EVERSOURCE

Project Approval Form

Project Title [redacted]Montville, [redacted]	**Project Number:** CD02118
Date Prepared: 09/12/2024	**Company:** Eversource CT
Organization: Distributed Energy Resource Planning	**Project Category:** Distributed Generation
Project Initiator: [redacted]	**Project Type:** Specific
Initiating Organization: Distributed Energy Resources	**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: December 31, 2024	
Total Capital Request: $103.8K (100% Reimbursable)	**Authorization Type:** Full Funding

1. Executive Summary

Full Funding is requested for this project in the amount of $103.8K, which is 89% of the Partial Funding estimate of $116.4K. CD02118 was approved for Partial funding on 3/21/24. There is no scope change. The variance between Full Funding and Partial Funding is shown in the table below.

Direct Capital Costs	Full Funding (000's)	Partial Funding (000's)	Difference (000's)
Labor/Equipment	9.2	6.9	2.3
Outside Services	1.2	37.5	-36.3
Materials	43.3	15.3	28
Removals	1.7	15.6	-13.9
Risk & Contingency	7.2	0	7.2
Other	0	0.8	-0.8
Indirects/Overheads	41.2	40.3	0.9
AFUDC	0	0	0
Total Capital Costs	103.8	116.4	-12.6

Original project as presented:

The purpose of this request is to approve the partial funding estimate of $116.4K (100% reimbursable). This preliminary engineering estimate includes a 24% contingency for a projected December 31st, 2024 in service date. The total 100% customer Contribution In Aide of Construction as indicated in the project cost summary below is $151.3K which includes O&M, taxes, and a 24% contingency.

[redacted] is proposing a 600- kW photovoltaic (PV) project, located at [redacted] Montville CT via the [redacted]

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	9.2	0.0	0.0	9.2
Outside Services	1.2	0.0	0.0	1.2
Materials	43.3	0.0	0.0	43.3
Removals	1.7	0.0	0.0	1.7
Risk and Contingency	7.2	0.0	0.0	7.2
Other	0.0	0.0	0.0	0.0
Subtotal – Direct Costs	**62.6**	**0.0**	**0.0**	**62.6**
Indirect Capital Costs				
Indirect/Overheads (including benefits)	41.2	0.0	0.0	41.2
Capitalized interest or AFUDC, if any	0.0	0.0	0.0	0.0
Subtotal – Indirect Costs	**41.2**	**0.0**	**0.0**	**41.2**
Total Gross Capital Costs	**103.8**	**0.0**	**0.0**	**103.8**
Customer Contribution	**-103.8**	**0.0**	**0.0**	**-103.8**
Total Net Capital Project Costs	**0.0**	**0.0**	**0.0**	**0.0**

The below table illustrates the total cost that will be shared with the customer in the interconnection agreement. It includes a CIAC contribution as well as a witness test fee. The project is 100% reimbursable.

Distribution cost including O&M	$129,803
CIAC Tax: 15%	$19,470
Total Distribution cost	$149,273
Witness Test	$2,000
TOTAL Customer Contribution in Aide of Construction. **paid by customer**	$151,273

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

[redacted] approached Eversource in August 2022 regarding a 600 kW project on [redacted] Montville, CT as a new construction. A system impact study agreement was issued to Verogy in October 2022 and executed in November 2022. [redacted]

b. Project Need

This is an interconnection requirement. The proposed solutions are standard industry practice for the issues that were identified in the system impact study.

c. Project Scope

The project will begin once the generating customer executes an interconnection agreement authorizing the Company to begin construction. The generating customer will also be required to pay for their construction in a payment schedule as outlined in the interconnection agreement. Once construction is authorized, Eversource will work to put the project on the schedule.

The following is a list of major material that will be required to complete this project:

[redacted]

4. Alternatives Considered

The project is a compliance obligation. There were no alternatives considered. There is no financial benefit. The customer's frontage is [redacted] There was no need to review alternate feeders.

5. Project Schedule

Milestone/Phase Name	Estimated Date
Partial Approval	December 15, 2022 (Actual)
100% Detailed Engineering Completion	May 30, 2024
Fully Funded	February 2024 (Actual)
Construction Start	September 30, 2024
In Service Date	December 31, 2024

6. Regulatory Decisions

Nonapplicable.

7. Codes and Standards

Nonapplicable.

8. Risk and Contingencies

Contingencies:

A 24% contingency was added which is typical for projects expected to go online in the next year.

Risk Mitigation:

No additional dollars were included for risk. Based on the scope of work, risk is expected to be minimal.

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	Medium	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.
Technological risks involving integration of new technology	2024	Low	Before use of new technology ensure support of standards and manufacturer. Schedule project to accommodate for extra time or ensure new technology is not on the critical path.
Wetlands / Environmentally sensitive area	2024	Low	Use of mats and specialty equipment, only work during certain times of the year.

9. References

References
1. DSEM- Distributed Generation- Remote monitoring and control- 7.0
2. DSEM- Distributed Generation- General Standards- Large scale DER 1.4.1
3. DSEM- New Service- NB-3-7a
4. DER Planning Guide
5.

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

Attachment	Included in Submittal?
A. Cost Estimate	*YES*
B. Geographic Map	*YES*
C. Customer One Line	*YES*
D. Feeder One Line	*YES*

E. Project Checklist	*YES*
F.	

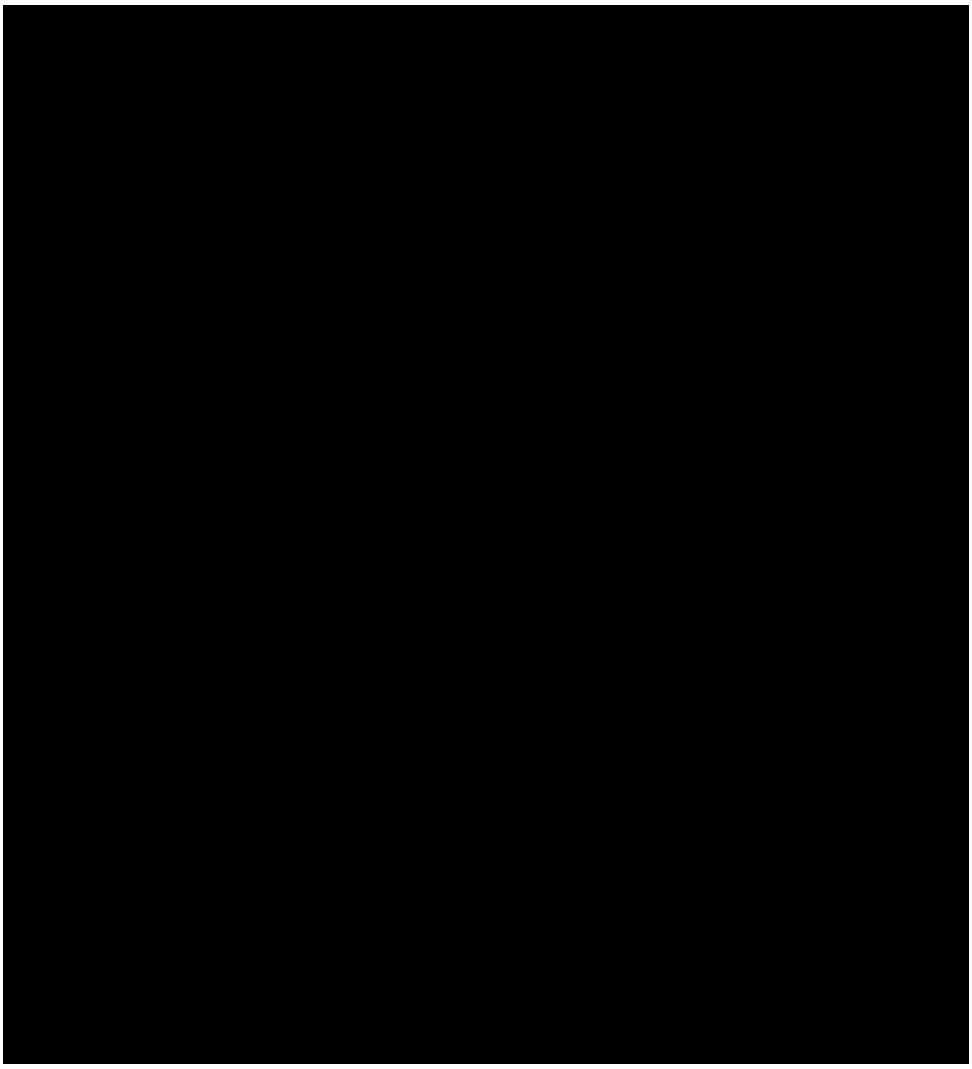
Attachment A:

Estimating Sheet

Code	Unit Type	Unit Description	Included	Unit of Measu	[redacted]	Total Cost	KEYWORD	
ALL14	ALL	OTHER	Item not in list	$		$30,000	OTHER	Cost of 1 primary meter
ALL18	ALL	OH/OB/UG - Traffic Control - Police Officer	$1000 / day / officer, Urban area, Main/State roads, 2 needed for reconductoring, multiple crews	$		$3,000	TRAFFIC	1 officer / 3 days
OH14A	OH	OH - JUNCTION POLE - 3ph (CL&P custodian)	Install and shift any 3ph JUNCTION with CLASS 1 pole - CL&P installs pole	LOC		$11,690	POLE	Cost to replace junction pole 3205 with 45' pole
OH34	OH	OH - Line Extension - 3ph (556 kcmil)	Includes conductor, poles, poletops, arresters, c/o's, guys, average trimming	FT		$12,000	OH WIRE	on site to primary meter
OH38	OH	OH - Recloser - 3ph	Includes Replacing Pole, 6 Stirrups, 6 arresters, 3 Vertical Disc Switches, Control, etc.	LOC		$47,990	SECTIONALIZE	
Total					Sub-Total	$104,680		
			Contingency/Contractor Contingency/Urban Adder		24%	$25,123		
					Total	$129,803		

Attachment B:

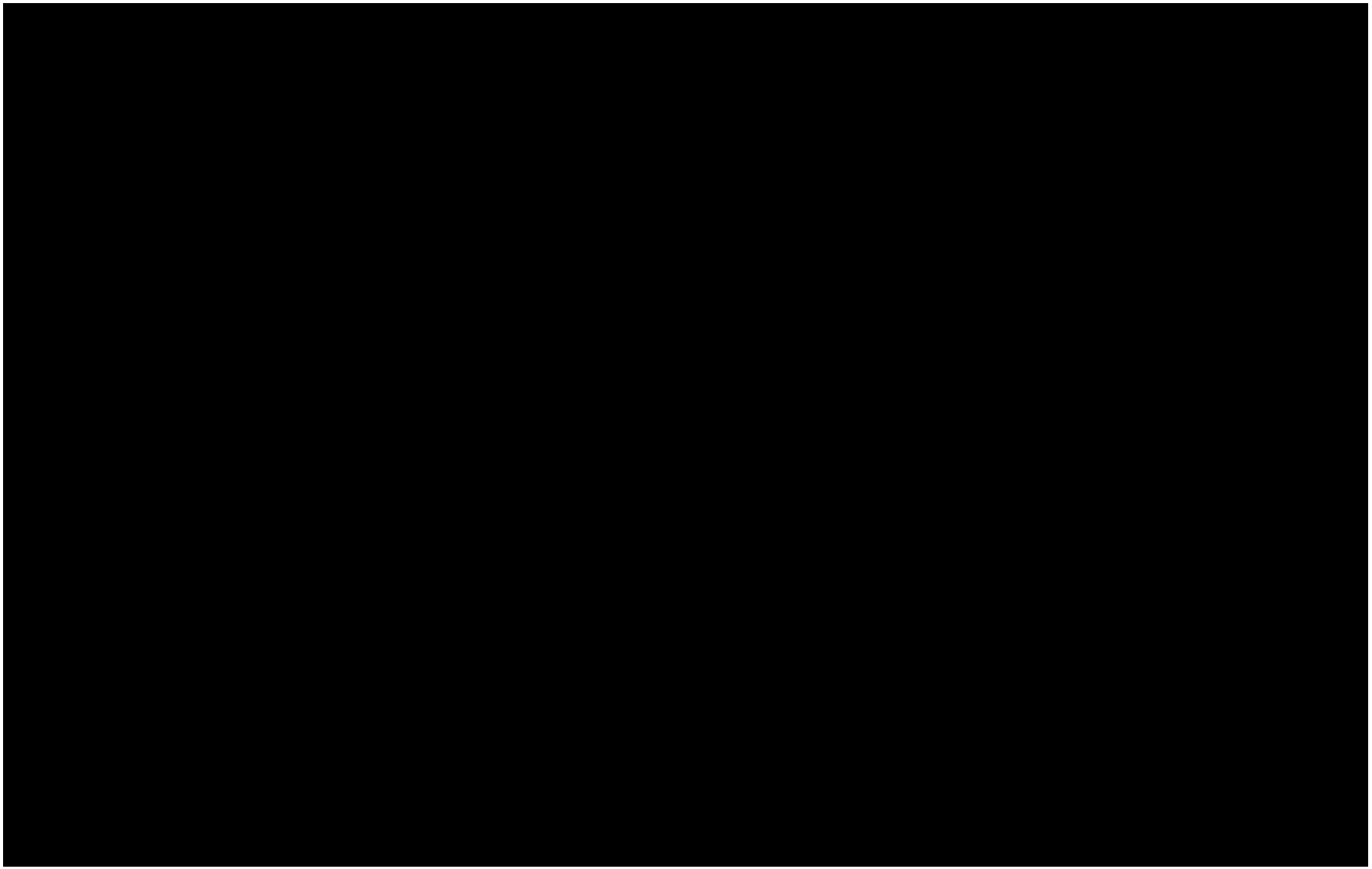
Note, the circuit has been reconfigured back to 1Q01 after a temporary configuration for power quality complaint diagnosis. The image is what was presented in 2022 for approval.



Attachment C:



Attachment D:



Current, as of 2024:



Attachment E:

Project Authorization Checklist

Project Initiator: [redacted]

Project #:CD02118

Project Title [redacted] **Montville,** [redacted]

Funding Type:

☒ Partial PAF ☐ Full PAF

Project Alternatives:

☐ Options considered ☒ Explanation why alternatives were not selected

☐ NWA considered ☐ Explanation why preferred option was selected

Project Requirements (Review all, and check all that apply):

NR = Not Required R=Required C = Complete

NR	R	C		NR	R	C	
☐	☒	☐	Easement	☒	☐	☐	TD007
☒	☐	☐	Trimming Estimate Received	☒	☐	☐	ROW trimming Estimate Received
☒	☐	☐	Environmental Review Initiated	☐	☒	☐	Review with Operations
☐	☒	☐	Permits (state roads)	☒	☐	☐	Underground permits
☐	☒	☐	S &C Settings	☐	☒	☐	Material long lead
☐	☐	☒	Synergi load flow				

PAF Documents Attached:

☒ One Lines ☒ Geographical Map ☐ Load Projections ☒ Estimates

☐ Other Documents (List):

PAF Review Complete:

☒ Lead Reviewed by: **Joseph Debs** Date: **12/08/22**

☒ Manager Reviewed by: **David Ferrante** Date: **12/08/22**

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Initiating Organization: Distributed Energy Resources	**Capital Investment part of original Op Plan:** No
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: December 31, 2024	
Total Capital Request: $116.4K (100% Reimbursable)	**Authorization Type:** Partial Funding

1. Executive Summary

The purpose of this request is to approve the partial funding estimate of $116.4K (100% reimbursable). This preliminary engineering estimate includes a 24% contingency for a projected December 31st, 2024 in service date. The total 100% customer Contribution In Aide of Construction as indicated in the project cost summary below is $151.3K which includes O&M, taxes, and a 24% contingency.

[redacted] is proposing a 600- kW photovoltaic (PV) project, located at [redacted] Montville CT via the Uncasville 1Q01 feeder at 13.2kV. [redacted]

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	6.9	0.0	0.0	6.9
Outside Services	37.5	0.0	0.0	37.5
Materials	15.3	0.0	0.0	15.3
Removals	15.6	0.0	0.0	15.6
Risk and Contingency	0.0	0.0	0.0	0.0
Other	0.8	0.0	0.0	0.8
Subtotal – Direct Costs	**76.1**	**0.0**	**0.0**	**76.1**
Indirect Capital Costs				
Indirect/Overheads (including benefits)	40.3	0.0	0.0	40.3
Capitalized interest or AFUDC, if any	0.0	0.0	0.0	0.0
Subtotal – Indirect Costs	**40.3**	**0.0**	**0.0**	**40.3**
Total Gross Capital Costs	**116.4**	**0.0**	**0.0**	**116.4**
Customer Contribution	**-116.4**	**0.0**	**0.0**	**-116.4**
Total Net Capital Project Costs	**0.0**	**0.0**	**0.0**	**0.0**

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B. Geographic Map	*YES*
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D. Feeder One Line	*YES*
E. Project Checklist	*YES*
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Attachment A:

Estimating Sheet								
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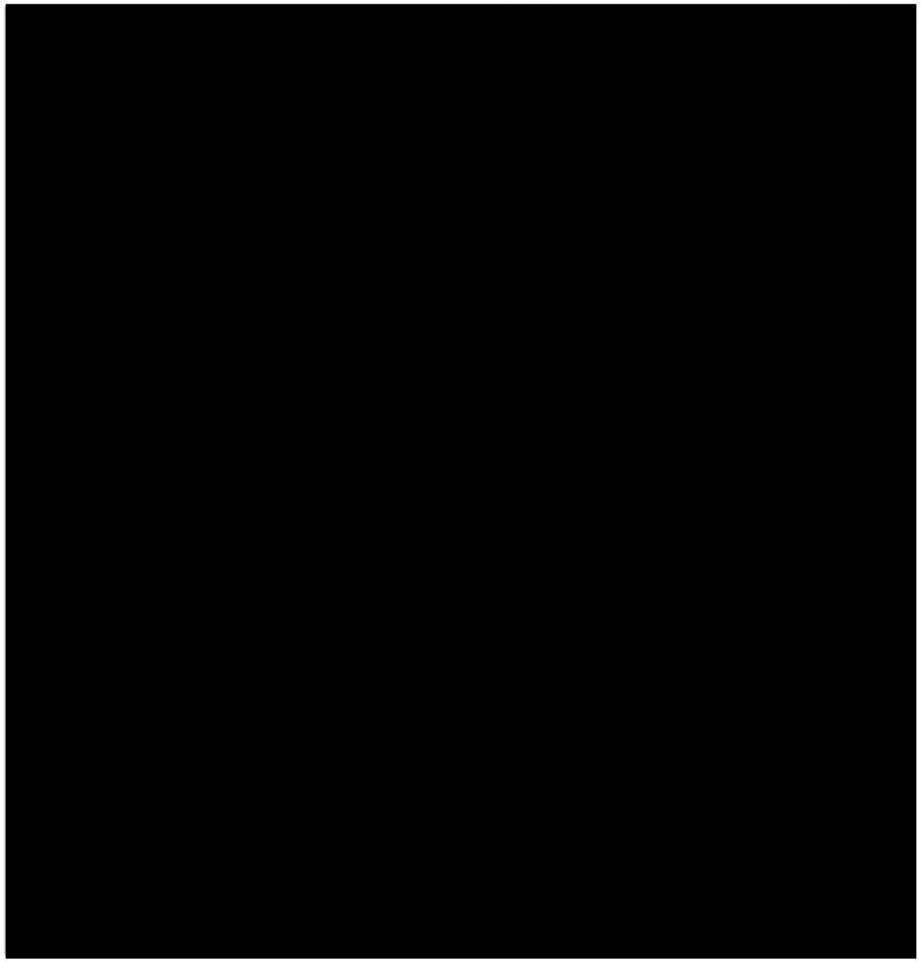

Attachment C:



Attachment D:



Project Approval Form

Current, as of 2024:



Attachment E:

Project Authorization Checklist

Project Initiator: [redacted]

Project #:CD02118

Project Title: [redacted] **Montville** [redacted]

Funding Type:

☒ Partial PAF ☐ Full PAF

Project Alternatives:

☐ Options considered ☒ Explanation why alternatives were not selected

☐ NWA considered ☐ Explanation why preferred option was selected

Project Requirements (Review all, and check all that apply):

NR = Not Required R=Required C = Complete

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☐	☒	☐	Easement	☒	☐	☐	TD007
☒	☐	☐	Trimming Estimate Received	☒	☐	☐	ROW trimming Estimate Received
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