Bristol, Vermont
1905 Waterline Replacement Project Overview
October 21, 2026



VTM Engineering, PLC

Background

- Pre-2020 – The Bristol distribution system was losing roughly twice as much water as it was selling to customers on an annual basis (200% leakage rate). The average municipal water system leakage rate is approximately 15% - 20% according to AWWA.
- Bristol was also experiencing a lack of adequate water flow and water pressure in parts of their distribution system during fire fighting activities.
- 2020 - Bristol hires a professional engineering firm to complete an evaluation of the water distribution system and provide a Preliminary Engineering Report (PER) of their findings.
- 2021 - The PER is completed and confirms that more than one half of Bristol's water distribution system was installed in 1905 and is well beyond its useful service life. The recommendation was to replace all of the 1905 waterlines (> 30,000 lf).

Background

- 2022 - Bristol contracts with VTM Engineering in 2023 to assist with developing a masterplan to complete the engineering design, permitting, construction as well as obtaining State/Federal financing to fund the project.
- 2022 -The Bristol Water Commission realizes that the project is too large from a financial as well as logistical perspective to take on as a singe construction project. The Water Commission ultimately decides to split the project into four distinct phases:

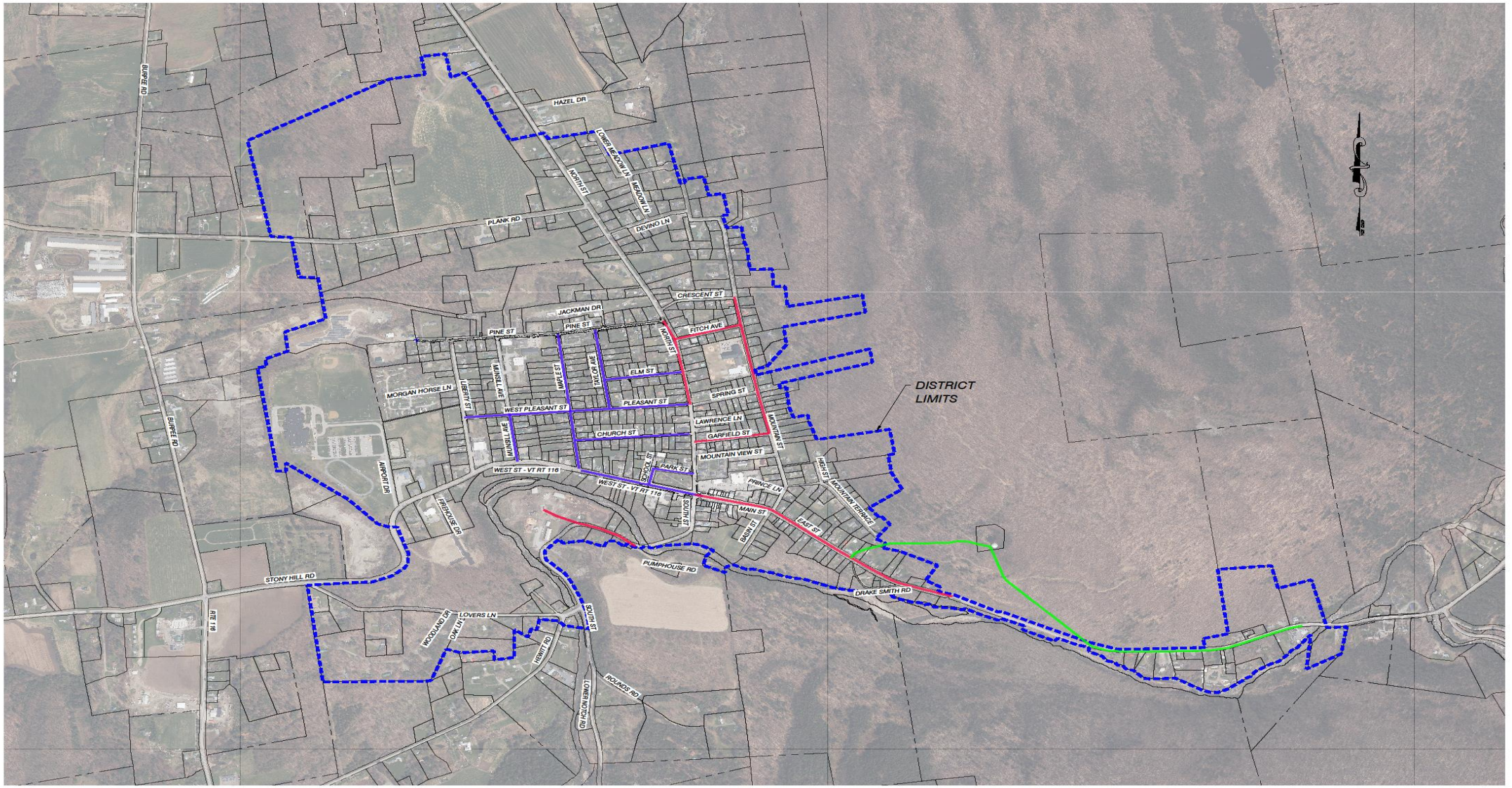
  Phase 1 - Pine Street

  Phase 2 - Bristol West

  Phase 3 – Bristol East

  Phase 4 – Rockydale (AKA mountain areas)

Bristol 1905 Waterline Replacement Phasing Plan



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2941 SHELBURNE FALLS ROAD
HINESBURG, VT 05461
(802) 233-7531

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

TOWN WATER SYSTEM

BRISTOL WEST WATER REPLACEMENT PROJECT

TOWN OF BRISTOL
1 SOUTH STREET, BRISTOL VT 05443

DESIGNED SP
DRAWN PM
CHECKED SP
PLOT DATE –
SCALE AS SHOWN
DATE –

PROJECT NO. 22.1.3

DRAWING NO. MAP 1

Masterplan Schedule (updated)

Town of Bristol, Vermont
1905 Waterline Replacement
Master Project Schedule

Revision Date 10/9/26

Segment	Milestone	2023				2024				2025				2026				2027				2028				2029				2030				2031			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Phase 1 - Pine Street	Project is complete																																				
Phase 2 Bristol West	Step 2 - DWSRF Funding Application Submittal/Approval																																				
	Step 2 - Eng. Services Contract - DWSRF/WID Review & Approval																																				
	Step 2 - Surveying/Design																																				
	Step 2 - Archeology & Environmental																																				
	Step 2 - Wetlands/Endangered Species, etc.					N/A																															
	Step 2 - Opinion of Probable Construction Cost																																				
	Step 2 - Bond Preparation/Vote																																				
	Step 2 - Bid Document Preparation & WID Approval																																				
	Step 2 - Construction Permit Submittal/Approval																																				
	Step 2 - DWSRF Priority List Application Feb. Submital/June Approval																																				
	Step 3 - ESA Amendment (Town & DWSRF Review & Approval)																																				
	Step 3 - DWSRF Bid Process/Award/Contract Signing																																				
	Step 3 - Material Submittals & Approvals																																				
	Step 3 - Construction (2 segments, approx. 5,000' each year)																																				
Phase 3 Bristol East	Step 2 - EPA Lead Funding Application Submittal/Approval																																				
	Step 2 - Eng. Services Contract - DWSRF/WID Review & Approval																																				
	Step 2 - Surveying/Design/Hydraulic Modeling																																				
	Step 2 - Archeology & Environmental (preliminary & Final)																																				
	Step 2 - Wetlands/Endangered Species, etc.													N/A																							
	Step 2 - Opinion of Probable Construction Cost																																				
	Step 2 - Bond Preparation/Vote/Approval																																				
	Step 2 - Bid Document Preparation & WID Approval																																				
	Step 2 - Construction Permit Submittal/Approval																																				
	Step 2 - Lead Priority List Application. Funding Application/Approval																																				
	Step 2 - Easements (Construction & potentially permanent) [1]																																				
	Step 3 - ESA Amendment (Town & DWSRF Review & Approval)																																				
	Step 3 - DWSRF Bid Process/Award/Contract Signing																																				
	Step 3 - Material Submittals & Approvals																																				
	Step 3 - Contract Award/Construction (2 segments, approx. 5,000' each year)																																				
Phase - 4 Rockydale/Slopeside +	Step 1 - Alternatives Analysis/PER Amendment																																				
	Step 2 - DWSRF Funding Application/Approval (Step 2/Step 3)																																				
	Step 2 - Eng. Services Contract - DWSRF/WID Review & Approval																																				
	Step 2 - Surveying/Design																																				
	Step 2 - Archeology & Environmental																																				
	Step 2 - Wetlands/Endangered Species, etc.																																				
	Step 2 - Opinion of Probable Construction Cost																																				
	Step 2 - Bond Preparation/Vote																																				
	Step 2 - Bid Document Preparation & WID Approval																																				
	Step 2 - Construction & Other? Permits/Approval																																				
	Step 2 - DWSRF Priority List Application Feb. Submital/June Approval																																				
	Step 3 - ESA Amendment (Town & DWSRF Review & Approval)																																				
	Step 3 - DWSRF Bid Process/Award																																				
	Step 3 - Material Submittals & Approvals																																				
	Step 3 - Contract Award/Construction																																				

Curent Timeline

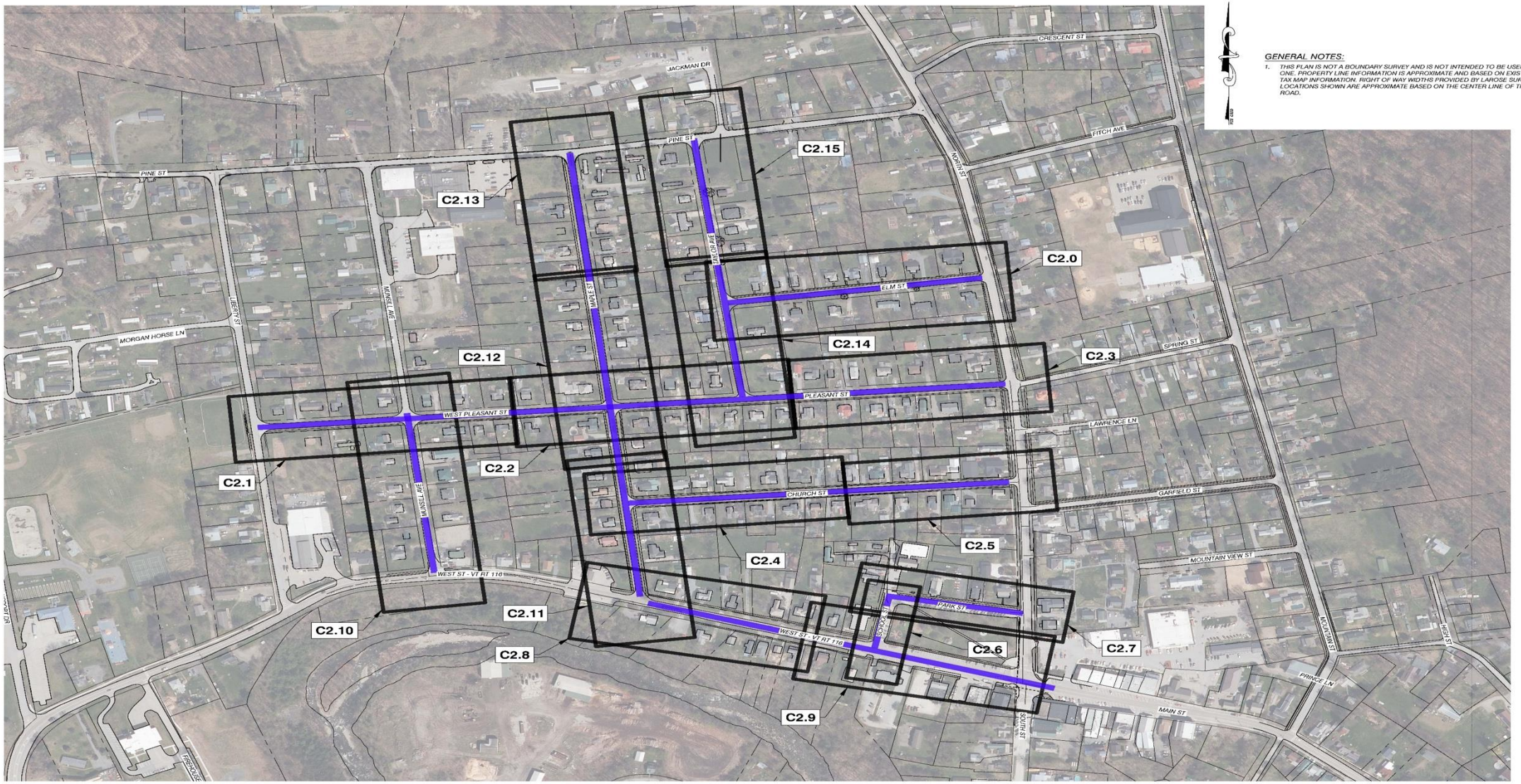
Legend

Task is Complete

Task Still To Be Completed

1. Task not within the current Engineering Services Agreement

Phase 2 – Bristol West (2026/2027)



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PRELIMINARY PLANS
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BRISTOL WEST WATER REPLACEMENT - PLAN LAYOUT

BRISTOL WEST WATER REPLACEMENT PROJECT

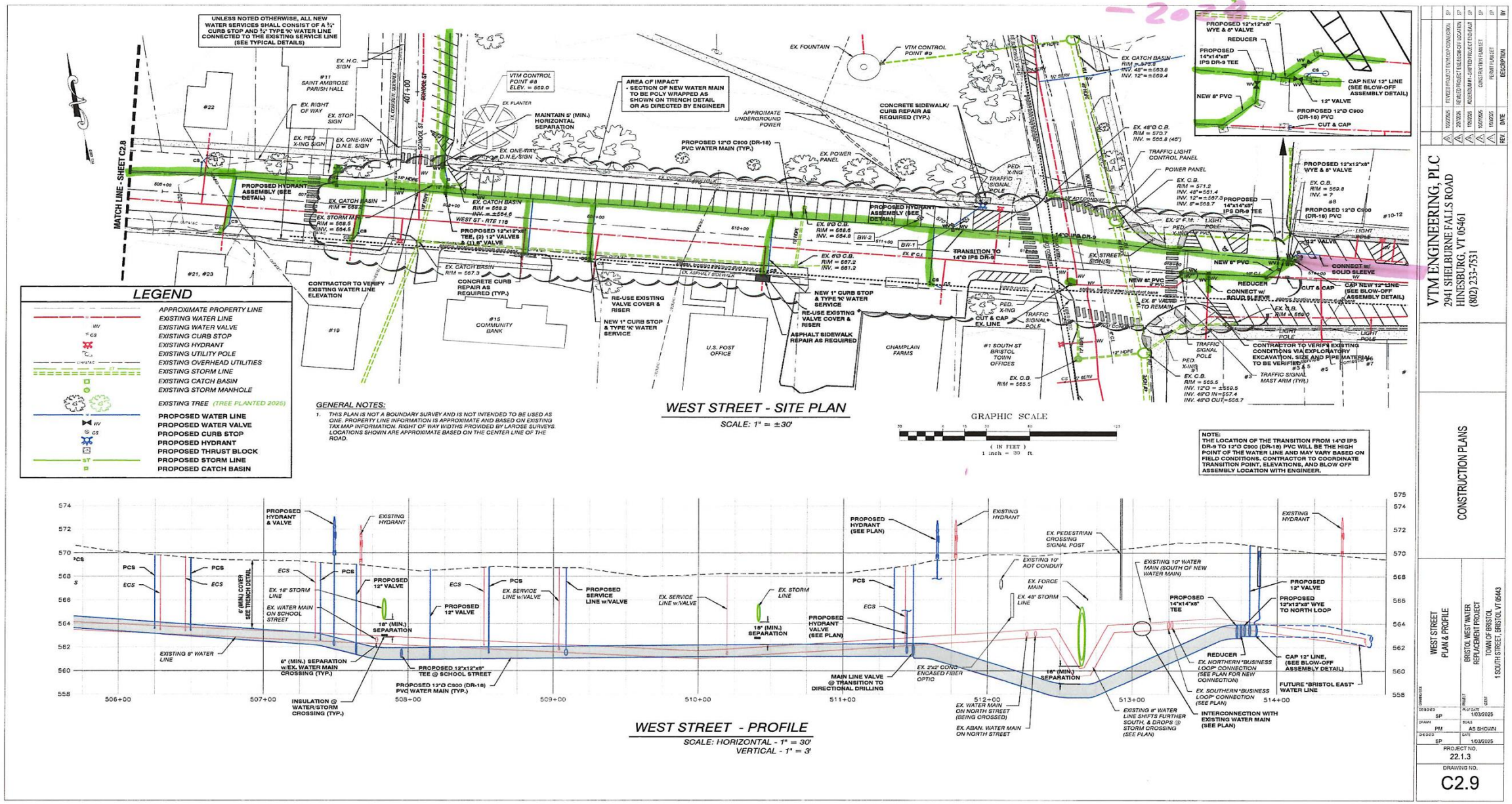
TOWN OF BRISTOL
1 SOUTH STREET, BRISTOL, VT 05443

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PROJECT NO.
22.1.3

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C1.0

Phase 2 - West Street (2027)



Phase 2 – West Street (2027)



Phase 2 – West Street (2027)

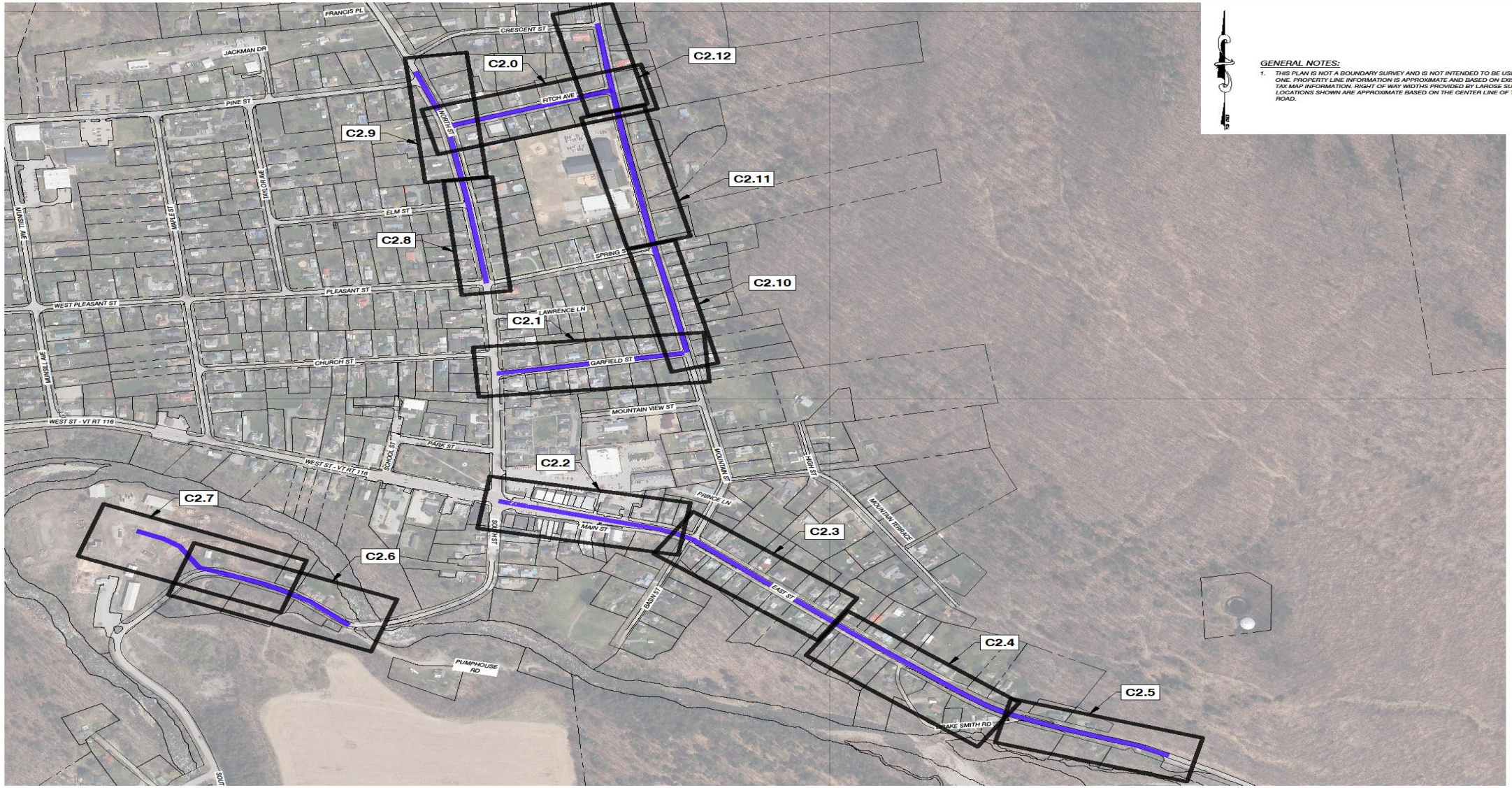


Phase 2 – West Street (2027)



Main Street Looking East

Phase 3 – Bristol East (2028/2029)



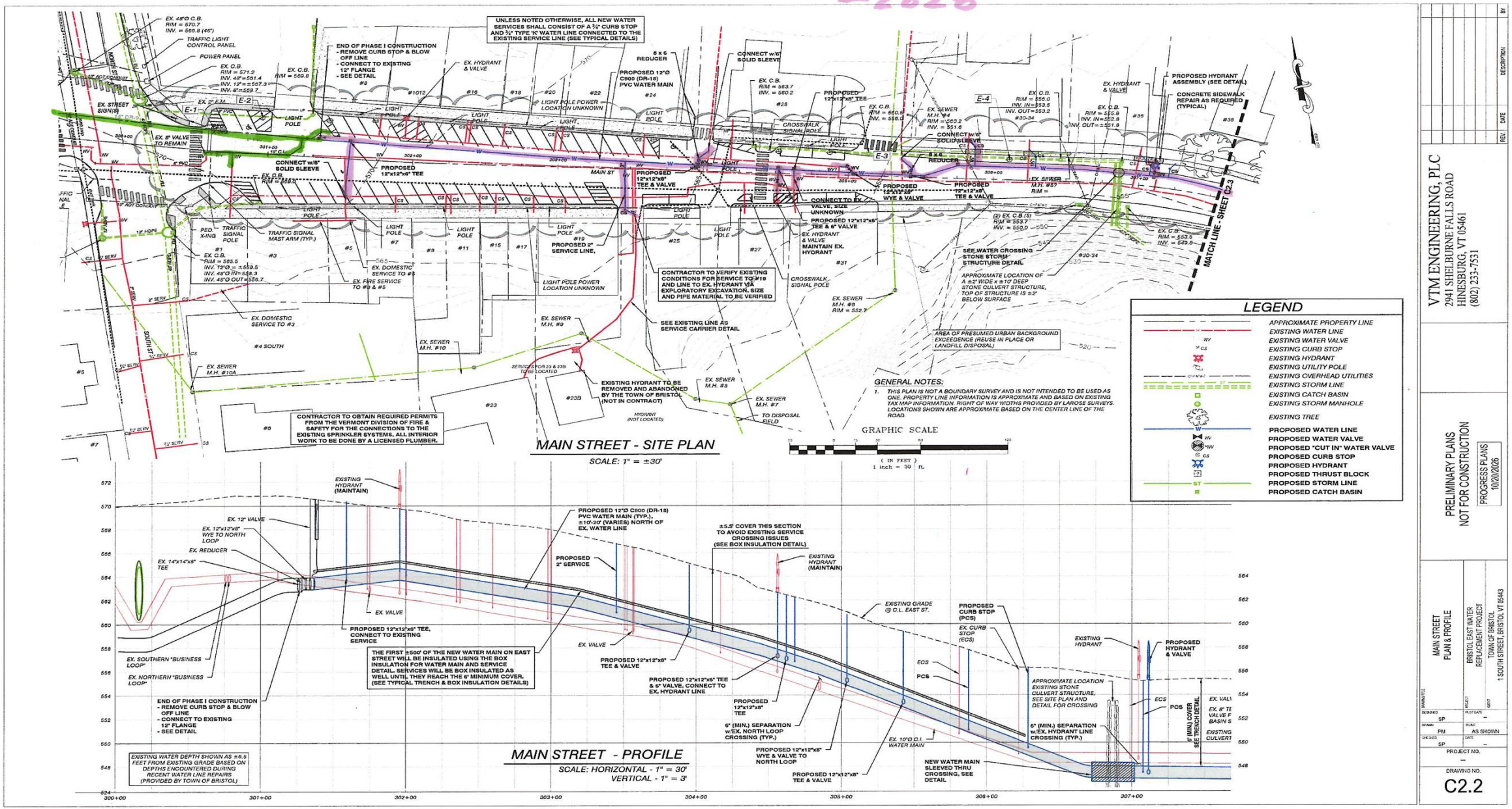
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PRELIMINARY PLANS
NOT FOR CONSTRUCTION
PROGRESS PLANS
10/08/2026

BRISTOL EAST WATER REPLACEMENT
BRISTOL EAST WATER REPLACEMENT PROJECT
TOWN OF BRISTOL
1 SOUTH STREET, BRISTOL, VT 05443

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DATE –
PROJECT NO.
DRAWING NO. C1.0

Phase 3 - Main Street (2028)



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PRELIMINARY PLANS
NOT FOR CONSTRUCTION
PROGRESS PLANS
10/20/2026

MAIN STREET PLAN & PROFILE
BRISTOL EAST WATER REPLACEMENT PROJECT
TOWN OF BRISTOL
1 SOUTH STREET, BRISTOL, VT 05443

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PLOT DATE –
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DATE –

PROJECT NO. –

DRAWING NO. C2.2

Phase 3 - Main Street (2028)



Main Street Looking East

Phase 3 - Main Street (2028)



Phase 3 - Main Street(2028)



Phase 3 - Main Street (2028)



Discussion/Questions?



