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Operations Project Authorization Form

Project Title: Reconductor School Rd, Wilton	**Project Number: CD02018**
Date Prepared: 04/10/2023	**Company:** Eversource CT
Organization: Electric Field Operations	**Class(es) of Plant:** D Line
Project Initiator [redacted]	**Project Category:** Distribution Line Reliability
Project Manager: [redacted]	**Project Type:** Specific
Project Sponsor: [redacted]	**Capital Investment part of original Operating Plan:** No
Estimated in service date: 9/1/2022	**Emergency Related Request?** No
Eng./Constr. Resources Budgeted? No	**Facility Type** (check all that apply)**:** ☐ PTF ☐ non-PTF ☒ Distribution
Total Gross Capital Request: $692K	**Authorization** Type**:** Full Funding

Executive Summary

This project received initial funding in May,2022 for $492,269 to be completed in the same year due to reliability issues to the Wilton Schools. The project has been completed in the field by Eversource Western Project crews and the total cost and final funding request is $691,600. This represents an increase of $199,331 or 140% of the initial funding.

Everything called for in the original request was completed in the field and nothing beyond original scope of work was done. However, the direct costs increased by approximately $75K due in large part to the following:

- Crews show up site is in Litchfield CT 48 miles away from job site. This equates to 25% of the overall labor hours for this job.
- There are three Wilton schools and a community center on this narrow road. Crews had to be off street approximately 60 minutes a day because of school bus traffic and vehicle drop off related to the schools.
- Overtime was required on this project due to cutting over primary risers feeding the schools and community center.
- 195 hours of field training apprentices were not accounted for in original estimate.
- Majority of pole sets required core boring due to rock.

The indirect costs on this project amounted to $317K, a difference of $125K from the original estimate.

Despite the higher than estimated costs, this project addressed a serious reliability issue for the Wilton School system and needed to be done immediately to avoid future issues that could have occurred due to the #4 Cu wire that previously existed in this location.

The project was previously presented for initial funding as follows:

School Rd in Wilton CT serves 30 customers, two of which are an elementary and a middle school. The area has been interrupted 9 times in the past four years and 4 times in 2022 alone, forcing the school to either close early or cancel school altogether.

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Project Costs Summary

Capital Costs	2022	2023	2024+	Total
Internal Labor and Construction Equipment	144.0	0.0	0.0	144.0
Outside Services	22.4	0.0	0.0	22.4
Materials	70.9	0.0	0.0	70.9
Removals	123.8	0.0	0.0	123.8
Risk and Contingency	0.0	0.0	0.0	0.0
Other	14.0	0.0	0.0	14.0
Subtotal	**375.0**	**0.0**	**0.0**	**375.0**

Indirect Capital Costs	2022	2023	2024+	Total
Indirects/Overheads (including benefits)	306.1	0.0	0.0	306.1
Capitalized interest or AFUDC, if any	10.5	0.0	0.0	10.5
Subtotal	**316.6**	**0.0**	**0.0**	**316.6**
Total Capital Costs (Gross)	**691.6**	**0.0**	**0.0**	**659.8**
Less Total Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Project Costs (Net of Reimbursement)	**691.6**	**0.0**	**0.0**	**691.6**

Technical Justification:

Project Need, Objective and Justification:

[redacted]

Project Scope:

- [redacted]

Major Material:

- 3,000' 556 Hendrix Cable
- 20 Class 2 poles.

Background:

There have been 9 outages in the past four years on this side tap and 4 of these outages have occurred in 2022. This level of reliability as noted by the Wilton Schools System is unacceptable and cannot be tolerated. [redacted]. A claim has been turned in to the school insurance company in the amount of approximately $300,000. Eversource also was made aware and was asked for a detailed account of the outage to be turned in to the insurance company. Please see attachment below for some communications with the Wilton Schools.

Fwd Loss of Power
on School Rd Wilto

Alternatives Considered:

One alternative that was considered was the [redacted] The cost for this option is approximately $100K less than the preferred, however, Spacer Cable provides a smaller footprint for tree contact and is a better alternative to open wire. The higher priced option of Spacer Cable is best in this situation.

Project Option Comparison

	Option	[redacted]
Cost	$502k	$385k
Cost / MVA added	N/A	N/A
Cost / CM Saved	$16.03	$12.29
Cost / CI Saved	$16,217	$12,432
Preferred option	**X**	

Regulatory Approvals:

Are Regulatory body approvals needed for the project?
No

Project Schedule

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Milestone/Phase Name	Estimated Date
100% Engineering Completion	6/15/2022
Construction Start	7/15/2022
Testing/Commissioning	8/15/2022
In Service Date	9/01/2022

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.
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	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2022	Medium	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2022	Medium	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. Install temporary bypasses/equipment if system will be abnormal for extended periods.

References

CD02018_project_needs_statement.pdf

Appendices (One-Line Diagrams, Images, etc.)

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