EVERSOURCE

Project Approval Form

Project Title: [redacted]	**Project Number CD01428**
Date Prepared: 04/26/2022	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** UG CABLE & EQUIPMNT REPLACEMNT
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: 10/01/2022	
Total Capital Request: $1,732K	**Authorization Type:** Full Funding

1. Executive Summary

Work orders have been written for this project and approval is now being requested for a final funding of $1,731,920. This funding is 264% of the preliminary estimate which is an increase of $1,075,747 over the original $656,173 that was approved. Scope changes that contributed to the increase in cost are as follows:

[redacted]

Apart from these scope changes, other increases can be attributed to higher overhead costs. Estimated indirect costs on this final estimate is $708K compared to $205K on the initial estimate.

Location Information:

Division: Western
District: Stamford
City: Darien

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2022	2023	2024+	Total
Direct Capital Costs				
Internal Labor and Construction Equipment	$136	$0	$0	$136
Outside Services	$568	$0	$0	$568
Materials	$199	$0	$0	$199
Removals	$0	$0	$0	$0
Risk and Contingency	$121	$0	$0	$121
Other	$0	$0	$0	$0
Subtotal – Direct Costs	**$1,024**	**$0**	**$0**	**$1,024**
Indirect Capital Costs				
Indirect/Overheads (including benefits)	$708	$0	$0	$708
Capitalized interest or AFUDC, if any	$0	$0	$0	$0
Subtotal – Indirect Costs	**$708**	**$0**	**$0**	**$708**
Total Gross Capital Costs	**$1,732**	**$0**	**$0**	**$1,732**
Customer Contribution	$0	$0	$0	$0
Total Net Capital Project Costs	**$1,732**	**$0**	**$0**	**$1,732**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

[redacted]

b. Project Need

[redacted]

c. Project Scope

[redacted]

[redacted]

Major Material:

- 1200' 1000kcMil Co EPR cable
- 2000' 750 Al AC

4. Alternatives Considered

Alternatives were considered (please describe below)

[redacted]

5. Project Schedule

Add any additional milestones that are pertinent to the project.

Milestone/Phase Name	Estimated Date
Partial Approval	September, 2020
100% Detailed Engineering Completion	December, 2021
Construction Started	January, 2022
Fully Funded	April, 2022
In Service Date	October, 2022

6. Regulatory Decisions

N/A

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	Medium	Included contingency costs in the funding request. Perform detailed Field Analysis and walk down in project development to avoid potential issues.
Internal construction resources not available to perform the work.	2022	High	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Storm delays	2022	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2022	Low	Schedule work to minimize system abnormal time. Most of this work will require system to be abnormal for any extended period of time.

9. References

N/A

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

Attachment	Included in Submittal?
A. Cost Summary	*YES*
B. Oneline	*YES*
C. Load Sheet	*YES*
D. Geographic Map	*YES*
E. Partial Funding PAF	*YES*

Attachment A: Cost Summary:

Segment 1: [redacted] Load Transfer

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	28.00%
SubTotal:	$130,841
Contingency Amount:	$36,635
Estimate:	$167,476
Reimbursement:	$0
Net Amount:	**$167,476**

Description: Reclosers

Item Description	CU	$ / Per	Qty	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17	[redacted]		$10,528.80
TRAFFIC OH/DB/UG - Traffic Control - Police Officer	16-ALL18			$5,000.00
SECTIONALIZE OH - Recloser Control - setting changes only	16-OH39A			$14,656.80
SECTIONALIZE OH - Recloser - 3ph 1 Sectionalizing Recloser, 1 Radial Recloser	16-OH38			$95,979.20
POLE OH - POLE - 3ph (CL&P custodian) Midspan Pole	16-OH14			$4,676.00

Segment 2: [redacted] Reconductoring

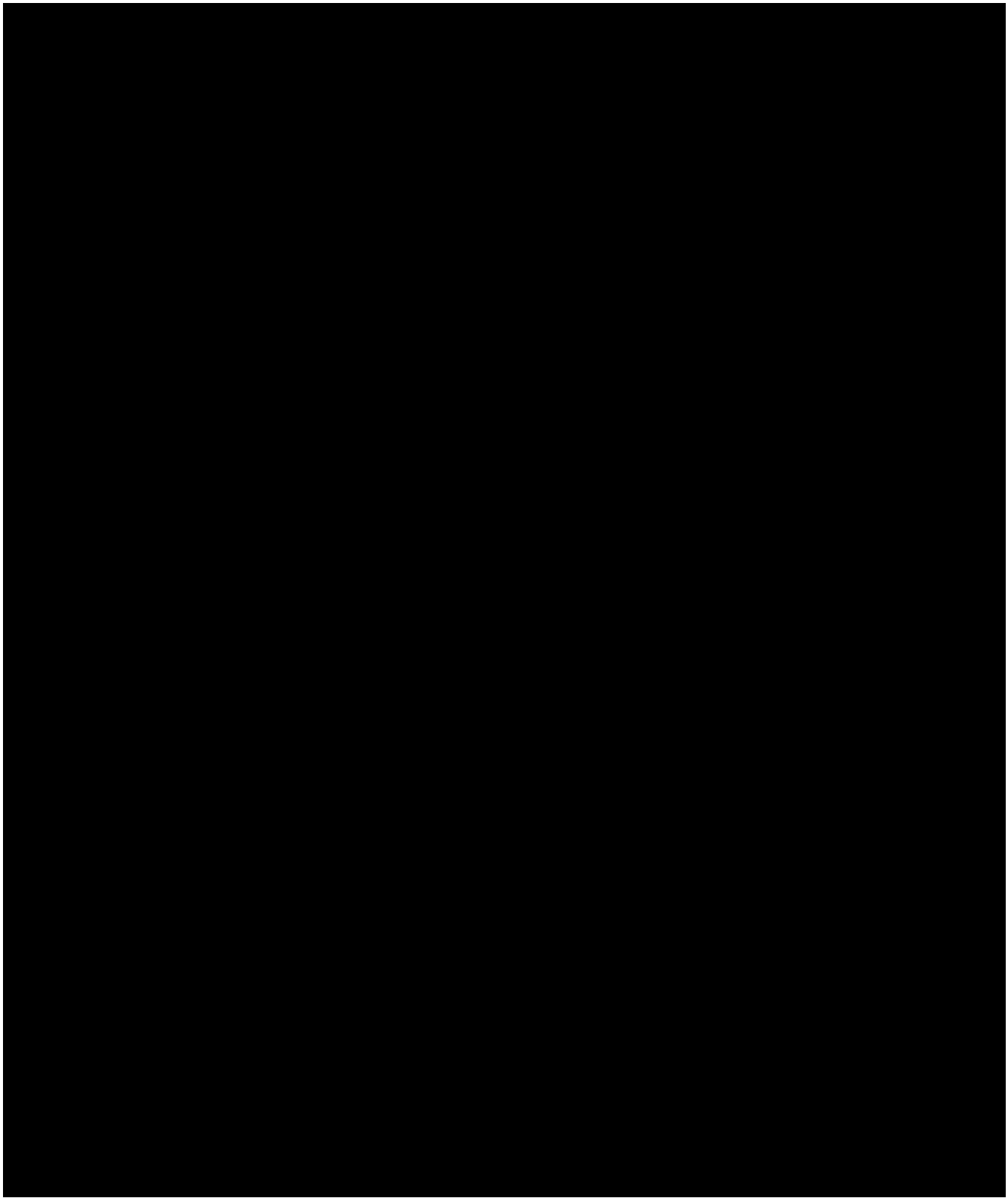
Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	28.00%
SubTotal:	$381,794
Contingency Amount:	$106,902
Estimate:	$488,697
Reimbursement:	$0
Net Amount:	**$488,697**
Description:	

Item Description	CU	$ / Per	Qty	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17	[redacted]		$3,509.60
TRAFFIC OH/DB/UG - Traffic Control - Police Officer	16-ALL18			$15,000.00
POLE OH - POLE - 3ph (Telephone custodian)	16-OH12			$32,040.00
POLE OH - POLE - 3ph (CL&P custodian)	16-OH14			$28,056.00
UG CABLE UG - Cable Removal - all cables	16-UG117			$50,000.00
POLE DB/UG - Riser - 3ph	16-UG146			$21,588.80
OH WIRE OH-Install Aerial Cable-existing poles (any gauge) [redacted] OH Wire	16-OH36			$193,200.00
UG CABLE DB/UG - 750/1000 - 3-1/C (3ph) Cu [redacted] UG Reconductoring	16-UG114B			$38,400.00

CD01428_project_needs_statement.pdf

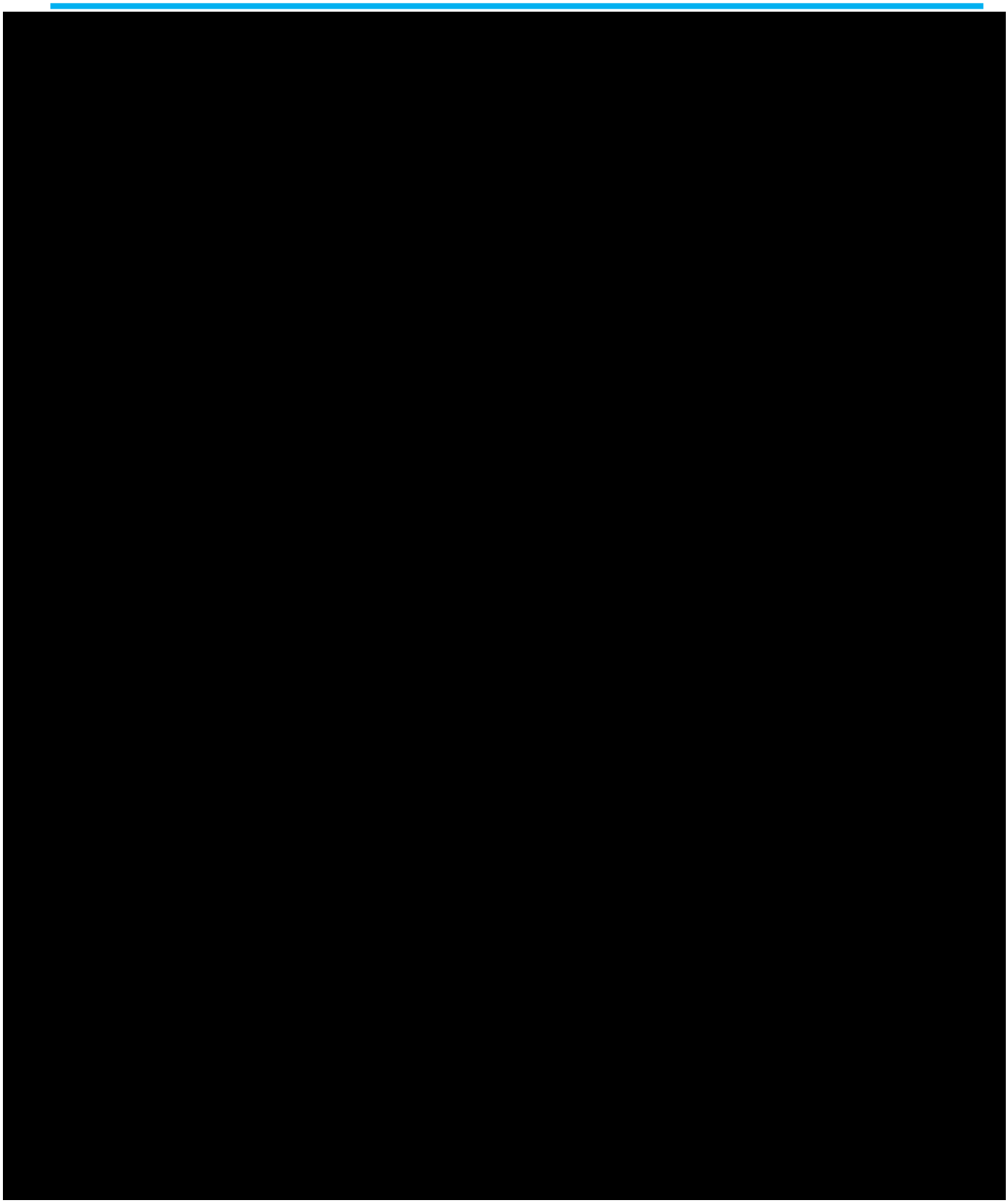
Attachment B: Oneline:



[redacted]

One Line Diagram Before Rev3.pdf

One Line Diagram After Rev3.pdf



CD01428%20loadsheet.xlsx

Attachment D: Geographic Map:

[redacted]

[redacted]



[redacted]_Map Rev3.pdf

Attachment E: Partial Funding PAF:

Date Prepared: 12/03/2019	**Project Title:** [redacted]
Company: Eversource CT	**Project ID Number: CD01428**
Organization: Distribution Electric	**Class of Plant: Distribution**
Project Initiator: [redacted]	**Project Category: Line**
Project Manager: [redacted]	**Project Type: Overload – Specific Projects**
Project Sponsor: [redacted]	**Project Purpose: Solve contingency circuit overloads**
Estimated in service date: 06/01/2021	**If Transmission Project: PTF? N/A**
Eng. /Constr. Resources Budgeted?	**Capital Investment Part of Original Operating Plan?**
Authorization Type: Preliminary	**O&M Expenses Part of the Original Operating Plan?**
Total Request: $656,173	

Financial Requirements:

Project Authorization

ERM: _____

FP&A: _____

Executive Summary

[redacted]

[redacted]

[redacted]

Project Costs Summary

	Prior Authorized	2021	2022	2023+	Totals
Capital Additions - Direct	$0	$388,726	$0	$0	$388,726
Less Customer Contribution	$0	$0	$0	$0	$0
Removals net of Salvage ____%	$0	$25,956	$0	$0	$25,956
Total - Direct Spending	$0	$414,682	$0	$0	$414,682
Capital Additions - Indirect	$0	$205,019	$0	$0	$205,019
Subtotal Request	$0	$619,701	$0	$0	$619,701
AFUDC	$0	$16,090	$0	$0	$16,090
Total Capital Request	$0	$635,791	$0	$0	$635,791
O&M	$0	$20,382	$0	$0	$20,382
Total Request	$0	$656,173	$0	$0	$656,173

Financial Evaluation

Direct Capital Costs	2021	2022	2023+	Total
Straight Time Labor	$21,258	$0	$0	$21,258
Overtime Labor	$4,406	$0	$0	$4,406
Outside Services	$250,007	$0	$0	$250,007
Materials	$137,321	$0	$0	$137,321
Other, including contingency amounts (describe)	$1,690	$0	$0	$1,690
Total Direct Costs	**$414,682**	**$0**	**$0**	**$414,682**

Indirect Capital Costs	Year 1	Year 2	Year 3+	Total
Indirects/Overheads (including benefits)	$205,019	$0	$0	$205,019
Capitalized interest or AFUDC, if any	$15,577	$0	$0	$15,577
Total Indirect Costs	**$220,597**	**$0**	**$0**	**$220,597**
Total Capital Costs	**$635,279**	**$0**	**$0**	**$635,279**
Less Total Customer Contribution	**$0**	**$0**	**$0**	**$0**
Total Capital Project Costs	**$635,279**	**$0**	**$0**	**$635,279**
Total O&M Project Costs	**$20,894**	**$0**	**$0**	**$20,894**
Total Project Cost	**$ 656,173**	**$ -**	**$ -**	**$ 656,173**

Technical Justification:

Project Need Statement

[redacted]

Project Objectives

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

Project Scope

Increase[redacted]

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

[redacted]

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

[redacted]

- [redacted]
- [redacted]

[redacted]

- [redacted]
- [redacted]

Background / Justification

[redacted]

Business Process and / or Technical Improvements:

[redacted]

[redacted]

Alternatives Considered with Cost Estimates

[redacted]

[redacted]

to max normal rating and the other at 103% of normal rating, this wasn't very cost effective.

Project Option Comparison

Design Criteria	[redacted]	
Cost	$656,173	$1,314,657.28
Cost / MVA added	$234,347/MVA	$208,676/MVA
Preferred option	X	

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Preliminary Approval	December, 2019
Detailed Design	June, 2020
Material Ordered	July, 2020
Project completion	June, 2021

Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
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