Stantec

Memo

To:	Andrew L'Roe Addison County Regional Planning Commission Vermont	From:	Joseph Morici, Associate, Brownfields Community Revitalization Program joseph.morici@stantec.com
Project/File:	Ferrisburgh, Middlebury, and Vergennes Brownfield Inventory	Date:	October 16, 2024

Reference: EPA Brownfield Assessment Grant – Site Inventory and Prioritization Assistance

Stantec Consulting Services Inc. (Stantec) has prepared the following Work Plan for development of a Brownfield Inventory for three focus areas within Addison County, Vermont. The proposed scope of work will be completed in accordance the Work Plan for U.S. Environmental Protection Agency (EPA) Brownfield Grant Application and Implementation Assistance Services Workplan, Task 4, A. Area Wide Planning.

1 BACKGROUND

The Focus Areas are defined as the parcels of land constrained by the three boundaries within Ferrisburgh, Middlebury, and Vergennes Vermont as defined by the Addison County Regional Planning Commission (ACRDC). The focus areas comprise areas not previously studied for a grant in the combined 5.3 square mile area. These areas, shown below in Figure 1, will be referred to as the Focus Areas (FA) in this memo.

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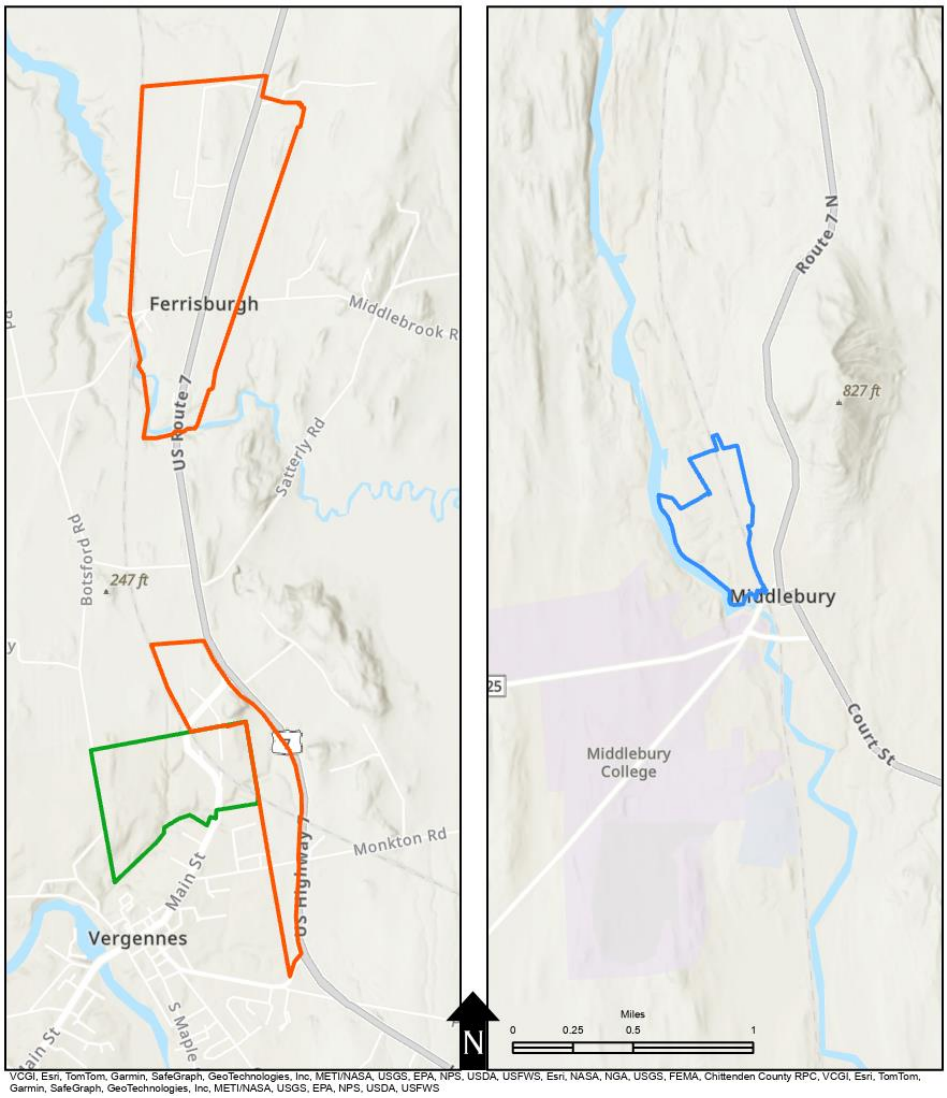
Figure 1: Focus Areas



The ACRDC will use funding to establish an effective brownfields program to engage the community and create a comprehensive brownfield inventory, prioritize sites with revitalization and planning opportunities. By creating organizational infrastructure, the ARPDC will develop a process to assess and remediate sites and facilitate partnerships necessary to complete revitalization and planning efforts.

2 Proposed scope of work

Stantec proposes to complete a scope of work to inventory potential brownfield sites based in the identified FA. The remainder of this document summarizes the methodology proposed:

2.1 Inventory Methodology and Data Sources

Stantec will create the inventory using geographic information system (GIS) and tax parcel data obtained from Addison County. Environmental database records and historical documents will be ordered from a third-party vendor to ascertain potential environmental impacts from past land uses on each tax parcel. Stantec will then conduct field observations as needed to supplement the property data; though these observations will be focused on legacy commercial/industrial lands. Stantec will create a property inventory matrix and associated maps to display the property conditions within the FA. Stantec intends to complete the inventory using the following data sources:

Table 2.0.a. Inventory Data Sources

Inventory Data Source	*Components*
Data Source A: Tax Parcel Information Database Stantec will create a tax parcel information database that includes property characteristics from readily available public data sources. This information will be imported into a spreadsheet and base map. Each parcel will be assigned an inventory identification number.	• Existing Land Use • Address / property identification number • Owner / business name • Zoning • Size • Structure age • Land and structure values • Improvement to Land Value Ratio (ILVR)[1]
Data Source B: Environmental Databases Stantec will review public environmental database listings to identify tax lots with potential environmental impacts caused by past property use or have associated documentation at the state/federal level.	• Vermont Environmental Databases (Vermont Department of Environmental Conservation [VTDEC], etc.) • Federal EPA Environmental Databases (FRS)
Data Source C: Field Observations Stantec will conduct a more in-depth analysis for the tax parcels in the FA to verify the information collected in Data Sources A and B by conducting field observations (visiting the FA and surveying the property condition(s)) to confirm current land use/occupancy and site conditions. Stantec may incorporate supplemental data sources like aerial/Streetview photography and staff interviews, as available.	• Existing Land Use • Occupancy (e.g., vacant, developed, occupied) • Obvious Environmental Conditions (e.g., containers/drums, above ground storage tanks, pavement/soil staining, etc.). • Building/property conditions that suggest deferred maintenance and/or needs for investment (e.g., peeling paint, poor roof, exterior damage/wear).
Data Source D: Historical Resources Stantec will also review available Fire Insurance maps to identify past land uses associated with parcels not previously captured that are in the FA.	• Published Fire Insurance Maps • City Directories (as needed)
Data Source E: Other Resources Stantec will also review available data sources listed here to identify other factors or recommendation by stakeholder that are identified as pertinent to the study.	• Real Estate Listings: CoSTAR • Tax Delinquency and Foreclosure data: If available • Sites Identified by Stakeholders: To be provided by the Stakeholders.

Notes: 1. ILVR is determined/calculated by dividing the assessed value for improvements (e.g., buildings and structures) by the assessed value of the land. Properties with high land values when compared to structure values indicate the property is *underutilized* and could support future development. An ILVR of 0 typically means a tax lot is vacant, and a value <1 indicates that the land is more valuable than the improvements, and therefore is underutilized in terms of development potential).

EPA FRS and VTDEC records will be geocoded to local addresses in GIS (using addresses, coordinates, and other available information). Check the results for accuracy and locate unmatched sites manually, if feasible. All records will need to be reviewed, classified, and assigned to a unique address.

2.2 Historical Fire Insurance Map Analysis

Stantec will acquire a complete coverage of historical fire insurance maps (FIM) from a data provider and georeference and mosaic them into seamless coverages for each year acquired. A detailed map analysis will identify features from each FIM for each year acquired that identify industrial, commercial, and other uses that potentially generated or used hazardous materials during their operations. This will include features like gas stations, dry cleaners, factories, machine shops, in addition to specific features such as underground and above ground storage tanks, materials storage, asbestos uses, etc. Each feature will be digitized using GIS and a database of features will be created that can be used for any spatial analysis such as land use planning, remediation, utility work, and brownfield identification, using any geospatial system. This complete GIS analysis will deliver to the ACPDC GIS data in the form of layers, databases, and orthorectified images of the complete FIM coverage.

2.3 Prioritization Criteria

Stantec will use the property data to identify which Opportunity Sites the ACPDC may choose to prioritize for site assessments, cleanup, reuse, and/or redevelopment. This criterion considers site characteristics including property size, ILVR, the presence of an environmental database record or historical land use of concern (i.e., retail gas station, automotive repair, dry cleaner), building, and abandonment. Table 3.0.a lists the criteria and the reasoning for the criterion rating.

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Table 3.0.a. Prioritization Criteria	
Prioritization Criteria	***Reasoning***
A: Site Size ***Method:*** *GIS Analysis*	This criterion is based on lot size. Sizes one acre or greater have high potential to accommodate significant redevelopment projects, whereas sizes less than 0.25 acres may only accommodate modest redevelopment activity. Notably, 3-acres sites may be highly valuable for industrial development.
B: Underutilization / Improvement to Land Value Ratio (ILVR) ***Method:*** *GIS Analysis*	This criterion is based on the properties' Improvement to Land Value Ratio (ILVR). A lot having an ILVR less than 0.5 means the property is more valuable than its buildings and suggests the property is underutilized with the potential to support additional development. An ILVR greater than 1.0 suggests the property is well-utilized and therefore a lower priority for redevelopment in the near-term.
C: Environmental Data Base ***Method:*** *GIS Analysis / State & Federal Databases / Fire Insurance Maps*	This criterion is based on whether the lot is on a state or federal environmental database. Lots with these conditions should be prioritized for redevelopment to address the potential environmental liabilities through site cleanup and/or abatement. Additionally, this criterion will consider past/historical land use on properties using Fire Insurance Maps and City Directories; properties with past industrial or intense commercial operations may be considered brownfields.
D. Building Age (pre- 1980) ***Method:*** *GIS Analysis*	This criterion aims to identify buildings that were constructed prior to 1980 – buildings constructed before this time have a higher potential for containing asbestos and other hazardous building materials.
E: Vacant / Undeveloped Property ***Method:*** *GIS Analysis / Field Observations*	This criterion aims to identify lots which are currently undeveloped and do not have a building. There is opportunity to target these properties for redevelopment. An ESA may be needed to proceed with development activities.
F: Vacant Building/Structure (no active tenant) ***Method:*** *Field Observations*	This criterion identifies lots that do not have an occupant/tenant AND/OR have a vacant building. Vacant buildings could be actively reused for new uses. Older buildings may suggest the need for studies (ESAs) to ensure the building can be safely reoccupied and/or improved.
G: Poor Property Conditions ***Method:*** *Field Observations*	This criterion identifies buildings/sites that have various signs of deterioration, wear, and/or deferred maintenance. Sites that are in poor condition should be prioritized for revitalization/ redevelopment.
H: Designated Opportunity Zones or Targeted Redevelopment Areas or Nominations ***Method:*** *GIS Analysis*	This criterion identifies sites within a designated Opportunity Zone (OZ) or targeted redevelopment areas; this designation includes tax incentives for private entities to redevelop or reinvest in properties.

Additional criteria may be added based on feedback from the ACPDC, its partners, or as it presents itself as the database is constructed.

2.3.1 PERFORM WINDSHIELD SURVEYS

The project team may visit potential brownfield sites from to verify information obtained during previous assessments, document existing site conditions, or identify additional properties.

3 Deliverables

The Stantec project team will develop a Brownfield Inventory Report that will include the methodology described earlier in this technical memorandum, results of the windshield surveys, and summarize the site prioritization criteria selection and ranked list of site results.

The final deliverables will consist of the following:

- A final priority brownfield property spreadsheet
- Static FA and selected site maps
- GIS file geodatabases and map packages.
- ArcGIS Online accessible web map to be hosted by ACPDC or, for the duration of the grant, by Stantec. Some limited licensing costs may apply for either scenario.

4 Estimated Costs

The estimated costs to complete the proposed scope of work is summarized below. Pursuant to Stantec's contract with ACPDC, consultant time will be billed on a time and material basis and not to exceed the overall project budget unless authorized by ACPDC.

Tasks	Budget to complete
Brownfield/Property Inventory Report and Databases	$11,000
Expanded Brownfield/Property Inventory (Entire City Boundary)	*add. $5,000*
Georeferenced FIMs for years 1885 to 1965, and City Directories as needed.	$3,800
Web Map	$3,500
Project-related Expensive *(e.g., travel, printing)*	$1,000
Windshield Survey, Stantec	*add. $8,000*
Total	**$19,300/*$32,300***

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Stantec anticipates the Inventory can be completed within approximately 2 months from the start date - Stantec will prepare a timeline of key milestones upon receiving the formal notice to proceed. We are excited to partner with the ACPDC to build upon the community's past planning events and recommend strategies that will support redevelopment, adaptive reuse, and revitalization activities that put underutilized and abandoned brownfields back into productive use.