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Project Approval Form

Project Title: ROW 030 Remediation	Project Number: CD01852
Date Prepared: 11/24/2023	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** RIGHT OF WAY LINES
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: 12/31/2024	
Total Capital Request: $1,532K	**Authorization Type:** Full Funding

1. Executive Summary

Project CD01852 – [redacted] - was created to address damaged utility poles in Right-of-Way [redacted].

Eversource completed drone patrols of all distribution ROWs in November 2020 and categorized all findings into five priority levels: P1, P2, P3, P4, and P5.

[redacted] had the following list of priority poles: 12 P3, 1 P4 pole, and 2 P5 poles.

To mitigate this issue, project CD01852 proposed to [redacted]

- Project Location
  - Division: Central
  - District: Hartford AWC
  - City/Town: West Hartford

The Partial Funding estimate for this project was $1,694K capital dollars and was approved at the 2/3/2022 CTPAC. The full funding estimate for this project is $1,532K, a reduction of $162K, or 95.6% of Partial Funding Estimate.

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2023	2024	Total
Internal Labor and Construction Equipment	0.1	116.4	116.5
Outside Services	9.4	459.7	469.0
Materials	0.0	215.9	215.9
Removals	1.3	110.9	112.3
Risk and Contingency	1.4	105.5	106.9
Other	0.0	0.0	0.0
Subtotal	**12.2**	**1,008.4**	**1,020.6**

Indirect Capital Costs	2023	2024	Total
Indirects/Overheads (including benefits)	7.5	503.6	511.1
Capitalized interest or AFUDC, if any	0.2	-0.2	0.0
Subtotal	**7.8**	**503.4**	**511.1**

Total Capital Costs (Gross)	**19.9**	**1,511.8**	**1,531.8**
Less Total Customer Contribution	**0.0**	**0.0**	**0.0**
Project Costs (Net of Reimbursement)	**19.9**	**1,511.8**	**1,531.8**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

[redacted]

There have been six events originating in the [redacted] since 6/12/2011 on both circuits. These events are listed below:

11/11/2011 Tree Related on the [redacted]
10/17/2019 Tree Related on [redacted]
11/2/2020 Patrol Nothing Found on [redacted]
2/22/2010 Equipment failure on [redacted]
6/12/2011 Tree Related on [redacted]
10/29/2011 Tree Related on [redacted]

b. Project Need

Improve the reliability of [redacted].

c. Project Scope

[redacted]

Major Materials

- 32 steel poles
- 8,700 ft of 3-phase 556 TW
- 96 Crossarms

4. Alternatives Considered

There were two options considered for ROW 030 remediation:

[redacted]

[redacted]

	Option	
[redacted]		
Authorization Type	Full	Partial
Capital Cost	$1,532	$
Expense Cost	$	$
Total Cost	$	$748K
Preferred option	X	

5. Project Schedule

Milestone/Phase Name	Estimated Date
Partial Approval	2/2022
100% Detailed Engineering Completion	5/2023
Fully Funded	11/2023
Construction Start	11/2023
In Service Date	12/31/2024

6. Regulatory Decisions

N/A

7. Codes and Standards

N/A

8. Risk and Contingencies

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Internal construction resources not available to perform the work.	2024	Low	External resources are planned to perform the work. Competitive bidding will be used to ensure lowest outside labor cost.
Materials Shortage or long lead times	2024	High	Material procurement has been a challenge in recent years. This issue is anticipated to persist in the foreseeable future.
Storm delays	2024	Medium	Storm delays are always a concern with Utility work
Wetlands / Environmentally sensitive area	2024	Medium	Wetlands or environmentally sensitive areas are typically found in ROWs such as this project.

9. References

References
1.

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

Attachment	Included in Submittal?
A. Cost Estimate	*YES*
B. System One-Lines	*YES*
C. Geographic Map	*YES*
D. Initial Funding PAF	*YES*

Attachment A: Cost Estimate

Design Alternative CD01852-01

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	28.00%
SubTotal:	$1,323,581
Contingency Amount:	$370,603
Estimate:	$1,694,183
Reimbursement:	$0
Net Amount:	**$1,694,183**
Description:	

Item Description	CU	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17	$7,019.20
TRAFFIC OH/DB/UG - Traffic Control - Flagger	16-ALL19	$15,000.00
POLE OH - JUNCTION POLE - 3ph (CL&P custodian)	16-OH14A	$187,046.40
POLETOP OH - Replace wood xarm with composite xarm - 3ph	16-OH17A	$44,953.60
OH WIRE OH - Remove circuit wire (3 phase) Romove the existing [redacted] conductors	16-OH37A	$24,441.60
OTHER OTHER Install Timber Matting along th[redacted]	16-ALL14	$300,000.00
OTHER OTHER Mowing the ROW	16-ALL14	$50,000.00
OH WIRE OH-Reconductor w/175 Mil Tree Wire-3ph- 556 kcmil Recond[redacted]	16-OH27	$675,120.00
OTHER OTHER To account for environment studies	16-ALL14	$20,000.00

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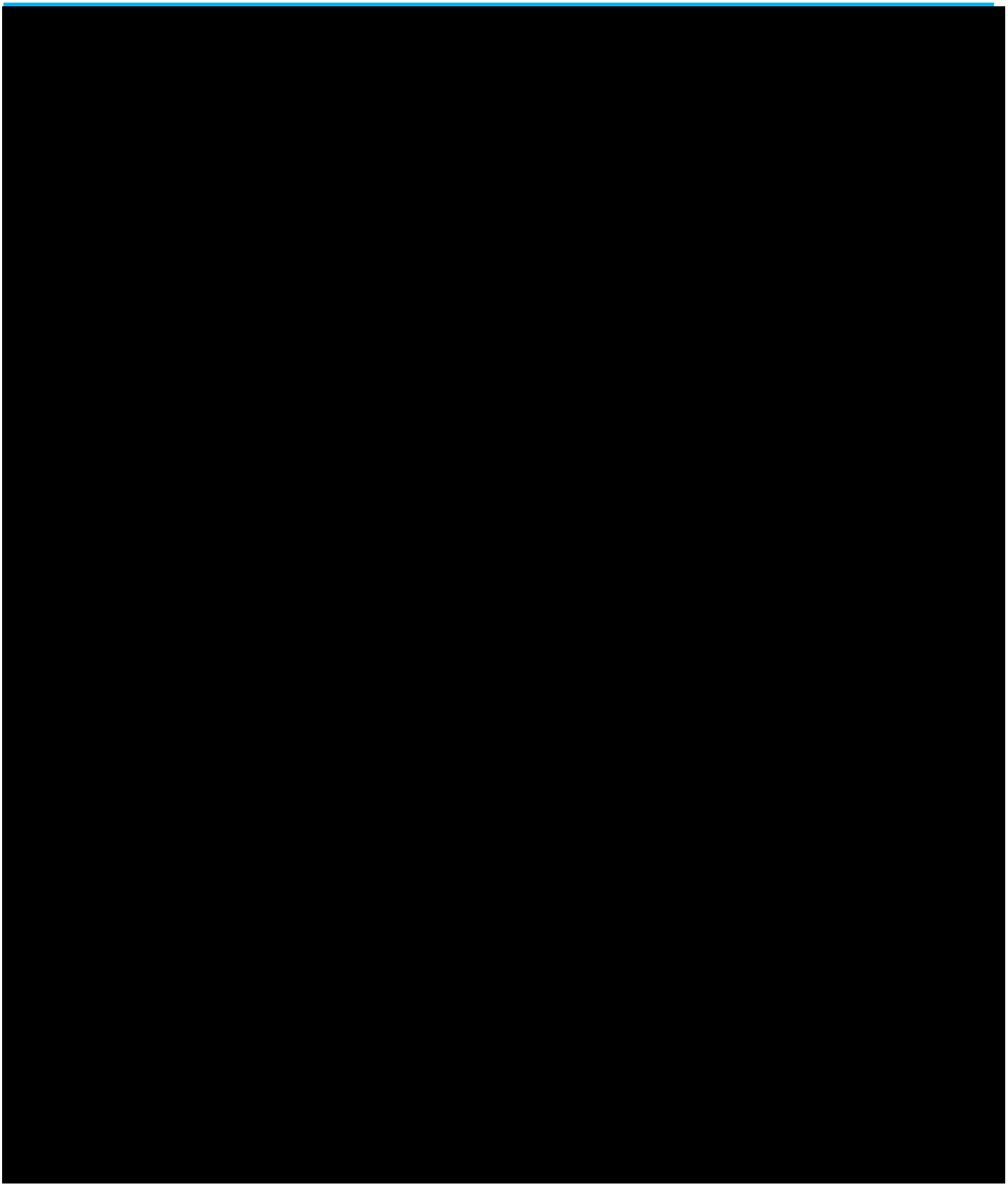
Design Alternative CD01852-02

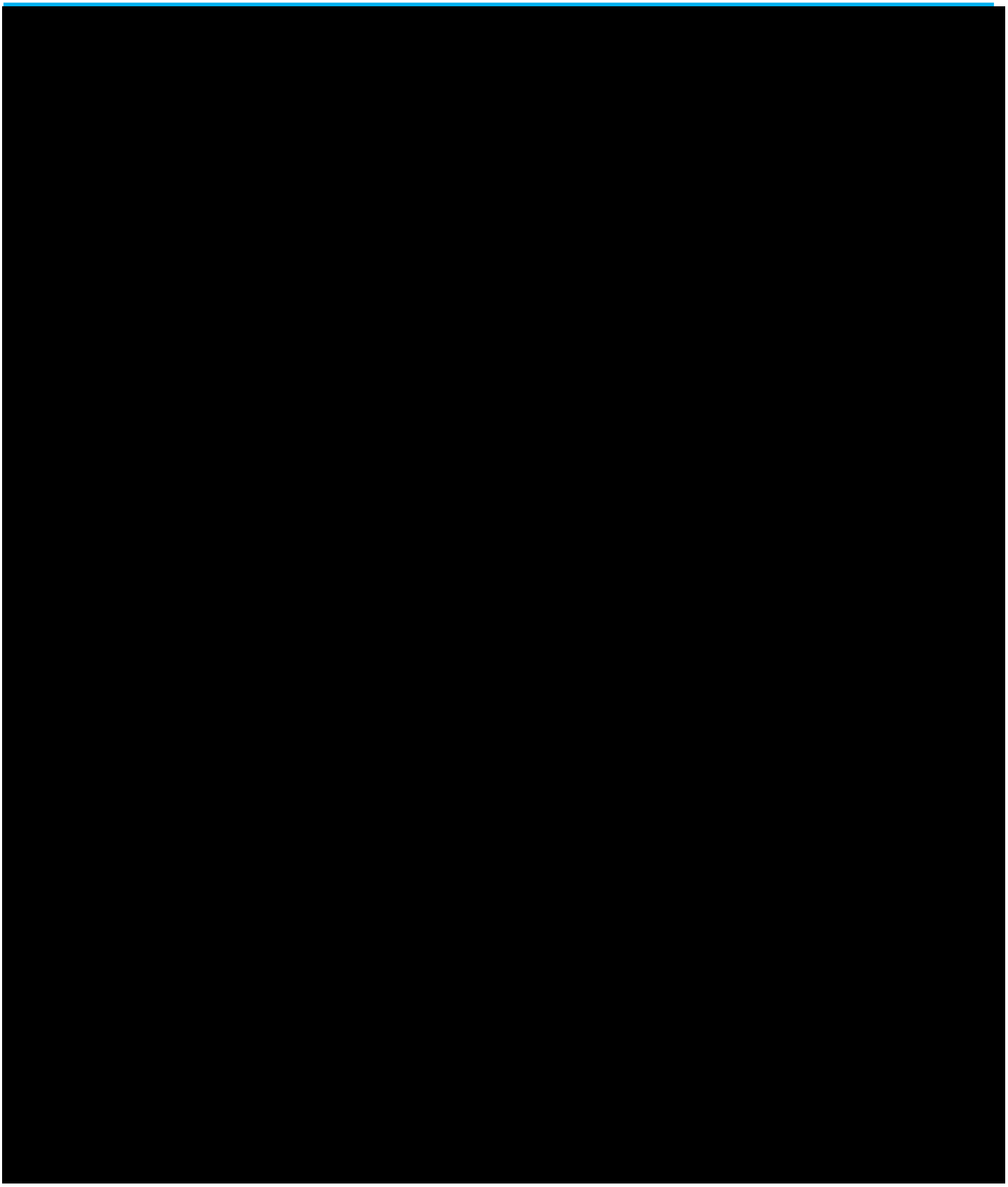
Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	28.00%
SubTotal:	$584,519
Contingency Amount:	$163,665
Estimate:	$748,185
Reimbursement:	$0
Net Amount:	**$748,185**
Description:	

Item Description	CU	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17	$7,019.20
TRAFFIC OH/DB/UG - Traffic Control - Police Officer	16-ALL18	$15,000.00
POLE OH - JUNCTION POLE - 3ph (CL&P custodian)	16-OH14A	$175,356.00
POLETOP OH - Replace wood xarm with composite xarm - 3ph	16-OH17A	$42,144.00
OTHER OTHER For Mowing the ROW	16-ALL14	$50,000.00
OTHER OTHER Environment Studies	16-ALL14	$20,000.00
OTHER OTHER Install Timber Matting along the [redacted]	16-ALL14	$200,000.00
OTHER OTHER to account purchasing steel poles structure	16-ALL14	$75,000.00

[redacted]





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Attachment D: Partial Funding PAF

Operations Project Authorization Form

Date Prepared: 2/3//2022	**Project Title: ROW 030 Priority Structures**
Company/ies: Eversource CT	**Project ID Number: CD01852**
Organization: Distribution Design	**Class(es) of Plant: Distribution**
Project Initiator: [redacted]	**Project Category: Line**
Project Manager: [redacted]	**Project Type: ROW Rehabilitation**
Project Sponsor: [redacted]	**Project Purpose: Rehabilitate ROW 030**
Estimated in service date: 12/31/2024	**If Transmission Project: PTF? NA**
Eng. / Constr. Resources Budgeted? No	**Capital Investment Part of Original Operating Plan? Yes**
Authorization Type: Preliminary	**O&M Expenses Part of the Original Operating Plan? Yes**
Total Request: $ 1,694k	

Financial Requirements:

Project Authorization
ERM: _____

FP&A: _____

Executive Summary

Drone patrols of all the distribution ROWs were completed by Eversource, findings were categorized into five priority levels 1 to 5. [redacted] had 22 total findings, 12 priority 3 poles, 1 priority 4 pole and 2 priority 5 poles.

[redacted]

[redacted]

Project Costs Summary

Note: Dollar values are in thousands

	Prior Authorized	2024	2025	2026+	Totals
Capital Additions - Direct	$0	$902	$0	$0	$902
Removals net of Salvage ___%	$0	$211	$0	$0	$211
Total - Direct Spending	$0	$1,112	$0	$0	$1,112
Capital Additions - Indirect	$0	$492	$0	$0	$492
Subtotal Request	$0	$1,604	$0	$0	$1,604
AFUDC	$0	$32	$0	$0	$32
Total Capital Request	$0	$1,636	$0	$0	$1,636
O&M	$0	$58	$0	$0	$58
Total Request	$0	$1,694	$0	$0	$1,694

Financial Evaluation

Note: Dollar values are in thousands

Direct Capital Costs	2024	2025	2026+	Total
Straight Time Labor	$31	$0	$0	$31
Overtime Labor	$6	$0	$0	$6
Outside Services	$918	$0	$0	$918
Materials	$156	$0	$0	$156
Other, including contingency amounts (describe)	$2	$0	$0	$2
Total Direct Costs	**$1,112**	**$0**	**$0**	**$1,112**

Indirect Capital Costs	2024	2025	2026+	Total
Indirects/Overheads (including benefits)	$492	$0	$0	$492
Capitalized interest or AFUDC, if any	$31	$0	$0	$31
Total Indirect Costs	**$523**	**$0**	**$0**	**$523**
Total Capital Project Costs	**$1,635**	**$0**	**$0**	**$1,635**

Total O&M Project Costs	**$59**	**$0**	**$0**	**$59**

Total Project Cost	**$ 1,694**	**$ -**	**$ -**	**$ 1,694**

Technical Justification:

Project Need Statement

Drone patrols of all the Distribution ROWs were completed by Eversource, findings were ranked from 1 to 5 with 1 being the most severe. [redacted] had 22 total findings, 12 priority 3 poles, 1 priority 4 pole and 2 priority 5 poles. Of the 32 poles in ROW 030, 47% were identified as damaged and need to be addressed.

Given the amount of work required to access the double circuit pole line, this project proposes to [redacted]

Project Objectives

Improve the reliability of [redacted]

Project Scope

[redacted]

Major Materials

- 32 steel poles
- 8,700 ft of 3-phase 556 TW
- 96 Crossarms

Background / Justification

[redacted]

These events are listed below:

11/11/2011 Tree Related on the [redacted]
10/17/2019 Tree Related on [redacted]
11/2/2020 Patrol Nothing Found on [redacted]
2/22/2010 Equipment failure on [redacted]
6/12/2011 Tree Related on [redacted]
10/29/2011 Tree Related on [redacted]

Business Process and / or Technical Improvements:

Performing this project will improve the reliability of the [redacted]

Alternatives Considered with Cost Estimates

[redacted]

Options	Pros	Cons	Cost
Option 1 (Preferred) [redacted]	Reduce the risk of faults due to tree damages [redacted]	Most expensive option	$1,694,183

Option 2 Addresses damaged poles	Improves system resiliency by replacing all the priority poles with steel poles along [redacted]	[redacted]	**748,185**

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Preliminary Engineering	2/2022
Detail Design	11/2023
Full Funding	12/2023
Construction	12/2024

Regulatory Approvals

[redacted] has several areas that are wetlands, so an environment review will be needed.

References
N/A

Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2024	Medium	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	High	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.	2023	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2024	Low	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2024	Low	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
Wetlands / Environmentally sensitive area	2024	High	Use of mats and specialty equipment, only work during certain times of the year