EVERSOURCE

Project Approval Form

Project Title: [redacted] Failed Equip - Maher Rd	**Project Number:** CD02530
Date Prepared: 08/15/2024	**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:** No
Project Manager: [redacted]	**Emergency Related Request?** Yes
Project Sponsor: [redacted]	**Facility Type** (check all that apply)**:** ☐ PTF ☐ non-PTF ☒ Distribution ☐ N/A (General Plant)
Required in service date: 12/31/2024	
Total Capital Request: $1,177.8k	**Authorization Type:** Full Funding

1. Executive Summary

Full funding is being requested for this project, CD02530 at a cost of $1,243.2K. There are no scope changes or variance between the full funding and partial funding estimate.

This project was created to address the aging infrastructure on [redacted] On further investigation it was determined that the 350 Cu Aerial Cable was a vintage cable and needed to be replaced to avoid future events.

[redacted]

- Project Location:
  - Western Division
  - Stamford AWC
  - Stamford, CT

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	Year 2024	Year 2025	Year 2026+	Total
Direct Capital Costs				
Internal Labor and Construction Equipment	61.6	0.0	0.0	61.6
Outside Services	417.6	0.0	0.0	417.6
Materials	167.4	0.0	0.0	167.4
Removals	147.4	0.0	0.0	147.4
Risk and Contingency	5.7	0.0	0.0	5.7
Other	0.0	0.0	0.0	0.0
Subtotal – Direct Costs	**799.7**	**0.0**	**0.0**	**799.7**
Indirect Capital Costs				
Indirect/Overheads (including benefits)	354.6	0.0	0.0	354.6
Capitalized interest or AFUDC, if any	23.5	0.0	0.0	23.5
Subtotal – Indirect Costs	**378.1**	**0.0**	**0.0**	**378.1**
Total Gross Capital Costs	**1,177.8**	**0.0**	**0.0**	**1,177.8**
Customer Contribution	0.0	0.0	0.0	0.0
Total Net Capital Project Costs	**1,177.8**	**0.0**	**0.0**	**1,177.8**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

[redacted]

b. Project Need

[redacted]

c. Project Scope

The following work is needed to be performed to achieve the project objective.

- [redacted]
  - [redacted]
  - [redacted]
  - [redacted]
  - [redacted]
- [redacted]
  - [redacted]
- [redacted]
  - [redacted]

4. Major Materials

500 Cu EPR Cable 1,960'

5. Alternatives Considered

An alternative was to [redacted]

Project Option Comparison

	Option [redacted]		
Authorization Type	Partial	Partial	
Capital Cost	$569.8k	$1,177.8k	
Expense Cost	$32.4k	$66.9k	
Total Cost	$602.2k	$1,244.6k	
Total Cost / CM Saved	$11.0k/CM	$22.8k/CM	
Total Cost / CI Saved	$325.6k/CI	$673.0k/CI	
Preferred option		X	

6. Project Schedule

Milestone/Phase Name	Estimated Date
Partial Approval	Aug 2024
100% Detailed Engineering Completion	Sept 2024
Fully Funded	Mid - Oct 2024

Milestone/Phase Name	Estimated Date
Construction Start	Mid - Oct 2024
In Service Date	Dec 2024

7. Regulatory Decisions

NA

8. Codes and Standards

NA

9. Risk and Contingencies

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2024	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	2024	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction resources not available to perform the work.	2024	Medium	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.	2024	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2024	Medium	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2024	Medium	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2024	Low	Schedule work to minimize system abnormal time. Install temporary bypasses/equipment if system will be abnormal for extended periods.

10. References

References
1. NA

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

Attachment	Included in Submittal?
Partial PAF	YES
A. Estimates	*YES*
B. Geo Map	*YES*
C. One Line	*YES*
D. Load Summary	*YES*

EVERSOURCE

Project Approval Form

Attachment: Partial PAF

Project Title: [redacted] Failed Equip - Maher Rd	**Project Number:** CD02530
Date Prepared: 08/15/2024	**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:** No
Project Manager: [redacted]	**Emergency Related Request?** Yes
Project Sponsor: [redacted]	**Facility Type** (check all that apply)**:** ☐ PTF ☐ non-PTF ☒ Distribution ☐ N/A (General Plant)
Required in service date: 12/31/2024	
Total Capital Request: $1,177.8k	**Authorization Type:** Partial Funding

12. Executive Summary

[redacted] On further investigation it was determined that the 350 Cu Aerial Cable was a vintage cable and needed to be replaced to avoid future events.

[redacted]

- Project Location:
  - Western Division
  - Stamford AWC
  - Stamford, CT

13. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	Year 2024	Year 2025	Year 2026+	Total
Direct Capital Costs				
Internal Labor and Construction Equipment	61.6	0.0	0.0	61.6
Outside Services	417.6	0.0	0.0	417.6
Materials	167.4	0.0	0.0	167.4
Removals	147.4	0.0	0.0	147.4
Risk and Contingency	5.7	0.0	0.0	5.7
Other	0.0	0.0	0.0	0.0
Subtotal – Direct Costs	**799.7**	**0.0**	**0.0**	**799.7**
Indirect Capital Costs				
Indirect/Overheads (including benefits)	354.6	0.0	0.0	354.6
Capitalized interest or AFUDC, if any	23.5	0.0	0.0	23.5
Subtotal – Indirect Costs	**378.1**	**0.0**	**0.0**	**378.1**
Total Gross Capital Costs	**1,177.8**	**0.0**	**0.0**	**1,177.8**
Customer Contribution	0.0	0.0	0.0	0.0
Total Net Capital Project Costs	**1,177.8**	**0.0**	**0.0**	**1,177.8**

14. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

[redacted]

b. Project Need

[redacted]

c. Project Scope

The following work is needed to be performed to achieve the project objective.

- [redacted]
  - [redacted]
  - [redacted]
  - [redacted]
  - [redacted]
- [redacted]
  - [redacted]
- [redacted]
  - [redacted]

15. Major Materials

500 Cu EPR Cable	1,960’

16. Alternatives Considered

[redacted]

Project Option Comparison

	Option		
[redacted]			
Authorization Type	Partial	Partial	
Capital Cost	$569.8k	$1,177.8k	
Expense Cost	$32.4k	$66.9k	
Total Cost	$602.2k	$1,244.6k	
Total Cost / CM Saved	$11.0k/CM	$22.8k/CM	
Total Cost / CI Saved	$325.6k/CI	$673.0k/CI	
Preferred option		X	

17. Project Schedule

Milestone/Phase Name	Estimated Date
Partial Approval	Aug 2024
100% Detailed Engineering Completion	Sept 2024
Fully Funded	Mid - Oct 2024

Milestone/Phase Name	Estimated Date
Construction Start	Mid - Oct 2024
In Service Date	Dec 2024

18. Regulatory Decisions

NA

19. Codes and Standards

NA

20. Risk and Contingencies

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2024	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	2024	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction resources not available to perform the work.	2024	Medium	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.	2024	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2024	Medium	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2024	Medium	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2024	Low	Schedule work to minimize system abnormal time. Install temporary bypasses/equipment if system will be abnormal for extended periods.

21. References

References
1. NA

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

Attachment	Included in Submittal?
A. Estimates	*YES*
B. Geo Map	*YES*
C. One Line	*YES*
D. Load Summary	*YES*

Attachment A: Estimates

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	20.00%
SubTotal:	$956,509
Contingency Amount:	$191,302
Estimate:	$1,147,811
Reimbursement:	$0
Net Amount:	**$1,147,811**
Description:	

Item Description	CU	$ / Per	Qty	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	23-ALL17	[redacted]		$9,124.96
TRAFFIC OH/DB/UG - Traffic Control - Police Officer	23-ALL18			$50,000.00
OTHER OTHER 30% Contractor Cost	23-ALL14			$220,733.00
OTHER OTHER Final Paving	23-ALL14			$100,000.00
UG CABLE DB/UG - 350/500 - 3-1/C (3ph) Cu Maher Rd - [redacted] From MH#455 to MH#1117	23-UG114			$159,244.80
OH WIRE OH - Remove circuit wire (3 phase) Maher Rd - Remove existing [redacted] aerial cable	23-OH37A			$6,240.00
OTHER OTHER Penna - $193,935 Civil cost including labor and Material (1xMH) - Mal	23-ALL14			$387,870.00
UG CABLE UG - Cable Removal - all cables Ursula Pl - Remove riser cable from MH#455	23-UG117			$5,200.00
UG CABLE DB/UG - 350/500 - 3-1/C (3ph) Cu Ursula Pl - Replace riser cable from MH#455 and change Hammer Heads with Y Mechanical Splice	23-UG114			$18,096.00

Estimates (Cont.)

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	20.00%
SubTotal:	$21,562
Contingency Amount:	$4,312
Estimate:	$25,875
Reimbursement:	$0
Net Amount:	**$25,875**

Description:

Item Description	CU	$ / Per	Qty	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	23-ALL17	[redacted]		$4,562.48
TRAFFIC OH/DB/UG - Traffic Control - Police Officer	23-ALL18			$2,000.00
OTHER OTHER Arc/fire proof cable in MH 1000	23-ALL14			$15,000.00

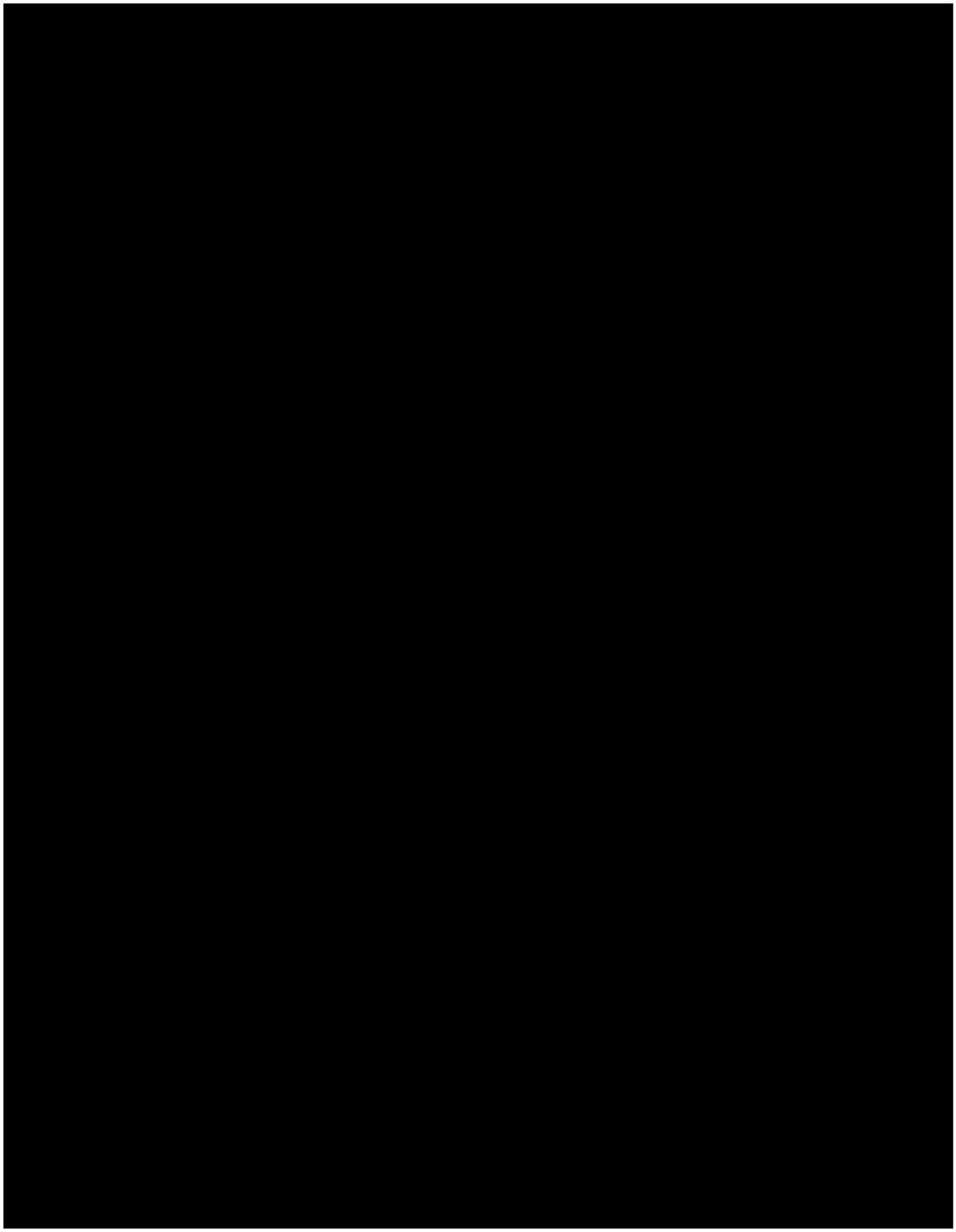
Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	20.00%
SubTotal:	$59,125
Contingency Amount:	$11,825
Estimate:	$70,950
Reimbursement:	$0
Net Amount:	**$70,950**

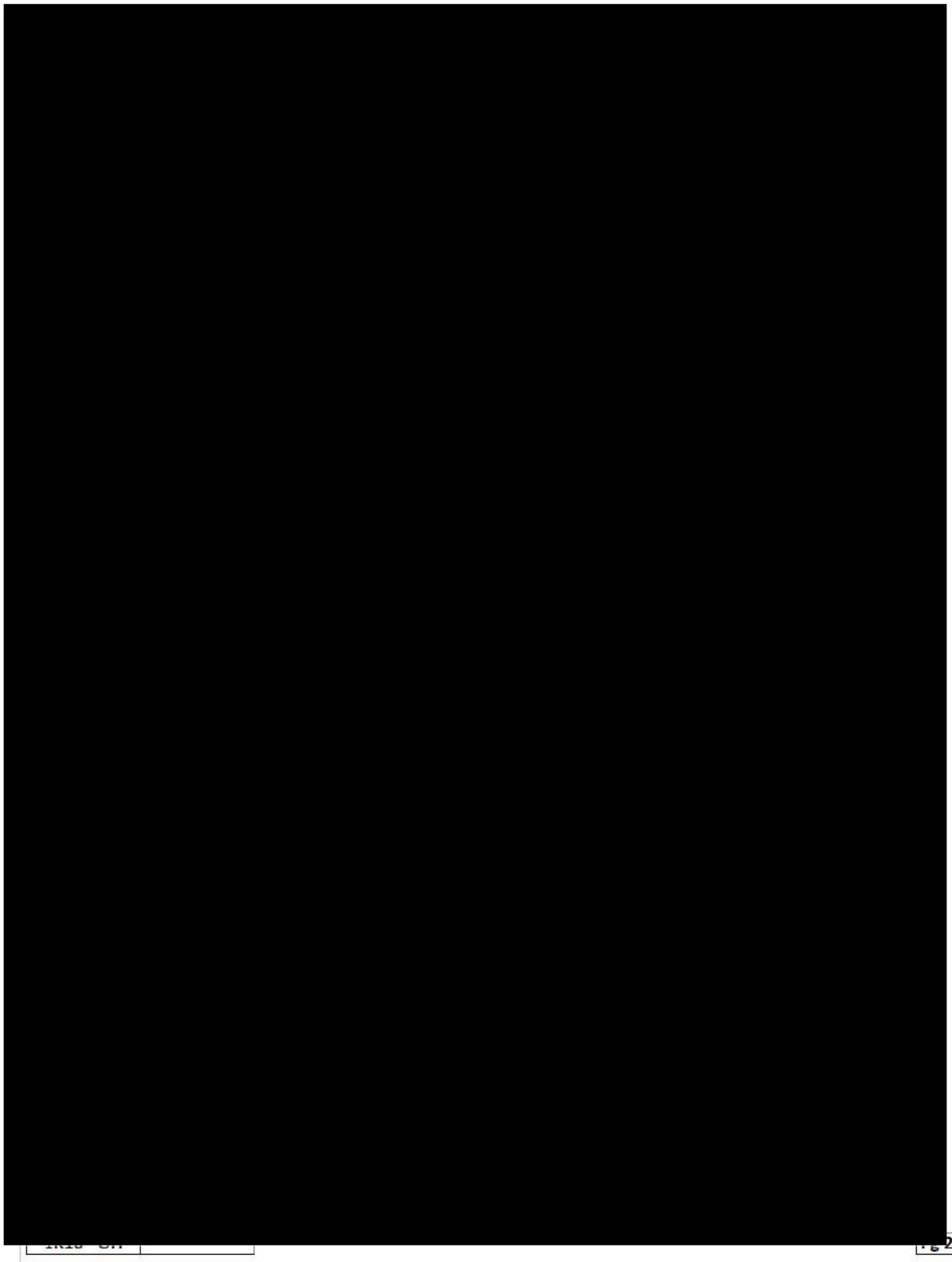
Description:

Item Description	CU	$ / Per	Qty	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	23-ALL17	[redacted]		$9,124.96
OTHER OTHER 18MH x $2,500 Inspect all MH for fire proofing cost includes labor and police	23-ALL14			$50,000.00

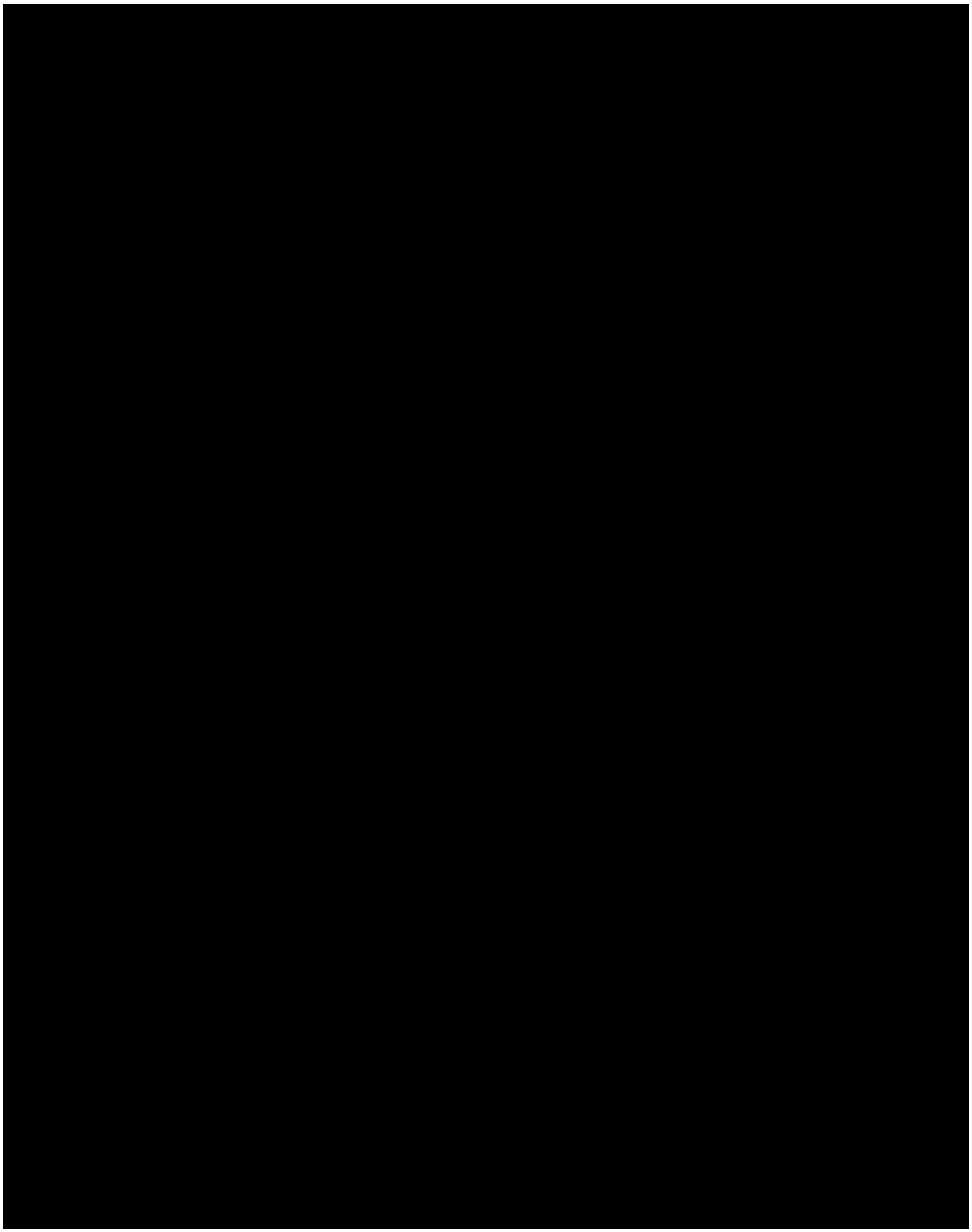
Attachment B: Geo Map



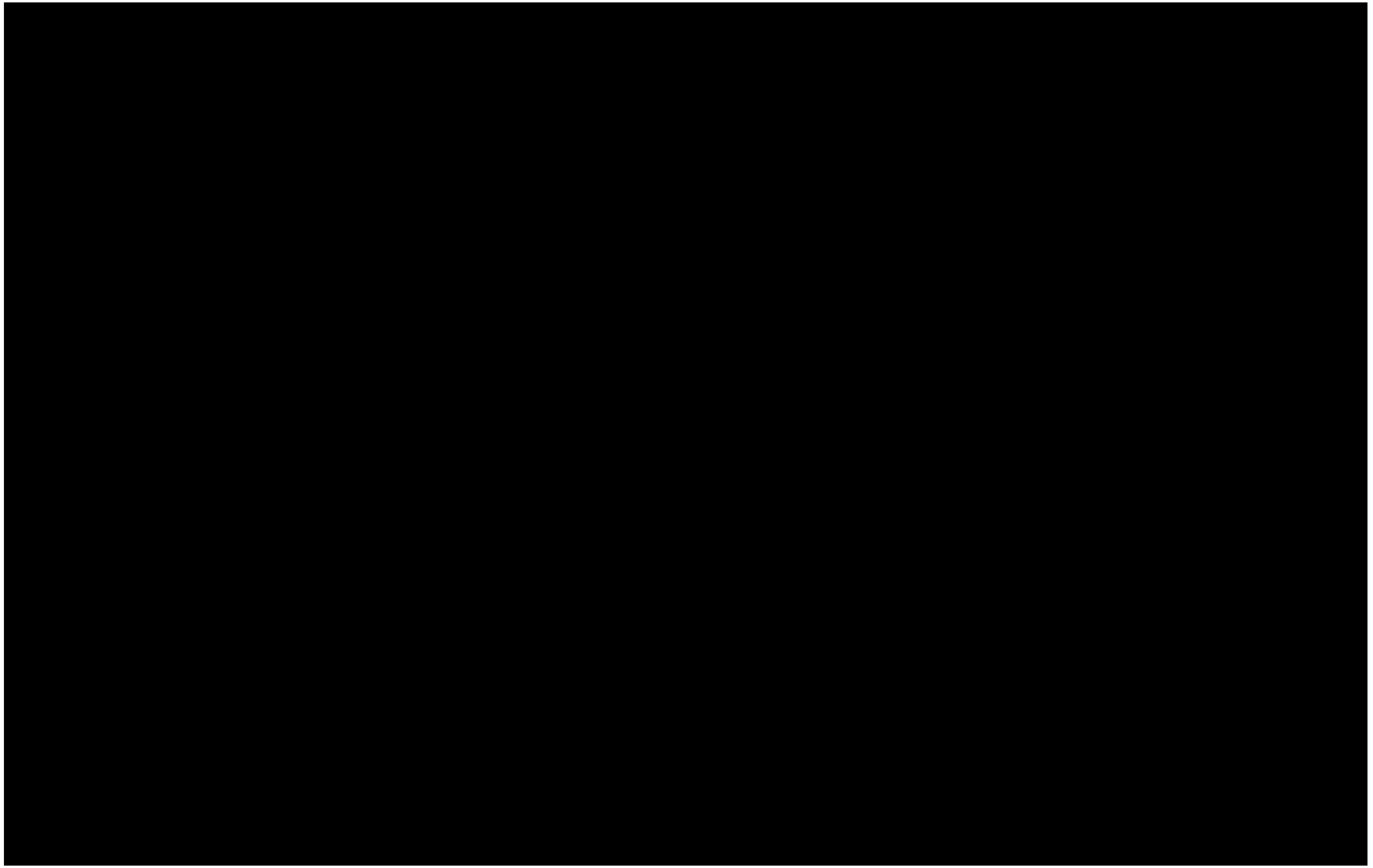
Geo Map – Option 1



Geo Map – Option 2 (Preferred)



Attachment C: One Line



One Line – Option 1



Project Approval Form

One Line – Option 2 (Preferred)



Attachment D: Load Sheet

[redacted]