EVERSOURCE

Supplement Authorization Form

Project Title: 2024 Flood Damage	Project Number: CD02564
Date Prepared: 01/31/2025	**Company:** Eversource CT
Organization: Electric System Operations	**Project Category:** Major Storms
Initiating Organization: Distribution	**Project Type:** Specific
Project DDE: [redacted]	**Capital Investment part of 5-year 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)
Current Authorized Amount: $664K	**Approved In-Service Date:** 12/31/2024
Supplement Request: $528K	**Estimated In-Service Date:** 6/1/2025
Total Capital Request ($): $1,192K ($118K reimbursable)	**Authorization Type:** Supplement Request
	Reason: Cost Overage

1. Project Background

- Please refer to the original Full-Funded Project Authorization Form attached at the end of this document. The current authorized amount is **$664K**. A supplemental authorization of **$528K** is requested to meet the total capital request of **$1,192K**. This brings the new total capital request amount to 180% of the current authorized amount.
- Project CD02564 was established to address the severe flood damage across the Newtown AWC, primarily in the towns of Monroe, Newtown, Oxford, and Southbury, CT. This occurred in mid-August 2024.
- A majority of this project was completed in Q4 2024 with the remainder of work halted due to incomplete customer and town civil work. Upon restoration of the civil infrastructure by these parties, Eversource facilities can be permanently restored in these areas. This anticipated work is accounted for in the supplement request.

2. Supplement Justification Overview

- This project underwent changes in scope, primarily involving Segment 8: Klarides Village. The most significant driver for the change in cost stemmed from this segment.

Segment No.	Segment	Old WO	New WO
1	Temporary Backyard Feed on Southford Rd	18525293	19236587
2	Restore Permanent Feed from [redacted] to HH #1101 Southford Rd	18596002	19236422
3	Restore Permanent Feed from [redacted] to [redacted] Southford Rd	18597392	19237132
4	Remove Temporary Backyard Feed Southford Rd	18533830	19237573
5	Purchase Brook Rd Refeed	18569611	19237734
6	Emergency Declarations	18578246 18578187 18567634 18575402	19239522 19239299 19239620 19239767
7	Further Storm Repair Areas and Material	18446023	19237823
8	Klarides Village	18957516	19238130

3. Supplement Justification Detail

This project had a total of eight segments. Below summarizes segments with significant differences between the estimate and the actual:



It was stated during SDC and CPAC, as well as in the Risk and Contingencies section in the Full PAF, that the estimates generated for this project had high risk of scope change, resulting in increases in cost. There was a high likelihood a supplemental request would need to be made.

At the time this project was generated, storm repairs were still being made in the field. For some areas of the project, it was difficult to anticipate the civil infrastructural repairs required. This resulted in creating designs and estimates that assume the civil layout will be the same as before which was found to be untrue for certain locations.

4. Supplement Cost Summary (Project Total)

Capital Costs	To Date Spend	Prior Authorized	Supplement Request	Total
Internal Labor	58.8	55.6	8.3	63.9
Outside Services	442.5	19.4	461.8	481.2
Materials	55.5	284.6	-224.2	60.4
Removals	36.9	59.0	-17.0	42.0
Risk and Contingency	0.0	0.0	28.8	28.8
Other	1.4	1.3	0.3	1.6
SUBTOTAL Direct Cost	**595.1**	**420.0**	**257.9**	**677.9**
Indirects / Overheads	460.9	137.2	370.3	507.5
AFUDC	6.5	106.5	-100.0	6.5
SUBTOTAL Indirect Cost	**467.4**	**243.7**	**270.2**	**513.9**
TOTAL Capital Request	**1,062.5**	**663.7**	**528.1**	**1,191.8**
Less Total Customer Contribution (if any)	**0.0**	**0.0**	**-118.0**	**-118.0**
TOTAL Project Cost	**1,062.5**	**663.7**	**410.1**	**1,073.8**

5. New Total Request by Year (if applicable)

Note: If multi-year project, include actuals for current and years past, and then show forecasted spend for upcoming years.

Capital Costs	2024	2025	TOTAL
Internal Labor & Equipment	58.8	5.1	63.9
Outside Services	442.5	38.7	481.2
Materials	55.5	4.9	60.4
Removals	36.9	5.1	42.0
Risk and Contingency	0.0	28.8	28.8
Other	1.4	0.1	1.6
SUBTOTAL Direct Cost	**595.1**	**82.7**	**677.9**
Indirects / Overheads	460.9	46.6	507.5
AFUDC	6.5	0.0	6.5
SUBTOTAL Indirect Cost	**467.4**	**46.6**	**513.9**
TOTAL Capital Request	**1,062.5**	**129.3**	**1,191.8**
Less Total Customer Contribution	0.0	-118.0	**-118.0**
TOTAL Project Cost	**1,062.5**	**11.3**	**1,073.8**

6. Lessons Learned

N/A

Project Title: 2024 Flood Damage	Project Number: CD02564
Date Prepared: 10/04/2024	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** Major Storms
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: $664K	**Authorization Type:** Full Funding

7. Executive Summary

This project was created in order to address the severe flood damage inflicted on Eversource underground facilities, primarily in the town of Southbury, CT, on August 18, 2024. With instant action taken in order to restore power to the customers, temporary facilities have been constructed in the interim before the area can return to its previous permanent configuration. This project outlines the timeline for actions taken as well as designs in order for these areas to return to their nominal states.

Division: Western
District: Newtown AWC
Town(s): Monroe, Newtown, Oxford, Southbury

8. 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	55.6	0.0	0.0	55.6
Outside Services	19.4	0.0	0.0	19.4
Materials	284.6	0.0	0.0	284.6
Removals	59.0	0.0	0.0	59.0
Other	1.3	0.0	0.0	1.3
Risk and Contingency	0.0	0.0	0.0	0.0
Subtotal – Direct Costs	**420.0**	**0.0**	**0.0**	**420.0**
Indirect Capital Costs				
Indirect/Overheads (including benefits)	137.2	0.0	0.0	137.2
Capitalized interest or AFUDC, if any	106.5	0.0	0.0	106.5
Subtotal – Indirect Costs	**243.7**	**0.0**	**0.0**	**243.7**
Total Gross Capital Costs	**663.7**	**0.0**	**0.0**	**663.7**
Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Total Net Capital Project Costs	**663.7**	**0.0**	**0.0**	**663.7**

9. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

[redacted]

b. Project Need

Given the damage caused by this weather event, this project proposes to reconfigure these areas from temporary feeds back to more permanent configurations. In doing so, it would resolve Eversource facilities being in areas without easement and reduce the overhead (OH) conductors and poles leading to these DB areas.

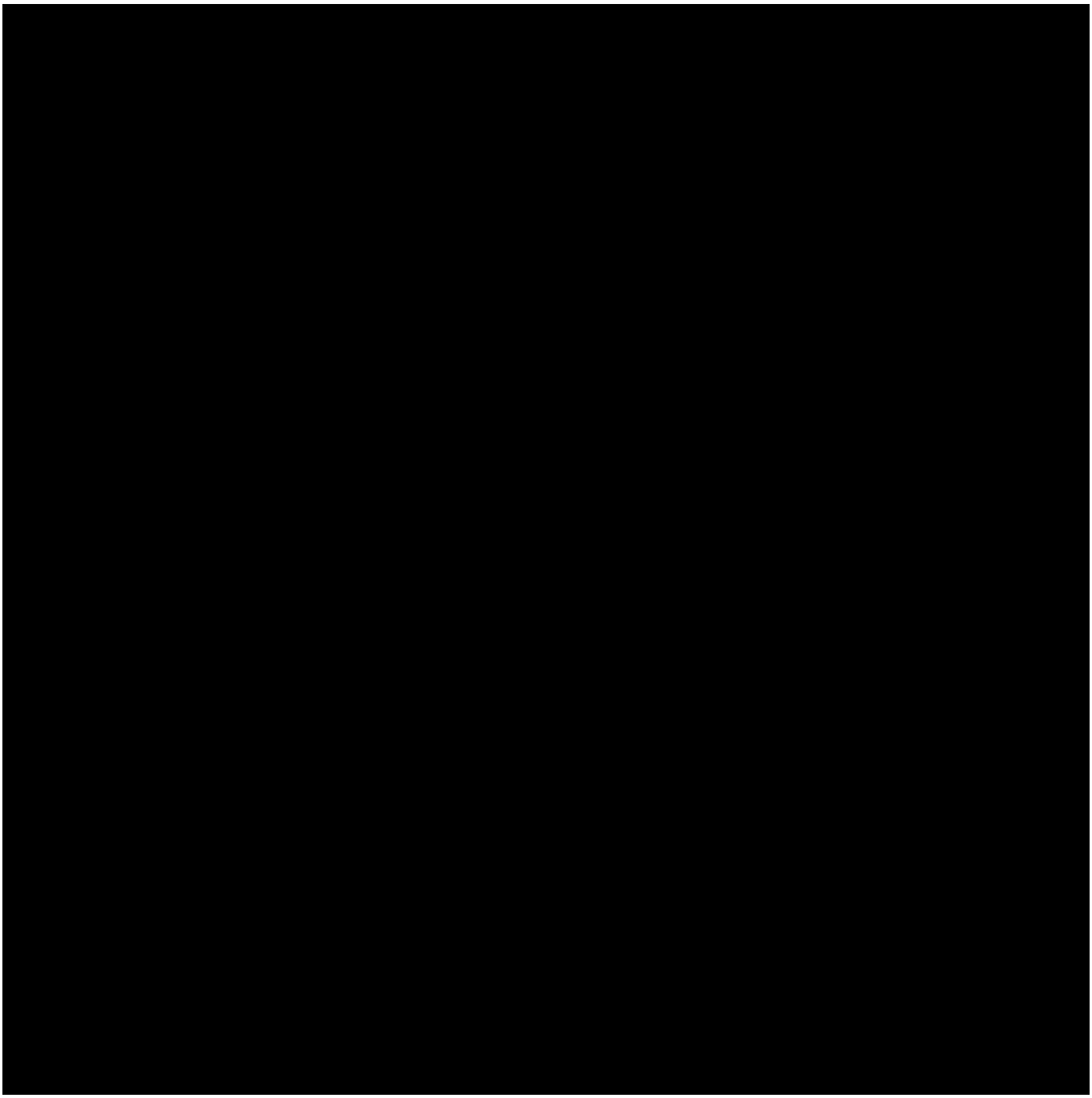
Successful execution of this project will result in both DB areas returned to optimal configurations. Failing to conduct this project will result in Eversource facilities to remain on land without easement and can lower

reliability for these customers due to the increased overhead exposure to potential outages compared to a primarily underground system.

c. Project Scope

This project proposes the following option, Option 1, as the preferred option. This option looks to fund the dollars spent on providing temporary feeds to these customers, restore them back to their original underground configurations, and to remove the poles, wire, and other assets utilized to restore them in the interim. This has been broken down into six segments. The scope of Option 1 is as follows:







- This segment is expected to be reimbursed by 50% from CDOT, full costs are in the estimate



10. Alternatives Considered

Doing nothing is not recommended as it will leave what should be a temporary configuration in a permanent state. This would pose a risk in the future due to tree coverage and Eversource facilities existing on areas without an easement.

Design Criteria	[redacted]
Fund dollars spent on temporary configuration	
Fund dollars spent on emergency declared repairs and make safe conditions	
Restore Southford Rd to original configuration	
Remove obsolete UG facilities from Purchase Brook Rd	
Remove all temporary facilities	
Remove facilities out of non-easement areas	
Reconfigure Klarides Village	
Authorization Type	Full
Capital Cost	$663,701
Expense Cost	$0
Total Cost	$663,701
Preferred Option	**X**

11. Project Schedule

Milestone/Phase Name	Estimated Date
Partial Approval	October 4, 2024
100% Detailed Engineering Completion	October 18, 2024
Fully Funded	November 7, 2024
Construction Start	November 25, 2024
Project Completion	December 31, 2024

12. Regulatory Decisions

N/A

13. Codes and Standards

N/A

14. Risk and Contingencies

Contingencies: 25% contingency was added for 2024 work. This contingency accounts for any risks that are unknown and do not have mitigation plans.

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2024	High	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	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	Medium	Schedule work to minimize system abnormal time. Install temporary bypasses/equipment if system will be abnormal for extended periods.
Wetlands / Environmentally sensitive area	2024	Low	Use of mats and specialty equipment, only work during certain times of the year.

15. References

References
1.

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

Attachment	Included in Submittal?
A. Cost Estimates	*YES*
B. Geographic Maps	*YES*
C. Flood Pictures	*YES*
D. Initial Funding PAF	*YES*

Attachment - A: Cost Estimates

Design Alternative CD02564-01

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	25.00%
SubTotal:	$247,849
Contingency Amount:	$61,962
Estimate:	$309,811
Reimbursement:	$0
Net Amount:	**$309,811**
Description:	

Item Description	CU	$ / Per	Qty	Amount
OTHER	23-ALL14	[redacted]		$247,849.00
OTHER Maximo Estimate - WO# 18525293				

Figure 1: Option 1 – Segment 1 (preferred)

Design Alternative CD02564-02

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	25.00%
SubTotal:	$23,337
Contingency Amount:	$5,834
Estimate:	$29,171
Reimbursement:	$0
Net Amount:	**$29,171**
Description:	

Item Description	CU	$ / Per	Qty	Amount
OTHER	23-ALL14	[redacted]		$5,386.00
OTHER 30% contractor adder ($17,952*0.3)				
OTHER	23-ALL14			$17,951.00
OTHER Maximo Estimate - WO# 18596002				

Figure 2: Option 1 – Segment 2 (preferred)

Design Alternative CD02564-03

Estimate

Preliminary Estimate Summary

Revision Number:	0
Contingency:	25.00%
SubTotal:	$63,918
Contingency Amount:	$15,980
Estimate:	$79,898
Reimbursement:	$0
Net Amount:	**$79,898**

Description:

Item Description	CU	$ / Per	Qty	Amount
OTHER OTHER 30% contractor adder ($49,168*0.3)	23-ALL14	[redacted]		$14,751.00
OTHER OTHER Maximo Estimate - WO# 18597392	23-ALL14			$49,167.00

Figure 3: Option 1 – Segment 3 (preferred)

Design Alternative CD02564-04

Estimate

Preliminary Estimate Summary

Revision Number:	0
Contingency:	25.00%
SubTotal:	$10,533
Contingency Amount:	$2,633
Estimate:	$13,166
Reimbursement:	$0
Net Amount:	**$13,166**

Description:

Item Description	CU	$ / Per	Qty	Amount
OTHER OTHER 30% contractor adder ($8,103*0.3)	23-ALL14	[redacted]		$2,431.00
OTHER OTHER Maximo Estimate - WO# 18533830	23-ALL14			$8,102.00

Figure 4: Option 1 – Segment 4 (preferred)

Design Alternative CD02564-05

Estimate

Preliminary Estimate Summary

Revision Number:	0
Contingency:	25.00%
SubTotal:	$5,624
Contingency Amount:	$1,406
Estimate:	$7,030
Reimbursement:	$0
Net Amount:	**$7,030**
Description:	

Item Description	CU	$ / Per	Qty	Amount
OTHER OTHER Maximo Estimate - WO# 18569611	23-ALL14	[redacted]		$5,624.00

Figure 5: Option 1 – Segment 5 (preferred)

Design Alternative CD02564-06

Estimate

Preliminary Estimate Summary

Revision Number:	0
Contingency:	25.00%
SubTotal:	$89,359
Contingency Amount:	$22,342
Estimate:	$111,711
Reimbursement:	$0
Net Amount:	**$111,711**
Description:	

Item Description	CU	$ / Per	Qty	Amount
OTHER OTHER Berkshire Rd/Roosevelt Dr Newtown/Monore Maximo Estimate - WO# 1	23-ALL14	[redacted]		$18,228.00
OTHER OTHER Georges Hill Rd Oxford Maximo Estimate - WO# 18575402	23-ALL14			$35,066.00
OTHER OTHER Roosevelt Dr Oxford Maximo Estimate - WO# 18567634	23-ALL14			$32,823.00
OTHER OTHER Southford Rd, Southbury Maximo Estimate - WO# 18578187	23-ALL14			$3,252.00

Figure 6: Option 1 – Segment 6 (preferred)

Design Alternative CD02564-07

Estimate

Preliminary Estimate Summary

Revision Number:	0
Contingency:	25.00%
SubTotal:	$45,279
Contingency Amount:	$11,320
Estimate:	$56,599
Reimbursement:	$0
Net Amount:	**$56,599**
Description:	

Item Description	CU	$ / Per	Qty	Amount
OTHER OTHER Maximo Estimate - WO# 18446023	23-ALL14	[redacted]		$45,279.00

Figure 7: Option 1 – Segment 7 (preferred)

Design Alternative CD02564-08

Estimate

Preliminary Estimate Summary

Revision Number:	0
Contingency:	25.00%
SubTotal:	$45,663
Contingency Amount:	$11,416
Estimate:	$57,079
Reimbursement:	$0
Net Amount:	**$57,079**
Description:	

Item Description	CU	$ / Per	Qty	Amount
OTHER OTHER 30% contractor adder ($35,126*0.3)	23-ALL14	[redacted]		$10,538.00
OTHER OTHER Maximo Estimate - WO# 18957516	23-ALL14			$35,125.00

Figure 8: Option 1 – Segment 8 (preferred)

Attachment - B: Geographic Maps



Figure 9: Circuit Map – Southford Rd Pre-Flood



Figure 10: Circuit Map – Southford Rd Post-Flood



Figure 11: Circuit Map – Southford Rd Temp Repair



Figure 12: Circuit Map – Southford Rd Permanent Fix



Figure 13: Circuit Map – Purchase Brook Rd Pre-Flood



Figure 14: Circuit Map – Purchase Brook Rd Post-Flood



Figure 15: Circuit Map – Purchase Brook Rd Temp Repair



Figure 16: Circuit Map – Purchase Brook Rd Permanent Fix



Figure 17: Circuit Map – Klarides Village

Attachment - C: Flood Pictures

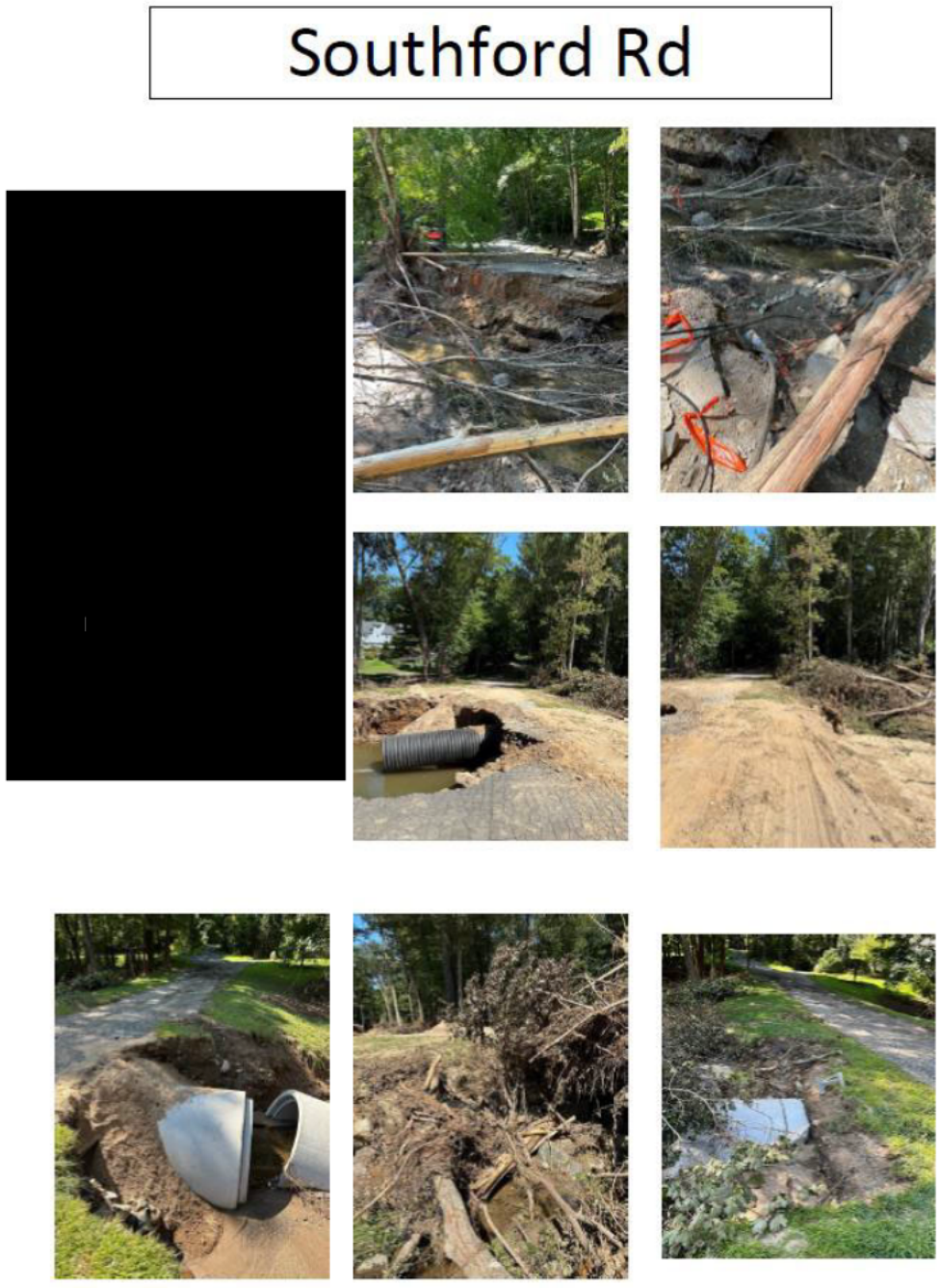


Figure 18: Flood Pictures – Southford Rd

Purchase Brook Rd



Figure 19: Flood Pictures – Purchase Brook Rd

Attachment - D: Initial Funding PAF

Project Approval Form

Project Title: 2024 Flood Damage	**Project Number: CD02564**
Date Prepared: 08/28/2024	**Company:** Eversource CT
Organization: Distribution Engineering	**Class(es) of Plant:** D Line
Project Initiator: [redacted]	**Project Category:** Major Storms
Project Manager	**Project Type:** Specific
Project Sponsor:	**Capital Investment part of 5-year plan?** No
	Emergency Related Request? No
Total Request ($): 30K	**Authorization Type:** Initial Funding

1. Project Need Statement

[redacted]

Title: **2024 Flood Damage**
Division: Western
District: Newtown AWC
Town: Southbury

2. Project Objectives

The objectives for this project are to design and install permanent configurations for these underground developments and to remove the temporary facilities following the permanent configuration install. This initial funding request is to investigate methods to perform and complete the objectives above. The initial requested amount is $30,000.

Project Initiator: [redacted]

Engineering Approval: [redacted]

1

Refer to Distribution Capital Project Approval Process
JA-AM-2001-B, Rev.1