

Sunrise  
Wind

Powered by  
Ørsted &  
Eversource

Section 7 - PUBLIC

# Interconnection & Deliverability Plan



Portions of this proposal contain confidential, proprietary, and/or commercially sensitive information which has been redacted from the "Public Version" of this proposal. Sunrise Wind has submitted a "Confidential Version" of this proposal which includes the redacted information, and which should be treated as a non-public record that is exempt from disclosure to the extent permitted under applicable laws and/or as expressly set forth in the Request for Proposals.

## Table of Contents

7.0	Interconnection and Deliverability Plan.....	7-1
7.1	Anticipated Injection and Delivery Points.....	7-8
7.2	Alternate Proposals.....	7-10
7.3	Planned Interconnection.....	7-10
7.4	Interconnection Plan and Timeline.....	7-11
7.5	Electrical One-Line Diagram.....	7-12
7.6	Expected NYISO Interconnection Cost Allocation.....	7-12
7.7	Cost of Transmission Infrastructure.....	7-13
7.8	Available Capacity of Injection Point.....	7-14
7.9	NYISO Market Participant.....	7-15
7.10	Meshed Ready Components.....	7-15
7.11	Meshed Ready Deliverables.....	7-18
7.12	Exclusion of Meshed Ready Proposals.....	7-20
7.13	Cable Route GIS Files.....	7-21

### List of Tables

[REDACTED]	.....	7-1
[REDACTED]	.....	7-9
[REDACTED]	.....	7-13
[REDACTED]	.....	7-14
[REDACTED]	.....	7-18

### List of Figures

[REDACTED]	.....	7-2
[REDACTED]	.....	7-2
[REDACTED]	.....	7-3
[REDACTED]	.....	7-3
[REDACTED]	.....	7-4
[REDACTED]	.....	7-5
[REDACTED]	.....	7-5
[REDACTED]	.....	7-6
[REDACTED]	.....	7-7
[REDACTED]	.....	7-8
[REDACTED]	.....	7-9
[REDACTED]	.....	7-12
[REDACTED]	.....	7-17



## 7.0 INTERCONNECTION AND DELIVERABILITY PLAN

6.2.7 The Interconnection and Deliverability Plan must demonstrate that Project's plan for offshore transmission and onshore grid interconnection is technically viable and can be implemented on a timeline that is consistent with meeting the overall development schedule and proposed Commercial Operation Date(s). The Submission must include both Confidential and Public versions of the Interconnection and Deliverability Plan.

The Project is connecting to the existing Holbrook 138 kilovolt (kV) substation owned by the Long Island Power Authority (LIPA) and operated and maintained by Public Service Enterprise Group (PSEG) Long Island, located in Zone K. The Proposer has a highly advanced interconnection plan with a fully executed Large Generator Interconnection Agreement (LGIA) with the New York Independent System Operator (NYISO) and LIPA.

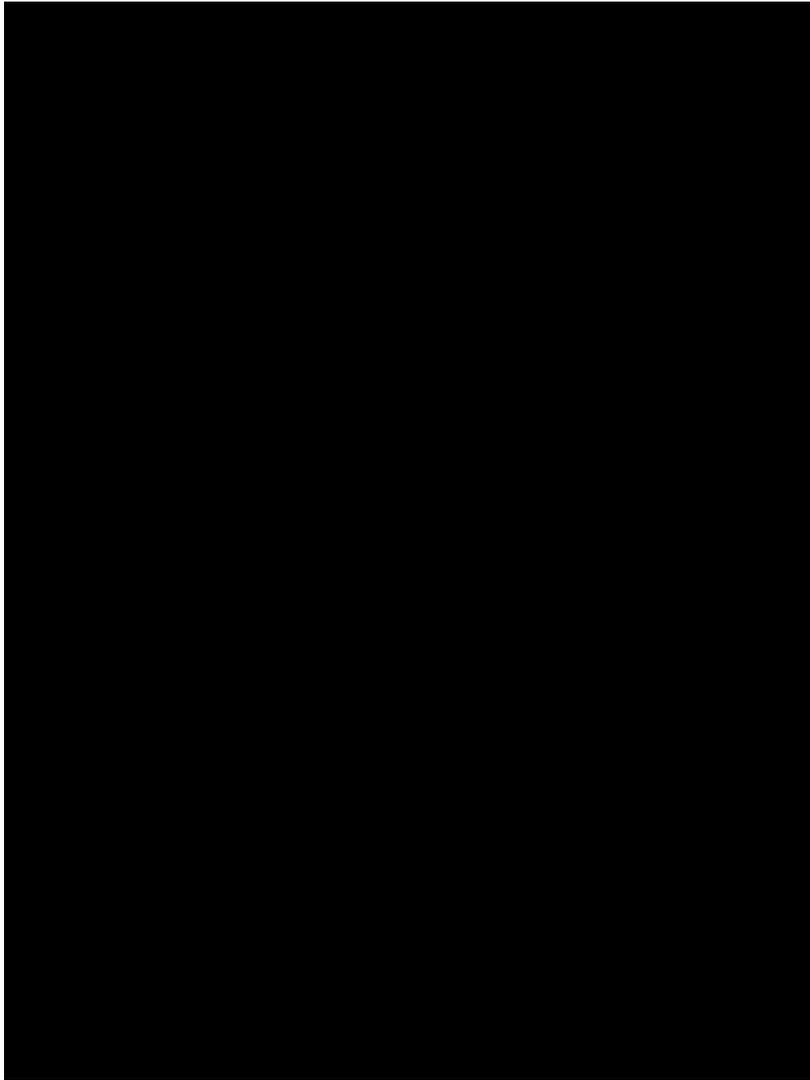
[REDACTED]

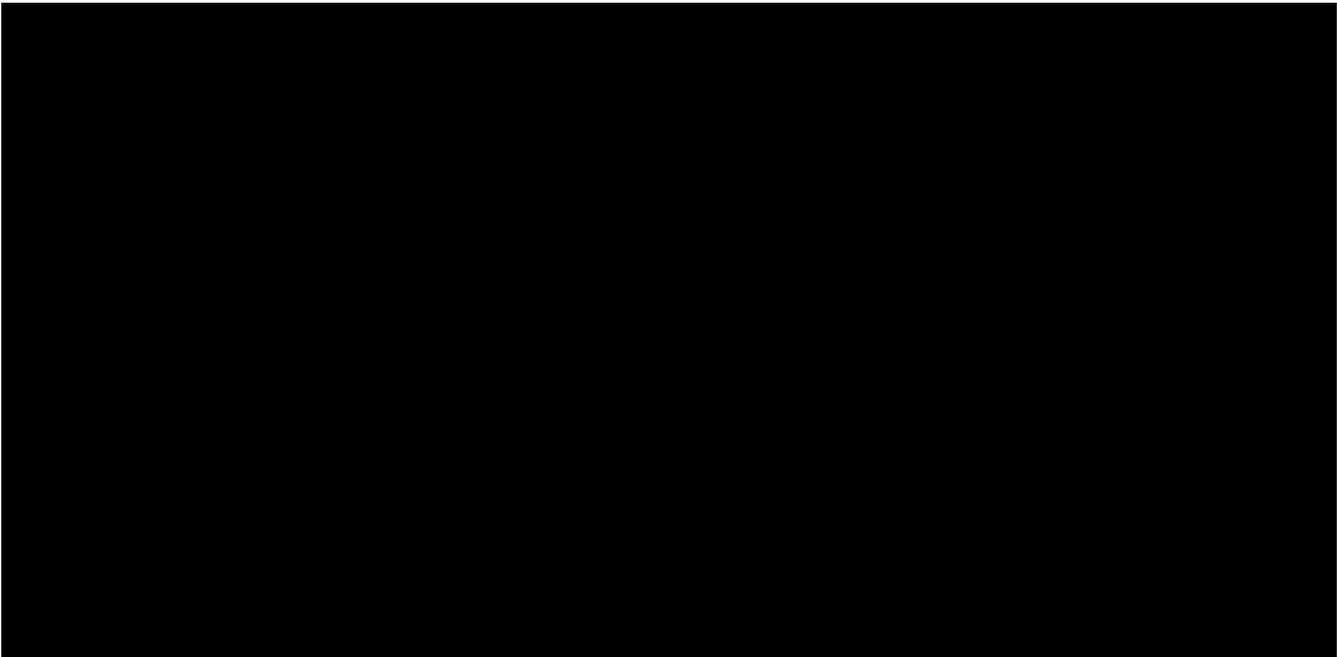
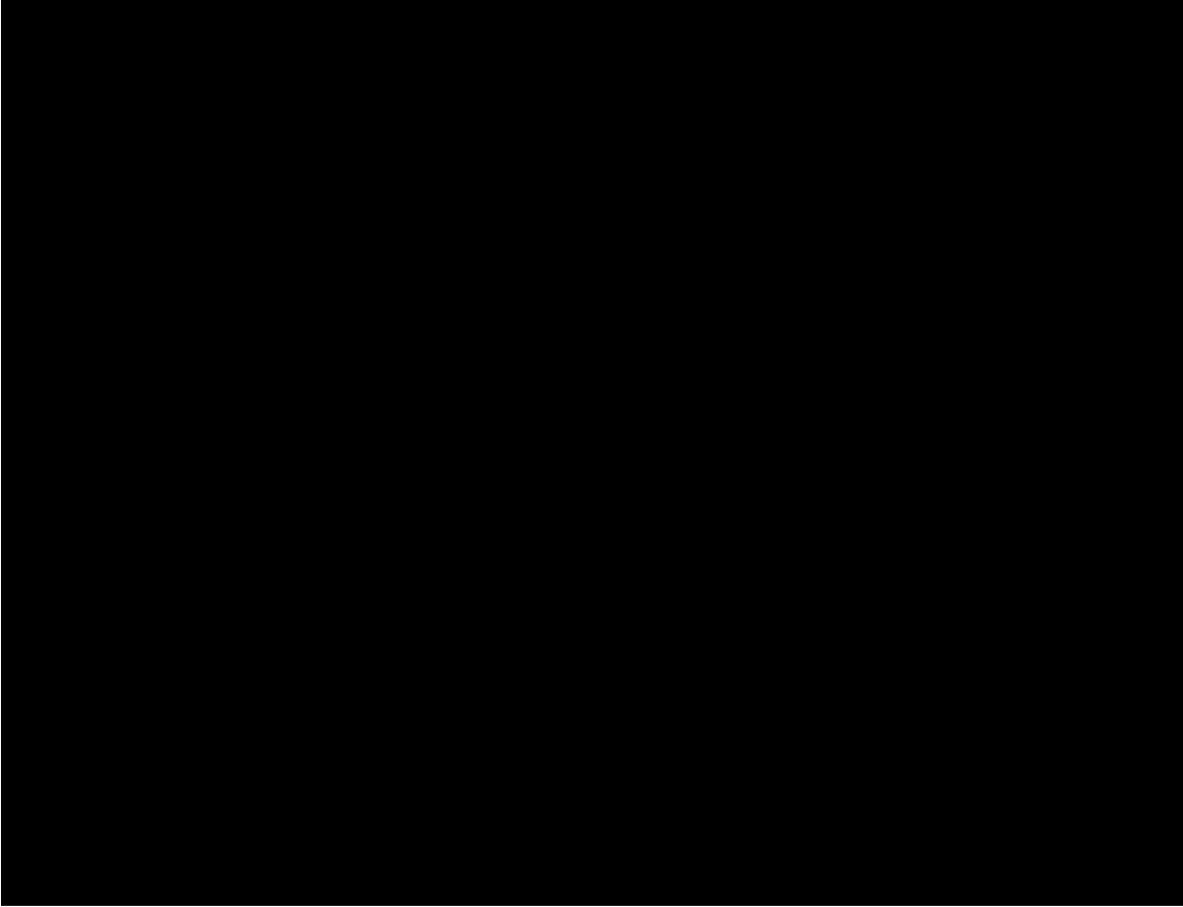
[REDACTED]

[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

[REDACTED]

[REDACTED]

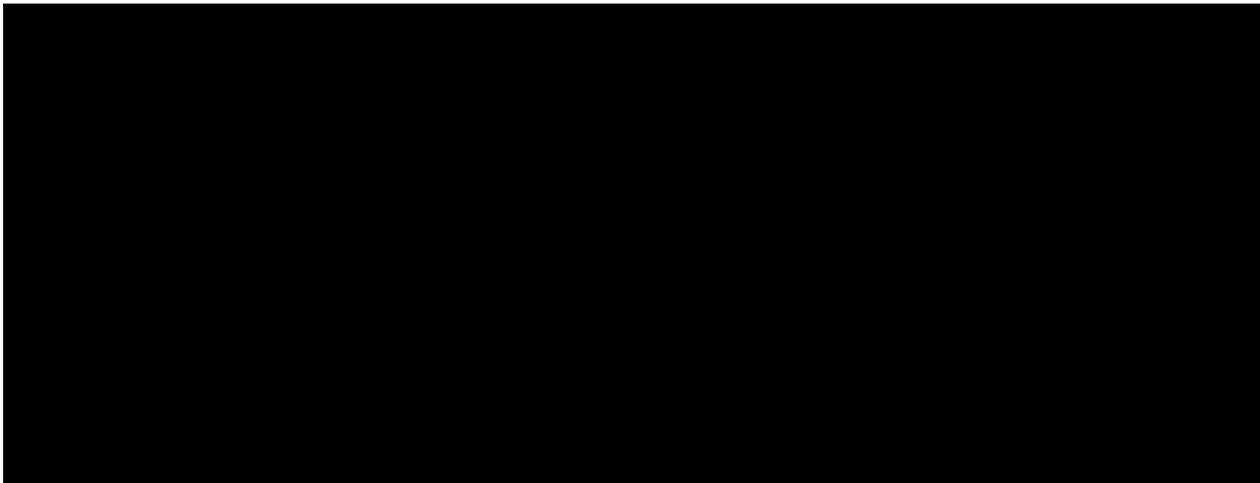




[Redacted]

[Redacted]

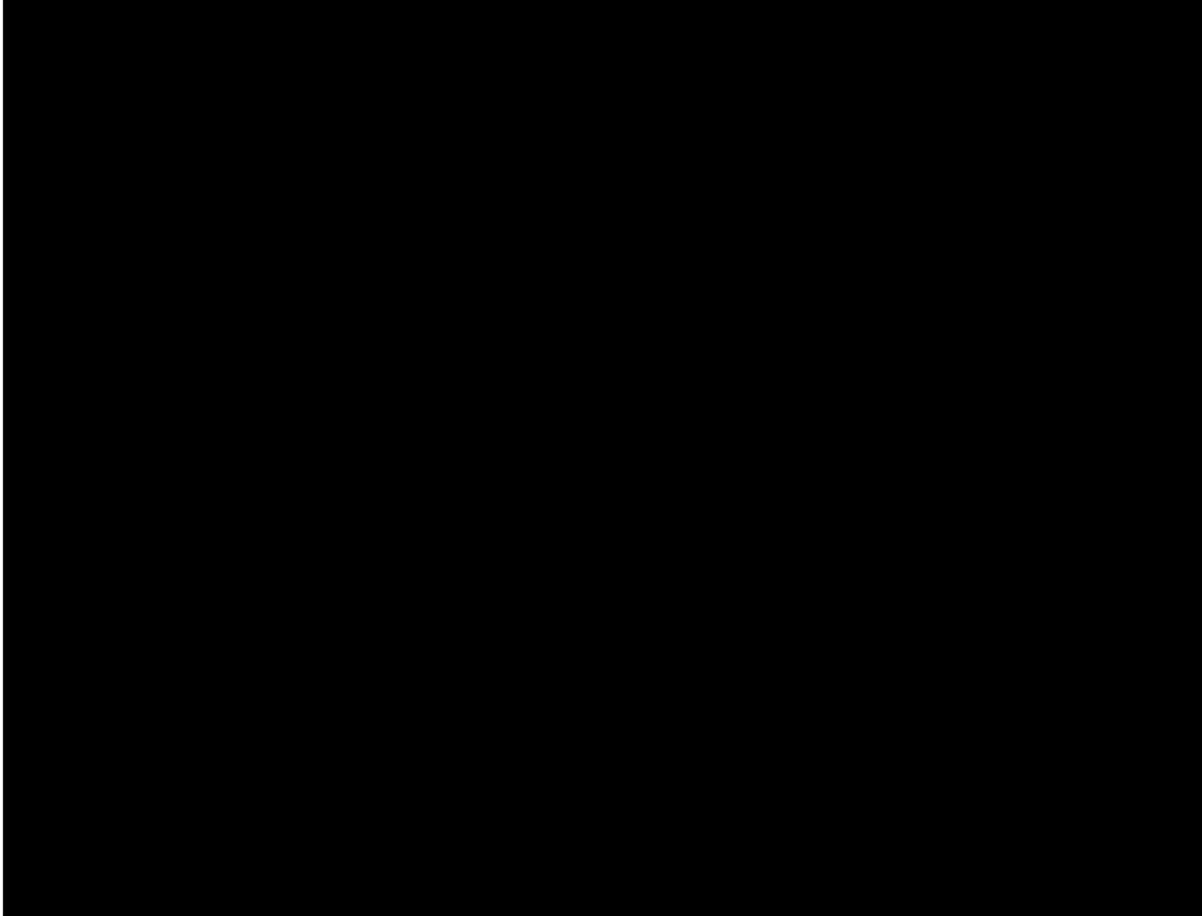
[Redacted]

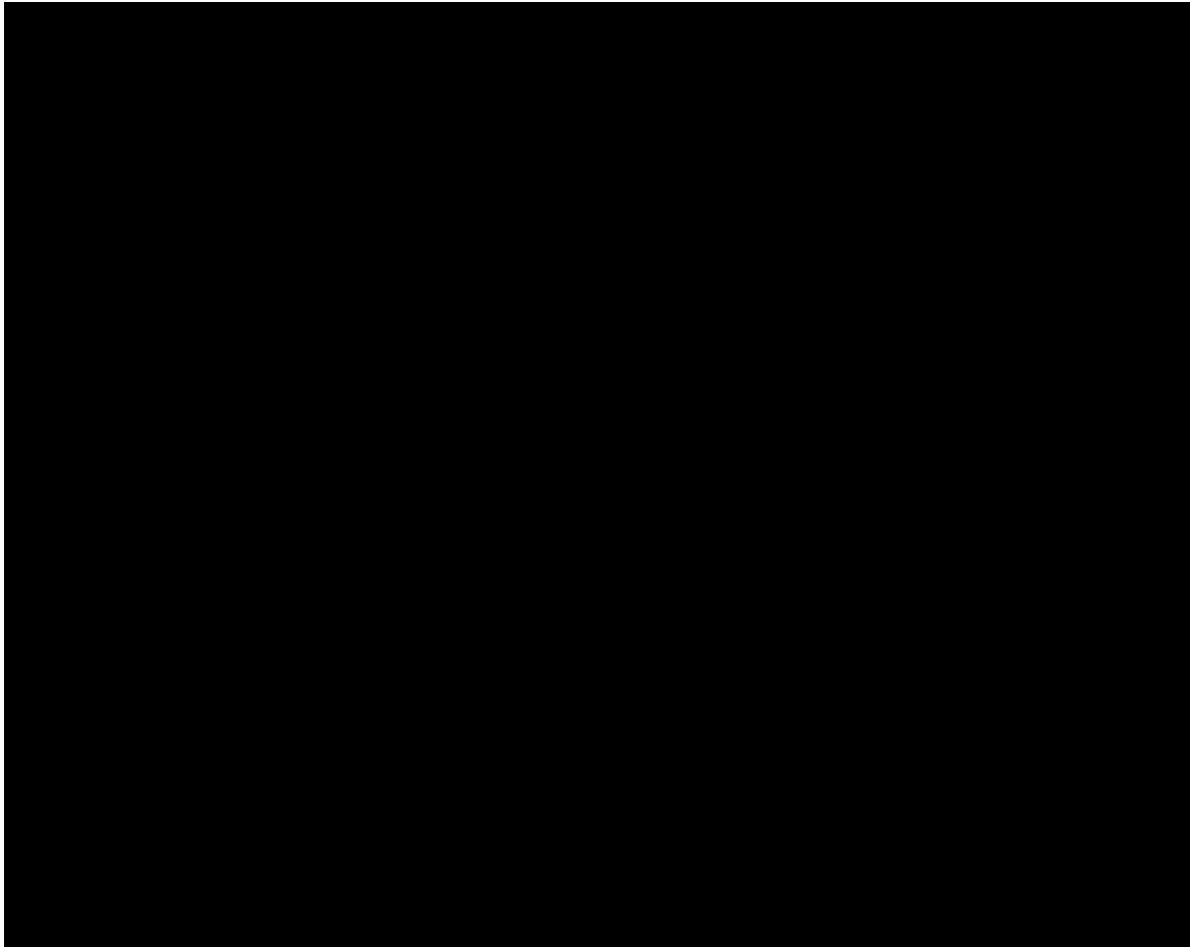


[Redacted text block]

[Redacted text block]

[Redacted text block]





## 7.1 ANTICIPATED INJECTION AND DELIVERY POINTS

---

1. Proposers should provide the following information in the Interconnection and Deliverability Plan:

*Identify the anticipated Injection and Delivery Point(s), support facilities, and the relationship of the Injection and Delivery Point(s) to other local infrastructure, including transmission facilities, roadways, and waterways. Include as much supportive detail and information of relevance for an actual or eventual Article VII filing as available at the time of submission. Identify whether the proposed cable routes impact New York Disadvantaged Communities. If Disadvantaged Communities are impacted by the proposed cable route, identify which Disadvantaged Communities are impacted and for the approximate miles the onshore cable route.*

---

The Proposer's point of interconnection (POI) is the existing Holbrook 138 kV Substation, located in Suffolk County, Long Island, New York (NYISO Zone K). The Holbrook 138 kV Substation is owned by LIPA and operated and maintained by PSEG Long Island.



[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]							
[REDACTED]							

[REDACTED]

[REDACTED]

## 7.2 ALTERNATE PROPOSALS

---

2. Describe any Alternate Proposals which contemplate different Delivery Points. Give details on relative merits of each considering cable routing, interconnection cost, local system upgrades, or other benefits or burdens associated with siting the Project.

---



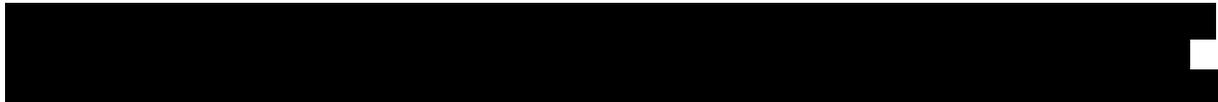
## 7.3 PLANNED INTERCONNECTION

---

3. Describe the status of any planned interconnection to the grid.

---

The Proposer has completed the NYISO interconnection process and PSEG Long Island, the connecting transmission owner, has already commenced construction of the Holbrook 138 kV upgrades to interconnect the Project. The Proposer, NYISO, and LIPA executed the LGIA on August 31, 2023. NYISO filed the LGIA with the Federal Energy Regulatory Commission (FERC) on September 15, 2023, and was approved on November 9, 2023. FERC public docket ER23-2850 contains the filing and the executed LGIA is provided in 



[REDACTED]

[REDACTED]

[REDACTED]

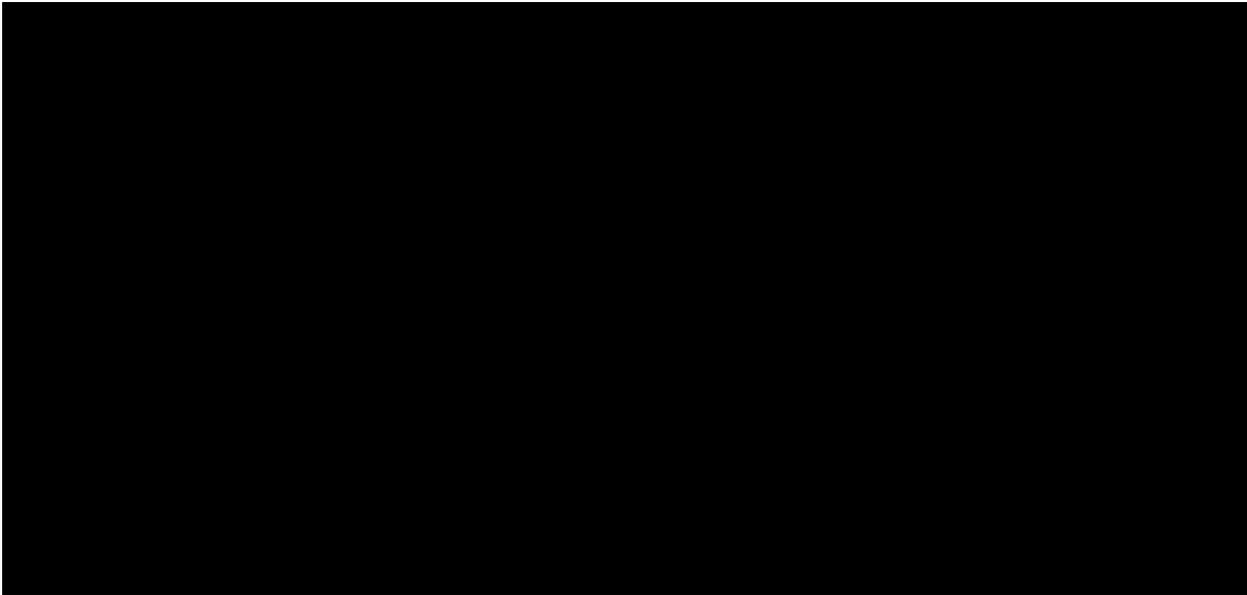
## 7.4 INTERCONNECTION PLAN AND TIMELINE

---

*4. Provide a detailed plan and a reasonable timeline to complete the interconnection process with NYISO for direct interconnection(s) to the NYCA and, if applicable, for any other interconnecting authority (Regional Transmission Organization, “RTO,” or Independent System Operator, “ISO”) in an adjacent Control Area, i.e., ISO-NE or PJM. The timeline must be consistent with meeting the overall development schedule and proposed Commercial Operation Date(s) as presented in response to Section 6.2.5.*

---

[REDACTED]



## 7.5 ELECTRICAL ONE-LINE DIAGRAM

---

5. Provide a copy of an electrical one-line diagram showing the interconnection facilities and the relevant facilities of the transmission provider.

---



## 7.6 EXPECTED NYISO INTERCONNECTION COST ALLOCATION

---

6. Identify and provide an estimate of the expected (50% probability of exceedance) NYISO Interconnection Cost Allocation along with high (10% probability of exceedance) and low (90% probability of exceedance) estimates of the NYISO Interconnection Allocation, which should include all proposed or anticipated interconnection and transmission system upgrades, including any transmission system upgrades beyond the point of interconnection that are needed to ensure delivery of energy from the Offshore Wind Generation Facility into NYCA. Provide a clear explanation for how the estimated expected, high, and low Interconnection Cost Allocations relate to any studies that were performed. If there are differences between the studies and the proposed values, or any engineering judgment was applied, explain. If studies exist that are outside the range of the high and low Interconnection Cost Allocation

*estimates, please explain. For example, if a study shows upgrade costs beyond the estimated high Interconnection Cost Allocation, explain why the particular scenario studied is unlikely. NYSERDA understands that these values will be imperfect and seeks to understand the Proposer's view on interconnection risks.*

[REDACTED]

[REDACTED]

[REDACTED]

## 7.7 COST OF TRANSMISSION INFRASTRUCTURE

*7. Identification of the costs associated with all elements of the needed transmission infrastructure, including the offshore substation, Meshed Ready design, radial export cable material and installation costs. Include a breakdown of costs of the cable installation plan, including both onshore and offshore cable routing.*

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

## 7.8 AVAILABLE CAPACITY OF INJECTION POINT

---

8. *Proposals must provide any information they are aware of regarding the available capacity, at the time of submission, of the proposed Injection Point(s), such as through the Utilities' Revised Headroom Calculations as filed with the PSC.*

---

[REDACTED]

## 7.9 NYISO MARKET PARTICIPANT

---

9. Identify the entity that will assume the duties of NYISO Market Participant for your proposed Offshore Wind Generating Facility. Provide a summary of Proposer's or Market Participant's experience with the wholesale market administered by NYISO as well as transmission services performed by Con Edison, NYPA, and PSEG LONG ISLAND /LIPA.

---

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

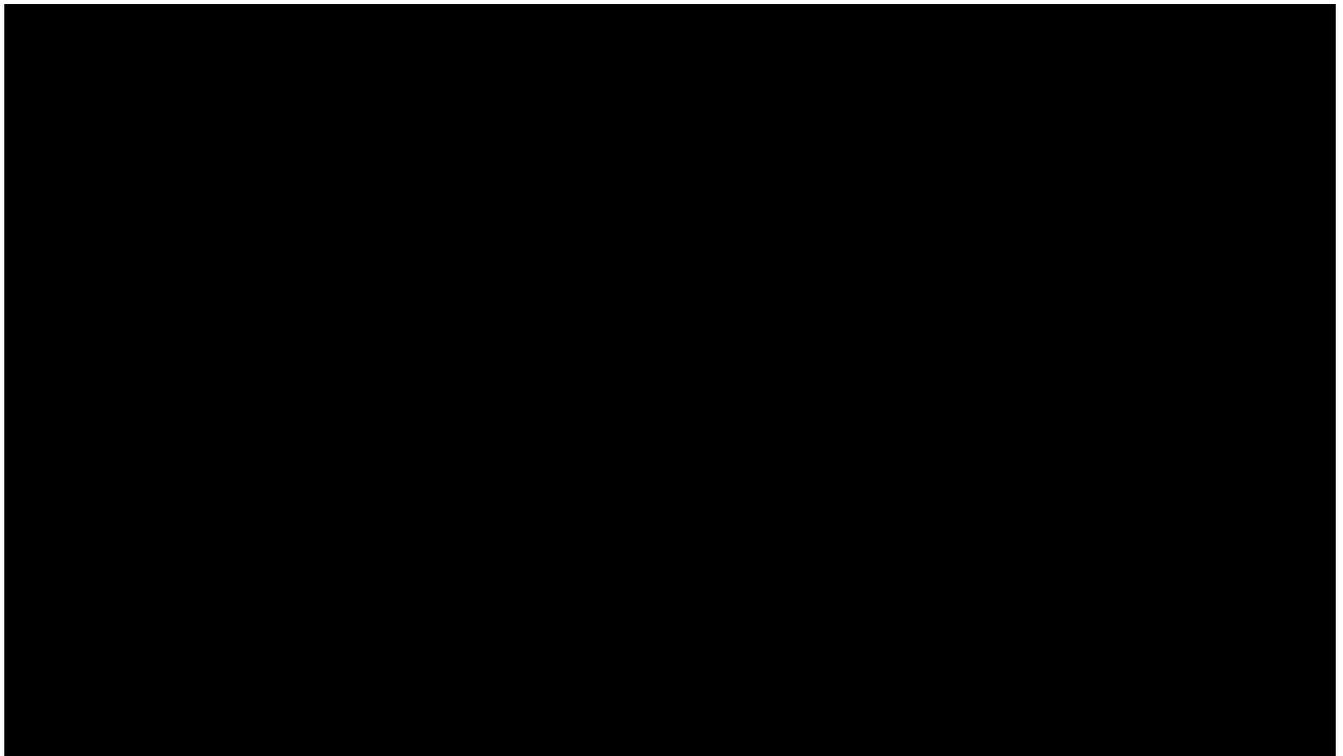
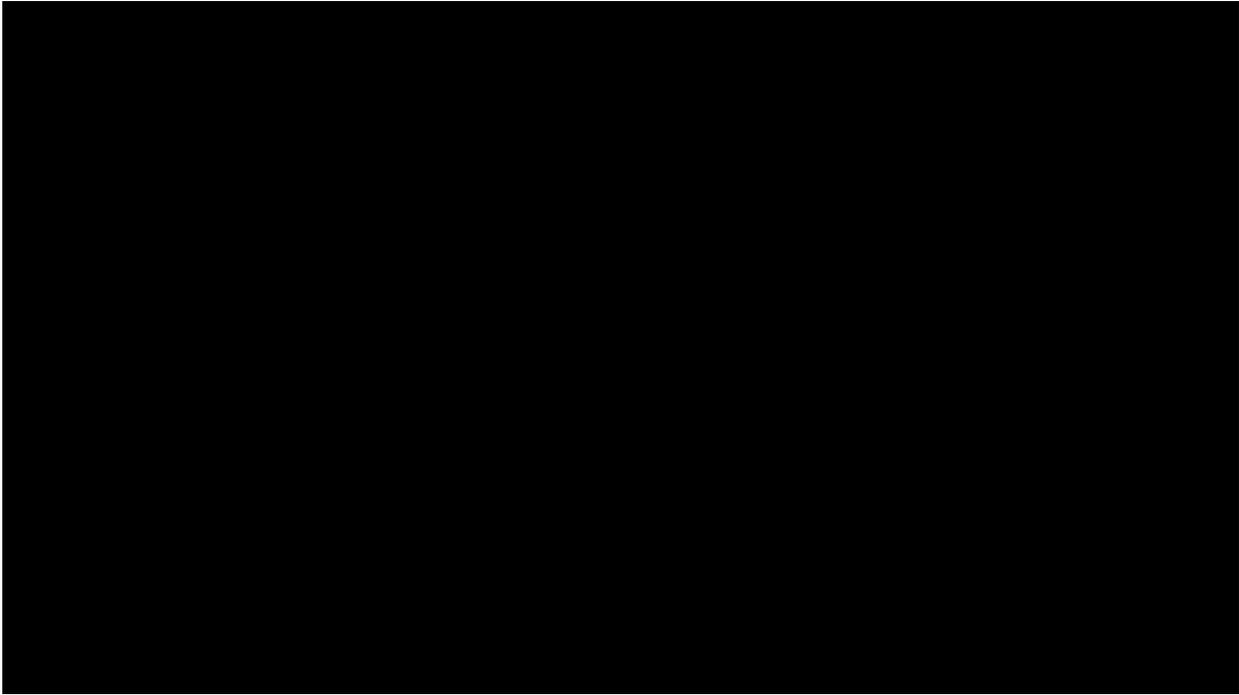
## 7.10 MESHED READY COMPONENTS

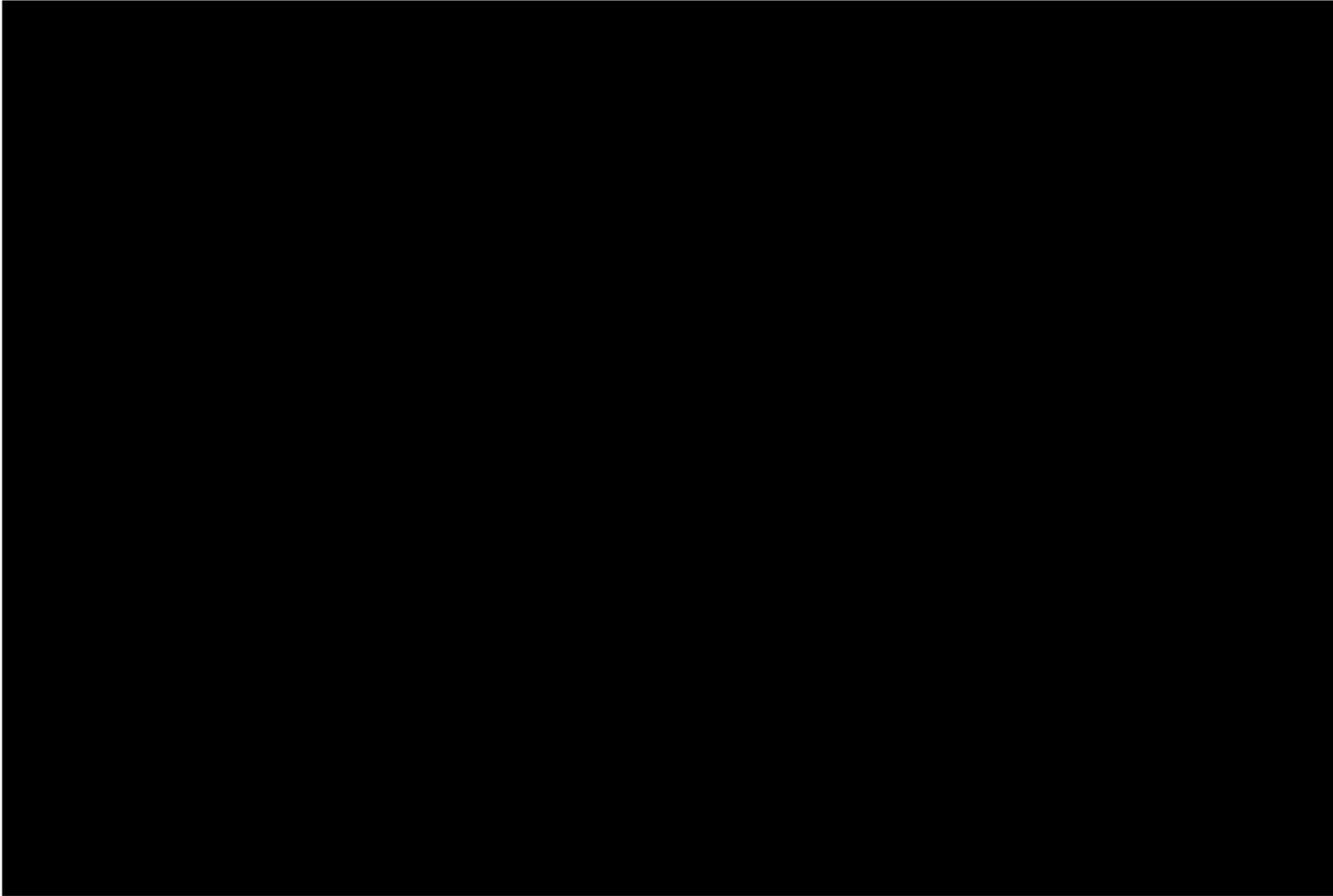
---

10. For any Proposals that will be included in the Meshed Ready system, describe the components that will be installed to meet the Meshed Ready requirements set forth in Appendix F and enable future operability if recommended by the New York State Public Service Commission for interconnection to the Meshed Network.

---

[REDACTED]





[Redacted text block]

## 7.11 MESHED READY DELIVERABLES

11. For any Proposals that will be included in the Meshed Ready system, provide drafts of the required Meshed Ready deliverables listed in Section F.2.3 of Appendix F.

[Redacted text block]

[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]



[REDACTED]

[REDACTED]

[REDACTED]

## 7.12 EXCLUSION OF MESHED READY PROPOSALS

---

12. For any Proposals that will be excluded from the Meshed Ready system, provide a clear and detailed justification for the exclusion.

---

[REDACTED]



### 7.13 CABLE ROUTE GIS FILES

---

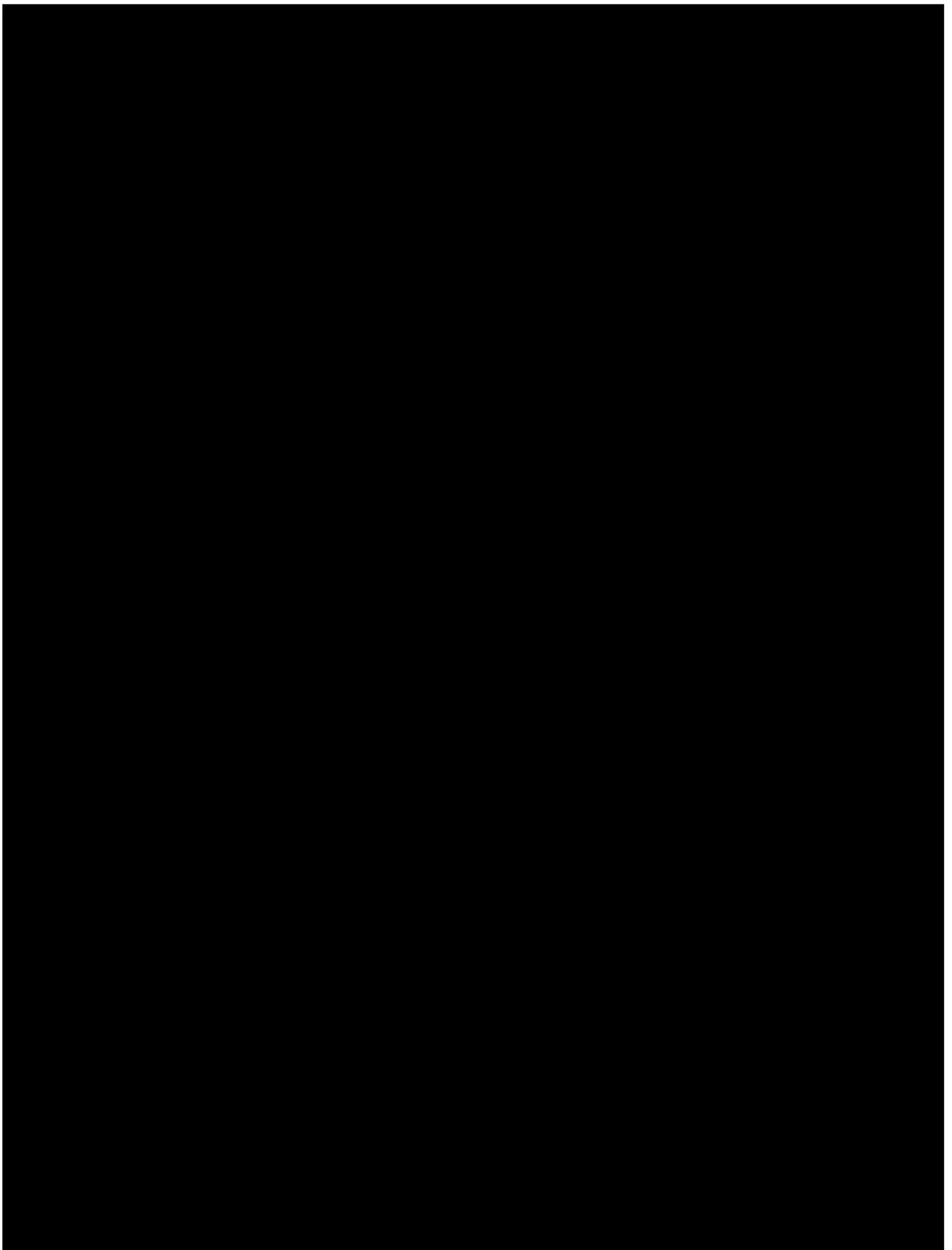
*Provide detailed maps as KMZ files that show the proposed off- and on-shore cable route(s) from the offshore project to the proposed Injection Point including (if applicable) the landfall point(s), the converter station location and the assumed right-of-way width KMZ files should be compiled in a single ZIP file for submission.*

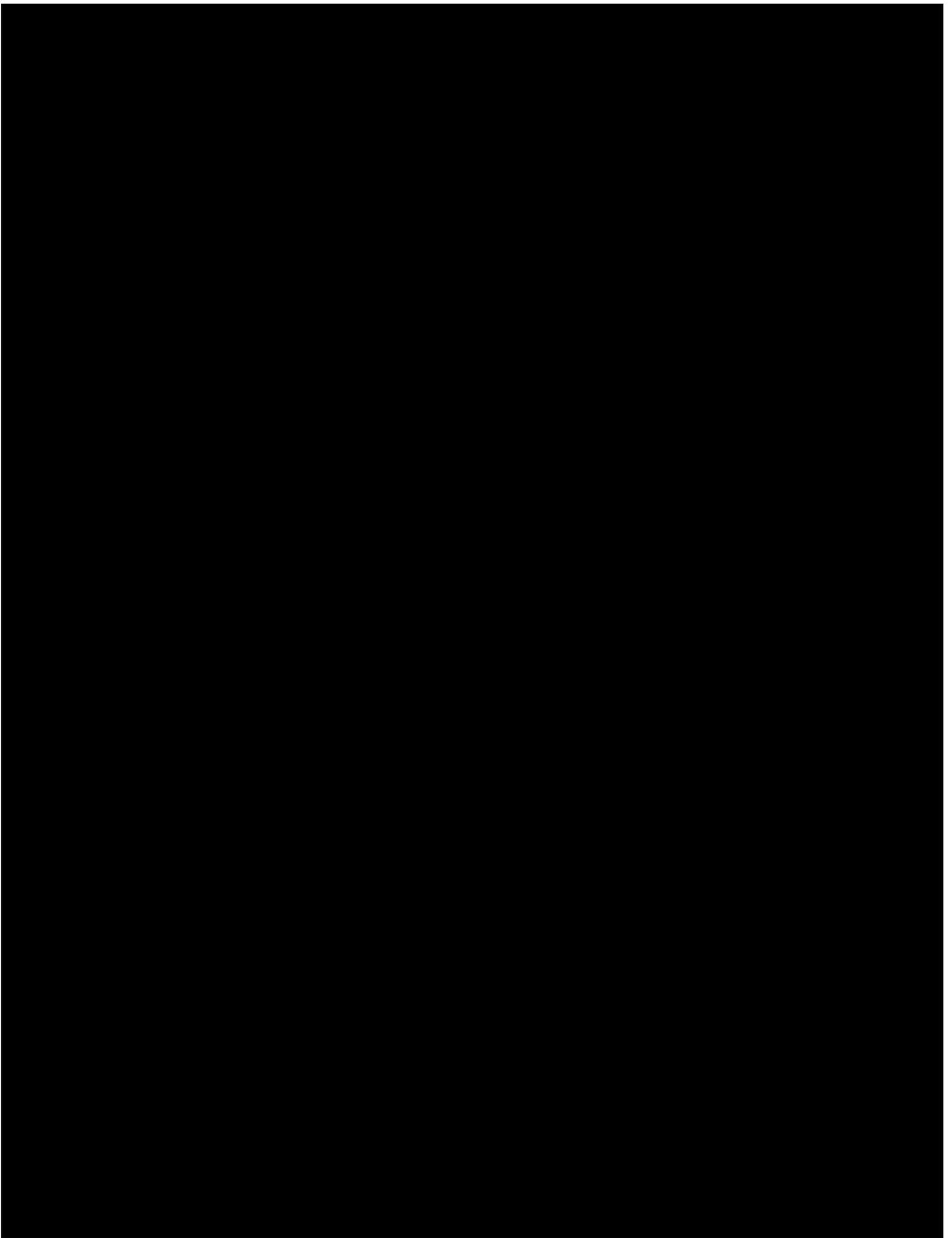
---

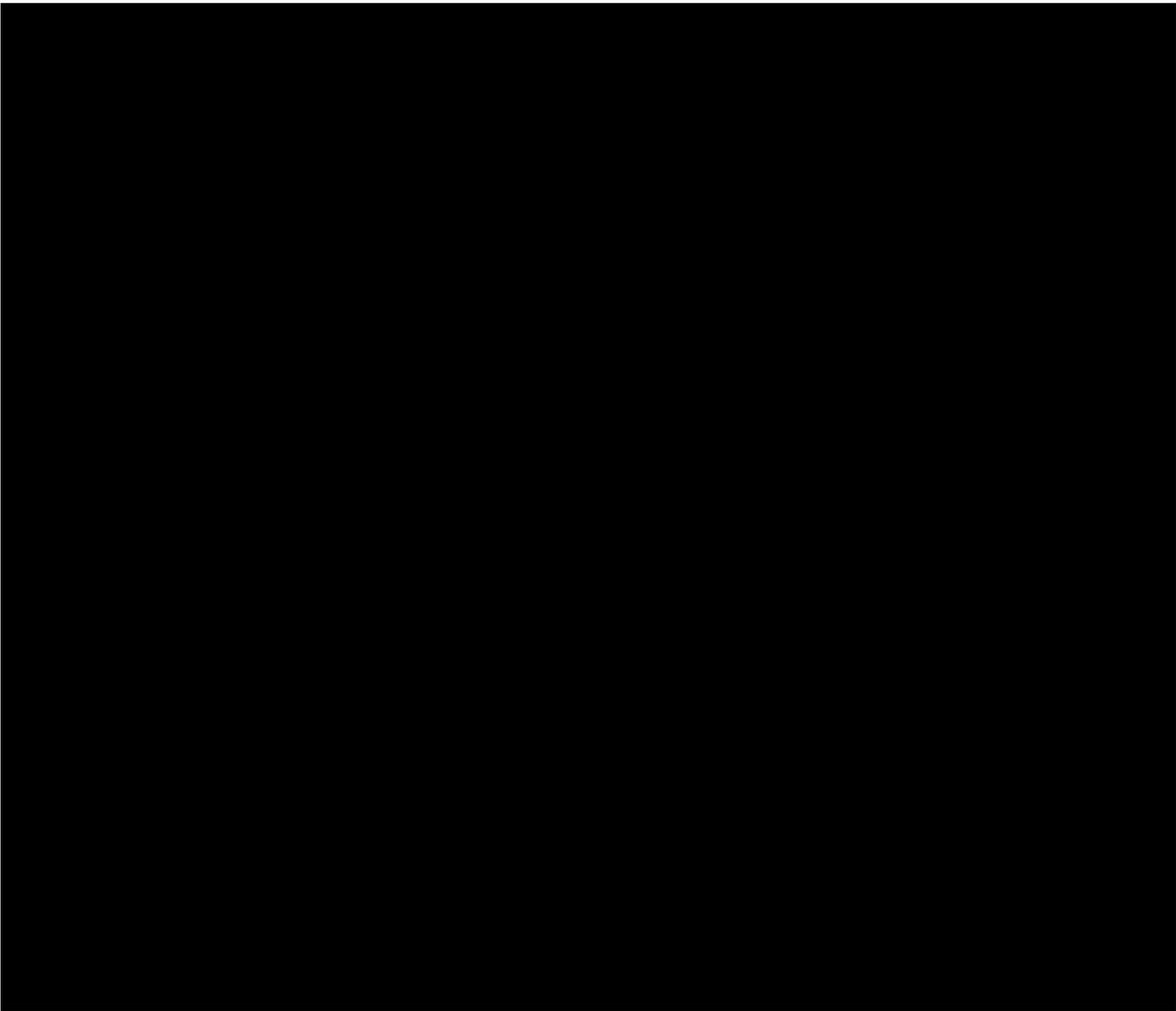
13. The kmz files for the offshore and onshore cable routes are included as Attachment 7-11, including the landfall points, the converter station location, and the assumed ROW width.

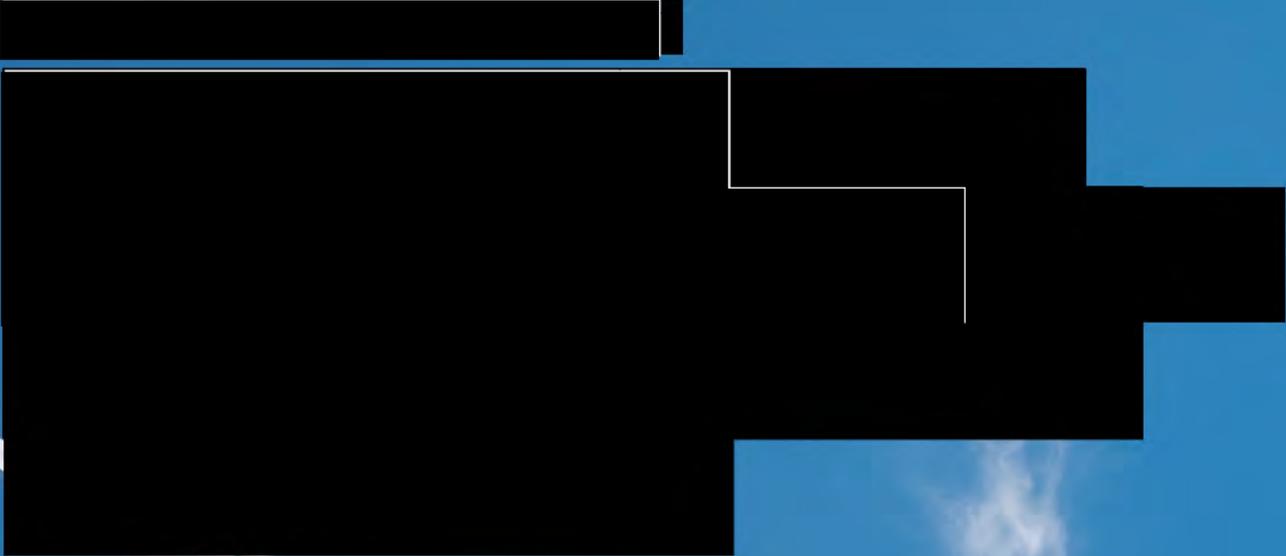


Portions of this proposal contain confidential, proprietary, and/or commercially sensitive information which has been redacted from the "Public Version" of this proposal. Sunrise Wind LLC has submitted a Confidential Version of this proposal which includes the redacted information, and which should be treated as a non-public record that is exempt from disclosure to the extent permitted under applicable laws and/or as expressly set forth in the Request for Proposals.

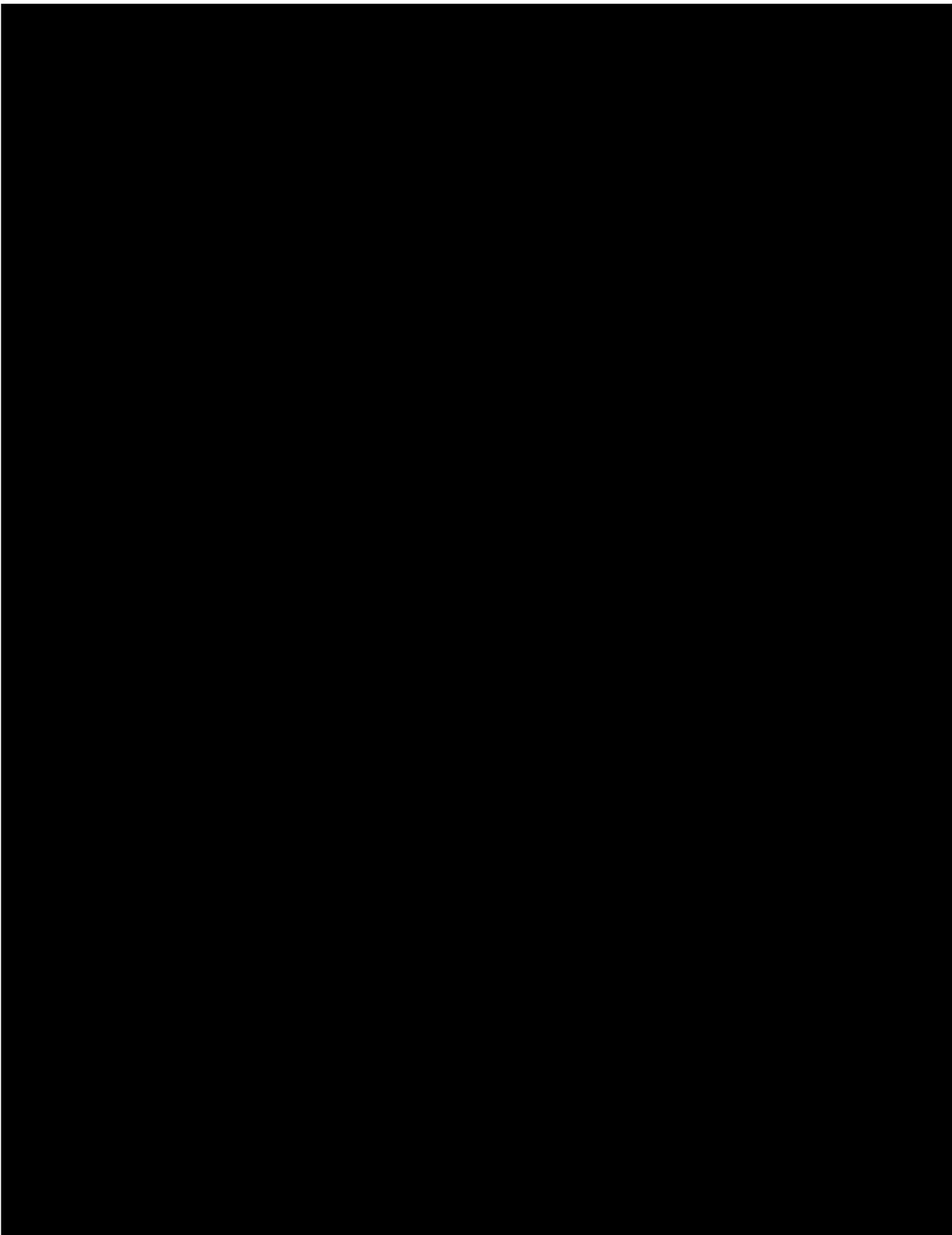


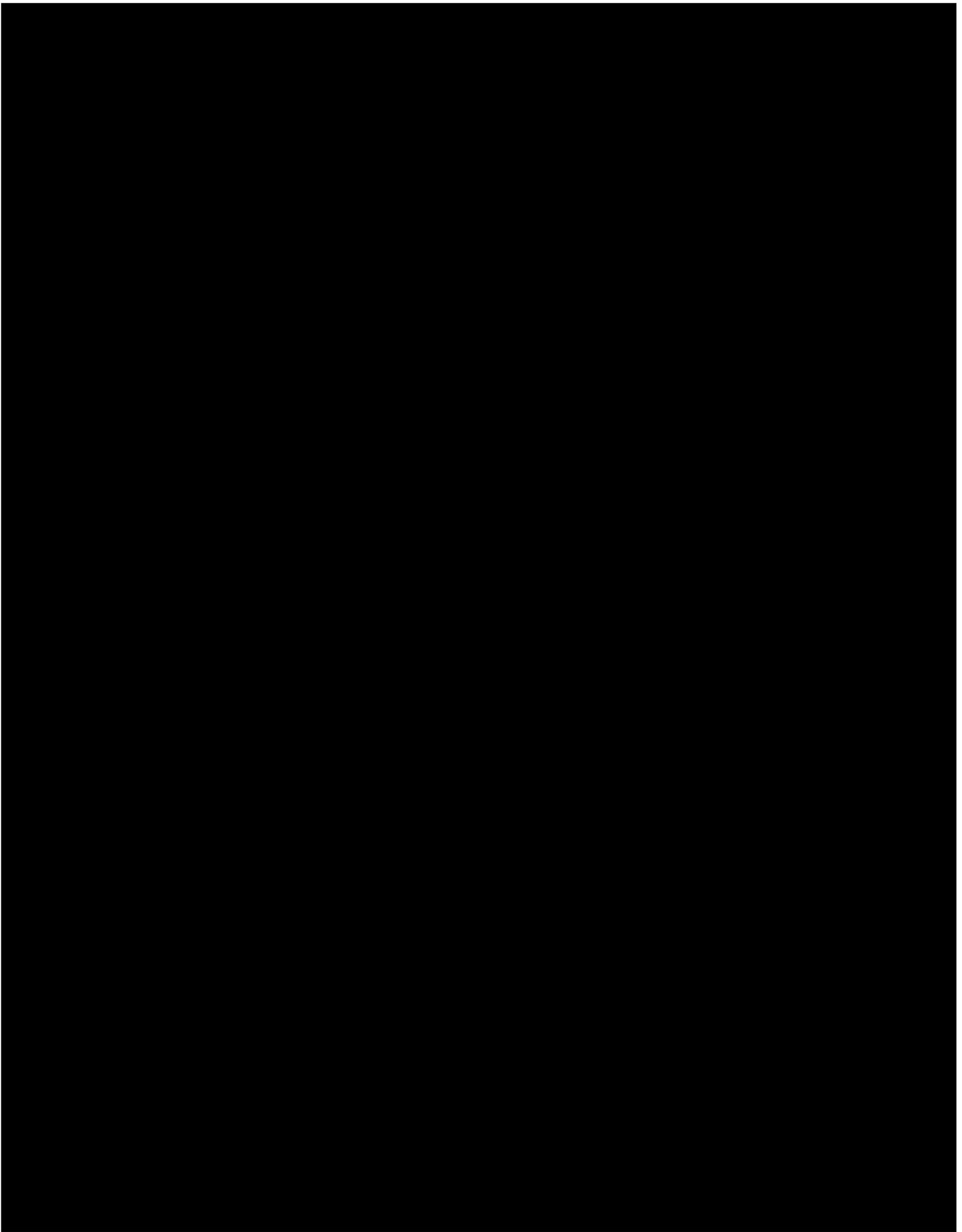


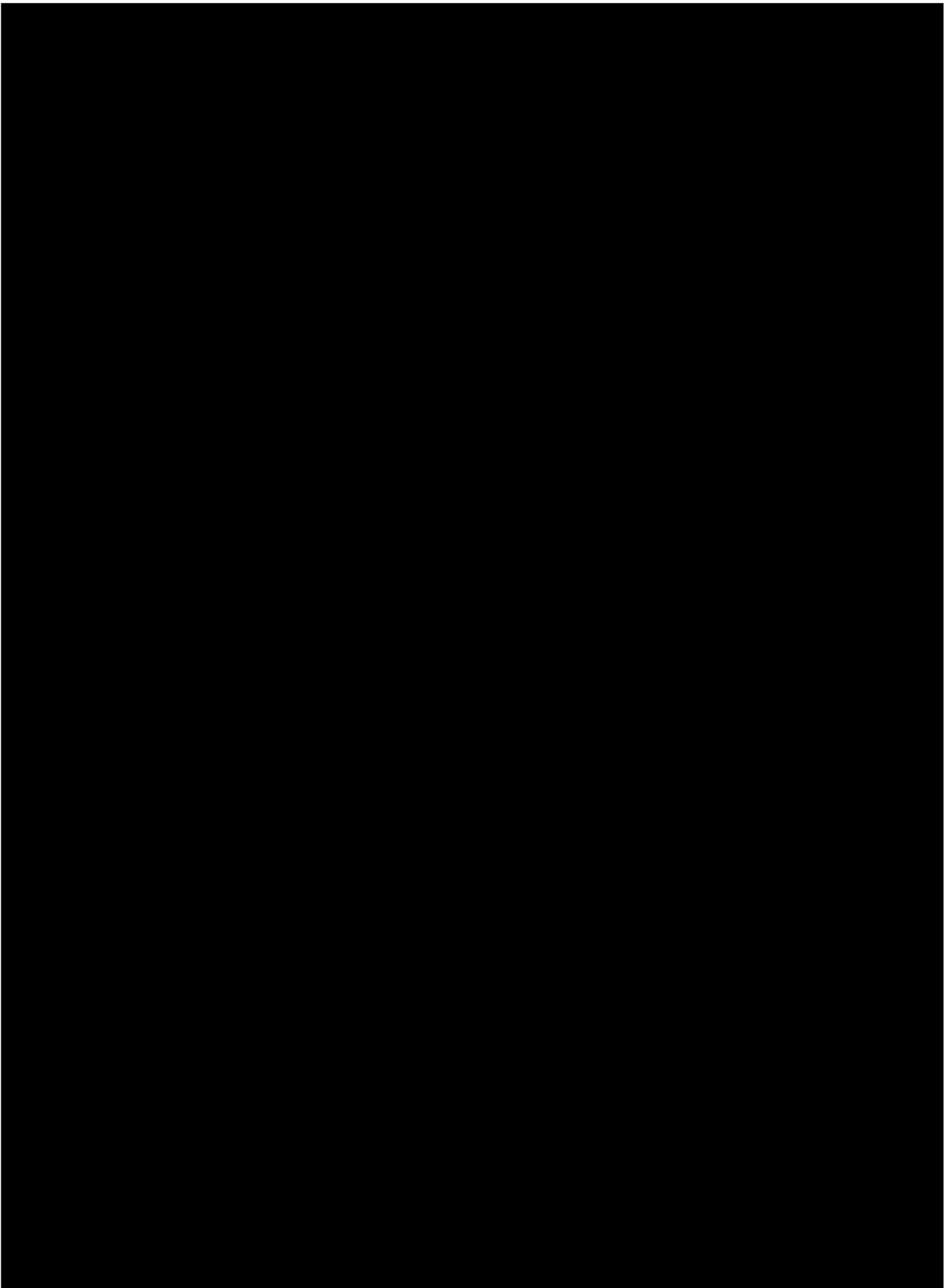


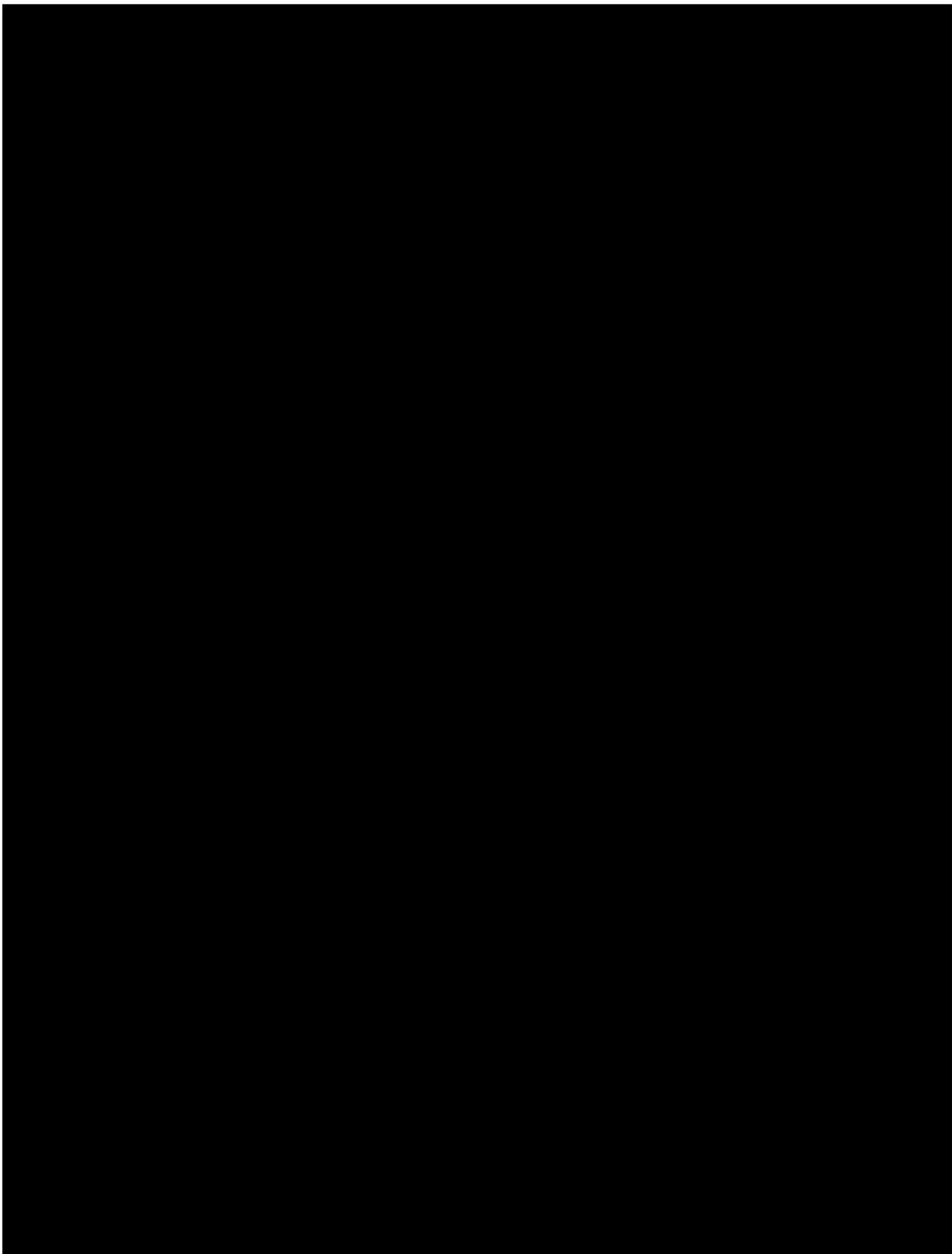


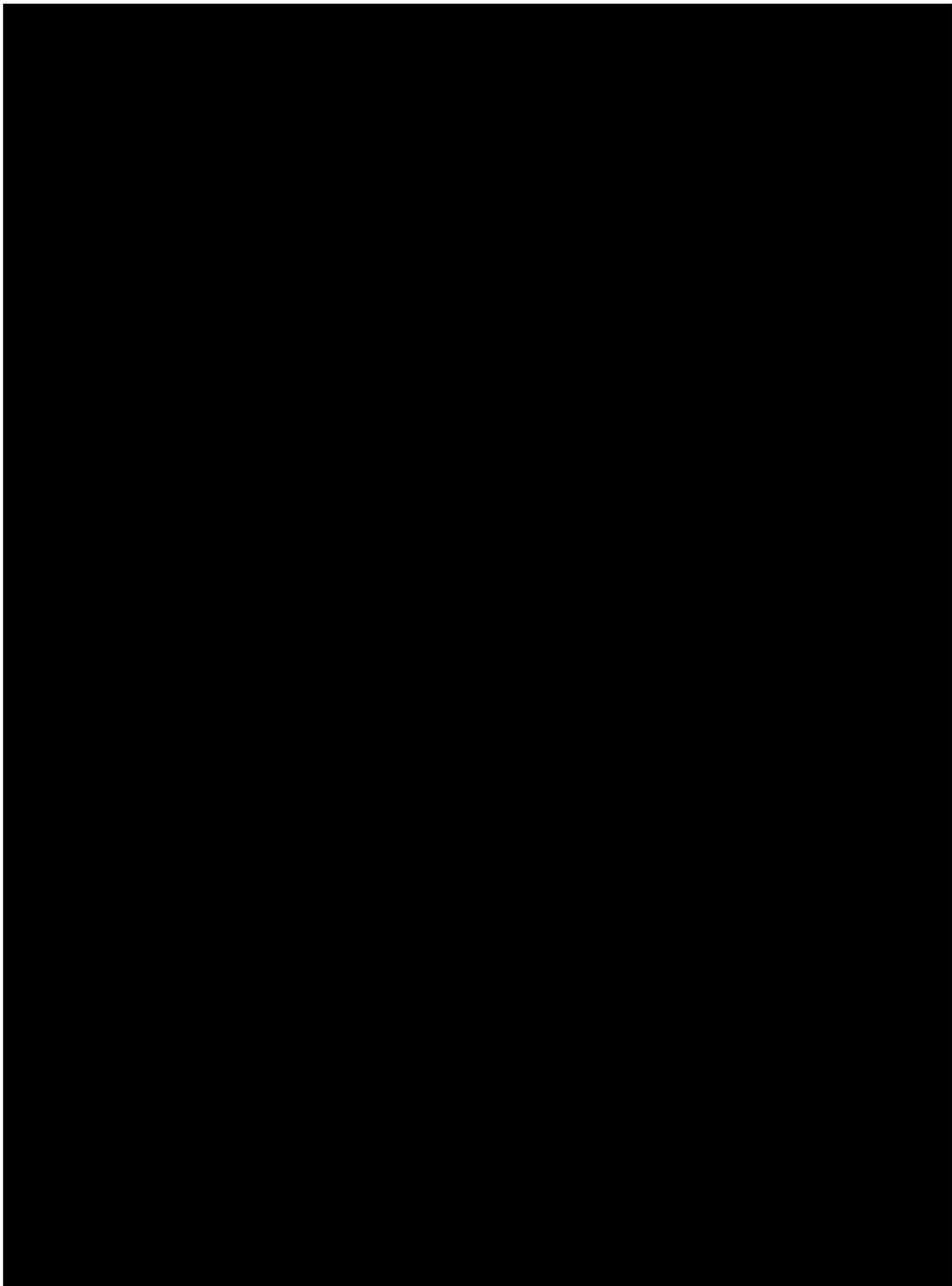
Portions of this proposal contain confidential, proprietary, and/or commercially sensitive information which has been redacted from the "Public Version" of this proposal. Sunrise Wind LLC has submitted a Confidential Version of this proposal which includes the redacted information, and which should be treated as a non-public record that is exempt from disclosure to the extent permitted under applicable laws and/or as expressly set forth in the Request for Proposals.

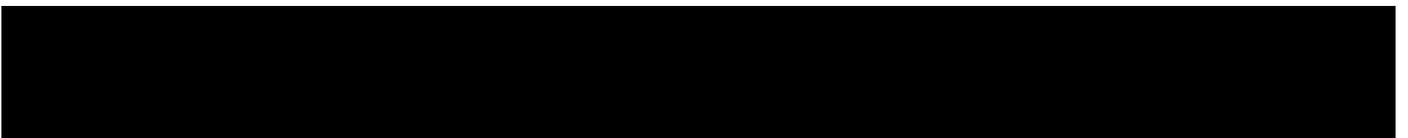


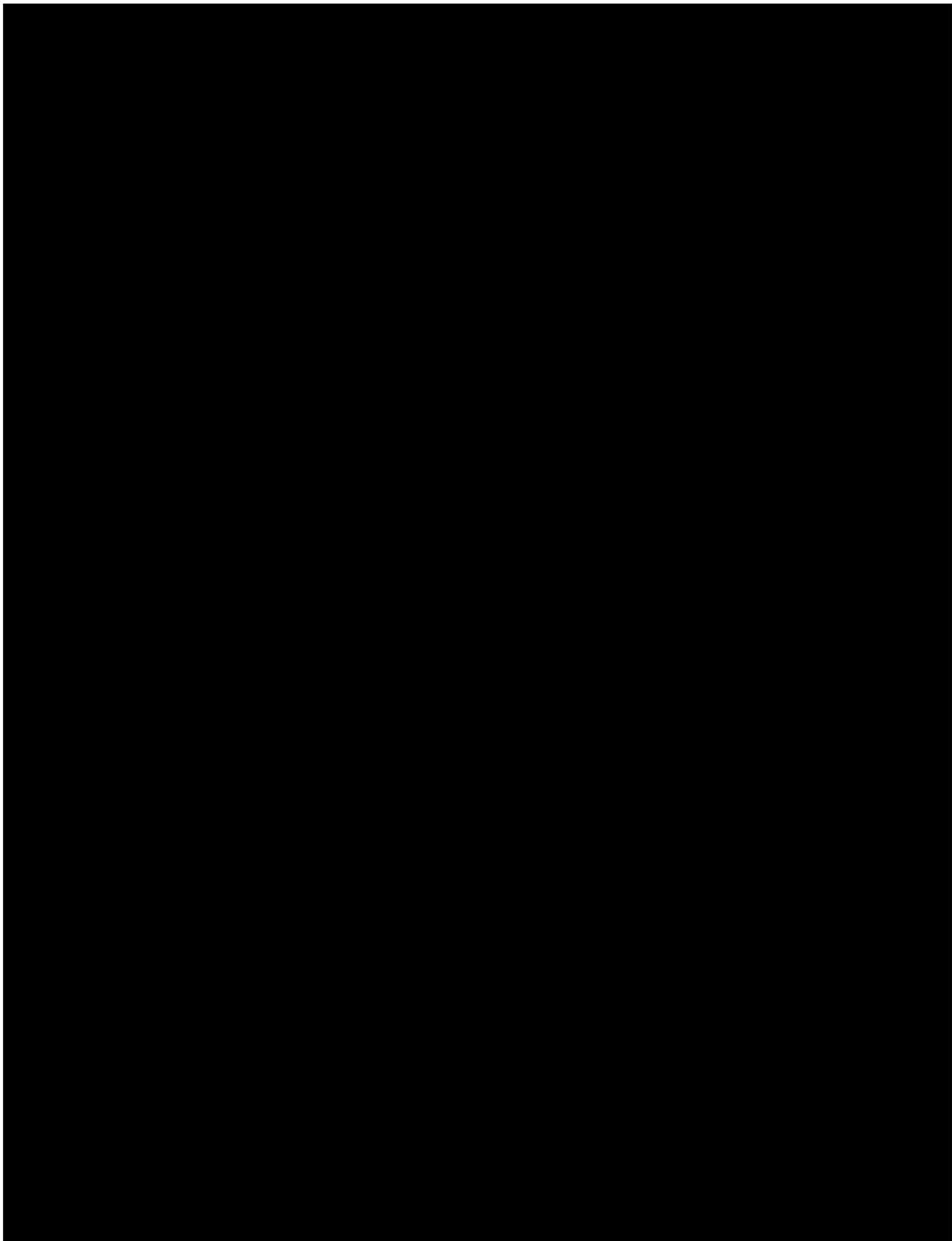


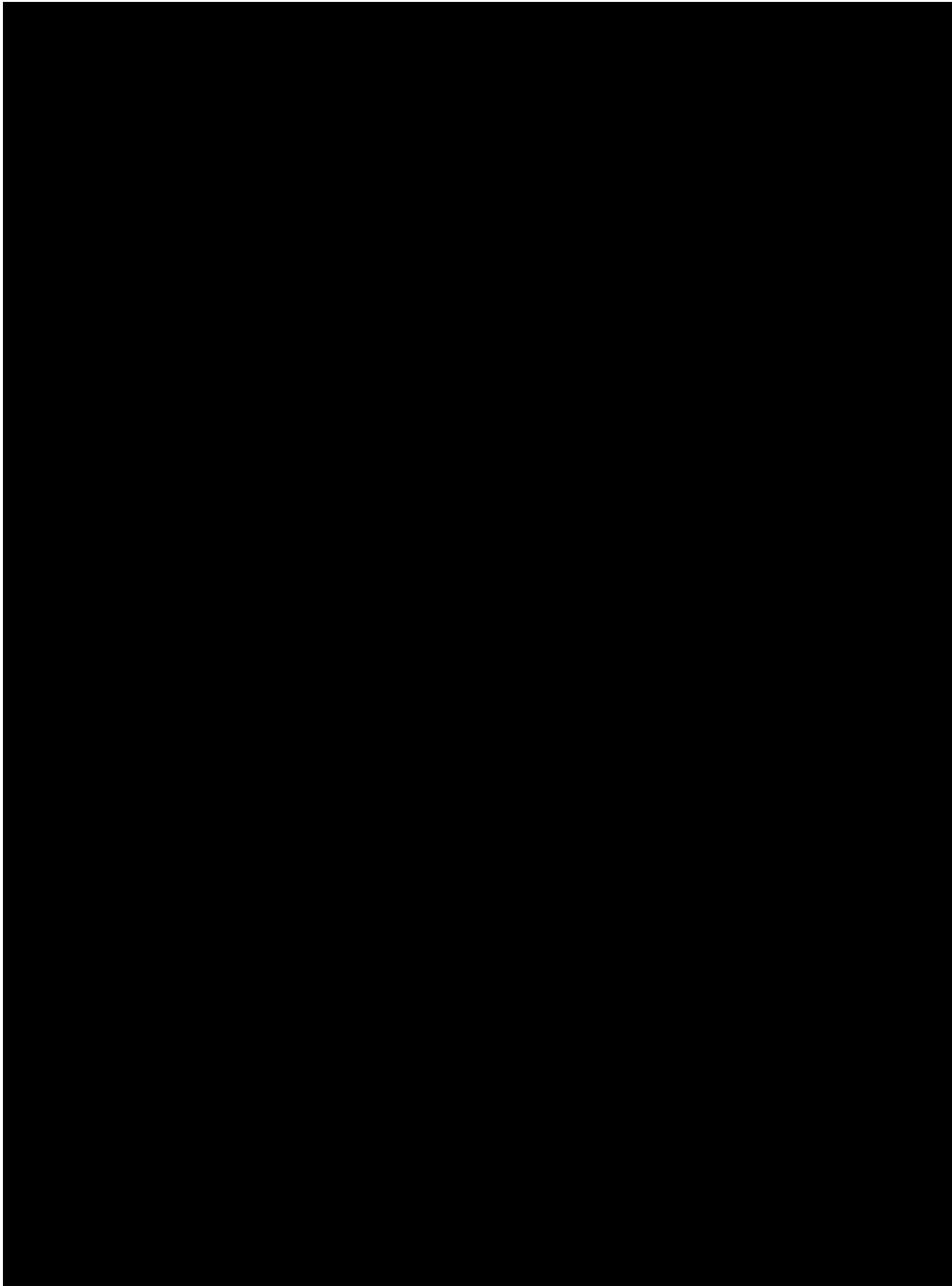


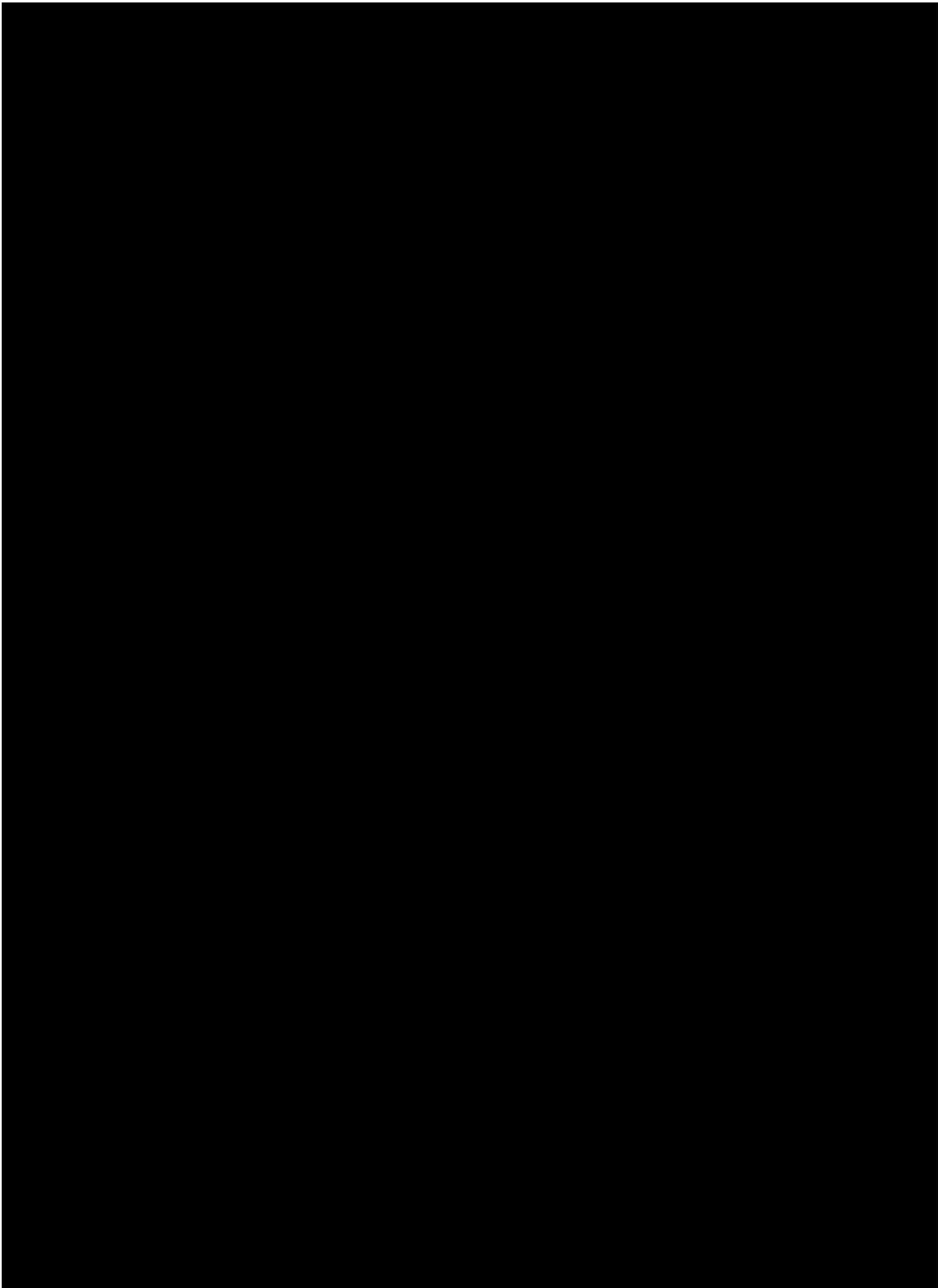


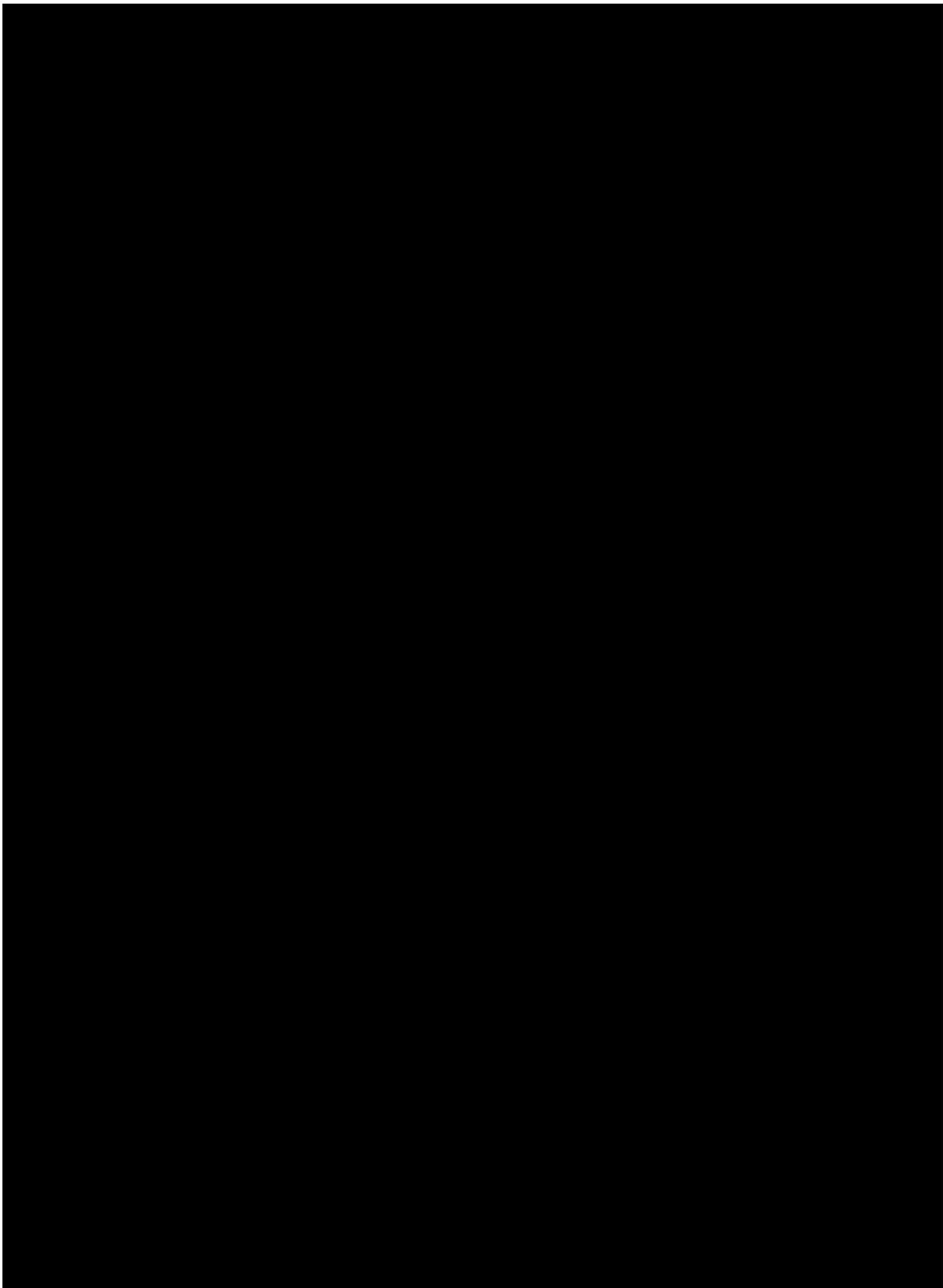


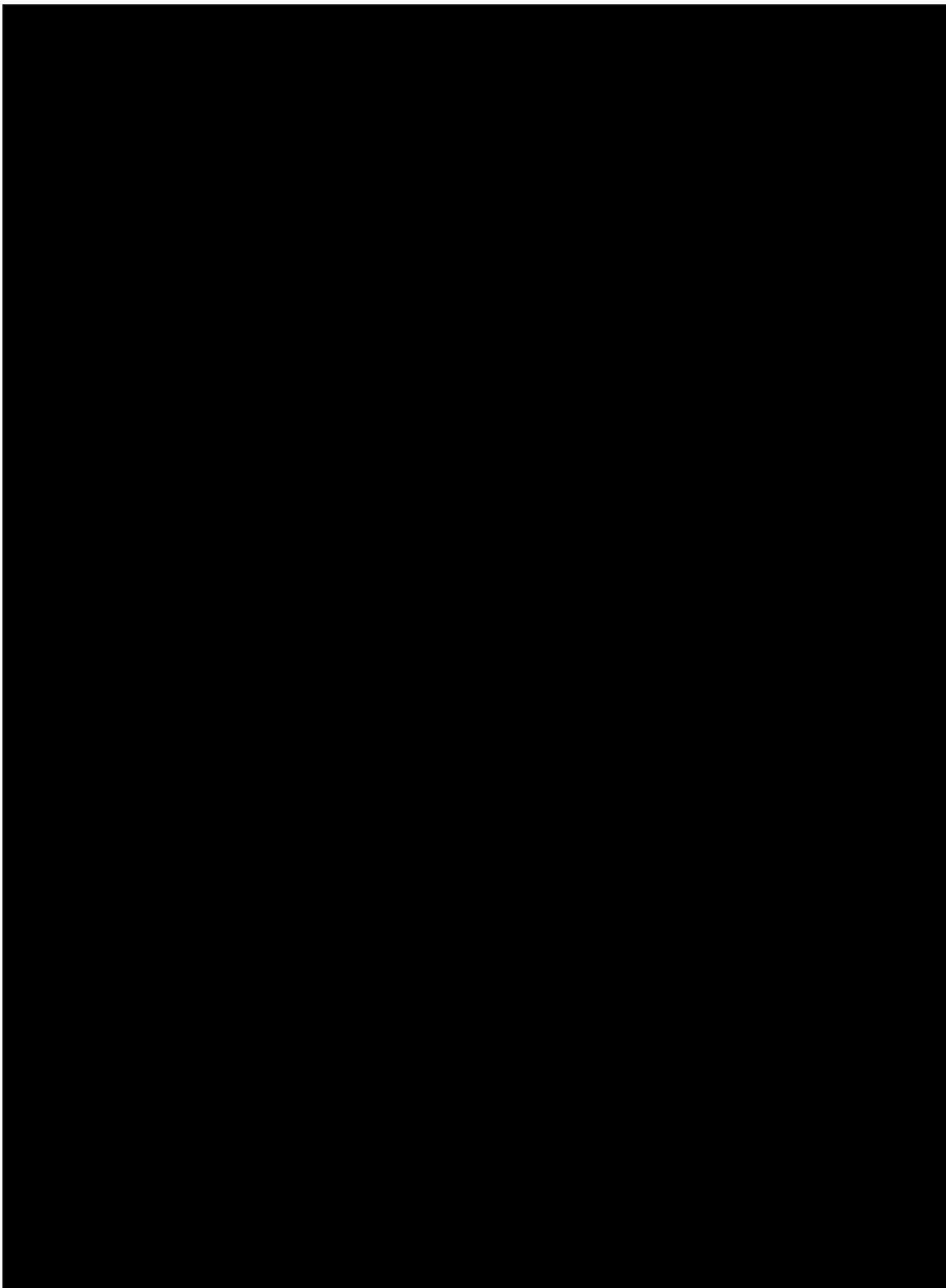


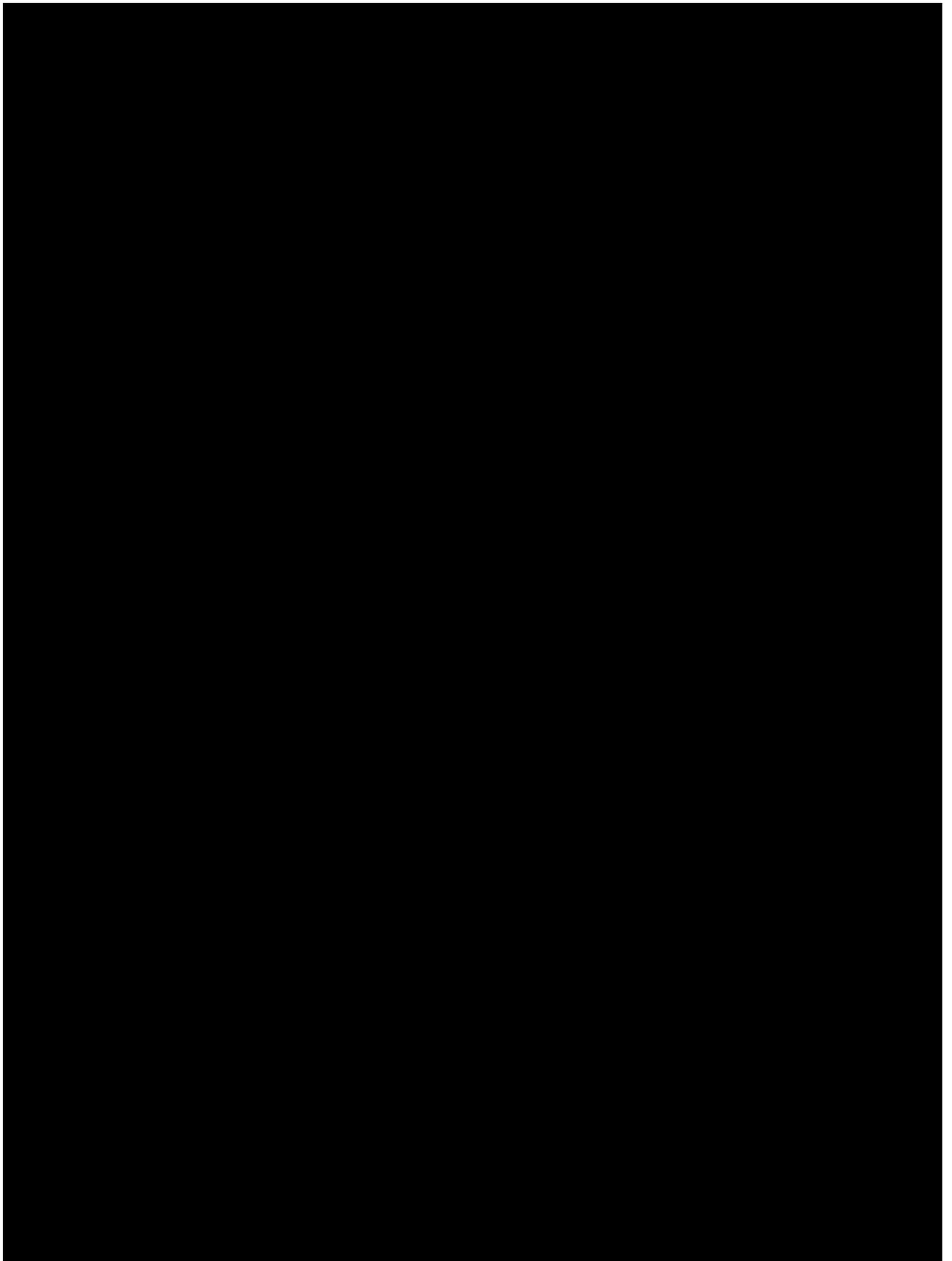


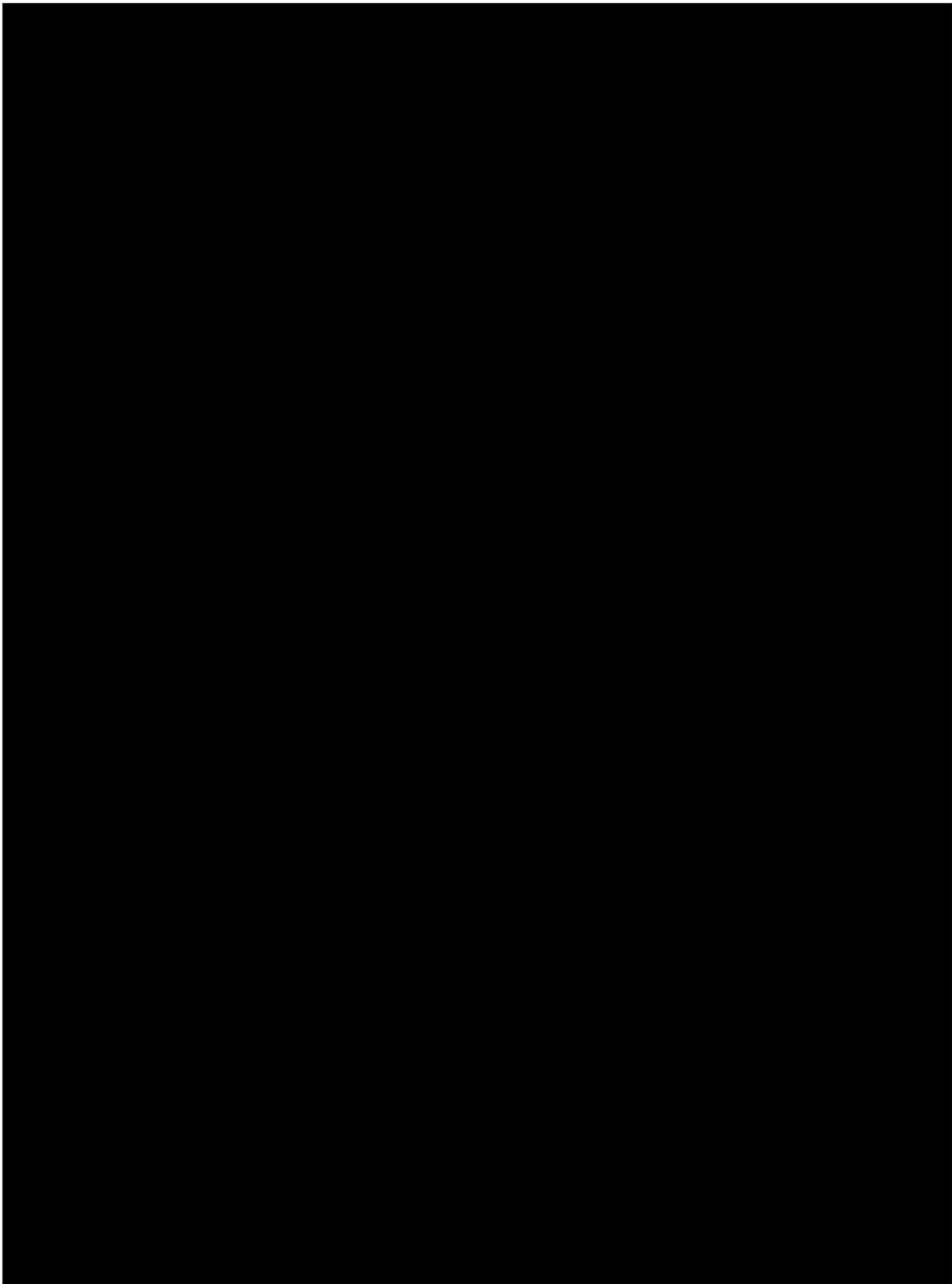


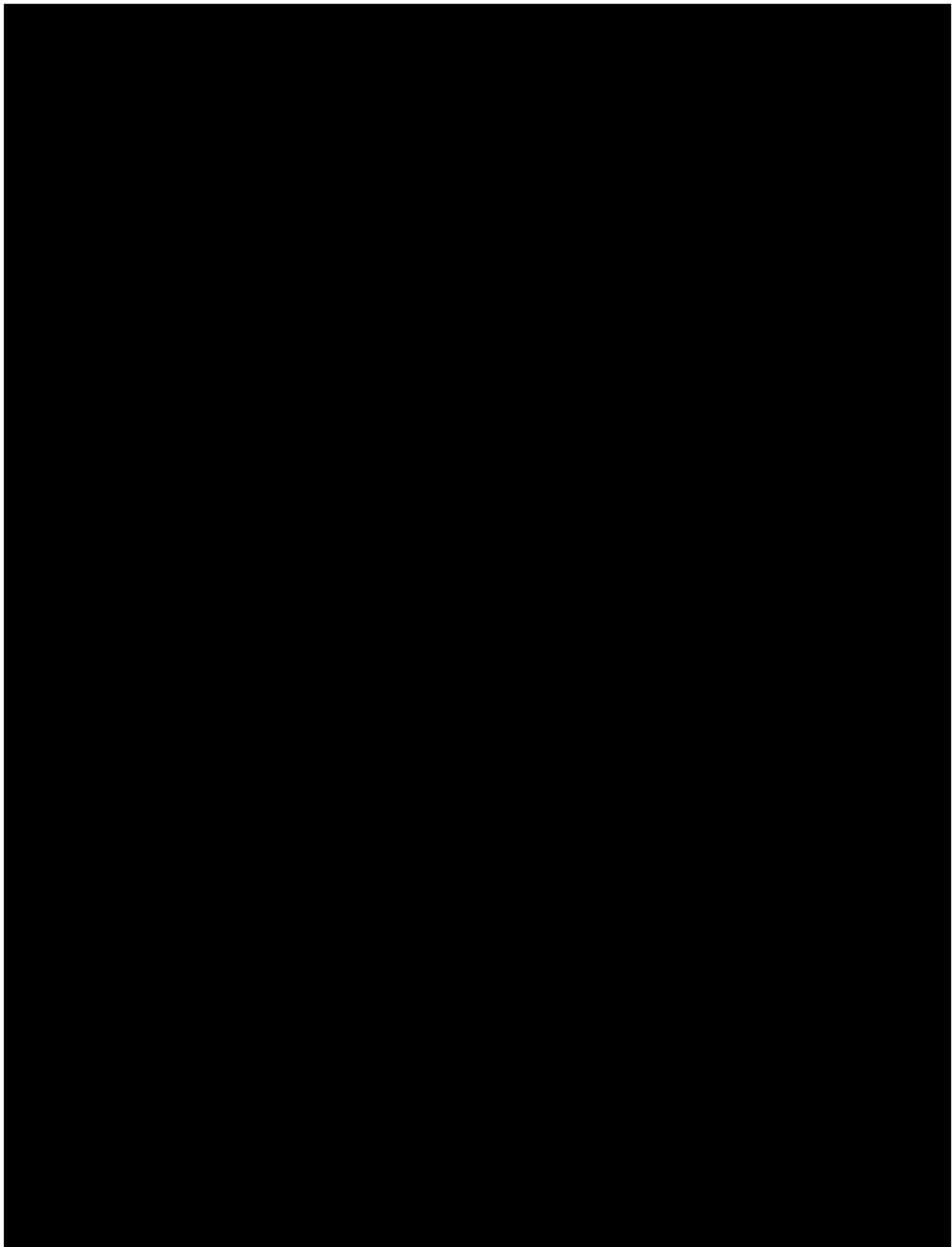


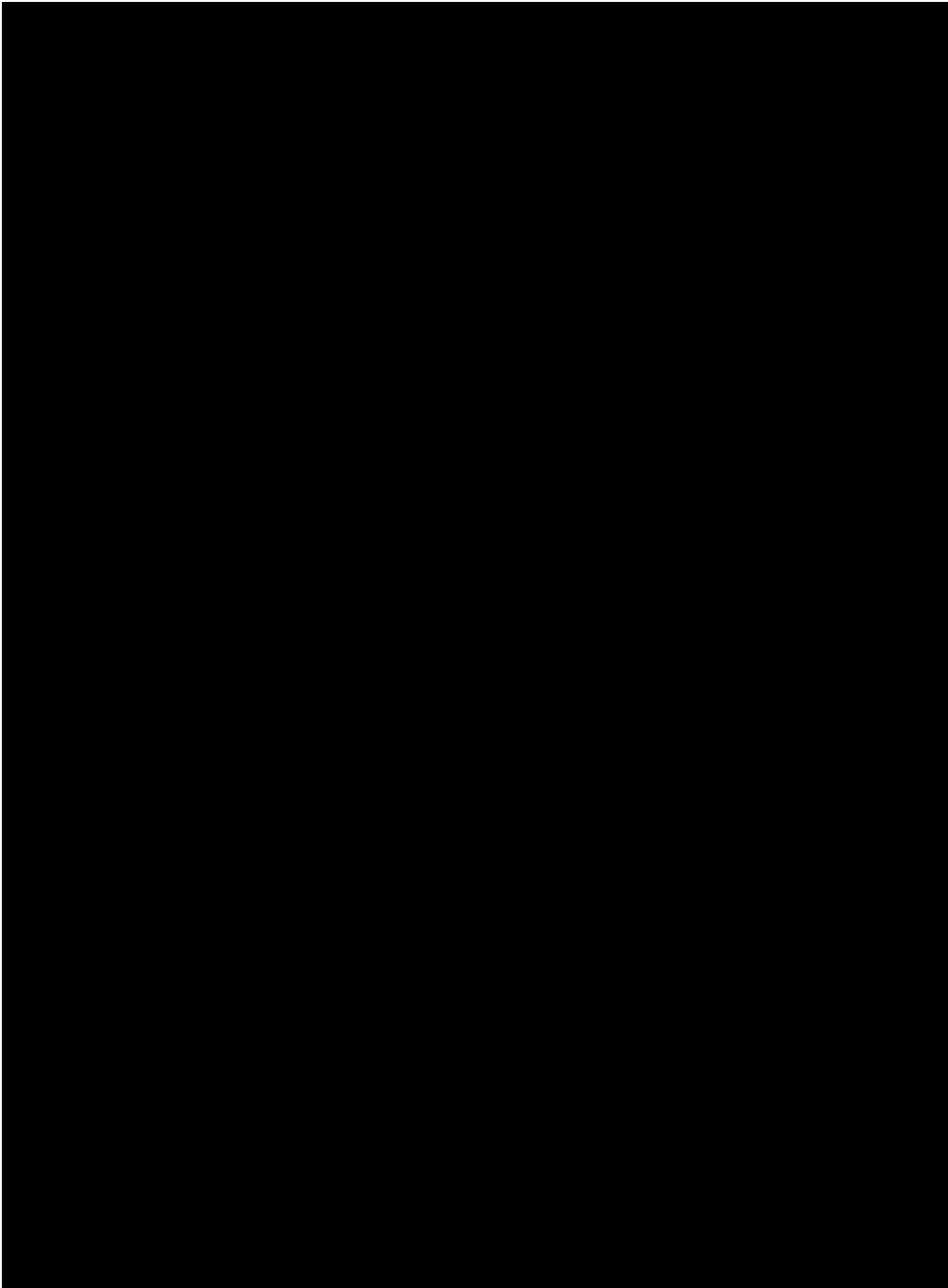


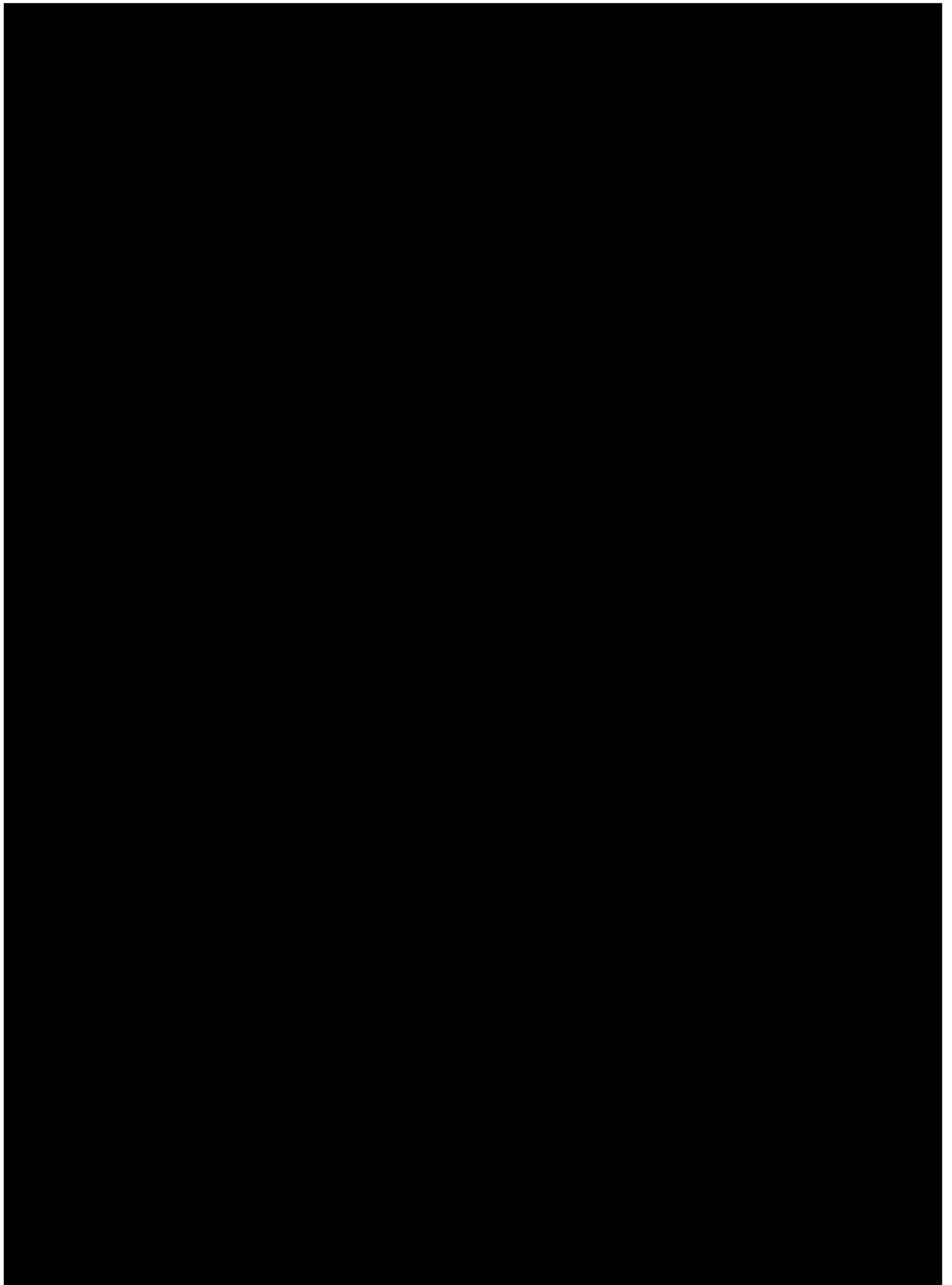


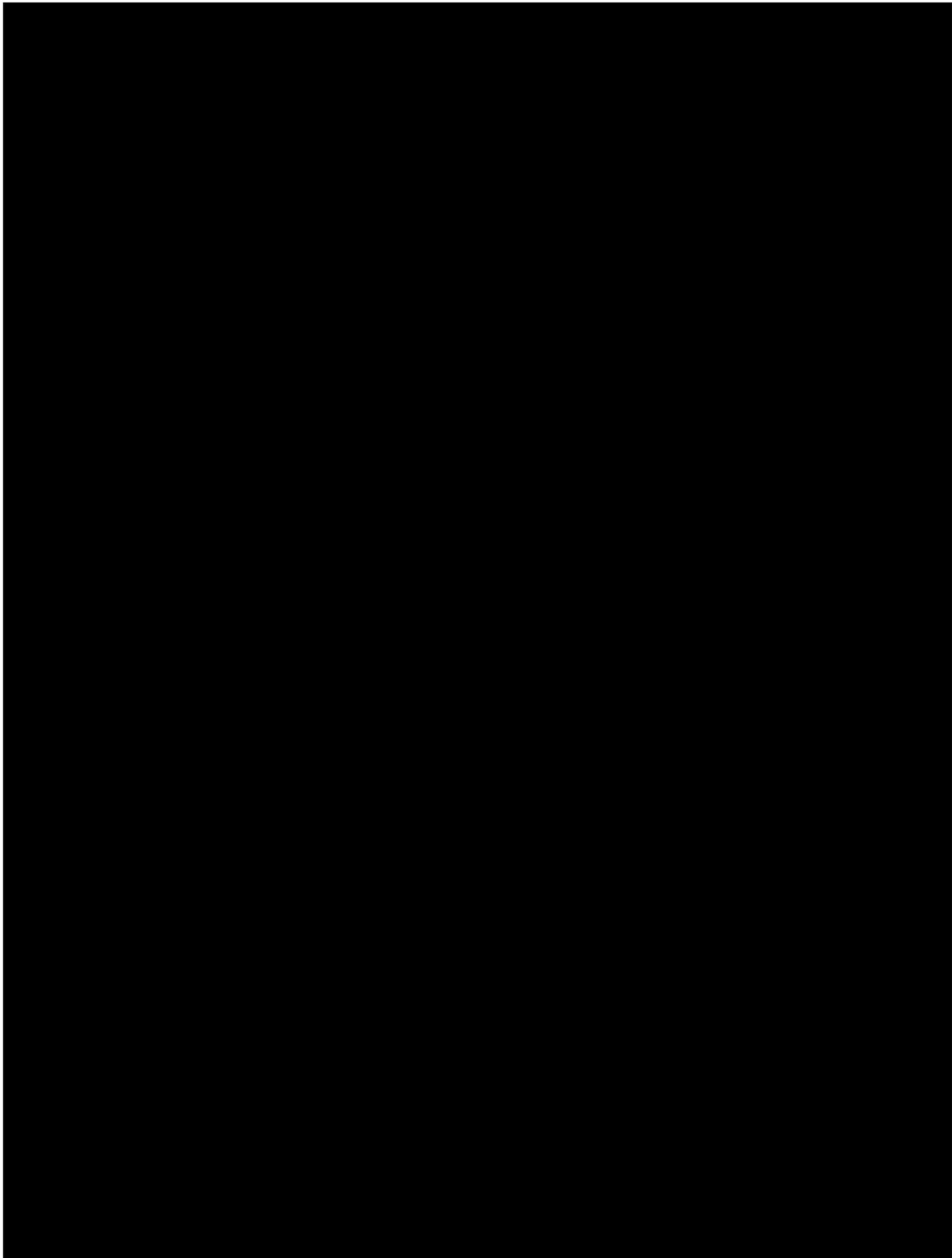


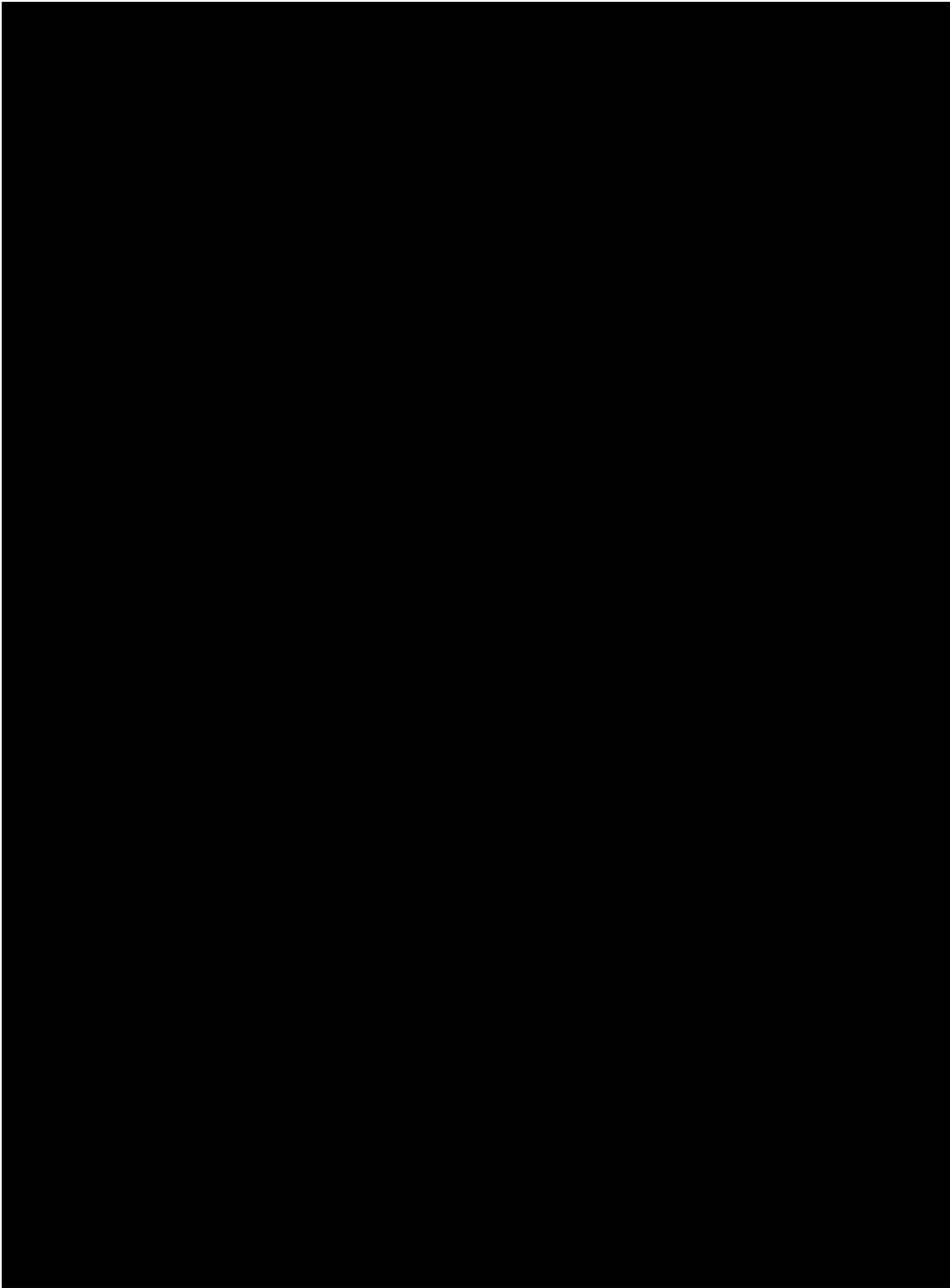


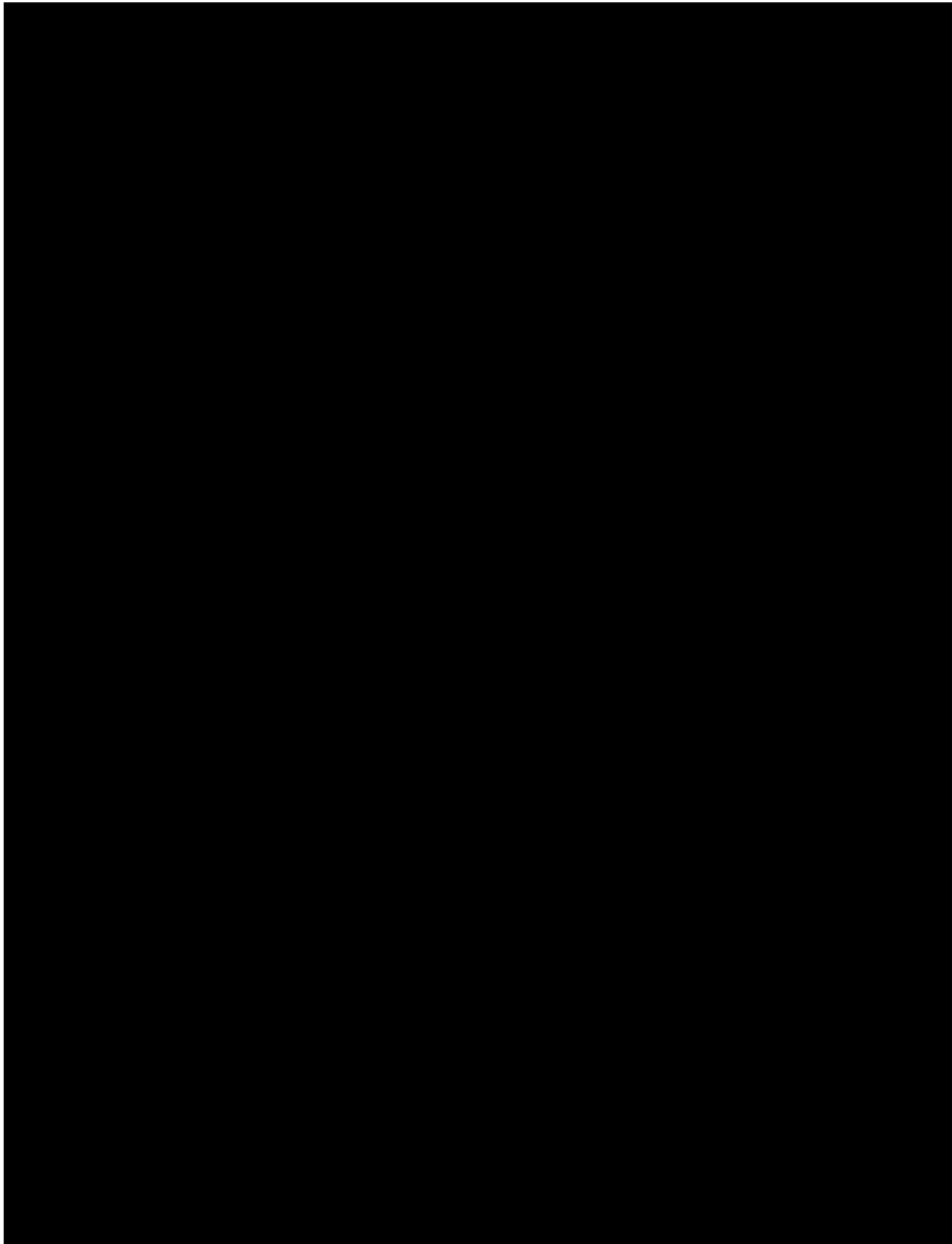


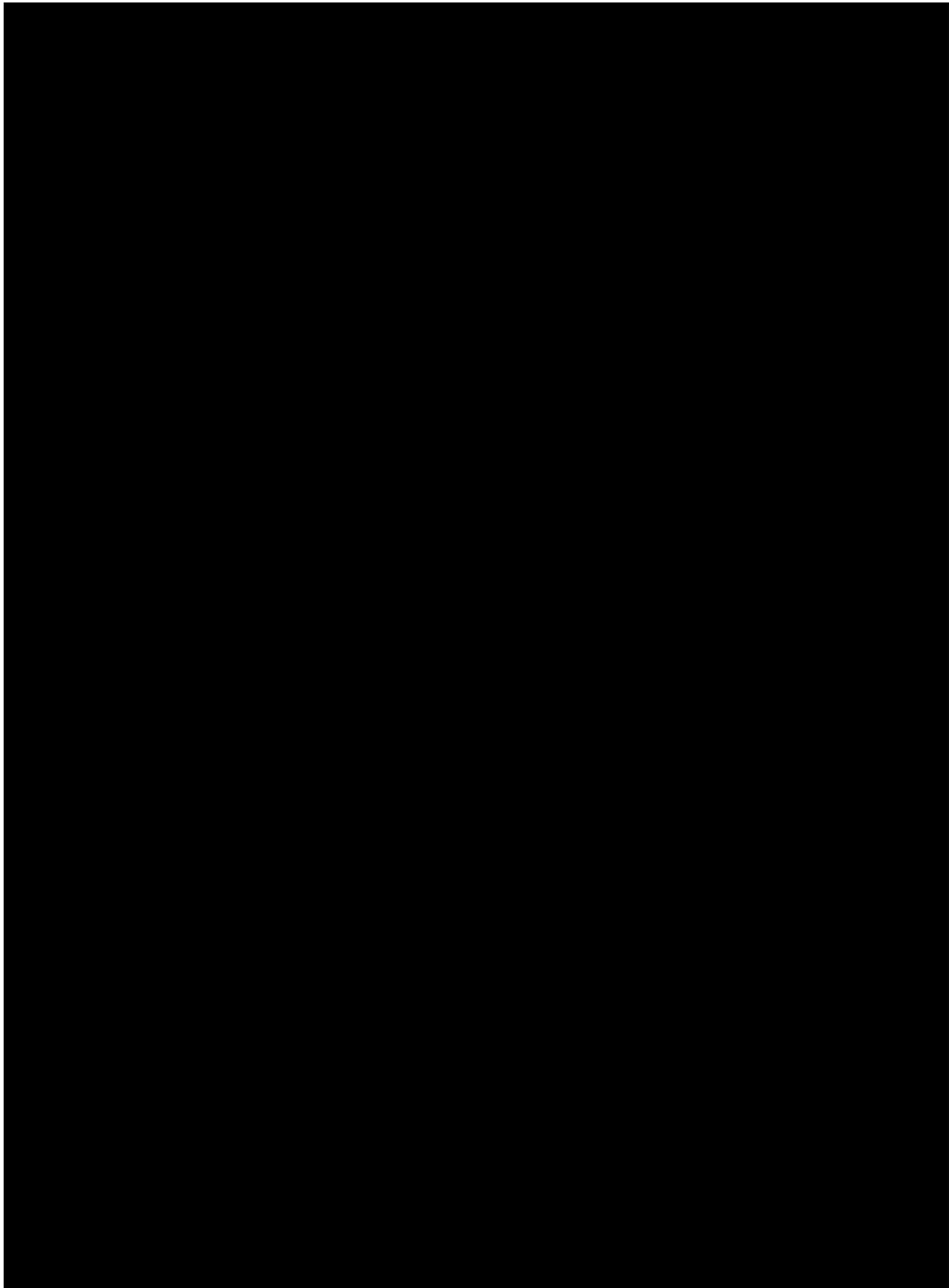


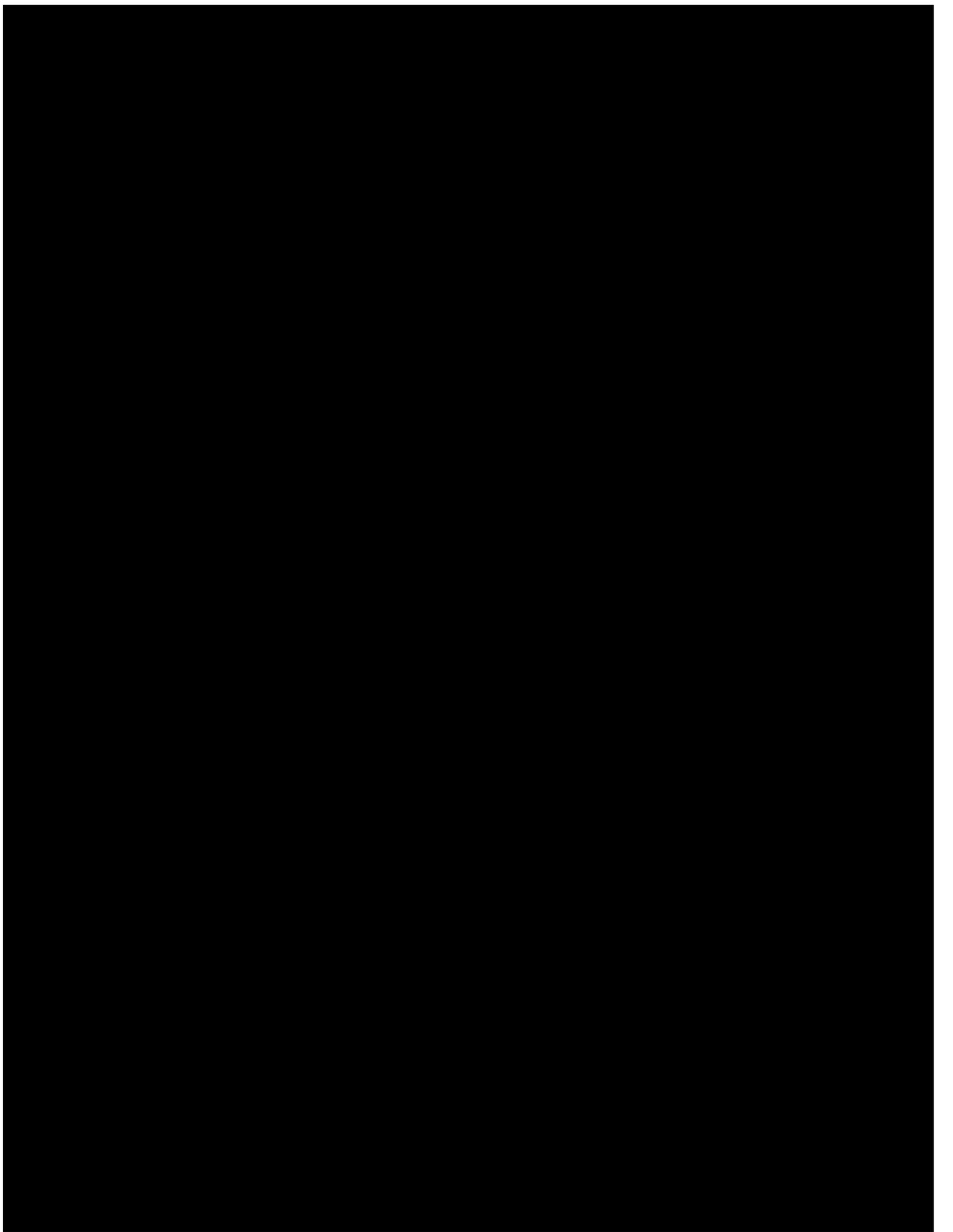


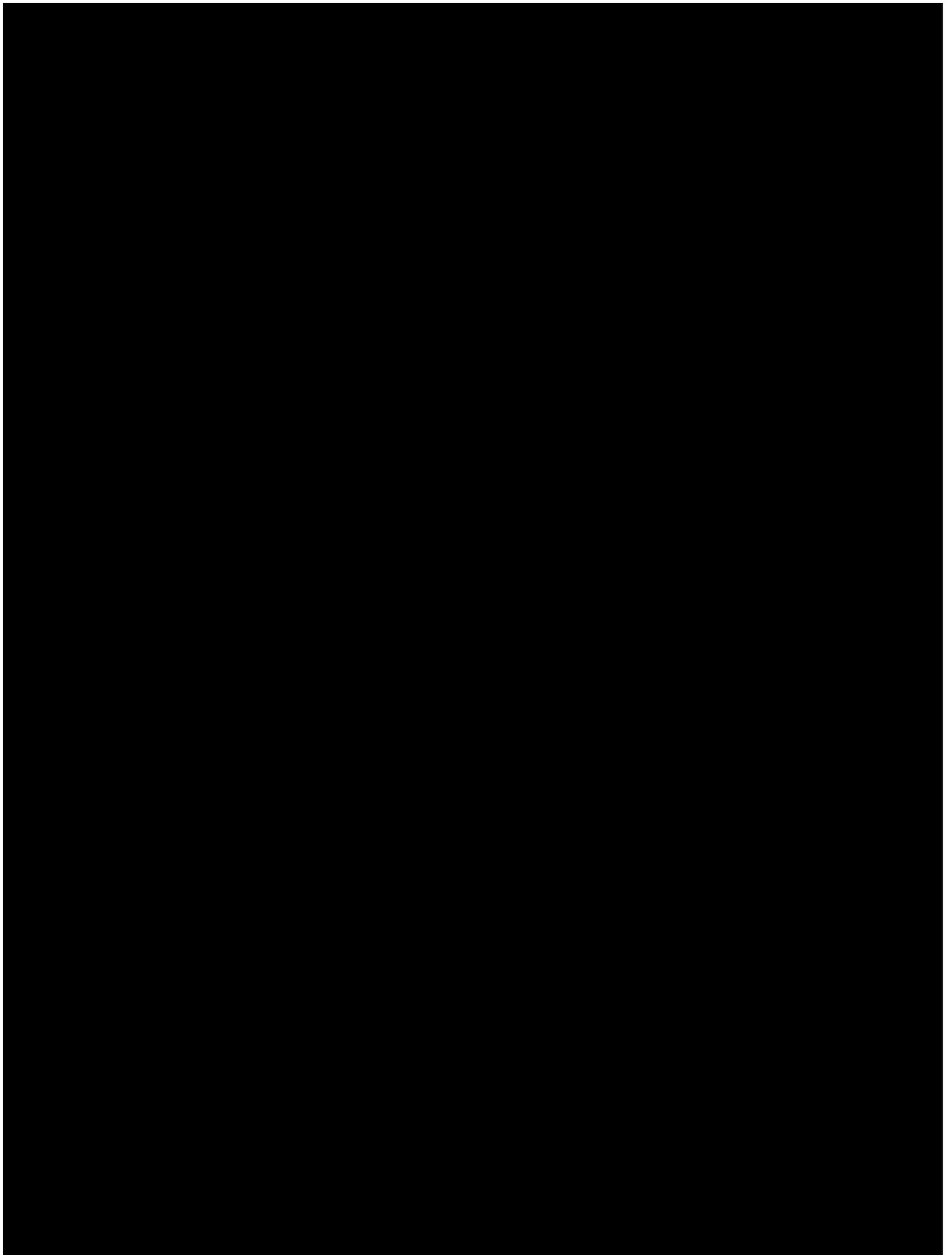


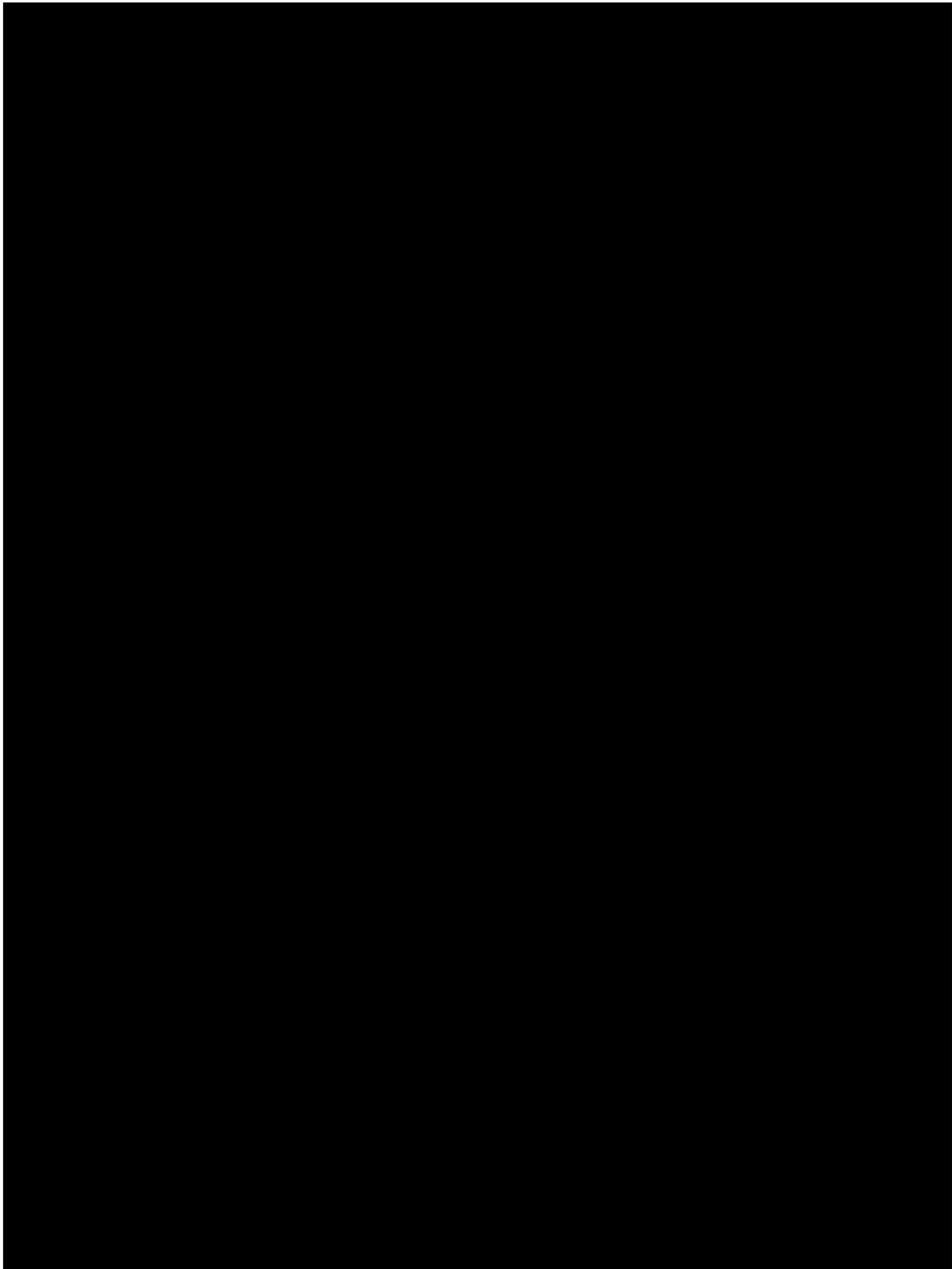


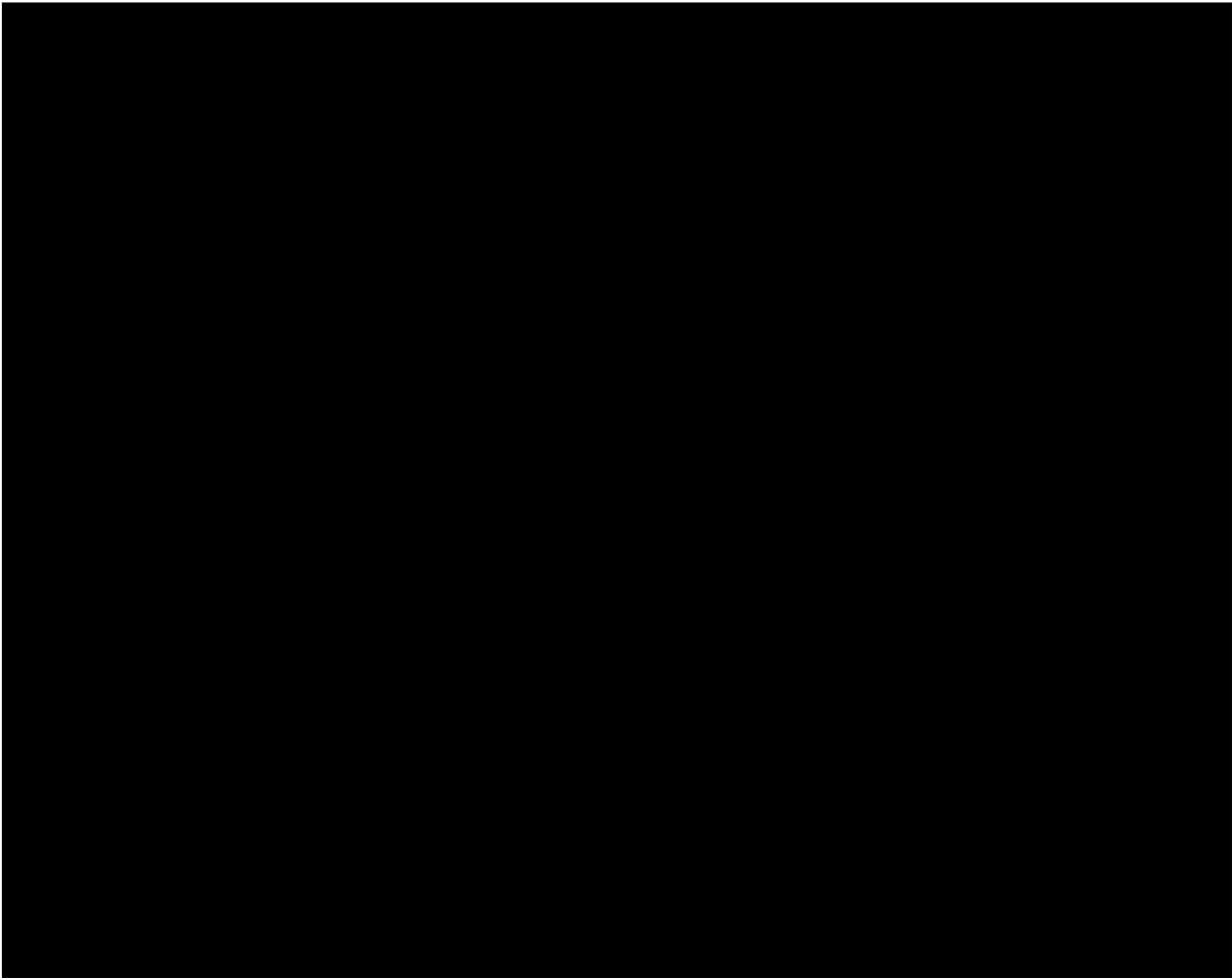


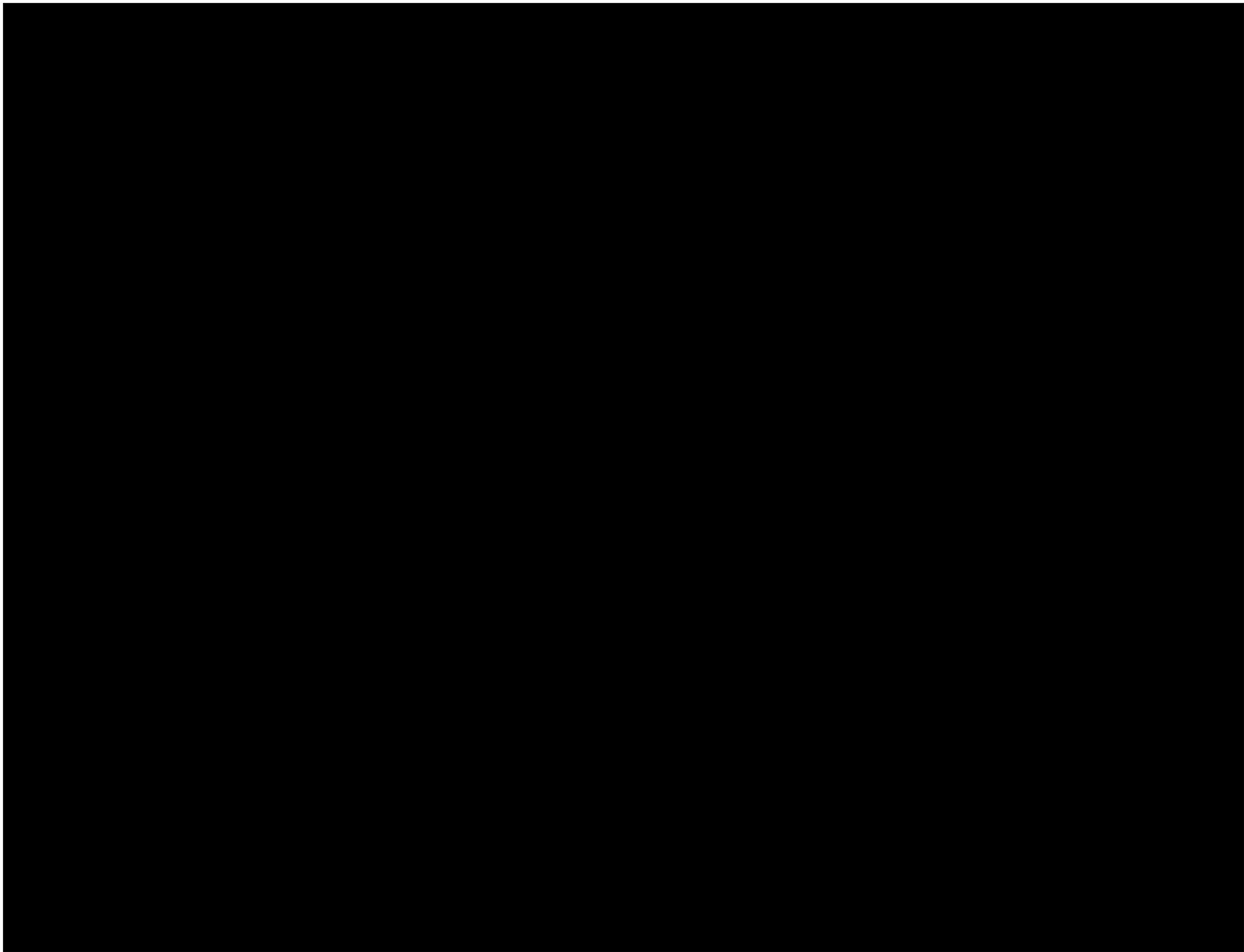


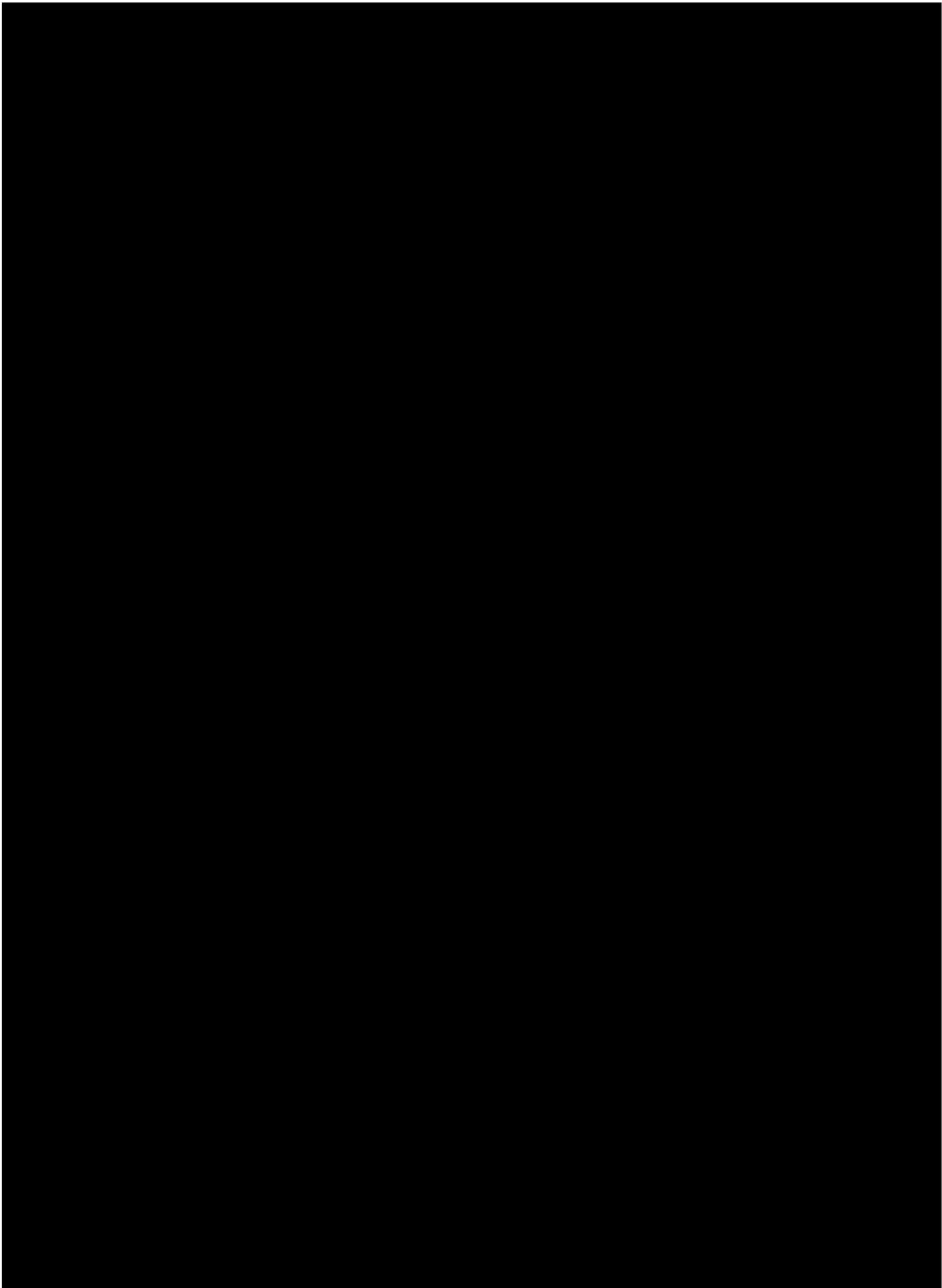


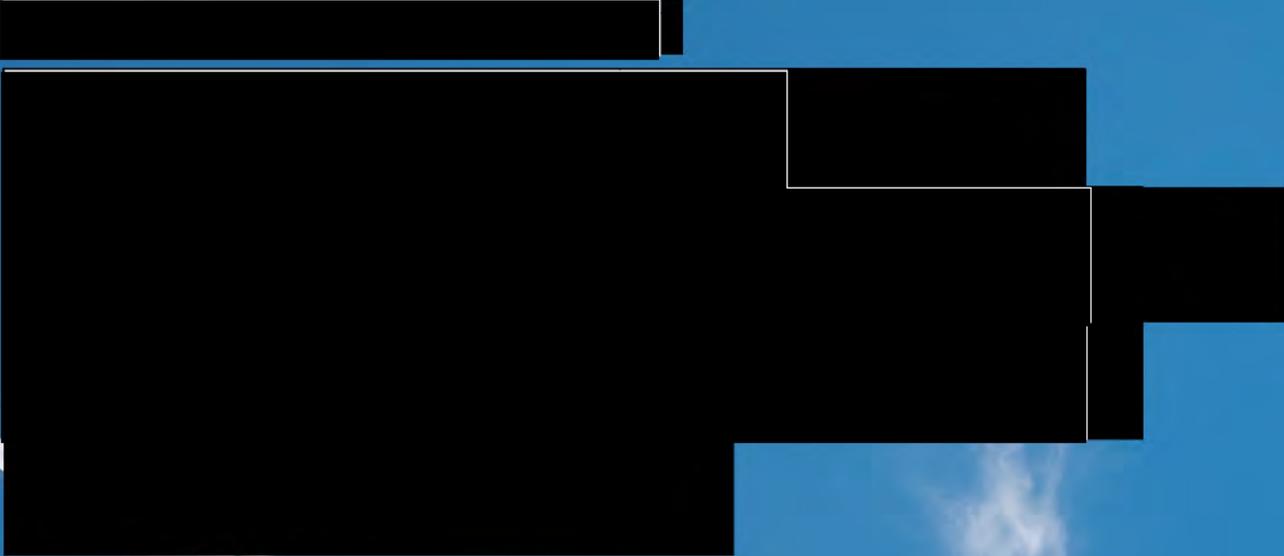




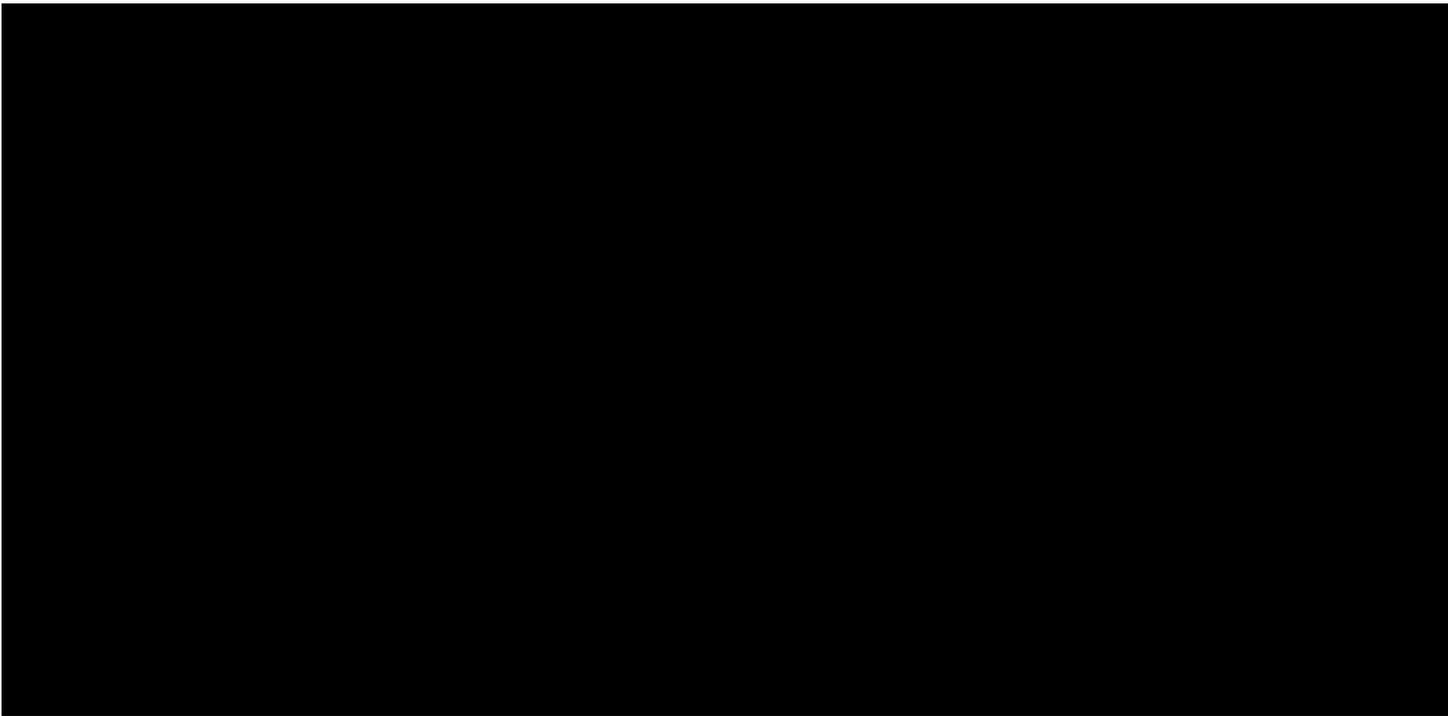






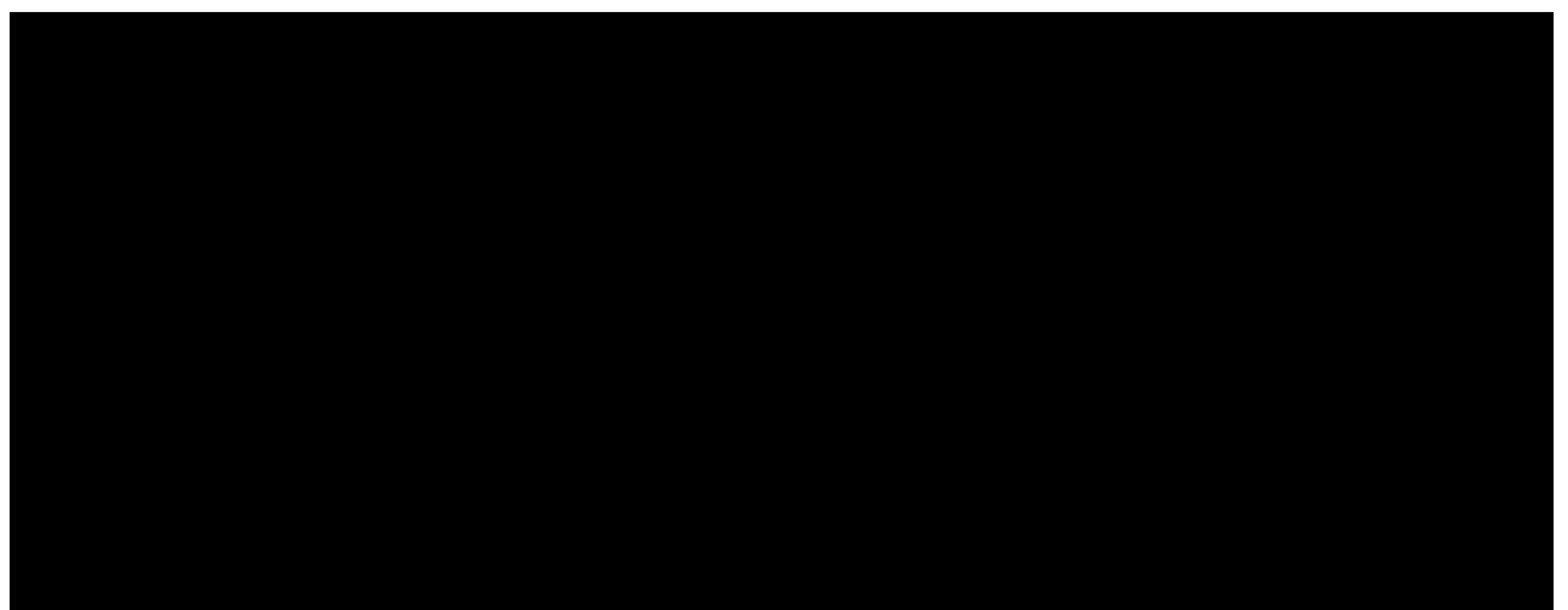


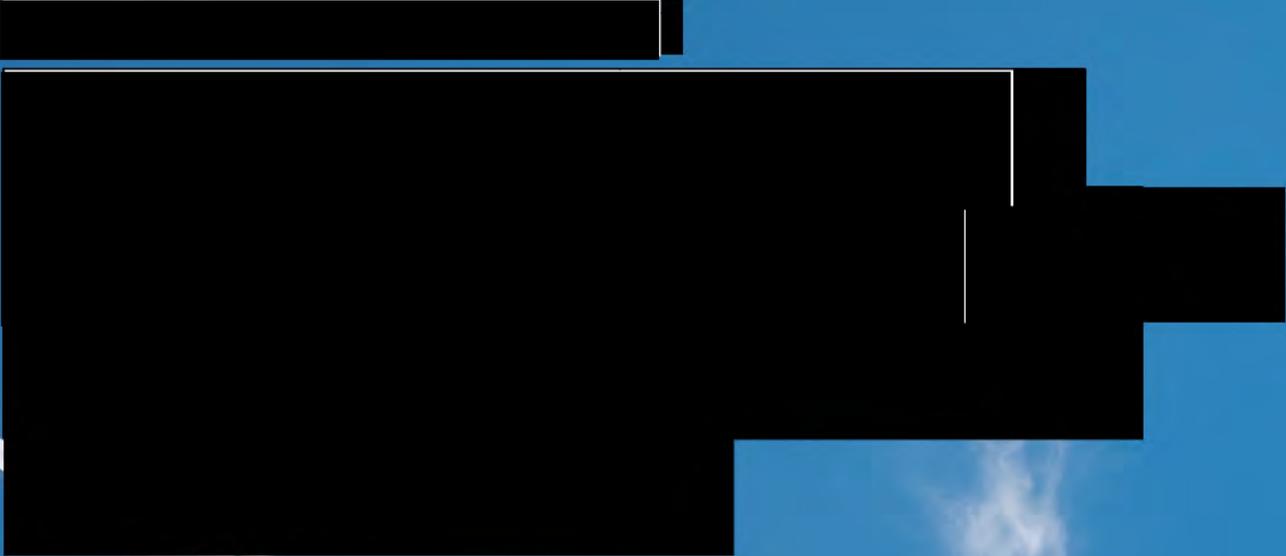
Portions of this proposal contain confidential, proprietary, and/or commercially sensitive information which has been redacted from the "Public Version" of this proposal. Sunrise Wind LLC has submitted a Confidential Version of this proposal which includes the redacted information, and which should be treated as a non-public record that is exempt from disclosure to the extent permitted under applicable laws and/or as expressly set forth in the Request for Proposals.



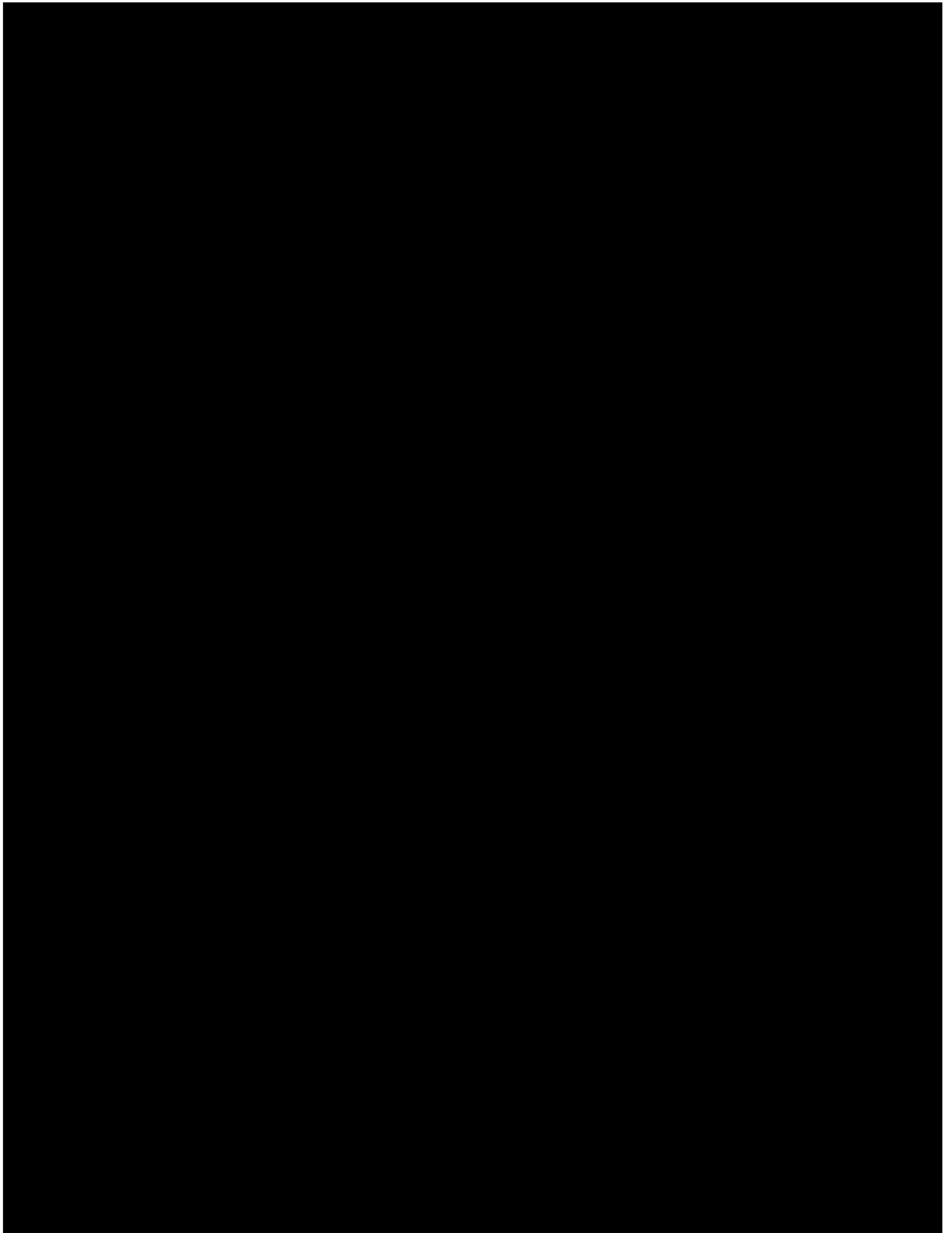


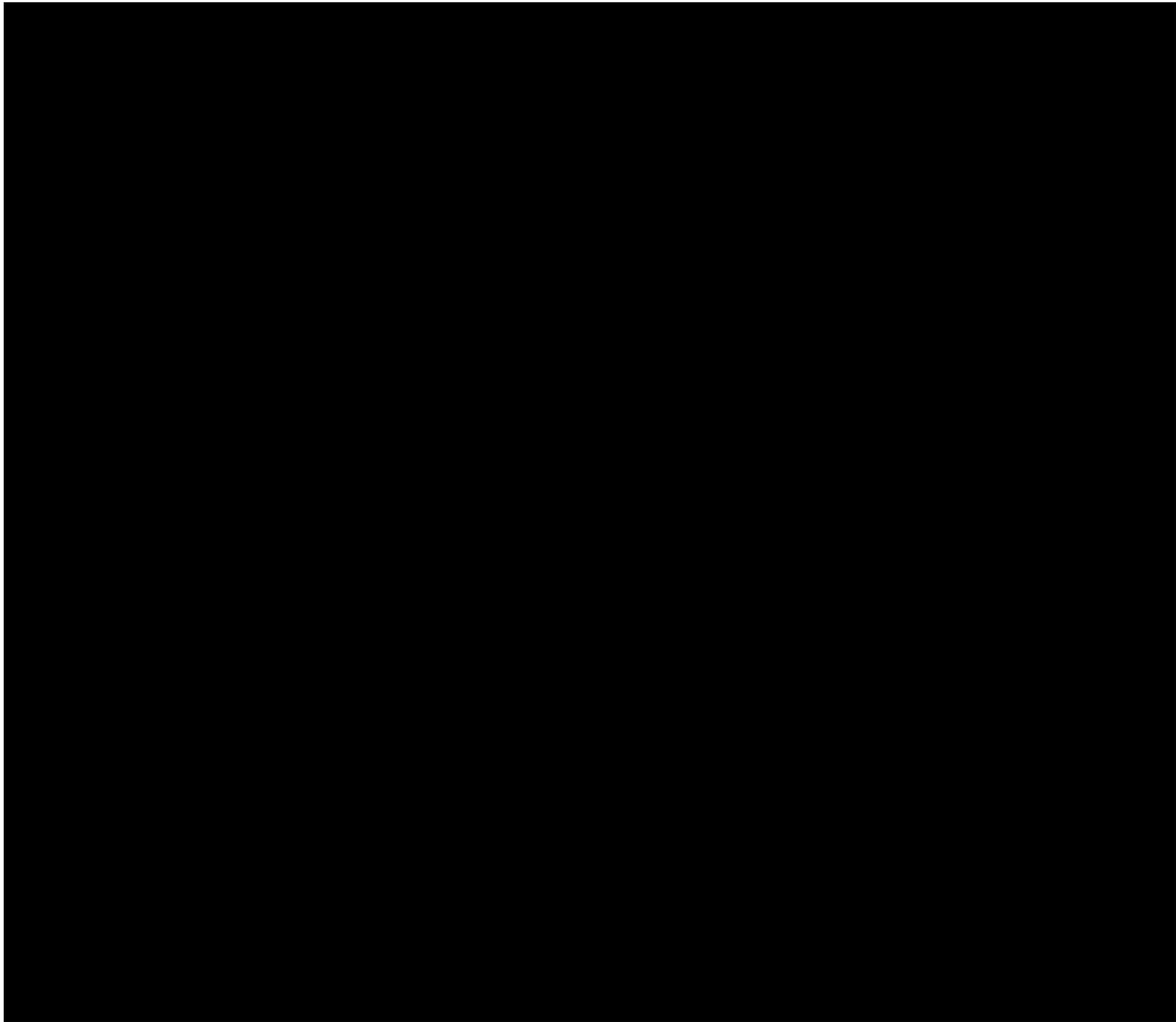




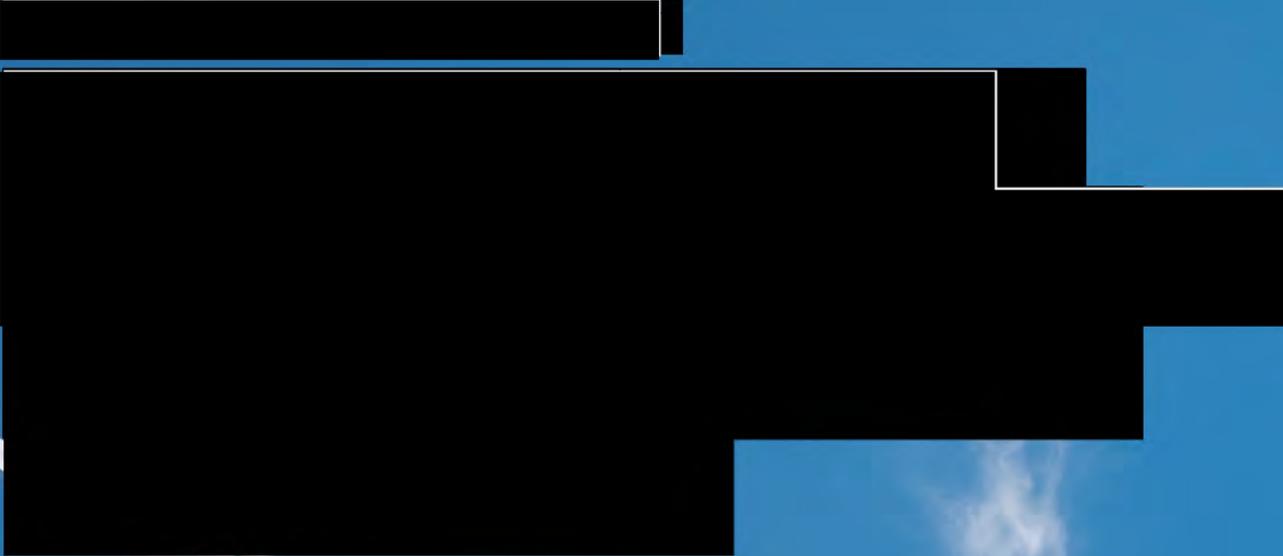


Portions of this proposal contain confidential, proprietary, and/or commercially sensitive information which has been redacted from the "Public Version" of this proposal. Sunrise Wind LLC has submitted a Confidential Version of this proposal which includes the redacted information, and which should be treated as a non-public record that is exempt from disclosure to the extent permitted under applicable laws and/or as expressly set forth in the Request for Proposals.



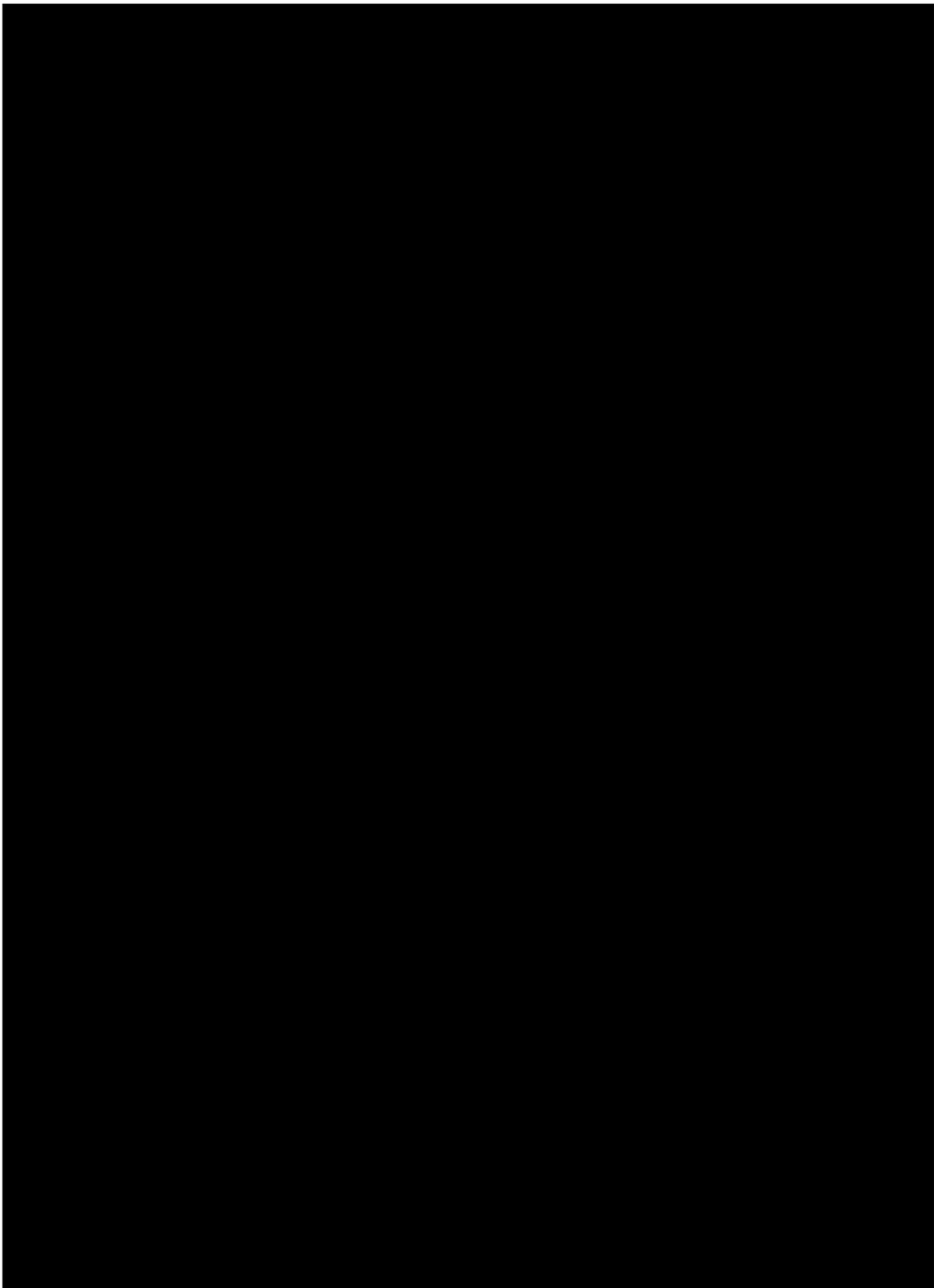


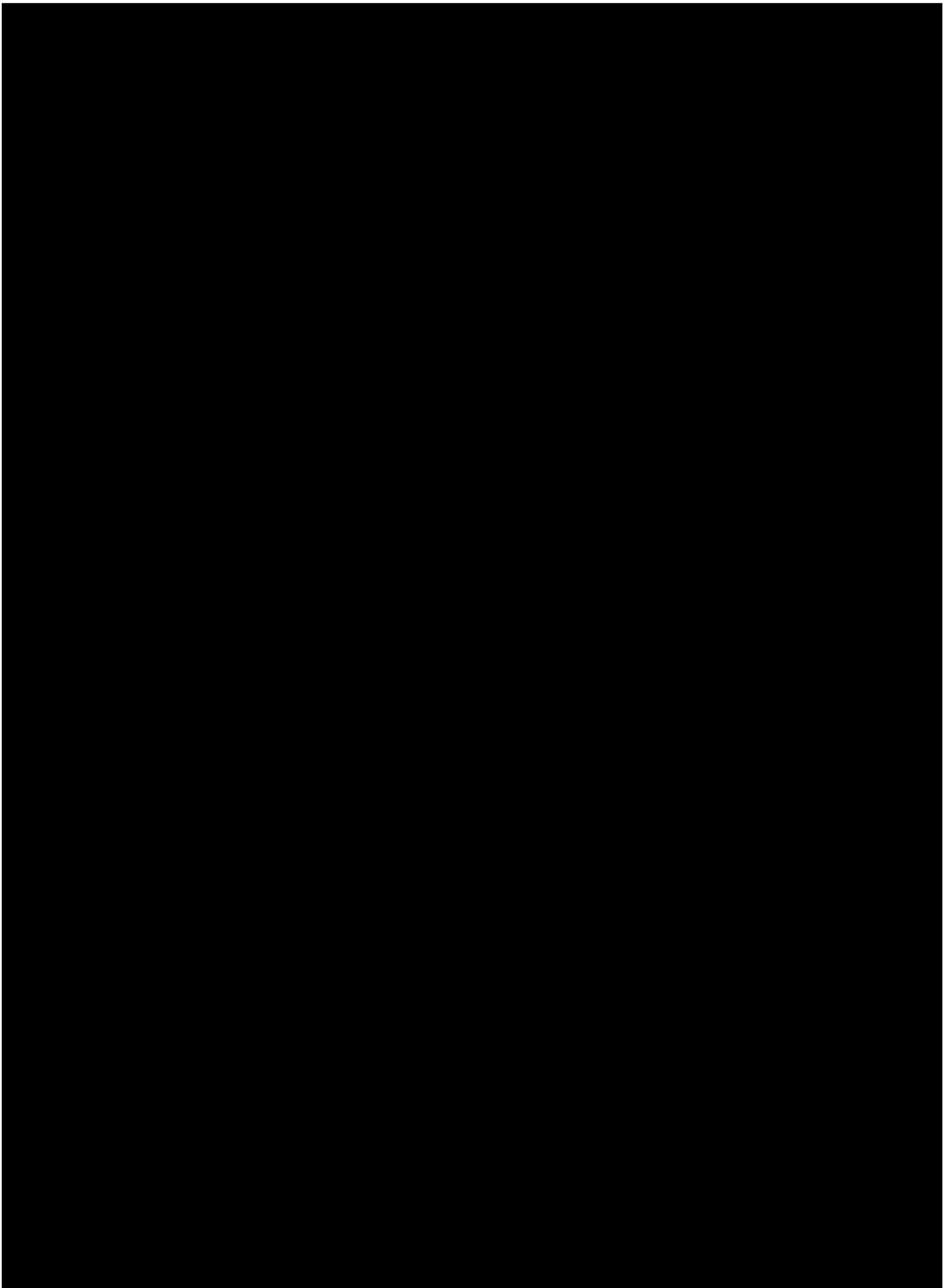


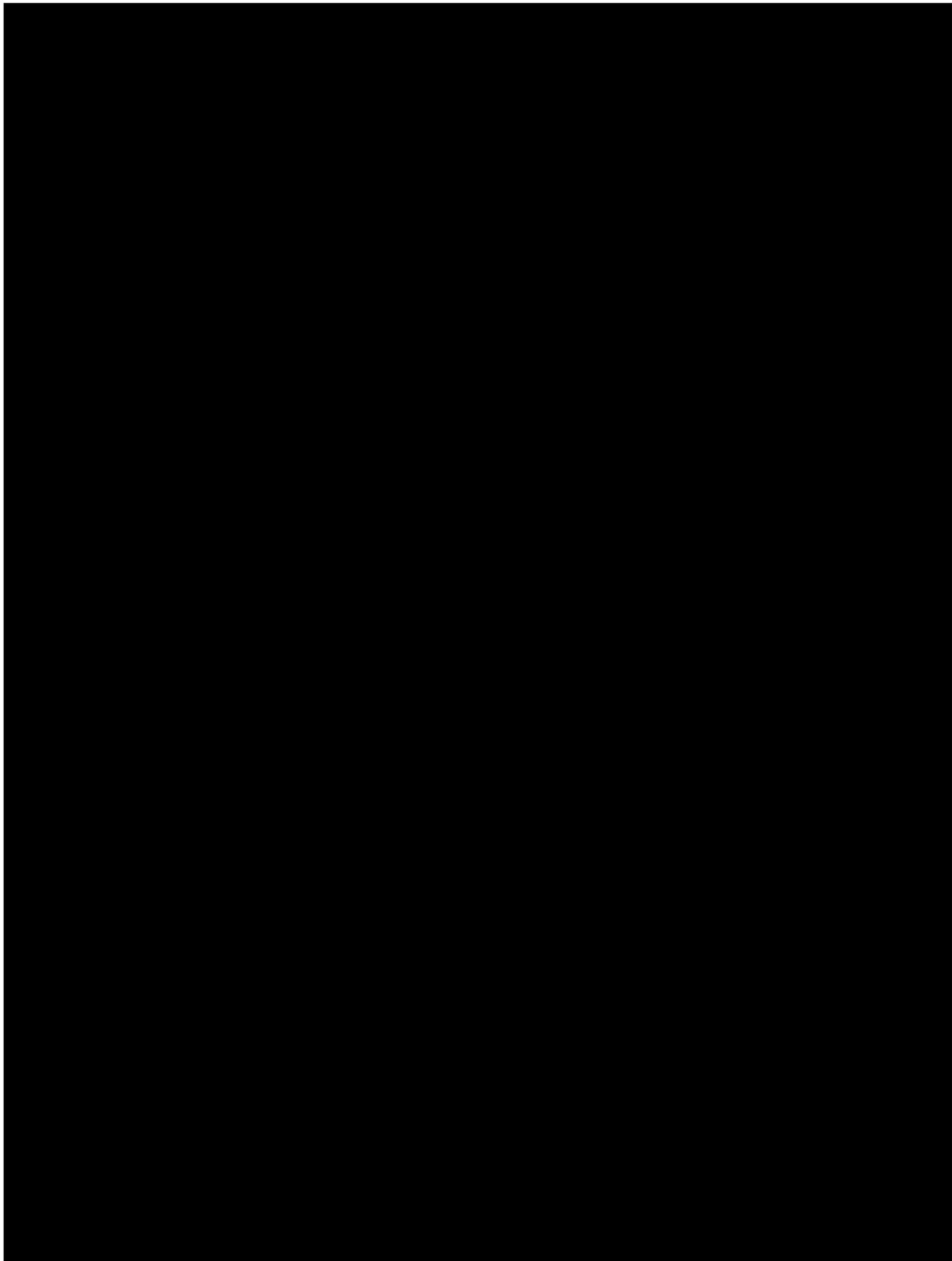


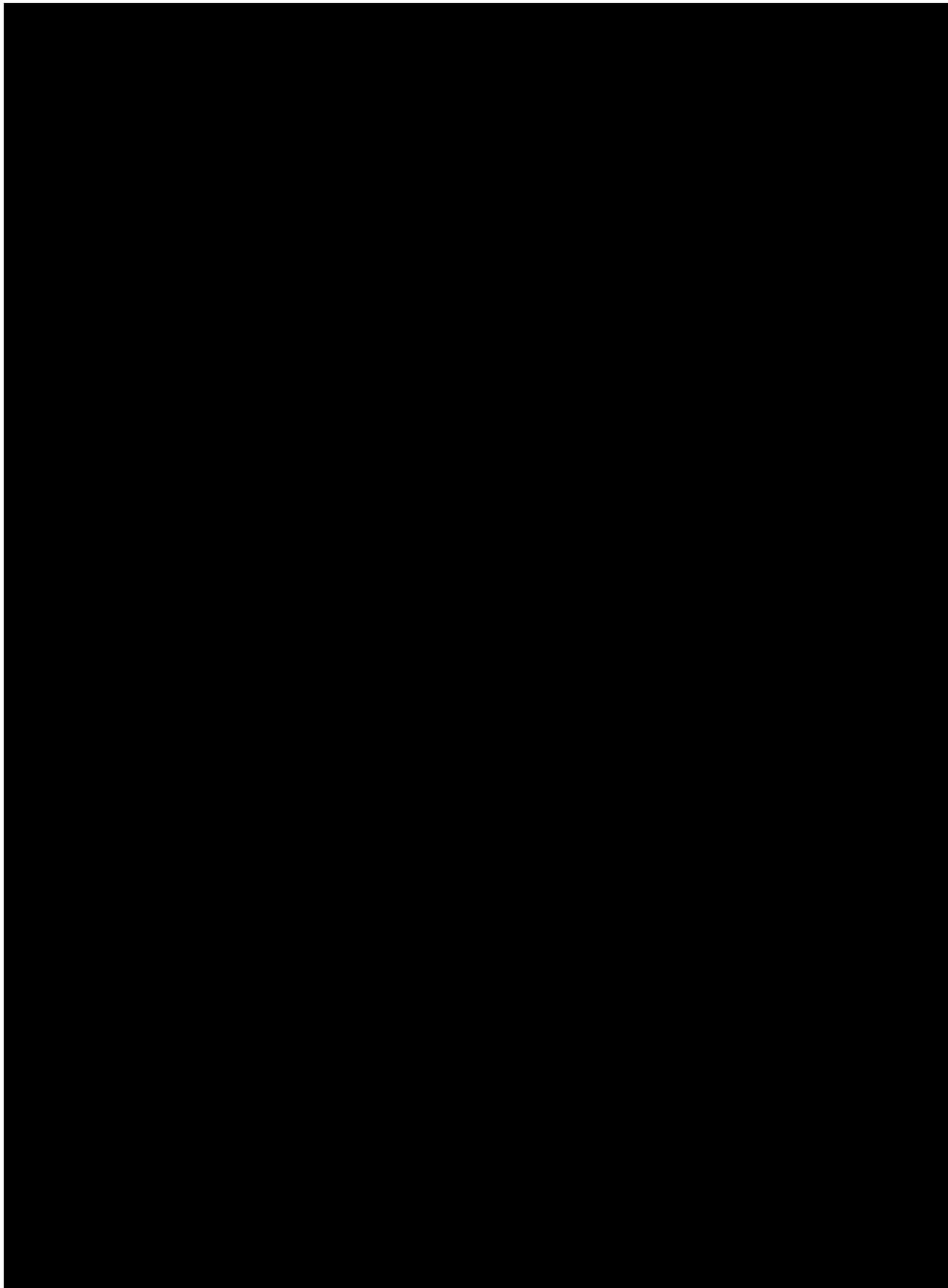
Portions of this proposal contain confidential, proprietary, and/or commercially sensitive information which has been redacted from the "Public Version" of this proposal. Sunrise Wind LLC has submitted a Confidential Version of this proposal which includes the redacted information, and which should be treated as a non-public record that is exempt from disclosure to the extent permitted under applicable laws and/or as expressly set forth in the Request for Proposals.

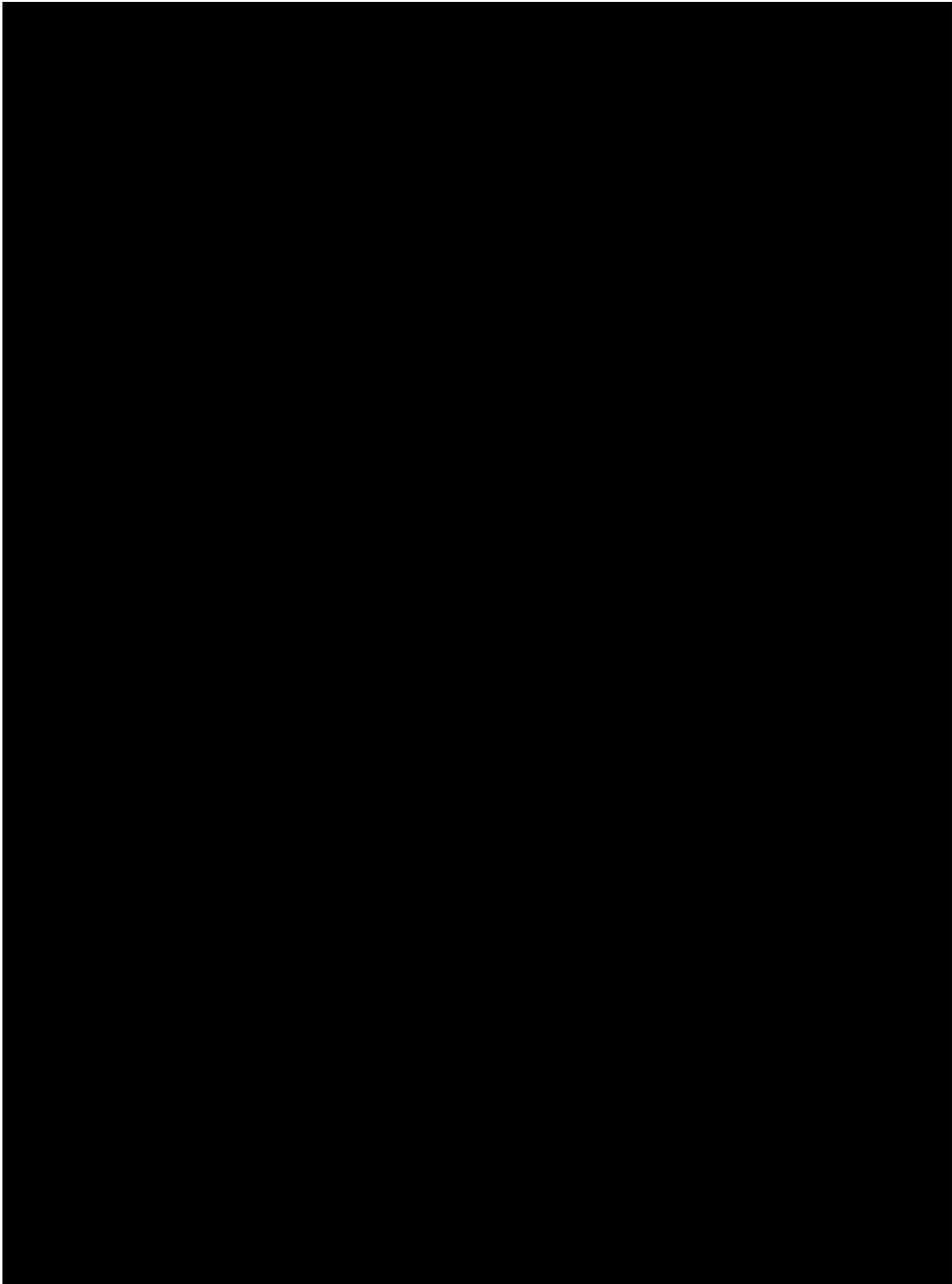


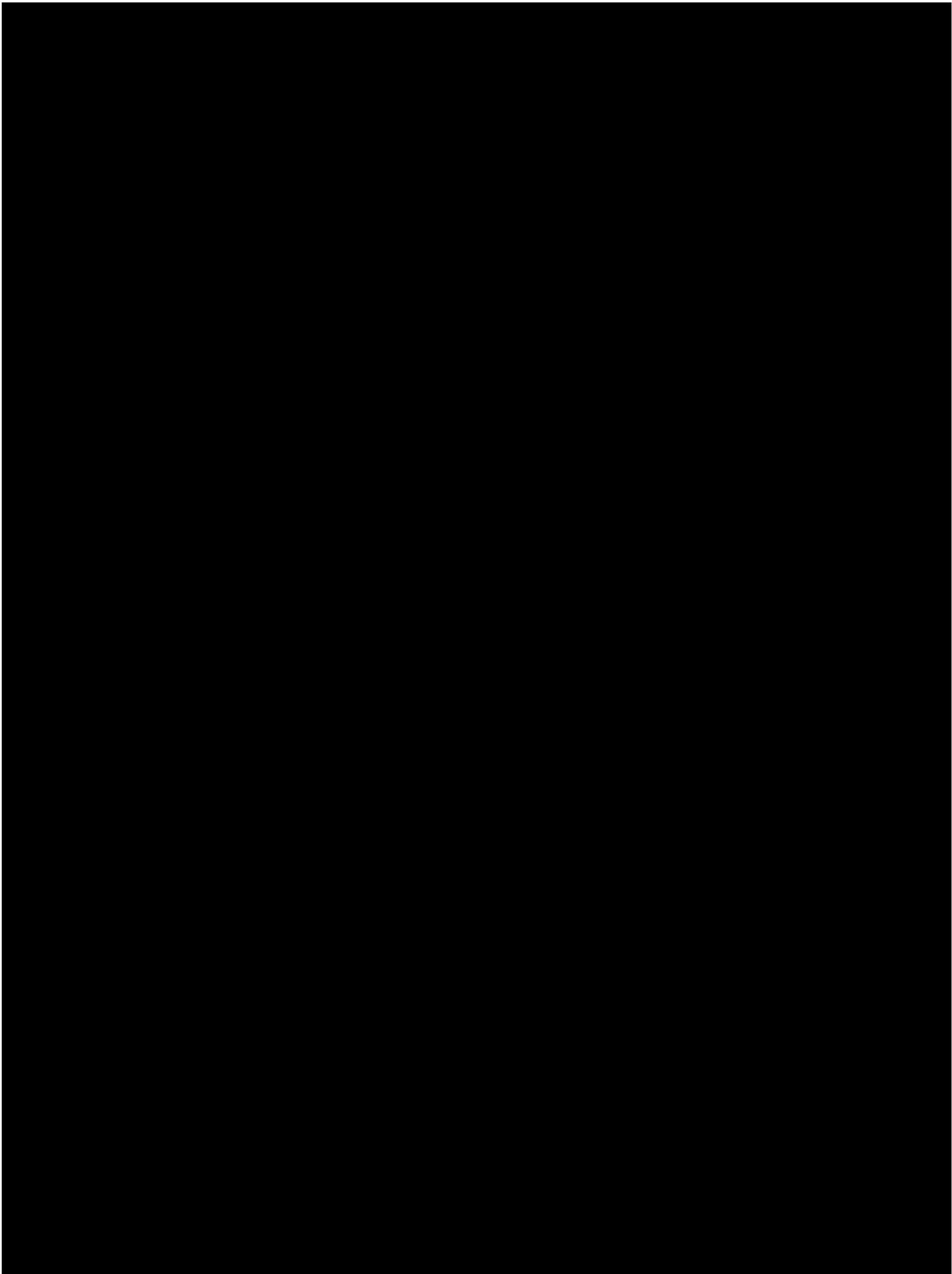


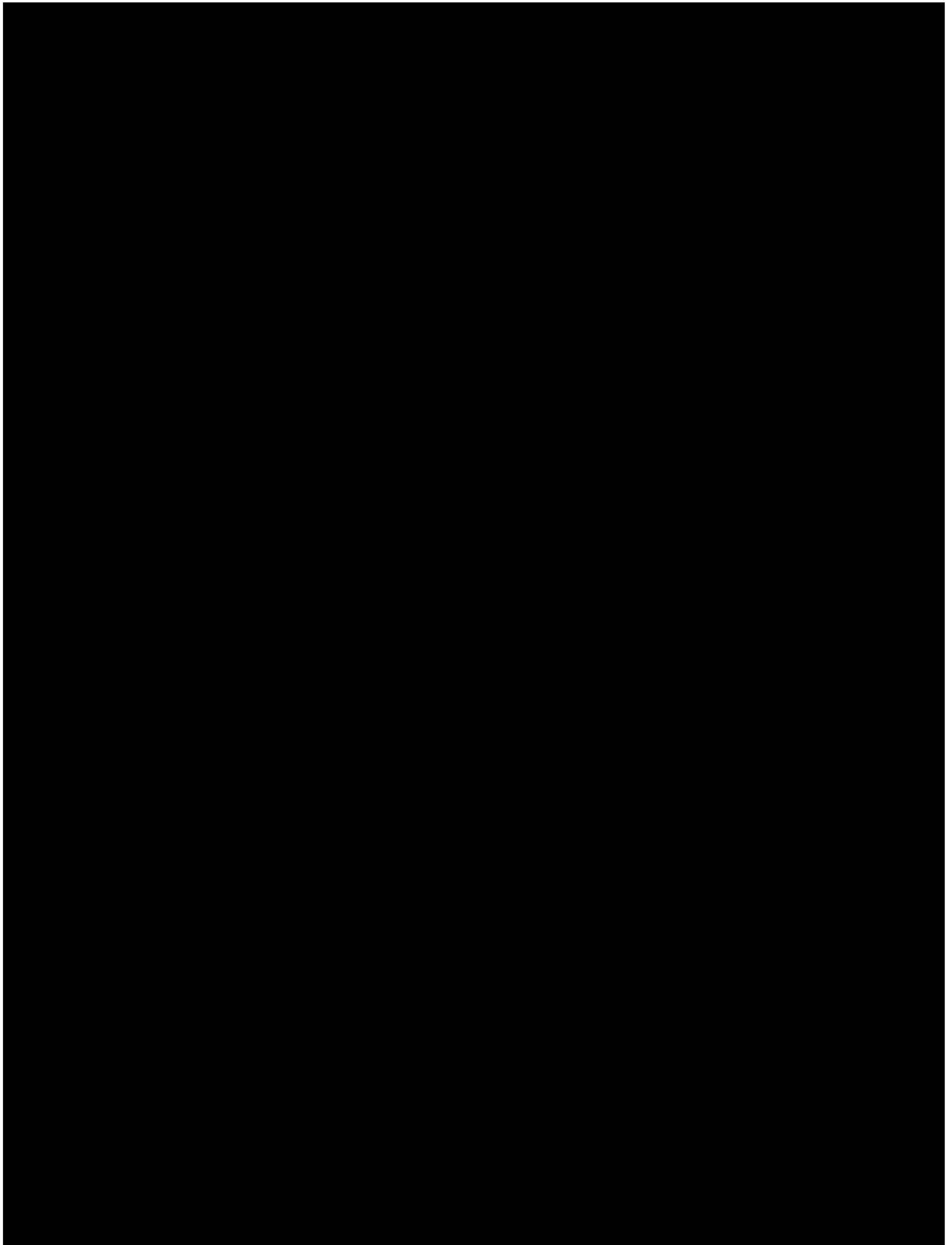


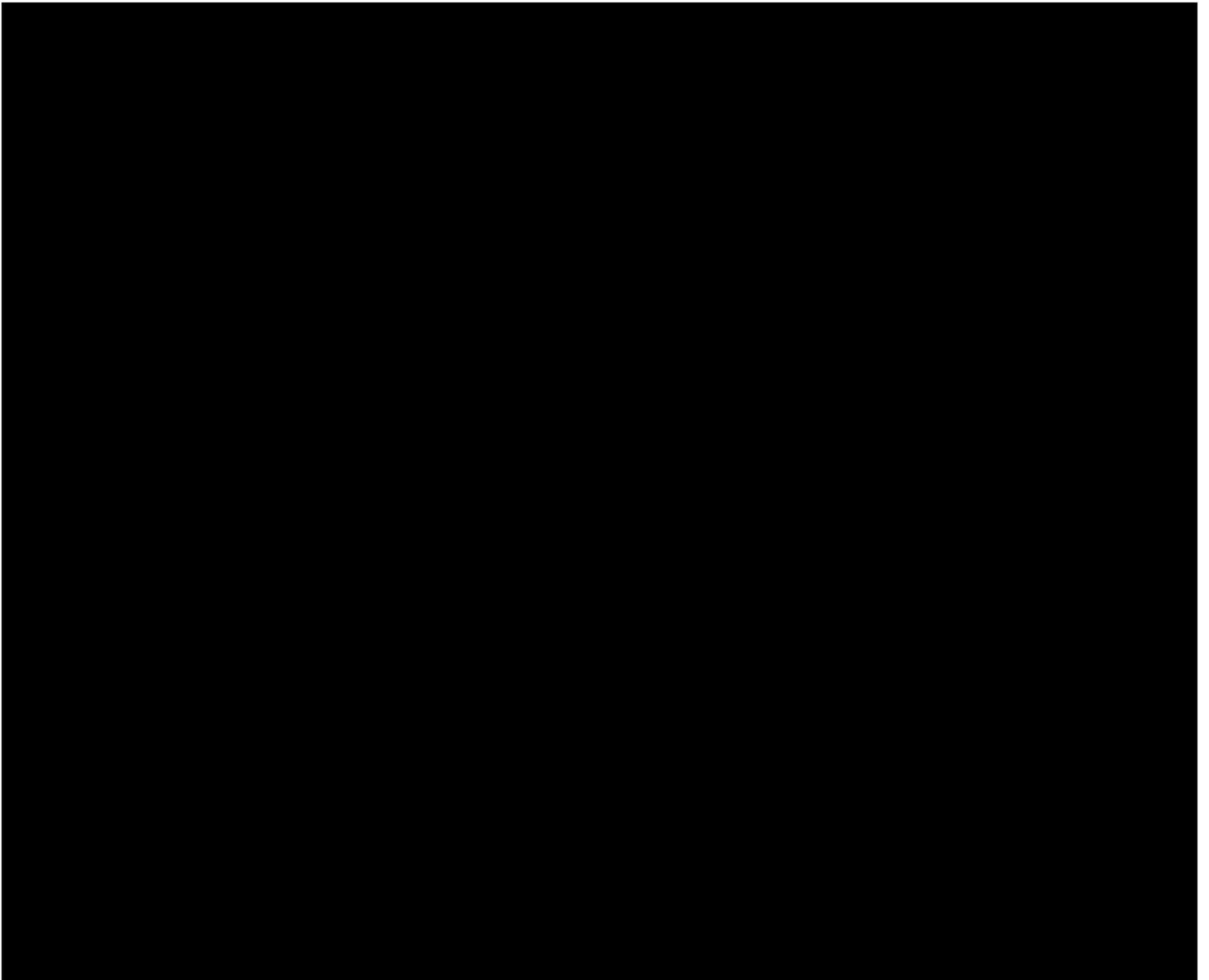


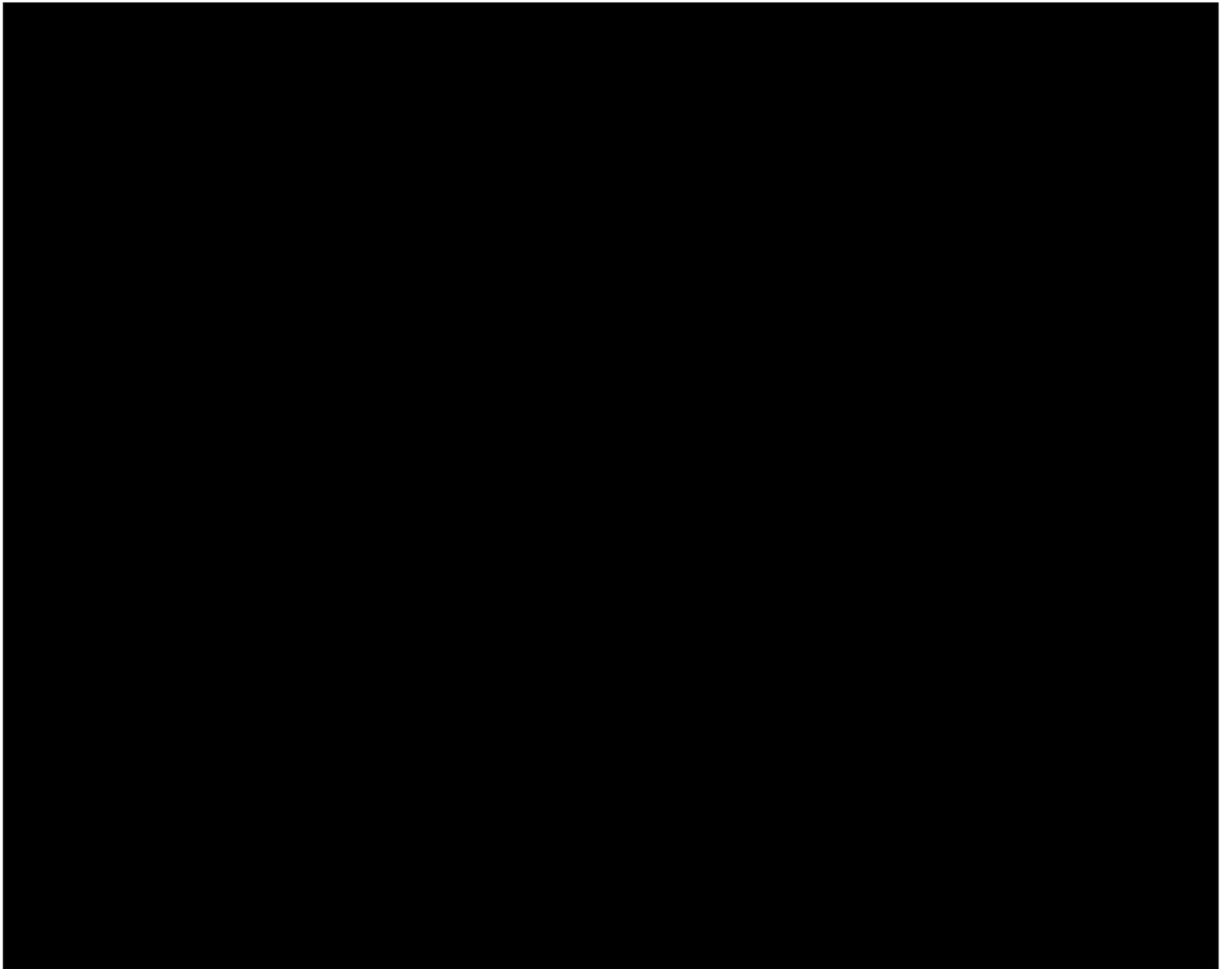


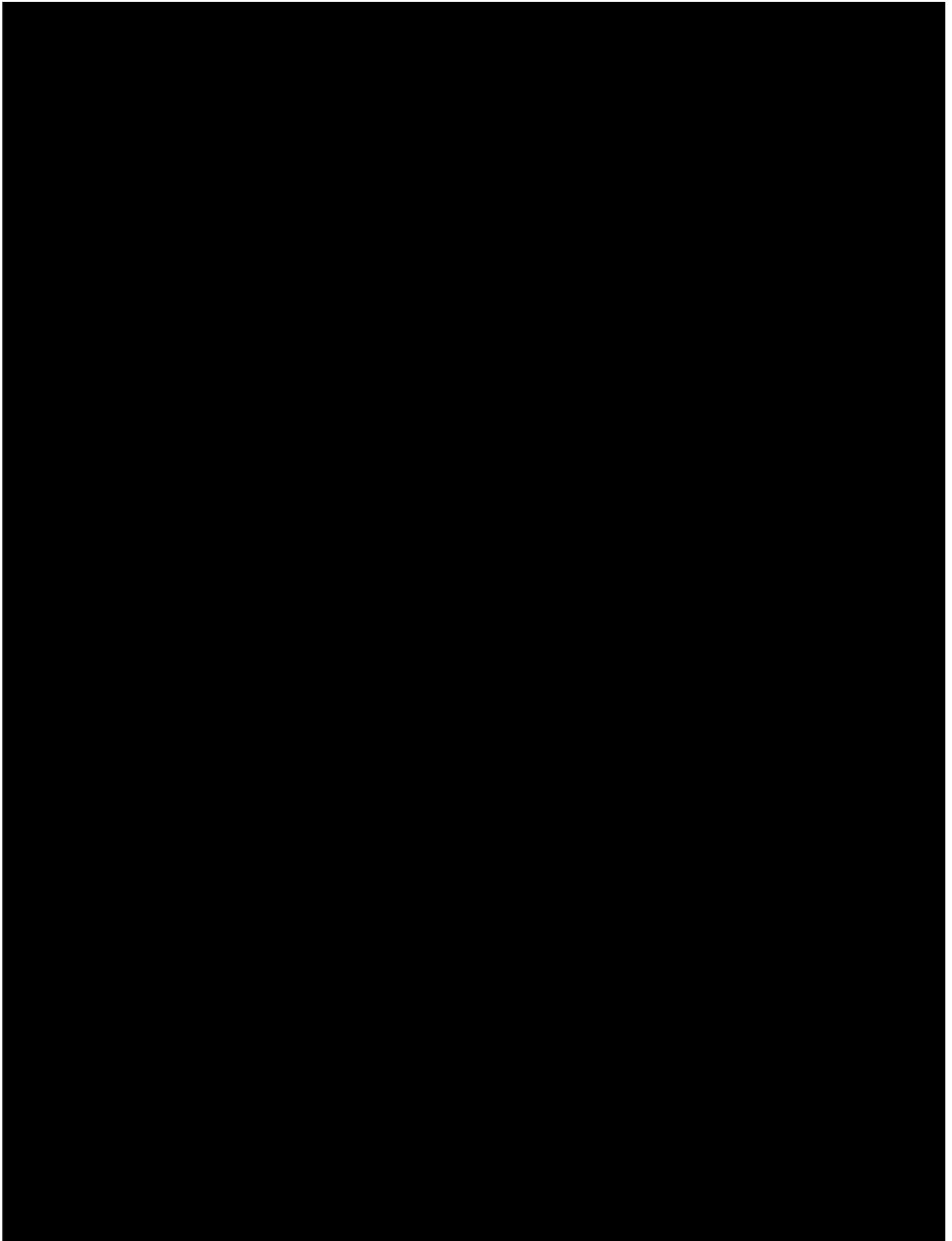


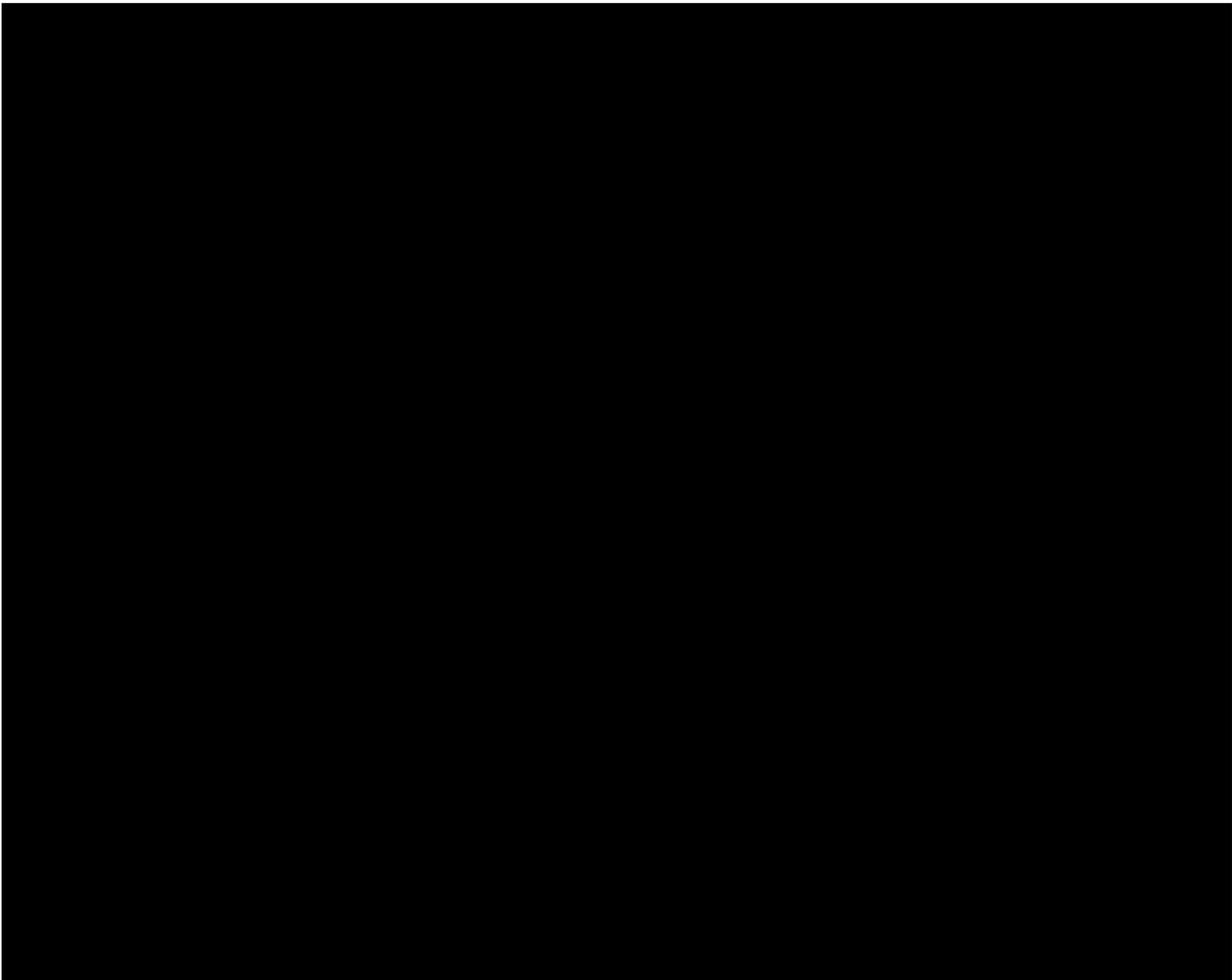


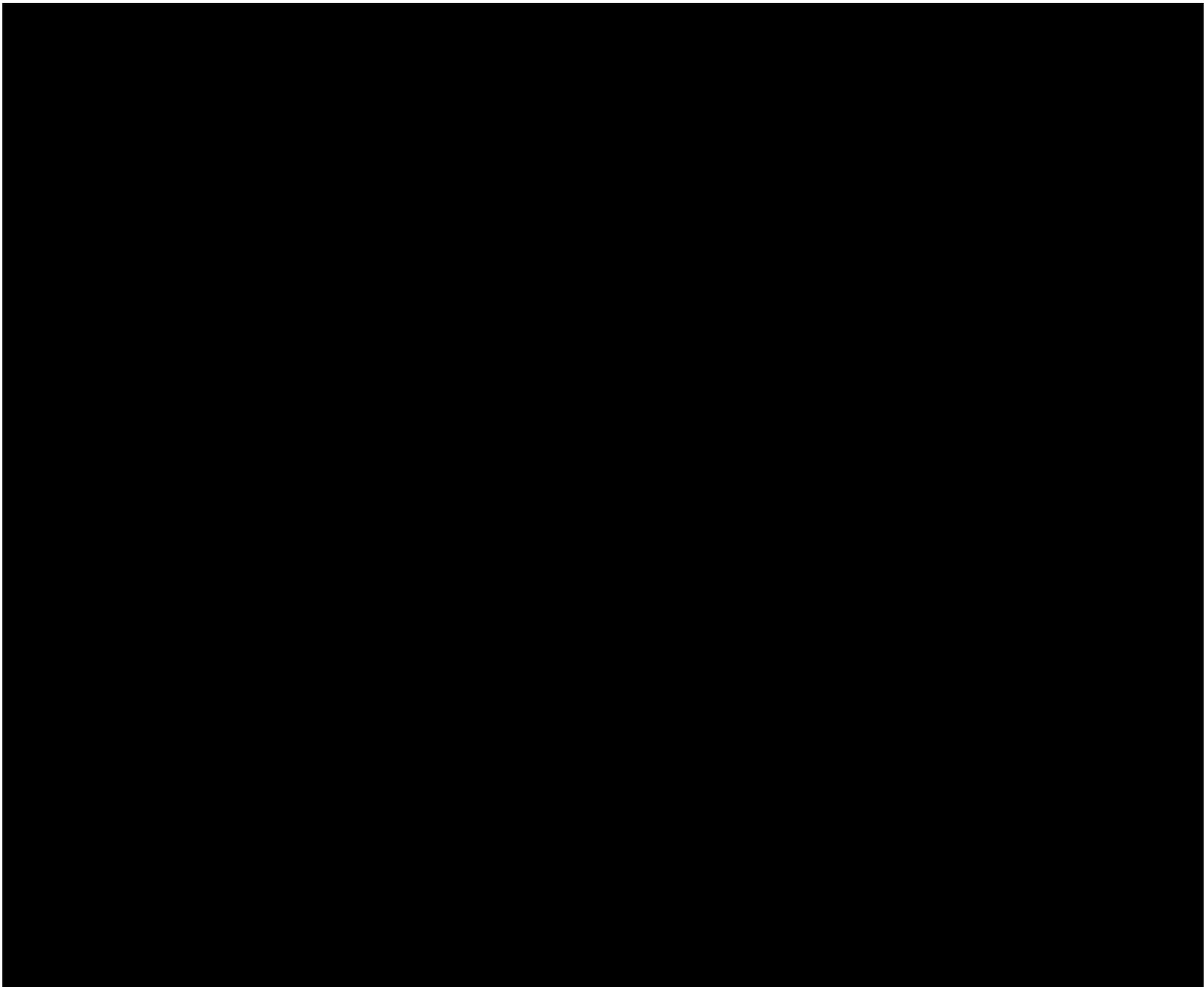


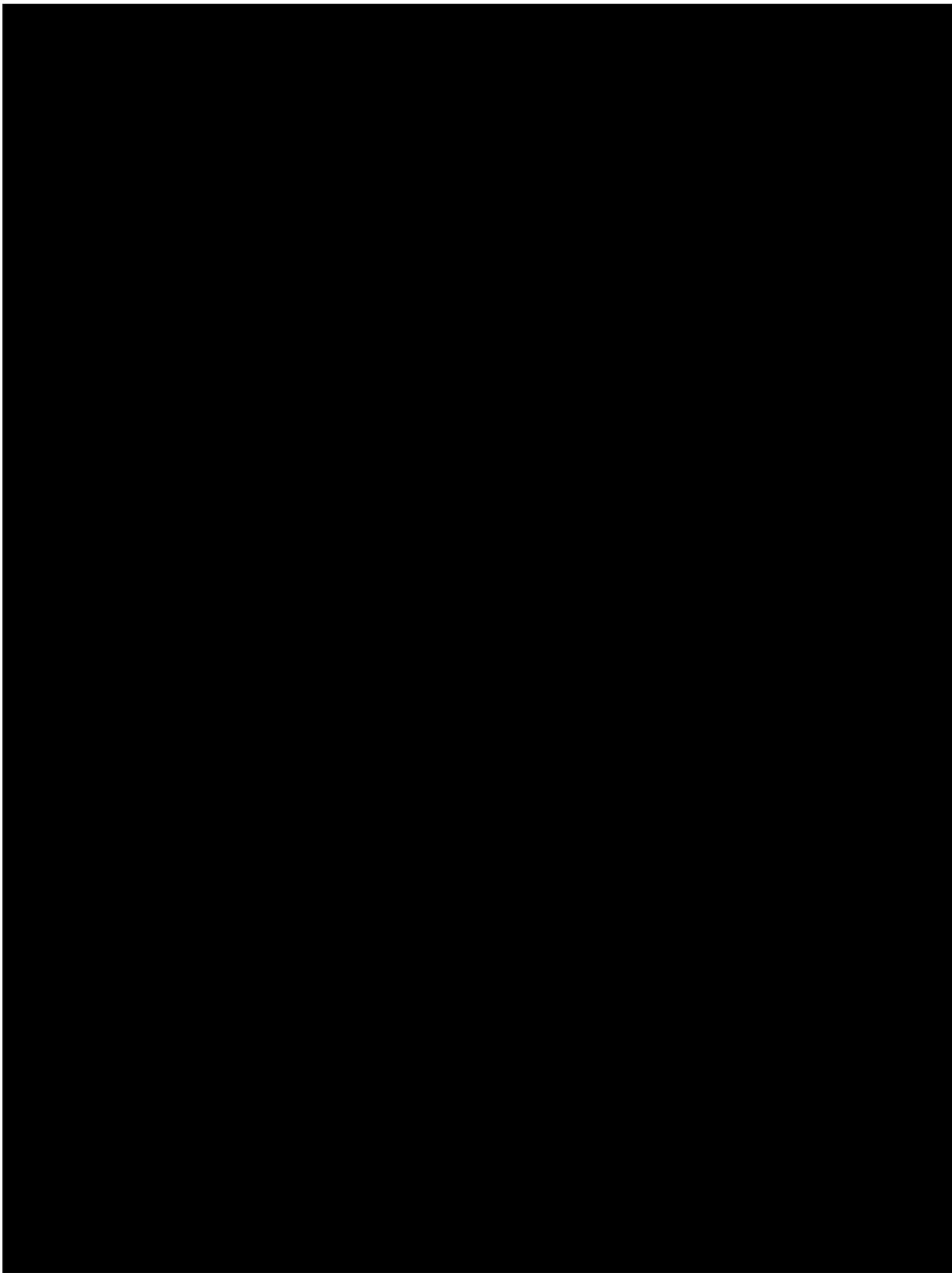


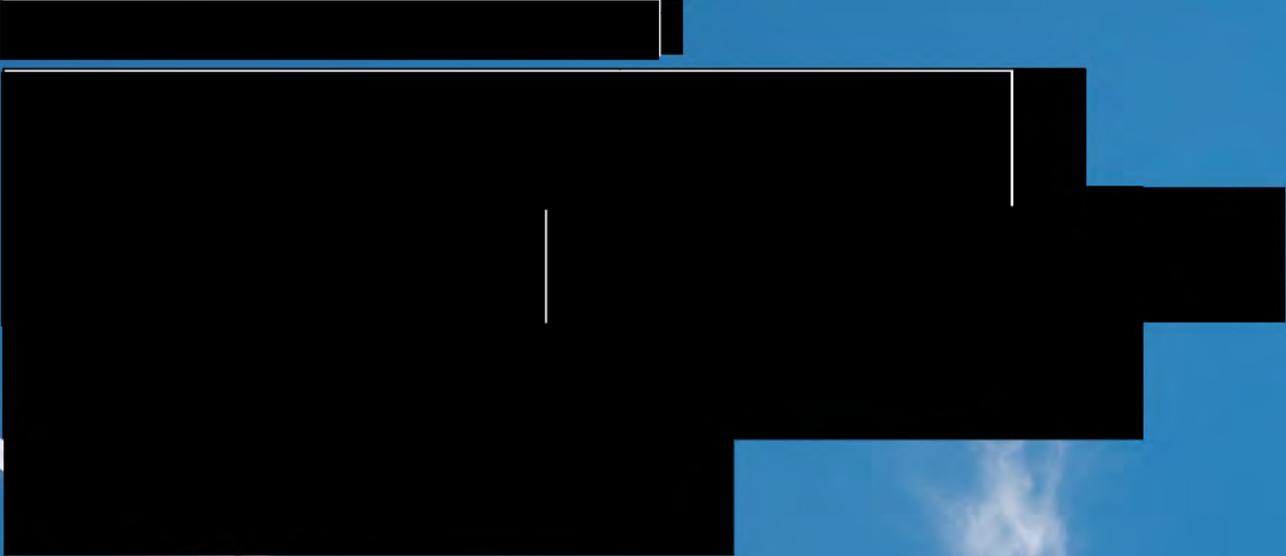




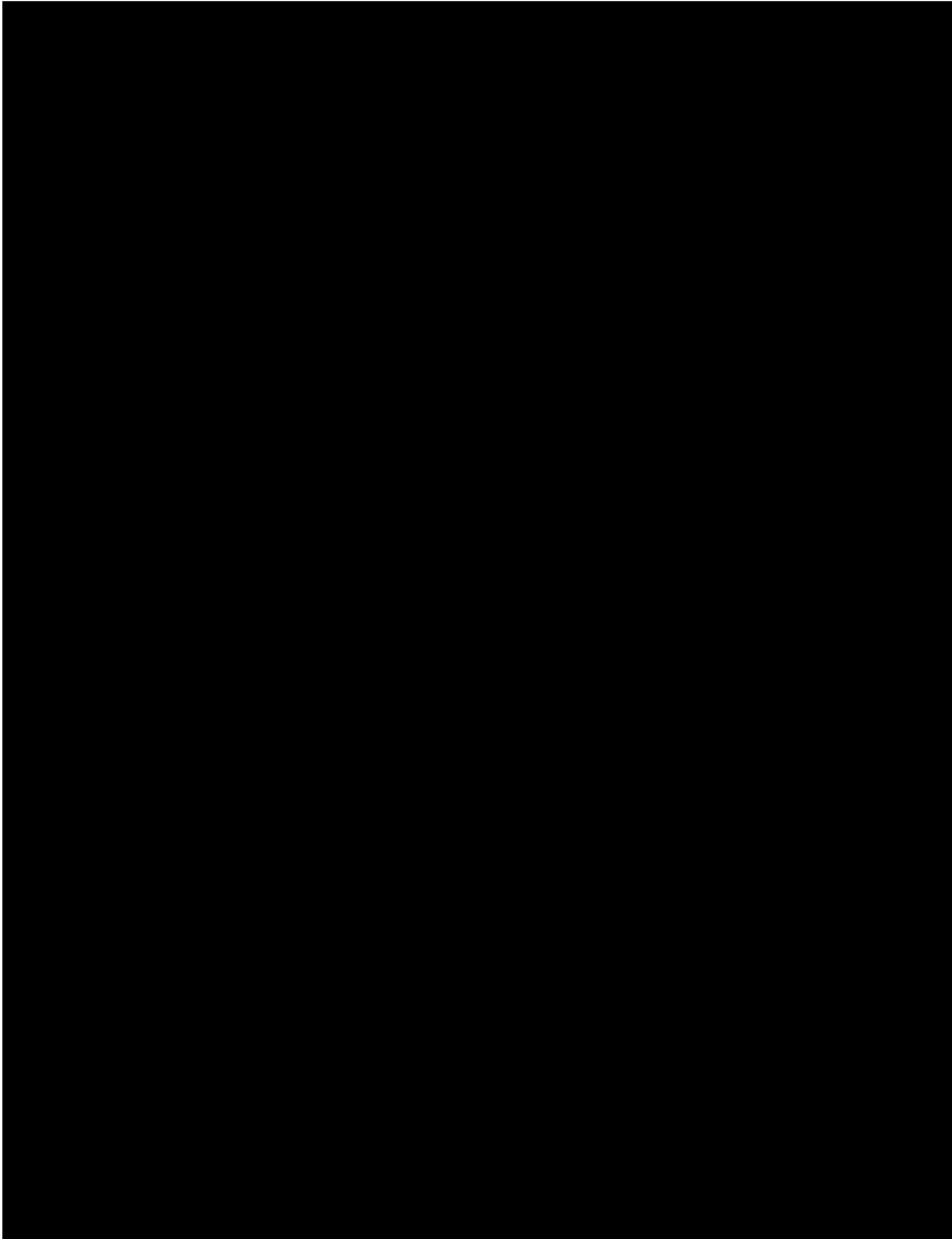


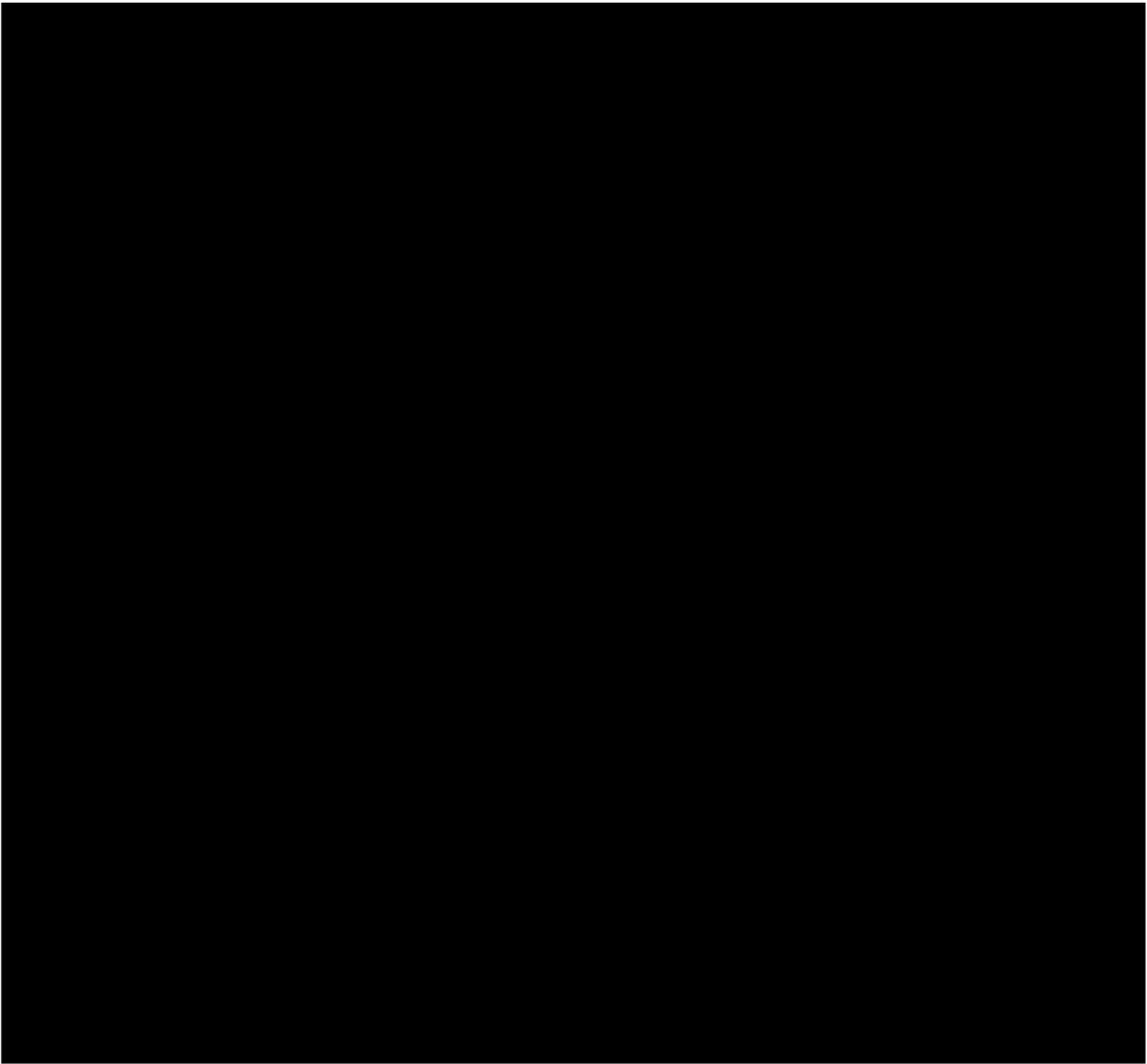


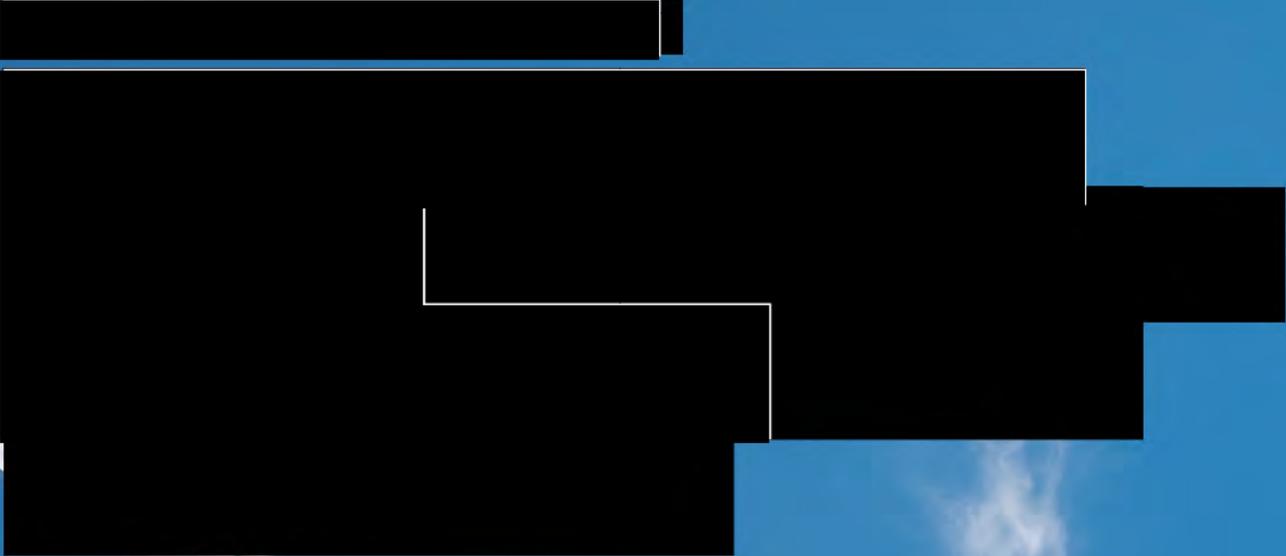




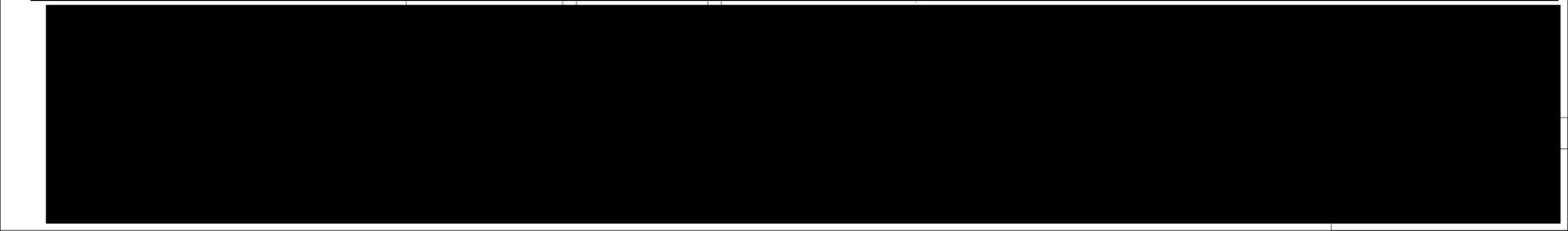
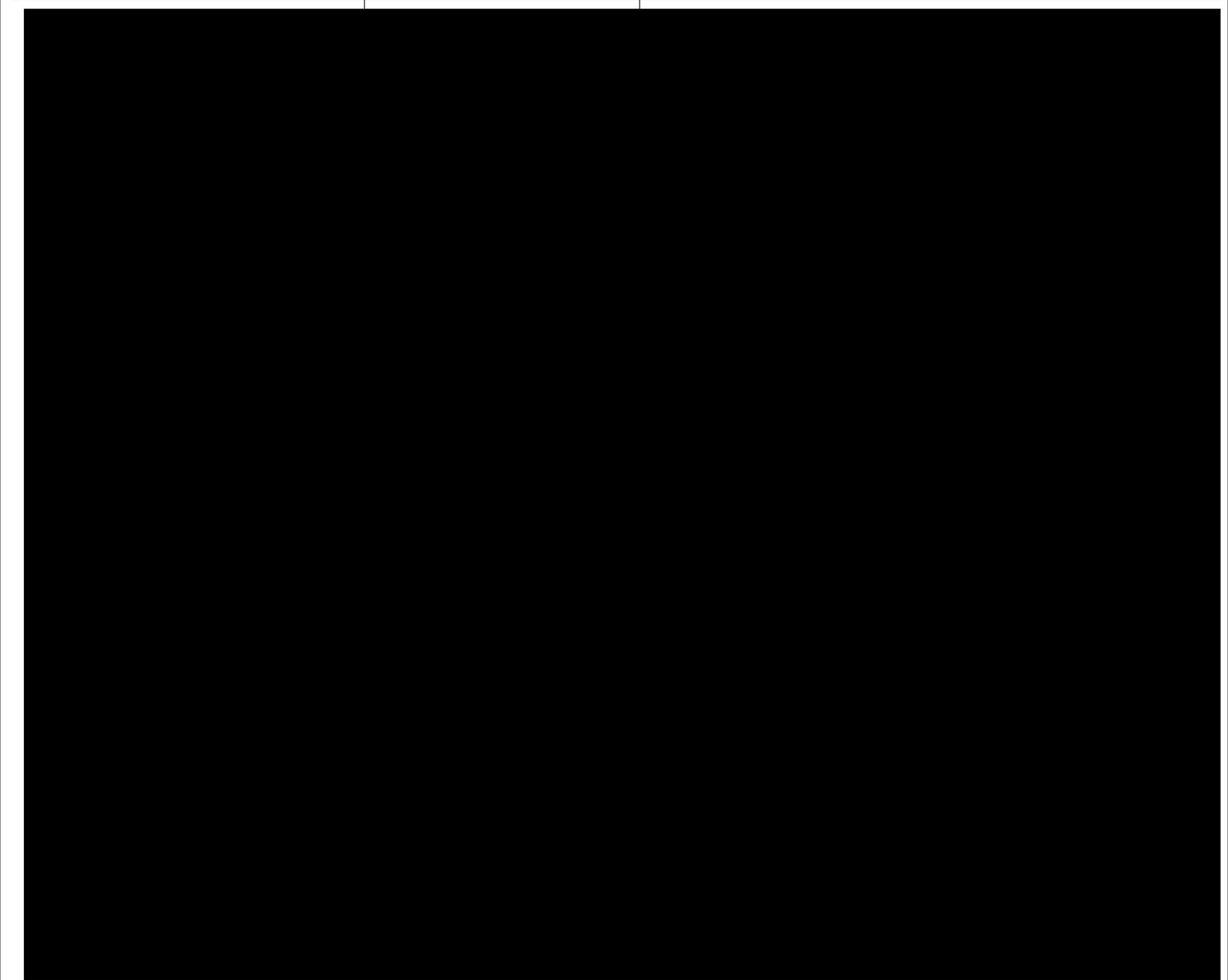
Portions of this proposal contain confidential, proprietary, and/or commercially sensitive information which has been redacted from the "Public Version" of this proposal. Sunrise Wind LLC has submitted a Confidential Version of this proposal which includes the redacted information, and which should be treated as a non-public record that is exempt from disclosure to the extent permitted under applicable laws and/or as expressly set forth in the Request for Proposals.

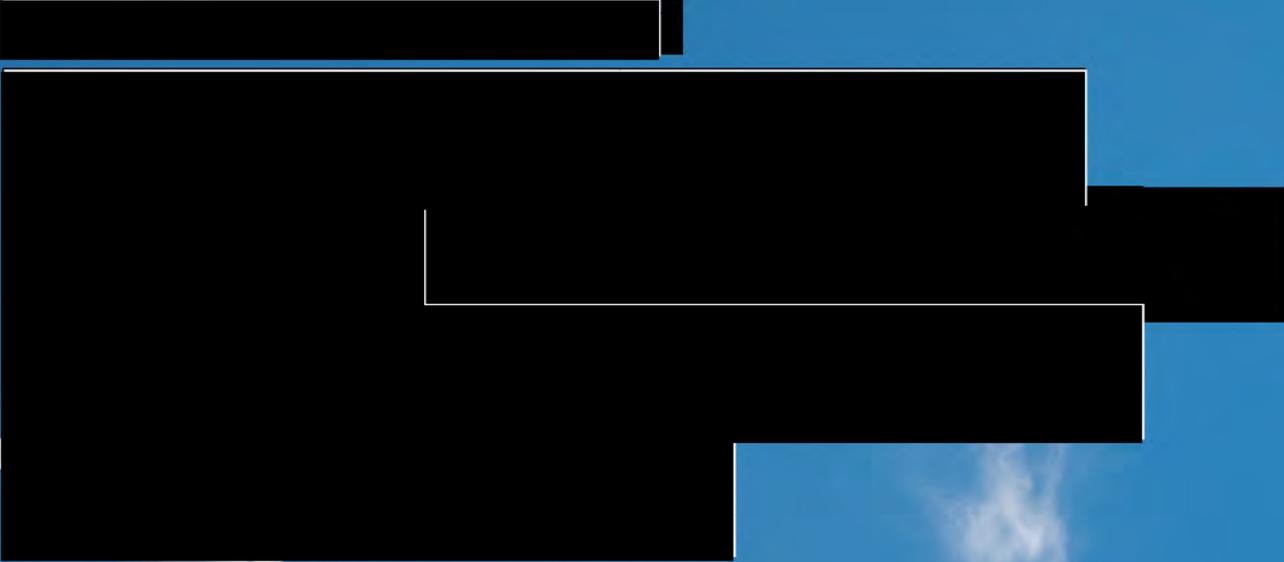




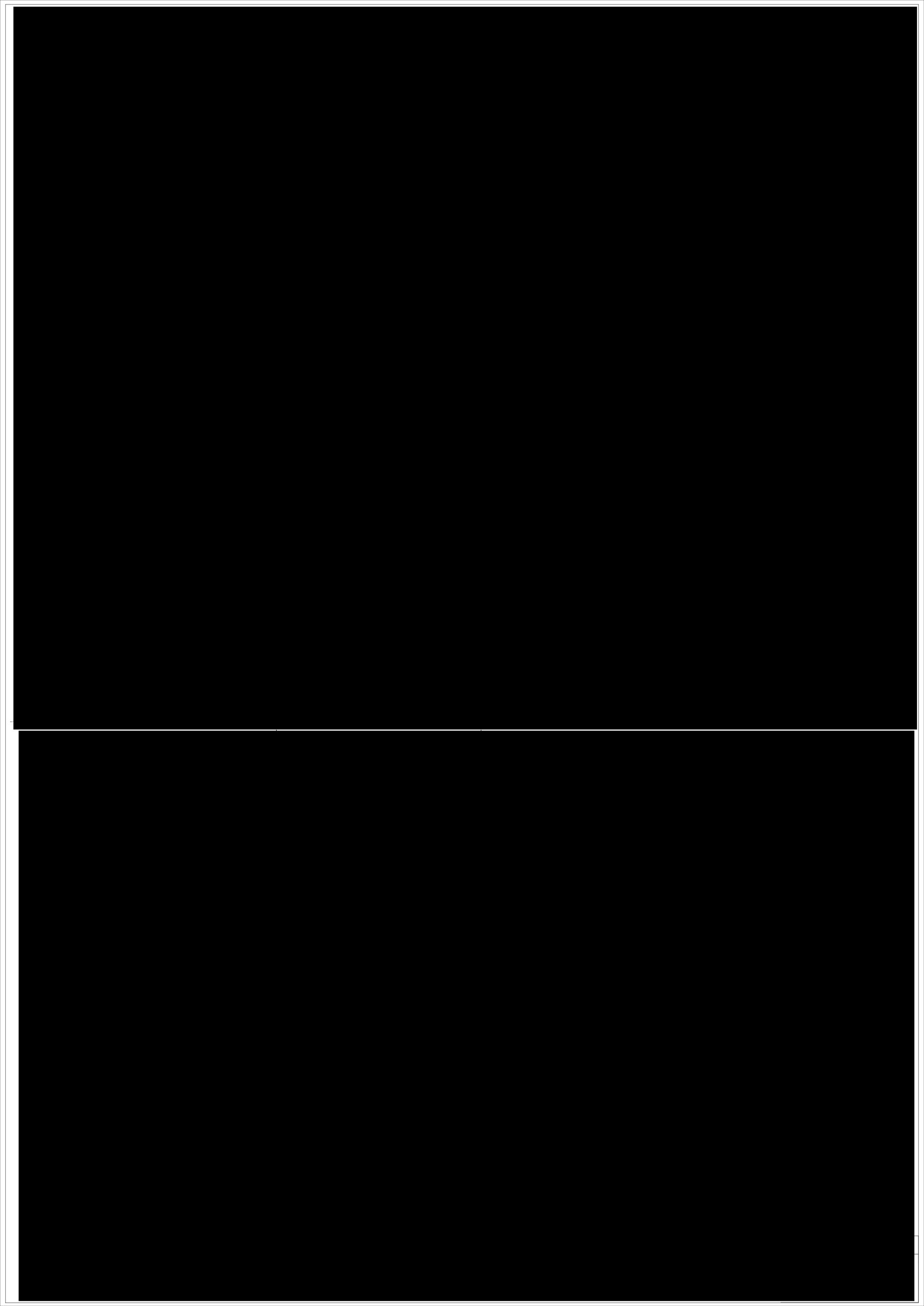


Portions of this proposal contain confidential, proprietary, and/or commercially sensitive information which has been redacted from the "Public Version" of this proposal. Sunrise Wind LLC has submitted a Confidential Version of this proposal which includes the redacted information, and which should be treated as a non-public record that is exempt from disclosure to the extent permitted under applicable laws and/or as expressly set forth in the Request for Proposals.



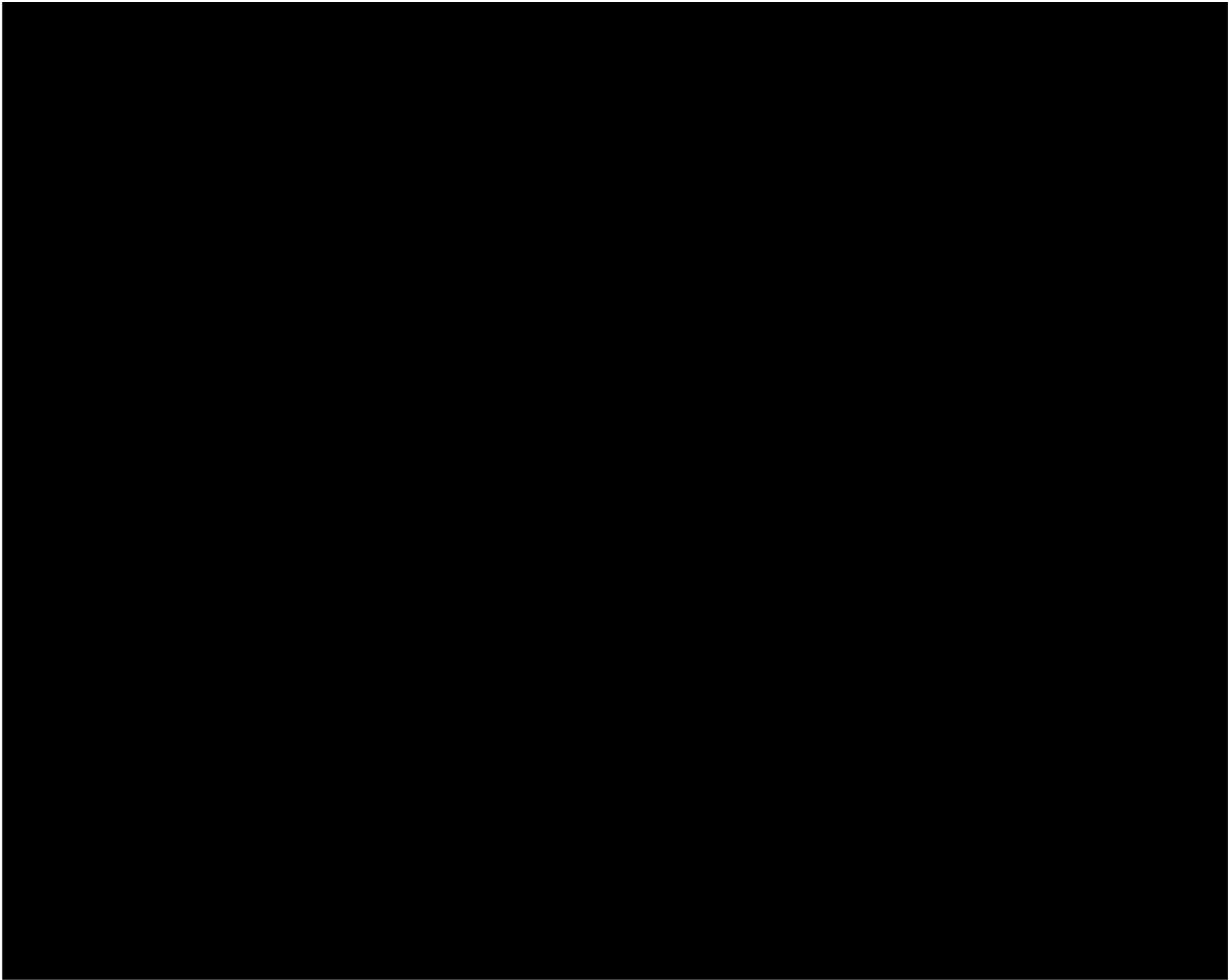


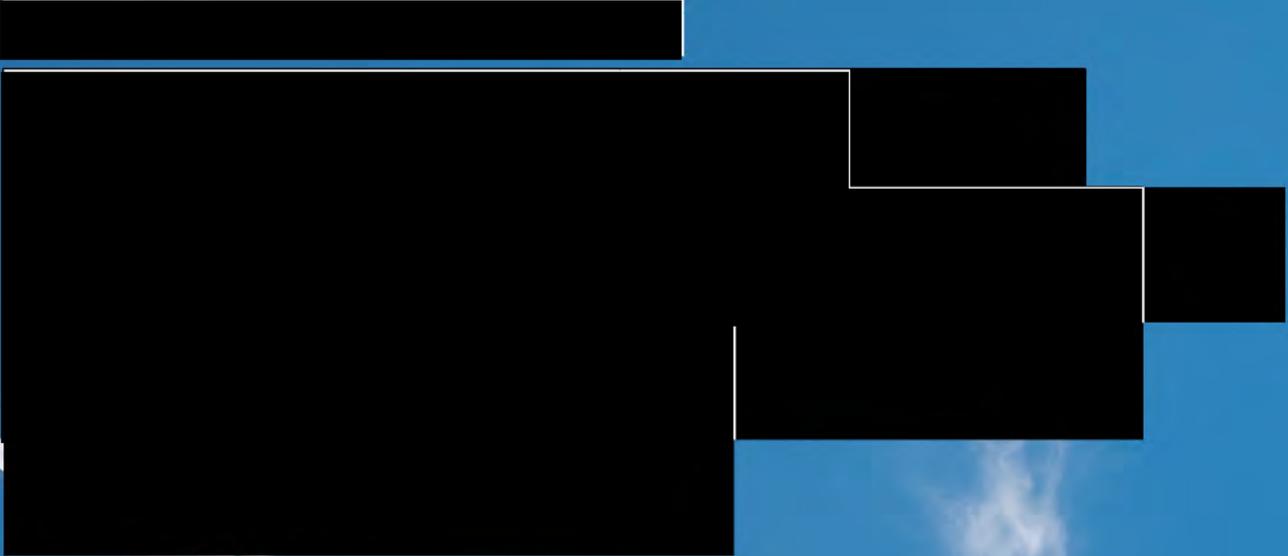
Portions of this proposal contain confidential, proprietary, and/or commercially sensitive information which has been redacted from the "Public Version" of this proposal. Sunrise Wind LLC has submitted a Confidential Version of this proposal which includes the redacted information, and which should be treated as a non-public record that is exempt from disclosure to the extent permitted under applicable laws and/or as expressly set forth in the Request for Proposals.





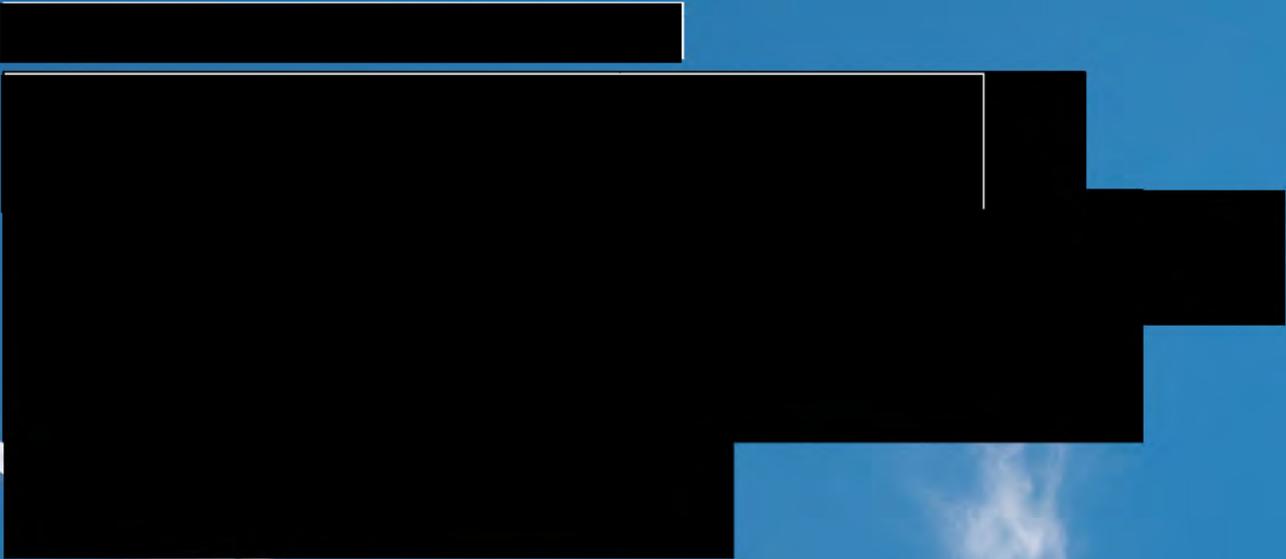
Portions of this proposal contain confidential, proprietary, and/or commercially sensitive information which has been redacted from the "Public Version" of this proposal. Sunrise Wind LLC has submitted a Confidential Version of this proposal which includes the redacted information, and which should be treated as a non-public record that is exempt from disclosure to the extent permitted under applicable laws and/or as expressly set forth in the Request for Proposals.





Portions of this proposal contain confidential, proprietary, and/or commercially sensitive information which has been redacted from the "Public Version" of this proposal. Sunrise Wind LLC has submitted a Confidential Version of this proposal which includes the redacted information, and which should be treated as a non-public record that is exempt from disclosure to the extent permitted under applicable laws and/or as expressly set forth in the Request for Proposals.





Portions of this proposal contain confidential, proprietary, and/or commercially sensitive information which has been redacted from the "Public Version" of this proposal. Sunrise Wind LLC has submitted a Confidential Version of this proposal which includes the redacted information, and which should be treated as a non-public record that is exempt from disclosure to the extent permitted under applicable laws and/or as expressly set forth in the Request for Proposals.

