



Upper Valley Lake Sunapee Regional Planning Commission

March 29th, 2021

Ms. Victoria Sheehan, Commissioner
New Hampshire Department of Transportation
7 Hazen Drive
Concord, NH 03302-0483

RE: UVLSRPC Regional Project Priorities for 2023-2032 Ten-Year Transportation Improvement Plan

Dear Commissioner Sheehan:

The Upper Valley Lake Sunapee Regional Planning Commission (UVLSRPC) Transportation Advisory Committee (TAC) has completed its solicitation for the 2023-2032 Ten-Year Transportation Improvement Plan (Ten-Year Plan) and has unanimously approved a recommended project list for NHDOT review. Per the Ten-Year Plan process, the TAC:

- 1) Scored projects according to the statewide project evaluation criteria; and
- 2) Developed a fiscally-constrained Ten-Year Plan program based on the NHDOT-identified regional budget target. UVLSRPC's proposed 2023-2032 Ten-Year Plan program of non-programmatic projects is fiscally-constrained to our regional budget target of \$3.77 million for fiscal years 2031 and 2032.

This correspondence details UVLSRPC's proposed Ten-Year Plan program of projects.

Overview of Needs and Strategic Priorities in the UVLSRPC Region

UVLSRPC seeks to advance a program of projects that balances the need for maintenance of the current transportation system with needed improvements in safety, mobility, and access for all users.

The UVLSRPC region continues to be challenged by the small federal aid allocation (\$3.77 million) provided through the Ten-Year Plan process. With these funding limitations, as well as the anticipated year-of-expenditure (2031 or 2032) for new Ten-Year Plan projects and associated inflationary impacts, we are challenged to advance transportation improvement projects of regional significance without local financial match and/or scaling back scopes of needed projects. We remain hopeful that future federal surface transportation funding bills will increase the amount of federal aid available to New Hampshire and that increased federal aid will be available across all planning regions.

Existing Projects in the 2021-2030 Ten-Year Plan

UVLSRPC supports the continued inclusion and timely advancement of all existing Ten-Year Plan projects within the UVLSRPC region, including programmatic projects. It is critical that existing projects remain on-schedule and fully-funded in order to ensure the safety and condition of the regional transportation network.

Project Priorities for Fiscal Year 2031 of the 2023-2032 Ten-Year Plan

UVLSRPC received five project proposals from four communities for consideration as regional priorities for \$3.77 million in federal aid funding through the FY 2023-2032 Ten-Year Plan. After consultation with 1) a scoring committee consisting of TAC members and UVLSRPC staff, and 2) the full UVLSRPC TAC, the top four projects were submitted to NHDOT for review and comment.



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After review by NHDOT and consultation with UVLSRPC, the TAC approved the following regional project rankings:

Priority	Project Location and Description	TAC Score (out of 100)	Project Cost in Year-of-Expenditure	Construction Year
1	Claremont – Main St Phase I. Roadway reconstruction, stormwater improvements, and new multi-use path along NH 103/12/Main St between Citizens St and Westside Ave.	65.4	Federal aid (80%): \$3,267,062 City match (20%): \$816,766 Total: \$4,083,828	2032
2	Claremont – Main St Phase II. Roadway reconstruction, stormwater improvements, streetscape/sidewalk improvements along NH 103/12/Main St between Westside Ave and Elm St.	56.8	Federal aid (80%): \$3,935,216 City match (20%): \$938,304 Total: \$4,919,020	2032
3	Canaan – Intersection/safety improvements along US Route 4 from Potato Rd to Roberts Rd.	43.9	Variable	2032
4	Canaan – Upgrade two dilapidated bridge trestles on the Northern Rail Trail to address poor condition and improve flood resiliency in Canaan Village.	34.7	Variable	2032

Priority #1 - Claremont Main St Phase I

- **Project Synopsis:** This project was originally proposed for the FY 2021-2030 Ten-Year Plan as part of a larger Main St improvement project. The estimated costs for the full project (\$9 million) significantly exceed the UVLSRPC regional federal aid budget for Ten-Year Plan projects. Accordingly, the project area was broken up into two phases – Phase I and Phase II. Phase I is the higher priority for the City of Claremont and the UVLSRPC region.

Phase I proposes to reconstruct NH 12/103/Main St between Citizens St and Westside Ave, including stormwater and drainage improvements and constructing a multi-use path. Poor drainage and frost heaving contribute to maintenance challenges along this stretch of roadway. A City of Claremont Truck Route Plan, aimed at rerouting trucks away from Opera House Square, will lead to increased tractor trailer truck traffic, further stressing the roadway. The location of roadway on top of a steep bank of Sugar River creates additional resiliency challenges as well. There is no sidewalk in the project area currently – construction of a multi-use path will provide a continuous safe pedestrian connection between connection between Beauregard Village/Citizens St, Main Street, and downtown Claremont, and improve bicycle safety along heavily-trafficked section of road.

- **Proposed Construction Year:** The UVLSRPC TAC recommends that this project be constructed in 2032.
- **Fiscal Constraint Assumptions:** This project is estimated to use \$3,267,062 in federal aid (80%) and \$816,766 in local matching funds from the City of Claremont for a total project cost of \$4,083,828.



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Priority #2 - Claremont Main St Phase II

- Project Synopsis: This project would extend the proposed improvements from the Main St Phase I project to address the full scope of needs on Main St. This project would address poor roadway condition and multi-modal safety needs through reconstruction of NH 12/103/Main St from Westside Ave to Elm St, including streetscape and traffic calming improvements and reconstructing sidewalks.
- Proposed Construction Year: The UVLSRPC TAC recommends that this project be constructed in 2032.
- Fiscal Constraint Assumptions: This project is estimated to use \$3,935,216 in federal aid (80%) and \$938,304 in local matching funds from the City of Claremont (20%) for a total project cost of \$4,919,020. The project cost slightly exceeds the \$3.77 million in federal aid available to the UVLSRPC region.

Priority #3 – Canaan: US Route 4/Potato Rd/Roberts Rd Intersection Safety Improvements

- Project Synopsis: The project proposes to improve intersection and roadway safety along US Route 4 at Potato Rd and Roberts Rd in Canaan. In keeping with NHDOT review comments, the UVLSRPC TAC acknowledges that additional study and planning is needed to identify the scope of needs and potential improvements in the project area.
- Proposed Construction Year: Should 1) higher-priority projects not be realized, and 2) a suitable project scope be identified, the UVLSRPC TAC recommends that this project be constructed in 2032.
- Fiscal Constraint Assumptions: The costs for this project would vary depending on the specific scope of needs identified, but is likely to be far below the UVLSRPC regional funding allocation.

Priority #4 – Canaan: Upgrade two bridge trestles on the Northern Rail Trail

- Project Synopsis: This project proposes upgrading two dilapidated bridge trestles on the Northern Rail Trail to improve safety and bridge condition, as well as mitigate flooding in Canaan Village. The bridges would be upgraded to 90-foot spans to comply with NHDES wetlands rules and improve drainage of floodwaters along the Indian River.

NHDOT has previously agreed to contribute \$750,000 in non-Ten-Year Plan funds towards this project. The Town of Canaan is currently working to secure additional funds to complete the funding package. The Town has applied to for inclusion in the Ten-Year Plan as a backup should the envisioned funding package not be secured.

- Proposed Construction Year: Should 1) higher-priority projects not be realized, and 2) the envisioned funding package for this project fall through, the UVLSRPC TAC recommends this project be constructed in 2032.
- Fiscal Constraint Assumptions: The Town of Canaan anticipates this project will cost \$3.3 million; additional study and assessment is needed to estimate costs.



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Recommendation for Funding in FY 2023 – 2032 Ten-Year Plan

UVLSRPC TAC recommends funding regional priority project #1, *Claremont Main St Phase I*, using \$3,267,062 of federal aid (80%) with the remainder of the project costs (20%) being funded by the City of Claremont (see Attachment C for project details).

Next Steps

Per NHDOT guidance, UVLSRPC will submit our scoring/evaluation of each project to the NHDOT Bureau of Planning and Community Assistance and we will provide your staff with supporting documentation for the projects on our proposed Ten-Year Plan program. We look forward to working collaboratively with you and your staff as you work through the process and develop the draft 2023-2032 Ten-Year Plan for consideration by the Governor's Advisory Commission on Intermodal Transportation (GACIT).

Please feel free to contact me at (603) 448-1680 or abelenz@uvlsrpc.org if you have any questions about this correspondence.

Respectfully Submitted,

Alex Belenz
Planner

Cc: Bill Watson, NHDOT Bureau of Planning and Community Assistance
Bill Oldenburg, NHDOT Front Office
Bill Lambert, NHDOT Bureau of Traffic
Pete Stamnas, Director of Project Development
Doug King, NHDOT District II
John Kallfelz, NHDOT District IV
Leigh Levine, FHWA NH Division
Hon. Joseph Kenney, NH Executive Council
Hon. Cinde Warmington, NH Executive Council
NH Representatives in the UVLSRPC Region
NH Senators in the UVLSRPC Region
UVLSRPC TAC Members
UVLSRPC Commissioners

Attachments: Attachment A: Regional Project Scores
Attachment B: NHDOT Project Review Comments & UVLSRPC Response Memo
Attachment C: Claremont Phase I Project Information



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ATTACHMENT A

Regional Project Scores



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Criteria Information			Claremont Main St Phase I		Claremont Main St Phase II		Enfield US 4		Canaan US 4/Roberts Rd		Canaan Rail Trail	
Criteria	Sub-Criteria	Criteria Weight	Raw Score (out of 10)	Weighted Score	Raw Score (out of 10)	Weighted Score	Raw Score (out of 10)	Weighted Score	Raw Score (out of 10)	Weighted Score	Raw Score (out of 10)	Weighted Score
Economic Development	Local & Regional	7%	8	5.6	7	4.9	3	2.1	4	2.8	4	2.8
	Freight Movement	5%	7	3.5	7	3.5	3	1.5	1	0.5	1	0.5
Equity, Environmental Justice, & Accessibility	Equity & Environmental Justice	5%	7	3.5	6	3	1	0.5	1	5	1	0.5
	Accessibility	7%	7	4.9	6	4.2	1	0.7	1	7	2	1.4
Mobility	Mobility Need & Performance	7%	7	4.9	6	4.2	1	0.7	4	2.8	1	0.7
	Mobility Interventions	7%	8	5.6	7	4.9	1	0.7	4	2.8	1	0.7
Natural Hazard Resiliency	Hazard Risk	7%	4	2.8	1	0.7	2	1.4	1	0.7	5	3.5
	Hazard Mitigation	7%	5	3.5	1	0.7	2	1.4	1	0.7	5	3.5
Network Significance	Traffic Volume	4%	7	2.8	7	2.8	8	3.2	6	2.4	1	0.4
	Facility Importance	10%	6	6	6	6	8	8	7	7	3	3
Safety	Safety Performance	9%	4	3.6	4	3.6	1	0.9	5	4.5	3	2.7
	Safety Measures	9%	7	6.3	7	6.3	1	0.9	5	4.5	6	5.4
State of Repair	State of Repair	4%	7	2.8	7	2.8	6	2.4	2	0.8	8	3.2
	Maintenance	4%	8	3.2	7	2.8	3	1.2	2	0.8	2	0.8
Support	n/a	8%	8	6.4	8	6.4	2	1.6	2	1.6	7	5.6
100%			Score out of 100:	65.4	Score out of 100:	56.8	Score out of 100:	27.2	Score out of 100:	43.9	Score out of 100:	34.7



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ATTACHMENT B

NHDOT Project Review Comments & UVLSRPC Response Memo

**NHDOT PROJECT SCOPE AND SCHEDULE REVIEW TASK FORCE
SUMMARY RECOMMENDATIONS FOR PROJECTS PROPOSED BY
UPPER VALLEY LAKE SUNAPEE REGIONAL PLANNING COMMISSION
FOR THE 2023-2032 NH TEN YEAR TRANSPORTATION PLAN**

Initial Priority #1: Main St. Phase I (Claremont)

Project summary: The Main Street (NH12/103) Project Phase 1 (Citizen Street to Westside Avenue) will include full depth reconstruction of road with a new storm water collection system and add a sidewalk and a bike lane on approximately 1500 LF south of the North & Main Street project (NHDOT 13248). Project will address safety issues, the state of good repair, and add transportation options for Claremont.

Review Comments

- We question the need for full depth reconstruction of the roadway. This section appears to be in fairly good condition and shape. Could a lesser (and much expensive) option be considered? Step box widening with an overlay, or step box widening with a reclaim of existing pavement would be a couple of such options.
- We used the scope and cost estimate developed by D&K as our basis for review.
- Pavement price of \$200/ton seems excessive.
- How was the structural base depth determined: 18" gravel, 18" crushed gravel, 6" HBP?
- Estimate from D&K (dated Oct 26, 2020)
- NHDOT review noted what appears to be a 10% management fee for this project for the City. We are not familiar with this approach on these types of projects. Is this intended to be Construction Engineering?
- Sidewalks bike lanes will require a Municipal Agreement to address ongoing maintenance.
- Project will be LPA managed and matched by the City of Claremont.

Review Summary

- The project is recommended to commence with PE in 2027, with ROW planned in 2030 and CON beginning in 2032. The proposed project would use **\$3,267,062** of the regional allocation for the 2023-2032 Ten Year Transportation Plan.
- NHDOT Year-of-Expenditure (YoE) estimates include 2.80%/year to account for inflation
- The project will be funded at 80% federal funds with the remaining 20% (\$816,765) coming from the City as cash match.

Funding

Phase	2021 UVLSRPC Estimate	2021 NHDOT Estimate	YoE
PE	\$ 396,000	\$ 396,000 (2027)	\$ 454,633 (2027)
ROW	\$ 10,000	\$ 10,000 (2030)	\$ 12,472 (2030)
CON	\$ 2,744,000	\$ 2,744,000 (2032)	\$ 3,616,723 (2032)
Totals	\$ 3,150,000	\$ 3,150,000	\$ 4,083,828

Initial Priority #2: Main St. Phase II (Claremont)

Project summary: The Main Street (NH12/103) Project Phase 2 (Westside Avenue to Elm Street) will include full depth reconstruction of road with reconstruction of the existing drainage and sidewalks (both sides) and relocating utility poles for approximately 2500 LF. Ties into Phase 1 project to the north. Project will address safety issues, the state of good repair, and add transportation options for Claremont.

Review Comments

- We question the need for full depth reconstruction of the roadway. This section appears to be in fairly good condition and shape. Could a lesser (and much cheaper) option be considered? Step box widening with an overlay, or step box widening with a reclaim of existing pavement.
- D&K used a pavement structural depth of 18" gravel, 18" crushed gravel and 6" HBP.
- Typically, the Department would use 12" sand (frost protection), 12" gravel, 12" crushed gravel, and 5.5" HBP. How did D&K develop their base course depths??
- Typically, the Department would use 6" crushed gravel and 2" HBP for sidewalk construction, D&K used 8" gravel, 2" crushed gravel for sidewalk, and 2" HBP
- In the City narrative there is mention of water line reconstruction work but D&K doesn't appear to have costs estimated for this work. Is the City going to complete this work independently?
- Pavement price seems excessive. D&K used a price of \$200/ton for pavement. Based on our recent bidding we would believe the HBP price should be closer to \$80/ton.
- Sidewalks bike lanes will require a Municipal Agreement to address ongoing maintenance.
- Project would be an LPA project managed by the City of Claremont.

Review Summary

- The project is recommended to commence with PE in 2027; ROW in 2030 and CON in 2032.
- The proposed project would use **\$3,935,216 (80%)** of the regional allocation for the 2023-2032 Ten Year Transportation Plan.
- Project would be 80% federal funds with the remaining \$983,804 (20%) paid as cash match by the City.
- The Year-of-Expenditure (YoE) values include inflation of 2.80%/year.

Funding

Phase	2021 UVLSRPC Estimate	2021 NHDOT Estimate	YoE
PE	\$ 580,000	\$ 580,000 (2027)	\$ 665,876 (2027)
ROW	\$ 40,000	\$ 40,000 (2030)	\$ 49,889 (2030)
CON	\$ 3,189,000	\$ 3,189,000(2032)	\$ 4,203,254(2032)
Totals	\$ 3,809,000	\$ 3,809,000	\$ 4,919,020

Initial Priority #3: Intersection improvements to US4/Roberts Rd./Potato Rd. intersection (Canaan)

Project summary: The proposed project would widen Rt 4 in this area to allow: 1) Center turn lane on Rt4 East bound serving Roberts Rd and Rt 4 West bound serving Potato Rd 2) Deceleration lane on Rt 4 Eastbound to Potato Rd and acceleration lane from Roberts Rd to Rt 4 East Bound. 3) Deceleration lane on Rt4 West bound to Roberts Rd and acceleration lane from Roberts Rd to Rt 4 West bound.

Review Comments

- As with the 2021-2030 TYP round, we are still unclear as to what the underlying issue to be resolved is – traffic volume and crash history does not seem to support an improvement at this location.
- Intersecting roads are only 400' apart making the left turn lane problematic.
- We did not note any cost estimate or proposed breakdown in PE, ROW and CON.
- Adding right turn lane in offset intersection configuration like this makes for a head-on crash scenario.
- Offset right turn lanes to keep sight distance open may be needed. This will make for a very large very wide intersection which will cause more issues.

Review Summary

- Values presented below represent the project commencing with PE in 2027; ROW in 2030 and CON in 2032.
- The Year-of-Expenditure (YoE) values include inflation of 2.80%/year and 10% for indirect costs.
- The project would utilize **\$ 988,408** of 2023-2032 Ten Year Transportation Plan funding allocation.

Funding

Phase	2021 UVLSRPC Estimate	2021 NHDOT Estimate	YoE
PE	\$	\$ 100,000 (2027)	\$ 126,287 (2027)
ROW	\$	\$ 100,000(2030)	\$ 137,195(2030)
CON	\$	\$ 500,000(2032)	\$ 724,926 (2032)
Totals	\$	\$ 700,000	\$ 988,408

Initial Priority #4: Rail Trail bridges (Canaan)

Project summary: Replacement of 2 trestle bridges on the existing rail trail system. Both bridges are over the Indian River.

Review Comments

- NHDOT has agreed to participate in \$750,000 of funding but not through the TYP, so we're unclear what this project is requesting. There is no estimate information and no project total information.
- We were unable to develop project costs for Ten Year Plan purposes based on the materials submitted.

Funding

Phase	2021 UVLSRPC Estimate	2021 NHDOT Estimate	YoE
PE	\$	\$ (2027)	\$ (2027)
ROW	\$	\$ (2030)	\$ (2030)
CON	\$	\$ (2032)	\$ (2032)
Total	\$	\$	\$



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Date: March 15th, 2021

Re: NHDOT Project Review Task Force Comments on City of Claremont Main Street Phase I & II Proposals for the FY 2023 - 2032 Ten-Year Plan

NHDOT comment: *We question the need for full depth reconstruction of the roadway. This section appears to be in fairly good condition and shape. Could a lesser (and much expensive) option be considered? Step box widening with an overlay, or step box widening with a reclaim of existing pavement would be a couple of such options.*

➔ **UVLSRPC response:** Full-depth reconstruction of this section of Main Street is proposed by the City of Claremont in response to several issues:

- The roadway suffers significant structural damage every winter due to frost heaving, high water table, aging road base, and poor underdrainage. As such it is a constant maintenance challenge and cost for the City.
- This section of Main Street is anticipated to see increased truck traffic as part of the City's plan to reroute trucks away from Opera House Square. The truck route plan is based upon a 2009 Truck Route Study conducted by UVLSRPC in partnership with the City and NHDOT. Approval of the final truck route is currently pending at the NHDOT Bureau of Traffic. Increased truck traffic will further stress the already-degraded road surface and base materials.
- The roadway is located directly on top of a steep bank of the Sugar River. The City has previously added 50 feet of fill to this bank to restore it due to silt and water seeping up from the under the roadway. Reconstruction will allow for a more resilient and environmentally-friendly roadway design.
- While not the primary purpose of the project, reconstruction of the roadway will allow the City to phase in a needed water line replacement along this section of Main Street.
- The reconstruction of this section of Main Street is identified as a priority project in the City's Master Plan.

NHDOT comment: *Pavement price of \$200/ton seems excessive.*

➔ **UVLSRPC response:** Initial unit cost estimation was performed using 2019 NHDOT Weighted Average Unit Prices. Referencing the 2020 prices, the unit cost should be revised to \$100/ton in an updated OPCC.

NHDOT comment: *[Dubois & King] used a pavement structural depth of 18" gravel, 18" crushed gravel and 6" HBP. Typically, the Department would use 12" sand (frost protection), 12" gravel, 12" crushed gravel, and 5.5" HBP. How did D&K develop their base course depths?*



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➔ **UVLSRPC response:** As this was a very conceptual level cost estimate, in preparing the OPCC, Dubois & King used structural depths that are typically used in their construction projects in the region. This included a 2.5" base course, 2.5" binder, and 1" wearing course. The OPCC should be revised to reflect 5.5" HBP. The other changes to the subbase materials should be considered during preliminary engineering but should not meaningfully affect this conceptual OPCC.

NHDOT comment: *Typically, the Department would use 6" crushed gravel and 2" HBP for sidewalk construction, D&K used 8" gravel, 2" crushed gravel for sidewalk, and 2" HBP.*

➔ **UVLSRPC response:** The OPCC should be updated to reflect 6" crushed gravel for sidewalk construction.

NHDOT comment: *NHDOT review noted what appears to be a 10% management fee for this project for the City. We are not familiar with this approach on these types of projects. Is this intended to be Construction Engineering?*

➔ **UVLSRPC response:** This was included in error and should be removed from the OPCC.

NHDOT comment: *In the City narrative there is mention of water line reconstruction work but D&K doesn't appear to have costs estimated for this work. Is the City going to complete this work independently?*

➔ **UVLSRPC response:** Yes, this would be a separate project and cost that would be phased into reconstruction of the roadway.



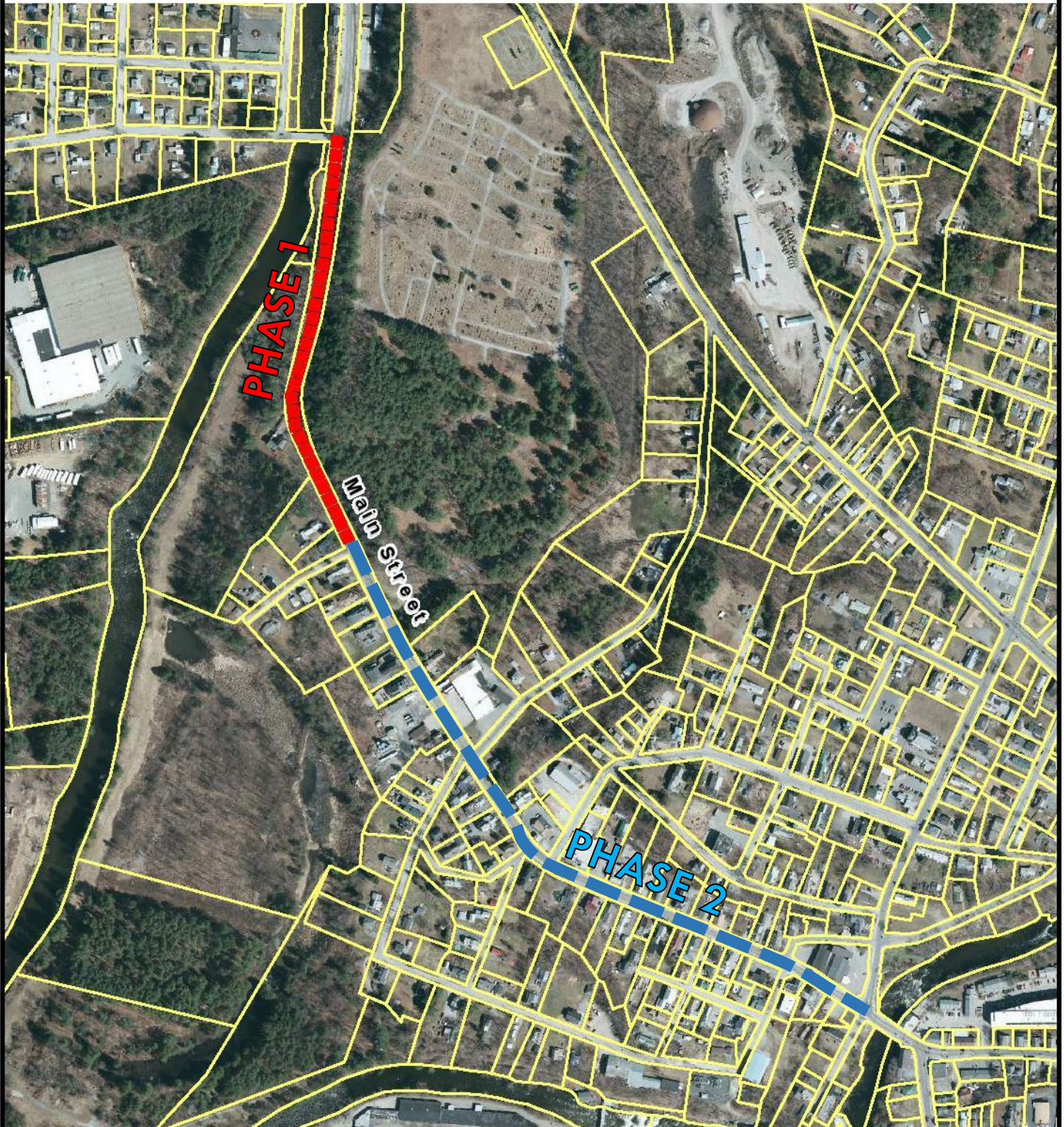
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ATTACHMENT C

Claremont Main Street Phase I Project Information

Main Street Project, Segment II

0 150 300 600
Feet



Data shown on this map is provided for planning and informational purposes only. The City of Claremont is not responsible for any use for other purposes or misuse or misrepresentation of this map.

Transportation Project Proposal Form

Contact Information

Full Name Tom Krebs Municipality City of Claremont
Email tkrebs@claremontnh.com Affiliation _____
Phone Number 603-504-0349 Title/Position Project Manager

Transportation Project Information

Name/Title of Project Main Street Connectivity Improvement Project, Phase I

Please select the project type(s):

- | | |
|--|---|
| <input checked="" type="checkbox"/> Highway Improvements (operational improvements, access management, intelligent transportation systems, widening, technology operation improvements) | <input type="checkbox"/> Planning Studies (road diets, corridor studies, network studies, pedestrian/cyclist safety studies) |
| <input type="checkbox"/> Asset Management (bridge rehabilitation, bridge replacement, pavement repair/replacement) | <input type="checkbox"/> Infrastructure-related Travel Demand Management (park & ride lots, transit or HOV lanes, priority signalization, bus shelters, intermodal transportation centers) |
| <input checked="" type="checkbox"/> Bicycle and Pedestrian Improvements (sidewalks, bike trails, multi-use paths, traffic calming improvements) | |

Where is this project located? *(road names, nearby facilities/landmarks)*

Main Street, Claremont, NH between Citizen Street and Westside Avenue

What is the scale of this project? *(please provide approximate measurements in feet; you can use Google Maps measuring tool to estimate distances)*

1,500 Linear Feet

Purpose, Need, and Scope

Please provide the Purpose Statement for this project.

See attached statement.

Please provide the Need Statement for this project.

See attached Need Statement.

Please outline the project scope.

See attached Scope of Work.

Please provide any additional information about this project. *(local knowledge/insight, relevant studies/data, infrastructure needs, etc.)*

Supplementary Information

Please note that these questions are not required to make an initial submission. If you are not able to provide answers to some or all of these questions at this time, please leave the question(s) blank and [RPC name] staff will reach out to provide assistance.

How involved has the public been in this project proposal so far?

(please make note of any dates, agenda items, minutes from public meetings, and decisions influenced by public involvement)

This project was included as a priority in the 2017 City of Claremont Master Plan. Over 100 public subcommittee meetings and over 230 surveys were conducted during the Master Plan process. Excerpts from the Master Plan identifying the reconstruction of Main Street as a priority is included in with this application.

Are there opportunities for further public discussion of this project in the near future?

Once a design engineering firm has been selected, the City of Claremont will host an initial local concerns meeting to gather input from residents. In addition, once the preliminary design is near completion, a preferred alternative will be presented to the public for comment.

Will the project be managed locally?

Yes, this project will be managed locally. The City of Claremont, Planning and Development has Local Public Agency (LPA) certified staff that will manage the project from the engineering study, through the construction phase. Following the LPA process provides the benefits of ensuring that the project meets local needs, is within budget, and on schedule.

What alternative options or methods have been considered to address this need and what makes this project proposal the best option?

Please provide evidence supporting this project, including letters of support.

(review list of documents, letters of support, data sources, plans, guidance, maps, etc. that will serve as sources of information to bolster the application; please note what and where you are referencing from)

Please refer to the following attachments:

1. Project Map identifying the phases of the project.
2. Project scope and cost estimate summary.
3. Map identifying areas of erosion that will be addressed in this project.
4. Map identifying Floodway, Floodplain, and Streambank along Main Street
5. Map identifying the project area the percentage of residents lacking vehicle access.

Submission

Please return this form to Alex Belenz, UVLSRPC, at abelenz@uvlsrpc.org. Please attach any relevant documents, maps, cost estimates, and data to this project along with the form that you have:



Local Plans/Master Plans



Maps



Bike/Pedestrian Surveys



Cost Estimate



Transit Operator Data



Project Scope



Local Police Crash Data



Development Studies



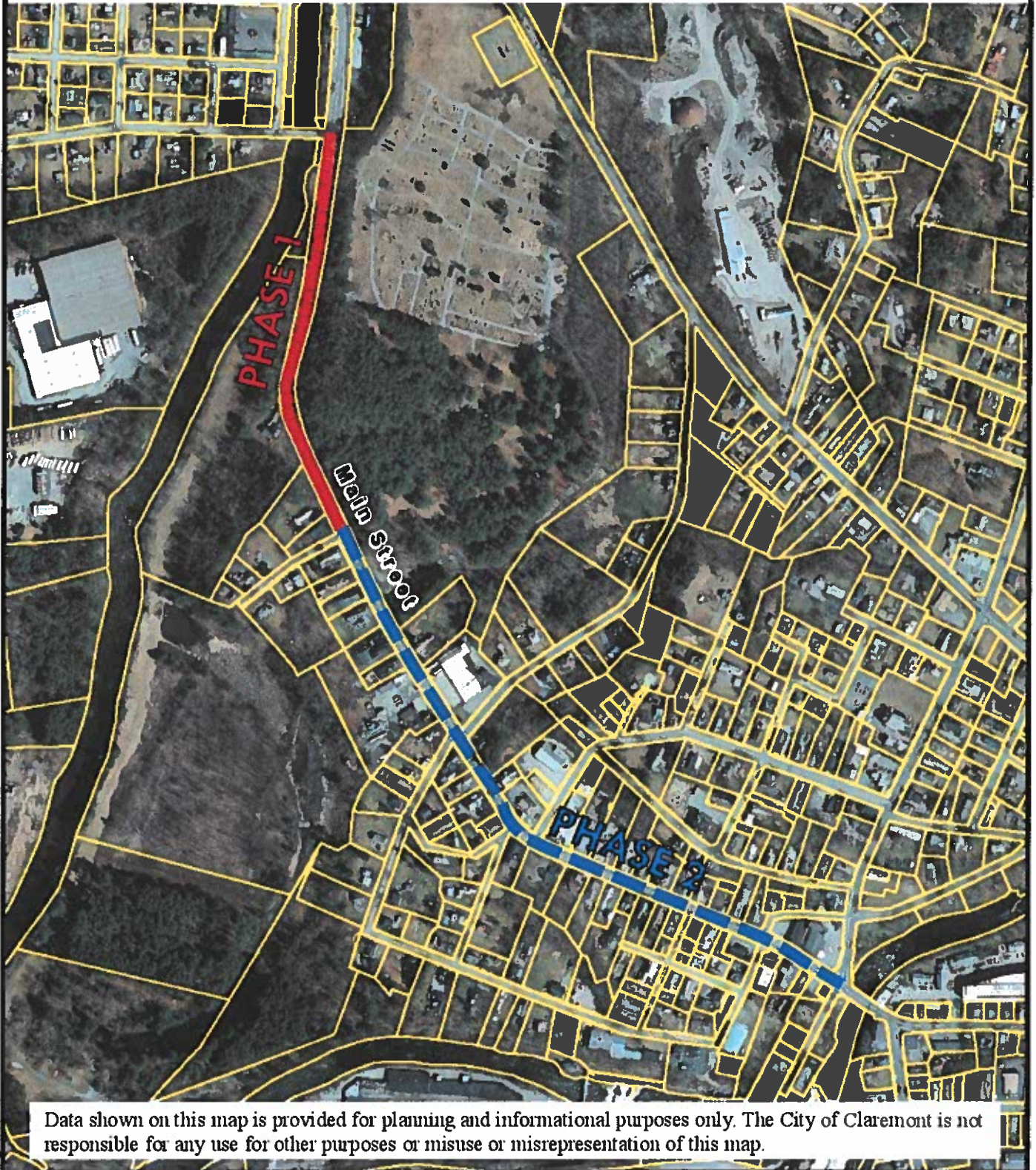
Conceptual Designs

(Pending)



Main Street Project

0 150 300 600
Feet



Main Street Project Phase 1, Claremont, NH

Purpose Statement

The Main Street Project Phase 1 will include full depth reconstruction of road with a new storm water collection system and add a sidewalk and bike lane on approximately 1500 linear feet south of the North & Main Street project (NHDOT 13248). This project will address safety issues, the state of good repair, and add transportation options for Claremont.

Need Statement

Main Street is a state-numbered highway (NH-12/NH-103) that connects Claremont and points east and south to Interstate Highway 91 in Vermont. This roadway currently serves approximately 6,000 vehicles a day. Main Street is one of the four arterial routes for trucks moving along regional transportation networks and truck traffic will increase with a potential truck route designation under consideration.

Main Street is subjected to significant structural damage every winter and during high-precipitation events in other seasons. In addition, the road runs along the Sugar River, and critical improvements to the bank are needed to halt erosion and protect the waterway.

The condition of the existing infrastructure in the project area is poor. Underlying base gravels have deteriorated and are consistent with the age at which they were initially installed. A Truck Route Plan conducted in August 2009 by the Upper Valley Lake Sunapee Regional Planning Commission identified deteriorating pavement and narrow shoulders on Main St as traffic circulation issues. The surface is uneven with varying degrees of cracking and potholing. Lanes and shoulder widths vary and are not well defined.

There is currently no sidewalk from Citizens Bridge to Westside Road despite the existence of residential neighborhoods. The area from the Citizen Street bridge traveling in towards town is also a concern as it has a large amount of pedestrian/bicycle traffic which does not have any breakdown lane or assigned pedestrian or bicycle lane/walkway. This census block of Claremont in the NH DHHS Housing & Transportation Vulnerability map, shows 9.3 – 37.5% with no vehicle access.

Public safety has responded to 28 accidents in this area and it appears that it is progressively becoming more of an issue.

Scope

The Main Street Phase 1 roadway is in need of reconstruction. Installation of a drainage culvert and potential incorporation of green stormwater infrastructure to mitigate runoff into the river are contemplated in the project.

There are two options under consideration for sidewalk and bicycle lane, depending on project engineering:

Option 1 uses existing rail ROW on the north/east side of the road. This option would require crossing at Citizens St and crossing near Westside Road. Terrain on the north/east side of the road (stream crossing) makes extending sidewalk to existing sidewalk at Cemetery Road challenging, but could be achieved as part of full reconstruction.

Option 2 would construct the sidewalk along the south/west side of road using space made available by moving the road away from the river. It would require drainage systems to be installed, but eliminates the need for pedestrian crossings.

One of the goals of this project is to create safer conditions for motorists and for alternative transportation by taking measures to actively reduce speed on Main Street, including changing road geometry to reduce width and using full matrix radar driver-feedback signs. All shoulder widths in the project area will be built to accommodate bicyclists.

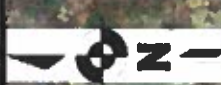
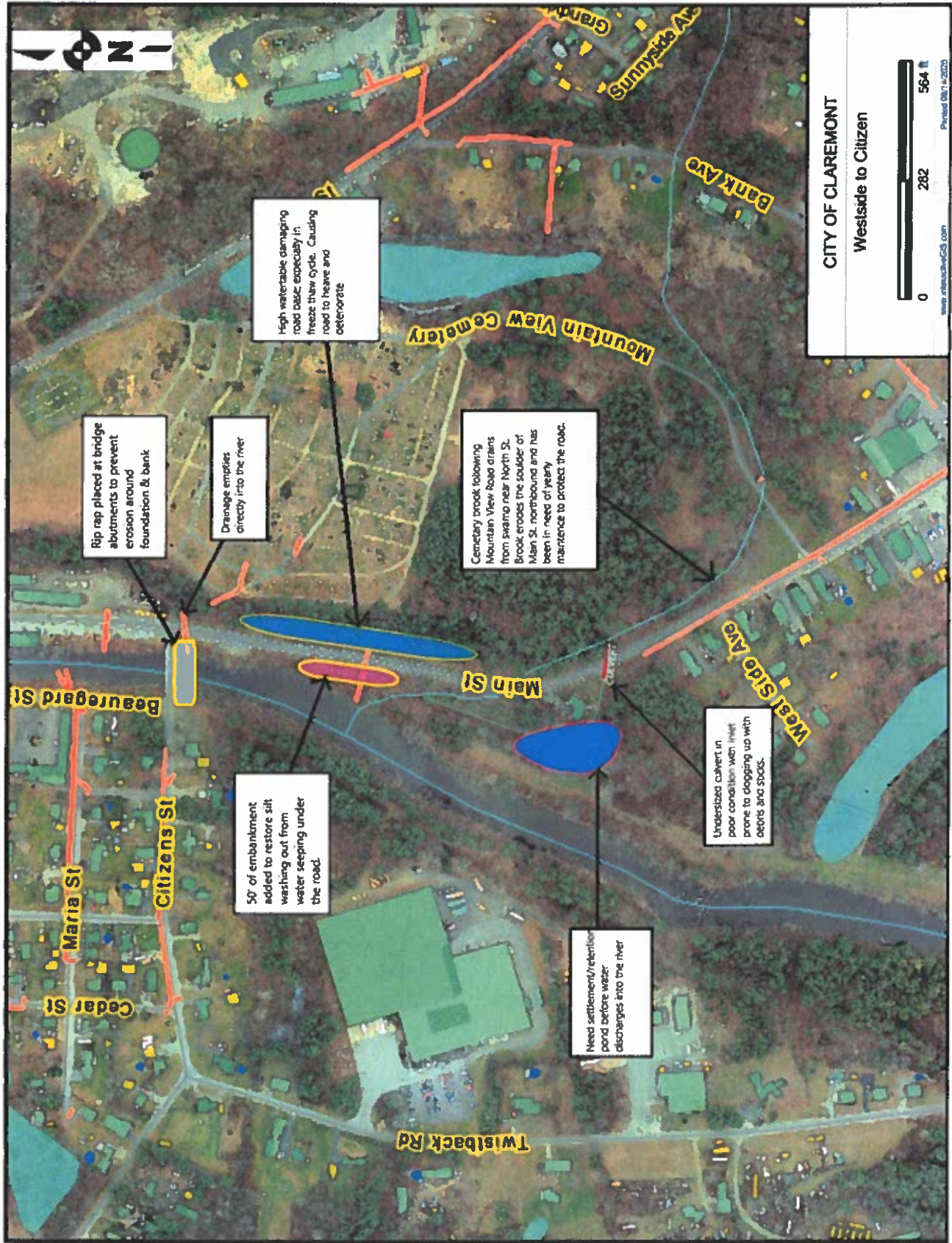
Please see attached stream bank map, Project Scope and Estimate Stream bank map, erosion & drainage notes.

Main St Project - Phase 1
Scope and Estimate
8/14/2020

Phase	Length	Description and Scope
1	1,500	<p>Citizen Street to Westside Avenue</p> <p>Full depth reconstruction with new storm water, water line, and landscaping. Build two 11' travel lanes with 4 ft shoulders. Install granite curb , grass panels and 5 ft sidewalk. Install guardrails and fill slope.</p>

Cost				Permitting/ Review Process Initiated
	Expended to Date		Total	
	Engineering	\$ 356,481	\$ 356,481	
	ROW	\$ 69,444	\$ 69,444	
	Construction Eng	\$ 291,667	\$ 291,667	
	Construction	\$ 1,768,003	\$ 1,768,003	
Total		\$ 2,485,595	\$ 2,485,595	

1500/4050



Beauregard St

Maria St

Cedar St

Citizens St

Twilback Rd

Main St

West Side Ave

Bank Ave

Sunnyside Ave

Mountain View Cemetery

Rip rap placed at bridge abutments to prevent erosion around foundation & bank

Drainage empties directly into the river

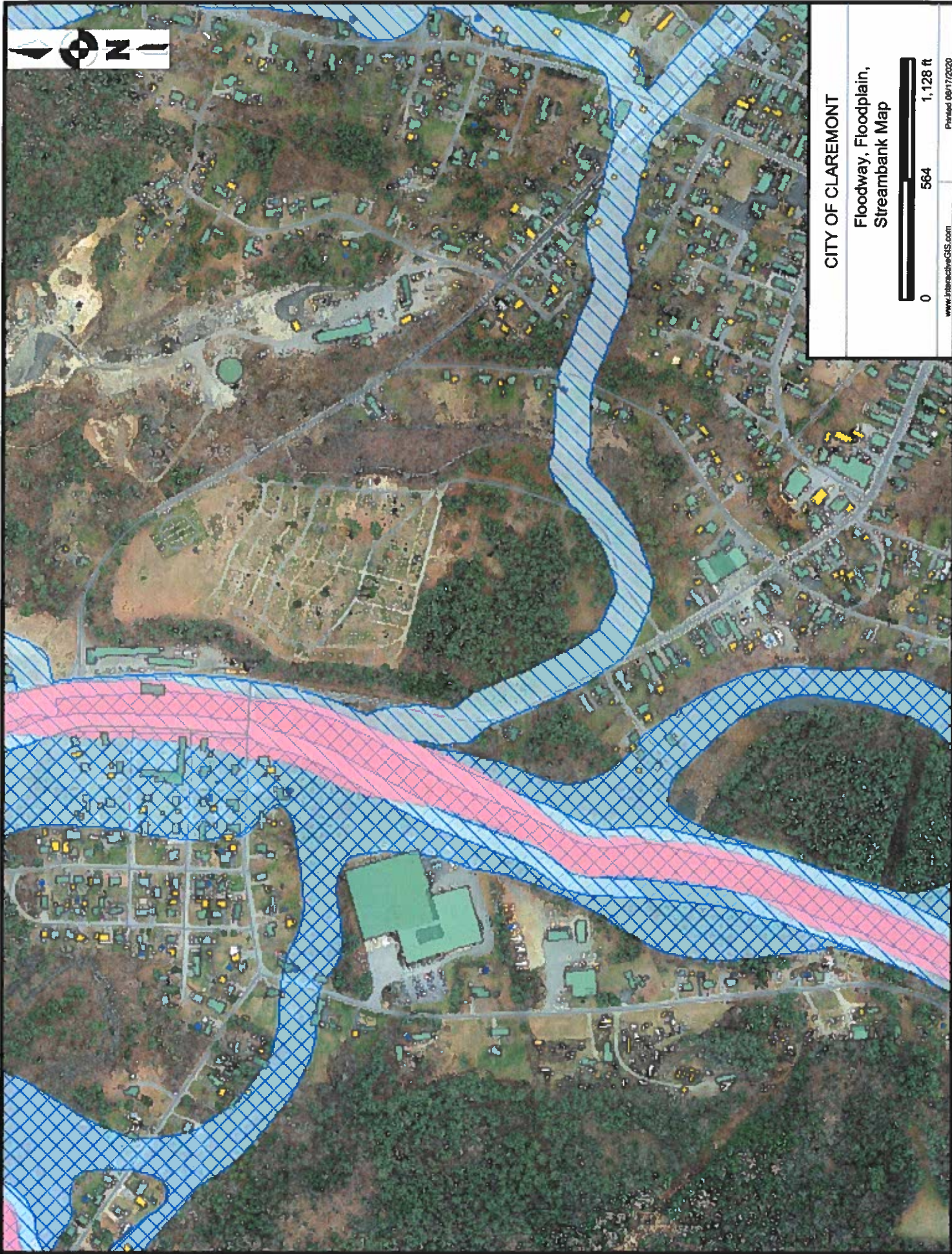
50' of embankment added to restore silt washing out from water seeping under the road

High water table damaging road base especially in freeze thaw cycle. Causing road to heave and deteriorate

Cemetery brook following Mountain View Road drains from swale near North St. Brook erodes the shoulder of Main St. northbound and has been in need of yearly maintenance to protect the road.

Need settlement/retention pond before water discharges into the river

Undersized culvert in poor condition with inlet prone to clogging up with debris and sticks



CITY OF CLAREMONT

**Floodway, Floodplain,
Streambank Map**



Main Street Project, Phases 1 & 2

Master Plan

The Transportation Chapter of the Master Plan recommends reconstruction of Main Street from Elm Street to Citizen Street utilizing Complete Streets design.

The Public Health Chapter of the Master Plan supports active living, with action items to connect pedestrian pathways from neighborhoods to the downtown area.

The Parks & Recreation Chapter of the Master Plan promotes health and wellness including making Claremont a pedestrian and bicycle friendly community with the maintenance, improvement and creation of biking and walking infrastructure.

The Land Use Chapter objective on enhancing existing City neighborhoods and downtown districts recommends adoption of policies to prioritize infrastructure improvements, including sidewalks, streets and underground utilities.

Over 100 public subcommittee meetings and over 230 surveys were conducted during the Master Plan process.

TRANSPORTATION (CONTINUED)	LAND USE	COMMUNITY FACILITIES	ECONOMIC DEVELOPMENT	ENERGY	HISTORIC RESOURCES	HOUSING	NATURAL RESOURCES	PARKS & RECREATION	PUBLIC HEALTH	TRANSPORTATION	PERFORMANCE MEASURE
14. Review standards for roads in ordinances to ensure they are appropriate.											<ul style="list-style-type: none"> • Policy audit • Policy amendment(s) • Regulatory audit • Regulatory amendment(s)
15. Implement a maintenance program to bring city road signs in conformance with the Manual of Uniform Traffic Control Devices.											<ul style="list-style-type: none"> • Sign maintenance plan • CIP projects planned • Project(s) complete
16. Work with the NHDOT preventative maintenance program for bridges.											<ul style="list-style-type: none"> • Bridges identified • Bridge maintenance complete
17. Pursue the reconstruction of Main Street from Elm Street to Citizen Street utilizing Complete Streets design.											<ul style="list-style-type: none"> • Project design development • CIP projects planned
Goal 9: Apply for grants that support this chapter.											<ul style="list-style-type: none"> • Grants and other funding sources identified

Housing & Transportation Vulnerability

New Hampshire Department of Health and Human Services

Multi-Unit Group Quarters

Crowding

No Vehicle

Mobile Homes

Tour Guide

New Hampshire Health WISDOM



No Vehicle Access

This page shows the percentage of a tract's housing units that do not have access to a vehicle.

Links to Associated Measures

[Demographics](#)

[Social Vulnerability Overview](#)

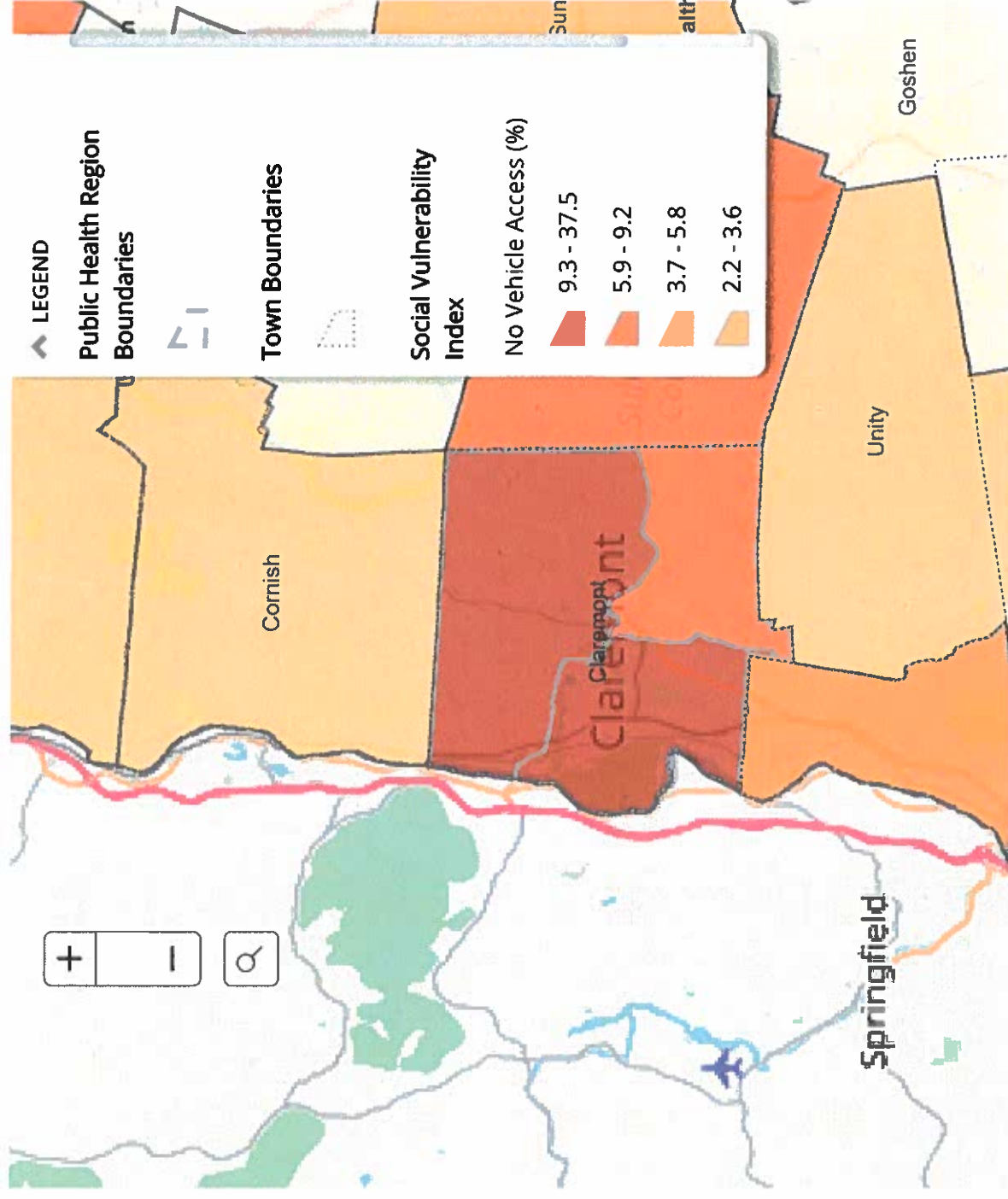
[Socioeconomic](#)

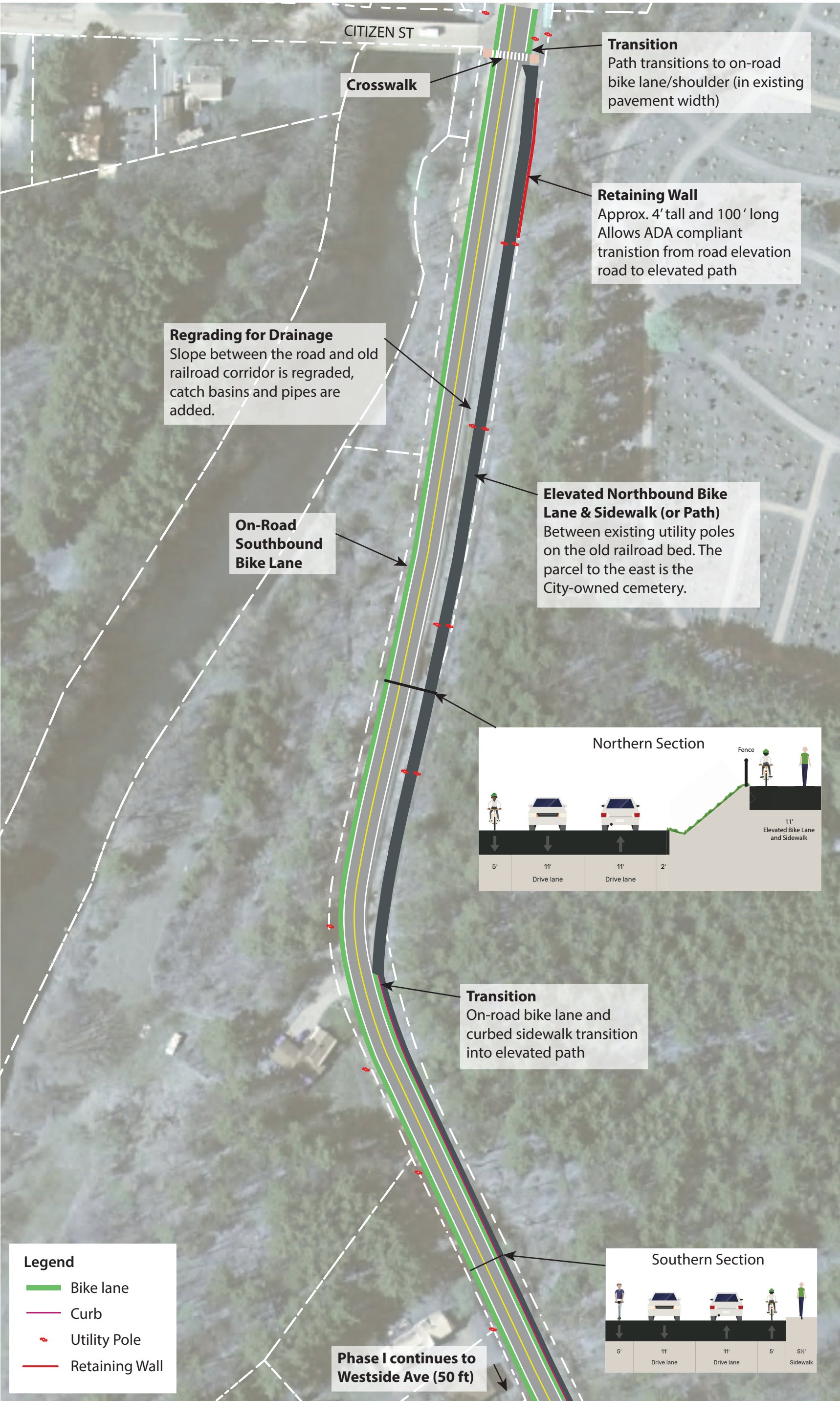
Using This Tool

Legend: The legend is in a drop-down located on the right-hand side. Clicking the arrow will activate the legend's drop-down window.

The values **ALWAYS** trend from light to dark with the darkest hue representing the highest value. A high value (darker hue) can reflect a positive or negative impact on vulnerability depending on the measure.

Summary Data: Clicking on a census tract activates a pop-up window with summary

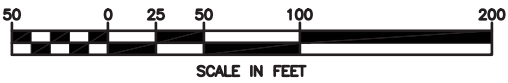


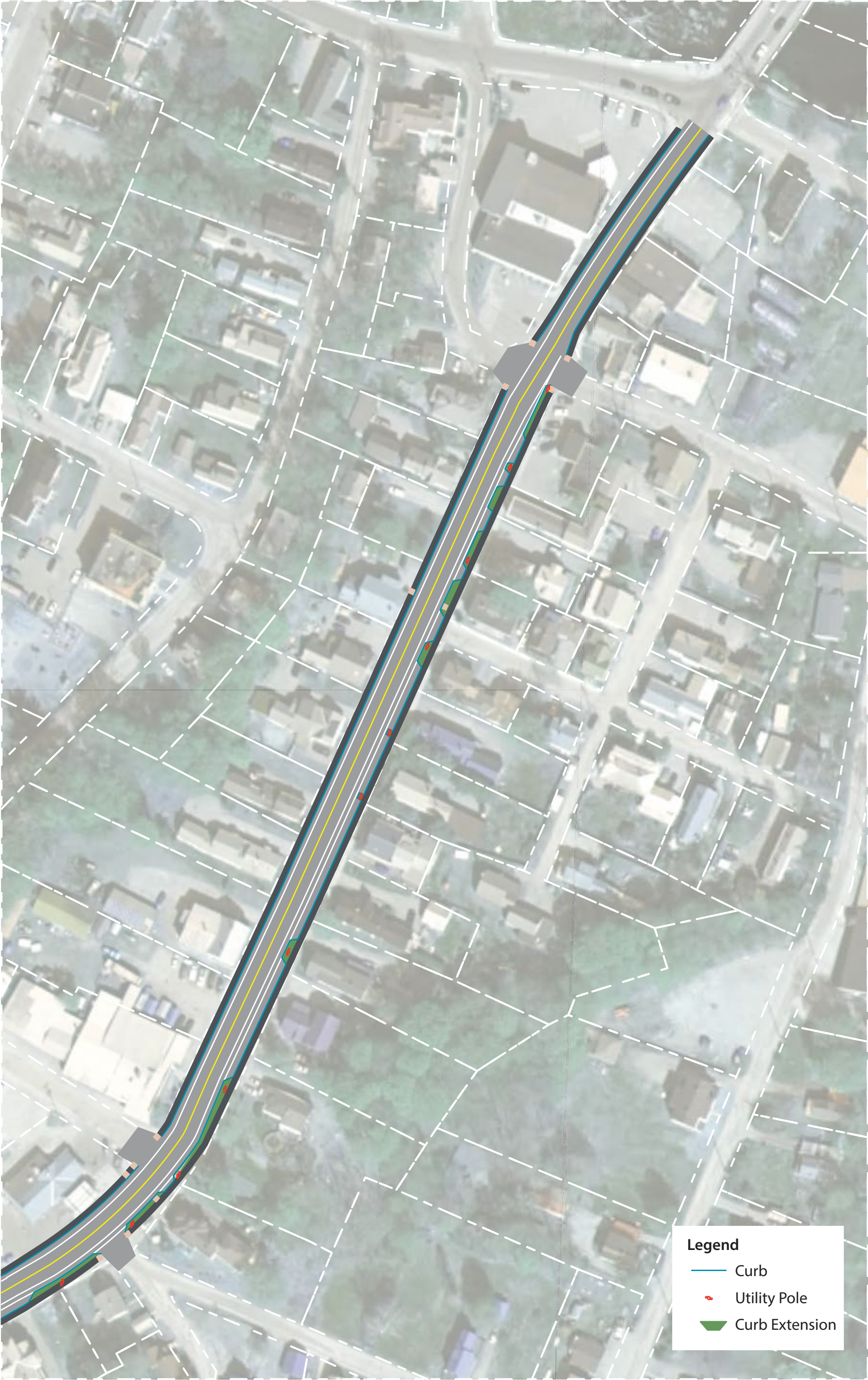


Main Street Phase I
Claremont, New Hampshire

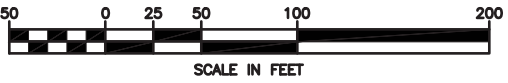


Main Street Phase II (a)
Claremont, New Hampshire





Main Street Phase II (b)
Claremont, New Hampshire





November 2, 2020

To: Alex Belenz, UVLSRPC

From: Julia Ursaki, EI, Brian Breslend, PE and Chris Sargent, AICP

Re: **Main Street Phase I and Phase II Opinion of Probable Construction Cost, Claremont, NH**

The UVLSRPC is supporting the Town of Claremont by providing conceptual cost estimates for two projects along Main Street to inform the Ten Year Plan for the region. DuBois & King prepared this opinion of probable construction cost (OPCC) for both Phase I and Phase II of rebuilding segments of Main Street as a complete street. The project areas are shown in Attachment A. Based on input from the UVLSRPC, the OPCC is provided in 2020 dollars and 2030 dollars using an inflation rate of 2.8%.

Table 1. OPCC Summary

Project	OPCC	
	2020 dollars	2030 dollars
Main Street Phase I	\$3,150,000	\$4,200,000
Main Street Phase II	\$4,149,000	\$5,469,000

Main Street Phase I: Citizen Street to Westside Ave

Phase I of the project includes full depth road reconstruction with a southbound bike lane and an elevated northbound bike lane and sidewalk in the old rail corridor adjacent to the road. The OPCC for Phase I is **\$3,150,000 in 2020 dollars** and **\$4,200,000 in 2030 dollars**. Site-specific design assumptions are summarized below, and a summary of the OPCC is included in Attachment B.

Big Ticket Items

“Big ticket” items are construction items that have a high cost – generally, over \$100,000. They are explained below (refer to Attachment B).

- Common Excavation – this quantity and cost is high since the project includes full-depth reconstruction of the road and some significant regrading for drainage. This item includes removing the existing surfaces (pavement) as well as the existing subbase and disposing of the materials. It also includes excavation for the elevated bike lane and sidewalk, as well as regrading between the road and old rail corridor and to the east of the rail corridor for drainage.

- Common Structure Excavation – this quantity accounts for excavation to install catch basins and piping for drainage between the road and rail corridor.
- Hot Bituminous Pavement, Machine Method – We assumed the road would be rebuilt with a 2.5 inch base course, 2.5 inch binder, and 1 inch wearing course, for a total of 6 inches of pavement.
- Maintenance of Traffic and Flaggers – we anticipate that construction would take approximately 24 weeks. Traffic control during construction may be relatively complex, with potential detour routes while also needing to maintain access for local traffic.
- Mobilization – included as 10% of the cost of construction items.
- Slope Stabilization – an expense is included for slope stabilization for 100 linear feet on the riverbank between the road and Sugar River. While most of the bank looks undisturbed (evidenced by the presence of mature trees on the slope), some areas have less vegetation and could be more vulnerable to washing out. We assume those areas would be armored with stone. This expense includes items like Clearing and Grubbing, Unclassified Channel Excavation, Stone Fill Class D, building an access road, Cofferdam, Erosion Prevention and Sediment Control (EPSC) measures.
- Retaining Wall – an expense is included for a 4 foot tall and 100 foot long retaining wall at the northern end of the project. We assume this would be required to meet ADA grading requirements as the sidewalk changes from the road elevation at the crossing of Citizen Street to the elevation of the old rail corridor. On the south end of the project area, the slope is much gentler so we assume a retaining wall would not be required.

Other Design Assumptions

The corridor, between Citizen Street and Westside Ave, is approximately 1500 feet long. We assume the northern 1000 feet of the road would have a cross section including one 5 foot bike lane, two 11 foot travel lanes, and one 2 foot shoulder. Parallel but separate from the road on the old rail corridor, there would be an elevation bike lane and sidewalk, 10 feet wide in total.

The southern 500 feet of the corridor would include a transition from the elevated bike lane and sidewalk to a cross section that includes two 5 foot bike lanes, two 11 foot travel lanes, and a 5 foot bituminous sidewalk with granite curbing.

Main Street Phase II: Westside Ave to Elm Street

Phase II of the project includes full depth road reconstruction with bike lanes and a parking lane, removing and reconstructing the sidewalk, building curb extensions, reconstructing drainage, and relocating utility poles. Because the project includes over an acre of impervious area and will be federally funded, it also includes stormwater treatment. The OPCC for Phase II is **\$4,149,000 in 2020 dollars** and **\$5,469,000 in 2030 dollars**. Site-specific design assumptions are summarized below, and a summary of the OPCC is included in Attachment C.

Big Ticket Items

“Big ticket” items are construction items that have a high cost – generally, over \$100,000. They are explained below (refer to Attachment C).

- Common Excavation – this quantity and cost is high since the project includes full-depth reconstruction of the road. It includes removing the existing surfaces (pavement and sidewalk) as well as the existing subbase, and disposing of the materials.
- Gravel and Crushed Stone (fine gradation) – these items make up the subbase of the reconstructed road and sidewalk. We assumed the road would be rebuilt with a subbase of 18 inches of gravel and 18 inches of crushed stone, and that the sidewalk would have a subbase of 8 inches of gravel and 2 inches of crushed stone.
- Hot Bituminous Pavement, Machine Method and Hand Method – We assumed the road would be rebuilt with a 2.5 inch base course, 2.5 inch binder, and 1 inch wearing course, for a total of 6 inches of pavement. There is an additional quantity included for side streets and driveway aprons.
- Maintenance of Traffic and Flaggers – we anticipate that construction would take approximately 30 weeks. Traffic control during construction may be relatively complex, with potential detour routes while also needing to maintain access for local traffic.
- Mobilization – included as 10% of the cost of construction items.
- Alternations and additions as needed – drainage adjustments – several of the existing catch basins are not at the curb line. Because the corridor is relatively flat, we assume the road would be crowned and catch basins would be moved to the curb line. We assume existing catch basins would be capped as drainage manholes and adjusted to the new pavement surface elevation.
- Stormwater treatment – this project has over an acre of impervious area. Since it will be funded using state or federal dollars, stormwater will need to be treated.

Other Design Assumptions

Typical Section

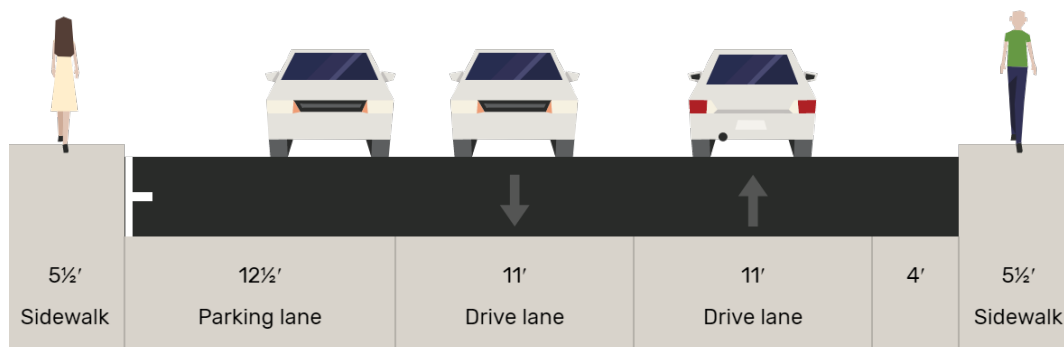


Figure 1. Main Street Phase II existing road configuration

The current configuration of the road is shown in Figure 1. The right-of-way is 3 rods or 49.5 feet, and pavement width is 38.5 feet. The sidewalks are both 5 feet wide, the additional ½ foot shown in the section accounts for the 6 inch curb.

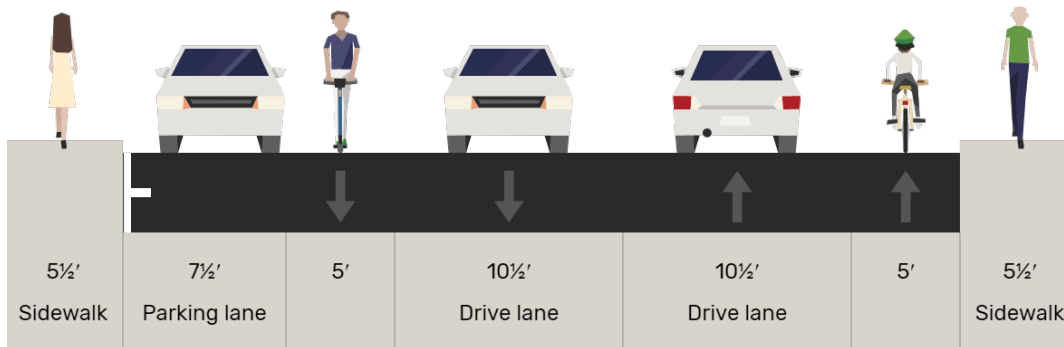


Figure 2. Main Street Phase II proposed road configuration

Figure 2 shows a proposed typical configuration for Main Street Phase II, that fits travel lanes, parking, bike lanes, and sidewalk in the existing 3 rod right-of-way. The sidewalks are both 5 feet wide, the additional ½ foot shown in the section accounts for the 6 inch curb. The pavement width is still 38.5 feet wide; however, the widths of the parking lane, bike lanes, and travel lanes are minimal. Therefore, we propose that the parking lane is dropped at curves along the road to make room for wider travel lanes so that trucks don't encroach on the bike lane.

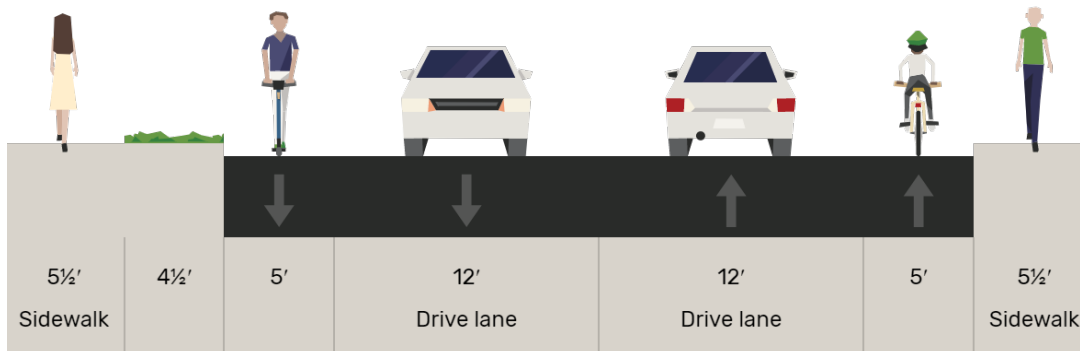


Figure 3. Main Street Phase II proposed road configuration at curves

Dropping the parking lane at areas along the road with curves also makes room for a small green strip between the sidewalk and bike lane.

Overhead Utilities

There is no room for utility poles outside of the sidewalk within the existing right-of-way. Except for at curves, there is also no green strip available for utility poles. Therefore, we recommend putting the utility poles in small curb extensions (approximately 5 feet by 5 feet) in the parking lane to provide a

small buffer between traffic and the utility poles. These small curb extensions could be mulched for ease of maintenance, like in the example below from Enosburg Falls, Vermont.



Figure 4. Small curb extensions for utility poles in Enosburg Falls, VT. Image from Google Maps

Streetscape Improvements

Because the road and sidewalk take up all of the right-of-way, there is not room for a continuous furnishing zone or sidewalk buffer. However, we do not expect the on-street parking to be fully occupied, based on the existing land uses (residential, with driveways), and current observed parking occupancy. Therefore, the parking lane is replaced with curb extensions at intersections and crosswalks. This provides traffic calming and space for landscaping, while improving crosswalks by narrowing the road.

Attachments

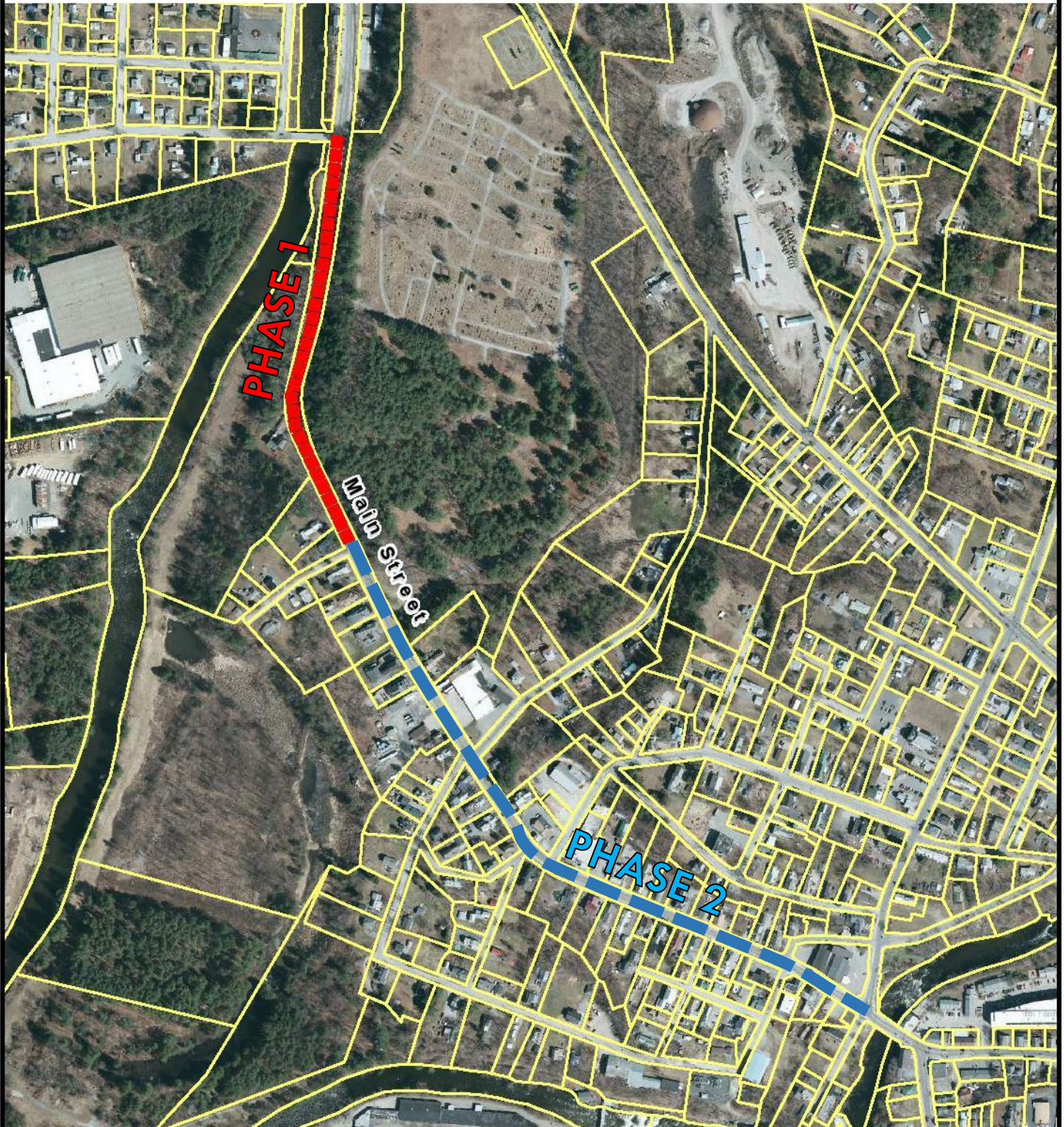
- A. Project Areas
- B. Main Street Phase I OPCC Summary
- C. Main Street Phase II OPCC Summary

Attachment A

Project Areas

Main Street Project, Segment II

0 150 300 600
Feet



Data shown on this map is provided for planning and informational purposes only. The City of Claremont is not responsible for any use for other purposes or misuse or misrepresentation of this map.

Attachment B

Main Street Phase I Opinion of Probable Construction Cost



☐ Bedford, NH 03110 (603) 883-0463
☒ Randolph, VT 05060 (802) 728-3376
☐ S. Burlingt., VT 05403 (802) 878-7661
☐ Springfield, VT 05156 (802) 591-4326

Engineering • Planning • Development • Management

JOB Main Street Phase I

SHEET NO. 1 OF 1

CALCULATED BY: JLU DATE: 10/26/2020

CHECKED BY: BMB DATE: 10/28/2020

SCALE: _____

Phase I: Road Reconstruction with bike lanes and sidewalk, Citizen St-Westside Ave

ITEM NO.	DESCRIPTION	UNIT	QUANT.	UNIT PRICE	AMOUNT
201.1	CLEARING AND GRUBBING	A	0.90	\$25,000.00	\$22,500.00
202.7	REMOVAL OF GUARDRAIL	LF	1000.00	\$5.00	\$5,000.00
203.1	COMMON EXCAVATION	CY	9000	\$15.00	\$135,000.00
203.5	BORROW	CY	200	\$10.00	\$2,000.00
206.1	COMMON STRUCTURE EXCAVATION	CY	1000	\$100.00	\$100,000.00
209.1	GRANULAR BACKFILL	CY	1000	\$50.00	\$50,000.00
304.200	GRAVEL	CY	1900	\$30.00	\$57,000.00
304.330	CRUSHED AGGREGATE FOR SHOULDERS	CY	100	\$40.00	\$4,000.00
304.400	CRUSHED STONE (FINE GRADATION)	CY	900	\$30.00	\$27,000.00
403.11	HOT BITUMINOUS PAVEMENT, MACHINE METHOD	T	1800	\$200.00	\$360,000.00
410.2	ASPHALT EMULSION FOR TACK COAT	GAL	150	\$50.00	\$7,500.00
417.0	COLD PLANING BITUMINOUS SURFACES	SY	500	\$10.00	\$5,000.00
583.1	RIP RAP, CLASS I	CY	200	\$50.00	\$10,000.00
603.8	18" PE PIPE (TYPE C)	LF	1100	\$60.00	\$66,000.00
604.1	CATCH BASINS TYPE A, 4-FOOT DIAMETER	U	5	\$4,000.00	\$20,000.00
604.4	RECONSTRUCTING/ADJUSTING CATCH BASIN & DROP INLET	EA	10	\$500.00	\$5,000.00
606.1	BEAM GUARDRAIL (STANDARD SECTION)(STEEL POST)	LF	1000	\$25.00	\$25,000.00
608.12	2" BITUMINOUS SIDEWALK (F)	SY	1500	\$90.00	\$135,000.00
608.26	4" CONCRETE SIDEWALK (F)	SY	10	\$150.00	\$1,500.00
609.01	STRAIGHT GRANITE CURB	LF	500	\$80.00	\$40,000.00
608.54	DETECTABLE WARNING DEVICES, CAST IRON	SF	30	\$500.00	\$15,000.00
615.0071	STEEL SIGN POSTS	LB	400	\$20.00	\$8,000.00
615.0101	TRAFFIC SIGNS TYPE A	SF	100	\$25.00	\$2,500.00
618.7	FLAGGERS	HR	2400	\$45.00	\$108,000.00
619.10	MAINTENANCE OF TRAFFIC	U	1	\$140,000.00	\$140,000.00
619.25	PORTABLE CHANGEABLE MESSAGE SIGN	U	3	\$4,000.00	\$12,000.00
628.10	SAWED CONCRETE PAVEMENT	LF	200	\$10.00	\$2,000.00
632.01	RETROFLECTIVE PAINT PAVE. MARKING, 4" LINE	LF	9000	\$0.50	\$4,500.00
632.01	RETROFLECTIVE PAVEMENT MARKING, 18" LINE	LF	50	\$15.00	\$750.00
632.01	RETROFLECTIVE PAVEMENT MARKING, 24" LINE	LF	200	\$10.00	\$2,000.00
632.01	SHORT TERM PAVEMENT MARKINGS, 4" LINE	LF	10000	\$0.25	\$2,500.00
632.02	RETROFLECT PAVEMENT MARKING, SYMBOL OR WORD	SF	400	\$4.00	\$1,600.00
644.82	SALT TOLERANT GRASS SEED, TYPE 82	LB	300	\$30.00	\$9,000.00
647.10	HUMUS	CY	500	\$40.00	\$20,000.00
692	MOBILIZATION	U	1	\$140,000.00	\$140,000.00
697.41	CRITICAL PATH METHOD (CPM) ELECTRONIC SCHEDULE	U	1	\$4,000.00	\$4,000.00
698.11	FIELD OFFICE TYPE A	MON	6	\$5,000.00	\$30,000.00
699.00	MISCELLANEOUS TEMPORARY EROSION CONTROL AND SEDIMENT CONT	U	1	\$70,000.00	\$70,000.00
	Running Total				\$1,649,350.00
	Contingency (25%)				\$329,870.00
	CONSTRUCTION COST (ROUNDED)				\$2,000,000.00



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☐ Springfield, VT 05156 (802) 591-4326

Engineering • Planning • Development • Management

JOB Main Street Phase I

SHEET NO. 1 OF 1

CALCULATED BY: JLU DATE: 10/26/2020

CHECKED BY: BMB DATE: 10/28/2020

SCALE: _____

OTHER EXPENSES				
Relocation of 2 utility poles				\$5,000.00
Right-of-way (construction easements etc)				\$10,000.00
Slope Stabilization (100 LF)				\$150,000.00
Fence (on east side of elevated path)	LF	750	\$35.00	\$26,250.00
Retaining Wall	SY	70	\$1,900.00	\$133,000.00
SOFT COSTS				
Local project management(10%)				\$198,000.00
Design fee (15%)				\$396,000.00
Construction inspection fee (10%)				\$198,000.00
Grand Total (2020 dollars)				\$3,150,000.00
Assumed Inflation Rate			2.8%	
Grand Total (2030 dollars)				\$4,200,000.00

Attachment C

Main Street Phase II Opinion of Probable Construction Cost



☐ Bedford, NH 03110 (603) 883-0463
☒ Randolph, VT 05060 (802) 728-3376
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JOB Main Street Phase II

SHEET NO. 1 OF 1

CALCULATED BY: JLU DATE: 10/23/20

CHECKED BY: BMB DATE: 10/26/20

SCALE: _____

Phase II: Road Reconstruction with bike lanes, sidewalk, streetscaping

ITEM NO.	DESCRIPTION	UNIT	QUANT.	UNIT PRICE	AMOUNT
201.1	CLEARING AND GRUBBING	A	0.60	\$20,000.00	\$12,000.00
203.1	COMMON EXCAVATION	CY	14100	\$10.00	\$141,000.00
203.5	BORROW	CY	100	\$9.00	\$900.00
304.200	GRAVEL	CY	6100	\$25.00	\$152,500.00
304.400	CRUSHED STONE (FINE GRADATION)	CY	5600	\$30.00	\$168,000.00
403.11	HOT BITUMINOUS PAVEMENT, MACHINE METHOD	T	3900	\$200.00	\$780,000.00
403.12	HOT BITUMINOUS PAVEMENT, HAND METHOD	T	100	\$300.00	\$30,000.00
410.2	ASPHALT EMULSION FOR TACK COAT	GAL	900	\$20.00	\$18,000.00
417.0	COLD PLANING BITUMINOUS SURFACES	SY	600	\$10.00	\$6,000.00
604.40	RECONSTRUCTING/ADJUSTING CATCH BASIN & DROP INLET	LF	16	\$450.00	\$7,200.00
604.51	RECONSTRUCTING/ADJUSTING SEWER MANHOLES	LF	7	\$500.00	\$3,500.00
604.52	RECONSTRUCTING/ADJUSTING DRAINAGE MANHOLES	LF	4	\$460.00	\$1,840.00
608.12	2" BITUMINOUS SIDEWALK (F)	SY	2600	\$40.00	\$104,000.00
608.26	4" CONCRETE SIDEWALK (F)	SY	50	\$65.00	\$3,250.00
609.01	STRAIGHT GRANITE CURB	LF	5000	\$30.00	\$150,000.00
608.54	DETECTABLE WARNING DEVICES, CAST IRON	SY	50	\$400.00	\$20,000.00
615.0071	STEEL SIGN POSTS	LB	300	\$20.00	\$6,000.00
615.0101	TRAFFIC SIGNS TYPE A	SF	200	\$20.00	\$4,000.00
618.7	FLAGGERS	HR	3000	\$40.00	\$120,000.00
619.10	MAINTENANCE OF TRAFFIC	U	1	\$170,000.00	\$170,000.00
619.25	PORTABLE CHANGEABLE MESSAGE SIGN	U	3	\$4,000.00	\$12,000.00
628.10	SAWED CONCRETE PAVEMENT	LF	400	\$5.00	\$2,000.00
632.0104	RETROFLECTIVE PAINT PAVE. MARKING, 4" LINE	LF	12700	\$1.00	\$12,700.00
632.0118	RETROFLECTIVE PAVEMENT MARKING, 18" LINE	LF	150	\$8.00	\$1,200.00
632.0124	RETROFLECTIVE PAVEMENT MARKING, 24" LINE	LF	750	\$9.00	\$6,750.00
632.0107	SHORT TERM PAVEMENT MARKINGS, 4" LINE	LF	25300	\$0.10	\$2,530.00
632.02	RETROFLECT PAVEMENT MARKING, SYMBOL OR WORD	SF	300	\$2.50	\$750.00
644.82	SALT TOLERANT GRASS SEED, TYPE 82	LB	350	\$25.00	\$8,750.00
647.10	HUMUS	CY	500	\$30.00	\$15,000.00
692	MOBILIZATION	U	1	\$170,000.00	\$170,000.00
697.41	CRITICAL PATH METHOD (CPM) ELECTRONIC SCHEDULE	U	1	\$2,500.00	\$2,500.00
698.11	FIELD OFFICE TYPE A	MON	8	\$2,500.00	\$18,750.00
699.00	MISCELLANEOUS TEMPORARY EROSION CONTROL AND SEDIMENT CONT	U	1	\$89,000.00	\$89,000.00
1008.31	ALTERATIONS AND ADDITIONS AS NEEDED - DRAINAGE ADJUSTMENTS	\$	100000	\$1.00	\$100,000.00
-	STORMWATER TREATMENT	\$	75000	\$1.00	\$75,000.00
	Running Total				\$2,415,120.00
	Contingency (20%)				\$483,024.00
	CONSTRUCTION COST				\$2,899,000.00



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JOB Main Street Phase II

SHEET NO. 1 OF 1

CALCULATED BY: JLU DATE: 10/23/20

CHECKED BY: BMB DATE: 10/26/20

SCALE: _____

OTHER EXPENSES				
	Relocation of 18 utility poles			\$45,000.00
	Right-of-way (construction easements etc)			\$40,000.00
	Landscaping			\$10,000.00
	Disposal of contamination soils			\$10,000.00
SOFT COSTS				
	Local project management(10%)			\$290,000.00
	Design fee (15%)			\$580,000.00
	Construction inspection fee (10%)			\$290,000.00
	Grand Total (2020 dollars)			\$4,164,000.00
	Assumed Inflation Rate		2.8%	
	Grand Total (2030 dollars)			\$5,489,000.00