EVERSOURCE

Project Approval Form

Project Title: [redacted]	Project Number: CD01968
Date Prepared: 08/16/2023	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** RELIABILITY IMPROVE SPEC PROJ
Project Initiator: [redacted]	**Project Type:** Specific
Initiating Organization: Distribution	**Capital Investment part of original Op Plan:** Yes
Project Manager: [redacted]	**Emergency Related Request?** No
Project Sponsor: [redacted]	**Facility Type** (check all that apply)**:** ☐ PTF ☐ non-PTF ☒ Distribution ☐ N/A (General Plant)
Required in service date: 6/30/2023	
Total Capital Request: $653.5K	**Authorization Type:** Full Funding

1. Executive Summary

This project was established to address the [redacted]

Project CD01903 was previously approved to address a [redacted]

The purpose of project CD01968 is to install 4[redacted]

On March 17, 2022, the project was Partial approved for $535.9K. The Full Funding amount is $653.5K for an increase of $99.6K, or a 19% increase. There was no scope change. The original estimate used legacy estimating units that did not account for increased labor and material cost, and no contractor adders were included. If 2023 estimating units and a 30% contractor adder were used, the original estimate would be $704.5K, or 8% more than the Full Funding estimate.

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2022	2023	Total
Internal Labor and Construction Equipment	52.7	38.6	91.3
Outside Services	48.8	27.5	76.3
Materials	218.5	14.9	233.4
Removals	3.8	1.1	4.9
Risk and Contingency	0.0	12.8	12.8
Other	0.3	0.4	0.7
Subtotal	**324.0**	**94.9**	**419.4**

Indirect Capital Costs	Year 1	Year 2	Total
Indirect/Overheads (including benefits)	135.9	77.1	213.0
Capitalized interest or AFUDC, if any	6.8	14.3	21.1
Subtotal	**142.7**	**91.4**	**234.1**
Total Capital Costs (Gross)	**466.7**	**186.4**	**653.5**
Less Total Customer Contribution	**0.0**	**0.0**	**0.0**
Project Costs (Net of Reimbursement)	**466.7**	**186.4**	**653.5**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

[redacted]

b. Project Need

[redacted]

[redacted] This project will greatly increase reliability and reduce the number of customers that will experience an outage in this area.

c. Project Scope

The scope of this project is as follows:

- [redacted]

Major Material:

- 4 Reclosers
- 1,600 ft. 500 Cu
- 250 ft Conduit

4. Alternatives Considered

Option 1:

[redacted]

Option 2 (preferred):

[redacted]

5. Project Schedule

Add any additional milestones that are pertinent to the project.

Milestone/Phase Name	Estimated Date
Partial Approval	March 2022
100% Detailed Engineering Completion	June 2022
Fully Funded	August 2023
Construction Start	July 2022
In Service Date	June 2023

6. Regulatory Decisions

No.

7. Codes and Standards

N/A

8. Risk and Contingencies

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2022	Low	Included contingency costs in the funding request. Perform detailed Field Analysis and walk down in project development to avoid potential issues.
Customer Permission / Siting Council / Municipal approvals	2022	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach
Internal construction resources not available to perform the work.	2022	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Internal engineering resources not available to perform the work.	2022	Medium	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Storm delays	2022	Medium	If storm activity delays work, we may be forced to use external resources.

9. References

10. Attachments (One Line Diagrams, Images, etc.)

Attachment	Included in Submittal?
A. Cost Estimate	*YES*
B. P6 Schedule	*NO*
C. Geographic Map	*YES*
D. System and Station One-Lines	*YES*
E. Other – Load Sheet	*YES*

A. Cost Estimate.

Option One had two Segments One and Two.

Segment One.

[redacted]

Design Alternative CD01968-01

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	20.00%
SubTotal:	$397,036
Contingency Amount:	$79,407
Estimate:	$476,443
Reimbursement:	$0
Net Amount:	**$476,443**
Description:	

Item Description	CU	[redacted]	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17		$3,509.60
UG CABLE DB/UG - 350/500 - 3-1/C (3ph) Cu	16-UG114		$111,360.00
UG CABLE UG - Transition Splice	16-UG120		$2,636.80
CONDUIT UG-Ductline-up to 12 duct - Traveled Way / Paved	16-UG137		$78,200.00
POLE DB/UG - Riser - 3ph	16-UG146		$10,794.40
TRAFFIC OH/DB/UG - Traffic Control - Police Officer 2 cops for 2 weeks - 1 cop for 1 week.	16-ALL18		$25,000.00
OTHER OTHER Shift Transformer	16-ALL14		$1,000.00
SECTIONALIZE OH-Vertical Disconnect Switches-600/900 amp 3-1ph SR & MR	16-OH43		$20,566.40
SECTIONALIZE OH - Recloser - 3ph SR, MR and TR	16-OH38		$143,968.80

Segment Two.

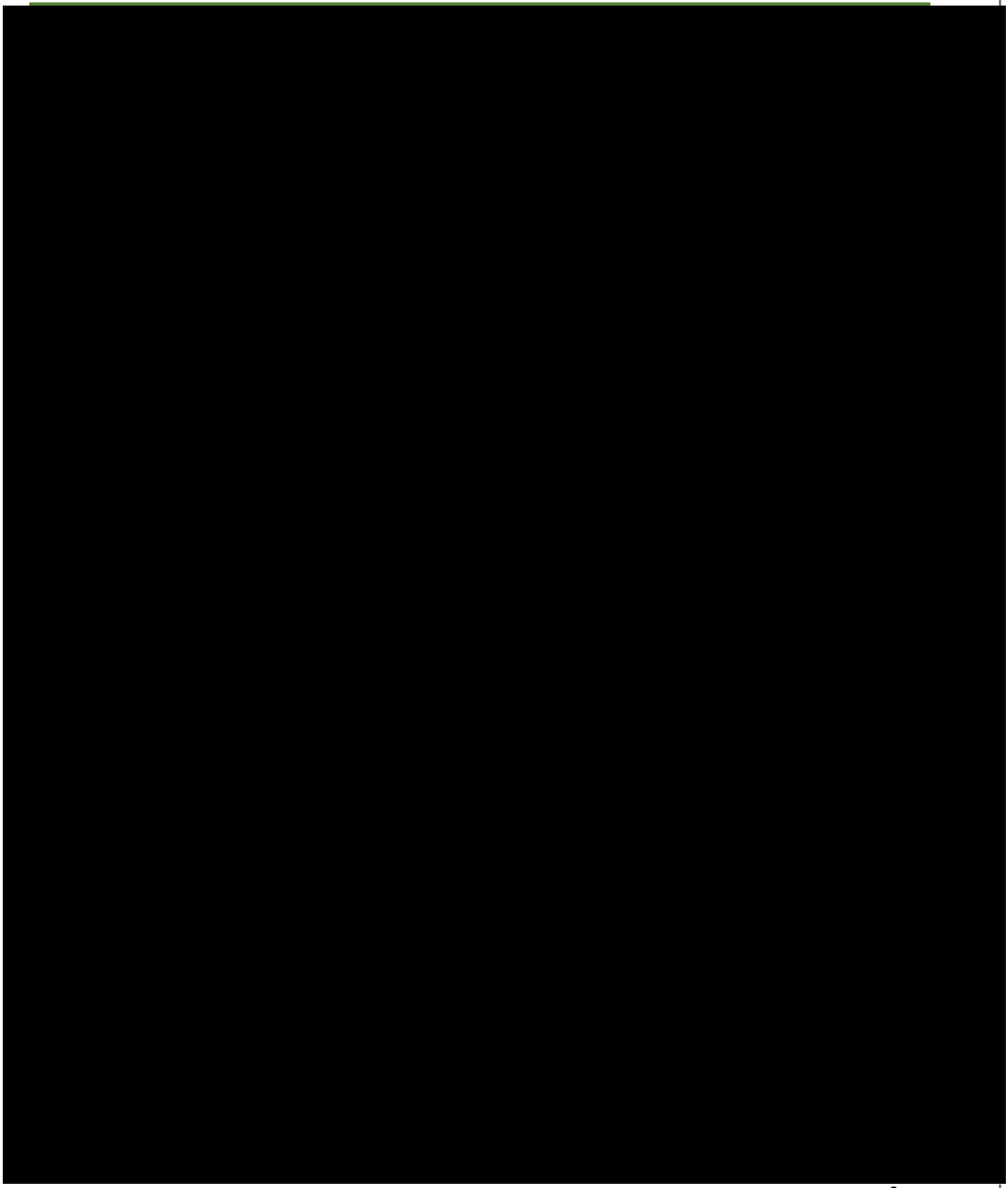
[redacted]

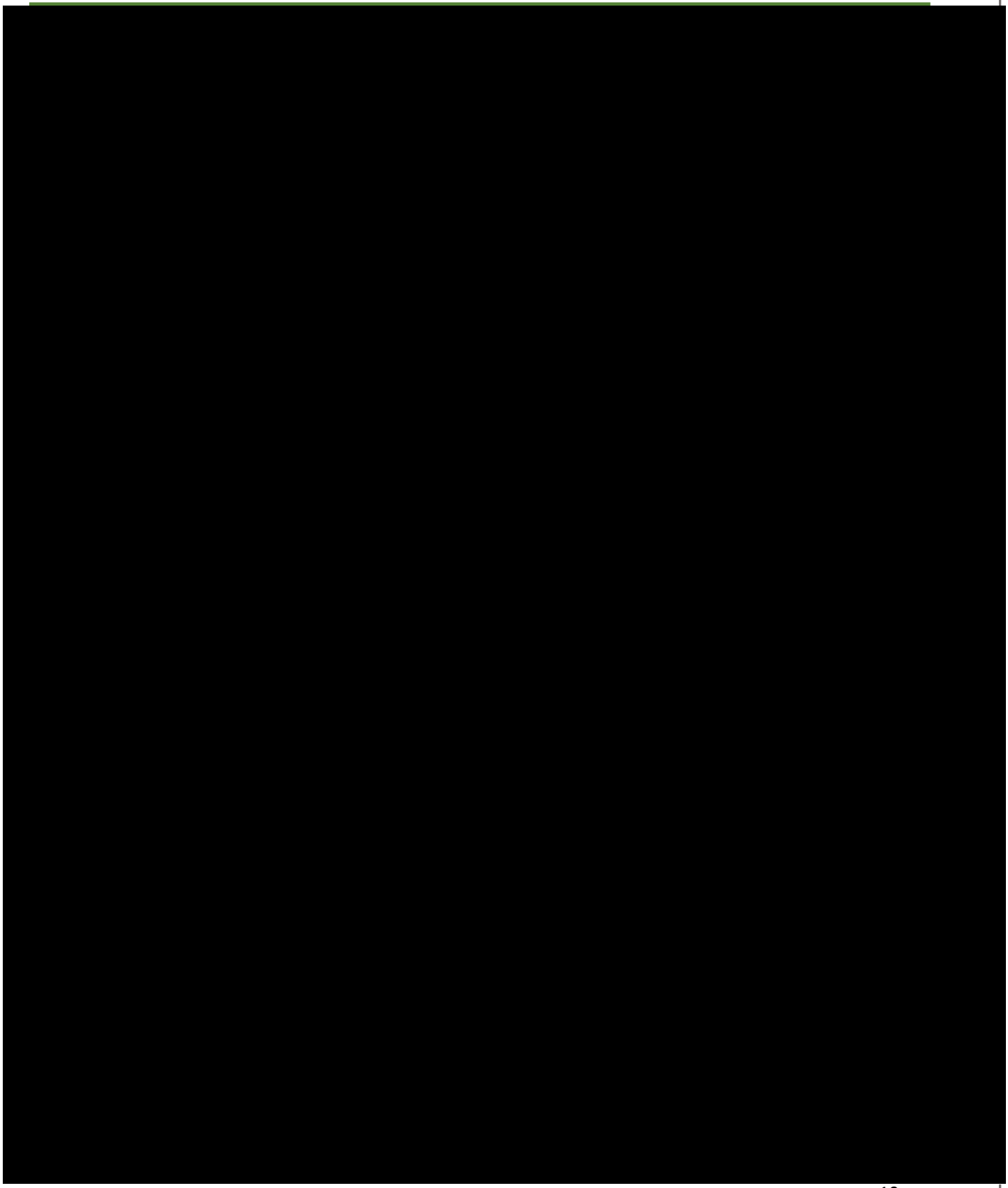
Design Alternative CD01968-02

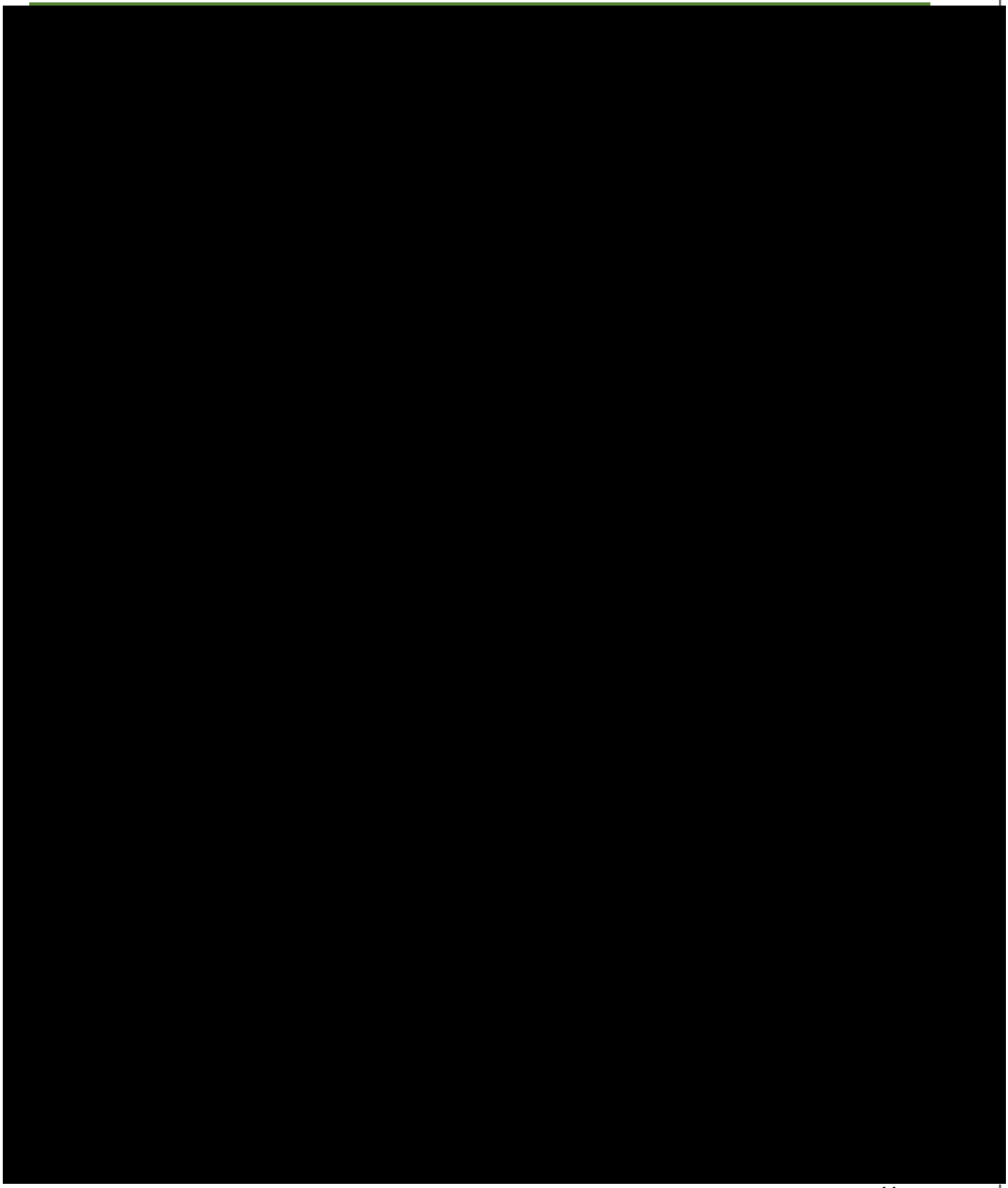
Estimate

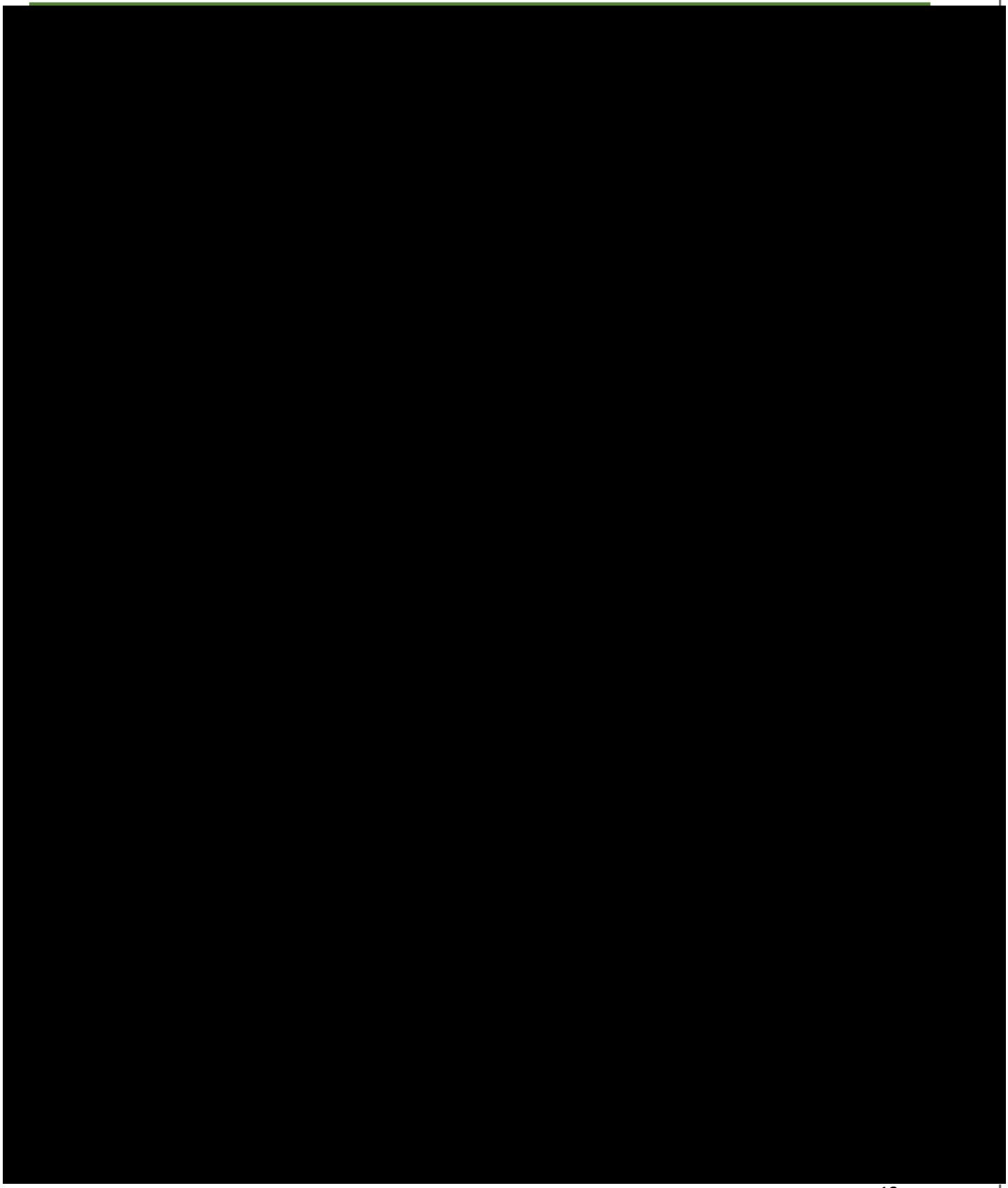
	Preliminary Estimate Summary
Revision Number:	0
Contingency:	20.00%
SubTotal:	$60,773
Contingency Amount:	$12,155
Estimate:	$72,927
Reimbursement:	$0
Net Amount:	**$72,927**
Description:	

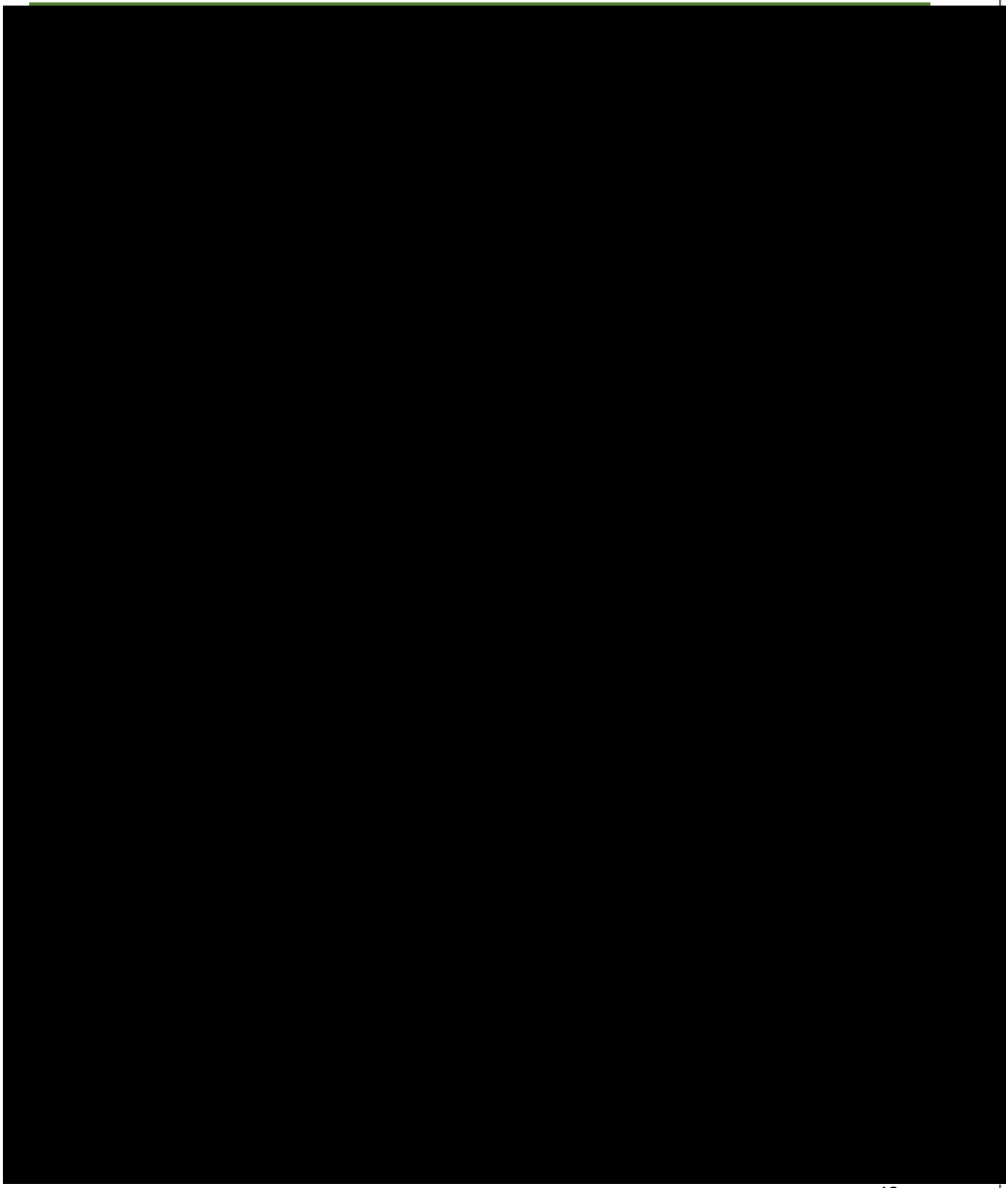
Item Description	CU	[redacted]	Amount
TRAFFIC OH/DB/UG - Traffic Control - Police Officer	16-ALL18		$1,500.00
SECTIONALIZE OH - Recloser - 3ph	16-OH38		$47,989.60
SECTIONALIZE OH-Vertical Disconnect Switches-600/900 amp 3-1ph	16-OH43		$10,283.20
OTHER OTHER Rework Secondaries	16-ALL14		$1,000.00

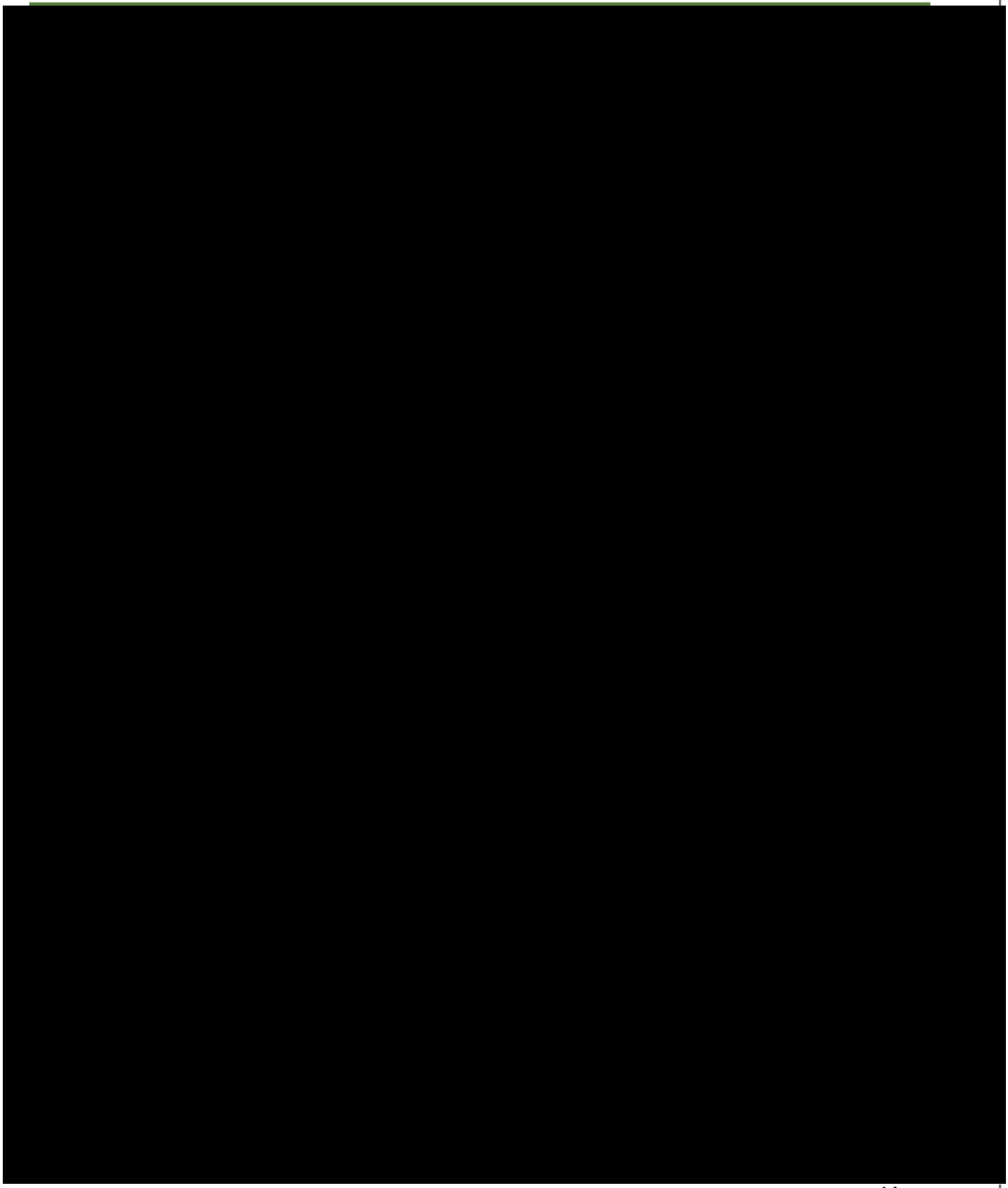












Operations Project Authorization Form

Project Title: [redacted]	**Project Number: CD01968**
Date Prepared: 03/15/2022	**Company:** Eversource CT
Organization: EFO	**Class(es) of Plant:** D Line
Project Initiator: [redacted]	**Project Category: Smart Switch**
Project Manager: [redacted]	**Project Type:** Specific
Project Sponsor: [redacted]	**Capital Investment part of original Operating Plan:** Yes
Estimated in service date: 12/31/2022	**Emergency Related Request?** Yes
Eng./Constr. Resources Budgeted? Yes	**Facility Type** (check all that apply): ☐ PTF ☐ non-PTF ✓ Distribution
Total Gross Capital Request: $535.9	**Authorization Type:** Initial Funding

Executive Summary

This project is being established to address the [redacted]

Project CD01903 was previously approved to address a [redacted]

The purpose of project CD01968 is to install [redacted]

Project Costs Summary

Capital Costs	2022	2023	2024+	Total
Direct Capital Costs				
Internal Labor and Construction Equipment	$46.5	$0	$0	$46.5
Outside Services	$61.4	$0	$0	$61.4
Materials	$195.9	$0	$0	$195.9
Removals	$12.7	$0	$0	$12.7
Risk and Contingency	$1.9	$0	$0	$1.9
Other	$0.0	$0	$0	$0.0
Subtotal	**$318.4**	**$0**	**$0**	**$318.4**
Indirect Capital Costs				
Indirect/Overheads (including benefits)	$210.8	$0	$0	$210.8
Capitalized interest or AFUDC, if any	$6.8	$0	$0	$6.8
Subtotal	**$217.6**	**$0**	**$0**	**$217.6**
Total Customer Contribution	$0	$0	$0	$0
Total Capital Project Costs	**$535.9**	**$0**	**$0**	**$535.9**

Technical Justification:

a. Project Scope

[redacted]

[redacted]

a. Project Scope

The scope of this project is as follows:

- [redacted]

Major Material:

4	Reclosers
1,600 ft.	500 Cu
250 ft	Conduit

Background

Outage History

[redacted]

Alternatives Considered:

Alternatives were considered (please describe below)

[redacted]

Regulatory Approvals:

No

Project Schedule

Milestone/Phase Name	Estimated Date
100% Engineering Completion	June 2022
Construction Start	July 2022
Testing/Commissioning	N/A
In Service Date	December 2022

Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2022	Low	Included contingency costs in the funding request. Perform detailed Field Analysis and walk down in project development to avoid potential issues.
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E. Other	*NO*
F. Load Sheets	*YES*

B. Cost Estimate.

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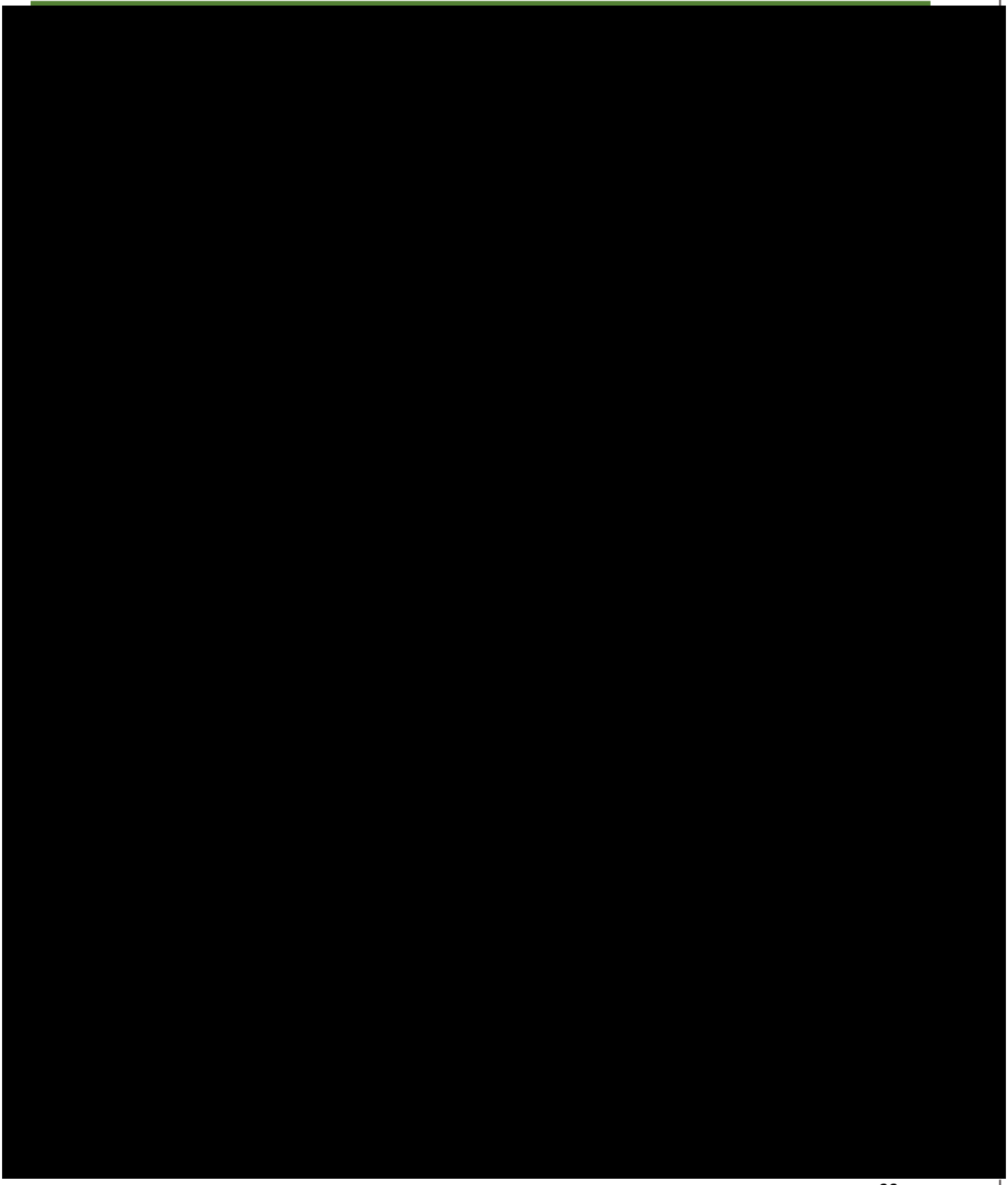

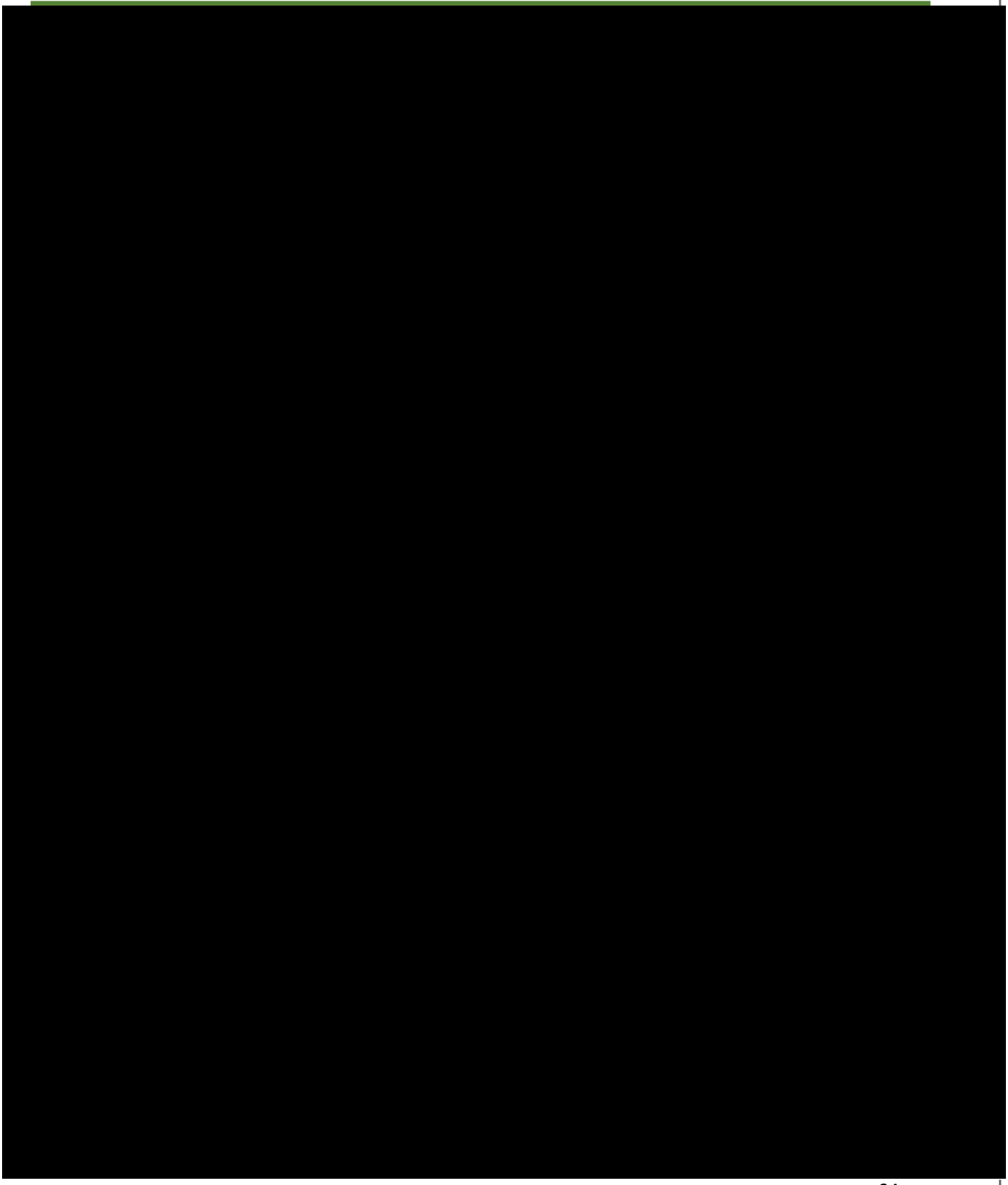

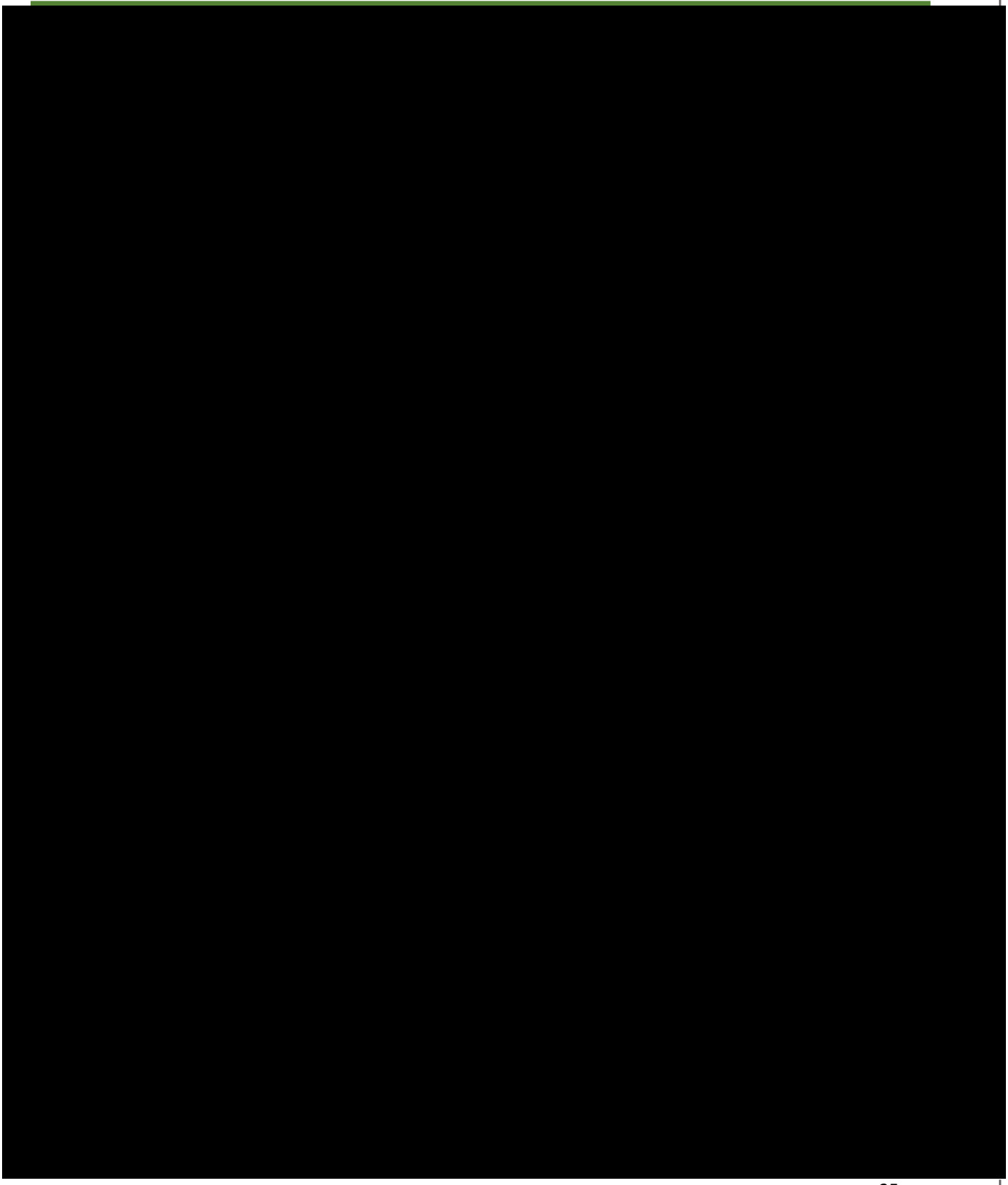

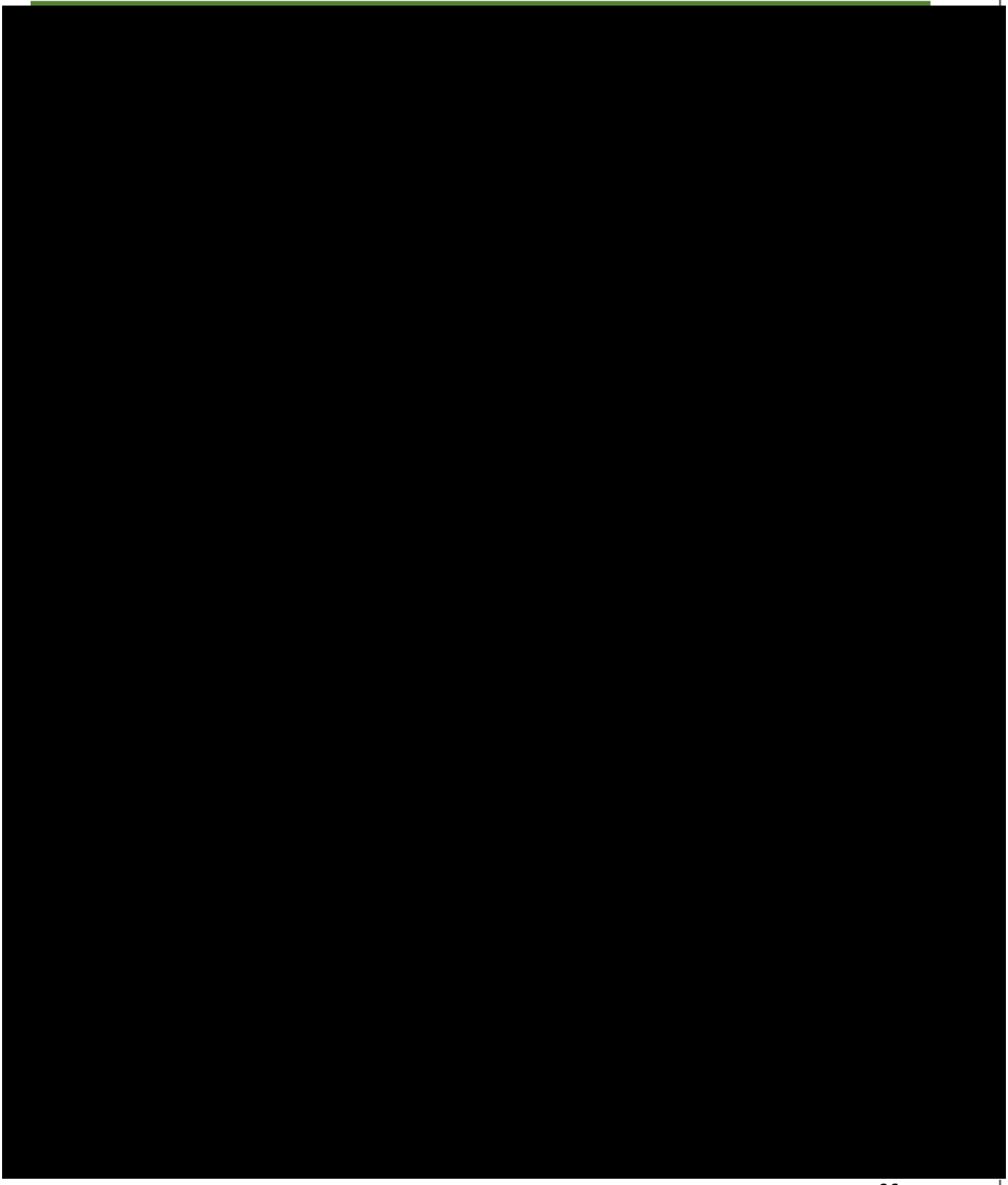

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