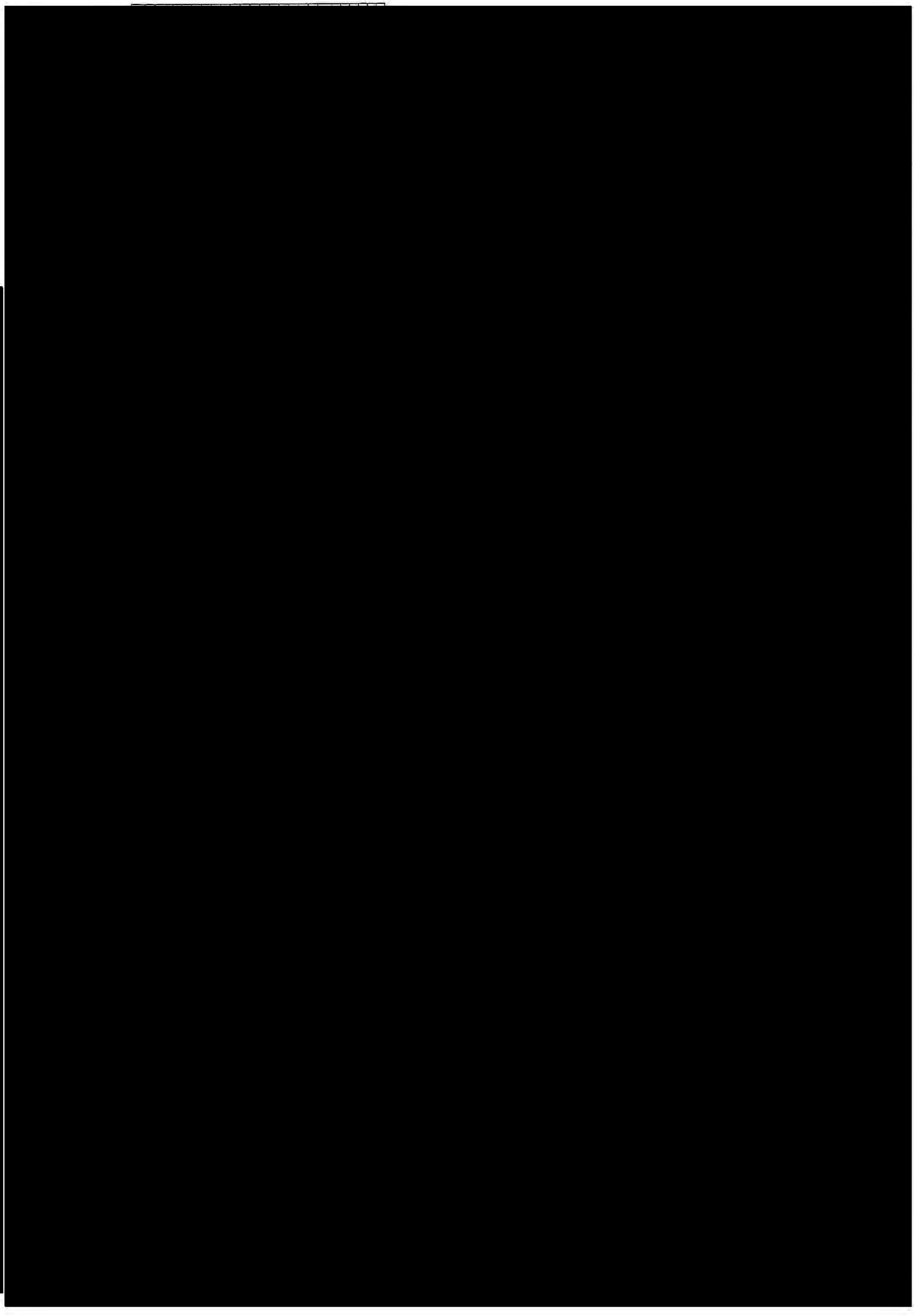












SCHEDULE 3: SPECIFICATION

Lot 2 – TRACK AND OFF TRACK DRAINAGE

1 Description of the Works

1.1. The Contractor shall supply Planned and Reactive Services for track and off track gravity drainage systems and ancillary equipment on SSL and BCV. The Contractor shall ensure that all works are carried out in accordance with London Underground and National Standards as well as Statutory Obligations required by Law which are current throughout the life of the Contract.

1.2. Drainage systems include but are not limited to:

- Channels;
- Manholes;
- Catchpits;
- Gravity drainage pipes;
- Pump sumps;
- Bailing pits;
- Gravity outfalls with or without anti flood valves;
- Ditches;
- Soakaways
- Earth structure drainage; and
- Trash screens.

1.3 The Contractor shall be responsible for delivering all the requirements of this scope, including but not limited to the supply of all labour, overheads, consumables, access equipment and plant required to undertake the required tasks. The Contractor shall hold adequate stock to meet Planned and Reactive Services needs.

1.4 The Contractor shall provide the Company with a digital image of each Asset before and after every element of planned and reactive maintenance is undertaken.

1.5 The Contractor shall undertake Planned and Reactive Services in accordance with and at the frequencies set out in the Drainage PPM Programme unless otherwise stated in this Scope.

1.6 The Contractor shall research and identify innovative products, methods of working and overall health, safety and environmental practices to ensure the continual improvement of this scope. The Contractor is encouraged to engage with the Company to arrange trial innovations for any such improvements, and work in accordance with good industry practice and best practice

1.7 The Contractor shall note that due to the ongoing Track Partnership work, LU reserves the ultimate right to de-scope or alter the scope of work or a portion of the scope of work that is no longer needed at any time of the contract and at no extra cost associated

2 Scope of Services

The types of interventions covered under Track Drainage Planned and Reactive Services scope are summarised below.

- Cleaning of Drainage by Manual & Mechanical Means – Track & Off-Track

- Undertaking CCTV and/or Acoustic Surveys of Drainage Pipes – Track & Off-Track
- Undertaking Inspections of Drainage Assets (Catchpits, Gulleys, Manholes)
- Pipework Repairs by Trenchless Methods – Track & Off-Track
- Pipework Repairs by Non-Trenchless Methods – Track & Off-Track
- Catchpit Repairs and/or Re-Builds – Track & Off-Track
- Channel & Ditch Cleaning – Tunnel Sections, Track and Off-Track
- Re-bedding, replacing and repairing manhole and sump covers
- Installation of New Catchpits
- Installation of New Drainage Systems – Track & Off-Track
- Use of New Technologies for Drainage Works
- Design of New Drainage Systems
- Level Surveys of Drainage Assets/Systems
- Inspection/Maintenance/Repair of anti flood devices

2.1 Planned Services

Planned General Inspections of Catchpits

2.1.1 The Contractor shall undertake Planned General Inspections of catchpits in accordance with LU Standards prior to carrying out cleaning or maintenance work. The PGI shall describe structural and serviceability of cover, cover frame and chamber of the catchpit. The Contractor shall take at least two digital photographs of each catchpit; the first to show the cover and the second to show the inside of the chamber (once the cover has been removed). Both photos shall clearly show the incoming and outgoing pipes. The Contractor shall report any visible sign of contamination (for example petroleum material) to the Company within 24 hours of the inspection.

2.1.2 Where catchpits are found to be buried under ballast, vegetation, earth or debris, the Contractor shall attempt to locate and uncover it. If uncovering the buried catchpit would present a safety risk or it would take more than one complete shift to completely expose the catchpit, the Contractor shall mark the position of the catchpit and shall report this to the Company. The Contractor shall provide the Company with a digital image of the Asset before and after to show clearly the depth and extent of excavation.

2.1.3 The Contractor shall check all Drainage Asset Location Plans provided by the Infracos against the catchpits found on site. Where a discrepancy is identified between the record drawings and the actual catchpit, the Contractor shall carry out line and level surveys at that location, shall update the Drainage Asset Location Plans using Microstation V8 format and shall submit the updated plans and supporting Asset information to the Company.

Catchpit Cleaning

2.1.4 The Contractor shall clean catchpits of silt and debris and shall double bag and

remove waste from site, taking it to an authorised disposal point. The Contractor shall take care not to contaminate the ballast. After cleaning, the depth of silt in the chamber shall not exceed half of the depth of the sump.

2.1.5 The contractor shall arrange for any confined space access when required.

2.1.6 The Contractor shall report the volume of waste removed to the Infracos.

Catch pit Covers and Frames

2.1.7 The Contractor shall inspect catchpit covers (as part of the Planned General Inspection of catchpits referred to in paragraph 2.1.2 above) and shall report to the Infracos on the condition of catchpit covers in accordance with Standards. The Contractor shall replace catchpit covers and / or the top-ring of the catchpit where these are found to be in a sub-standard condition. The design of replacement catchpit covers shall be approved in advance by the Company.

2.1.8 The Contractor shall install an Asset Identification Plate where this is missing, broken, damaged or not existent.

Drainage Channel Cleaning

2.1.9 The Contractor shall validate the Asset list of channels on each maintenance visit to drainage channels. By the end of the contract term, the Contractor shall compile and present a complete Asset list for all drainage channels throughout the network and in a format to be agreed with the Company and in accordance with the Drainage PPM Programme.

2.1.10 The Contractor shall clean drainage channels of silt, debris and scale deposits taking care to avoid damage to the covers or their surrounds. Solid waste that is likely to settle out in the drainage system shall be physically removed from site and taken to an authorised disposal point.

2.1.11 The Contractor shall lift gratings, check on the condition of channels and gullies and shall replace the gratings in sub-standards condition. Gratings shall be replaced level to avoid risk of tripping. Open channels shall be cleaned back to the manhole or point of discharge.

Cleaning of Gravity Drainage Pipes

2.1.12 The Contractor shall clean gravity drainage pipes by rodding and/or high pressure jetting and shall physically remove waste from site, taking it to an authorised disposal point. The Contractor shall report the volume of waste removed to the Company. The Contractor shall check for obvious defects (blockage, collapse, etc) and report these to the Company.

Sumps and Bailing Pits

2.1.13 . The Contractor shall validate the Asset list of sumps and bailing pits on each

maintenance visit. By the end of the contract term, the Contractor shall compile and present a complete Asset list for all drainage sumps and bailing pits throughout the network and in a format to be agreed with the Company and in accordance with the Drainage PPM Programme.

2.1.14 The Contractor shall clean sumps and bailing pits of silt and debris and shall physically remove waste from site, taking it to an authorised disposal point. The Contractor shall take care not to contaminate the ballast. The Contractor shall repair spalled concrete areas using a suitable approved product in accordance with Standards and the manufacturer's instructions. The Contractor shall replace covers that are defective / substandard with a cover from an approved supplier in accordance with Standards. The Contractor shall undertake brickwork repairs in accordance with Standards. Where areas of spalled brickwork is to be removed, the Contractor shall remove the defective brickwork with the minimum of breakout to adjacent sound brickwork, but sufficient to form a key and shall re-build to the same profile, matching the adjacent brickwork.

Outfalls to Public Sewers and Anti Flood Valves

2.1.15 The Contractor shall inspect chambers and clean, if required, in accordance with Standards. The Contractor shall check the condition and undertake repairs (where necessary) of flaps / anti surcharge devices to ensure that they are in full working condition. The Contractor shall grease and maintain valves and check that watertight covers are in working condition. The Contractor shall take care not to damage seals, covers and fixings to chambers.

2.1.16 The Contractor shall report to the Infracos on damage found to watertight covers to outfalls and shall notify the Infracos of watertight covers not in working condition.

Ditch Cleaning

2.1.17 The Contractor shall validate extant Asset lists for ditches for all lines on each maintenance visit. The Contractor shall present a complete Asset list to the Infracos by the end of the Contract term. The contractor shall clean and carry out a PGI for any new/uncharted ditch.

2.1.18 The Contractor shall clean all drainage ditches across the entire Networks during the term of the Contract as per the frequency defined in the PPM Programme, of any objects and overgrown plants that are causing a blockage. Silt, twigs, leaves and other biodegradable materials removed from ditches may be spread evenly over adjacent land away from the banks of the ditch or stream. The Contractor shall physically remove non-biodegradable material from site, taking it to an authorised disposal point.

2.1.19 The Contractor shall remove silt from the entire length of the ditch to give an even gradient ending 75mm below the invert at the upstream end of the pipe. The

Contractor shall provide the Infracos with a digital image of the ditch before and after cleaning.

Depots and Sidings

2.1.20 The Contractor shall undertake planned maintenance of track and off track drainage at depots and sidings listed in the Drainage PPM Programme Template once during the term of the Contract.

Trash Screens

2.1.21 The Contractor shall undertake planned maintenance of trash screens listed in the Drainage PPM Programme Template as per the frequency during the term of the Contract. The Contractor shall provide the Company with a digital image of the Trash Screen before and after cleaning.

Vegetation removal

2.1.22 The Contractor shall clear the vegetation around the off- track drainage assets when required to enable the maintenance work.

2.2 Reactive Services

The Contractor shall be responsible for delivering all the Reactive Services requirements of this scope, including but not limited to the supply of all labour, overheads, consumables, access equipment and plant required to undertake the required tasks. The Contractor shall hold adequate stock to meet Services needs.

Reactive Services are required 24 hours a day, 7 days a week, every day of the year.

All Faults shall be notified / passed by the Company to the Contractor. All Faults shall be rectified. The Contractor shall respond to and rectify Faults in accordance with with paragraph 2.2 of Schedule 12.

Faults that cannot be rectified on the initial visit shall be left by the Contractor in a safe condition.

If the Fault is estimated to either take more than two shifts to rectify (calculated as the total resource time taken to rectify the Fault) or the cost to rectify the Fault costs in excess of £3,000 (including the cost of labour, plant, equipment, consumables and access equipment) to complete, the Contractor shall cease work and shall notify the Company in writing within 24 hours.

The Contractor shall take a digital photograph of the Asset or component before and after the Fault is rectified.

The Contractor is to submit a Schedule of Rate document for quantifying fault works.