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REPORT

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TOWN OF
West Rutland
VERMONT

Sidewalk Scoping Study
West Rutland TAP TA 21(8)

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The development of the Town of West Rutland Sidewalk Scoping Study was made possible through a Transportation Alternatives Grant from the Vermont Agency of Transportation (VTrans). The Town of West Rutland thanks VTrans for its continued support.

EXECUTIVE SUMMARY

The Town of West Rutland has initiated a study to assess potential improvements to sidewalks and related pedestrian facilities at several locations within the Town. These improvements would build upon previously completed sidewalk improvement projects and help bridge gaps and connect various portions of the Town. The study encompasses seven areas throughout the Town of West Rutland, each with its own unique site context and constraints.

The study reviews and evaluates potential improvements for each project area and recommends preferred alternatives and future actions for each study area. All but one project area contained existing sidewalk infrastructure that helped inform the selection of a preferred solution. Through analysis and review, each area was found to have a potential alternative or mix of alternatives that were deemed feasible for implementation and would satisfy the purpose and need of the project.

In March of 2022, the Town of West Rutland ("Town") hired Weston & Sampson Engineers, Inc. ("Consultant") to assess the feasibility of sidewalk improvements at seven locations throughout the Town. The scope of work includes an assessment of the existing conditions in each project area, development of potential alternatives for improvements, selection of the preferred alternatives for each area, soliciting public input, identifying impacts resulting from considered alternatives, and the development of a report summarizing the findings.

As part of this project, the existing conditions of each project area were determined through a combination of desktop review and field investigations. Multiple public meetings were held both in-person and remotely, including a Local Concerns Meeting to gather initial thoughts and concerns about the project (Appendix H), and an Alternative Analysis Meeting to present potential solutions for consideration and feedback (Appendix H). A detailed summary of each project task is described in the following sections of this report, including recommendations for moving the project forward.

Our Purpose and Need Statement identifies issues to be addressed by the project and justifies that a solution is warranted based on project specific conditions. The purpose and need are as follows:

> The *purpose* of the project is to improve existing and construct new accessible pedestrian sidewalk facilities within the Town of West Rutland to provide safe connections to destinations within the community.
>
> The *need* for this project is founded on existing gaps in service and deteriorating facilities that create unsafe conditions for pedestrians. Improving the pedestrian facilities will provide safer and accessible pedestrian accommodations and better connections to the surrounding neighborhoods and community resources within the Town. These improvements will create an increased sense of community, improve health by increasing the walkability of the Town, encourage and support foot traffic for economic growth, bridge gaps between existing facilities, and create safer systems for pedestrians traveling throughout the Town.

1.0 EXISTING CONDITIONS ANALYSIS

The overall project limits encompass seven areas that were assessed for potential improvements. These areas were identified by the Town of West Rutland as critical areas for improvement due to several factors, including lack of existing connection, pedestrian traffic patterns, and concerns over the condition of existing pedestrian facilities in these areas.

An Overall Project Area Map can be found in Appendix A, and a Land Use and Connectivity Plan identifying existing facilities and zoning within the Town can be found in Appendix B.

1.1 Site Visit & Field Review

Weston & Sampson performed a field review of each study area in April of 2022 to analyze the condition of existing sidewalks and assess the potential improvements to these facilities.

1.1.1 Area 1 – Pleasant Street: Sheldon Avenue to Business Route 4 (East Side)

The existing sidewalk along the eastern side of Pleasant Street is in poor condition. While the roadway has been recently paved, no improvements were made to the pedestrian sidewalk as part of this pavement project. The sidewalk is constructed of concrete and is 4' wide. There are large portions of sidewalk that are deteriorating and cracking, creating trip hazards and ADA compliance issues. The curb material varies between concrete and granite. There are segments of road that do not have curb installed, and the height of the curb varies between 1" and 7". Curb cuts for existing residential driveways are not flush with the adjacent road or walkway. In addition, the sidewalk generally does not continue across the driveways, and the pavement is uneven in these areas. New curb ramps and a crosswalk have been installed at the intersection of Pleasant Street and Main Street; however, the existing sidewalk ends approximately 90' to the north, preventing an ADA connection to the Pleasant Street sidewalk. The buffer zone between curb and edge of sidewalk varies between 4' and 5' and is comprised of a mix of grass and gravel.

View South from Pleasant Street towards Business Route 4

1.1.2 Area 2 – Pleasant Street: Durgy Hill Road to Baxter Street (West Side)

The existing sidewalk along the western side of Pleasant Street is in fair condition. The sidewalk is constructed of concrete and is 4' wide. The curb material is concrete and is generally 4" in height. The sidewalk has settled behind the curb, resulting in an uneven surface. The curb is flush at existing driveway curb cuts, and the sidewalk continues across the drives. There are two catch basins located within the sidewalk area, with evidence of ponding and washout from stormwater runoff. A drainage way crosses underneath the sidewalk and connects to the southernmost catch basin within the project area.

The sidewalk remains directly adjacent to the curb for the northern portion of the project area before the curb ends and the sidewalk cuts away from the road to create a 2' – 3' wide buffer zone. The buffer zone is comprised primarily of grass and slopes down away from the road. Utility poles are present along this area and are set approximately 2.5' off the western edge of the sidewalk. There is no curb ramp at the Baxter Street crossing, and the crosswalk markings are faded. No sidewalk exists to the north of the project area beyond Durgy Hill Road, and no sidewalks are present along Durgy Hill Road.

View South from Pleasant Street towards Baxter Street

1.1.3 Area 3 – Thrall Avenue: Park & Ride to Sheldon Avenue (North Side)

The existing sidewalk along the northern side of Thrall Avenue is in generally fair condition. The curb material is concrete and is generally 4" in height. The curb is in poor condition, and there are gaps in the curb from the stream crossing to just past the storage yard parking area. Portions of the sidewalk have settled behind the curb and adjacent to culvert, resulting in an uneven surface. The sidewalk is constructed of concrete and is 5' wide in front of the Park & Ride area before narrowing to 4' wide for the remainder of the corridor. The 5' segment appears to be more recently installed and is in good condition. The sidewalk is in very poor condition from the stream crossing to the end of the storage yard parking area, with stark elevation changes between panels creating ADA compliance concerns. At the rail crossing, it was observed that the flashing warning lights did not appear to activate when a train went through. The sidewalk remains directly adjacent to the curb for the entirety of the project area with no buffer zone. A recently installed curb ramp at the intersection of Thrall and Sheldon Avenue is in good condition, however the transition from this curb ramp to the Thrall Avenue sidewalk is constructed of asphalt and does not appear to be ADA compliant. There is no crosswalk connecting the Thrall Avenue sidewalk to the newly installed sidewalk facilities on the other side of Sheldon Avenue.

View East on Thrall Avenue towards Railroad Crossing

1.1.4 Area 4 – Ross Street: Main Street to Fence at End of Rigg's Parcel (North Side)

There is currently no formal sidewalk system along the northern side of Ross Street near the intersection of Main Street & Clarendon Avenue. The remnants of what appears to be an asphalt walk are in very poor condition with extensive cracking / heaving, and the transition to the concrete sidewalk to the west of the project site is not ADA compliant. There is no curb in this area, and a catch basin and utility pole are located between the former asphalt walk and edge of roadway. The sidewalk facilities along Main Street and connecting to Clarendon Avenue appeared to be in fair condition, however there is no formal connection to this system from Ross Street.

View East from Corner of Rigg's Parcel towards Main Street

1.1.5 Area 5 – Ross Street: Franklin Street to End of Ross Street (South Side)

The existing asphalt sidewalk along the southern side of Ross Street is in generally fair condition. There is no curbing in this area, and the walk is directly adjacent to the edge of road, with multiple driveways intersecting with the walk. A newly installed curb ramp is located at the western most edge of the project area where Ross Street dead-ends, connecting to a newly installed multi-use path that runs north towards the school property. The asphalt walk was recently patched and there is minor cracking in several areas. The curb ramps located at the eastern end of the project area where Ross Street intersects with High Street, Chapel Street, and Franklin Street are in poor condition, with some evidence of deterioration and one of the detectable warning pads oriented in the incorrect direction. Crosswalk markings are faded in some places and missing in others where the roadway was recently repaved.

View East from End of Ross Street towards Shared Use Path Crossing

1.1.6 Area 6 – Main Street: Proctor Street to Gilmore Street (North Side)

The existing condition of the 4' wide concrete sidewalk along the northern side of Main Street varies and is generally fair near the intersection of Main Street and Proctor Street, while getting progressively poorer towards the intersection of Main Street and Gilmore Street. Moderate cracking was evident in areas, and the sidewalk cross-slope is inconsistent, with some areas potentially not compliant with ADA guidelines. The curb material is granite and is generally 4" in height, with some sections missing at driveway crossings. The curb is in generally fair condition. The sidewalk remains directly adjacent to the curb for the entirety of the project area with no buffer zone. A buffered bike lane is installed along Main Street adjacent to the sidewalk area. Curb ramps were located at intersections, and crosswalk markings appeared to be in good condition. A solar-powered rectangular rapid flash beacon was located at the mid-block crossing location and appeared functional.

View West down Main Street towards Mid-Block Crossing

1.1.7 Area 7 – Dewey Avenue: Clarendon Avenue to Clark Hill Road (Both Sides)

There is currently no sidewalk installed on either side of Dewey Avenue. Newly installed curb, curb ramps, and crosswalk markings are installed at the recently reconfigured intersection of Dewey Avenue and Clarendon Avenue. Bike lanes and signage are located along Clarendon Avenue. Dewey Avenue is approximately 24' wide with two 12' drive lanes and no marked shoulders. Utility poles are located along the project corridor, on both sides of the roadway. The poles are generally 6' off the edge of the road, however a few are located as close as 3' off the edge of road. Private property signs are located prominently along the southern side of Dewey Avenue where the grade drops to a bench before forming a ravine near the intersection of Clarendon Avenue and Dewey Avenue. There are multiple driveways, mailboxes, and landscape areas located near the edge of pavement along the project area. There are no sidewalk facilities located south of the project area or along Clark Hill Road. Two catch basins are located on either side of Dewey Avenue where it intersects with Clark Hill Road that have settled significantly.

View North on Dewey Avenue towards Fox Run Lane

1.2 Right-of-Way & Utility Assessment

The Weston & Sampson team documented and assessed potential impacts to utilities, adjacent properties, and rights-of-way within the project areas. This assessment was based upon ground level conditions visible during field reconnaissance and publicly available GIS information.

Information regarding property ownership, right-of-way, and utilities for each study area can be found in Appendix C.

1.2.1 Area 1 – Pleasant Street: Sheldon Avenue to Business Route 4 (East Side)

The right-of-way width of Pleasant Street in Area 1 is approximately 50', and the existing sidewalk is currently located within the right-of-way. A fire hydrant is located on the western side of the road towards the intersection with Main Street, and another hydrant was observed on the west side of the road at the intersection of Sheldon Avenue. A storm catch basin / curb inlet is located immediately north of the project area on the west side of the road, and a sanitary sewer manhole was observed near the center of the road just north of the intersection of Pleasant Street and Sheldon Avenue. Utility poles and the overhead line were located primarily on the west side of the street opposite the project area, however the overhead lines cross over to the east side at the intersection of Pleasant Street and Main Street.

As the existing sidewalk facility is located within the right-of-way, potential alternatives were assessed to have similar impacts to the right-of-way and not anticipated to extend beyond the existing right-of-way. While permanent easements are not anticipated to be required, temporary construction easements may be warranted dependent upon final design and limits of work. As most utilities were located outside of the project area on the western side of the roadway, minimal impacts to utilities are anticipated for any potential alternative. Any future design will require accommodating the existing utility pole, and an underground utility location & project survey should be completed during the design process.

1.2.2 Area 2 – Pleasant Street: Durgy Hill Road to Baxter Street (West Side)

The right-of-way width of Pleasant Street in Area 2 is approximately 50', and the existing sidewalk is currently located within the right-of-way. A fire hydrant is located at the northeast corner of the intersection with Durgy Hill Road, and another hydrant was observed on the east side of pleasant street directly across from the Baxter Street intersection. Several catch basins are present on the east side of Pleasant Street within the roadway, and two catch basins are located within the existing sidewalk area on the west side of Peasant Street. Sanitary Sewers are present along the approximate center of the roadway throughout the project area. Utility poles and overhead wires were located primarily on the west side of Pleasant Street on the far side of the existing sidewalk.

As the existing sidewalk facility is located within the right-of-way, potential alternatives were assessed to have similar impacts to the right-of-way and not anticipated to extend beyond the existing right-of-way. While permanent easements are not anticipated to be required, temporary construction easements may be warranted dependent upon final design and limits of work. The implementation of a retaining wall or similar system may mitigate potential temporary easements. Any improvements will need to be located between the existing utility poles and edge of road to mitigate impacts to overhead utilities, however as the existing sidewalk is already located within this area, it is anticipated that any new construction would have minimal impacts. The two storm catch basins located within the sidewalk area should be relocated into the roadway, with the existing storm drains cored into them, to improve pedestrian safety and minimize potential damage to the sidewalk facilities due to differential settlement or deterioration due to

runoff and freeze/thaw cycles. Any future design will require accommodating the existing utility poles, and an underground utility location & project survey should be completed as a part of the design process.

1.2.3 Area 3 – Thrall Avenue: Park & Ride to Sheldon Avenue (North Side)

The right-of-way width of Thrall Avenue in Area 3 is approximately 50', and the existing sidewalk is currently located within the right-of-way. An existing railroad right-of-way extends through the project area, crossing over Thrall Avenue approximately 450' east of the Marble Street intersection. This crossing is currently signaled with flashing railroad crossing beacons. Several catch basins are present on the north side of Thrall Avenue within the roadway. Utility poles and overhead wires are located primarily on the south side of Thrall Avenue, with poles & lines running north/south down Sheldon Avenue and Marble Street at either end of the project area.

As the existing sidewalk is located within the right-of-way, any potential alternatives were assessed to have similar impacts to the right-of-way and not anticipated to extend beyond the existing right-of-way. While permanent easements are not anticipated to be required, temporary construction easements may be warranted dependent upon final design and limits of work. Coordination with the railroad company will be required for any improvements that extend through their right-of-way. It is anticipated that this effort will be extensive and span several months to allow the railroad company to review the proposed design plans at multiple stages, ensure all proper safety measures are taken during and after construction, and meet all applicable codes and regulations. The Town should engage in conversations with the railroad company prior to soliciting proposals for design to ensure an adequate scope of work is established, confirm the possibility of an acceptable design, and properly outline the required design elements and permits needed for approval. Sidewalk facilities that cross over the railroad must be perpendicular to the tracks in order to be considered ADA compliant. There is an existing culvert that spans over an unnamed tributary, which any sidewalk improvement will need to accommodate. There are no major concerns with other utilities in the project area, however any future design should include an underground utility location & project survey as a part of the design process.

1.2.4 Area 4 – Ross Street: Main Street to Fence at End of Rigg's Parcel (North Side)

The right-of-way width of Ross Street in Area 4 is approximately 40'. The existing sidewalk / walkway area appears to be located outside of the right-of-way based on available GIS information. A series of storm and sanitary sewers are located immediately east of the project area in Main Street, and one catch basin is located adjacent to the walkway area on the north side of Ross Street. A utility pole is located along the western edge of the project area just short of the existing concrete sidewalk.

As it is unclear if the existing sidewalk facility is located within the right-of-way, any potential alternatives were assessed to have similar impacts to the right-of-way. A boundary survey should be completed prior to design to confirm the limits of the Ross Street right-of-way and determine if any permanent or temporary easement will be required. Any new sidewalk design will need to be aligned to avoid impacts to the existing utility pole and storm catch basin. An alternative with a narrower overall footprint may be able to better avoid impacts utilities. An underground utility location & project survey should be completed as a part of the design process.

1.2.5 Area 5 – Ross Street: Franklin Street to End of Ross Street (South Side)

The right-of-way width of Ross Street in Area 5 is approximately 40', and the existing sidewalk is currently located within the right-of-way. A storm sewer is located just west of the terminus of the existing sidewalk. A series of utility poles and overhead wires are located on the north side of the road opposite the project area.

As the existing sidewalk facility is located within the right-of-way, any potential alternatives were assessed to have similar impacts to the right-of-way and not anticipated to extend beyond existing right-of-way limits. While permanent easements are not anticipated to be required, temporary construction easements may be warranted dependent upon final design and limits of work. As there is currently no curb as part of the existing sidewalk, construction may need to be done in conjunction with roadway reconstruction to accommodate changes in elevation and minimize impacts to adjacent properties if a curbed alternative is selected. There are no utilities within the project area, and any potential alternatives were assessed to have similar negligible impacts on utilities. An underground utility location & project survey should be completed as part of the design process.

1.2.6 Area 6 – Main Street: Proctor Street to Gilmore Street (North Side)

The right-of-way width of Main Street in Area 6 is approximately 65', and the existing sidewalk is currently located within the right-of-way. Additional pedestrian improvements including crosswalks, median islands, and bike lanes have recently been installed within the right-of-way. Storm catch basins are located on both sides of Main Street, and a sanitary sewer manhole was observed in the approximate center of the road. Overhead utility poles are located on both sides of Main Street; however, the main overhead wire run is confined to the south end of the road within the project area. Hydrants are located at both the eastern and western end of the project area on the far side of the sidewalk.

As the existing sidewalk facility is located within the right-of-way, any potential alternatives were assessed to have similar impacts to the right-of-way and are not anticipated to extend beyond existing right-of-way limits. While permanent easements are not anticipated to be required, temporary construction easements may be warranted dependent upon final design and limits of work, especially for alternatives that incorporated a buffer area. Any alternative will need to accommodate the existing storm catch basins and hydrants; however, this is not anticipated to be a major impediment to construction. Proper clearance from overhead wires will need to be maintained throughout construction, and additional traffic control measures may be warranted due to the width and traffic level of Main Street. An underground utility location & project survey should be completed as part of the design process.

1.2.7 Area 7 – Dewey Avenue: Clarendon Avenue to Clark Hill Road (Both Sides)

The right-of-way width of Dewey Avenue in Area 7 is approximately 50'. There are currently no sidewalks within the project area, however pedestrian improvements have recently been installed at the intersection of Dewey Avenue and Clarendon Avenue. Two storm catch basins were observed at the southern end of the project area on either side of the road, as well as at the grass corner at the intersection of Dewey Avenue and Fox Run Lane. Sanitary manholes were observed primarily on the southern and eastern sides of the road. Utility poles and overhead wires were present on both sides of the road, starting on the south side of Dewey Avenue before crossing the road at the intersection of Fox Run Lane and continuing down the north/west side of Dewey Avenue. The poles and overhead wires cross the roadway again approximately 275 feet south of the Fox Run Lane intersection and remain on

the south/east side of the road for the remainder of the project area. A hydrant was located at the grass corner at the intersection of Dewey Avenue and Fox Run Lane.

Potential alternatives were assessed to be constructed within the existing Dewey Avenue right-of-way on either side of the road. While permanent easements are not anticipated to be required, temporary construction easements may be warranted dependent upon final design and limits of work, especially for alternatives that incorporate a buffer area. Any alternative will need to accommodate the existing storm catch basins and hydrants, and utility poles; however, this is not anticipated to be a major impediment to construction. The north side of the road may potentially have fewer impacts to the utility poles. However, a facility on the north side requires crossing Fox Run Lane and accommodating a fire hydrant. Proper clearance from overhead wires will need to be maintained throughout construction, and additional traffic control measures may be warranted due to the traffic level of Dewey Avenue. A full underground utility location & project survey should be completed prior to design.

1.3 Natural, Cultural & Historic Resource Assessment

The Weston & Sampson team conducted a desktop review and field reconnaissance of the various project areas to confirm information from existing resources and expand the understanding of environmental factors present within and near the project areas. Resource areas reviewed included waterbodies, floodplains, wetlands, topography, historic architecture, and archaeological & cultural resources. Exact locations and qualities of these resources should be confirmed through a complete topographic & boundary survey prior to development in each area.

When assessed as a whole, the overall project area is within one mile of four documented archaeological sites, two of which contained precontract deposits of an unknown date. The remaining two contained late 18th-century occupation evidence and a 19th-century building foundation and cellar hole. As all of these are located outside of the project areas, no impact is anticipated to these resources. The overall project area was assessed as having an archaeological sensitivity score of 48, which indicates the potential for precontact sensitivity.

A summary of natural, cultural and historical research for each study area provided below. The full Natural Resources Assessment can be found in Appendix D, and the full Archaeological Resource Assessment and Preliminary Historic Resource Identification Report can be found in Appendix E.

1.3.1 Area 1 – Pleasant Street: Sheldon Avenue to Business Route 4 (East Side)

Area 1 does not contain any known wetlands, streams, floodways, river corridors, shorelines, or occurrences of rare, threatened or endangered (RTE) species. The project area is mapped as primary agricultural soils. Bedrock in this area is partially comprised of “Whipple Marble,” which has a low probability of use for tool manufacturing by Native Americans. The Pleasant Street Cemetery is located adjacent to the project area; while no above-ground features were noted in the project area, consideration should be given to the potential of undocumented burials. As this area has been previously developed, the archaeological potential is generally low.

While the site contains primary agricultural soil, it has been previously developed and contains sidewalks replaced within the study area. As there are no additional known natural resources in this project area, and additional archaeological review was not recommended at this time, it was determined that any potential alternative would have a similar resource impact (negligible).

1.3.2 Area 2 – Pleasant Street: Durgy Hill Road to Baxter Street (West Side)

Area 2 does not contain any known floodways, river corridors, shorelines, or occurrences of RTE species. A wetland and an unnamed stream were found in the southern portion of the project area. The wetland extends to the west, is approximately 0.28 acres in size, is charactered as a shallow emergent marsh, and is presumed to be a Class II protected wetland. Mature trees in front of 1262 Pleasant Street were observed as being potentially significant and should be preserved. This residence is located on the opposite side of the street as the study area, and no impact is anticipated. As this area has been previously developed, the archaeological potential is generally low. No further archaeological review was recommended for this area due to the existing disturbance.

Stream Crossing Location on Pleasant Street

Construction of any potential alternative may possibly impact the wetland and require permitting depending upon the limit of work. Implementation of a retaining wall or similar system to minimize impacts beyond the edge of sidewalk may mitigate potential impacts to the wetland and waterbody.

1.3.3 Area 3 – Thrall Avenue: Park & Ride to Sheldon Avenue (North Side)

Area 3 does not contain any known shorelines, occurrences of RTE species, or agricultural soils. Three wetlands were identified within the project area, characterized as shallow emergent marshes, each of which extend northwest away from the project area. The wetlands are presumed to be Class II protected wetlands. An unnamed tributary to the Castleton River flows through the western portion of the project area. A FEMA mapped flood hazard area and river corridor associated with the unnamed tributary are present within the area. Area 3 is also located adjacent to the Marble Street Historic District, which served workers in the marble industry. As this area has been previously developed, the archaeological potential is generally low. No further archaeological review was recommended for this area due to the existing disturbance.

Construction of any potential alternative may impact the wetlands and require permitting depending upon the limit of work. Alternatives that fit within the existing sidewalk footprint and reduce the need for additional earthwork beyond the existing edge of sidewalk may mitigate potential impacts.

1.3.4 Area 4 – Ross Street: Main Street to Fence at End of Rigg's Parcel (North Side)

Area 4 does not contain any known wetlands, streams, floodways, river corridors, shorelines, or occurrences of RTE species and the project area is mapped as primary agricultural soil. As this area has been previously developed, the archaeological potential is generally low.

While the site contains primary agricultural soil, it has been previously developed and contains sidewalks within the study area. As there are no additional known natural or archaeological resources in this project area, no additional archaeological review is recommended at this time. In addition, it is determined that any potential alternative would have a similar resource impact (negligible).

1.3.5 Area 5 – Ross Street: Franklin Street to End of Ross Street (South Side)

Area 5 does not contain any known wetlands, streams, floodways, river corridors, shorelines, or occurrences of RTE species. The eastern and western edges of the project area are mapped as primary agricultural soils, and because this area has been previously developed, the archaeological potential is generally low. A Phase 1B survey was conducted in 2017 adjacent to the project area and did not encounter any archaeological deposits.

While the site contains primary agricultural soil, it has been previously developed and contains sidewalks within the study area. As there are no additional known natural or archaeological resources in the project area, no additional archaeology known is recommended at this time. In addition, it was determined that any potential alternative would have a similar resource impact (negligible).

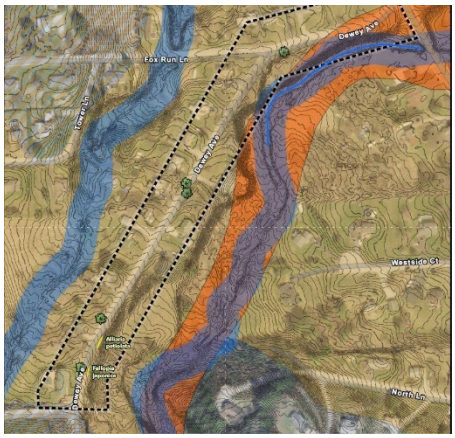
1.3.6 Area 6 – Main Street: Proctor Street to Gilmore Street (North Side)

Area 6 does not contain any known wetlands, streams, river corridors, shorelines, or occurrences of RTE species. There is an unnamed tributary with a FEMA flood hazard zone to the north within the western portion of the project area. The project area is mapped as primary agricultural soil and has been previously developed. As a result, the archaeological potential is generally low. No further archaeological review was recommended for this area due to the existing disturbance.

Any alternatives considered have the same potential impacts to the archaeological or flood hazard area. While the site contains primary agricultural soil, it has been previously developed and contains sidewalks within the study area. As there are no additional known natural resources in this project area, it was determined that any potential alternative would have a similar resource impact (negligible). Any alternative considered would have the same potential impacts to the flood hazard area.

1.3.7 Area 7 – Dewey Avenue: Clarendon Avenue to Clark Hill Road (Both Sides)

Area 7 currently does not have any sidewalks. This study area was found to contain no known wetlands, shorelines, or occurrences of RTE species, however there is an unnamed tributary to the Clarendon River in the eastern portion of the project area. A mapped FEMA flood hazard area and river corridor are associated with this tributary. The project area is mapped as primary agricultural soil. While no cultural or archaeological concerns were noted in this area, as the proposed sidewalk locations have not been previously developed, a Phase 1B Archaeological Study is recommended for this location.



Flood Hazard Area East of Dewey Avenue

A majority of the environmental and natural resources are located on the eastern & southern side of Dewey Avenue. Any potential alternative considered on this side of the roadway would have the same potential impacts to the tributary, flood hazard area, and agricultural soils. The northern portion of the roadway was found to contain fewer resources and may result in fewer potential impacts if construction were to occur.

2.0 ALTERNATIVES ANALYSIS

An alternatives analysis was prepared for each project area to determine potential improvements and impacts to existing site, natural and cultural resources. Five (5) potential sidewalk concept alternatives were analyzed for each project area:

- Alternative 1 – Sidewalk with Vertical Curb and Buffer Zone
- Alternative 2 – Sidewalk with Integral Vertical Curb
- Alternative 3 – At-Grade Sidewalk with Buffer Zone
- Alternative 4 – Sidewalk with Vertical Curb, Buffer Zone, and Retaining Wall
- Alternative 5 – No-Build

While a no-build alternative was analyzed for each area, it was determined that failure to construct any improvements would not meet the purpose and need statement of the project, and ultimately was not selected as the preferred alternative at any location. The remaining four alternatives were all determined to have the potential to meet the purpose and need of the project and were assessed based on a variety of factors including cost, environmental impacts, context & character, economic impacts, and potential permit requirements.

Typical sections of each alternative considered can be found in Appendix F, and a copy of the Alternatives Matrix completed for this project can be found in Appendix G.

2.1 Potential Alternatives

Four (4) different typical sidewalk cross sections were developed for the overall project. These sections generally contained a sidewalk width of 4ft to 6ft depending on whether existing facilities need to be connected to and the potential available right-of-way. All alternatives should comply with the American Disability Act (ADA) Guidelines and Vermont Agency of Transportation (VTrans) standards. Both concrete and bituminous concrete (asphalt) surface materials were considered for each alternative. While asphalt tended to be less expensive than concrete (approximately $14.00 per linear foot compared to approximately $58.00 per linear foot), asphalt does not match the existing character of the Town in most areas nor provide as clear of a visual barrier between vehicular roadway and pedestrian sidewalk, especially in the at-grade condition. For these reasons, concrete was selected as the recommended material in all alternatives. During implementation, all alternatives can be supplemented with additional design features and programming such as site amenities, street trees, or pedestrian scale lighting where budget and site context allow. The success of these strategies will be largely dependent on available right-of-way space, public input, and available funding. Prior to planting street trees, the development of a Town-wide Street Tree Program should be considered to create a comprehensive strategy for installation and maintenance of street trees.

Additional details of each alternative are described below.

2.1.1 Alternative 1 – Sidewalk with Curb

Sidewalk & Curb Example - Erie Blvd, Albany NY

Alternative 1 consists of a 4ft to 6ft wide concrete walkway, a vertical curb, and a buffer area between the top of curb and edge of sidewalk. The sidewalk should have a cross slope of no greater than 1.5% in one direction to aid in drainage. The direction of the cross slope can vary within project areas to best accommodate the surrounding topography. A 7" height granite curb is proposed to match existing site context. A buffer area of at least 2 feet in width is proposed, should have approximately the same longitudinal slope and cross slope as the adjacent sidewalk/roadway, and is not considered part of the travel way. The buffer can be constructed of "soft" materials, such as grass, gravel, or stone dust, or "hard" material such as asphalt or pavers. Soft materials are generally less expensive; however, grass can be difficult to maintain if the buffer zone is less than 3 feet, and loose material such as stone or gravel may wash or get kicked into the sidewalk area, impacting accessibility if not adequately maintained. While hard materials can be easier to maintain and maintain accessibility, they are also more expensive. This alternative is estimated to have an approximate cost of $112.25 per linear foot.

2.1.2 Alternative 2 – Sidewalk with Integral Curb

Integral Curb Example - Shaker HS Campus, Colonie, NY

Alternative 2 consists of a 4ft to 6ft wide concrete walkway and vertical curb. No buffer area is proposed in this alternative. The sidewalk should have a cross slope of no greater than 1.5% in one direction to aid in drainage. The direction of the cross slope can vary within project areas to best accommodate the surrounding topography. The curb is proposed to be 7" height granite to match existing site context. This alternative is estimated to have an approximate cost of $111.75 per linear foot.

2.1.3 Alternative 3 – At Grade Sidewalk

At-Grade Sidewalk Example - Southgate ES, Colonie, NY

Alternative 3 consists of a 4ft to 6ft wide concrete walkway with a buffer area between the edge of roadway and edge of sidewalk, but no vertical curb. The sidewalk should have a cross slope of no greater than 1.5% in one direction to aid in drainage and the direction of the cross slope can vary within project areas to best accommodate the surrounding topography. A buffer area at least 2 feet in width is proposed and should have approximately the same slope and cross slope as the adjacent roadway / sidewalk and is not considered part of the travel way. The buffer can be constructed of "soft" materials,

such as grass, gravel, or stone dust, or "hard" material such as asphalt or pavers. Soft materials are generally less expensive; however, grass can be difficult to maintain if the buffer zone is less than 3 feet, and loose material such as stone or gravel may wash or get kicked into the sidewalk area, impacting accessibility if not adequately maintained. While hard materials can be easier to maintain and maintain accessibility, they are also more expensive. This alternative is estimated to have an approximate cost of $62.25 per linear foot.

2.1.4 Alternative 4 – Sidewalk with Retaining Wall

Alternative 4 consists of a 4ft to 6ft wide concrete walkway, with a 7" height granite vertical curb, a buffer area between the top of curb and edge of sidewalk, and a retaining wall on the far side of the sidewalk to minimize grading impacts to adjacent properties. The sidewalk should have a cross slope of no greater than 1.5% in one direction to aid in drainage. The direction of the cross slope may vary within project areas to best accommodate the surrounding topography. The curb is proposed to be granite to match existing site contexts and be the standard VTrans standard 7" height. A buffer area at least 2 feet in width is proposed. This buffer should have approximately the same slope and cross slope as the sidewalk and is not considered part of the travel way. The buffer can be constructed of "soft" materials, such as grass, gravel, or stone dust, or "hard" material such as asphalt or pavers. Soft materials are generally less expensive; however, grass can be difficult to maintain if the buffer zone is less than 3 feet, and loose material such as stone or gravel may wash or get kicked into the sidewalk area, impacting accessibility if not adequately maintained. While hard materials can be easier to maintain and maintain accessibility, they are also more expensive. The retaining wall should be limited in length and height to the minimum amount necessary to mitigate grading impacts and reduce costs. A protective guide railing may be required in select areas if the wall height is to exceed 42 inches. The wall may be constructed of unit segmental block, concrete or other materials which should be determined during design. This alternative is estimated to have an approximate cost of $213.25 per linear foot.

Retaining Wall Example - Concept Sketch, Falmouth, MA

2.2 Preferred Alternative Selection

Weston & Sampson compared potential alternatives for each study area and assessed potential impacts to the rights-of-way, utilities, and natural & cultural resources, as well as feedback gathered from the public informational meetings. A preferred alternative for additional consideration and development was then selected.

Concept Plans identifying the preferred alternative for each project area can be found in Appendix I.

2.2.1 Area 1 – Pleasant Street: Sheldon Avenue to Business Route 4 (East Side)

Area 1 considered Alternatives 1, 2 and 3 as potential improvements to the sidewalk infrastructure. As there was no significant elevation change beyond the edge of sidewalk that could not be accommodated by minimal earthwork, Alternative 4 was determined not to be appropriate for this area. Alternatives 1, 2 and 3 were all found to have a similar impact from construction, and limited new

disturbance was anticipated for any alternative. The alternatives were also found to have a similar negligible impact on the context of the project area, as multiple sidewalk conditions exist along the corridor. Alternative 3 was assessed to be less safe than the other two options as there would be no vertical barrier separating pedestrians from vehicular traffic.

As there was no difference in impacts to adjacent resources between any of the alternatives considered, Alternatives 1 and 2 were selected as the preferred alternative for the project area. While Alternative 2 was assessed to be less preferable due to the lack of a buffer and safety concerns, it was included as a preferred alternative in select areas at the northern part of the project area to create a smooth transition to existing sidewalk and minimize potential easements and right-of-way conflicts adjacent to residences.

2.2.2 Area 2 – Pleasant Street: Durgy Hill Road to Baxter Street (West Side)

Area 2 considered Alternatives 1, 2, 3 and 4 as potential improvements to the sidewalk infrastructure. The steep drop-off in areas adjacent to the sidewalk and elevation of the sidewalk relative to the roadway would necessitate the need for a retaining wall if elevated above the roadway, resulting in Alternative 4 being considered. All potential alternatives were found to have a similar impact from construction and have a negligible impact on the aesthetics or character of the surrounding area, with Alternative 4 having the greatest potential impact due to retaining wall construction. All alternatives would necessitate the need to relocate existing catch basins outside of the sidewalk area, and all alternatives would face similar challenges in avoid impacts to adjacent utility poles, with Alternative 4 having the least potential impact to utilities due to the smaller earthwork footprint. Alternative 4 also has the greatest cost impact due to the material & labor cost associated with constructing the retaining wall. Alternative 3 was found to be the least safe option due to the lack of vertical barrier, however also had the lowest cost impact.

Ultimately, Alternatives 1, 2, and 4 were selected as the preferred alternative for various locations throughout the project area depending upon existing facilities that were to be tied into and adjacent topography. The northern portion of the corridor would implement Alternative 2 (integral curb) to match the adjacent existing sidewalk and minimize impacts to neighboring residences. Beyond the residential properties, a mix of either Alternative 1 or Alternative 4 would be constructed to elevate the sidewalk above the roadway and provide a consistent buffer zone, with Alternative 4 being implemented only when the earthwork required to tie back into existing elevations would encroach beyond the right-of-way or into environmental sensitive areas. During the design process, the neighboring residents should be engaged to help select an appropriate wall material and share their thoughts on additional design elements, such as elevating the wall to serve as seating, guard rail material & style, etc. While these additional design elements may impact the cost of the project, they would allow for the creation of positive community spaces and create a sense of ownership from the neighboring residents.

2.2.3 Area 3 – Thrall Avenue: Park & Ride to Sheldon Avenue (North Side)

Area 3 considered Alternatives 1, 2, 3, and 4 as potential improvements to the sidewalk infrastructure. The western portion of the project area contains a swale adjacent to the existing sidewalk, potentially necessitating the need for a wall to minimize impacts. Alternative 1 was found to have a high level of safety, providing both a vertical barrier and buffer space, however due to physiological constraints within the project area (stream crossings, railroad crossings, etc.) it was not clear that adequate space for a buffer zone would be available. Alternative 1 was also found to have a moderate cost impact and moderate impact to the existing context, as most of the surrounding area does not have a buffer zone. Alternative 2 was found to have similar impacts as Alternative 1, however was assessed to be slightly less safe due to the lack of buffer zone while better matching the surrounding character and context.

Alternative 3 was assessed to be the least safe option due to the lack of vertical barrier, and a poor match to the surrounding context due to the lack of curb. The grading impacts needed to eliminate the curb and tie into existing adjacent infrastructure were assessed to be moderate, however there was a cost benefit from eliminating the curb. Alternative 4 was found to have moderate impacts to both context and construction impacts due to the retaining wall construction and would cost the most.

Alternative 2 was selected as the preferred alternative throughout the entire project area as it was the best match to surrounding context, minimized impacts outside of the right-of-way, and had only a moderate cost impact. While the safety rating was assessed to be lower than if a buffer zone was provided as in Alternative 1, due to the existing utility, environmental, and right-of-way constraints, Alternative 2 was deemed to be more feasible to permit and construct than the other options.

2.2.4 Area 4 – Ross Street: Main Street to Fence at End of Rigg's Parcel (North Side)

Area 4 considered Alternatives 1, 2 and 3 as potential improvements to the sidewalk infrastructure. As there was no significant elevation change beyond the edge of sidewalk that could not be accommodated by minimal earthwork, Alternative 4 was determined not to be appropriate for this area. Alternatives 1 and 2 were assessed to have similar impacts to cost, a negligible impact to surrounding site context, and the same amount of impacts during construction to utilities, right-of-way, etc. Alternative 3 was found to have the lowest cost impact, however, was not as close in aesthetics or character to sidewalks in surrounding areas and was also the least safe of the options due to the lack of a vertical barrier.

Alternatives 1 and 2 were selected as the preferred alternatives for Area 4. Alternative 1 would be preferable in most parts of the project area, however an integral curb sidewalk should be considered when tying into the existing eastern sidewalk. During the field investigation, it was determined that the roadway was likely elevated several inches over the years due to a series of pavement overlay and repair projects, making the installation of a standard 7" vertical curb challenging. The intersection of Ross Street, Route 4A and Route 133 (Clarendon Avenue) is a High Crash Location due to a high degree of flow-thru traffic and consists of a free flow condition along Route 4A with a stop-controlled condition on Clarendon Avenue. In 2015, the Town of West Rutland completed a Safe Route to Schools Report, which included a concept for a roundabout or traffic circle for consideration. In 2016, the Town of West Rutland and Rutland Center Town completed a Smart Growth Connection Plan which recommended construction of a traffic circle at this intersection to alleviate safety concerns. In 2018, Weston & Sampson completed a study of this intersection for the Town of West Rutland that determined construction of a traffic circle was feasible for this location and could improve pedestrian safety in access. It is suggested that sidewalk construction in this area be completed at the same time as a traffic circle and/or roadway improvement project to allow the road elevations to more easily be adjusted and minimize impacts to the surrounding properties and ensure a comprehensive and safe pedestrian route is established.

2.2.5 Area 5 – Ross Street: Franklin Street to End of Ross Street (South Side)

Area 5 considered Alternatives 1, 2 and 3 as potential improvements to the sidewalk infrastructure. As there was no significant elevation change beyond the edge of sidewalk that could not be accommodated by simple earthwork, Alternative 4 was determined not to be appropriate for this area. While Alternative 1 was found to have the highest safety rating, the impacts to cost were found to be moderate due to the inclusion of a vertical curb. Alternative 1 was also found to not be fully consistent with the surrounding context, as the existing condition is an at-grade walkway with no separation from

the road. This lack of separation also led to Alternative 1 having a moderate impact from construction, and potential easements and utility modifications would need to be made to accommodate the inclusion of a buffer zone. Alternative 2 was assessed to have a slightly lower safety rating than Alternative 1 due to the lack of buffer, however, more closely match the surrounding site context and would minimize impacts from construction by limiting the offset from the edge of road. The cost impact was found to be similar to Alternative 1. While Alternative 3 most closely matches the surrounding context, has the least cost implications, and has the fewest number of potential construction impacts, it also has the lowest safety rating due to the lack of vertical barrier.

Alternative 2 was ultimately selected as the preferred alternative, as it struck a balance between minimizing impacts outside of the right-of-way and providing a safer facility. The vertical barrier will provide a safer facility than the existing at-grade walk and eliminating the buffer zone will mitigate impacts to adjacent landowners. Like Area 4, it appears likely that the roadway was elevated several inches over the years due to a series of pavement overlay and repair projects, eliminating the vertical separation that may have existing between the road and the walkway. It is suggested that sidewalk construction in this area be done at the same time as a roadway improvement project to allow the road elevations to more easily be adjusted and minimize impacts to the surrounding properties.

2.2.6 Area 6 – Main Street: Proctor Street to Gilmore Street (North Side)

Area 6 considered Alternatives 1, 2 and 3 as potential improvements to the sidewalk infrastructure. As there was no significant elevation change beyond the edge of sidewalk that could not be accommodated by minimal earthwork, Alternative 4 was determined not to be appropriate for this area. Alternative 1 was assessed to have the highest level of safety by providing both a vertical barrier and horizontal buffer between the sidewalk and roadway, however, was found to have a moderate cost impact, only moderately meet the existing character and context of the project area, and result in moderate impacts during construction, including potential utility conflicts and easement requirements from moving the sidewalk further away from the road. Alternative 2 was found to have a similar impact on cost and a slightly lower safety level due to the lack of buffer zone, however, was assessed to be a closer match to the surrounding character and context as the existing sidewalk does not contain a buffer zone. This lack of buffer zone also results in less impacts during construction as it would be a replacement in kind. Alternative 3 was found to have a low level of safety from removing the vertical barrier, especially considering this project area is adjacent to a busy roadway (Business Rte. 4). While having the least impacts on cost, Alternative 3 was also found to be a poor match to the existing context and character of the project area, and the removal of a vertical curb would necessitate grading modifications within and beyond the right-of-way.

Alternative 2 was selected as the preferred alternative for this project area. This Alterative most closely matches the existing condition of the sidewalk, minimizing impacts to surrounding properties during construction. While the lack of buffer zone results in a slightly lower safety rating when compared to Alternative 1, there were no concerns raised over the lack of buffer stuff during the public meetings and the greatly reduce construction impact makes this alternative the most feasible to construct and ensures that it will work in conjunction with a series of improvements installed along Main Street over the last five years without necessitating the removal or modification of these facilities.

2.2.7 Area 7 – Dewey Avenue: Clarendon Avenue to Clark Hill Road (Both Sides)

Area 7 considered Alternatives 1, 2, 3, and 4 as potential improvements to the sidewalk infrastructure. The eastern portion of the project area near the intersection of Dewey Avenue and Clarendon Avenue

contains a steep ravine and there is grade change throughout the project corridor in front of adjacent residences, potentially necessitating the need for a wall to minimize impacts. As there currently are no sidewalks along Dewey Avenue, all potential alternatives were found to have a moderate impact on the existing character and context and on potential construction impacts. There were no historical or environmentally sensitive resources identified within the project corridor, and the presence of utilities and driveways on both sides of Dewey Avenue make potential utility and right-of-impacts similar for any potential alternative. Alternatives 1 and 2 were found to have a similar impact on cost, however Alternative 1 was determined to be a safer facility due to the inclusion of a buffer zone. Alternative 3 was assessed to have the least impact on cost, however, this alternative provides the least safe facility. Alternative 4 was found to be equally safe as Alternative 1, however it has the greatest cost impact by including a retaining wall.

Alternative 1 was selected as the preferred alternative for the project area, with the north side of the road being the preferred alignment. The north side of the road was selected as it would allow pedestrians to more easily access the sidewalk when walking from the center of Town and crossing Fox Run Lane will be safer for pedestrians than crossing Dewey Avenue itself to access the southern side of the road, as both Dewey and Clarendon are busier streets that serve as connector roads within the Town. The potential impacts to utilities and adjacent residences were found to be similar on both sides of the road. Alternative 1 was selected as the preferred approach as it most closely matches the condition on Clarendon Avenue, and of the options assessed had the highest safety rating while still having similar impacts to cost, context, and construction/permitting.

3.0 PUBLIC PARTICIPATION

Throughout the project development process, strategic public participation is critical to the long-term success and support of the project. As a part of this scoping study, the project team met with members of the Town of West Rutland Selectboard, members of the Rutland Regional Planning Commission and conducted several public planning and coordination meetings throughout the duration of the project. As the project moves forward into design & construction, additional public meetings are encouraged to promote public involvement and support for the project.

Public input is an on-going process, and as plans become further developed for various project areas, engaging stakeholders and members of the community will help ensure the outcome of the project meets the needs of the community. As the project continues, public participation should consist of a series of public informational meetings, workshops, emails and/or newsletters, and other methods.

Ultimately if there is state or federal funding, there will need to be several public meetings to identify and address public issues and concerns, a Local Issues Meeting, and a Preliminary Design Public Hearing. At these meetings, abutters can request specific measures. These measures will be considered for addition to the design plans and included as part of the construction cost estimate.

As part of this study, a Local Concerns Meeting, Alternatives Analysis Meeting, and Report Presentation Meeting were held open to public to solicit questions & comments from the community.

Copies of these presentations can be found in Appendix H.

3.1 Local Concerns Meeting

At the outset of the project, a Local Concerns Meeting was held on June 13th, 2022, to introduce the project to the public and present the findings of the field investigation and existing conditions analysis. The purpose of this meeting was to gather initial thoughts and comments on potential sidewalk improvements throughout town to better inform the alternatives analysis. Weston & Sampson reviewed the project goal and objectives as outlined in the Request for Proposals issued by the Town of West Rutland and provided an overview of the different tasks included in the project.

Public feedback from this meeting was generally focused on Area 7 along Dewey Avenue, with several residents expressing concern that the corridor was not well suited for sidewalks as foot traffic in that area is limited and vehicles frequently exceed the speed limit in that area. Residents questioned the purpose of the sidewalk in that area and its proposed end point at Clark Hill Road, and suggested improvements may be better suited on Marble Street near the Sculpture Studio or boardwalk area. It was noted that Dewey Avenue used to be a dirt road, and while sidewalk improvements were recently installed at the intersection of Dewey Avenue and Clarendon Avenue, several residents noted that they moved there to feel more separate from the central Town area. There were also questions regarding potential tree removal and historic resources in this area. Residents also asked if sidewalks would generally be elevated above the road for safety and drainage reasons.

In response to concerns over the Dewey Avenue location, the Town noted that the intent was to continue the improvements constructed on Clarendon Avenue, which are supporting increased foot and bicycle traffic in the area. The Town also noted that while the Sherriff's Department may be able to monitor

vehicle speeds, sidewalks would create a safer condition for pedestrians if vehicles are speeding as it removes them from the immediate roadway.

The archaeological and natural resources assessment was still in progress at the time of this meeting, with the Town noting that the findings of these reports would be taken into consideration during the alternatives analysis in response to concerns over tree removal and historic resource impact. Upon completion of these reports, it was found that a small number of trees within the corridor had the potential to serve as bat roosting habitat and the historic Maria Neinaltowski House was located at 328 Dewey Avenue, which is a State Register Listed resource. There was no potential historic district identified along Dewey Avenue, and the house did not have any associated landscape feature that would need to be avoided. The proposed concept would not impact the historic resource at 328 Dewey Avenue as the entirety of the project is anticipated to take place within the Town of West Rutland right-of-way. Tree removal was not anticipated to be significant, and any necessary removals would need to be done in accordance with the latest applicable Federal and State requirements for protecting bat habitat. Any trees that were deemed necessary for removal could potentially be replaced in kind at a similar location; the exact location and species of tree would be determined during design with input from the adjacent property owner and the Town.

3.2 Alternatives Analysis Presentation

After the potential alternatives were developed, assessed, and a preferred alternative selected, Weston & Sampson presented the Alternatives Analysis to the public on September 12th, 2022, sharing the findings of the study to that point and solicit feedback on the potential alternatives. A summary analysis for each project area, including potential impacts, benefits, and constraints of each alternative was discussed.

Members of the Town Selectboard stated there was concern over how previous sidewalk improvement projects had been constructed, noting that some improvements on Thrall Avenue resulted in preventing fire apparatuses from maneuvering a left turn onto Pleasant Street, increasing response times. A suggestion was made to contact the local fire company prior to final design to confirm turning radii, curb reveals, and other design features that may impact maneuverability.

Weston & Sampson noted that each fire apparatus is different, and while beyond the scope of this study, any final design should take into account the needs of fire companies, police departments, and other public entities to ensure service is not impacted.

4.0 PROJECT IMPLEMENTATION STRATEGIES

Prior to engaging a consultant to develop design & construction documents for sidewalk improvements, the Town must ensure adequate funding is set aside for consulting fees, construction, and the ongoing maintenance of the new facilities. To that end, Weston & Sampson has prepared a cost estimate for each project area based upon the preferred alternative and conceptual plans developed as part of this study to identify potential costs for budgetary and fundraising purposes. Fundraising strategies were evaluated for the implementation of the project, as well as a summary of potential maintenance items and concerns for the Town's consideration.

4.1 Cost Estimates

A budgetary cost estimate of anticipated construction and project development costs for each of the project areas was developed for this study. These estimates should be considered conceptual and can be used to develop budgetary estimates for project phasing, potential requests for qualifications or proposals for future design, and project funding. It should be noted that these costs are subject to change and are based only on the conceptual plans and preferred alternatives developed as part of this study.

As the project moves forward into design, the proposed impacts, easement requirements, property acquisitions, and utility modifications should be further defined and detailed. It is imperative to continue the dialogue with any potentially impacted private property owner to identify constraints early in the process and avoid difficult and lengthy easement or acquisition agreements.

Overall, the conceptual cost estimate is based on similar work by the project team, the latest unit costs provided by the Vermont Agency of Transportation, and product manufacturers and suppliers. A 25% contingency cost has been included to account for specific items of work that will be determined during the preliminary design phase and for annual escalation of costs. A 10% permitting contingency and a 15% design contingency have also been included for each project area to account for design and construction administration costs, assuming any future project follows the VTrans Municipal Assistance Bureau design process. These costs would include design, topographic & boundary survey, plan/section/detail development, and construction administration.

The estimated probable costs, inclusive of all contingencies, for the preferred alternatives identified in the concept plans are as follows:

Conceptual Cost Estimates	
Project Area	Cost
Area 1 - Pleasant Street: Sheldon Avenue to Business Route 4 (East Side)	$ 232,000.00
Area 2 - Pleasant Street: Durgy Hill Road to Baxter Street (West Side)	$ 327,000.00
Area 3 - Thrall Avenue: Park & Ride to Sheldon Avenue (North Side)	$ 308,000.00
Area 4 - Ross Street: Main Street to Fence at End of Rigg's Parcel (North Side)	$ 116,000.00
Area 5 - Ross Street: Franklin Street to End of Ross Street (South Side)	$ 232,000.00
Area 6 - Main Street: Proctor Street to Gilmore Street (North Side)	$ 185,000.00
Area 7 - Dewey Avenue: Clarendon Avenue to Clark Hill Road (North Side)	$ 564,000.00
Overall Project Total	**$ 1,964,000.00**

A copy of the full cost estimate may be found in Appendix J.

4.2 Project Development Timeline

Several factors influence project phasing and prioritization, including the length of individual sidewalk segments, easement & right-of-way considerations, required permitting, construction difficulty, and available funding. As the study area is broken out into seven distinct areas, it is most logical to consider each project area a "phase" to be constructed as part of the overall project. Consolidating phases and overlapping project starts can potentially result in cost and scheduling benefits, however overlapping of phases is not necessarily required as each area is independent of the others

The phasing recommendations are primarily organized by safety and cost considerations in each area, as well as feedback gathered during public engagement. The exact timeframe of the overall project and individual phases will be heavily influenced by the funding source implemented, permitting requirements, and right-of-way review & approval. Assuming at least some portions of the project will be federally funded, it is estimated that each phase may take approximately 36 - 42 months to complete. The following organizational schedule is proposed for implementation of this work, pending available funding:

Potential Development Timeline			
Phase	Project Area	Year Start	Year End
1	Area 4 - Ross Street: Main Street to Fence at End of Rigg's Parcel (North Side)	2023	2026
2	Area 5 - Ross Street: Franklin Street to End of Ross Street (South Side)	2023	2026
3	Area 3 - Thrall Avenue: Park & Ride to Sheldon Avenue (North Side)	2025	2029
4	Area 1 - Pleasant Street: Sheldon Avenue to Business Route 4 (East Side)	2027	2030
5	Area 2 - Pleasant Street: Durgy Hill Road to Baxter Street (West Side)	2027	2031
6	Area 6 - Main Street: Proctor Street to Gilmore Street (North Side)	2029	2032
7	Area 7 - Dewey Avenue: Clarendon Avenue to Clark Hill Road (North Side)	2032	2036

Several projects are currently in development or proposed to be in development during several of the proposed phases. Future projects may similarly overlap with the proposed sidewalk improvement projects if undertaken by the Town. Schedule, signage, and material deliveries should be coordinated to the extent feasible between these projects.

As the first step towards implementing the recommendations of this study, the Town of West Rutland should accept and endorse the report. Once the report is endorsed by the Town of West Rutland Selectboard, the Town, with the assistance of the Vermont Agency of Transportation and Town residents and businesses, can undertake the following steps, but not necessarily in the order listed here:

- Begin to look and apply for funding opportunities through grants, bonding or other sources considered appropriate.
- Obtain letters of support from adjoining landowners.
- Contact landowners from whom easements might be needed to understand their willingness to consider granting easement, making sure to stay within guidelines for securing easements and rights-of-way.
- Solicit additional sources of in-kind contributions to support the matching funds that might be needed for grants that require them.
- Hire a consultant to assist with the design of the first phase to be implemented when funding is secured through either fundraising or grants.
- Work to secure required permits for construction.
- Work with the landowners whose property is impacted by the sidewalk construction to secure their final agreements on granting the necessary easements, as necessary.

4.3 Project Funding Opportunities

Funding for the improvement projects can be secured from a variety of sources. The Town may opt to allocate Highway Department funding as part of the Town budget or capital programs, as sidewalks are an integral part of Town infrastructure similar to roadways.

In addition to capital project funding by the Town, there are several grant and fundraising programs that could potentially be utilized to secure additional funds. Below is a list of various funding sources that could be used to help with the implementation of the recommendations.

- Transportation Alternatives Programs (TA Funds): TA funds can be used to increase bicycle and pedestrian mobility. These funds will cover a maximum of 80 percent of the project with the remaining portions most likely coming from the project sponsoring organization. TA funds are distributed in Vermont through a competitive grant program.
- Bicycle and Pedestrian Program: These funds cover specific bicycle and pedestrian improvement projects and are provided via a competitive grant program. They are largely federal, with some state funding for smaller scale projects. Small scale funding may be sufficient for individual segments, however it is unlikely that more than one phase could be constructed at a time utilizing these funds.
- Public-Private Fundraising: The Town could work with non-public entities or the general public to raise funds through private fundraising or grant sources available only to the non-public entities to match public funds for sidewalk improvements. Specifically, businesses whose location would be better served by improved sidewalk facilities for foot traffic may be interested in contributing to these improvements.

- Vermont Community and Urban Forestry Council Grants: These grants are awarded to municipalities to aid in conducting a street tree inventory and plan, as well as funding of street tree plantings.
- AARP Vermont Placemaking Demonstration Grants: These grants are awarded through State chapters of AARP focused on creating public spaces and streets that are safe and accessible for everyone. These grants are typically smaller and focused on demonstration projects to provide "quick action" and spark interest for future improvements.
- VT ACCD Better Places Program: These funds are part of a non-competitive community matching grant program that focused on creating inclusive and vibrant public spaces in town and village centers. Funds are gathered through a combination of crowdfunding and State matching, ensuring that residents are encouraged to take an active role in shaping the project and promote community connections, health & recreation benefits, and stimulate economic development and entrepreneurship.

Once funding is secured, the design and construction process can proceed.

Plans, specifications, and permits will be prepared that show the length, width, and elevations of any proposed sidewalk improvements, as well as specific locations, size and type of materials needed for construction. Design documents will need to be prepared in accordance with the requirements and standards of the appropriate agencies for which they will be submitted for review and approval at various stages throughout the design and construction process.

4.4 Construction Considerations

During construction of pedestrian facilities such as sidewalks, paths, and trails, consideration must be given during construction to the management of pedestrian circulation patterns to ensure service is disrupted to the minimal extent possible. For each phase of the project, a Transportation Management Plan (TMP) checklist must be completed to determine if any additional traffic control measures or work zone easements are required. This checklist is required for all federal-aid highway projects and is expected for all construction and maintenance activities on Vermont highways. Considerations include:

- When existing pedestrian facilities such as sidewalks or paths are disrupted, closed, or relocated in a TCC zone, the temporary facilities provided must be detectable and include accessibility features consistent with the features present in the existing facility.
- As the new pathway or sidewalk is constructed, the Contractor shall be responsible for closing off the full width of the facility during non-working hours and until the project is completed to prevent access by pedestrians or bicyclists.
- All properties shall have access maintained for emergency vehicles. Access shall be maintained to all commercial and municipal properties during business hours. Access to residential properties shall be coordinated with the respective Owner. Major work on commercial or municipal access shall be coordinated at least one week prior to starting work. All access shall be kept free of work and traffic control officers or flaggers as required.
- Communications and accommodations for postal deliveries, newspaper routes, trash services, and/or other delivery services interrupted by the project or detour shall be communicated with the proper contacts and minimized to the extent feasible.

4.5 Ongoing Maintenance

Maintenance requirements for all alternatives are similar in scope and cost. As there are existing sidewalk facilities in a majority of the project areas that the Town currently maintains, minimal impact to ongoing maintenance is anticipated as a result of this project.

General maintenance items include sweeping/plowing sidewalks and roadways as needed to remove snow and debris from the travel way, removal of trash from the sidewalk area either daily or weekly, pruning and removing vegetation that encroaches into the sidewalk area, mowing adjacent lawn areas and buffer zones (if lawn) to prevent vegetation from encroaching into the sidewalk area, and repairing or patching broken segments of sidewalk, curb, or retaining wall as issues arise.

APPENDIX A

Overall Project Area Map

West Rutland, Vermont
Transportation Alternatives Program
Sidewalk Scoping Study

Legend

- Proposed Sidewalk
- Roads (E911)
- Village Center Designation

Location	Feet
1) Pleasant Street (east side) - Business Route 4 to Sheldon	635
2) Pleasant Street (west side) - Baxter to Durgy	588
3) Thrall (north side) - park & ride to Sheldon	850
4) Ross Street (north side) - Main to fence (end of Rigg's parcel)	179
5) Ross Street (south side) - Franklin to end	670
6) Main Street (north side) - Proctor to Gilmore	485
7) Dewey (both sides) - Clarendon to Clark Hill	1,728
Total	**5,135**

Document Path: D:\RRPC\WRUTLAND\WR Sidewalk Map TAP 2020.mxd

APPENDIX B

Land Use & Connectivity Map

LEGEND:

- COMMERCIAL
- CONSERVATION 1
- CONSERVATION 2
- INDUSTRIAL
- RESIDENTIAL 1
- RESIDENTIAL 2
- RESIDENTIAL 2A
- VILLAGE COMMERCIAL 1
- VILLAGE COMMERCIAL 2
- VILLAGE RESIDENTIAL
- APPROX. WETLANDS AREA
- APPROX. FLOOD HAZARD ZONE
- APPROX. DRAINAGE WAY / WATER BODY
- APPROX. RTE HABITAT CHECK ZONE
- APPROX. PARCEL BOUNDARY
- PROJECT AREA
- EXISTING BIKE / PEDESTRIAN FACILITY

AREA 1 - RESIDENTIAL 1, RESIDENTIAL 2, INDUSTRIAL

AREA 2 - RESIDENTIAL 1

AREA 3 - VILLAGE COMMERCIAL 1, INDUSTRIAL, RESIDENTIAL 1

AREA 4 - VILLAGE COMMERCIAL 1, VILLAGE RESIDENTIAL

AREA 5 - VILLAGE RESIDENTIAL

AREA 6 - VILLAGE COMMERCIAL 2

AREA 7 - RESIDENTIAL 2, RESIDENTIAL 2A

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TOWN OF WEST RUTLAND, VT
TAP TA21(8) SIDEWALK SCOPING STUDY

LAND USE AND CONNECTIVITY PLAN

DESIGNED BY: JWG	CHECKED BY: DPB	DATE: JULY 2022

Weston & Sampson℠

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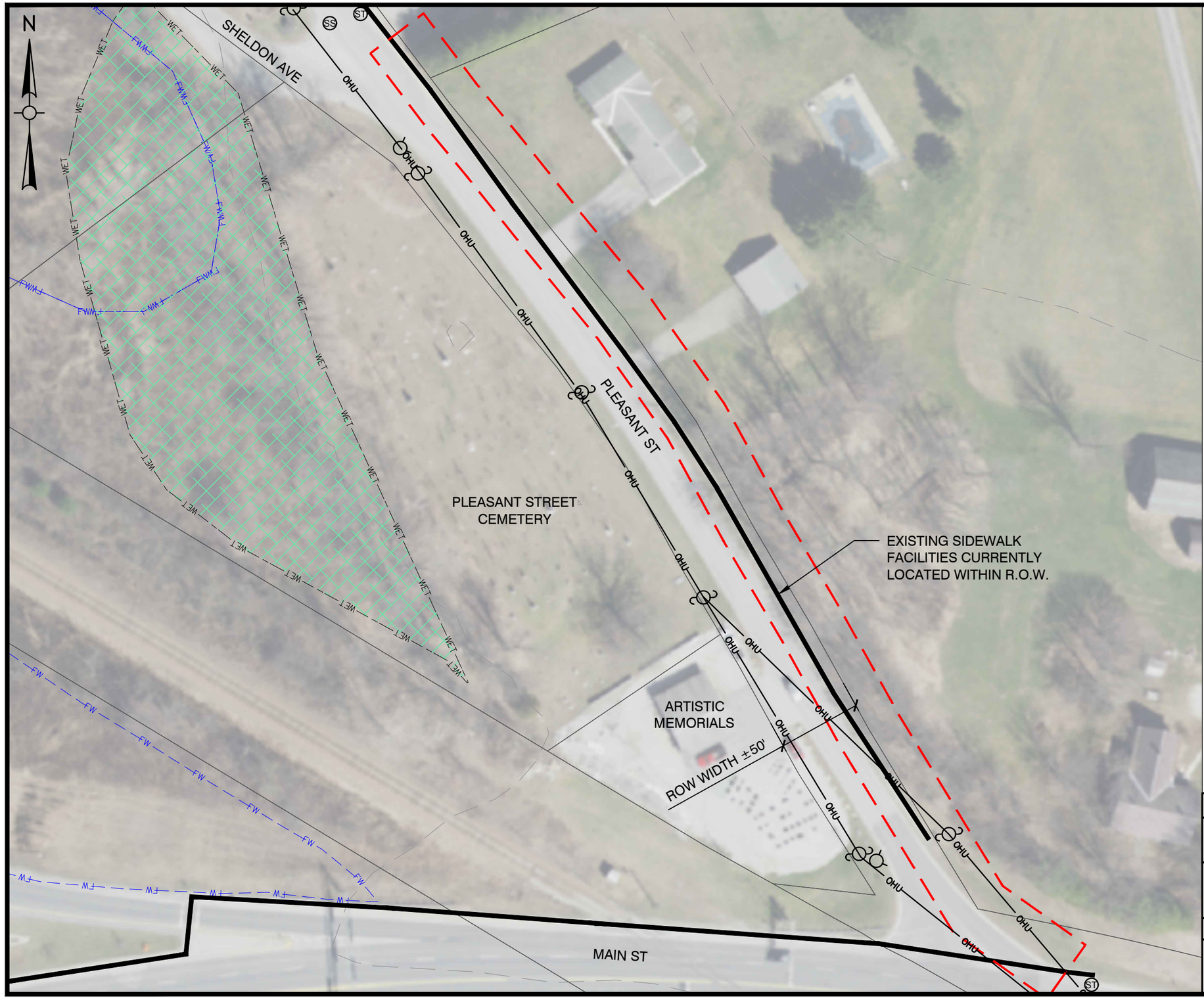
APPENDIX C

Right-of-Way & Utility Assessment Plans



LEGEND:

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- APPROX. FLOOD HAZARD ZONE
- APPROX. DRAINAGE WAY / WATER BODY
- APPROX. RTE HABITAT CHECK ZONE
- APPROX. PARCEL BOUNDARY
- PROJECT AREA
- EXISTING BIKE / PEDESTRIAN FACILITY
- EXISTING STORM STRUCTURE
- EXISTING SANITARY STRUCTURE
- EXISTING UTILITY POLE
- EXISTING OVERHEAD UTILITY LINE
- EXISTING HYDRANT

NOTES:

1. BASE MAPPING, INCLUDING PROPERTY & R.O.W. LIMITS, IS DERIVED FROM PUBLICLY AVAILABLE GIS INFORMATION & AERIAL IMAGERY. EXISTING CONDITIONS ARE SUBJECT TO FIELD VERIFICATION BY A LICENSED PROFESSIONAL LAND SURVEYOR.
2. UTILITY INFORMATION IS BASED UPON EVIDENCE VISIBLE AT GROUND SURFACE AND PUBLICLY AVAILABLE GIS INFORMATION AND ARE SUBJECT TO FIELD VERIFICATION. OBSERVATIONS DO NOT PURPORT TO CONSTITUTE ALL UTILITIES LOCATED IN OR ADJACENT TO THE PROJECT AREA.
3. SITE VISIT TO DOCUMENT VISIBLE GROUND SURFACE FEATURES WAS CONDUCTED ON APRIL 5TH, 2022 BY WESTON & SAMPSON.

0 60 120

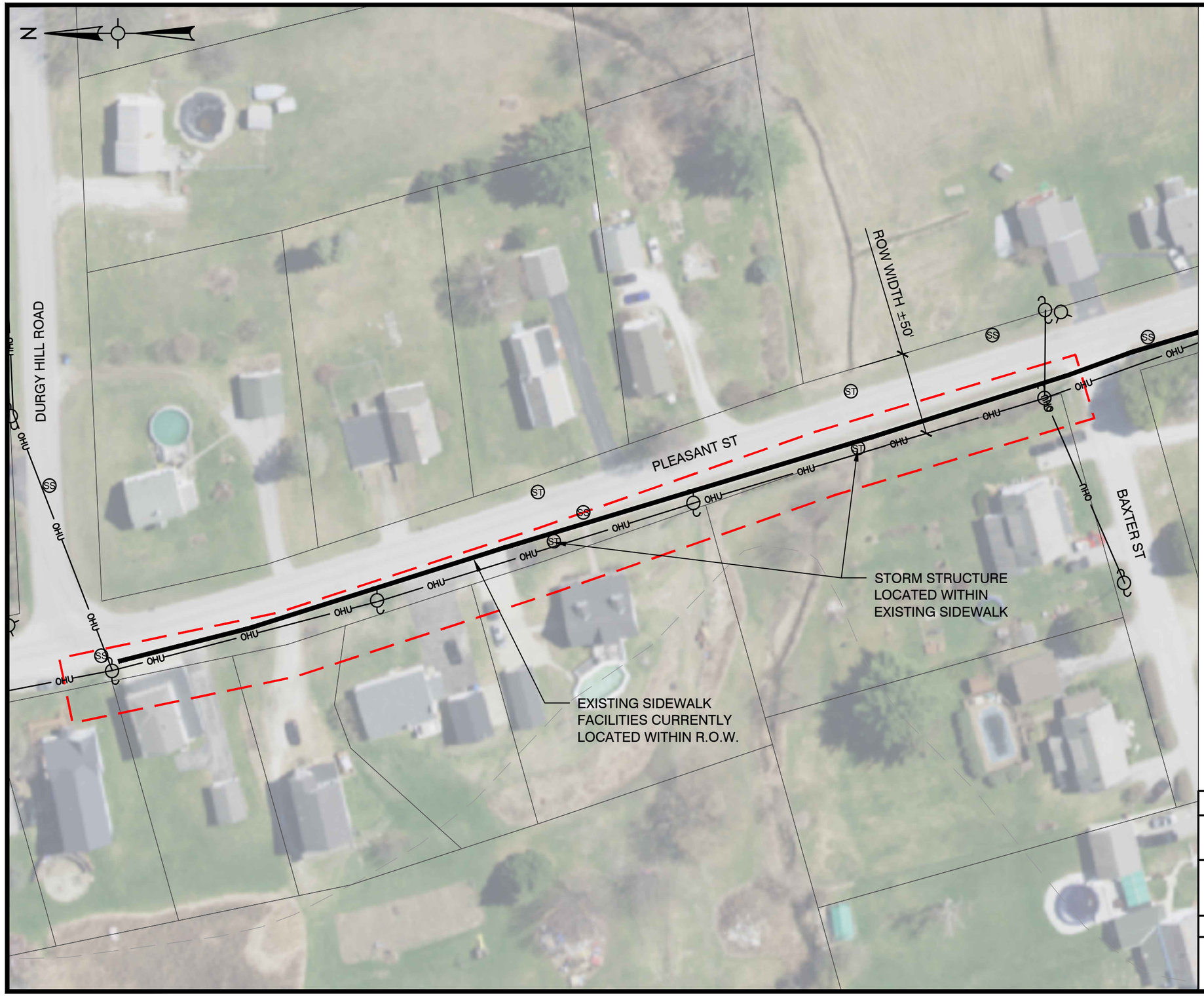
TOWN OF WEST RUTLAND, VERMONT
SIDEWALK SCOPING STUDY

ROW & UTILITY ANALYSIS
AREA '1' - PLEASANT STREET

DESIGNED BY: JWG	CHECKED BY: DPB	DATE: SEPT. 2022

Weston & Sampson

\\wse03.local\WSE\Projects\VT\West Rutland VT\ENG22-0265_Sidewalk Scoping Study\CAD\PMD\C-SP-E-ENG22-0265_ROW & Utility.dwg



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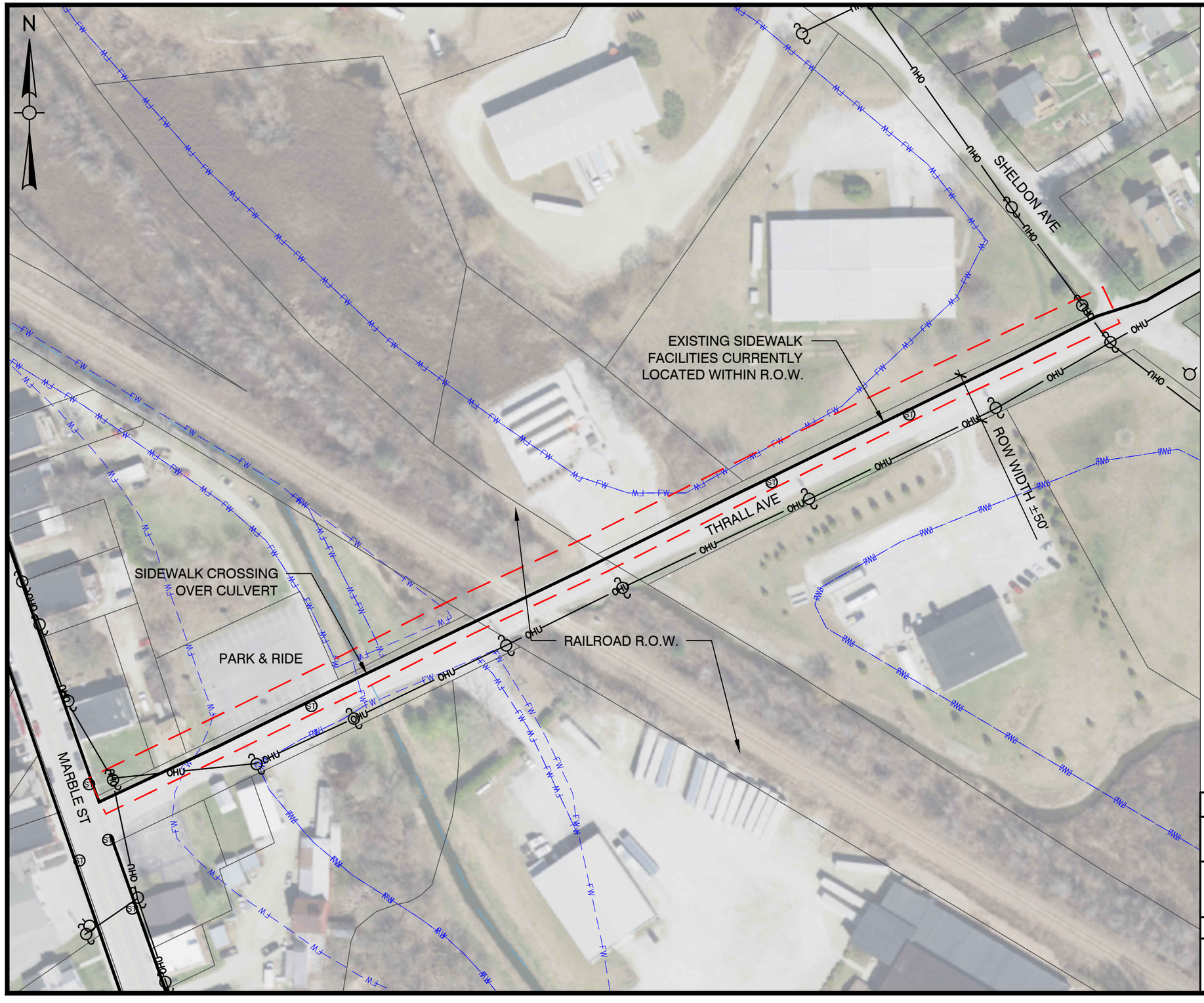
0 60 120

TOWN OF WEST RUTLAND, VERMONT
SIDEWALK SCOPING STUDY

ROW & UTILITY ANALYSIS
AREA '2' - PLEASANT STREET

DESIGNED BY: JWG	CHECKED BY: DPB	DATE: SEPT. 2022

Weston & Sampson℠



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- APPROX. RTE HABITAT CHECK ZONE
- APPROX. PARCEL BOUNDARY
- PROJECT AREA
- EXISTING BIKE / PEDESTRIAN FACILITY
- (ST) EXISTING STORM STRUCTURE
- (SS) EXISTING SANITARY STRUCTURE
- EXISTING UTILITY POLE
- —OHU— EXISTING OVERHEAD UTILITY LINE
- EXISTING HYDRANT

NOTES:

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3. SITE VISIT TO DOCUMENT VISIBLE GROUND SURFACE FEATURES WAS CONDUCTED ON APRIL 5TH, 2022 BY WESTON & SAMPSON.

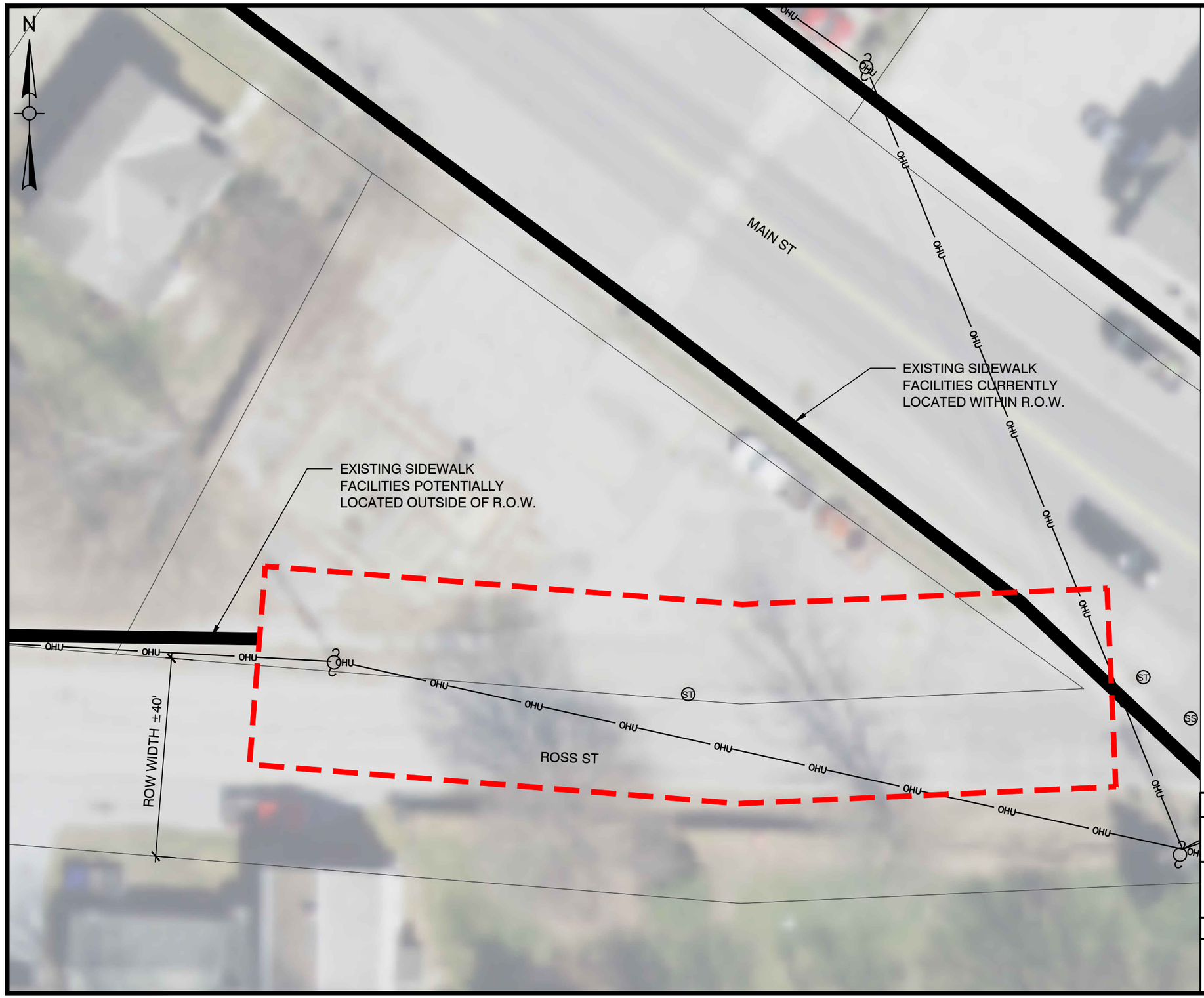
0 100 200

TOWN OF WEST RUTLAND, VERMONT
SIDEWALK SCOPING STUDY

ROW & UTILITY ANALYSIS AREA '3' - THRALL AVENUE

DESIGNED BY: JWG	CHECKED BY: DPB	DATE: SEPT. 2022

Weston & Sampson



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- APPROX. DRAINAGE WAY / WATER BODY
- APPROX. RTE HABITAT CHECK ZONE
- APPROX. PARCEL BOUNDARY
- PROJECT AREA
- EXISTING BIKE / PEDESTRIAN FACILITY
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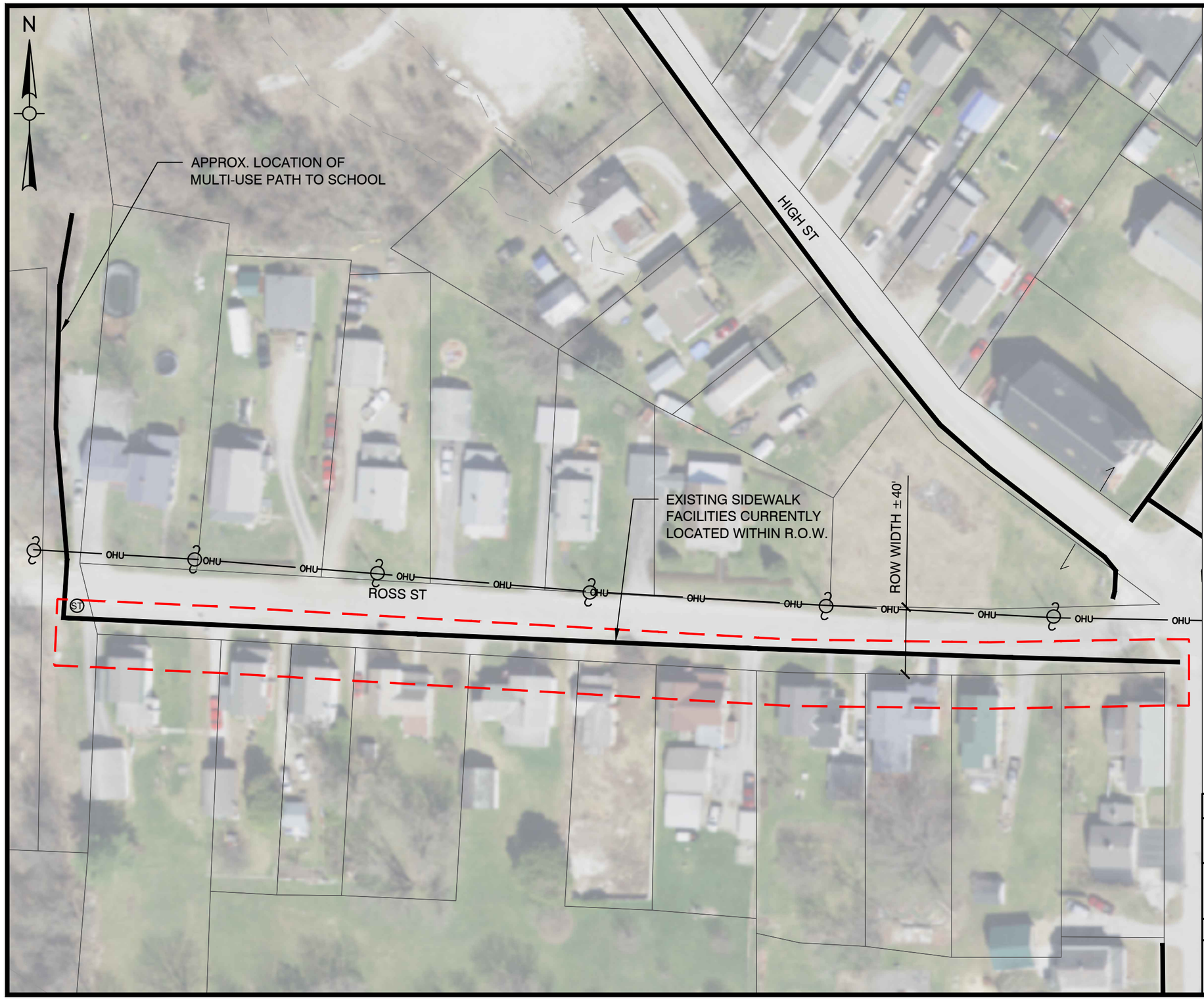
TOWN OF WEST RUTLAND, VERMONT
SIDEWALK SCOPING STUDY

ROW & UTILITY ANALYSIS
AREA '4' - ROSS STREET

DESIGNED BY: JWG	CHECKED BY: DPB	DATE: SEPT. 2022

Weston & Sampson



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- APPROX. DRAINAGE WAY / WATER BODY
- APPROX. RTE HABITAT CHECK ZONE
- APPROX. PARCEL BOUNDARY
- PROJECT AREA
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3. SITE VISIT TO DOCUMENT VISIBLE GROUND SURFACE FEATURES WAS CONDUCTED ON APRIL 5TH, 2022 BY WESTON & SAMPSON.

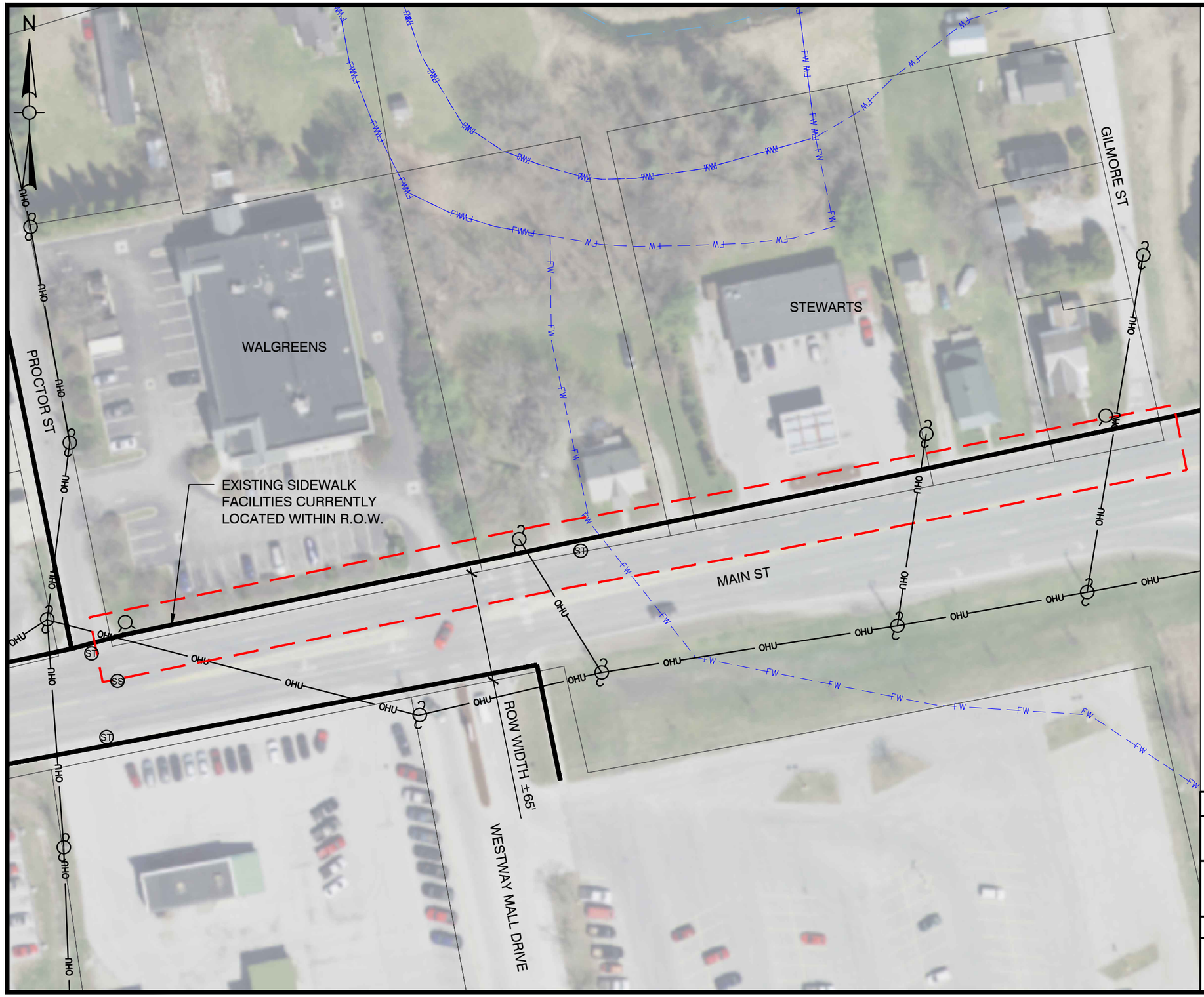
0 60 120

TOWN OF WEST RUTLAND, VERMONT
SIDEWALK SCOPING STUDY

ROW & UTILITY ANALYSIS
AREA '5' - ROSS STREET

DESIGNED BY: JWG	CHECKED BY: DPB	DATE: SEPT. 2022

Weston & Sampson



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- APPROX. DRAINAGE WAY / WATER BODY
- APPROX. RTE HABITAT CHECK ZONE
- APPROX. PARCEL BOUNDARY
- PROJECT AREA
- EXISTING BIKE / PEDESTRIAN FACILITY
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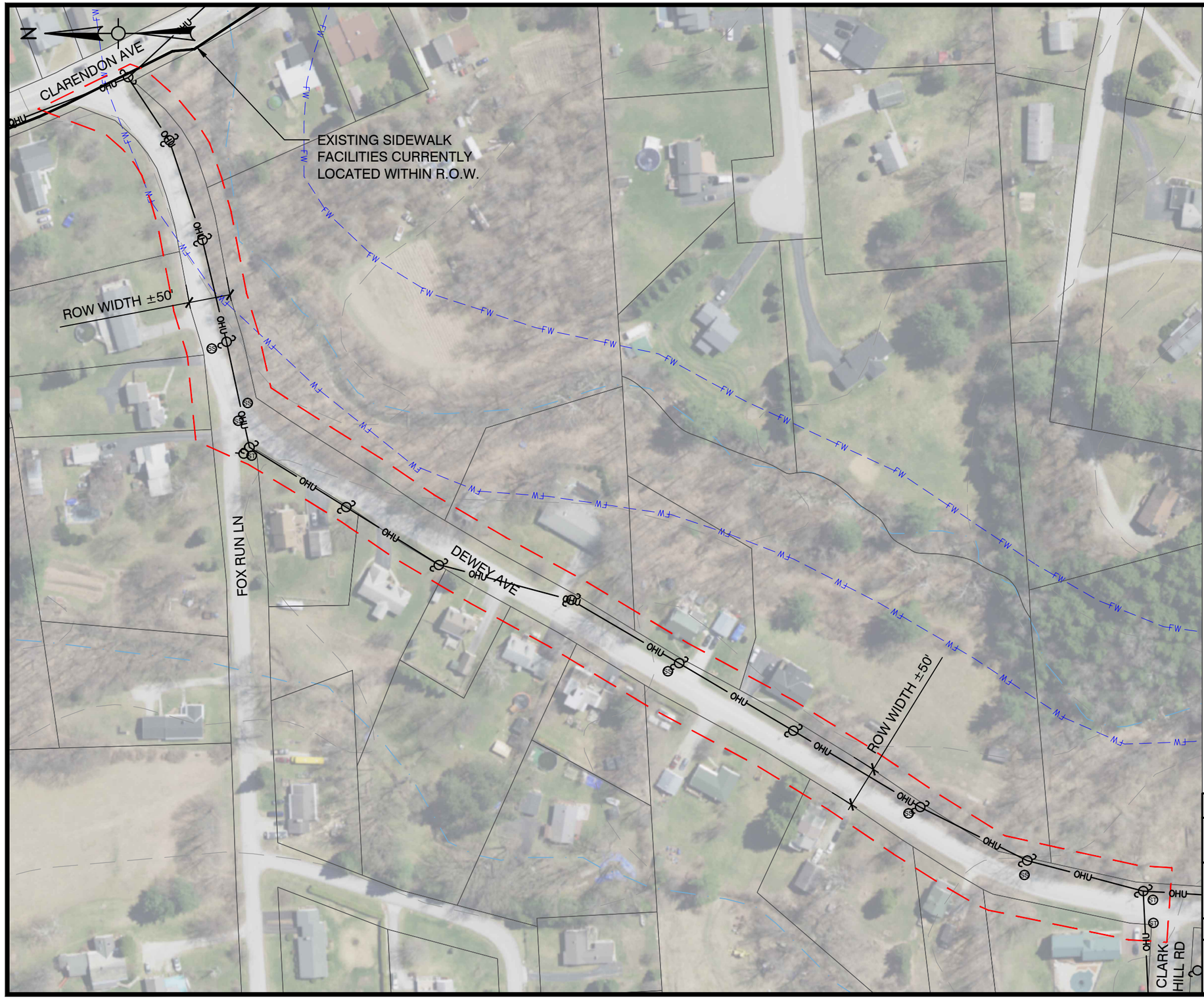
TOWN OF WEST RUTLAND, VERMONT
SIDEWALK SCOPING STUDY

ROW & UTILITY ANALYSIS
AREA '6' - MAIN STREET

DESIGNED BY: JWG	CHECKED BY: DPB	DATE: SEPT. 2022

Weston & Sampson℠



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- APPROX. RTE HABITAT CHECK ZONE
- APPROX. PARCEL BOUNDARY
- PROJECT AREA
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TOWN OF WEST RUTLAND, VERMONT
SIDEWALK SCOPING STUDY

ROW & UTILITY ANALYSIS AREA '7' - DEWEY AVENUE

DESIGNED BY: JWG	CHECKED BY: DPB	DATE: SEPT. 2022

Weston & Sampson

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APPENDIX D

Natural Resources Assessment

Natural Resources Assessment for:
West Rutland TAP TA 21(8)
Sidewalk Scoping Study

Town of West Rutland, Vermont

Prepared by:
Arrowwood Environmental, LLC

July 29, 2022

ARROWWOOD ENVIRONMENTAL
950 BERT WHITE ROAD
HUNTINGTON,VT 05462
(802 434-7276 FAX: (802) 329-2253

Natural Resources Assessment for
West Rutland TAP TA 21 (8)
Sidewalk Scoping Study
Town of West Rutland, Vermont

Table of Contents

Page #

I. Introduction

Arrowwood Environmental, LLC (AE) performed a preliminary natural resources assessment for seven discrete project areas for the West Rutland TAP TA 21 (8) Sidewalk Scoping Study. The assessment involved both an online database review as well as rapid field verification to identify natural resources. Resources included in the assessment include wetlands, streams, floodways and river corridors, shorelines, rare, threatened and endangered species, and primary agricultural lands. The field verification was conducted on May 24, 2022. Resource mapping was conducted at planning grade accuracy and not formal delineation. The project areas are labeled 1-7 as presented in the Request for Proposals. The results of the preliminary assessment are presented for each project area with an accompanying map.

II. Project Area 1

Project Area 1 is located along Pleasant Street north of the intersection with Main Street. The study area is approximately 1.33 acres. There are no wetlands, streams, floodways, mapped river corridors, shorelines, or known occurrences of rare, threatened or endangered species present within Project Area 1.

The entire area is mapped as primary agricultural soils consisting of the Warwick-Quonset complex. Sheet 1 of the attached map set presents the results of the preliminary natural resources inventory for Project Area 1.

III. Project Area 2

Project Area 2 is located along Pleasant Street, south of the intersection with Durgy Hill Road. The study area is approximately 1.6 acres. There are no floodways, mapped river corridors, shorelines, or known occurrences of rare, threatened, or endangered species present within Project Area 2.

There is a wetland and an unnamed stream located within the southern portion of the study area. The area of the wetland within the Project area is approximately 0.28 acres and extends to the west out of the study area. The wetland is characterized as a shallow emergent marsh and is presumed

to be a Class II wetland protected by the Vermont Wetland Rules. The wetland is likely significant for the following functions and values: water storage for flood water and storm runoff, surface and ground water protection, fish habitat, wildlife habitat, and erosion control.

A stream flows through the wetland in a westerly direction. The stream was flowing at the time of the assessment and assumed to have perennial hydrology.

The entire study area is mapped as primary agricultural soils consisting of Stockbridge gravelly silt loam, and Georgia and Amenia soils. Sheet 2 of the attached map set presents the results of the preliminary natural resources inventory for Project Area 2.

IV. Project Area 3

Project Area 3 is located along Thrail Avenue to the south west of Sheldon Avenue. The study area is approximately 1.64 acres. There are no shorelines, known occurrences of rare, threatened, or endangered species or primary agricultural soils present within Project Area 3.

There are three wetlands within Project Area 3. The wetlands are characterized as shallow emergent marsh with each extending to the northwest out of the study area. The wetlands are mapped on the Vermont Significant Inventory Maps and are therefore Class II and protected by the Vermont Wetland Rules. The wetlands are part of a large overall wetland complex and likely significant for the following functions and values: water storage for flood water and storm runoff, surface and ground water protection, fish habitat, wildlife habitat, and erosion control.

There is an unnamed tributary to the Castleton River that flows through the western portion of the study area in a northerly direction. The stream was flowing at the time of the assessment and is assumed to have perennial hydrology. There is a mapped FEMA flood hazard area and river corridor associated with this tributary that is present within the Project Area. Sheet 3 of the attached map set presents the results of the preliminary natural resources inventory for Project Area 3.

V. Project Area 4

Project Area 4 is located along Ross Street, west of the intersection of Main Street, Clarendon Avenue and Ross Street. The study area is approximately 0.3 acres. There are no wetlands, streams,

floodways, mapped river corridors, shorelines, or known occurrences of rare, threatened or endangered species present within Project Area 4.

The entire area is mapped as primary agricultural soils consisting of Canandaigua silt loam and Georgia and Amenia soils. Sheet 4 of the attached map set presents the results of the preliminary natural resources inventory for Project Area 4.

VI. Project Area 5

Project Area 5 is located along Ross Street, west of the intersection of High Street, Franklin Street and Ross Street. The study area is approximately 1.0 acres. There are no wetlands, streams, floodways, mapped river corridors, shorelines, or known occurrences of rare, threatened or endangered species present within Project Area 5.

The eastern and western margins of the study area are mapped as primary agricultural soils consisting of Georgia and Amenia soils. Sheet 5 of the attached map set presents the results of the preliminary natural resources inventory for Project Area 5.

VII. Project Area 6

Project Area 6 is located along Main Street between Gilmore and Proctor Streets. The study area is approximately 1.05 acres. There are no wetlands, streams, mapped river corridors, shorelines, or known occurrences of rare, threatened or endangered species present within Project Area 6.

There is a mapped FEMA flood hazard area within the western portion of Project Area 6. This flood hazard area appears to be associated with an unnamed tributary to the Clarendon River.

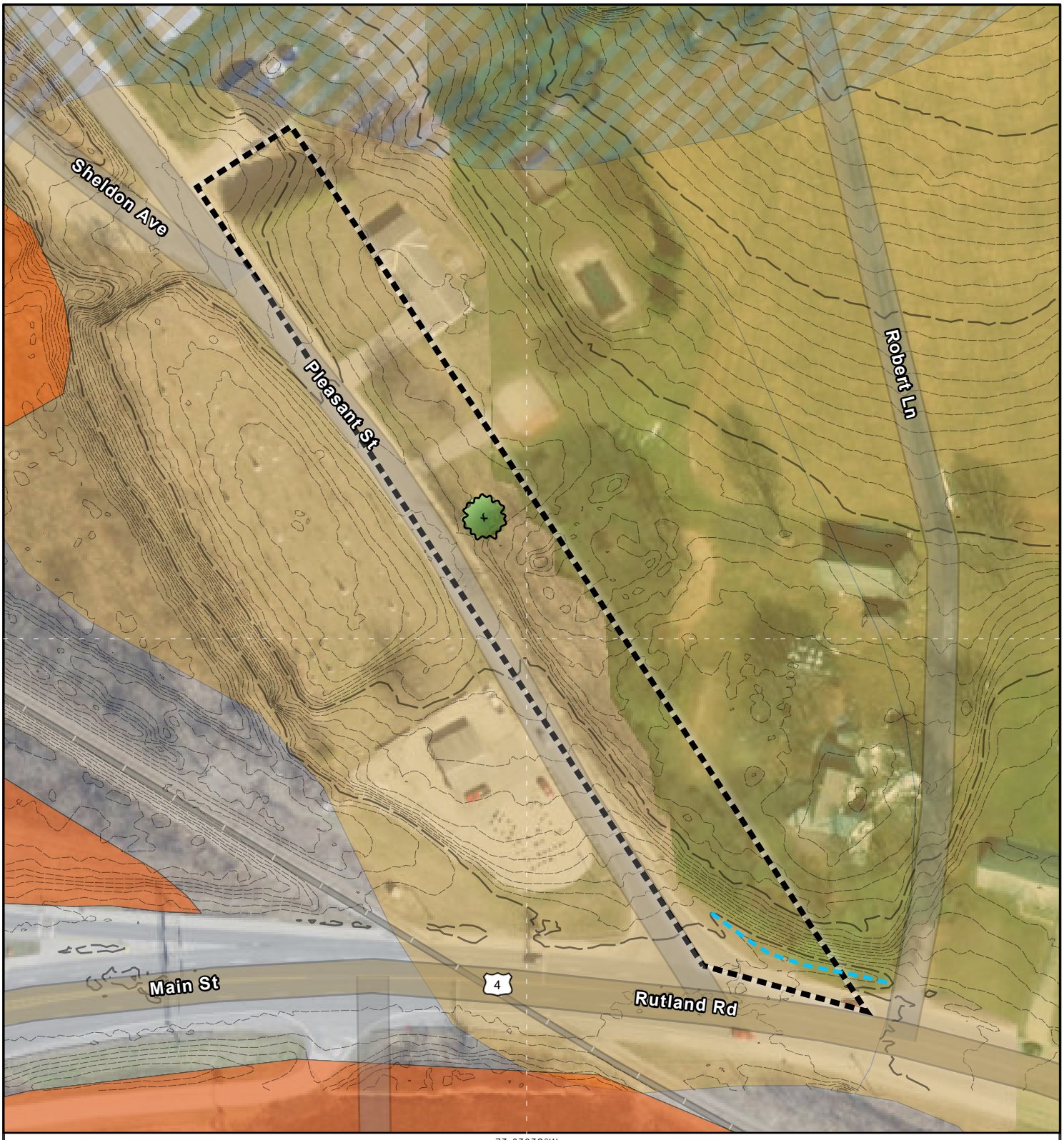
The entire study area is mapped as primary agricultural soils consisting of Canandaigua silt loam. Sheet 6 of the attached map set presents the results of the preliminary natural resources inventory for Project Area 6.

VIII. Project Area 7

Project Area 7 is located along Dewey Avenue between Clarendon Avenue and Clark Hill Road. The study area is approximately 7.15 acres. There are no wetlands, shorelines, or known occurrences of rare, threatened or endangered species present within Project Area 7.

There is an unnamed tributary to the Clarendon River that flows through the eastern portion of the study area in an easterly direction. The stream was flowing at the time of the assessment and is assumed to have perennial hydrology. There is a mapped FEMA flood hazard area and river corridor associated with this tributary that is present within the Project Area.

The entire study area is mapped as primary agricultural soils consisting of the Warwick-Quonset complex. Sheet 7 of the attached map set presents the results of the preliminary natural resources inventory for Project Area 7.



Wetlands
Stream
Culvert
Ditch
Invasive Plant Pop.
Pot. Bat Roost Tree(s)
Study Area
VT ANR River Corridor
FEMA Flood Hazard Area
Prime Ag Soils
Statewide Ag Soils

Source notes and disclaimers:
Resource identification through remote assessment and/or rapid field verification. Resource mapping by Arrowwood Environmental based on recon-level field mapping- this is NOT a wetland delineation, and accuracy is not suitable for permitting or detailed planning.

This is NOT a land or boundary survey. Other data from VCGI. Background imagery: VCGI-2019

West Rutland TAP: Preliminary NR

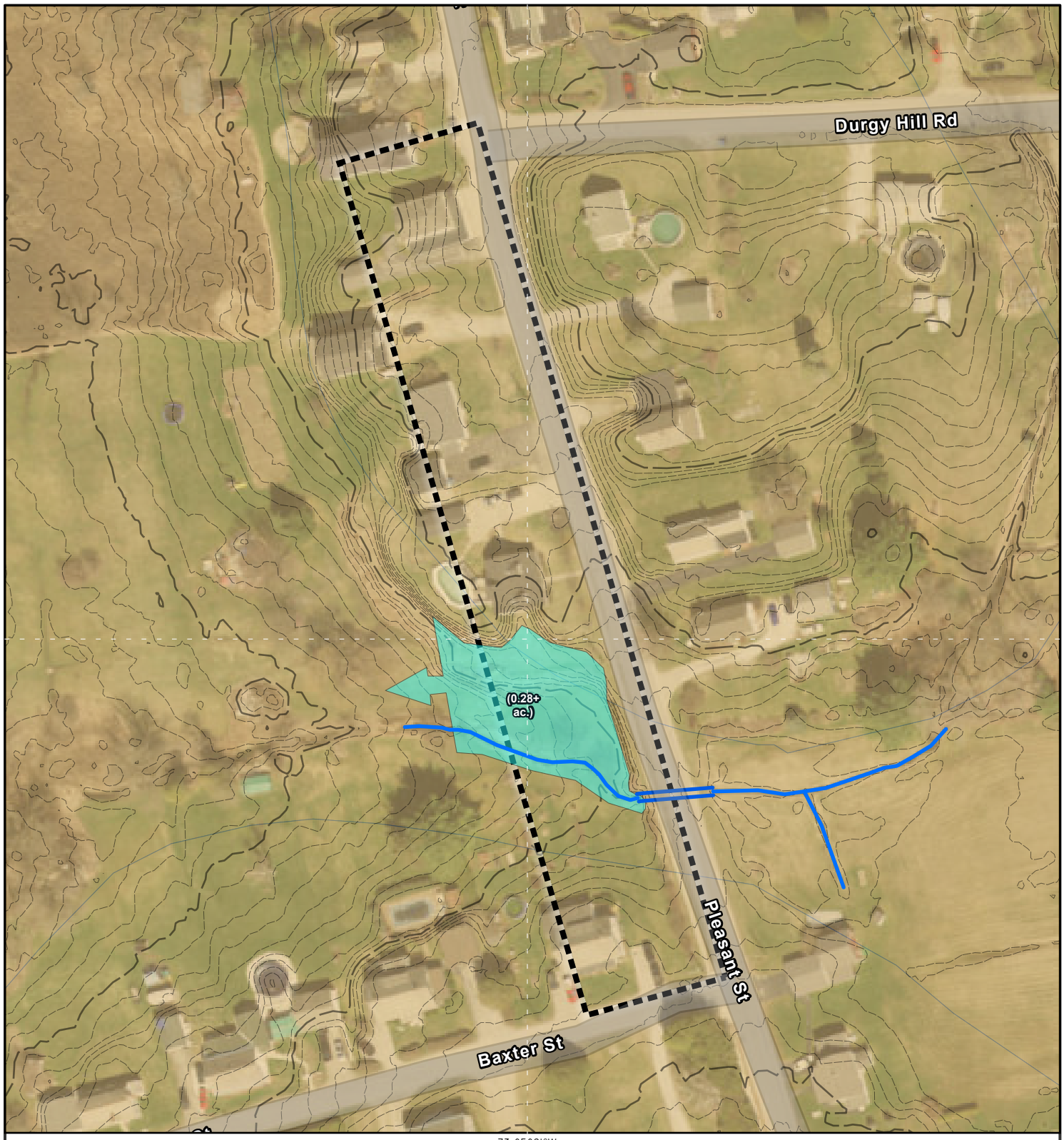
1- Pleasant St Rt 4 to Sheldon

Thursday, July 28, 2022 File: WS_WestRutlandTAP:8.5x11 Resource
Prepared By: A Worthley *NAD 1983 StatePlane Vermont FIPS 4400*

0 12.525 50 75 100 Feet

N W E S

ARROWWOOD ENVIRONMENTAL
950 BERT WHITE ROAD
HUNTINGTON,VT 05462
(802 434-7276 FAX: (802) 329-2259



Wetlands
Stream
Culvert
Ditch
Invasive Plant Pop.
Pot. Bat Roost Tree(s)
Study Area
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This is NOT a land or boundary survey. Other data from VCGI. Background imagery: VCGI-2019

West Rutland TAP: Preliminary NR

2- Pleasant St Baxter to Durgy

Thursday, July 28, 2022 File: WS_WestRutlandTAP:8.5x11 Resource
Prepared By: A Worthley *NAD 1983 StatePlane Vermont FIPS 4400*

0 12.525 50 75 100 Feet

N W E S

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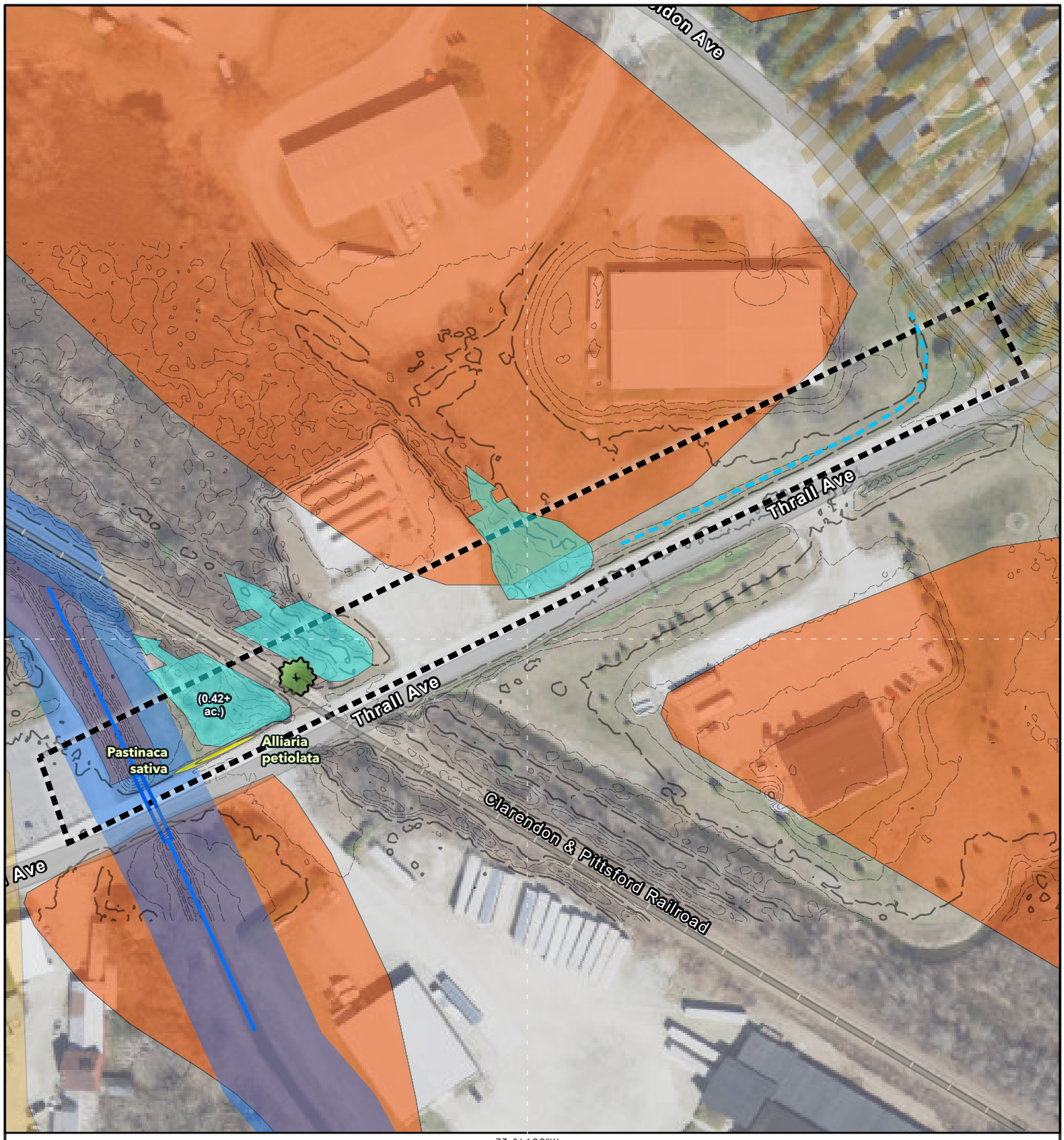
950 BERT WHITE ROAD
HUNTINGTON,VT 05462
(802 434-7276 FAX: (802) 329-2259



Wetlands
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Culvert
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This is NOT a land or boundary survey. Other data from VCGI. Background imagery: VCGI-2019

West Rutland TAP: Preliminary NR

3- Thrall Park & Ride to Sheldon

Thursday, July 28, 2022 File: WS_WestRutlandTAP:8.5x11 Resource
Prepared By: A Worthley *NAD 1983 StatePlane Vermont FIPS 4400*

0 15 30 60 90 120 Feet

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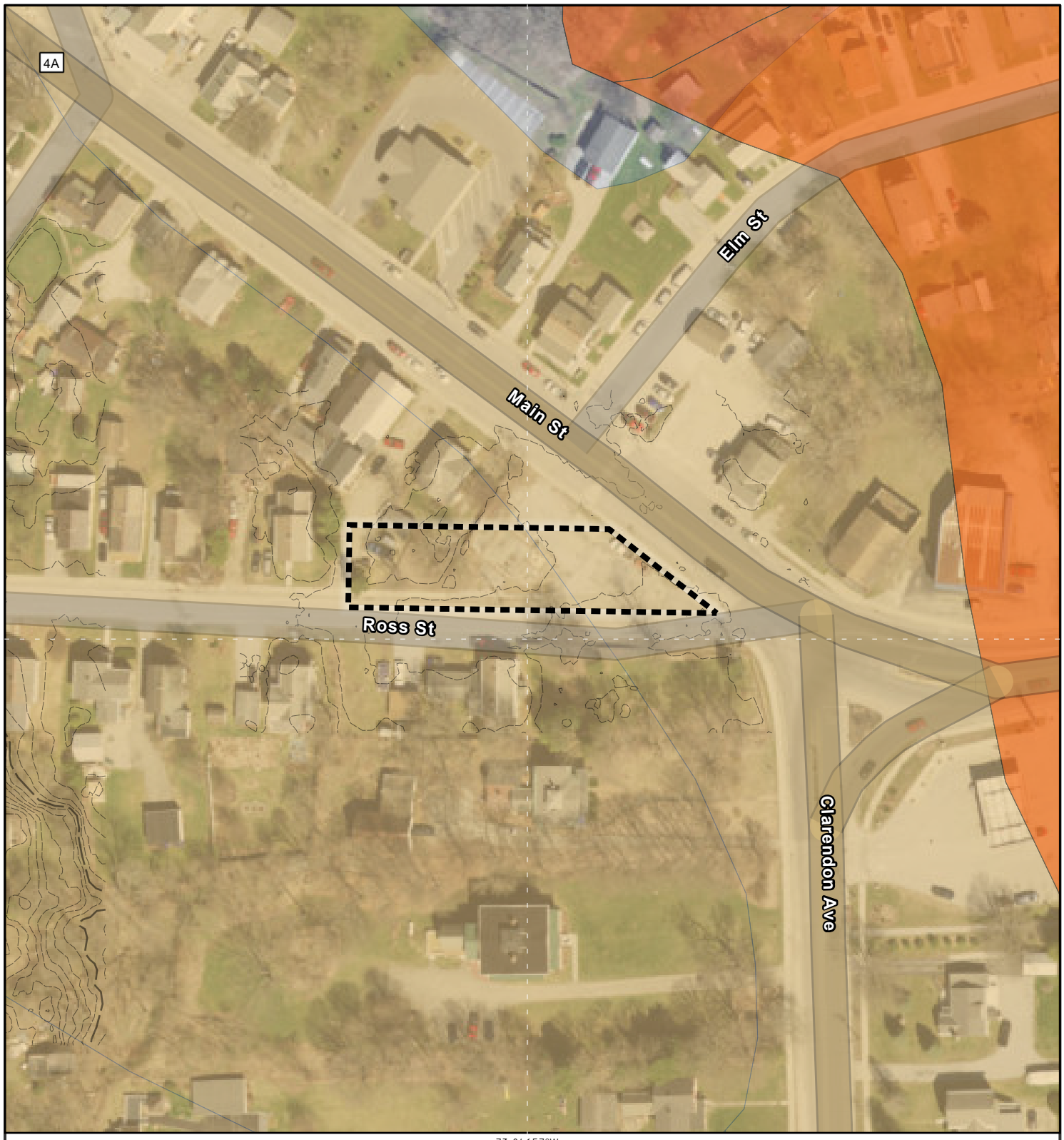
ARROWWOOD ENVIRONMENTAL
950 BERT WHITE ROAD
HUNTINGTON,VT 05462
(802 434-7276 FAX: (802) 329-2259



Wetlands
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West Rutland TAP: Preliminary NR

4- Ross St Main to Fence

Thursday, July 28, 2022 File: WS_WestRutlandTAP:8.5x11 Resource
Prepared By: A Worthley *NAD 1983 StatePlane Vermont FIPS 4400*

0 12.525 50 75 100 Feet

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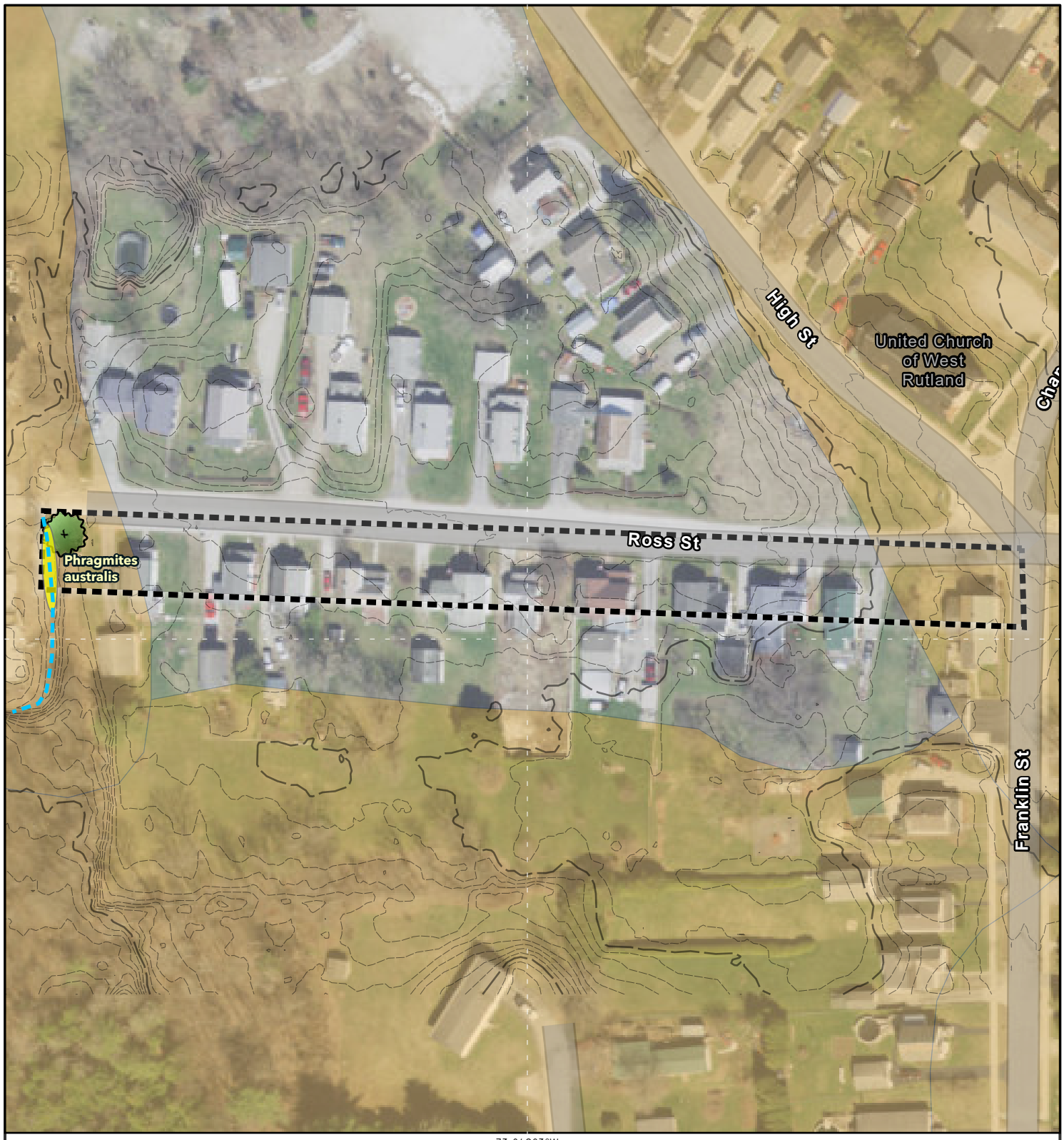
ARROWWOOD ENVIRONMENTAL
950 BERT WHITE ROAD
HUNTINGTON,VT 05462
(802 434-7276 FAX: (802) 329-2259



Wetlands
Stream
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West Rutland TAP: Preliminary NR

5- Ross St Franklin to end

Thursday, July 28, 2022 File: WS_WestRutlandTAP:8.5x11 Resource
Prepared By: A Worthley *NAD 1983 StatePlane Vermont FIPS 4400*

0 12.525 50 75 100 Feet

N W E S

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HUNTINGTON,VT 05462
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West Rutland TAP: Preliminary NR

6- Main St Proctor to Gilmore

Thursday, July 28, 2022 File: WS_WestRutlandTAP:8.5x11 Resource
Prepared By: A Worthley *NAD 1983 StatePlane Vermont FIPS 4400*

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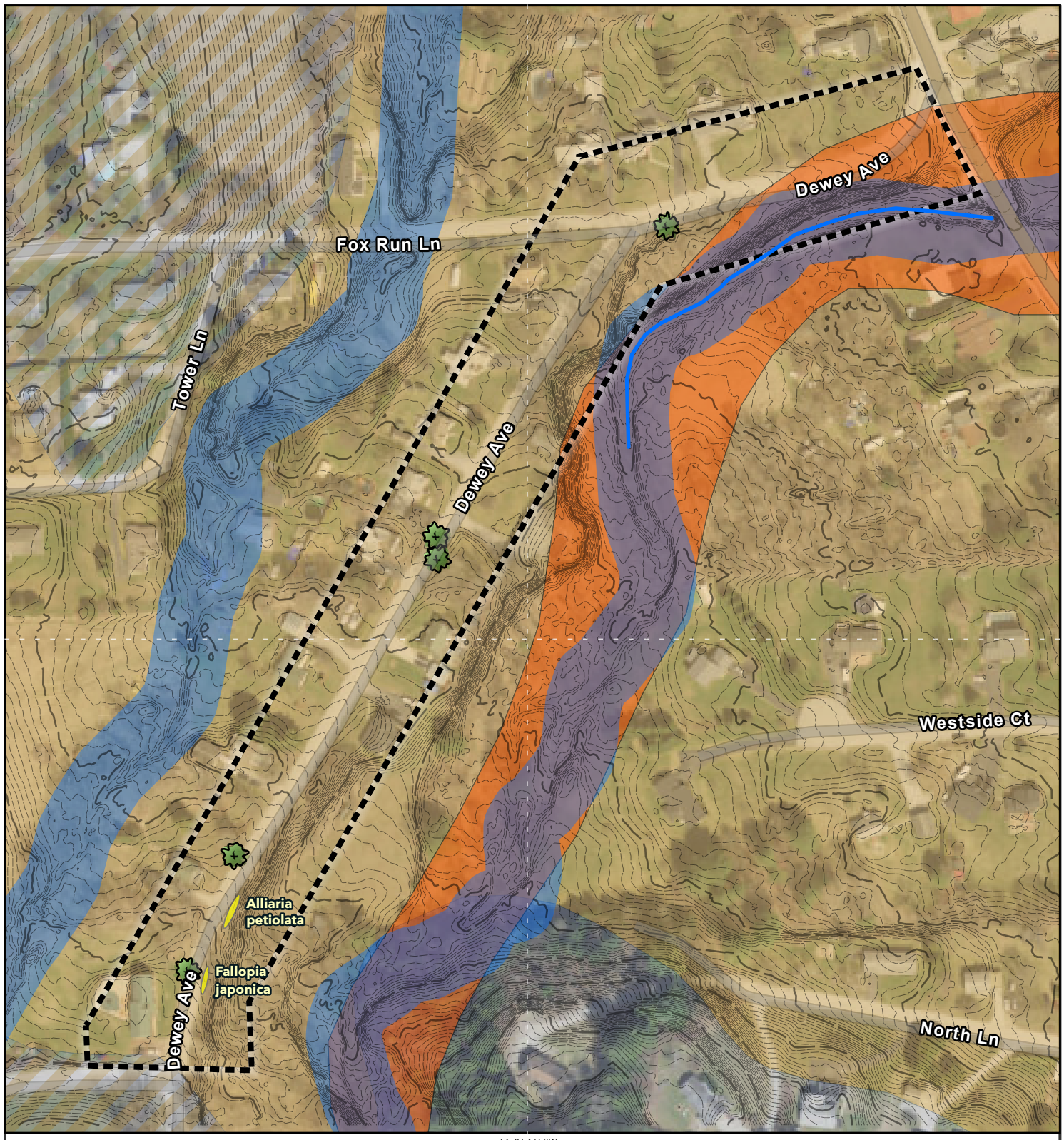

Wetlands
Stream
Culvert
Ditch
Invasive Plant Pop.
Pot. Bat Roost Tree(s)
Study Area
VT ANR River Corridor
FEMA Flood Hazard Area
Prime Ag Soils
Statewide Ag Soils

Source notes and disclaimers:
Resource identification through remote assessment and/or rapid field verification. Resource mapping by Arrowwood Environmental based on recon-level field mapping- this is NOT a wetland delineation, and accuracy is not suitable for permitting or detailed planning.

This is NOT a land or boundary survey. Other data from VCGI. Background imagery: VCGI-2019

West Rutland TAP: Preliminary NR

7- Dewey Clarendo to Clark Hill

Thursday, July 28, 2022 File: WS_WestRutlandTAP:8.5x11 Resource
Prepared By: A Worthley *NAD 1983 StatePlane Vermont FIPS 4400*

0 20 40 80 120 160 Feet

N W E S

ARROWWOOD ENVIRONMENTAL
950 BERT WHITE ROAD
HUNTINGTON,VT 05462
(802 434-7276 FAX: (802) 329-2259

APPENDIX E

Archeological Resources Assessment

&

Preliminary Historic Resources Identification

HARTGEN
archeological associates inc

ARCHEOLOGICAL RESOURCE ASSESSMENT

West Rutland Sidewalk Scoping Study
TAP TA 21(8)

Town of West Rutland
Rutland County, Vermont

HAA # 5822-11

Submitted to:
Weston & Sampson
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Prepared by:
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An ACRA Member Firm
www.acra-crm.org

June 2022

MANAGEMENT SUMMARY

VTrans Project Number: *TAP TA 21(8)*
Involved State and Federal Agencies: *Vermont Agency of Transportation (VTrans)*
Phase of Survey: *Archeological Resource Assessment (ARA)*

LOCATION INFORMATION

Municipality: *Town of West Rutland*
County: *Rutland County*

SURVEY AREA

The project APE is composed of seven sidewalk segments to be replaced along Pleasant Street, Thrall Avenue, Ross Street, and Main Street, and a new sidewalk on Dewey Avenue. The total APE measures as follows:
Length: *5,135 feet (157 m)*
Width: *15 feet (4.6 m)*
Area: *1.77 acres (0.7 ha)*

RESULTS OF RESEARCH

Archeological sites within one mile: *Four, three with precontact components, one with precontact and historic components and one with historic components*
Surveys in or adjacent: *One*
NR/NRE sites in or adjacent: *Marble Street Historic District (NRL 1990) adjacent; c. 1875 residence (SRL 1980) adjacent*
Precontact Sensitivity: *Moderate*
Historic Sensitivity: *Low*

RECOMMENDATIONS

No further archeological review is recommended for Segments 1 to 6 due to existing disturbance. Phase IB archeological reconnaissance survey is recommended for Segment 7. Once a side of Segment 7 (Dewey Avenue) is chosen, a Phase IB scope of work can be developed. Further information regarding the location of existing utility disturbance would be helpful in designing that scope.

Report Authors: *Thomas R. Jamison, PhD, RPA #16566*
Date of Report: *June 2022*

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Map List

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ARCHEOLOGICAL RESOURCE ASSESSMENT

1 Introduction

Hartgen Archeological Associates, Inc. (Hartgen) conducted an Archeological Resource Assessment for the proposed West Rutland Sidewalk Scoping Project (Project) located in the Town of West Rutland, Rutland County, Vermont (Map 1). The Project requires approvals by the Vermont Agency of Transportation (VTrans). This investigation was conducted to comply with Section 106 of the National Historic Preservation Act of 1966, as amended, and will be reviewed by the VTrans archeology officer. This investigation adheres to the Vermont State Historic Preservation Office's (SHPO) *Guidelines for Conducting Archeology in Vermont* (2017).

2 Project Information

A site visit was conducted by Rachel Freeman on May 24, 2022 to observe and photograph existing conditions within the Project Area. The information gathered during the site visit is included below.

2.1 Project Location

The project is located in and around the center of the village of West Rutland, consisting of seven segments of proposed replacement and new sidewalks as follows (Maps 2a to 2g):

1) East side of Pleasant Street between Business Route 4 and Sheldon Avenue: 639 feet (195 m)
2) West side of Pleasant Street between Baxter Street and Durgy Hill Road: 643 feet (196 m)
3) North side of Thrall Avenue between the Park & Ride and Sheldon Avenue: 512 feet (156 m)
4) North side of Ross Street from Main St. to the fence at the approximate property corner of 62 Ross Street: 188 feet (57 m)
5) South side of Ross Street from Franklin Street to the terminus of Ross Street: 692 feet (211 m)
6) North side of Main Street from Proctor Street to Gilmore Street: 653 feet (199 m)
7) Both sides of Dewey Street from Clarendon Avenue to Clark Hill Road: 1,720 feet (524 m)

2.2 Description of the Project

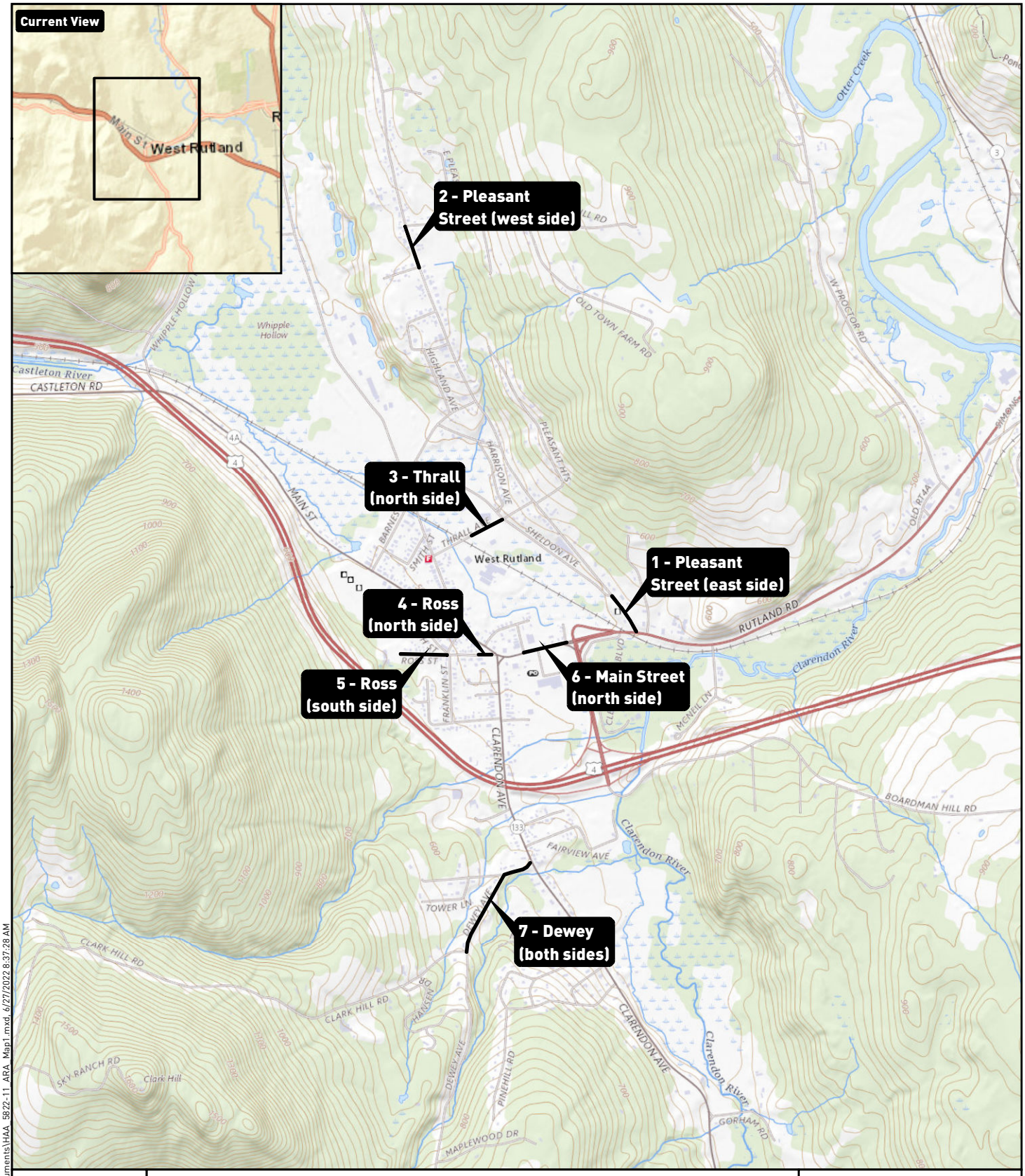
The project calls for replacement of deteriorated sidewalks along most of these alignments with construction of new sidewalk along both sides of the Dewey Street segment.

2.3 Description of the Area of Potential Effects (APE)

The area of potential effects (APE) includes all portions of the property that will be directly or indirectly altered by the proposed undertaking. The APE extends approximately 5,135 feet (157 m) in length and encompasses approximately 1.77 acres (0.7 ha), assuming a width of 15 feet (4.6 m). It is divided as outlined above.

3 Environmental Background

The environment of an area is significant for determining the sensitivity of the Project Area for archeological resources. Precontact and historic groups often favored level, well-drained areas near wetlands and waterways. Therefore, topography, proximity to wetlands, and soils are examined to determine if there are landforms in the Project Area that are more likely to contain archeological resources. In addition, bedrock formations may contain chert or other resources that may have been quarried by precontact groups. Soil conditions can provide a clue to past climatic conditions, as well as changes in local hydrology.



1,000 0 1,000 2,000 Feet

300 0 300 600 Meters

Note: Contour interval is 20 feet.

Project Location

GIS Services Accessed 6/27/2022: Environmental Systems Research Institute, Inc., World Street Map; USGS The National Map

HARTGEN archeological associates inc

Map 1

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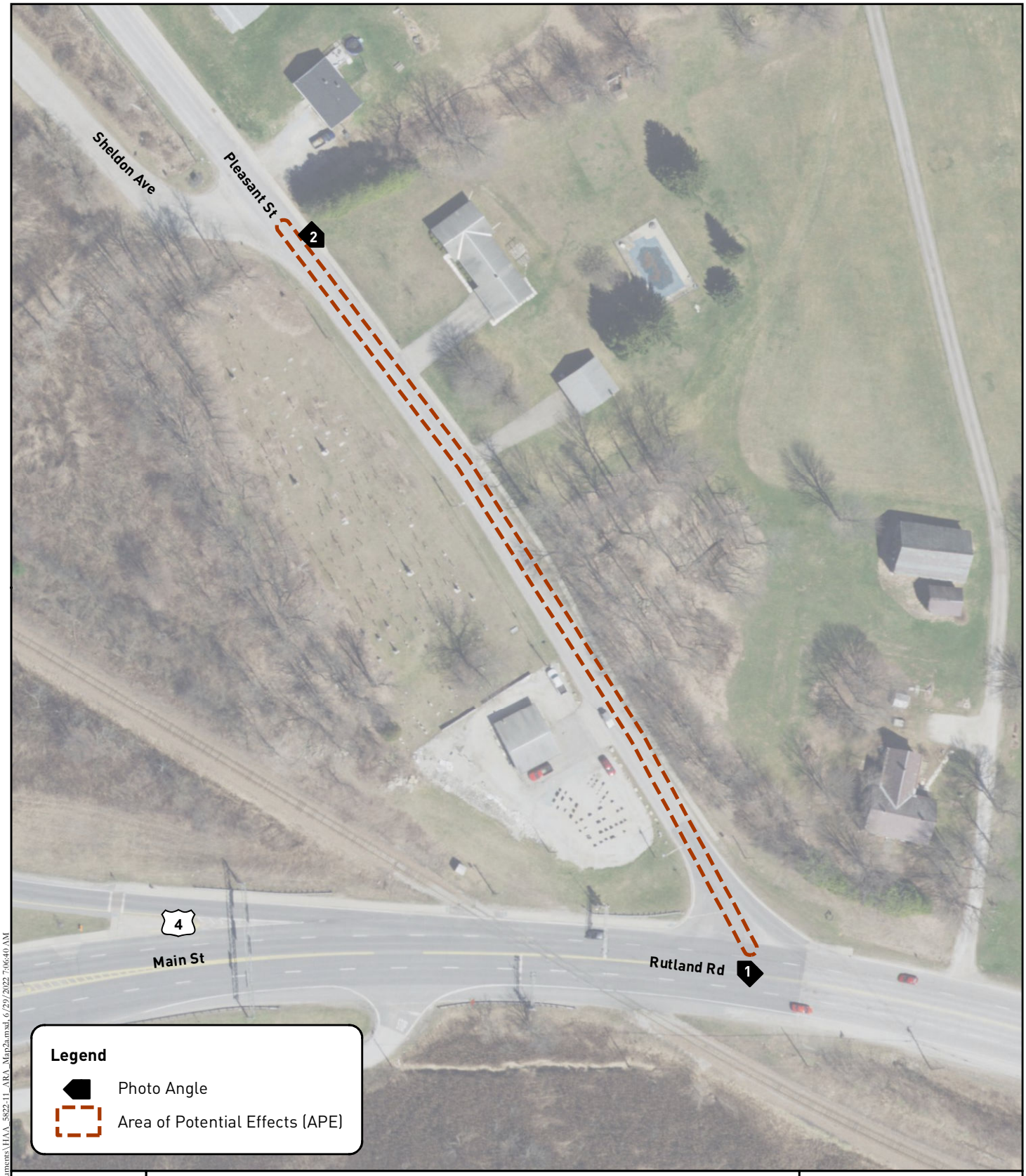

N

50 0 50 100 Feet

15 0 15 30 Meters

Project Map
1 - Pleasant Street (east side)

Vermont Center for Geographic Information, Orthoimagery, 2016-2020

HARTGEN archeological associates inc

Map 2a

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N

50 0 50 100 Feet

15 0 15 30 Meters

Project Map
2 - Pleasant Street (west side)

Vermont Center for Geographic Information, Orthoimagery, 2016-2020

HARTGEN archeological associates inc

Map 2b

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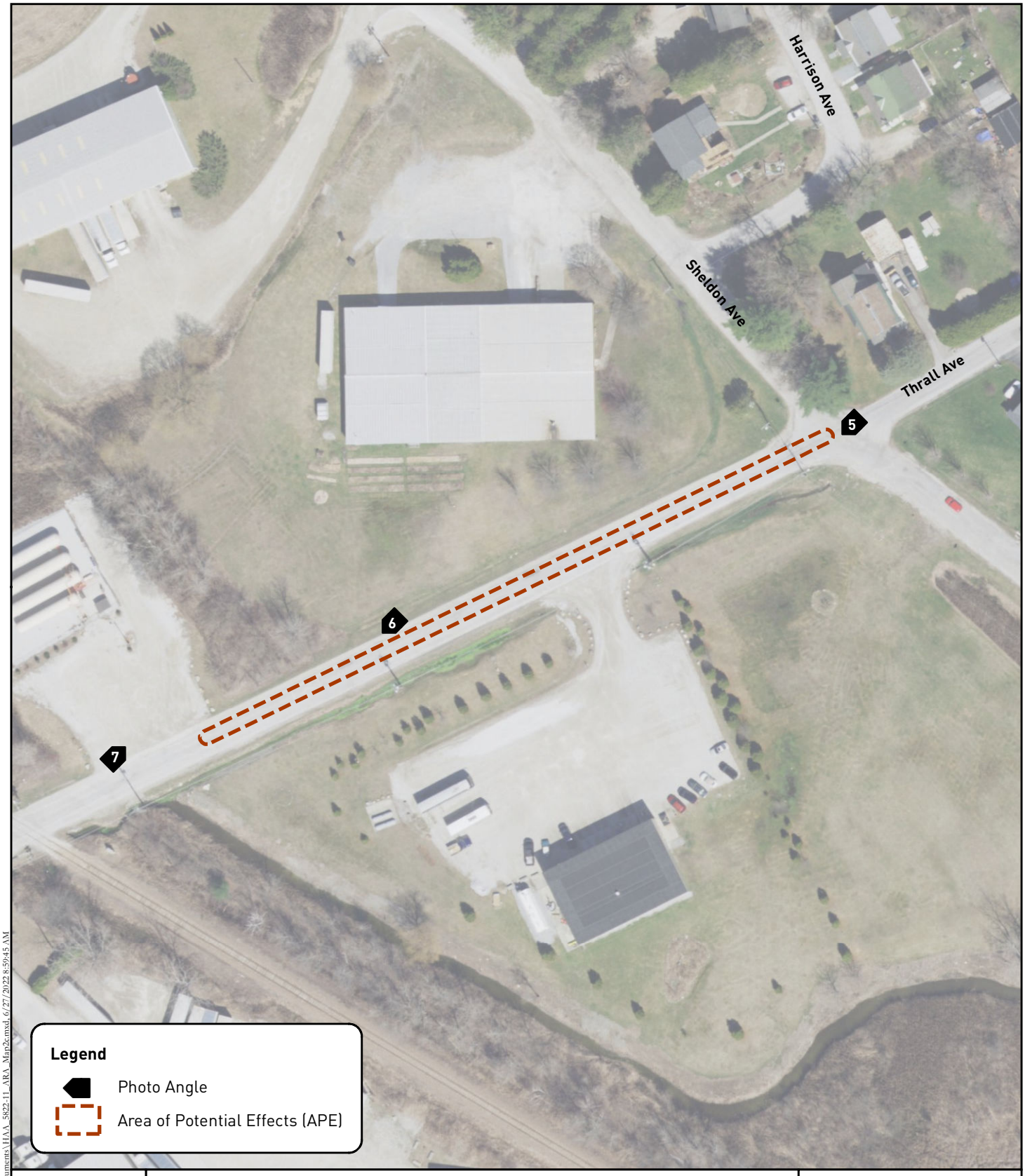

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15 0 15 30 Meters

Project Map
3 - Thrall (north side)

Vermont Center for Geographic Information, Orthoimagery, 2016-2020

HARTGEN archeological associates inc

Map 2c

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Project Map
4 - Ross (north side)

Vermont Center for Geographic Information, Orthoimagery, 2016-2020

HARTGEN archeological associates inc

Map 2d

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N

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15 0 15 30 Meters

Project Map
5 - Ross (south side)

Vermont Center for Geographic Information, Orthoimagery, 2016-2020

HARTGEN archeological associates inc

Map 2e

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N

50 0 50 100 Feet

15 0 15 30 Meters

Project Map
6 - Main Street (north side)

Vermont Center for Geographic Information, Orthoimagery, 2016-2020

HARTGEN archeological associates inc

Map 2f

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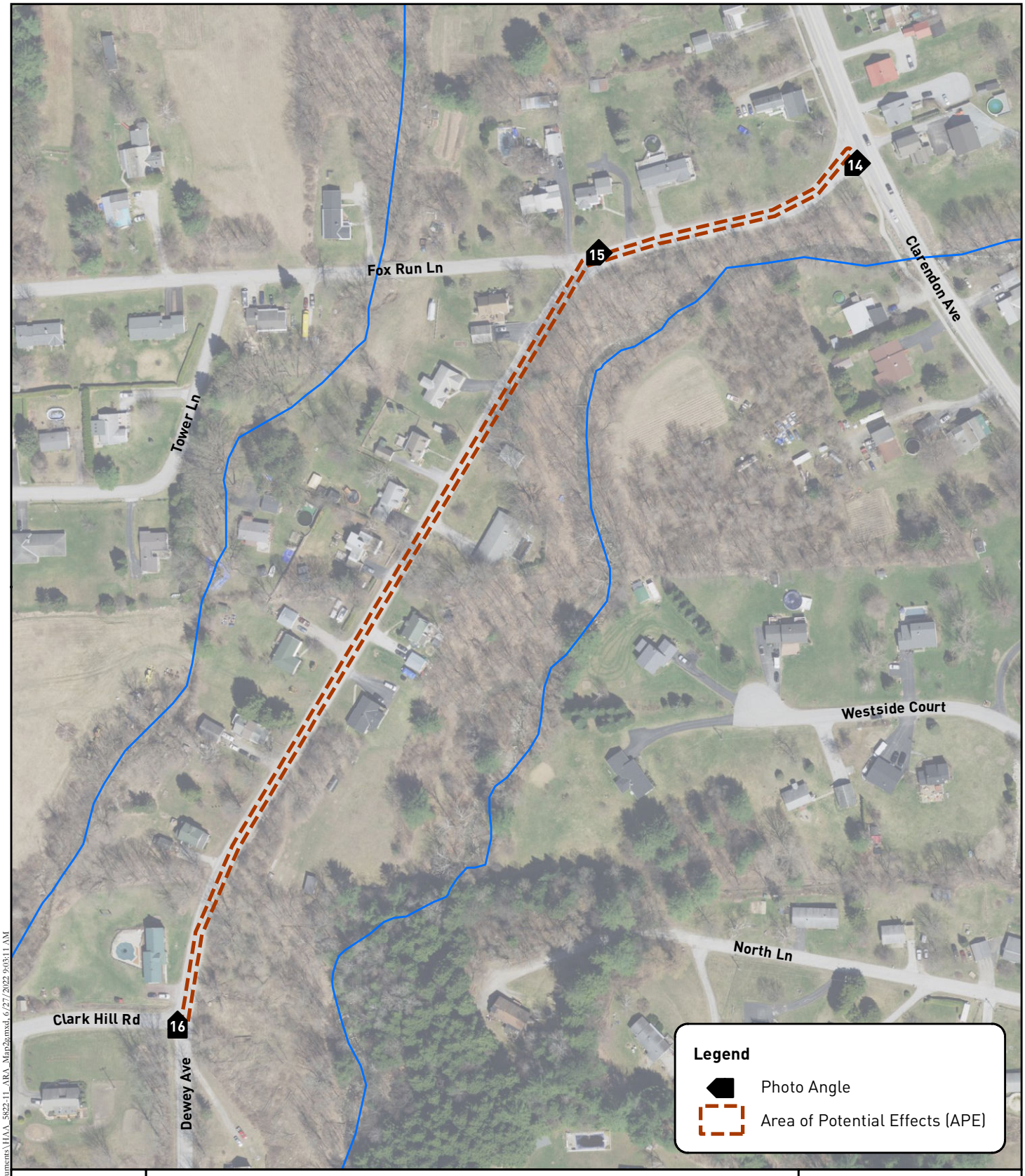

100 0 100 200 Feet

30 0 30 60 Meters

Project Map
7 - Dewey (both sides)

Vermont Center for Geographic Information, Orthoimagery, 2016-2020

HARTGEN archeological associates inc

Map 2g

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3.1 Present Land Use and Current Conditions

3.1.1 Segment 1: Pleasant Street (east side) – Business Route 4 to Sheldon Avenue

The existing sidewalk along the east side of Pleasant Street extends from Sheldon Avenue to just short of Business Route 4 (Photos 1 and 2). It passes in front of one recent house with recent and earlier houses located at the north end of the segment. The front lawn of the houses slopes down to the sidewalk. A storm drain drop inlet is noted under the sidewalk near the north end of the alignment. Across the street is the historic Pleasant Street Cemetery.

Photo 1. South end of Segment 1 at the intersection of Pleasant Street and Route 4. Note existing sidewalk that ends short of Business Route 4 on the right. View to the north/northwest.

Photo 2. Detail of existing sidewalk on the north end of Segment 1. Note lawns sloping down to the road. View to the southeast.

3.1.2 Segment 2: Pleasant Street (west side) – Baxter Street to Durgy Hill Road

Segment 2 is located on the west side of Pleasant Street between Baxter Street and Durgy Hill Road (Photos 3 and 4). As with Segment 1, Segment 2 is also on a sloped landscape with the properties on the eastern side of the road sloping down to the roadside and those on the west side constructed to some extent on fill sloping down away from the road to the west.

Photo 3. Segment 2, from Baxter Street to the north. Note existing sidewalk along the west side of Pleasant Street. View to the north.

Photo 4. Segment 2, from Durgy Hill Road to the south. Note slope down from east to west (l-r) and existing sidewalk along the west side of Pleasant Street. View to the south.

3.1.3 Segment 3: Thrall Avenue (north side) – park and ride to Sheldon

The Thrall Avenue segment extends along the north side of the street on an existing sidewalk from the intersection with Sheldon Street on the east to the park and ride lot on the west (Photos 5 to 7). The adjacent areas to the APE are lawns with ditches to facilitate drainage.

Photo 5. Segment 3, Thrall Avenue from Sheldon Avenue to the southwest. Note existing sidewalk along the north side of Thrall Avenue. View to the southwest.

Photo 6. Segment 3, Thrall Avenue to the southwest. Note existing sidewalk along the north side of Thrall Avenue. View to the southwest.

Photo 7. Segment 3, from park and ride to the northeast. Note existing sidewalk along the north side of Thrall Avenue. View to the northeast.

3.1.4 Segment 4: Ross Street (north side) – Main Street extending to west

Segment 4 extends from Main Street approximately 179 feet (55 m) along the north side of the street. An existing sidewalk is present along the alignment (Photo 8). The sidewalk has significant deterioration and runs adjacent to an empty lot that once had a structure within a few feet of the APE (Photo 9).

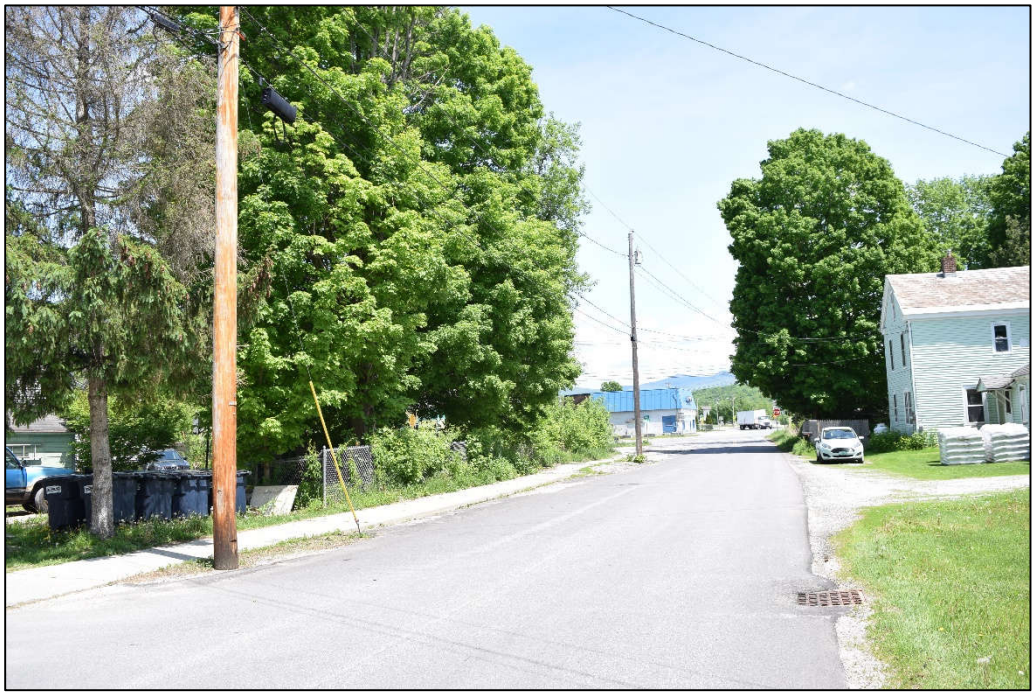


Photo 8. Segment 4, east end of Ross Street. Note existing sidewalk along the north side of Ross Street with Main Street in the background. View to the east.

Photo 9. Segment 4, toward Main Street. Note deteriorated existing sidewalk along the north side of Ross Street. View to the east.

3.1.5 Segment 5: Ross Street (south side) – Franklin Street to west

Segment 5 extends along an existing asphalt sidewalk on the south side of Ross Street (Photos 10 and 11). It passes in front of several residential properties and ends at the west end of Ross Street.

Photo 10. Segment 5, from the Franklin Street intersection to the west. Note existing sidewalk along the south side of Ross Street. View to the west.

Photo 11. Segment 5, from the west end of Ross Street to the east. Note deteriorating existing sidewalk along the south side of Ross Street. View to the east.

3.1.6 Segment 6: Main Street (north side) – Proctor Street to Gilmore Street

Segment 6 extends along the north side of Main Street between Proctor and Gilmore Streets (Photos 12 and 13). The alignment passes in front of several residential and commercial properties.

Photo 12. Segment 6, from Proctor Street to the east. Note existing sidewalk along the north side of Main Street. View to the east.

Photo 13. Segment 6, from Gilmore Street to the west. Note existing sidewalk along the north side of Main Street. View to the west.

3.1.7 Segment 7: Dewey Avenue (both sides) – Clarendon Avenue to Clark Hill Road

Dewey Avenue is a residential street extending from Clarendon Avenue to the southwest (Photos 14 to 16). No sidewalks are present along the alignment.

Photo 14. Segment 7, from Clarendon Avenue to the southwest. Note lack of sidewalk on both sides of Dewery Avenue. View to the southwest.

Photo 15. Segment 7, intersection with Fox Run Lane. View to the southwest.

Photo 16. Segment 7, from the intersection with Clark Hill Road to the north. Note Clark Hill Road on the bottom left with Dewey Avenue extending to the background. View to the north.

3.2 Soils

Soil surveys provide a general characterization of the types and depths of soils that are found in an area. This information is an important factor in determining the appropriate methodology if and when a field study is recommended. The soil type also informs the degree of artifact visibility and likely recovery rates. For example, artifacts are more visible and more easily recovered in sand than in stiff glacial clay, which will not pass through a screen easily.

According to the USDA soil survey (USDA 2022), the soils of the project area developed on a combination of glaciofluvial/glaciolacustrine sediments in low lying areas with areas of glacial till on adjacent upland slopes. One exception is the segment along Thrall Street that crosses a depression characterized by organic sediments.

Table 1. Soils in Project Area

Symbol	Name	Textures	Slope	Drainage	Landform
1)	East side of Pleasant Street between Business Route 4 and Sheldon Avenue				
97B	Warwick-Quonset	Fine sandy loam with gravel	3-8%	Somewhat excessively drained	Glaciofluvial sediments
2)	West side of Pleasant Street between Baxter Street and Durgy Hill Road				
64B	Stockbridge	Gravelly silt loam	3-8%	Well drained	Glacial till sediments
66B	Georgia and Amenia	Loam	3-8%	Moderately well drained	Glacial till sediments
3)	North side of Thrall Street between the West Rutland Park & Ride and Sheldon Avenue				
64C	Stockbridge	Gravelly silt loam	8-15%	Well drained	Glacial till sediments
86	Linwood	Organic materials over loam	0-2%	Very poorly drained	Depressions on lake plains and outwash plains
4)	North side of Ross Street from Main St. to the fence at the approximate property corner of 62 Ross Street				
66B	Georgia and Amenia	Loam	3-8%	Moderately well drained	Glacial till sediments

Symbol	Name	Textures	Slope	Drainage	Landform
163	Canandaigua	Silt loam	0-3%	Poorly drained	Glaciolacustrine sediments
5)	South side of Ross Street from Franklin Street to the terminus of Ross Street				
41C	Farmington-Galway-Galoo	Silt loam, very rocky	5-25%	Somewhat excessively drained	Glacial till on uplands
66B	Georgia and Amenia	Loam	3-8%	Moderately well drained	Glacial till sediments
6)	North side of Main Street from Proctor Street to Gilmore Street				
163	Canandaigua	Silt loam	0-3%	Poorly drained	Glaciolacustrine sediments
7)	Both sides of Dewey Street from Clarendon Avenue to Clark Hill Road				
97B	Warwick-Quonset	Fine sandy loam with gravel	3-8%	Somewhat excessively drained	Glaciofluvial sediments
64C	Stockbridge	Gravelly silt loam	8-15%	Well drained	Glacial till sediments

3.3 Bedrock Geology

The bedrock in the Project Area is dominated by the Beldens Member of the Chipman formation that consists of "light-gray to creamy-white-weathering fine-grained limestone, orangey-buff-weathering dolostone, and reddish-streaked (hematite) calcite marble" (Ratcliffe 2011). In addition, areas 1 (south end of Pleasant Street) and 7 (Dewey Street) cross into areas defined as the Ira member of the Vermont Valley Sequence, consisting of "basal limestone…locally referred to as the Whipple Marble".

Neither of these formations were typically used by Native American groups for stone tool manufacture. However, they could have been utilized on an expedient basis.

3.4 Physiography and Hydrology

The Project Area topography and hydrology is varied. Segments 1 and 2 along Pleasant Street are cut into the sloped landscape. Segment 3 along Thrall Avenue crosses the level area that characterizes the core of the village that has been developed on marshy areas between the Castleton and Clarendon Rivers. Segments 4 and 5 along Ross Street slope slightly up to the west as they approach the edge of the level area, keeping that vicinity better drained than to the east. Segment 6 of Main Street is similar to Thrall Avenue, being built up in a marshy area. Finally, Segment 7 on Dewey Street is located on an alignment that rises on a narrow ridge between two tributaries of the Clarendon River.

4 Documentary Research

Hartgen conducted research at the Vermont Division for Historic Preservation (VDHP) to identify previously reported archeological sites, State and National Register (NR) properties, properties determined eligible for the NR (NRE), and previous cultural resource surveys.

4.1 Archeological Sites

The archeological site files at VDHP contained four sites within one mile (1.6 km) of the Project Area (Table 2). Previously reported archeological sites provide an overview of both the types of sites that may be present in the APE and the relationship of sites throughout the surrounding region. The presence of few reported sites, however, may result from a lack of previous systematic survey and does not necessarily indicate a decreased archeological sensitivity within the APE.

Of the four sites in the project vicinity, two of them contain precontact deposits of unknown date. A third contains a Late Woodland occupation overlaid by the late 18th-century occupation likely associated with one of

the first settlers of Rutland, Wright Roberts. A fourth site consists of a limestone foundation and cellar hole likely associated in some manner with the 19th-century marble industry of West Rutland.

Table 2. Vermont Archeological Inventory (VAI) sites within one mile (1.6 km) of the Project Area

VAI Site No.	Site Identifier	Description	Proximity to Project Area
VT-RU-0082	Wright Roberts Cabin	Late Woodland, Levanna projectile point, debitage, FCR, bone, and late 18th-century domestic materials such as ceramics, glass, metal, bone, etc. related to the first settler in Rutland, Wright Roberts	0.34 mi/0.54 km to E/SE
VT-RU-0344	Limestone foundation	19th-century limestone foundation and cellar hole, in area of marble quarries, may be related to that industry	0.39 mi/0.62 km to NW
VT-RU-0625	Clarendon Floodplain	Unknown precontact, lithic scatter	0.57 mi/0.9 km to E/SE
VT-RU-0682		Unknown precontact, quartzite scraper	0.35 mi/0.57 km to E/SE

4.2 Historic Properties

An examination of the files at VDHP identified one NR historic district, one State Register property and no properties previously determined to be ineligible within or adjacent to the APE (Table 3).

Table 3. Inventoried properties within or adjacent to the APE

Property Name/Address	Description of Building	Location
Marble Street Historic District	Commercial and residential area that served workers in the marble industry, NRL 1990/03/01	Adjacent to Thrall Street APE
VHSSS #1128-78 (#55 in Johnson and Gilbertson)	Residence, c. 1875 house with Italianate porch, SRL 1980/05/07	Adjacent to Dewey Avenue at Clarendon Avenue

4.3 Previous Surveys

On file at VDHP is one previous survey within the immediate vicinity of the Project (Table 4). In 2017, Hartgen conducted Phase IB survey for a sidewalk project in West Rutland. One of the alignments tested intersected Ross Street adjacent to Area 5 in the current project. That survey did not encounter any archeological deposits (Hartgen 2017).

Table 4. Relevant previous surveys within or adjacent to the Project

Year	Investigator	Methodology	Results	Notes
2017	Hartgen	Shovel testing	Negative	(Hartgen 2017)

5 Historical Map Review

Historical maps dating from 1857 to 1964 were examined to assess the development of the areas crossed by the seven project segments (Maps 3a and 3b). The 1857 Chace (Chace, et al. 1854)and the 1869 Beers (Beers 1869) maps of the area show the alignments that are along roads that were in existence at the time. The exceptions are Thrall Avenue (Segment 3) and the two Ross Street alignments (Segments 4 and 5). Those roads are not present on those maps. They are present on the 1895 (USGS 1895) and the 1964 USGS quads (USGS 1964). The historical maps show the gradual development of the area with landmarks like the church, schoolhouse and cemetery adjacent to Segment 1 on Pleasant Street and Hyde's Marble Quarry that was located at the west end of Ross Street (Segment 5) in 1857 but absent from the 1869 map. Those two early maps depict the Main Street alignment (Segment 6) that crosses former wetland areas as nearly empty of development but

linking two more built up areas on either end (Main Street extending northwest of Ross Street and Pleasant Street). By 1895 that intervening area was being developed with the construction of Proctor Street and the channelization of the surrounding wetlands. The 1910 Sanborn map (Sanborn 1910) also demonstrates the filling and development of the Main Street alignment by that time (Map 3c).

6 Archeological Discussion

6.1 Precontact Archeological Sensitivity Assessment

Completion of the VDHP Environmental Predictive Model provides a measure of the precontact archeological sensitivity of the project area (Appendix 1). The Project Area is sensitive for proximity to a small brook that passes through West Rutland from north to south (Areas 3 and 6), presence on glacial outwash terrace (Area 7) and on lake plain sediments. Points were also added for the Project Area being on a travel corridor. The Project Area has a score of 48. A score of 32 and above is considered to indicate precontact sensitivity.

6.2 Historic Archeological Sensitivity Assessment

The historic sensitivity of an area is based primarily on proximity to previously documented historic archeological sites, map-documented structures, or other documented historical activities (e.g. battlefields).

The historic sensitivity of the project alignments is related to the 19th and early 20th-century development of West Rutland. The segments with the earliest development are Segment 1 along Pleasant Street and the east end of Ross Street (Segment 4), being in the vicinity of the earliest development. Other segments such as Pleasant Street (Segment 2), Thrall Street (Segment 3), Ross Street (Segment 5), Main Street (Segment 6) and Dewey Avenue (Segment 7) are located in areas that developed during the late 19th century and are less sensitive for historic archeological deposits. The front yard location of the segments also indicates a reduced historic sensitivity (Borstel 2005).

6.3 Archeological Potential

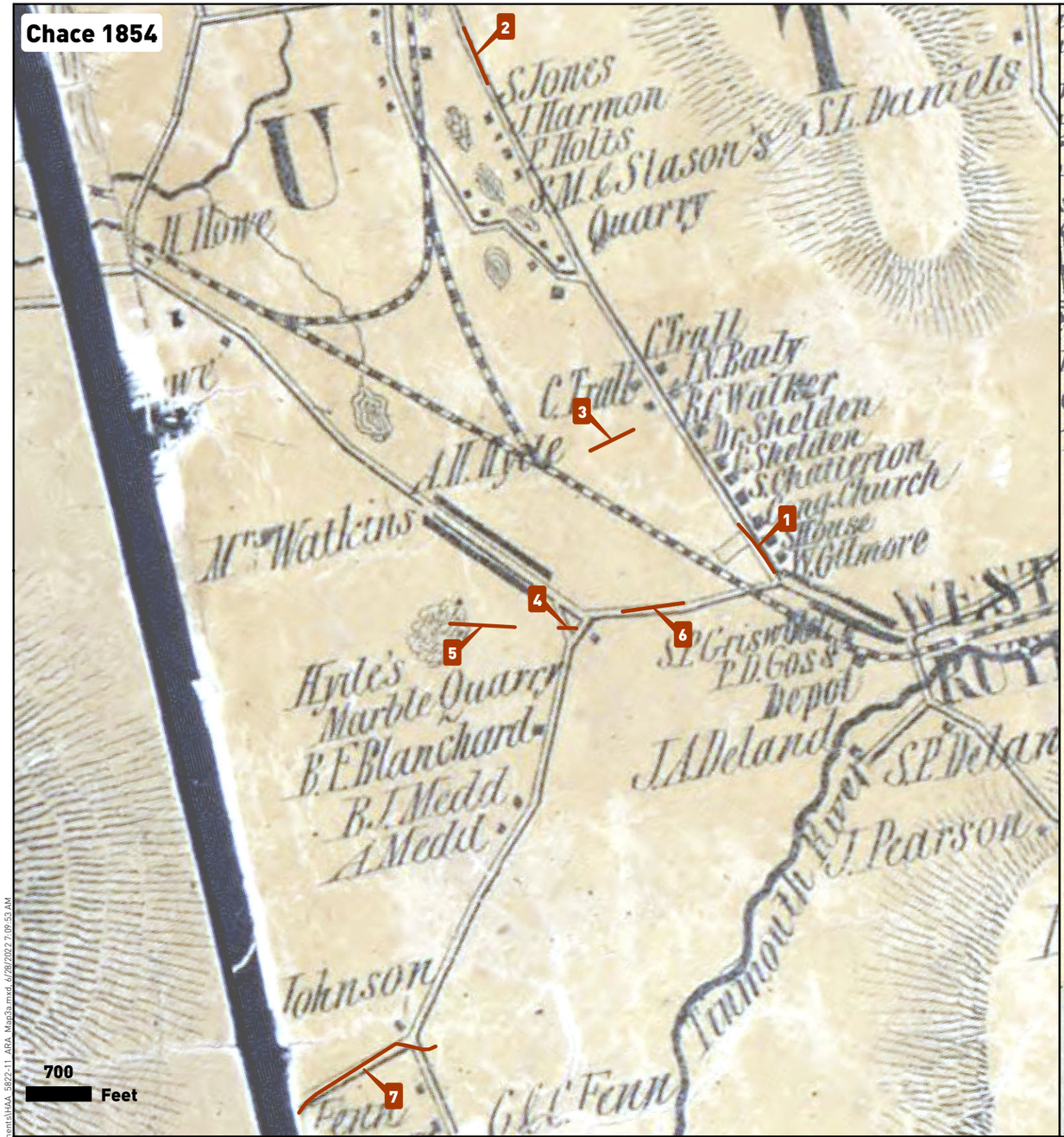
Archeological potential is the likelihood of locating intact archeological remains within an area. The consideration of archeological potential takes into account subsequent uses of an area and the impact those uses would likely have on archeological remains.

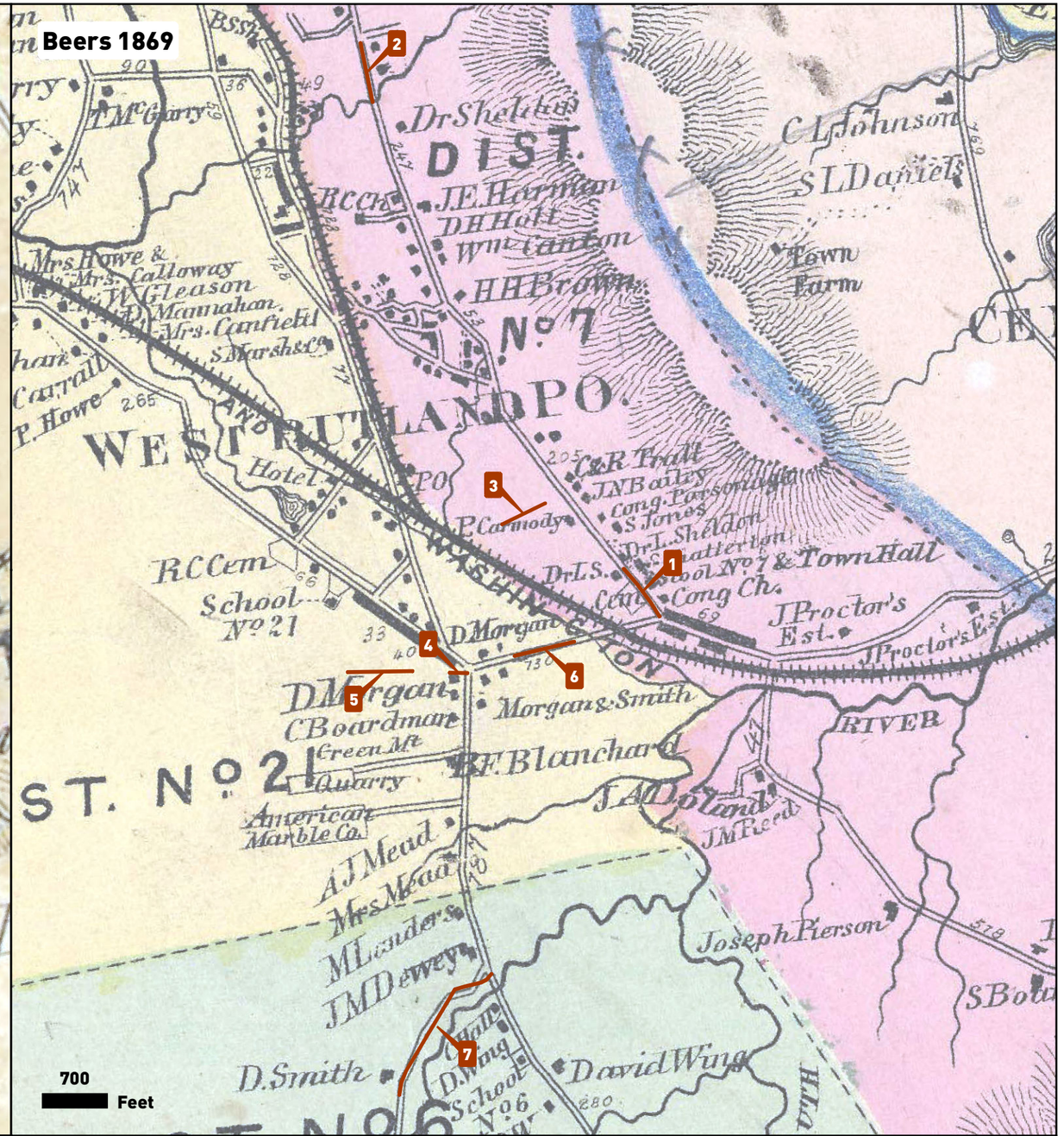
The archeological potential of the project alignments is generally low. Segments 1 to 6 are located where existing sidewalks are present that have likely disturbed any archeological deposits that may once have been located in those areas. Also, Segments 3 (Thrall Avenue) and 6 (Main Street) have undergone significant filling that also has contributed to reduced archeological potential.

The one area that may retain archeological potential is Segment 7 (Dewey Avenue). Segment 7 rises gradually as it extends from northeast to southwest, a total of about a 30-foot (9 m) rise over about 1720 feet (524 m). The scoping study is examining both sides of that alignment and no sidewalk is present. Some disturbance is evident from storm water and sewer installations. However, the location on a ridge with tributary brooks on both sides suggests a potential for precontact deposits in undisturbed areas.

6.4 Archeological Recommendations

No further archeological review is recommended for Segments 1 to 6 due to existing disturbance. Phase IB archeological reconnaissance survey is recommended for Segment 7. Once a side of Segment 7 (Dewey Avenue) is chosen, a Phase IB scope of work can be developed. Further information regarding the location of existing utility disturbance would be helpful in designing that scope.





Legend

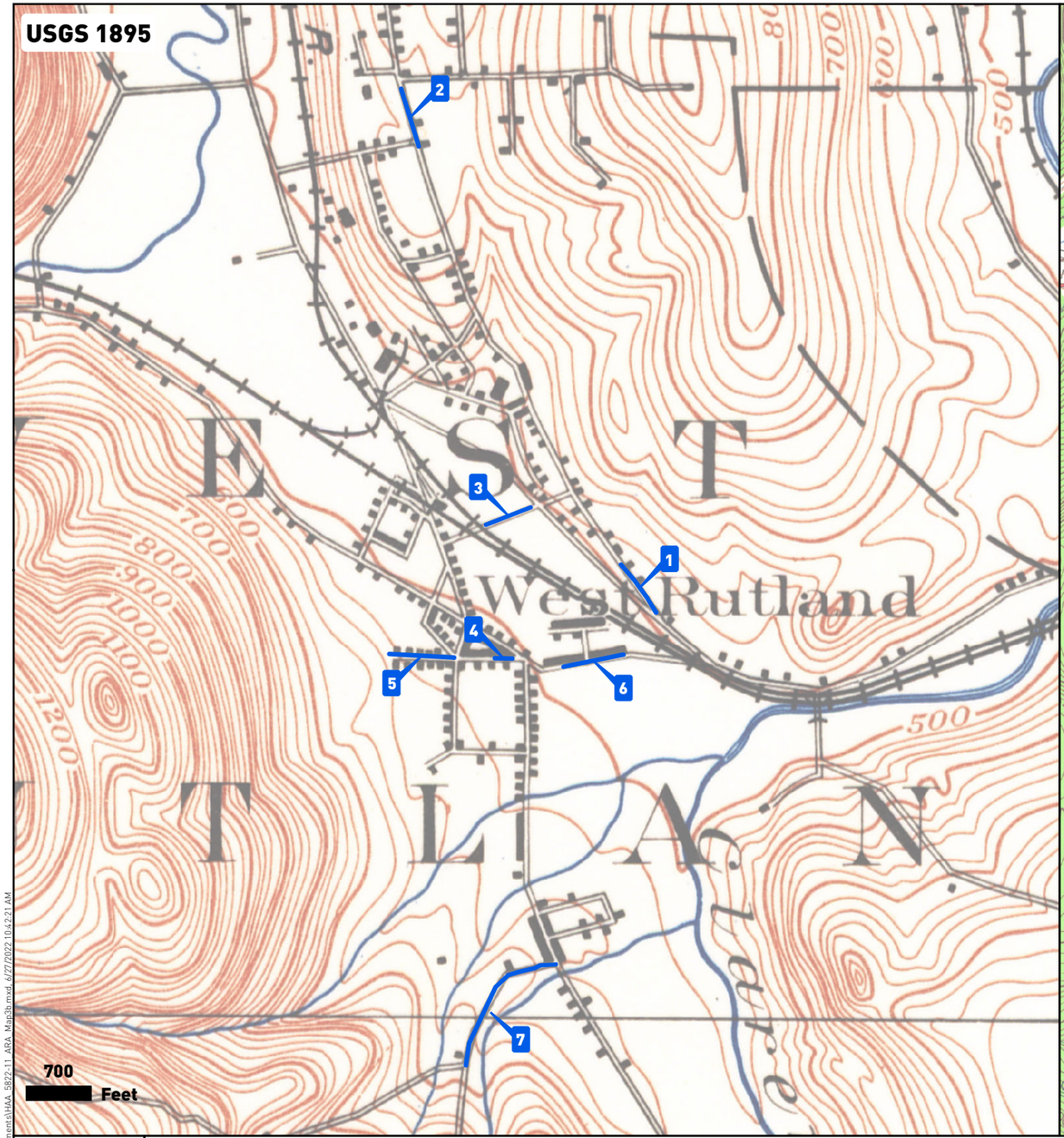
Area of Potential Effects (APE)

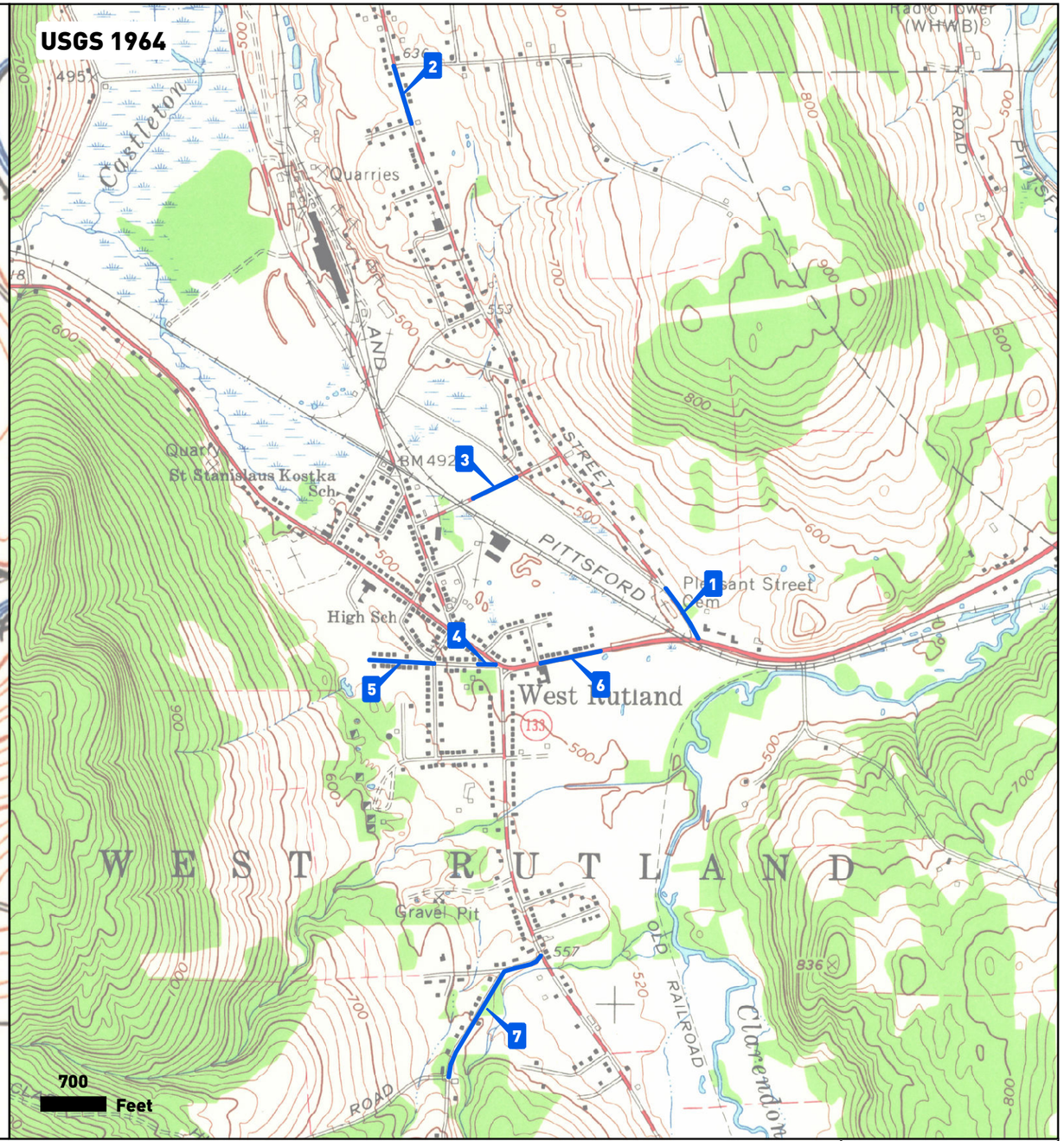
Historical Maps

1854-1869

HARTGEN archeological associates inc

Map 3a





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Area of Potential Effects (APE)

Historical Maps

1895-1964

HARTGEN archeological associates inc

Map 3b

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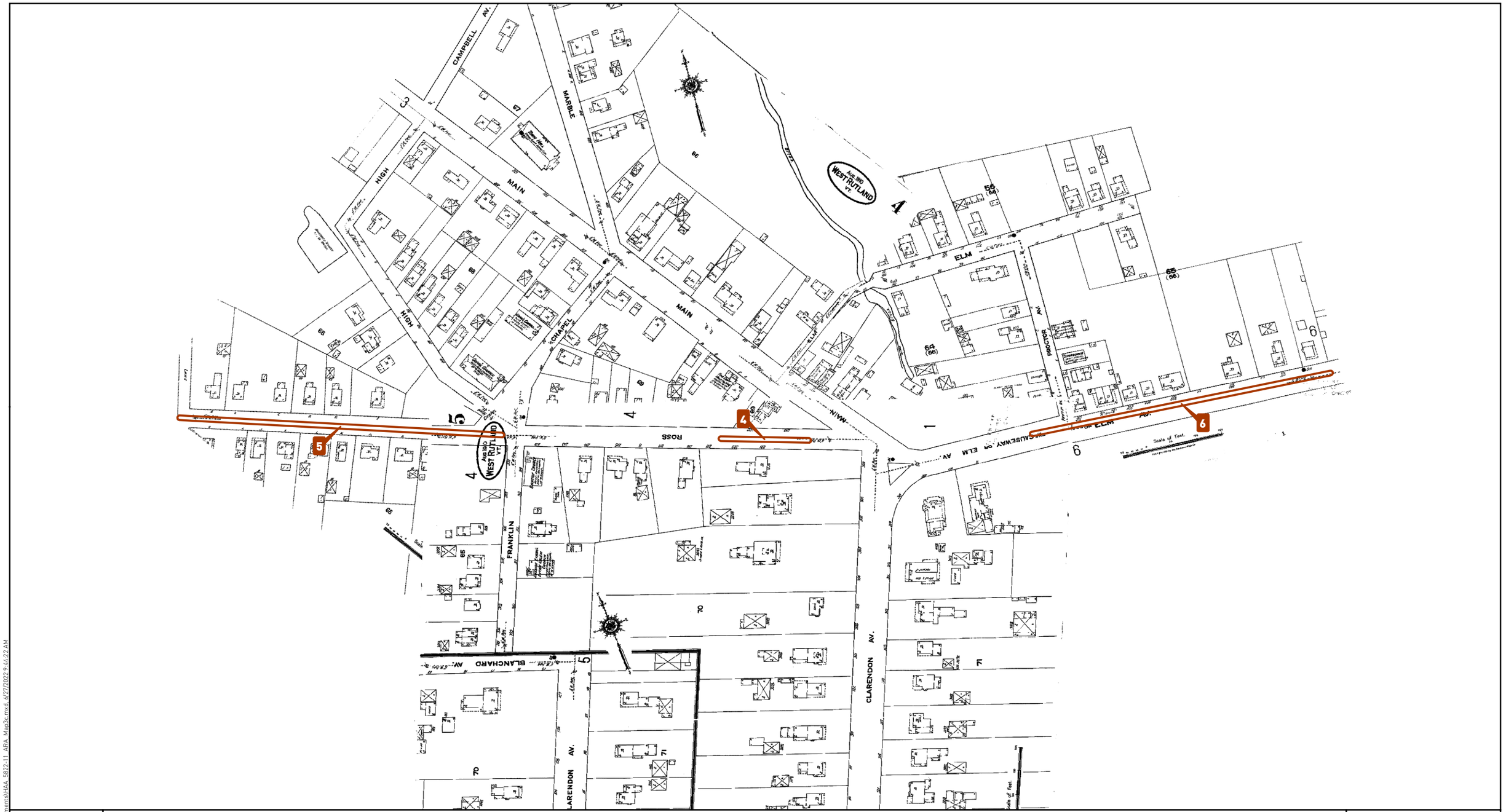

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Appendix 1: VDHP Environmental Predictive Model

VERMONT DIVISION FOR HISTORIC PRESERVATION

Environmental Predictive Model for Locating Pre-contact Archaeological Sites

Project Name West Rutland TAP TA 21(8) **County** Rutland **Town** West Rutland
DHP No. **Map No.** **Staff Init.** T. Jamison **Date** 2022-05-20

Additional Information

Environmental Variable	Proximity	Value	Assigned Score
A. RIVERS and STREAMS (EXISTING or RELICT):			
1) Distance to River or Permanent Stream (measured from top of bank)	0- 90 m 90- 180 m	12 6	12
2) Distance to Intermittent Stream	0- 90 m 90-180 m	8 4	
3) Confluence of River/River or River/Stream	0-90 m 90 –180 m	12 6	
4) Confluence of Intermittent Streams	0 – 90 m 90 – 180 m	8 4	
5) Falls or Rapids	0 – 90 m 90 – 180 m	8 4	
6) Head of Draw	0 – 90 m 90 – 180 m	8 4	
7) Major Floodplain/Alluvial Terrace		32	
8) Knoll or swamp island		32	
9) Stable Riverine Island		32	
B. LAKES and PONDS (EXISTING or RELICT):			
10) Distance to Pond or Lake	0- 90 m 90 -180 m	12 6	
11) Confluence of River or Stream	0-90 m 90 –180 m	12 6	
12) Lake Cove/Peninsula/Head of Bay		12	
C. WETLANDS:			
13) Distance to Wetland (wetland > one acre in size)	0- 90 m 90 -180 m	12 6	
14) Knoll or swamp island		32	
D. VALLEY EDGE and GLACIAL LAND FORMS:			
15) High elevated landform such as Knoll Top/Ridge Crest/ Promontory		12	
16) Valley edge features such as Kame/Outwash Terrace**		12	12

17) Marine/Lake Delta Complex**		12	12
18) Champlain Sea or Glacial Lake Shore Line**		32	
E. OTHER ENVIRONMENTAL FACTORS:			
19) Caves /Rockshelters		32	
20) ☑ Natural Travel Corridor ☐ Sole or important access to another drainage ☐ Drainage divide		12	12
21) Existing or Relict Spring	0 – 90 m 90 – 180 m	8 4	
22) Potential or Apparent Prehistoric Quarry for stone procurement	0 – 180 m	32	
23)) Special Environmental or Natural Area, such as Milton acquifer, mountain top, etc. (these may be historic or prehistoric sacred or traditional site locations and prehistoric site types as well)		32	
F. OTHER HIGH SENSITIVITY FACTORS:			
24) High Likelihood of Burials		32	
25) High Recorded Site Density		32	
26) High likelihood of containing significant site based on recorded or archival data or oral tradition		32	
G. NEGATIVE FACTORS:			
27) Excessive Slope (>15%) or Steep Erosional Slope (>20)		- 32	
28) Previously disturbed land as evaluated by a qualified archeological professional or engineer based on coring, earlier as-built plans, or obvious surface evidence (such as a gravel pit)		- 32	
**** refer to 1970 Surficial Geological Map of Vermont**			
		Total Score:	48
Other Comments :			
0- 31 = Archeologically Non- Sensitive **32+ = Archeologically Sensitive**			

HARTGEN
archeological associates inc

PRELIMINARY HISTORIC RESOURCES IDENTIFICATION

West Rutland Scoping Study
TAP TA21(8)

Town of West Rutland
Rutland County, Vermont

HAA # 5822-61

Submitted to:
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October 2022

MANAGEMENT SUMMARY

Avoidance of impacts to landscape elements associated with Vermont State or National Register Eligible structures is advised. Identification of structures within Segments 4 and 5 of the Project APE that would contribute to an expansion of the West Rutland Village Historic District is recommended, and will support avoidance of impacts to their associated landscape features by the Project.

Report Authors: *Walter R. Wheeler, Jennifer Geraghty, and Rachel Freeman*
Date of Report: 14 October 2022

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1 Introduction

Hartgen Archeological Associates, Inc. (Hartgen) conducted an Historic Resources Screening for the proposed West Rutland Scoping Study TAP TA21(8) (Project) located in the Town of West Rutland, Rutland County, Vermont (Map 1). The Project requires approvals by the Vermont Agency of Transportation (VTrans). The project will be subject to compliance with Section 106 of the National Historic Preservation Act of 1966, as amended. The screening study identifies known historic resources in the vicinity of the project with the goal of informing the design process and minimizing potential impacts upon historic resources. Determinations of project impacts on specific resources can be undertaken when the project's area of potential effects (APE) has been defined and project plans become available.

Background research was conducted at the Vermont Division for Historic Preservation (VDHP) ORC (Online Resource Center) site where archeological site files, National Register (NR), State Register (SR) and town information were reviewed. A site visit was conducted by Rachel Freeman on May 24, 2022, to observe and photograph existing conditions within the Project Area.

2 Project Location and Description

The project is located along seven different segments along Pleasant Street, Thrall Avenue, Ross Street, Main Street, and Dewey Avenue in the Town of West Rutland.

1) East side of Pleasant Street between Business Route 4 and Sheldon Avenue: 639 feet (195 m)
2) West side of Pleasant Street between Baxter Street and Durgy Hill Road: 643 feet (196 m)
3) North side of Thrall Avenue between the Park & Ride and Sheldon Avenue: 512 feet (156 m)
4) North side of Ross Street from Main St. to the fence at the approximate property corner of 62 Ross Street: 188 feet (57 m)
5) South side of Ross Street from Franklin Street to the terminus of Ross Street: 692 feet (211 m)
6) North side of Main Street from Proctor Street to Gilmore Street: 653 feet (199 m)
7) Both sides of Dewey Street from Clarendon Avenue to Clark Hill Road: 1,720 feet (524 m)

2.1 Description of the Area of Potential Effects (APE)

As the area of potential effects (APE) for this project are in the process of being defined, the APE will include all portions of the property that will be directly or indirectly altered by all known alternatives of the proposed undertaking. The project entails replacement of sidewalk segments along Pleasant Street, Thrall Avenue, Ross Street, and Main Street, and a new sidewalk on Dewey Avenue. For the present study, an area measuring approximately 1.77 acres and encompassing all alternatives under consideration will be examined.

3 Historical Background

The history of West Rutland was described in the *Historic Architecture of Rutland County*

> The marble-rich town of West Rutland was created in 1886 when the state legislature partitioned it and Proctor from Rutland Town. Before that time the area developed as the western parish of Rutland. Beginning in the 1770s, families traveled here along an early road between Rutland and Whitehall, New York, (now roughly traced by US. Route 4) and established their farms in the hills above the Castleton and Clarendon rivers. However, farming proved difficult between the two rivers in the swampy plain where beds of marble ran just below the surface. By the early 1800s blocks of marble were used for gravestones, but it was not until 1838 when William F. Barnes began burning marble for lime and then cutting it

for building stone that interest in marble quarrying intensified. Growth of both marble businesses and the village of West Rutland were greatly stimulated when the Rutland and Washington Railroad was completed through town in 1852. Much of the swampy plain was then filled in to accommodate the late 19th century development of the village. Today the historic resources of West Rutland, from its early hillside farms to the industrial village and its quarrying remains, tell the story of the transformation of an agrarian outpost to a thriving industrial center for the marble industry (Vermont Division for Historic Preservation 1987).

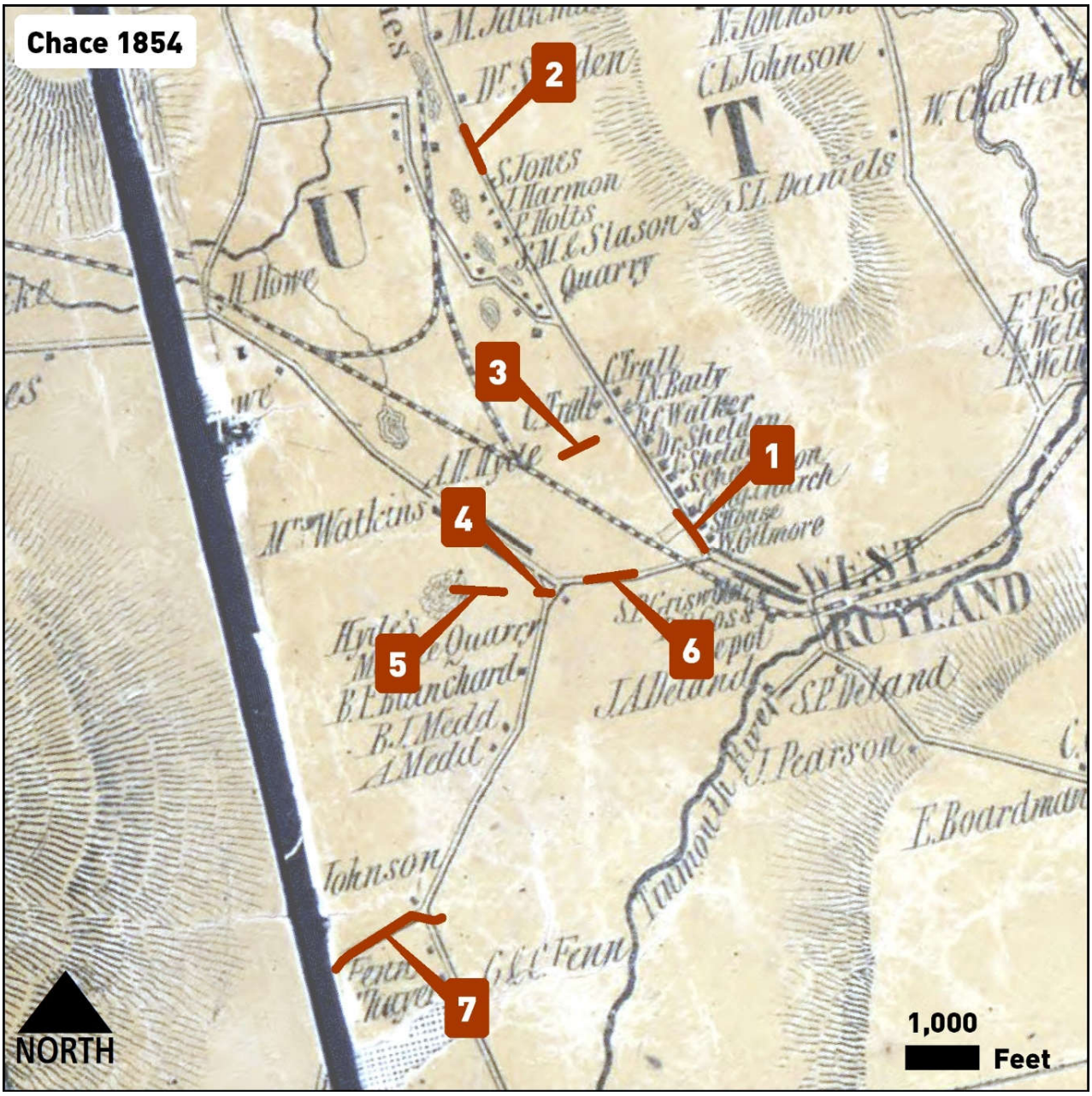


Figure 1. The APEs outlined on the 1854 Chace *Scott's Map of Rutland County, Vermont* (Chace, et al. 1854).

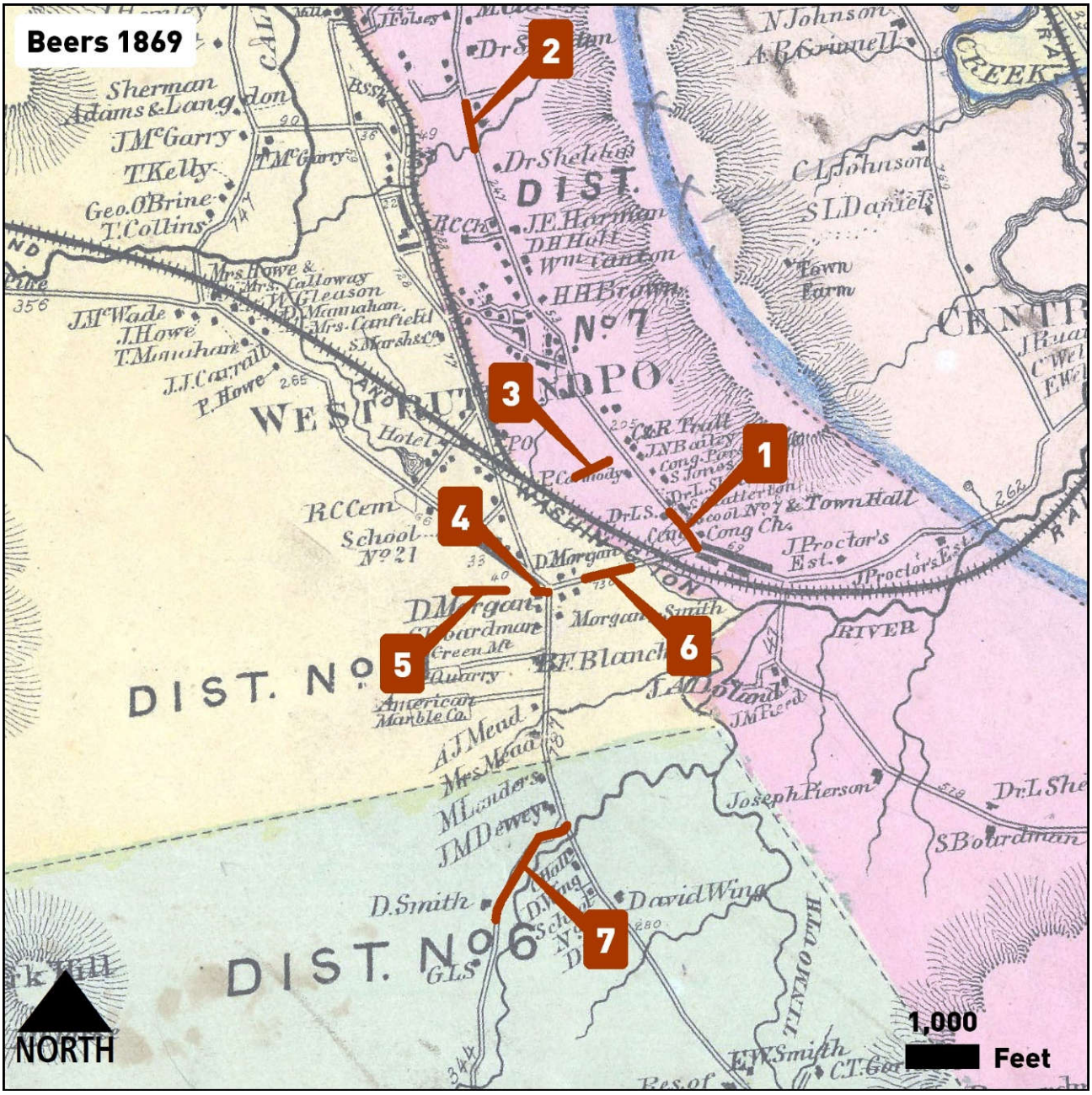


Figure 2. The APEs outlined on the 1869 Beers *Atlas of Rutland County, Vermont* (Beers 1869).

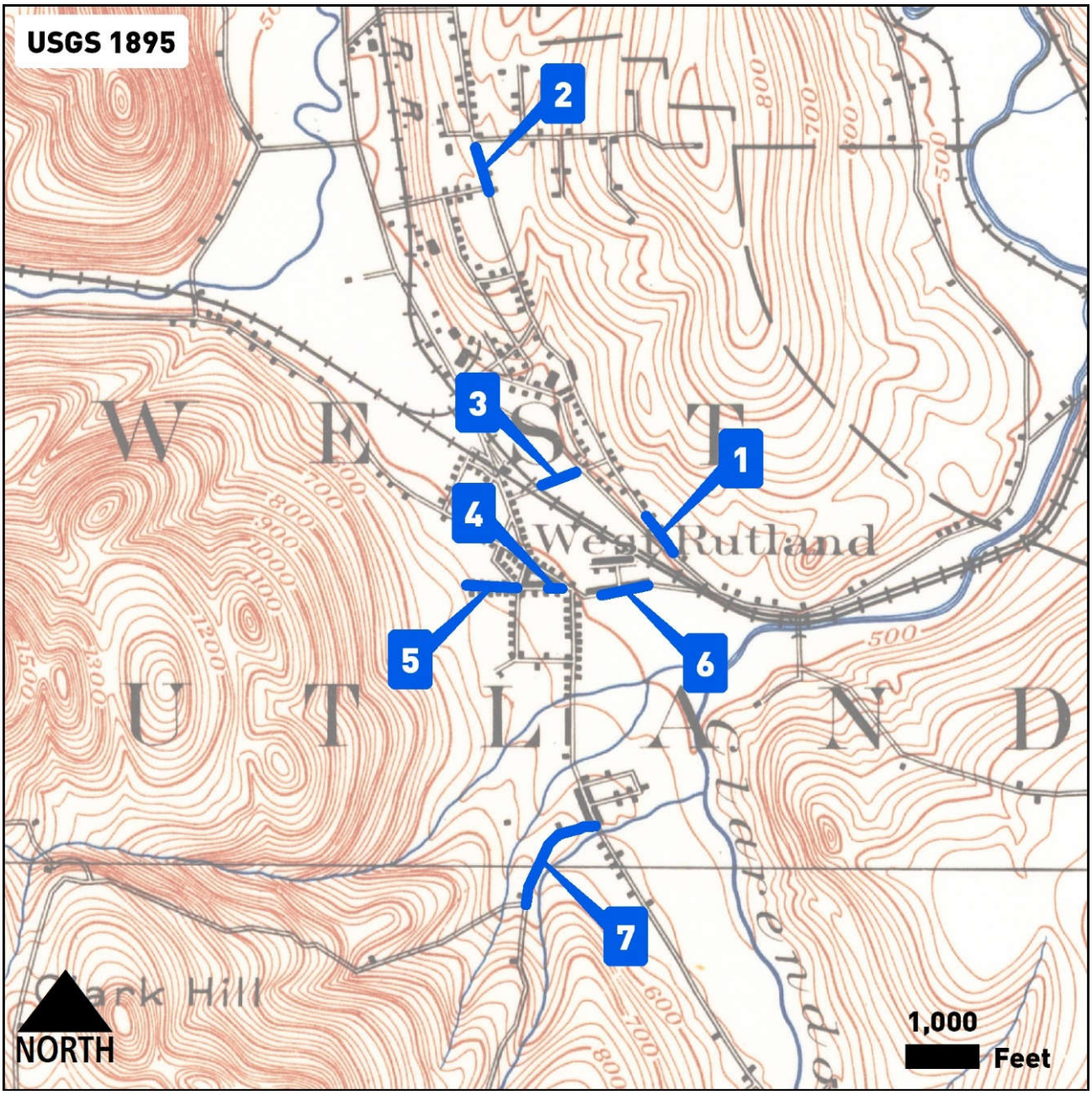


Figure 3. The APEs outlined on the 1895 topographic map (USGS 1895).

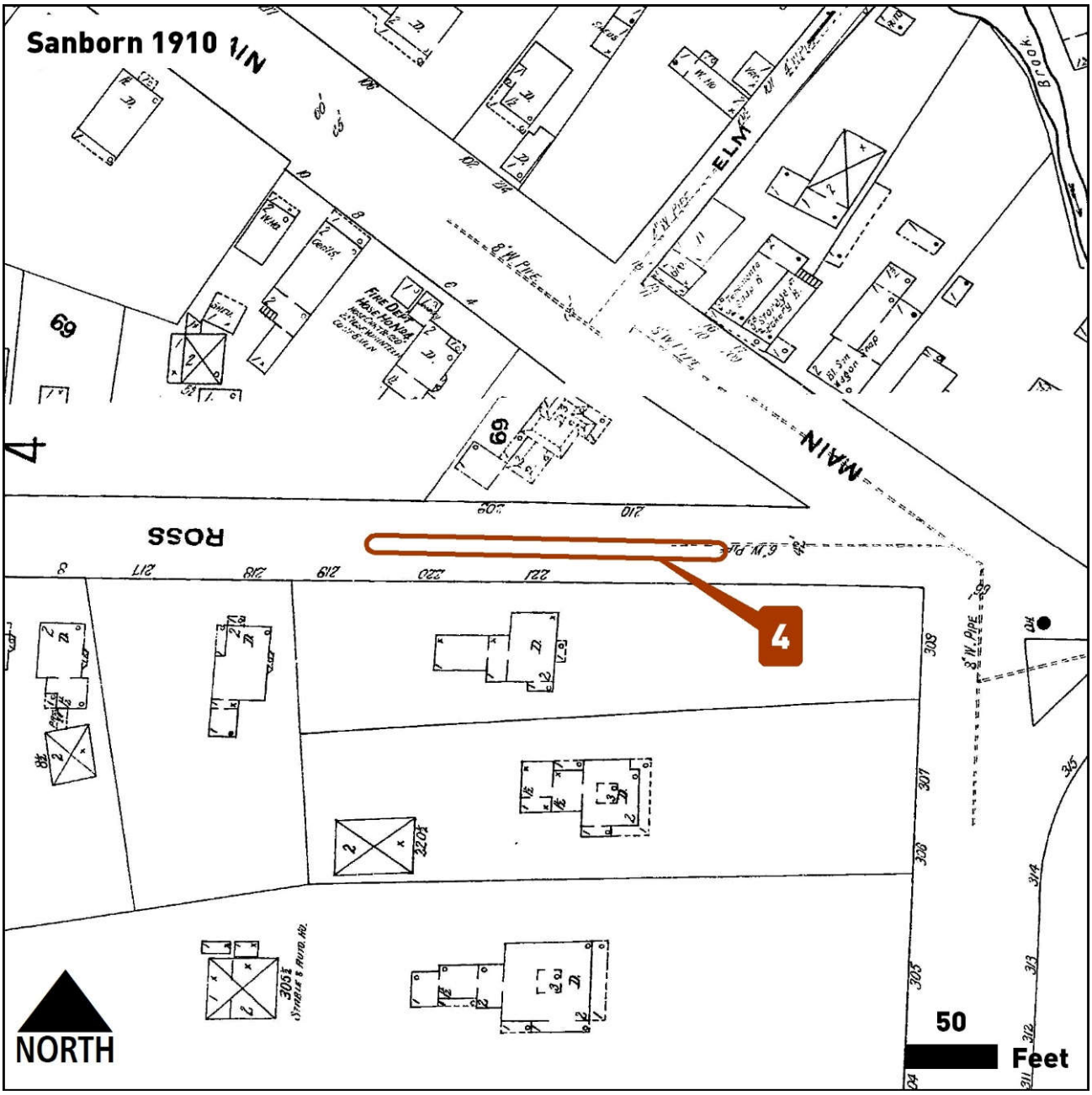


Figure 4. The east Ross Street APE outlined on a 1910 Sanborn map (Sanborn Map Company 1910).

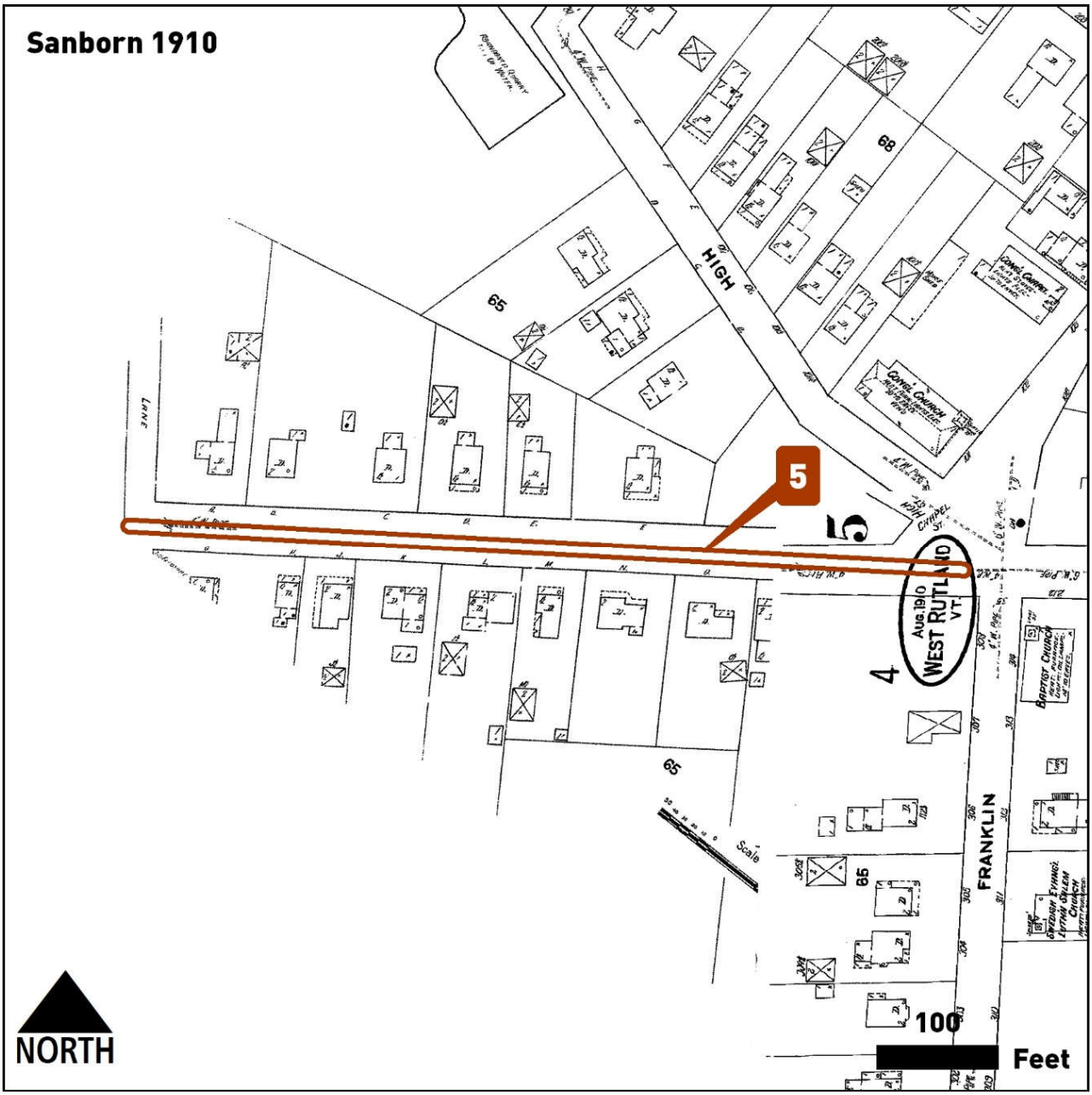


Figure 5. The west Ross Street APE outlined on a 1910 Sanborn map (Sanborn Map Company 1910).

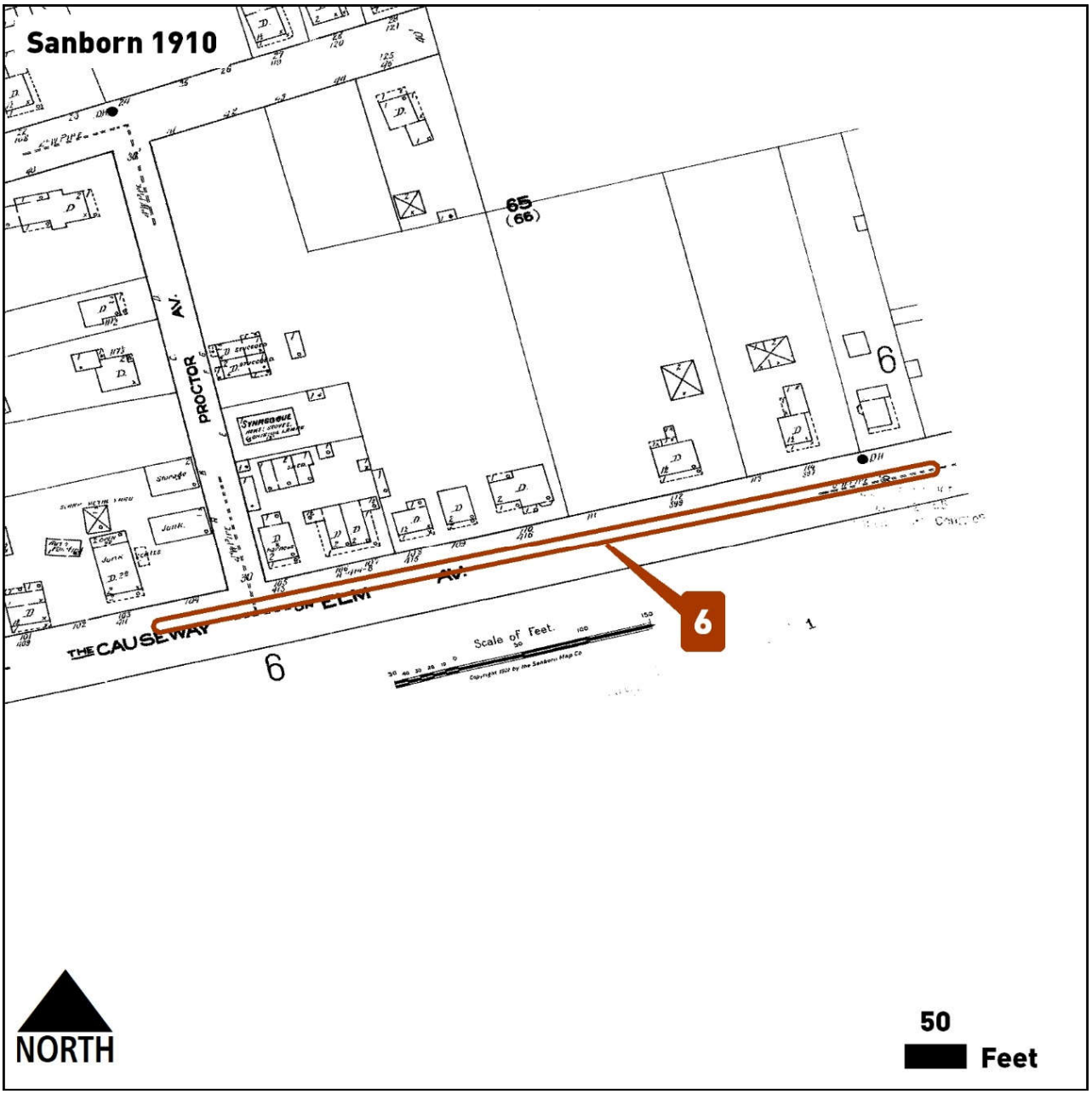


Figure 6. The Main Street APE outlined on a 1910 Sanborn map (Sanborn Map Company 1910).

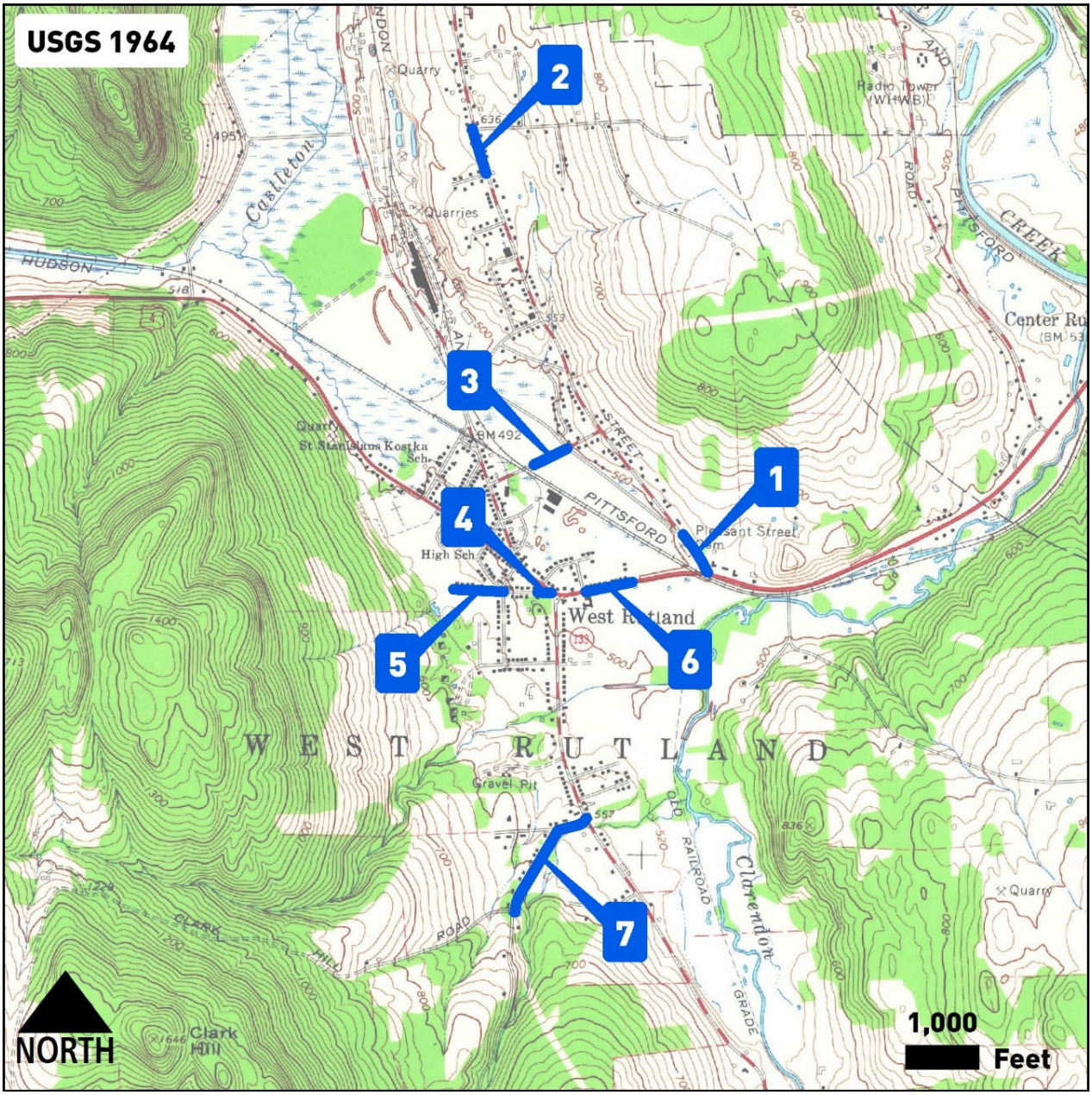


Figure 7. The APEs outlined on the 1964 topographic map (USGS 1964).

3.1 Historical Map Review

Historical maps dating from 1854 to 1964 were examined to assess the development of the areas crossed by the seven project segments (Figure 1, Figure 2, Figure 3, Figure 4, Figure 5). The 1854 Chace and the 1869 Beers maps of the area show the alignments that are along roads that were in existence at the time (Beers 1869; Chace, et al. 1854). The exceptions are Thrall Avenue (Segment 3) and the two Ross Street alignments (Segments 4 and 5). Those roads are not present on those maps. They are present on the 1895 topographic map and the 1964 topographic map (USGS 1895, 1964). The historical maps show the gradual development of the area with landmarks like the church, schoolhouse and cemetery adjacent to Segment 1 on Pleasant Street and Hyde's Marble Quarry that was located at the west end of Ross Street (Segment 5) in 1854 but absent from the 1869 map. Those two early maps depict the Main Street alignment (Segment 6) that crosses former wetland areas as nearly empty of development but linking two more built up areas on either end (Main Street extending northwest of Ross Street and Pleasant Street). By 1895 that intervening area was being developed with the

construction of Proctor Street and the channelization of the surrounding wetlands. The 1910 Sanborn map also demonstrates the filling and development of the Main Street alignment by that time (Sanborn Map Company 1910).

3.2 Previously Surveyed Properties

An examination of the files at VDHP identified two State Register Listed (SRL) properties within the APE. These properties are indicated in Table 1.

Table 1. NRL/SRL properties within or adjacent to the APE.

VDHP Number	Property Name	Address	Description	Status	Segment
1128-04	Bailey-Hurlbut House	141 Pleasant Street	Built c. 1840, Greek Revival style house with numerous connecting additions.	Individually SRL	1 (Slightly north of segment)
1128-06	Maria Neinaltowski House	328 Dewey Avenue	House built c. 1830; one of the earliest houses in West Rutland; alterations have reduced some of its early character; early vernacular house, representative of farmhouse plan.	Individually SRL	7
A	West Rutland Village Historic District	Main Street and Clarendon Avenue.	West Rutland village, once a small rural community, was transformed into a thriving industrial center by the success of the marble industry after 1850. Elaborate Italianate style homes of industry owners and entrepreneurs and the rows of gabled single and multi-family structures built for workmen stand on what was once marshy pastureland. Marble is evident everywhere, from sidewalks and curbing to building foundations, architectural details, and the walls of the public library and school.	SRL	4

4 Streetscape Views

Photo 1. View of Segment 1 on Pleasant Street, facing southeast.

Photo 2. View of Segment 2 on Pleasant Street, looking north-northwest.

Photo 3. View of Segment 3 on Thrall Avenue, facing west-southwest.

Photo 4. View of Segment 4 on Ross Street, facing west.

Photo 5. View of Segment 5 on Ross Street, facing west.

Photo 6. View of Segment 6 on Main Street, facing northeast.

Photo 7. View of Segment 7 on Dewey Avenue, facing southwest.

5 Architectural Descriptions

The project APE consists of seven distinct work areas or segments. Segment 1 consists of Pleasant Street, containing structures from the intersection of Pleasant Street and Sheldon Avenue to the intersection of Pleasant Street and Rutland Road. Segment 2 is also located on Pleasant Street, but further to the north. It extends from the intersection with Durgy Hill Road to the intersection with Baxter Street. Segment 3 is located on Thrall Avenue, between its intersection with Sheldon Avenue to 111 Thrall Avenue.

Segment 4 includes an eastern portion of Ross Street that consists of the intersection of Ross Street and Main Street to 39 Ross Street. Segment 5 consists of a western section of Ross Street, that goes from 265 Ross Street to the intersection of Ross Street and Franklin Street. Segment 6 consists of a stretch of Main Street from the intersection of Main Street and Proctor Street to the intersection of Gilmore Street and Main Street. Segment 7 is located on Dewey Avenue, extending from the intersection of Dewey Avenue and Clark Hill Road to Dewey Avenue at its intersection with Clarendon Avenue.

For descriptive purposes, the resources within the seven project segments are described as within four distinct groups, into which they naturally fall based upon development period and building types.

5.1 Group 1. Ross Street and Main Street

Group 1 consists of structures located within Segments 4, 5 and 6 of the Project and includes segments on Ross and Main streets. This group includes an eastern portion of Ross Street and a section of Main. Part of the SRL West Rutland Village Historic District falls within this group, in Segment 5.

Structures in Group 1 are located in a village setting and have construction dates chiefly in the 19th century. They consist of single-family wood-frame dwellings sited on landscaped lawns, frequently with separate garages or small associated outbuildings, and were constructed beginning in 1870.

Late-20th century municipal structures are located at the west terminus of Ross Street (Photo 15). Early-mid 20th-century commercial structures are intermixed with one-and-one-half and two-story 19th-century wood frame single-family dwellings that were formerly in a village setting, at the east end of the Project Segment 6 portion of this group (Photos 17, 9, 20 and 21). The Westway Mall, constructed in 1977, is located at the eastern terminus of this area (Photo 18).

Houses in this part of the community consist of vernacular structures, broadly characterized within four major groups: center passage dwellings (Photos 6 and 9), gable-entry side-passage dwellings (Photos 5 and 8), one-and-one-half story gable-entry cottages (Photo 8, in distance, and Photo 14) and dwellings of T or L-shaped plan, with intersecting gable roofs (Photos 10 thru 13 and 23).

Several private sidewalks of local marble extend to the street. Public sidewalks and curbing are located adjacent to the street except along the north side of Ross Street, particularly at its west end. The sidewalks and curbs are of poured concrete or asphalt (Photos 8 and 13). Marble sidewalks in the public way may be located in front of 226 Ross Street, and possibly in other locations where they are either buried or covered with a layer of asphalt (Photo 14). Few mature plantings are located in close proximity to the street or sidewalk, and no historic fencing materials are associated with any of the properties in this area.

39 Ross Street (Photo 9), a contributing structure near the intersection of Ross Street and Main Street is within the West Rutland Village Historic District., which is largely located to the south and north of Ross Street. Houses along the west portion of Ross Street, west of Clarendon Avenue may contribute to an expanded West Rutland Village Historic District, but few if any appear to be individually eligible for listing on the National Register.

Photo 8. View of Ross Street, looking west.

Photo 9. View of 39 Ross Street, facing southwest.

Photo 10. View of State Register Listed West Rutland Village Historic District of Main Street, facing northwest. This portion of the Historic District is not contiguous with the Project APE.

Photo 11. View of Ross Street from Chapel Street, looking southwest.

Photo 12. View of 189 Ross Street, facing south-southeast.

Photo 13. View of 225 Ross Street, facing southwest.

Photo 14. View of 226 Ross Street, facing northeast.

Photo 15. View of 265 Ross Street, facing west.

Photo 16. View of Ross Street, facing west.

Photo 17. View of Main Street, facing east-northeast.

Photo 18. View of Price chopper Supermarket located off Main Street at 100 Westway Mall Drive, looking southwest. This structure was built in 1977.

Photo 19. View of Main Street, looking southwest. Typical of 20th century commercial structures found in Group 1.

Photo 20. View of Bailey Motor, Inc. at 315 Main Street, looking southwest.

Photo 21. View of apartment complex located at 326 Main Street, looking north-northeast.

Photo 22. View of Main Street, looking northeast.

Photo 23. View of Main Street, with 216 Main Street shown to the right, looking west.

5.2 Group 2. Pleasant Street

Group 2 is represented by Project APE Segment 2 and consists of a portion of Pleasant Street that features small single-family dwellings constructed during the period c. 1860-1960 in a village setting that transitions to a suburban setting. This portion of the community contains a row of originally identical (so it would seem) cottages in a grouping located far from the community at the time of their construction; they may have been constructed as housing for a local industry, although this has not been verified (Photos 24, 25 and 29). These houses are one-and-one-half story wood-frame vernacular single-family dwellings, with gable side-passage entries and are three bays in width. They occupy sites that are elevated from the adjacent road.

Mixed in with these houses, and possibly constructed as a result of the demolition of some of them, are mid-20th century capes and ranch wood-frame single-family dwellings (Photos 24, 26 and 27).

Several houses have private walks of local marble in this group. Public sidewalks are typically of poured concrete, are separated from the street with a grassy border, and lack curbing (Photo 24). The sidewalk is located on the west side of the street, and at the north end of Segment 2 it is located immediately adjacent to the street and has a concrete curb. Concrete curbing borders much of the east side of the street.

Few mature plantings are located in close proximity to the street or sidewalk, and no historic fencing materials are associated with any of the properties in this area.

None of the structures in Group 2 are individually eligible for listing on the National Register, and no Historic District that would include these structures was identified.

Photo 24. View of Pleasant Street, facing north-northwest.

Photo 25. View of 1262 Pleasant Street, facing northeast.

Photo 26. View of 1310 Pleasant Street, facing northeast.

Photo 27. View of Pleasant Street, facing south-southwest.

Photo 28. View of Pleasant Street, facing southwest.

Photo 29. View of Pleasant Street, facing north.

5.3 Group 3. Pleasant Street and Dewey Avenue

Group 3 contains Segments 1 and 7 of the Project APE. Built resources within the group of two project segments consist of rural dwellings constructed in the early-to-mid 19th century, intermixed with late-20th century suburban dwellings, constructed as the village grew outward into formerly rural areas as its population expanded.

There are two Vermont State Register Listed properties within this portion of the Project APE. The first is located within Segment 1 at 144 Pleasant Street. This property was added into the Vermont State Register in 1980. It was described in 1977 by William N. Hosley of the Vermont Division for Historic Preservation as:

> This house is an unusually fine example of a Greek Revival house type with numerous connecting additions. Unfortunately, many of the additions are out of character with the original massing. The original mass is a vernacular Greek Revival Classic Cottage with a raking molded cornice which return at the gable ends; there is a wide frieze and thin corner posts. Windows are 6/6 with louvered shutters. The original frontispiece was removed when a later added enclosed porch was built. A period wing project out from the east side of the house. On the rear are attached a barn, woodshed, and privy. The barn has been modernized and incorporated into the house.
>
> Although altered, this house is most unusual in West Rutland for the degree to which it retains its rural character as expressed in the continuous ells which carry off the rear and were built for wood and carriage sheds.
>
> The house was probably built for L. N. Bailey who lived there in 1854. Little is known of him (Hosley 1977a).

The second State Register Listed resource is located within Segment 7, at 328 Dewey Avenue. This property was added into the Vermont State Register in 1980. It was described in 1977 by William N. Hosley of the Vermont Division for Historic Preservation as:

> This is one of the earliest houses in West Rutland; alterations have reduced some of its early character, Plain, raking box cornice; flushboard frieze, slightly altered first floor front window; eight-pane eyebrow windows; 12/12 side windows. The frontispiece is Greek Revival in character with wide, unusually paneled pilasters with molded capital, full entablature, three-quarter length sidelights, side panels, and a six-panel door. Attached to the south side is a later added 1-1/2 story clapboard wing fronted by a porch; large gable roof wall dormer, The windows on the façade of the main block of the house have had an additional window added between them to create a triple group of windows; the sash is 1/1.
>
> This is an early vernacular house, prominently located at the corner of Dewey and Clark Hill Roads, southwest of the village. It is plain in detail and representative of the type of farmhouse plan that developed in a variety of farm during the first third of the nineteenth century.
>
> The house was owned in 1854 by I. Johnson of whom little is known. Later is was owned by the Dewey Family (Hosley 1977b).

Houses in this grouping consist of gable-entry wood-frame one-and-one-half story vernacular cottages (Photos 35 and 36), or side-gable single family dwellings of wood-frame construction with end wall chimneys, one-story in height, with some Greek Revival detailing (Photos 31 and 37). Twentieth century dwellings, also of wood-frame construction, consist of cape, ranch and raised-ranch type dwellings, and are intermixed with the earlier houses (Photos 30, 38, 40, 41 and 42).

The Pleasant Street Cemetery, established in the 19th century and containing the graves of many of West Rutland's citizens, is located in this portion of the Project APE, and a business that produces memorial stones is located immediately adjacent, to the south (Photos 32 thru 34). The cemetery lacks any support structures

or border fencing, and the graves are arranged in parallel rows. It is, however, probable that it would be eligible for listing on the National Register, based upon its long period of use, which extends from 1776 to the present.

No potential historic district was identified in either of the two project segments that make up this group.

Sidewalks and curbs on the east side of Pleasant Street are of poured concrete. There are no sidewalks along the Dewey Avenue segment of the Project APE. There are no large-scale mature plantings located near the road in Group 3.

Photo 30. View of Pleasant Street of Segment 1, facing north-northwest. State Register listed property at 144 Pleasant Street in view to the left.

Photo 31. View of 144 Pleasant Street, facing north. This property is listed on the State Register.

Photo 32. View of Artistic Memorials Inc., facing northwest.

Photo 33. View of Pleasant Street Cemetery, facing north-northwest.

Photo 34. View of Pleasant Street Cemetery, facing south-southwest.

Photo 35. View of house on Dewey Avenue, facing northwest.

Photo 36. View of house on Dewey Avenue, facing west-southwest.

Photo 37. View of SRL property at 328 Dewey Avenue, facing north.

Photo 38. View of house on Dewey Avenue, facing north.

Photo 39. View of houses at the intersection of Clarendon Avenue and Dewey Avenue, facing northeast.

Photo 40. View of house on Dewey Avenue, facing northwest.

Photo 41. View of house on Dewey Avenue, facing south.

Photo 42. View of house on Dewey Avenue, facing northwest.

5.4 Group 4. Thrall Avenue

Group 4 consists of Segment 3 of the Project APE. Group 4 is typified by open spaces and late-20th century commercial and industrial development, located on the margins of the community (Photos 43 thru 47). Sidewalks and curbs are located along portions of this Segment. None of the built resources in Group 4 would be eligible for listing on the National Register, chiefly due to insufficient age.

Photo 43. View of Thrall Avenue, facing east-northeast.

Photo 44. View of Thrall Avenue, facing southwest.

Photo 45. View of building on Thrall Avenue, facing south.

Photo 46. View of West Rutland Pump Station building on Thrall Avenue, facing north.

Photo 47. View of structure on Thrall Avenue, facing north-northeast.

6 Recommendations

Because no project plans are available at present, these recommendations are necessarily general in nature. Comments and concerns are presented here according to their subgroupings of project segments.

Group 1 (Segments 4, 5 and 6)

39 Ross Street (Photo 9), a contributing structure near the intersection of Ross Street and Main Street is within the West Rutland Village Historic District., which is largely located to the south and north of Ross Street. Houses along the west portion of Ross Street, west of Clarendon Avenue may contribute to an expanded West Rutland Village Historic District, but few if any appear to be individually eligible for listing on the National Register.

Few mature plantings are located in close proximity to the street or sidewalk in either the portions of the Historic District that are located within the Project APE, or which are associated with potential additions to that district, and no historic fencing materials are associated with any of the properties in this area. Several private sidewalks of local marble extend to the street. Marble sidewalks in the public way may be located in front of 226 Ross Street, and possibly in other locations where they are either buried or covered with a layer of asphalt. Given the historic importance of the marble industry to West Rutland and the former ubiquitous nature of marble walkways in the community, avoidance of impacts to these resources would be recommended.

Group 2 (Segment 2)

None of the structures in Group 2 are individually eligible for listing on the National Register, and no Historic District that would include these structures was identified.

Several houses have private walks of local marble in this group. Impacts to these features should be avoided, as noted above. Few mature plantings are located in close proximity to the street or sidewalk, and no historic fencing materials are associated with any of the properties in this area.

Group 3 (Segments 1 and 7)

The Pleasant Street Cemetery is probably eligible for listing on the National Register. There are no identified graves located in close proximity to the adjacent street, however caution should be exercised to avoid potential impacts to unmarked graves. Two additional structures within this Group are listed on the Vermont State Register (141 Pleasant Street and 328 Dewey Avenue); neither has any associated landscape features that would need to be avoided. No potential historic district was identified in either of the two project segments that make up this group.

Group 4 (Segment 3)

None of the built resources in Group 4 would be eligible for listing on the National Register, chiefly due to insufficient age. There are no historic preservation concerns in this portion of the Project APE.

In summary, avoidance of impacts to landscape elements associated with Vermont State or National Register Eligible structures is advised. Identification of structures within Segments 4 and 5 of the Project APE that would contribute to an expansion of the West Rutland Village Historic District is recommended, and will support avoidance of impacts to their associated landscape features by the Project.

7 Bibliography

Beers, F. W.
1869 *Atlas of Rutland County, Vermont*. F. W. Beers, A. D. Ellis & G. G. Soule, New York.

Chace, C., Jr., James D. Scott, Isaac W. Moore and Owen McLeray
1854 *Scott's Map of Rutland County, Vermont*. Owen McLeran & James D. Scott, Philadelphia, PA.

Hosley, William N.
1977a Historic Sites & Structures Survey Individual Structure Survey Form: Bailey-Hurlbut House

1977b Historic Sites & Structures Survey Individual Structure Survey Form: Maria Neinaltowski House.

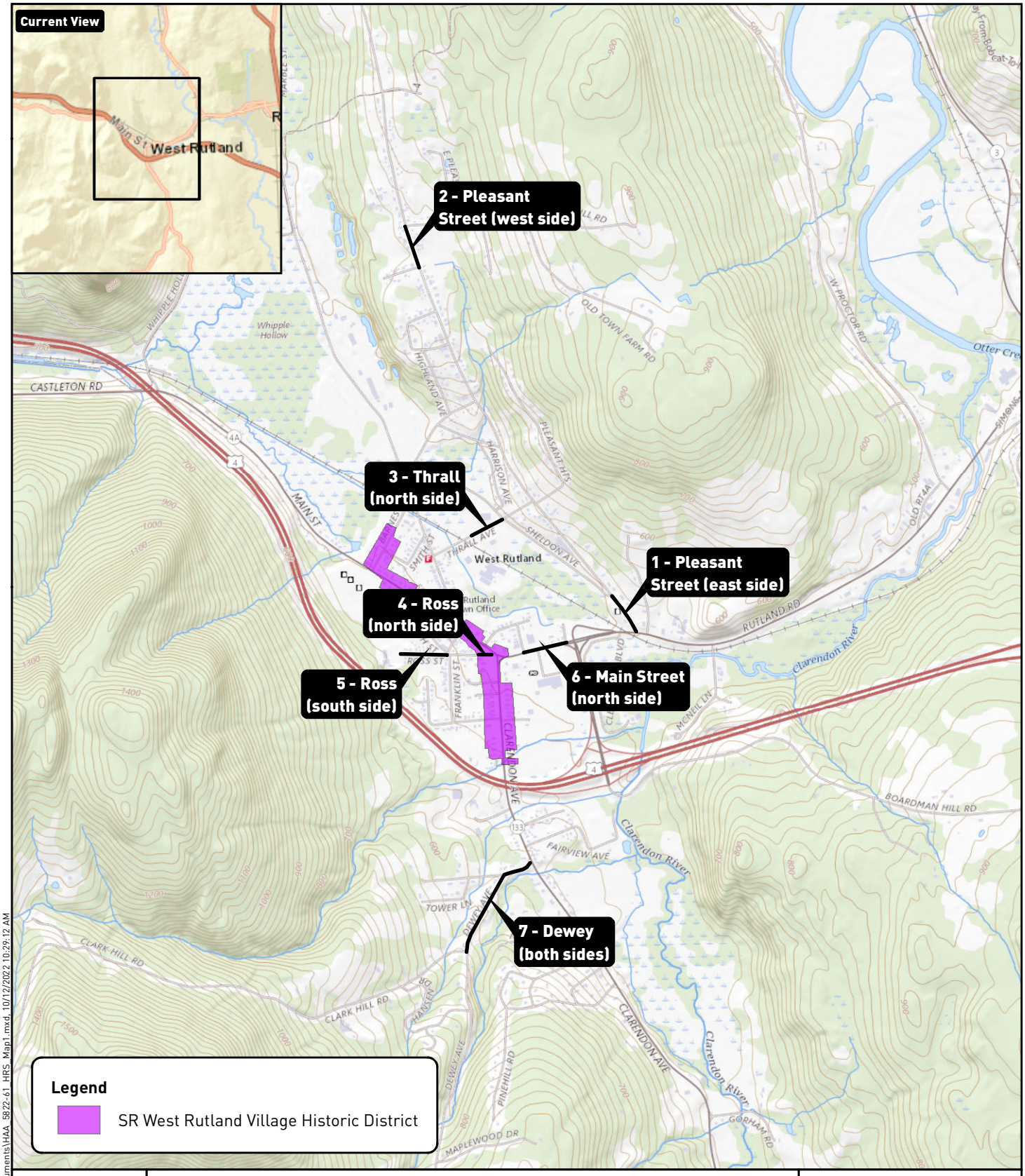
Sanborn Map Company
1910 *West Rutland, Rutland County, Vermont*.

United States Geological Survey (USGS)
1895 *Castleton, Vermont Topographic Quadrangle 1:62,500 scale*. USGS Historical Topographic Map Explorer, Reston, Virginia, http://historicalmaps.arcgis.com/usgs.

1964 *West Rutland, Vermont Topographic Quadrangle Map, 1:24,000 scale*. USGS Historical Topographic Map Explorer, Reston, Virginia, http://historicalmaps.arcgis.com/usgs.

Vermont Division for Historic Preservation
1987 *The Historic Architecture of Rutland County, Vermont State Register of Historic Places: West Rutland*. On file at Vermont Division for Historic Preservation, Online Resource Center, https://orc.vermont.gov.

Maps



1,000 0 1,000 2,000 Feet

300 0 300 600 Meters

Note: Contour interval is 20 feet.

Project Location

GIS Services Accessed 10/12/2022: Environmental Systems Research Institute, Inc., World Street Map; USGS The National Map

HARTGEN archeological associates inc

Map 1

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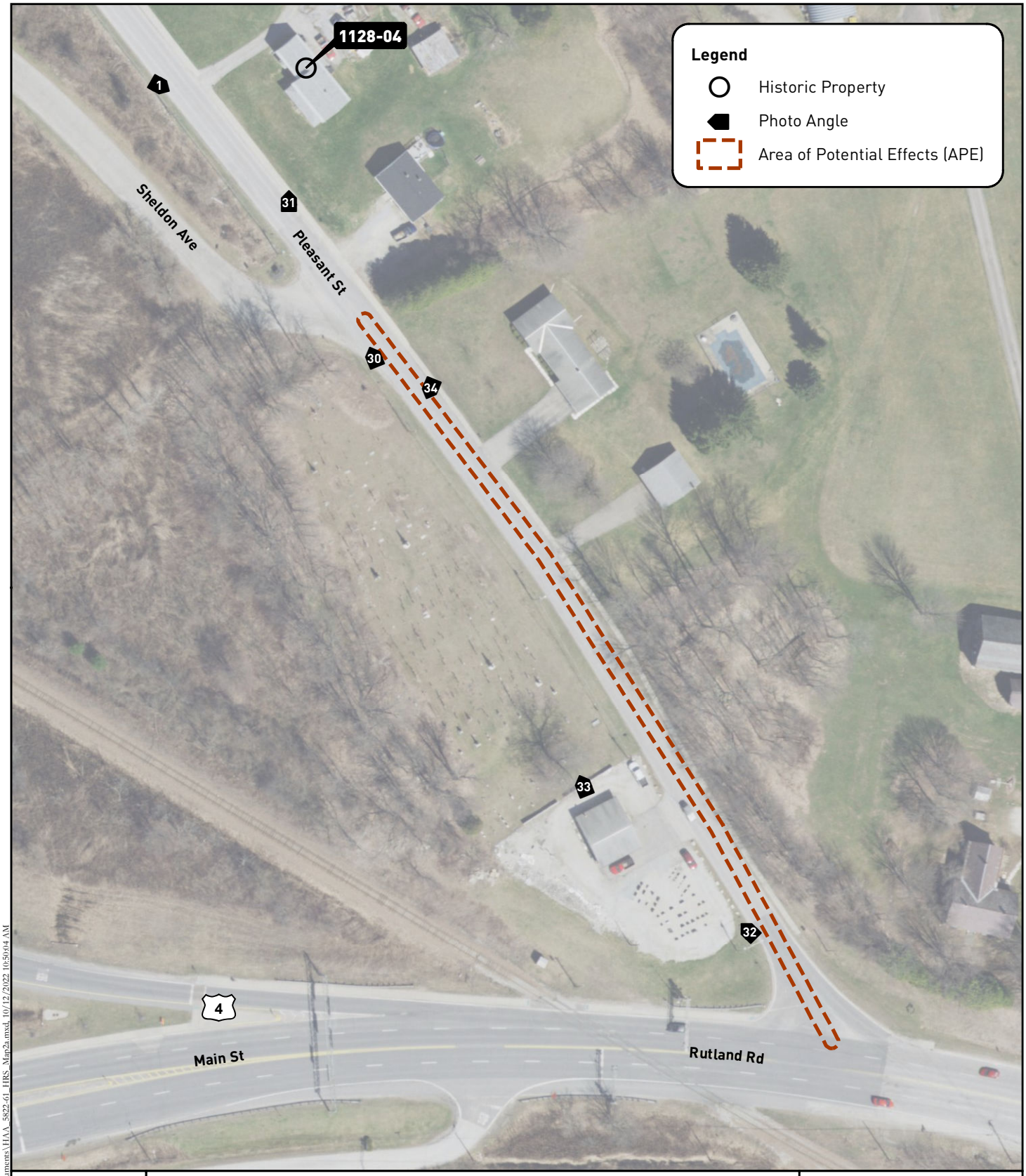

50 0 50 100 Feet
15 0 15 30 Meters

Project Map
1 - Pleasant Street (east side)

Vermont Center for Geographic Information, Orthoimagery, 2016-2020

HARTGEN archeological associates inc

Map 2a

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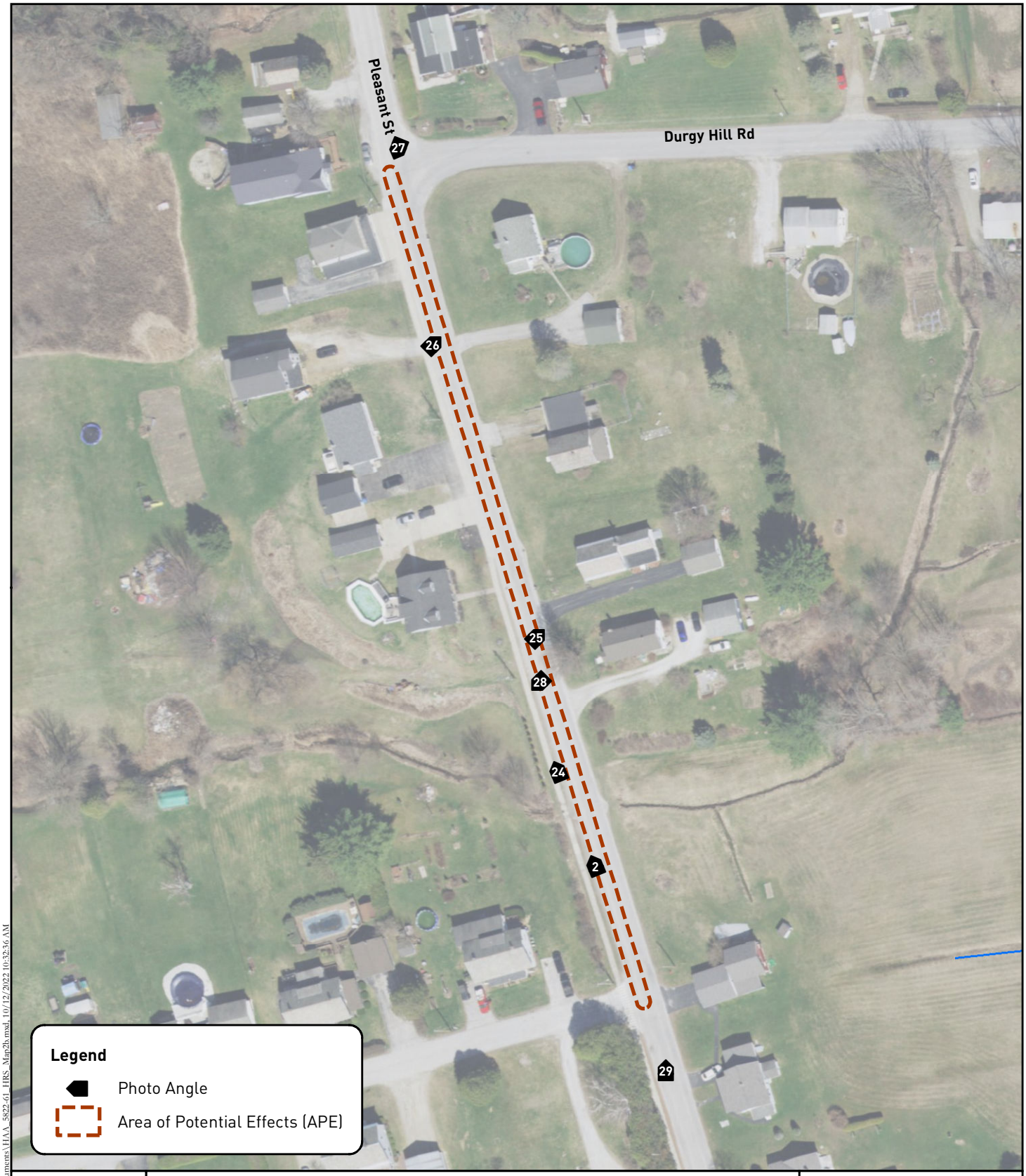

50 0 50 100 Feet
15 0 15 30 Meters

Project Map
2 - Pleasant Street (west side)

Vermont Center for Geographic Information, Orthoimagery, 2016-2020

HARTGEN archeological associates inc

Map 2b

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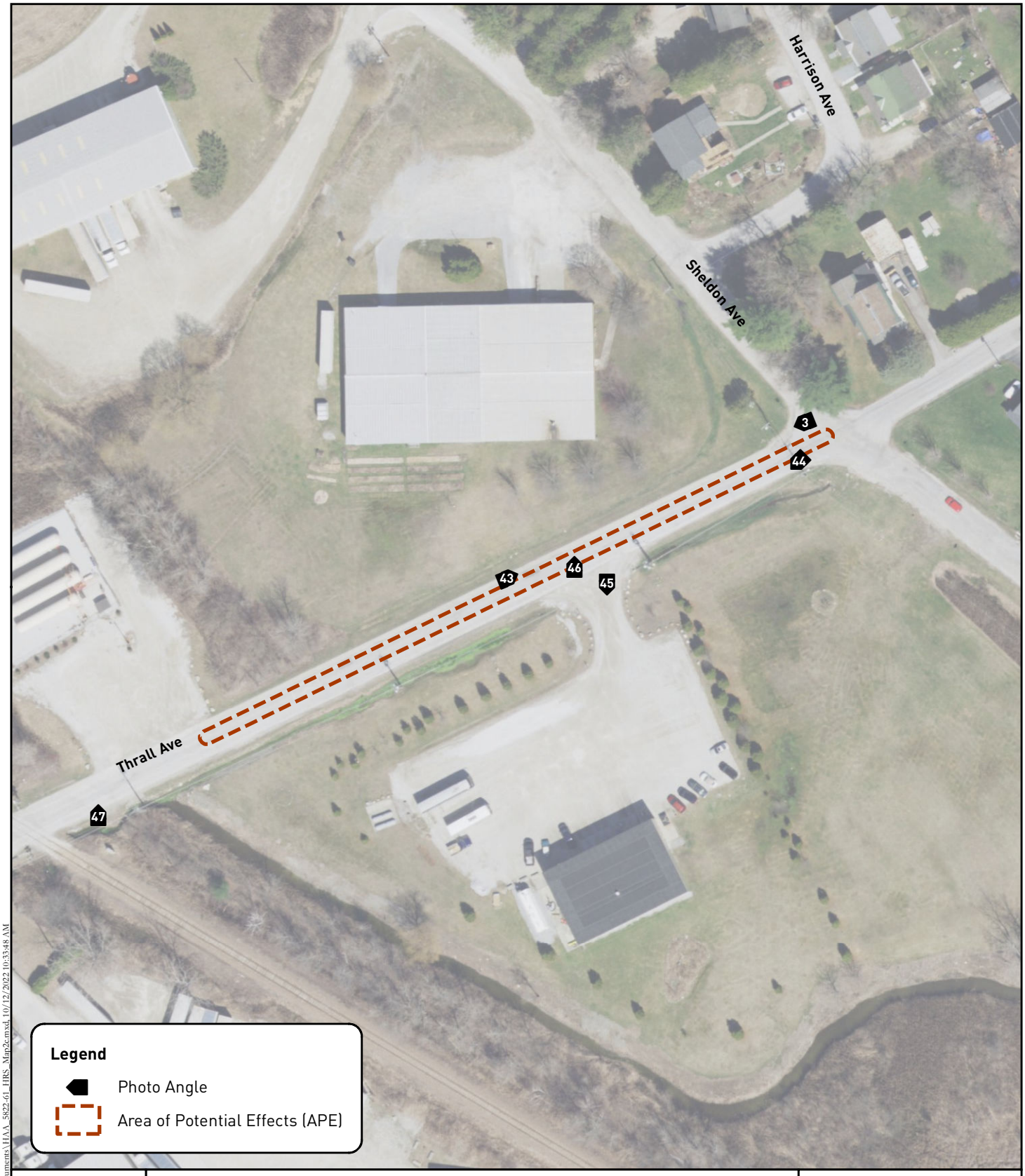

Project Map
3 - Thrall (north side)

Vermont Center for Geographic Information, Orthoimagery, 2016-2020

HARTGEN archeological associates inc

Map 2c

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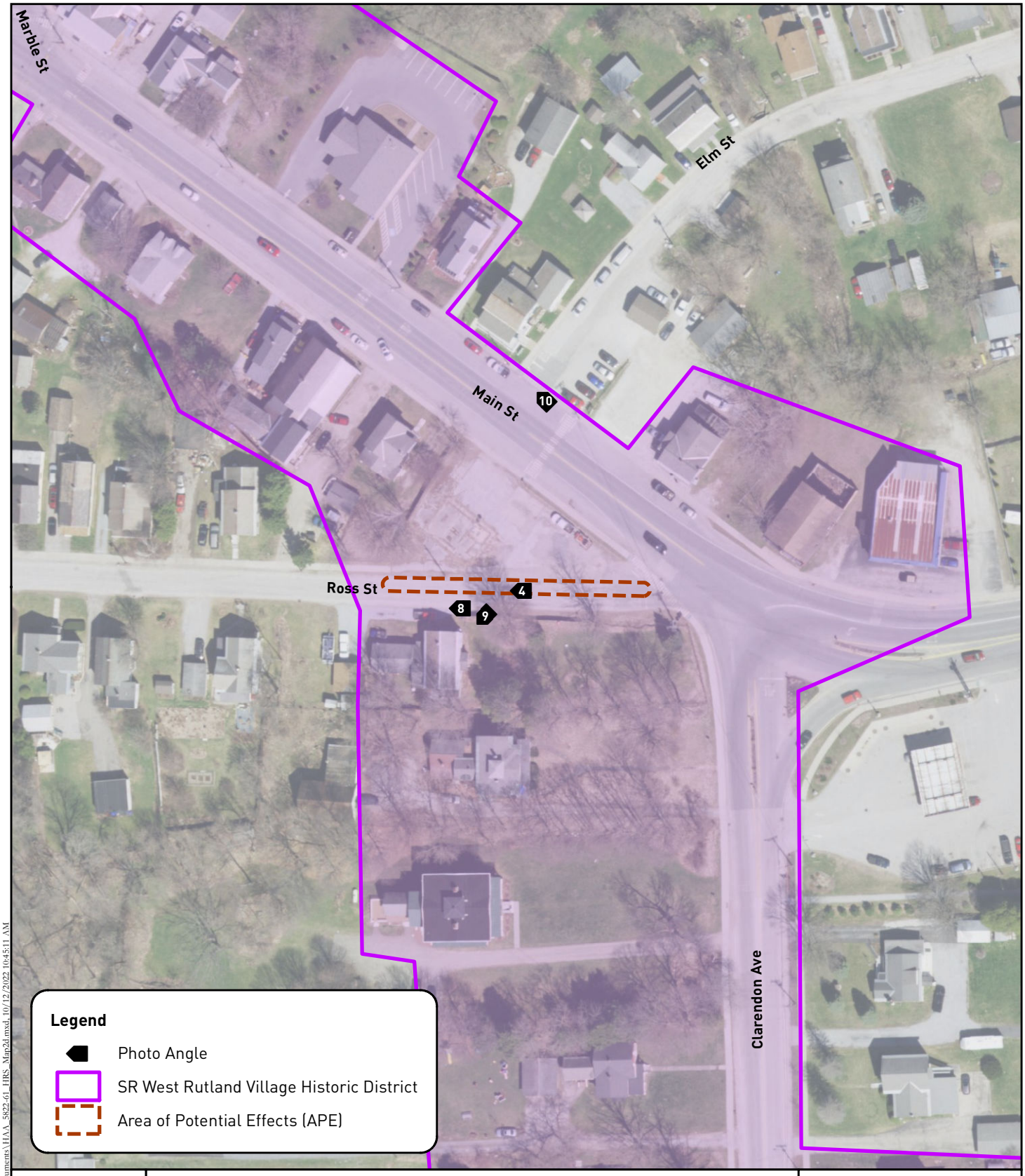

Project Map
4 - Ross (north side)

Vermont Center for Geographic Information, Orthoimagery, 2016-2020

HARTGEN archeological associates inc

Map 2d

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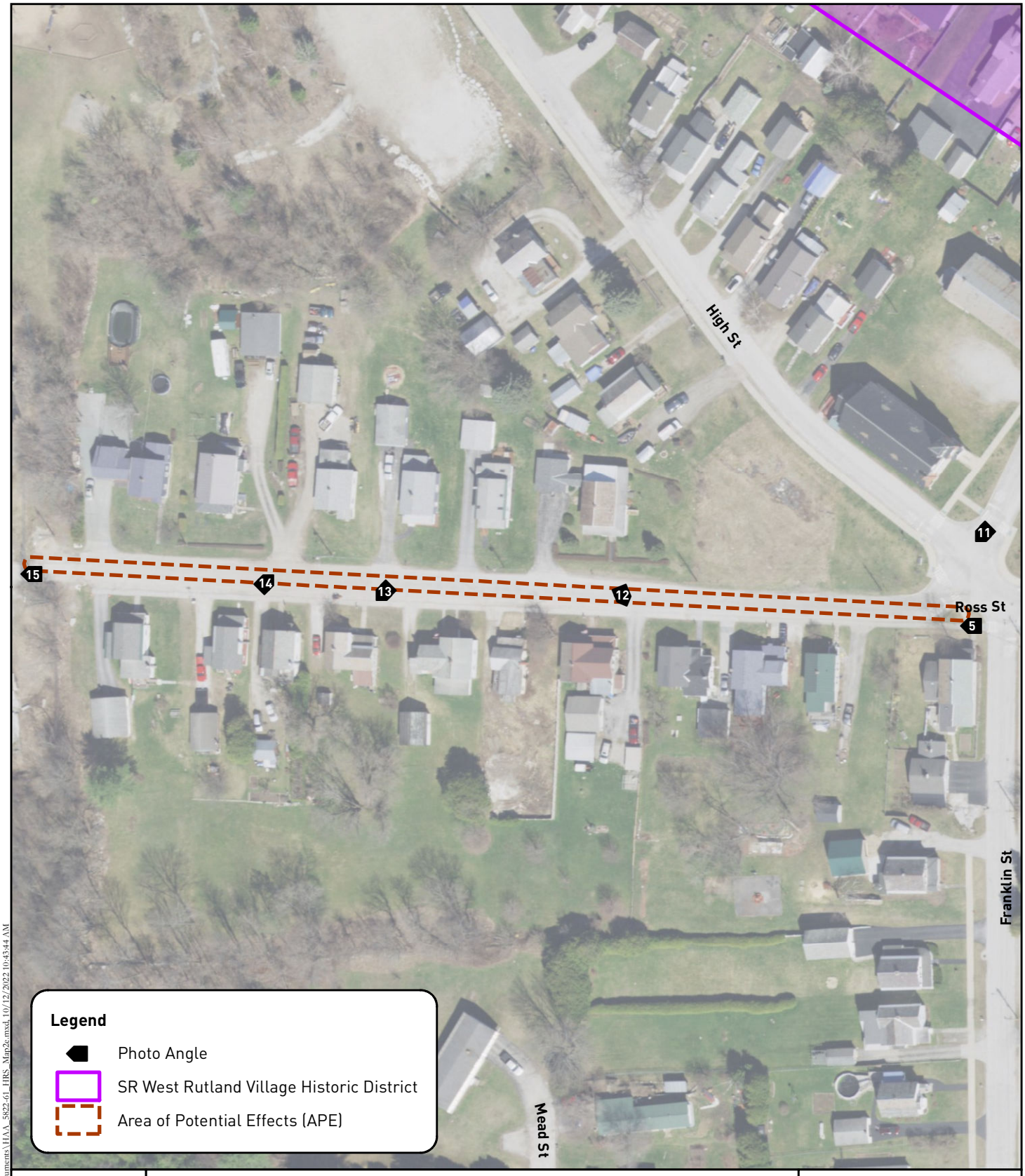

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15 0 15 30 Meters

Project Map
5 - Ross (south side)

Vermont Center for Geographic Information, Orthoimagery, 2016-2020

HARTGEN archeological associates inc

Map 2e

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15 0 15 30 Meters

Project Map
6 - Main Street (north side)

Vermont Center for Geographic Information, Orthoimagery, 2016-2020

HARTGEN archeological associates inc

Map 2f

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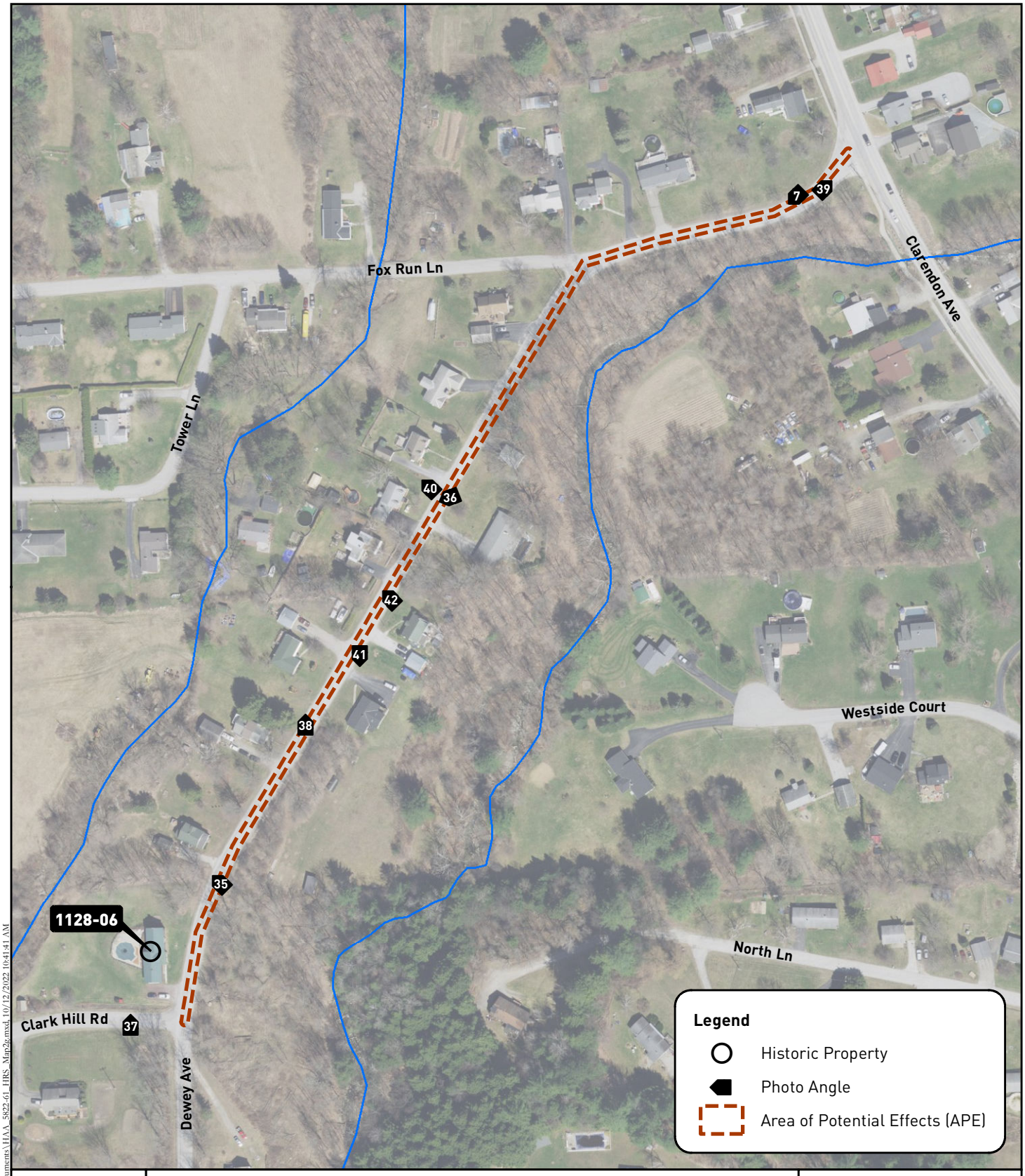
Fox Run Ln
Clarendon Ave
Tower Ln
Westside Court
North Ln
Clark Hill Rd
Dewey Ave
1128-06
7
39
40
36
42
41
38
35
37
Legend
Historic Property
Photo Angle
Area of Potential Effects (APE)
100 0 100 200
Feet
30 0 30 60
Meters
Project Map
7 - Dewey (both sides)
Vermont Center for Geographic Information, Orthoimagery, 2016-2020
HARTGEN
archeological associates inc
Map 2g
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Qualifications

HARTGEN
archeological associates inc

WALTER R. WHEELER
Senior Architectural Historian

EDUCATION:

Rensselaer Polytechnic Institute
Bachelor of Architecture May 1987
Bachelor of Science, Building Science, May 1986

QUALIFICATIONS:

36 CFR Part 61 Qualified Architectural Historian

SPECIAL TRAINING:

Architectural History Consultant Training
VDHP, Montpelier, VT, April 2019.

Vermont Community Development Program Qualified Professionals Training
VDHP, Montpelier, VT, September 2016.

Evaluating Significance of Historic and Archeological Resources Workshop
Vermont College, Montpelier, VT, May 2001
Historic Preservation Consultant training and Section 106 training

PROFESSIONAL EXPERIENCE:

June 1999 – Present — Senior Architectural Historian
Hartgen Archeological Associates, Inc.
Oversee and prepare architectural resource surveys, including pre-assessments, literature reviews and historical documentation; field reconnaissance; report and proposal preparation. Responsible for preparing documents to be reviewed by VAOT, VDHP, and USACOE, for SEQR, Section 106 and NEPA. Preparation of reports generated under ACT 250 and the FCCs Nationwide Programmatic Agreement, including preparation of forms 620 and 621.

November 1992 – June 1999 — Architectural History Consultant
Identified, analyzed, and assessed historic structures; researched and wrote for exhibitions and publications including Historic Structures Reports; executed drawings in connection with restoration projects. Clients included Rensselaer County Historical Society; Robert Pierpont, both in Troy, NY; towns of Durham and Oak Hill, NY; Albany Institute of History and Art; Metropolitan Museum of Art; the New York Public Library, and John G. Waite Associates, Albany, NY.

May 1984—November 1992 — Junior Architect
Worked for the Office of the New York State Architect, Wagoner & Reynolds, and in the office of Robert N. Pierpont as a Junior Architect. Responsible for restoration projects including the Governor's Mansion, the New York State Capitol, and Wilborn Temple (all in Albany, NY), and the Knickerbocker Mansion, in Schaghticoke, NY.

PRINCIPAL PUBLICATIONS:

2020 "Post-Colonial New World Dutch Framing Innovations and the Development of the Balloon Frame," in James W. P. Campbell et al eds., *Proceedings of the Seventh Annual Conference of the Construction History Society*. Cambridge, England: The Construction History Society.

2016 "Magical Dwelling: Apotropaic Building Practices in the New World Dutch Cultural Hearth," in Christiane Bis-Worch and Claudia Theune, eds., *Ruralia XI: Religion, Cults & Rituals in the Medieval Rural Environment.* Leiden, Netherlands: Sidestone Press, 373-396.

2010 "Once adorned with quaint Dutch tiles...: A Preliminary Analysis of Delft Tiles Found in Archaeological Contexts and Historical Collections in the Upper Hudson Valley," in Penelope Ballard Drooker and John P. Hart, eds., *Soldiers, Cities and Landscapes: Papers in Honor of Charles L. Fisher*. New York State Museum Bulletin 513, 107-150. Albany, NY: New York State Museum.

2009 *Architects in Albany*. Diana S. Waite, editor. Albany, NY: Mt Ida Press/ Historic Albany Foundation. Contributed two biographical essays.

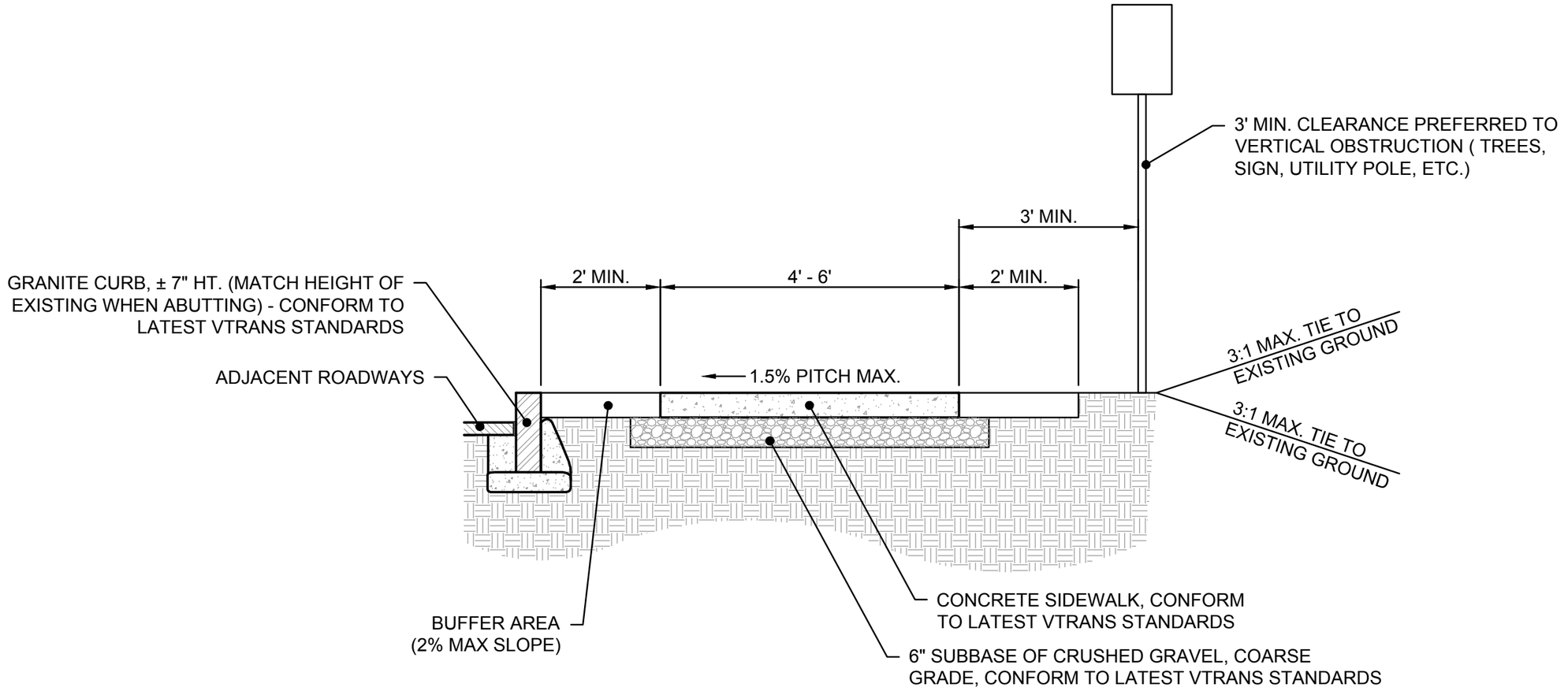
2005 *The Encyclopedia of New York State*, Peter Eisenstadt, editor. Syracuse, NY: Syracuse University Press, 2005. Author of entries "Philip Hooker," "Archimedes Russell," "Upright and Wing Houses," "Cobblestone Architecture," "Empire State Plaza," and "Architects and Architecture of Syracuse and Central New York."

2000 *The Marble House in Second Street: Biography of a Town House and its Occupants, 1825-2000*. Troy, NY: Rensselaer County Historical Society.

1993 *A Neat Plain Modern Stile: Philip Hooker and His Contemporaries, 1796-1836*. University of Mass. Press, Amherst, Mass.

APPENDIX F

Concept Alternative Details



NOTES:

1. SURFACE TO BE STIFF BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAFFIC WITH TOOLED EDGES.
2. INSTALL CONTROL JOINTS PER PLAN AT 5' MAX. SPACING. EXPANSION JOINT AT 20' MAX. SPACING.
3. CONCRETE SIDEWALK TO CONFORM TO LATEST VTRANS STANDARDS.

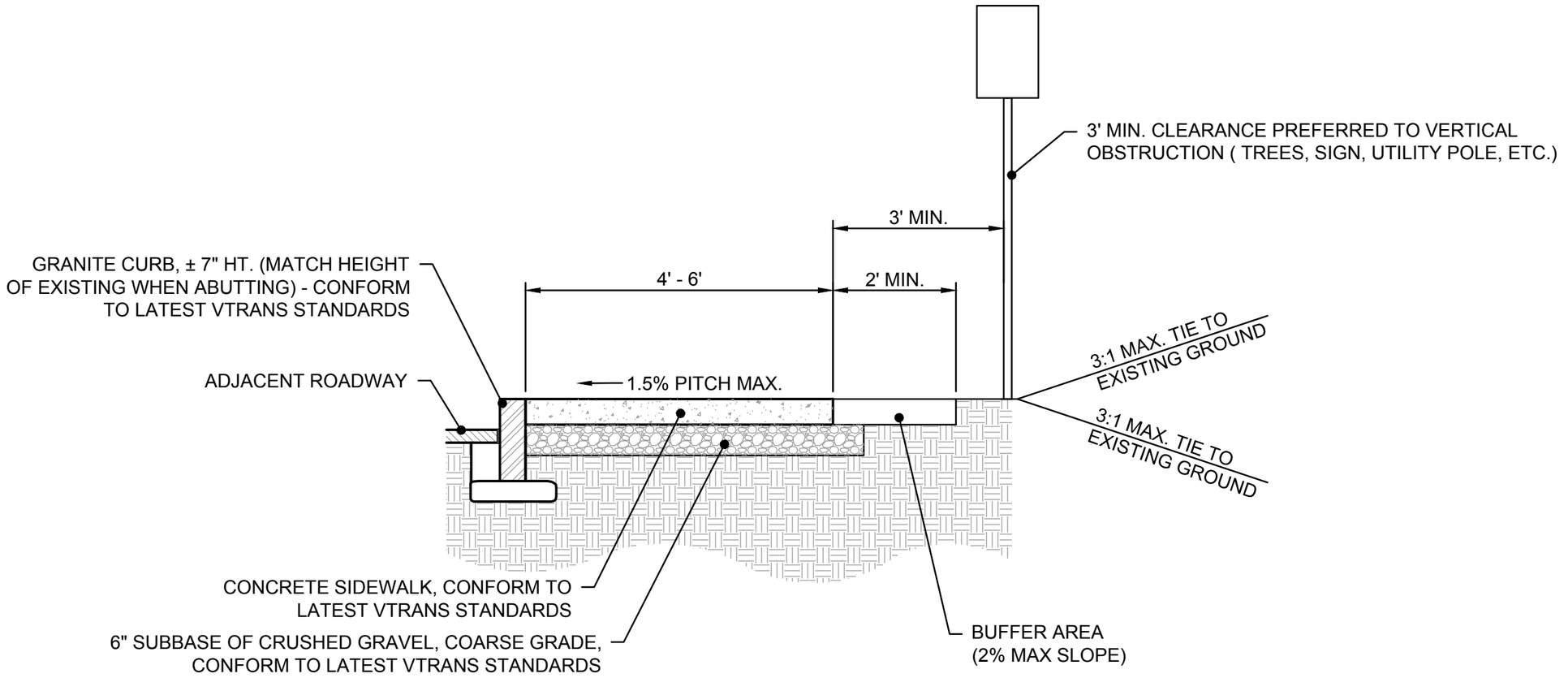
ALTERNATIVE 1 - SIDEWALK WITH CURB

TOWN OF WEST RUTLAND, VERMONT
SIDEWALK SCOPING STUDY

STANDARD DETAIL
ALTERNATIVE 1

DESIGNED BY: JWG	CHECKED BY: DPB	DATE: SEPT. 2022

Weston & Sampson℠



NOTES:

1. SURFACE TO BE STIFF BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAFFIC WITH TOOLED EDGES.
2. INSTALL CONTROL JOINTS PER PLAN AT 5' MAX. SPACING. EXPANSION JOINT AT 20' MAX. SPACING.
3. CONCRETE SIDEWALK TO CONFORM TO VTRANS STANDARDS.

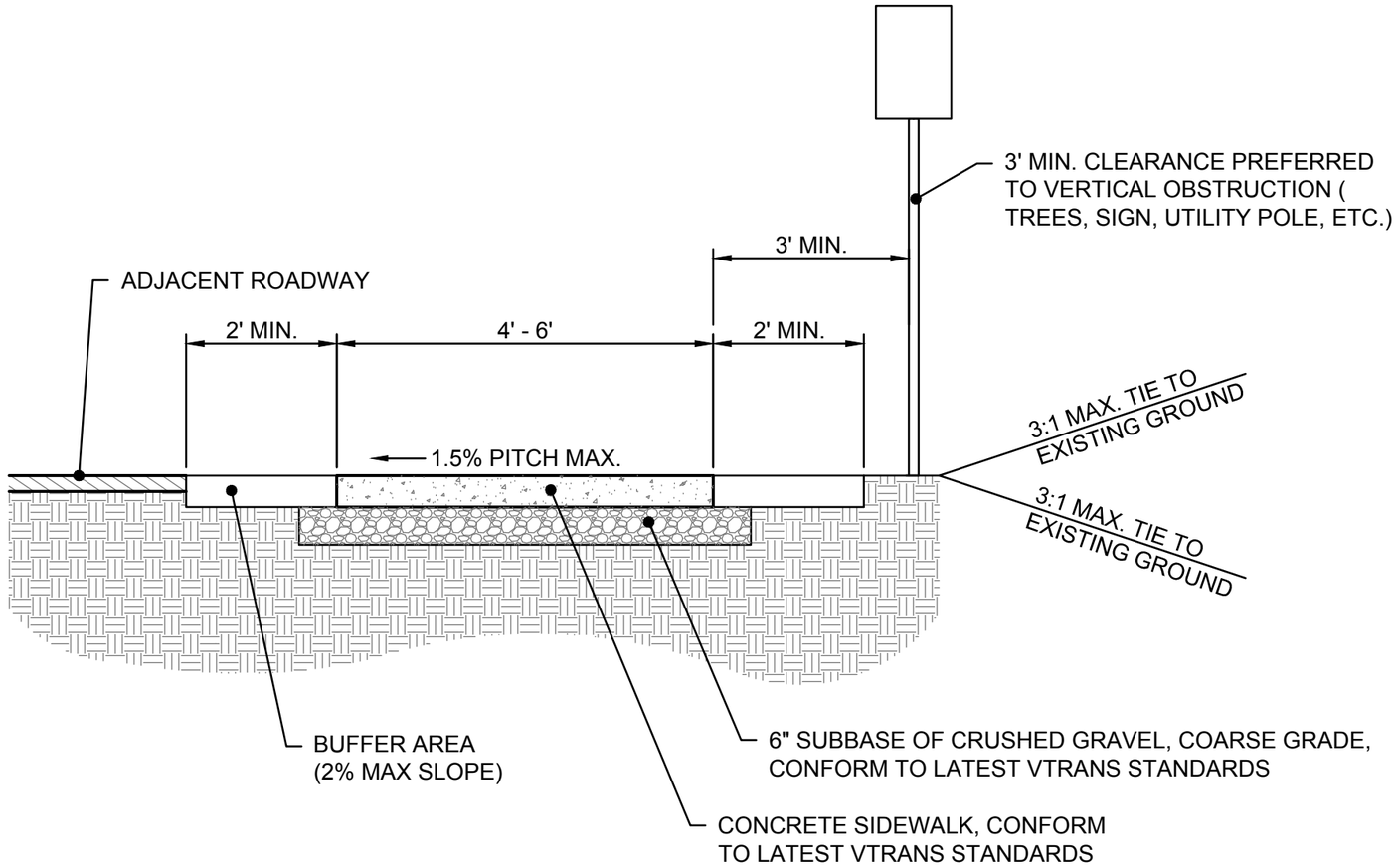
ALTERNATIVE 2 - SIDEWALK WITH INTEGRAL CURB

TOWN OF WEST RUTLAND, VERMONT
SIDEWALK SCOPING STUDY

STANDARD DETAIL
ALTERNATIVE 2

DESIGNED BY: JWG	CHECKED BY: DPB	DATE: SEPT. 2022

Weston & Sampson℠



NOTES:

1. SURFACE TO BE STIFF BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAFFIC WITH TOOLED EDGES.
2. INSTALL CONTROL JOINTS PER PLAN AT 5' MAX. SPACING. EXPANSION JOINT AT 20' MAX. SPACING.
3. CONCRETE SIDEWALK TO CONFORM TO LATEST VTRANS STANDARDS.

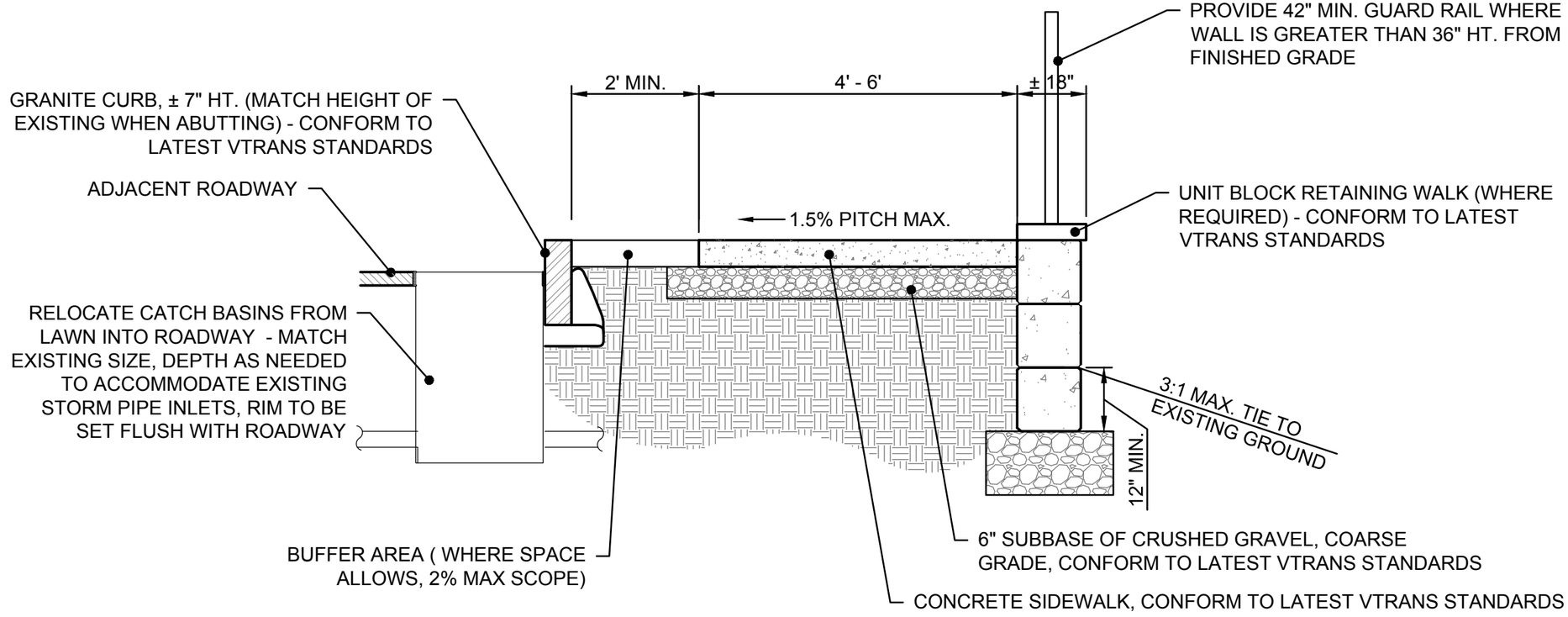
ALTERNATIVE 3 - SIDEWALK AT GRADE

TOWN OF WEST RUTLAND, VERMONT
SIDEWALK SCOPING STUDY

STANDARD DETAIL
ALTERNATIVE 3

DESIGNED BY: JWG	CHECKED BY: DPB	DATE: SEPT. 2022

Weston & Sampson℠



NOTES:

1. SURFACE TO BE STIFF BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAFFIC WITH TOOLED EDGES.
2. INSTALL CONTROL JOINTS PER PLAN AT 5' MAX. SPACING. EXPANSION JOINT AT 20' MAX. SPACING.
3. CONCRETE SIDEWALK TO CONFORM TO LATEST VTRANS STANDARDS.

ALTERNATIVE 4 - SIDEWALK WITH RETAINING WALL

TOWN OF WEST RUTLAND, VERMONT
SIDEWALK SCOPING STUDY

STANDARD DETAIL
ALTERNATIVE 4

DESIGNED BY: JWG	CHECKED BY: DPB	DATE: SEPT. 2022

Weston & Sampson

APPENDIX G

Alternatives Matrix

EVALUATION MATRIX					
AREA 1 - PLEASANT STREET (EAST SIDE) - BUSINESS ROUTE 4 TO SHELDON AVE (±635 LF)					
		No-Build	Sidewalk with Curb (Alt 1)	Sidewalk with Integral Curb (Alt 2)	Sidewalk Without Curb (Alt 3)
Cost	5' Concrete Sidewalk	$ -	$ 36,830.00	$ 36,830.00	$ 36,830.00
	5' Asphalt Sidewalk	$ -	$ 8,540.75	$ 8,540.75	$ 8,540.75
	Curb	$ -	$ 31,769.05	$ 31,769.05	$ -
	Buffer Zone	$ -	$ 635.00	$ 317.50	$ 635.00
	Subbase	$ -	$ 2,082.80	$ 2,082.80	$ 2,082.80
	Retaining Wall	$ -	$ -	$ -	$ -
Engineering	Typical Section	N/A	0.61 - 1.52 - 0.61	0.00 - 1.52 - 0.61	0.61 - 1.52 - 0.61
	Alignment Change	N/A	0	0	0
	User Access	Road Shoulder	Sidewalks	Sidewalks	Sidewalks
	Hydraulic Performance	Sufficient	No Impact	No Impact	No Impact
	Utilities	No Impact	No Impact	No Impact	No Impact
Impacts	Agricultural Lands	None	None	None	None
	Archaeological	None	No Impact	No Impact	No Impact
	Historic	None	No Impact	No Impact	No Impact
	Floodplain	None	None	None	None
	Fish & Wildlife	None	No Impact	No Impact	No Impact
	Right-of-Way	None	No Impact	No Impact	No Impact
	RTE Species	None	No Impact	No Impact	No Impact
	Public Lands - Sect. 4(f)	None	No Impact	No Impact	No Impact
	LWCP - Sect. 6(f)	None	No Impact	No Impact	No Impact
	Noise	None	No Impact	No Impact	No Impact
	Traffic Control & Mobilization/Demobilization	None	Minor Road Impacts, Residences	Minor Road Impacts, Residences	Minor Road Impacts, Residences
	Wetlands	None	No Impact	No Impact	No Impact
Local & Regional Issues	Concerns	Gap in Trail Sidewalk System	No Concerns	No Concerns	Pedestiran Safety - No Vert. Barrier
	Aesthetics	Unchanged	Unchanged	Unchanged	Unchanged
	Character	Unchanged	Unchanged	Unchanged	Unchanged
	Economic	Unchanged	Positive (Increased Connectivity)	Positive (Increased Connectivity)	Positive (Increased Connectivity)
	Regional Plan Conformance	No	Yes	Yes	Yes
	Satisfies Purpose & Need	No	Yes	Yes	Yes
Permits	ACT 250	No	No	No	No
	401 Water Quality	No	No	No	No
	404 COE Permit	No	No	No	No
	Stream Alteration	No	No	No	No
	State Wetland Permit	No	No	No	No
	Storm Water Discharge	No	No	No	No
	Lakes & Ponds	No	No	No	No
	RTE Species	No	No	No	No
	SHPO	No	No	No	No
Other	Convsersations with the local Vtrans District Coordinator regarding additional permits (1111 on Route 4, etc.) should be completed prior to additional design and construction.				

EVALUATION MATRIX						
AREA 2 - PLEASANT STREET (WEST SIDE) - BAXTER TO DURGY HILL (±588 LF)						
		No-Build	Sidewalk with Curb (Alt 1)	Sidewalk with Integral Curb (Alt 2)	Sidewalk Without Curb (Alt 3)	Sidewalk With Retaining Wall (Alt 4)
Cost	5' Concrete Sidewalk	$ -	$ 34,104.00	$ 34,104.00	$ 34,104.00	$ 34,104.00
	5' Asphalt Sidewalk	$ -	$ 7,908.60	$ 7,908.60	$ 7,908.60	$ 7,908.60
	Curb	$ -	$ 29,417.64	$ 29,417.64	$ -	$ 29,417.64
	Buffer Zone	$ -	$ 588.00	$ 294.00	$ 588.00	$ 588.00
	Subbase	$ -	$ 1,928.64	$ 1,928.64	$ 1,928.64	$ 1,928.64
	Retaining Wall	$ -	$ -	$ -	$ -	$ 59,587.92
Engineering	Typical Section	N/A	0.61 - 1.52 - 0.61	0.00 - 1.52 - 0.61	0.61 - 1.52 - 0.61	0.61 - 1.52 - 0.61 - 0.46
	Alignment Change	N/A	0	0	0	0
	User Access	Road Shoulder	Sidewalks	Sidewalks	Sidewalks	Sidewalks
	Hydraulic Performance	Sufficient	No Impact	No Impact	No Impact	No Impact
	Utilities	No Impact	No Impact	No Impact	No Impact	No Impact
Impacts	Agricultural Lands	None	Minor Impact	Minor Impact	Minor Impact	Minor Impact
	Archaeological	None	No Impact	No Impact	No Impact	No Impact
	Historic	None	No Impact	No Impact	No Impact	No Impact
	Floodplain	None	None	None	None	None
	Fish & Wildlife	None	No Impact	No Impact	No Impact	No Impact
	Right-of-Way	None	No Impact	No Impact	No Impact	No Impact
	RTE Species	None	No Impact	No Impact	No Impact	No Impact
	Public Lands - Sect. 4(f)	None	No Impact	No Impact	No Impact	No Impact
	LWCP - Sect. 6(f)	None	No Impact	No Impact	No Impact	No Impact
	Noise	None	No Impact	No Impact	No Impact	No Impact
	Traffic Control & Mobilization/Demobilization	None	Minor Road Impacts, Residences	Minor Road Impacts, Residences	Minor Road Impacts, Residences	Minor Road Impacts, Residences
	Wetlands	None	Minor Impact	Minor Impact	Minor Impact	Minor Impact
Local & Regional Issues	Concerns	Gap in Trail Sidewalk System	No Concerns	No Concerns	Pedestiran Safety - No Vert. Barrier	No Concerns
	Aesthetics	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged
	Character	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged
	Economic	Unchanged	Positive (Increased Connectivity)	Positive (Increased Connectivity)	Positive (Increased Connectivity)	Positive (Increased Connectivity)
	Regional Plan Conformance	No	Yes	Yes	Yes	Yes
	Satisfies Purpose & Need	No	Yes	Yes	Yes	Yes
Permits	ACT 250	No	No	No	No	No
	401 Water Quality	No	No	No	No	Yes
	404 COE Permit	No	No	No	No	No
	Stream Alteration	No	No	No	No	No
	State Wetland Permit	No	Yes	Yes	Yes	Yes
	Storm Water Discharge	No	No	No	No	No
	Lakes & Ponds	No	No	No	No	No
	RTE Species	No	No	No	No	No
	SHPO	No	No	No	No	No
Other	Convsersations with the local Vtrans District Coordinator regarding additional permits (1111 on Route 4, etc.) should be completed prior to additional design and construction.					

EVALUATION MATRIX						
AREA 3 - THRALL AVENUE (NORTH SIDE) - PARK & RIDE TO SHELDON AVE (±850 LF)						
		No-Build	Sidewalk with Curb (Alt 1)	Sidewalk with Integral Curb (Alt 2)	Sidewalk Without Curb (Alt 3)	Sidewalk With Retaining Wall (Alt 4)
Cost	5' Concrete Sidewalk	$ -	$ 49,300.00	$ 49,300.00	$ 49,300.00	$ 49,300.00
	5' Asphalt Sidewalk	$ -	$ 11,432.50	$ 11,432.50	$ 11,432.50	$ 11,432.50
	Curb	$ -	$ 42,525.50	$ 42,525.50	$ -	$ 42,525.50
	Buffer Zone	$ -	$ 850.00	$ 425.00	$ 850.00	$ 850.00
	Subbase	$ -	$ 2,788.00	$ 2,788.00	$ 2,788.00	$ 2,788.00
	Retaining Wall	$ -	$ -	$ -	$ -	$ 86,139.00
Engineering	Typical Section	N/A	0.61 - 1.52 - 0.61	0.00 - 1.52 - 0.61	0.61 - 1.52 - 0.61	0.61 - 1.52 - 0.61 - 0.46
	Alignment Change	N/A	0	0	0	0
	User Access	Road Shoulder	Sidewalks	Sidewalks	Sidewalks	Sidewalks
	Hydraulic Performance	Sufficient	No Impact	No Impact	No Impact	No Impact
	Utilities	No Impact	No Impact	No Impact	No Impact	No Impact
Impacts	Agricultural Lands	None	None	None	None	None
	Archaeological	None	No Impact	No Impact	No Impact	No Impact
	Historic	None	No Impact	No Impact	No Impact	No Impact
	Floodplain	None	None	None	None	None
	Fish & Wildlife	None	No Impact	No Impact	No Impact	No Impact
	Right-of-Way	None	Impacts within Ex. Railroad ROW Crossing	Impacts within Ex. Railroad ROW Crossing	Impacts within Ex. Railroad ROW Crossing	Impacts within Ex. Railroad ROW Crossing
	RTE Species	None	No Impact	No Impact	No Impact	No Impact
	Public Lands - Sect. 4(f)	None	No Impact	No Impact	No Impact	No Impact
	LWCP - Sect. 6(f)	None	No Impact	No Impact	No Impact	No Impact
	Noise	None	No Impact	No Impact	No Impact	No Impact
	Traffic Control & Mobilization/Demobilization	None	Railroad Coordination, Minor Road Impacts	Railroad Coordination, Minor Road Impacts	Railroad Coordination, Minor Road Impacts	Railroad Coordination, Minor Road Impacts
	Wetlands	None	Minor Impact	Minor Impact	Minor Impact	Minor Impact
Local & Regional Issues	Concerns	Gap in Trail Sidewalk System	No Concerns	No Concerns	Pedestiran Safety - No Vert. Barrier	No Concerns
	Aesthetics	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged
	Character	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged
	Economic	Unchanged	Positive (Increased Connectivity)	Positive (Increased Connectivity)	Positive (Increased Connectivity)	Positive (Increased Connectivity)
	Regional Plan Conformance	No	Yes	Yes	Yes	Yes
	Satisfies Purpose & Need	No	Yes	Yes	Yes	Yes
Permits	ACT 250	No	No	No	No	No
	401 Water Quality	No	No	No	No	Yes
	404 COE Permit	No	No	No	No	No
	Stream Alteration	No	No	No	No	No
	State Wetland Permit	No	Yes	Yes	Yes	Yes
	Storm Water Discharge	No	No	No	No	No
	Lakes & Ponds	No	No	No	No	No
	RTE Species	No	No	No	No	No
	SHPO	No	No	No	No	No
Other	Convsersations with the local Vtrans District Coordinator regarding additional permits (1111 on Route 4, etc.) should be completed prior to additional design and construction.					

EVALUATION MATRIX					
AREA 4 - ROSS STREET (NORTH SIDE) - MAIN STREET TO FENCE (END OF RIGG'S PARCEL) (±179 LF)					
		No-Build	Sidewalk with Curb (Alt 1)	Sidewalk with Integral Curb (Alt 2)	Sidewalk Without Curb (Alt 3)
Cost	5' Concrete Sidewalk	$ -	$ 10,382.00	$ 10,382.00	$ 10,382.00
	5' Asphalt Sidewalk	$ -	$ 2,407.55	$ 2,407.55	$ 2,407.55
	Curb	$ -	$ 8,955.37	$ 8,955.37	$ -
	Buffer Zone	$ -	$ 179.00	$ 89.50	$ 179.00
	Subbase	$ -	$ 587.12	$ 587.12	$ 587.12
	Retaining Wall	$ -	$ -	$ -	$ -
Engineering	Typical Section	N/A	0.61 - 1.52 - 0.61	0.00 - 1.52 - 0.61	0.61 - 1.52 - 0.61
	Alignment Change	N/A	0	0	0
	User Access	Road Shoulder	Sidewalks	Sidewalks	Sidewalks
	Hydraulic Performance	Sufficient	No Impact	No Impact	No Impact
	Utilities	No Impact	No Impact	No Impact	No Impact
Impacts	Agricultural Lands	None	Minor Impact	Minor Impact	Minor Impact
	Archaeological	None	No Impact	No Impact	No Impact
	Historic	None	No Impact	No Impact	No Impact
	Floodplain	None	None	None	None
	Fish & Wildlife	None	No Impact	No Impact	No Impact
	Right-of-Way	None	Potential Minor Impact	Potential Minor Impact	Potential Minor Impact
	RTE Species	None	No Impact	No Impact	No Impact
	Public Lands - Sect. 4(f)	None	No Impact	No Impact	No Impact
	LWCP - Sect. 6(f)	None	No Impact	No Impact	No Impact
	Noise	None	No Impact	No Impact	No Impact
	Traffic Control & Mobilization/Demobilization	None	Minor Road Impacts	Minor Road Impacts	Minor Road Impacts
	Wetlands	None	No Impact	No Impact	No Impact
Local & Regional Issues	Concerns	Gap in Trail Sidewalk System	No Concerns	No Concerns	Pedestiran Safety - No Vert. Barrier
	Aesthetics	Unchanged	Unchanged	Unchanged	Unchanged
	Character	Unchanged	Unchanged	Unchanged	Unchanged
	Economic	Unchanged	Positive (Increased Connectivity)	Positive (Increased Connectivity)	Positive (Increased Connectivity)
	Regional Plan Conformance	No	Yes	Yes	Yes
	Satisfies Purpose & Need	No	Yes	Yes	Yes
Permits	ACT 250	No	No	No	No
	401 Water Quality	No	No	No	No
	404 COE Permit	No	No	No	No
	Stream Alteration	No	No	No	No
	State Wetland Permit	No	No	No	No
	Storm Water Discharge	No	No	No	No
	Lakes & Ponds	No	No	No	No
	RTE Species	No	No	No	No
	SHPO	No	No	No	No
Other	Convsersations with the local Vtrans District Coordinator regarding additional permits (1111 on Route 4, etc.) should be completed prior to additional design and construction.				

EVALUATION MATRIX					
AREA 5 - ROSS STREET (SOUTH SIDE) - FRANKLIN TO END OF ROSS (±670 LF)					
		No-Build	Sidewalk with Curb (Alt 1)	Sidewalk with Integral Curb (Alt 2)	Sidewalk Without Curb (Alt 3)
Cost	5' Concrete Sidewalk	$ -	$ 38,860.00	$ 38,860.00	$ 38,860.00
	5' Asphalt Sidewalk	$ -	$ 9,011.50	$ 9,011.50	$ 9,011.50
	Curb	$ -	$ 33,520.10	$ 33,520.10	$ -
	Buffer Zone	$ -	$ 670.00	$ 335.00	$ 670.00
	Subbase	$ -	$ 2,197.60	$ 2,197.60	$ 2,197.60
	Retaining Wall	$ -	$ -	$ -	$ -
Engineering	Typical Section	N/A	0.61 - 1.52 - 0.61	0.00 - 1.52 - 0.61	0.61 - 1.52 - 0.61
	Alignment Change	N/A	0	0	0
	User Access	Road Shoulder	Sidewalks	Sidewalks	Sidewalks
	Hydraulic Performance	Sufficient	No Impact	No Impact	No Impact
	Utilities	No Impact	No Impact	No Impact	No Impact
Impacts	Agricultural Lands	None	Minor Impact	Minor Impact	Minor Impact
	Archaeological	None	No Impact	No Impact	No Impact
	Historic	None	No Impact	No Impact	No Impact
	Floodplain	None	None	None	None
	Fish & Wildlife	None	No Impact	No Impact	No Impact
	Right-of-Way	None	No Impact	No Impact	No Impact
	RTE Species	None	No Impact	No Impact	No Impact
	Public Lands - Sect. 4(f)	None	No Impact	No Impact	No Impact
	LWCP - Sect. 6(f)	None	No Impact	No Impact	No Impact
	Noise	None	No Impact	No Impact	No Impact
	Traffic Control & Mobilization/Demobilization	None	Minor Road Impacts, Residences	Minor Road Impacts, Residences	Minor Road Impacts, Residences
	Wetlands	None	No Impact	No Impact	No Impact
Local & Regional Issues	Concerns	Gap in Trail Sidewalk System	No Concerns	No Concerns	Pedestiran Safety - No Vert. Barrier
	Aesthetics	Unchanged	Unchanged	Unchanged	Unchanged
	Character	Unchanged	Unchanged	Unchanged	Unchanged
	Economic	Unchanged	Positive (Increased Connectivity)	Positive (Increased Connectivity)	Positive (Increased Connectivity)
	Regional Plan Conformance	No	Yes	Yes	Yes
	Satisfies Purpose & Need	No	Yes	Yes	Yes
Permits	ACT 250	No	No	No	No
	401 Water Quality	No	No	No	No
	404 COE Permit	No	No	No	No
	Stream Alteration	No	No	No	No
	State Wetland Permit	No	No	No	No
	Storm Water Discharge	No	No	No	No
	Lakes & Ponds	No	No	No	No
	RTE Species	No	No	No	No
	SHPO	No	No	No	No
Other	Convsersations with the local Vtrans District Coordinator regarding additional permits (1111 on Route 4, etc.) should be completed prior to additional design and construction.				

EVALUATION MATRIX					
AREA 6 - MAIN STREET (NORTH SIDE) - PROCTOR TO GILMORE (±485 LF)					
		No-Build	Sidewalk with Curb (Alt 1)	Sidewalk with Integral Curb (Alt 2)	Sidewalk Without Curb (Alt 3)
Cost	5' Concrete Sidewalk	$ -	$ 28,130.00	$ 28,130.00	$ 28,130.00
	5' Asphalt Sidewalk	$ -	$ 6,523.25	$ 6,523.25	$ 6,523.25
	Curb	$ -	$ 24,264.55	$ 24,264.55	$ -
	Buffer Zone	$ -	$ 485.00	$ 242.50	$ 485.00
	Subbase	$ -	$ 1,590.80	$ 1,590.80	$ 1,590.80
	Retaining Wall	$ -	$ -	$ -	$ -
Engineering	Typical Section	N/A	0.61 - 1.52 - 0.61	0.00 - 1.52 - 0.61	0.61 - 1.52 - 0.61
	Alignment Change	N/A	0	0	0
	User Access	Road Shoulder	Sidewalks	Sidewalks	Sidewalks
	Hydraulic Performance	Sufficient	No Impact	No Impact	No Impact
	Utilities	No Impact	No Impact	No Impact	No Impact
Impacts	Agricultural Lands	None	Minor Impact	Minor Impact	Minor Impact
	Archaeological	None	No Impact	No Impact	No Impact
	Historic	None	No Impact	No Impact	No Impact
	Floodplain	None	None	None	None
	Fish & Wildlife	None	No Impact	No Impact	No Impact
	Right-of-Way	None	No Impact	No Impact	No Impact
	RTE Species	None	No Impact	No Impact	No Impact
	Public Lands - Sect. 4(f)	None	No Impact	No Impact	No Impact
	LWCP - Sect. 6(f)	None	No Impact	No Impact	No Impact
	Noise	None	No Impact	No Impact	No Impact
	Traffic Control & Mobilization/Demobilization	None	Minor Road Impacts, Commercial	Minor Road Impacts, Commercial	Minor Road Impacts, Commercial
	Wetlands	None	No Impact	No Impact	No Impact
Local & Regional Issues	Concerns	Gap in Trail Sidewalk System	No Concerns	No Concerns	Pedestiran Safety - No Vert. Barrier
	Aesthetics	Unchanged	Unchanged	Unchanged	Unchanged
	Character	Unchanged	Unchanged	Unchanged	Unchanged
	Economic	Unchanged	Positive (Increased Connectivity)	Positive (Increased Connectivity)	Positive (Increased Connectivity)
	Regional Plan Conformance	No	Yes	Yes	Yes
	Satisfies Purpose & Need	No	Yes	Yes	Yes
Permits	ACT 250	No	No	No	No
	401 Water Quality	No	No	No	No
	404 COE Permit	No	No	No	No
	Stream Alteration	No	No	No	No
	State Wetland Permit	No	No	No	No
	Storm Water Discharge	No	No	No	No
	Lakes & Ponds	No	No	No	No
	RTE Species	No	No	No	No
	SHPO	No	No	No	No
Other	Convsersations with the local Vtrans District Coordinator regarding additional permits (1111 on Route 4, etc.) should be completed prior to additional design and construction.				

EVALUATION MATRIX						
AREA 7 - DEWEY AVENUE (BOTH SIDES) - PROCTOR TO GILMORE (±1,728 LF)						
		No-Build	Sidewalk with Curb (Alt 1)	Sidewalk with Integral Curb (Alt 2)	Sidewalk Without Curb (Alt 3)	Sidewalk With Retaining Wall (Alt 4)
Cost	5' Concrete Sidewalk	$ -	$ 100,224.00	$ 100,224.00	$ 100,224.00	$ 100,224.00
	5' Asphalt Sidewalk	$ -	$ 23,241.60	$ 23,241.60	$ 23,241.60	$ 23,241.60
	Curb	$ -	$ 86,451.84	$ 86,451.84	$ -	$ 86,451.84
	Buffer Zone	$ -	$ 1,728.00	$ 864.00	$ 1,728.00	$ 1,728.00
	Subbase	$ -	$ 5,667.84	$ 5,667.84	$ 5,667.84	$ 5,667.84
	Retaining Wall	$ -	$ -	$ -	$ -	$ 175,115.52
Engineering	Typical Section	N/A	0.61 - 1.52 - 0.61	0.00 - 1.52 - 0.61	0.61 - 1.52 - 0.61	0.61 - 1.52 - 0.61 - 0.46
	Alignment Change	N/A	0	0	0	0
	User Access	Road Shoulder	Sidewalks	Sidewalks	Sidewalks	Sidewalks
	Hydraulic Performance	Sufficient	No Impact	No Impact	No Impact	No Impact
	Utilities	No Impact	No Impact	No Impact	No Impact	No Impact
Impacts	Agricultural Lands	None	Minor Impact	Minor Impact	Minor Impact	Minor Impact
	Archaeological	None	Potential Minor Impact	Potential Minor Impact	Potential Minor Impact	Potential Minor Impact
	Historic	None	No Impact	No Impact	No Impact	No Impact
	Floodplain	None	Minor Impact	Minor Impact	Minor Impact	Minor Impact
	Fish & Wildlife	None	No Impact	No Impact	No Impact	No Impact
	Right-of-Way	None	Potential Minor Impact	Potential Minor Impact	Potential Minor Impact	Potential Minor Impact
	RTE Species	None	No Impact	No Impact	No Impact	No Impact
	Public Lands - Sect. 4(f)	None	No Impact	No Impact	No Impact	No Impact
	LWCP - Sect. 6(f)	None	No Impact	No Impact	No Impact	No Impact
	Noise	None	No Impact	No Impact	No Impact	No Impact
	Traffic Control & Mobilization/Demobilization	None	Minor Road Impacts, Residences	Minor Road Impacts, Residences	Minor Road Impacts, Residences	Minor Road Impacts, Residences
	Wetlands	None	No Impact	No Impact	No Impact	No Impact
Local & Regional Issues	Concerns	Gap in Trail Sidewalk System	No Concerns	No Concerns	Pedestiran Safety - No Vert. Barrier	No Concerns
	Aesthetics	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged
	Character	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged
	Economic	Unchanged	Positive (Increased Connectivity)	Positive (Increased Connectivity)	Positive (Increased Connectivity)	Positive (Increased Connectivity)
	Regional Plan Conformance	No	Yes	Yes	Yes	Yes
	Satisfies Purpose & Need	No	Yes	Yes	Yes	Yes
Permits	ACT 250	No	No	No	No	No
	401 Water Quality	No	No	No	No	Yes
	404 COE Permit	No	No	No	No	No
	Stream Alteration	No	No	No	No	No
	State Wetland Permit	No	No	No	No	No
	Storm Water Discharge	No	No	No	No	No
	Lakes & Ponds	No	No	No	No	No
	RTE Species	No	No	No	No	No
	SHPO	No	No	No	No	No
Other	Convsersations with the local Vtrans District Coordinator regarding additional permits (1111 on Route 4, etc.) should be completed prior to additional design and construction.					

APPENDIX H

Public Meeting Presentations

SIDEWALK SCOPING STUDY

West Rutland TAP TA 21(8)

Local Concerns Meeting

Town of

WEST RUTLAND VERMONT

June 13, 2022

Daniel Biggs, RLA, ISA, CERP
Principal-in-Charge

Jack Grieshober, RLA
Sr. Project Landscape Architect

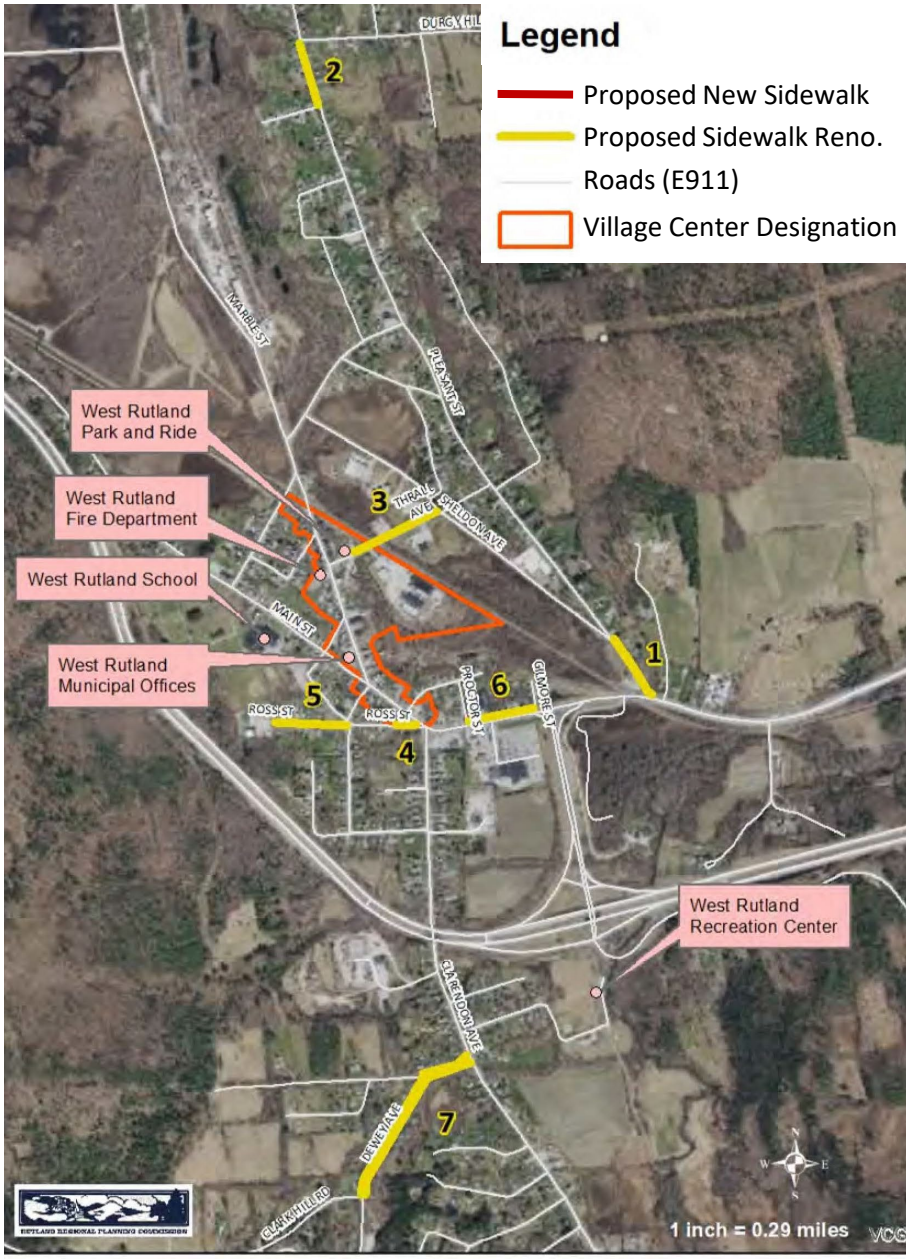
Weston & Sampson SM

project goal

The Town recently completed several sidewalk and pedestrian improvement projects at multiple locations.

This project will build on this progress to identify additional areas for improvements, potentially including upgrades to existing sidewalk facilities and construction of new sidewalks.

Location	Feet
1) Pleasant Street (east side) - Business Route 4 to Sheldon	635
2) Pleasant Street (west side) - Baxter to Durgy	588
3) Thrall (north side) - park & ride to Sheldon	850
4) Ross Street (north side) - Main to fence (end of Rigg's parcel)	179
5) Ross Street (south side) - Franklin to end	670
6) Main Street (north side) - Proctor to Gilmore	485
7) Dewey (both sides) - Clarendon to Clark Hill	1,728
Total	**5,135**



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project objectives

- Assess existing conditions & develop base mapping of project areas
- Identify land use & site context around project areas
- Identify utility conflicts, right-of-way issues, natural & cultural resources
- Develop conceptual alternatives for project areas
- Present alternatives to the community & recommend a preferred alternative
- Create a Final Scoping Report summarizing findings to use for future development

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existing conditions

Areas:

1 - east side of pleasant street
(business rte 4 – sheldon avenue)

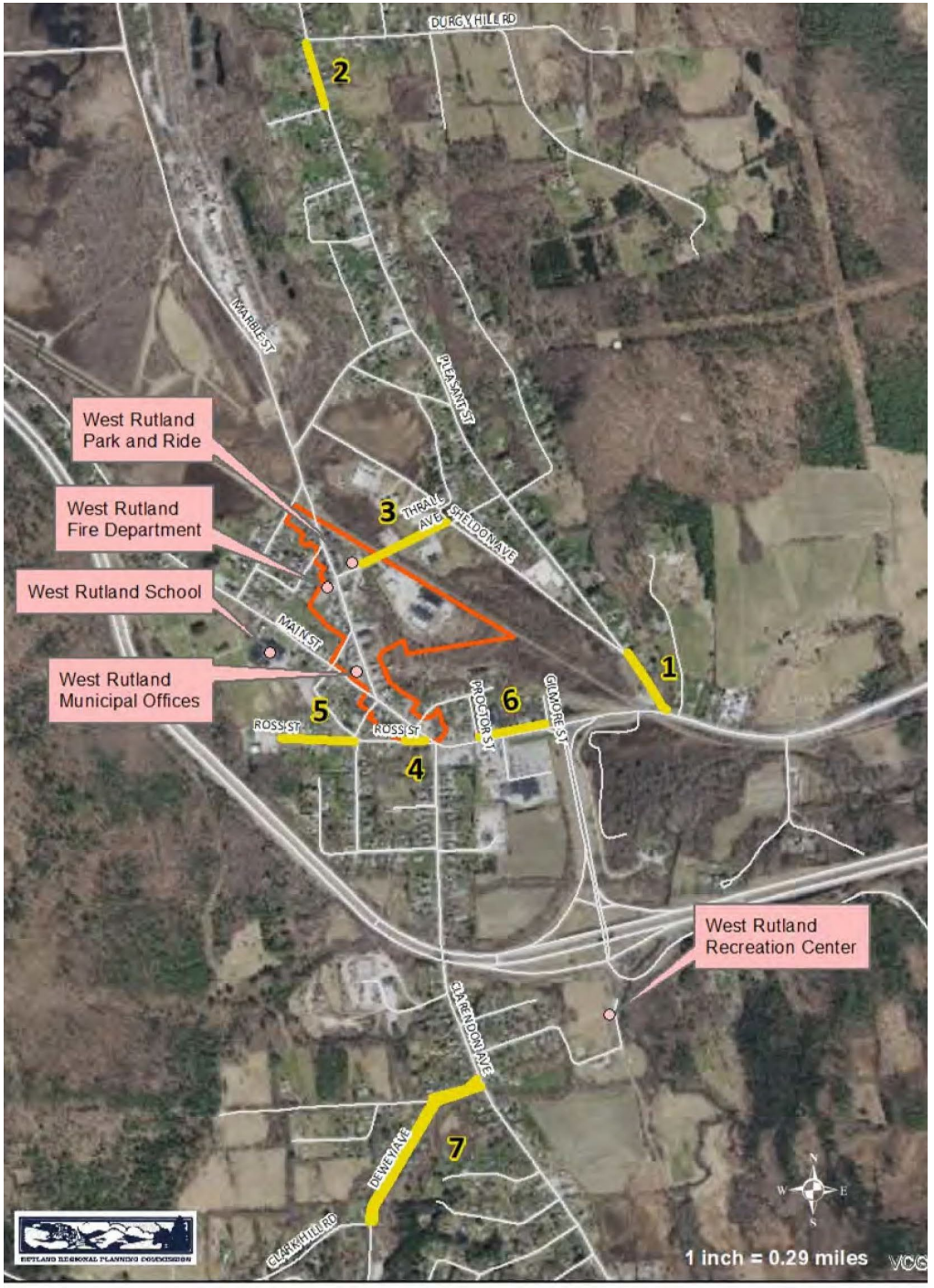
2 - west side of pleasant street
(baxter street – durgy hill road)

3 - north side of thrall street
(park & ride – sheldon avenue)

4 - north side of ross street
(main street – fence)

5 - south side of ross street
(franklin street – dead end)

6 - north side of main street
(proctor street – gilmore street)



existing conditions

Various Conditions:

- Concrete sidewalks with curbs
- Sidewalk settlements
- Poor condition, extensive cracking & heaving
- ADA Compliance
- Curb Ramps + Crosswalks







existing conditions

Area 7 – evaluate both sides of dewey avenue (clarendon avenue – clark hill road)

- Residential Area with no sidewalk or curb
- Corridor is approximately 1/3rd mile
- New curb ramps/crosswalks at Clarendon Ave
- Multiple driveways
- Utility poles on both sides of road (crosses frequently)
- Bike lanes & signage along Clarendon Avenue
- Topography/invasive species on eastern side of corridor
- Speed limit recently reduced to 25 mph

next steps

- Develop Concept Alternatives
- Evaluate Right-of-Way, Utilities & Natural/Cultural Resources

Phase	Months							
	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct
A: Project Kickoff Meeting	M							
B: Compile Base Map / Existing Conditions								
C: Local Concerns Meeting				M | P				
D: Identify Land Use Context								
E: Develop Conceptual Alternatives					M			
F: Identify Right-of-Way Issues & Utility Conflicts								
G: Identify N&C Resources & Permitting								
H: Alternatives Presentation						M | P		
I Develop Preliminary Cost Estimates & Timeline								
J: Report Production							M	M | P

M – Project Meeting P – Public Presentation

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SIDEWALK SCOPING STUDY

Thank You!

Questions? Comments?

Daniel Biggs, RLA, ISA, CERP
Principal-in-Charge

Jack Grieshober, RLA
Sr. Project Landscape Architect

Weston & Sampson SM

1 Winners Circle, Suite 130, Albany, NY 12205
tel: 518-463-4400

MEETING MINUTES

PROJECT: West Rutland TAP TA 21(8) - Sidewalk Scoping Study	
W&S Project No.: ENG22-0265	
DATE: June 13th, 2022	**TIME:** 6:00 p.m.
SUBJECT: Local Concerns Meeting Minutes	

1. Meeting Attendees:

- Mary Ann Goulette – Town Manager, Town of West Rutland
- John Harvey – Selectboard Chair, Town of West Rutland
- Nick Notte – Selectboard Vice Chair, Town of West Rutland
- Chet Brown – Selectboard Secretary, Town of West Rutland
- John Center – Selectboard, Town of West Rutland
- Richard Daley – Selectboard, Town of West Rutland
- Steffanie Bourque – Rutland Regional Planning Commission
- Daniel Biggs, RLA – Weston & Sampson
- Jack Grieshober, RLA – Weston & Sampson

2. The Following Items Were Reviewed:

- Introductions
- Project Goal
- Project Objectives
- Existing Conditions
- Next Steps
- Public Comment

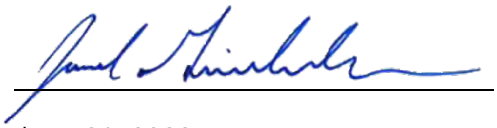
3. The Following Items Were Discussed:

- Reviewed the project goal and objectives as outlined in the Request for Proposals issued by the Town of West Rutland. Outlined overall project tasks, including an assessment of existing conditions, land use & site context, identification of utility, right-of-way, natural and cultural resources within the project areas, development of conceptual alternatives, public engagement, and the creation of a Final Scoping Report.
- Reviewed the 7 project areas and discussed the existing conditions of each area, including condition of curbs and walkways, walkway material, ADA compliance concerns, curb ramp & crosswalk conditions, and

general issues with the sidewalks (heaving, cracking, etc.). Provided a more in depth analysis of Area 7 (both sides of Dewey Avenue from Clarendon Ave to Clark Hill Road), as this is the only area without existing sidewalks.
    - Area 7 corridor is approximately 1/3rd of a mile in length, connects to existing and recently improved pedestrian and bicycle facilities along Clarendon Avenue, and recently had the speed limit reduced to 25 mph. There are utilities on both sides of the road with frequent crossing of overhead lines, and substantial topographic changes & invasive species present on the northeast side of the corridor. Multiple driveway crossings would be required on either side of the road.
- Discussed the project schedule.
    - Field work is ongoing and expected to be completed by July.
    - Alternatives will be developed in tandem with field work, with a Alternatives Analysis Public Meeting is planned for Late August / Early September, with a final Report complete and presented at a third public meeting in October.
- Opened the meeting up to public comment.
    - First respondent indicated her concern that Dewey Avenue is not conducive to sidewalks as there is limited foot traffic on the road and even with the reduced speed limit, vehicles still frequently speed down the corridor. Respondent questioned why the sidewalk would stop at Clark Hill Road and what the overall plan was for that area. Respondent indicated her belief that sidewalk improvements may be better suited elsewhere in town, including potentially a connection from Marble Street to the sculpture studio or boardwalk area. Respondent stated that some sidewalk improvements on Dewey could maybe be considered in the immediate area of the intersection with Clarendon to accommodate the bike lanes and sidewalks in the area, but that Dewey used to be a dirt road and has already had a lot of construction, negating part of the reason she moved to that area to be outside of the Town center. Respondent also expressed concern over trees potentially needing to come down to accommodate a sidewalk. Respondent also stated that she had started a petition with some of her neighbors on Dewey expressing their belief that a sidewalk is not needed.
    - Second respondent asked if there had been an evaluation of the speed limit on Dewey road, as even with the reduced speed limit people now seem to go faster, especially during peak travel hours.
        - Town mentioned that the Sheriffs may be able to monitor speeds on Dewey.
    - Third respondent asked if the sidewalks on Pleasant Street would be at grade or raised. Expressed concern that an at grade sidewalk would be a waste of money as snowmelt would flow overtop the sidewalk and degrade the facility over time. Respondent also mentioned that the lower elevation of the sidewalk near Durgy Hill Road was not safe due to drainage concerns. Respondent requested that any new sidewalks be accommodating of the elevation of the roadway to provide a safe facility.
    - Fourth respondent commented that there are potential historical resources along Dewey, which may prevent sidewalks from being constructed in those areas.

4. Action Items:

- Review public comment and issue meeting minutes.
- Complete existing conditions analysis and begin development of alternatives taking public comment into consideration.

Signed: 

Date: June 21, 2022

SIDEWALK SCOPING STUDY

West Rutland TAP TA 21(8)

Alternatives Presentation Meeting

Town of

WEST RUTLAND VERMONT

September 12, 2022

Daniel Biggs, RLA, ISA, CERP

Principal-in-Charge

Jack Grieshober, RLA

Sr. Project Landscape Architect

Weston & Sampson℠

project goal

The Town recently completed several sidewalk and pedestrian improvement projects at multiple locations.

This project will build on this progress to identify additional areas for improvements, potentially including upgrades to existing sidewalk facilities and construction of new sidewalks, to benefit residents by providing safe pedestrian facilities and improving connectivity between neighborhoods within the Town.

Location	Feet
1) Pleasant Street (east side) - Business Route 4 to Sheldon	635
2) Pleasant Street (west side) - Baxter to Durgy	588
3) Thrall (north side) - park & ride to Sheldon	850
4) Ross Street (north side) - Main to fence (end of Rigg's parcel)	179
5) Ross Street (south side) - Franklin to end	670
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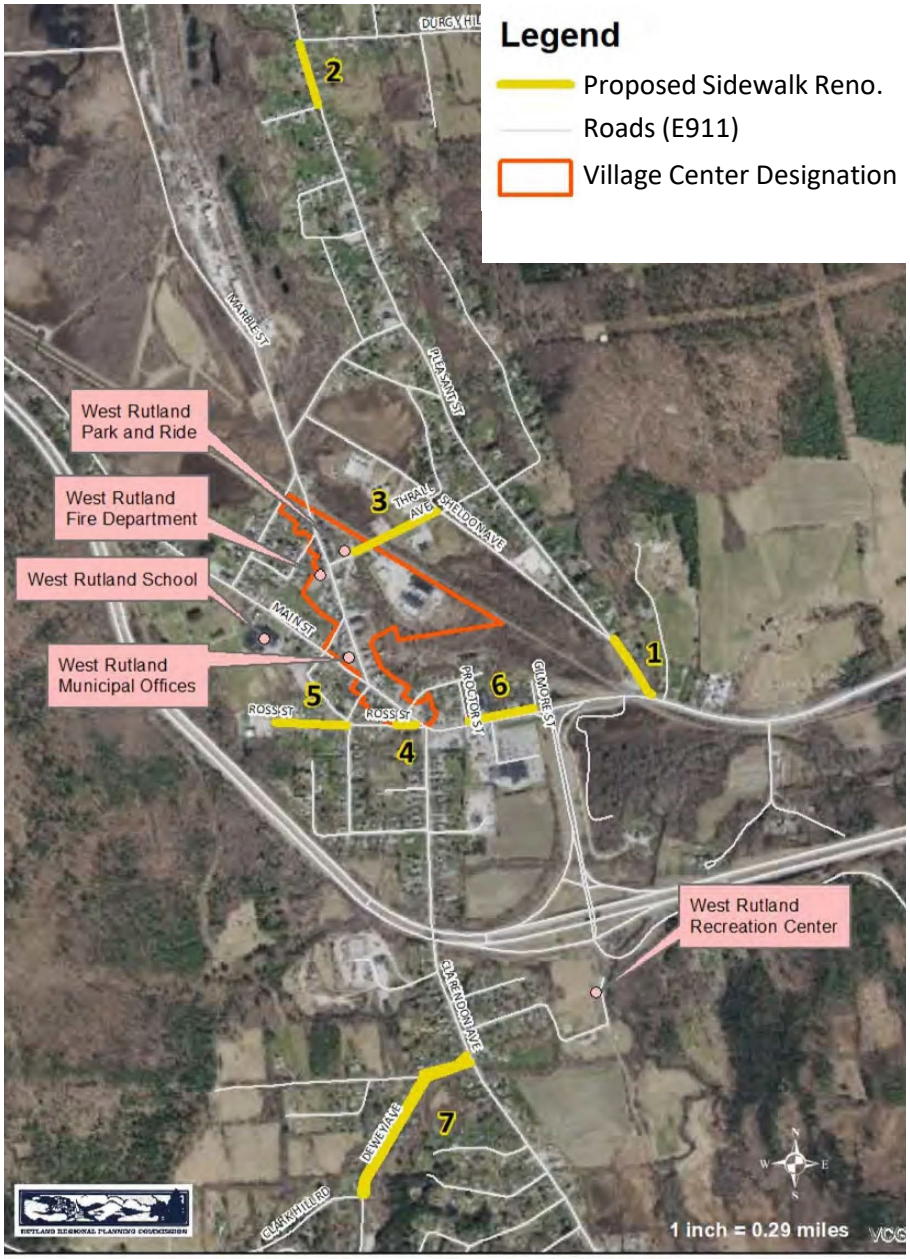
7) Dewey (both sides) - Clarendon to Clark Hill	1,728
Total	**5,135**



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purpose & need statement

The Purpose and Need Statement for the West Rutland Sidewalk Scoping Study is as follows:

Purpose: To improve existing and construct new pedestrian sidewalk facilities within the Town of West Rutland to provide safe connections to destinations within the surrounding community.

Need: Improvements to pedestrian sidewalk facilities within the Town of West Rutland. Existing gaps in service and deteriorating facilities create unsafe conditions for pedestrians. Improving the pedestrian facilities will facilitate safer pedestrian accommodations and provide better connections to the surrounding neighborhoods and community resources within the Town.

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local concerns summary

- Meeting held June 13, 2022 with hybrid format.
- Presented project goals, scope, & schedule, then opened for comment.
- Concerns that sidewalks along Dewey Avenue (Segment 7) were not needed.
- Suggested sidewalks to the boardwalk or sculpture studio may be more appropriate rather than along Dewey Avenue.
- Suggested that any proposed sidewalk should be elevated above the road where possible to create a safer condition and reduce deterioration due to snow melt, drainage issues plowing, etc.

alternatives summary

- Each project area was assessed to determine which alternative would **best fit the condition and needs** of that project area (the "preferred alternative").
- A **"no build" option was considered** for each project area, however, was determined to not meet the purpose & need of the project.
- Selecting an alternative as "preferred" **does not preclude a different option** from being ultimately constructed pending additional analysis & design.
- Selecting a preferred alternative **does not necessarily mandate construction of that alternative**, but rather identifies what would be the ideal condition if and when construction were to move forward.

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potential alternatives

Project Area	Environmental Concerns	Historic / Archaeological Concerns	Utility Concerns	Right-of-Way Concerns	Other Concerns
Area 1 – Pleasant Street	Bat Roosts	Pleasant St. Cemetery	Utility Pole at end of ex. walk		
Area 2 - Pleasant Street	Adjacent Ag. Lands, Wetlands	Mature Trees @ 1262 Pleasant St.	Utility Poles & Catch Basins		May Need Ret. Wall to Minimize Grading Impacts
Area 3 - Thrall Avenue	Adjacent Wetlands, Bat Roosts		Crossing over Culvert	Railroad ROW Crossing	May Need Ret. Wall to Minimize Grading Impacts
Area 4 - Ross Street	Adjacent Ag. Lands		Utility Pole & Catch Basin	Existing walk may be outside ROW	
Area 5 - Ross Street	Adjacent Ag. Lands, Bat Roosts	Potential for Marble Slabs under pavement		May Need Temp. Easements for Grading	Currently At-Grade, no Buffer, Elevations must be changed
Area 6 - Main Street	Floodplain, Adjacent Ag. Lands		Utility Poles, Hydrants		Support Newly Constructed Bike Lanes
Area 7 - Dewey Avenue	Floodplain, Ag. Lands, Bat Roosts		Utility Poles (Both Sides), Hydrant (North Side)	North Side Crosses Fox Run Ln	Steep Grades on South Side, Speeding

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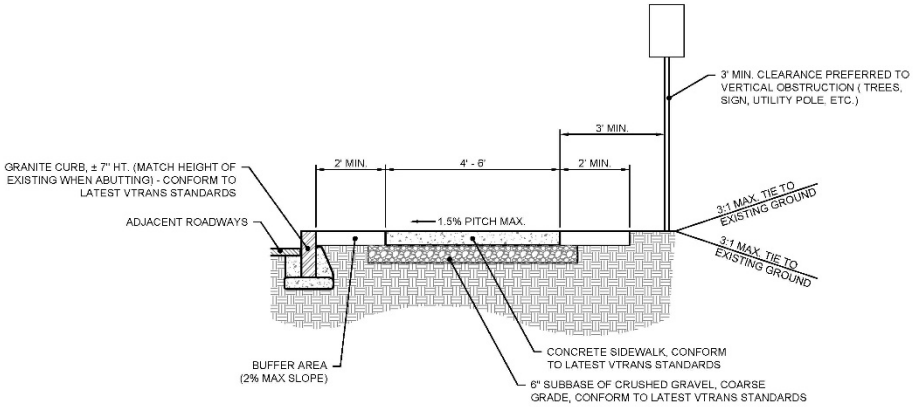
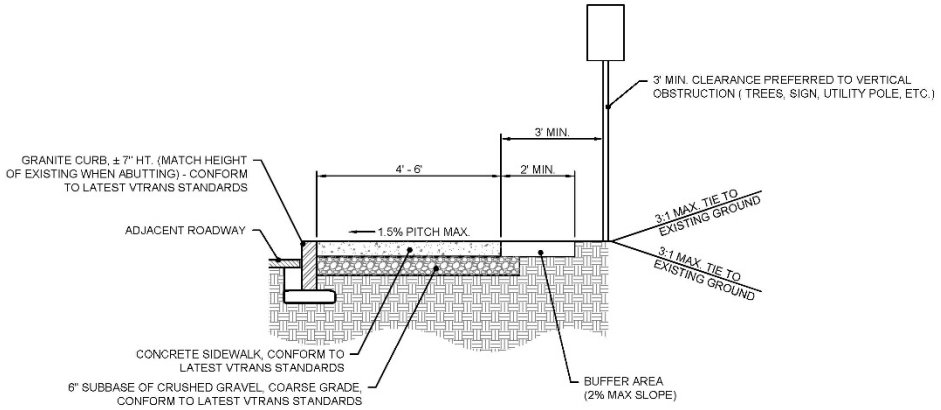
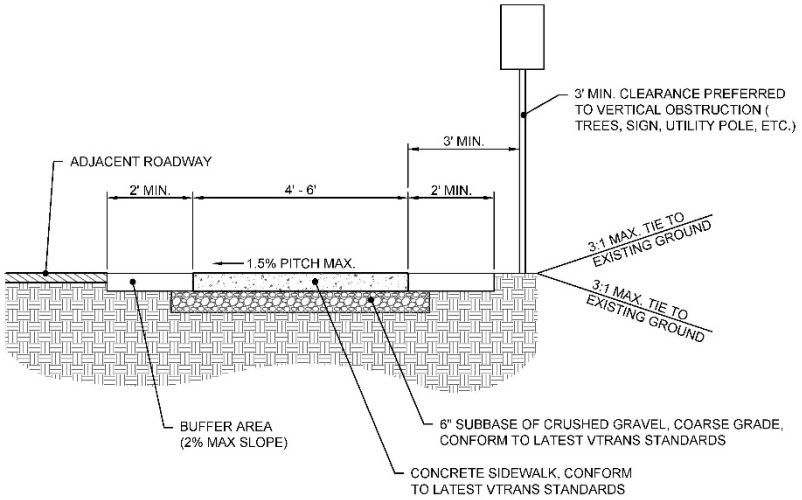
potential alternatives



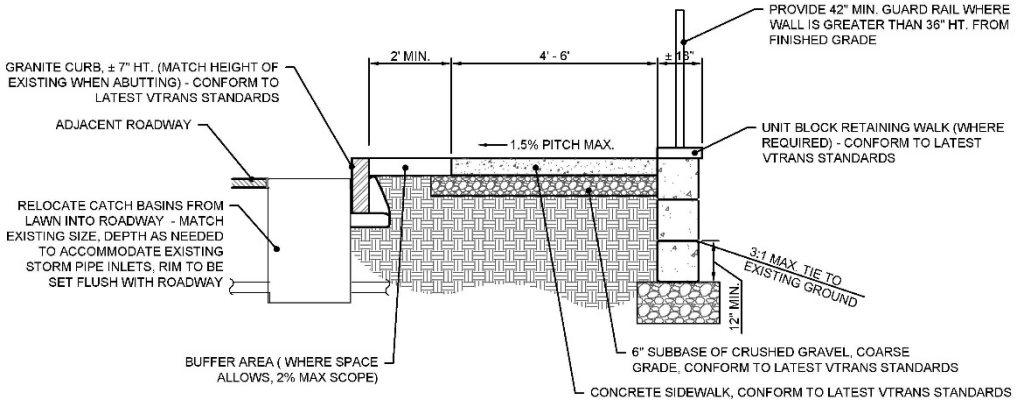
Alt. 1 – Sidewalk w/ Curb



Alt. 2 – Sidewalk w/ Integral Curb



Alt. 3 – Sidewalk At-Grade



Alt. 4 – Sidewalk w/ Retaining Wall*

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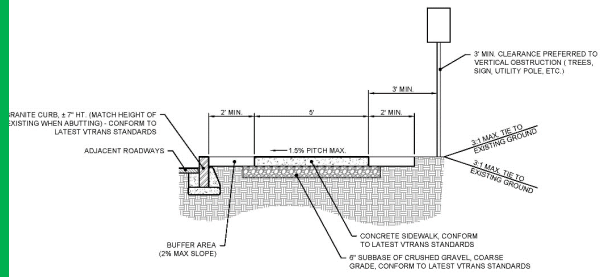
area 1 – pleasant street

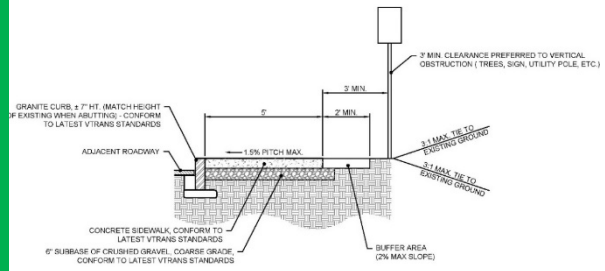
Preferred Alternative(s):

Alt. 1 – Sidewalk w/ Curb



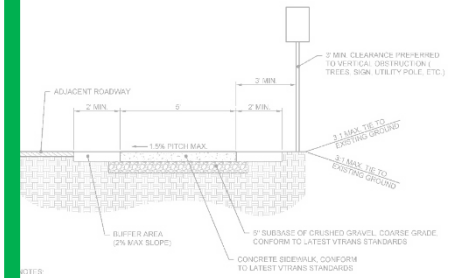
	Pro		Con
Safety	●	○	○
Cost	○	●	○
Context	●	○	○
Impacts	●	○	○

Alt. 2 – Sidewalk w/ Integral Curb



	Pro		Con
Safety	○	●	○
Cost	○	●	○
Context	●	○	○
Impacts	●	○	○

Alt. 3 – Sidewalk At-Grade



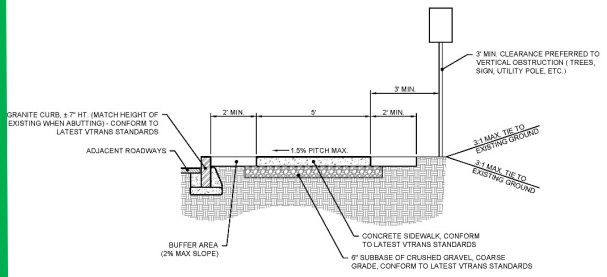
	Pro		Con
Safety	○	○	●
Cost	●	○	○
Context	○	●	○
Impacts	●	○	○

Weston & Sampson

area 2 – pleasant street

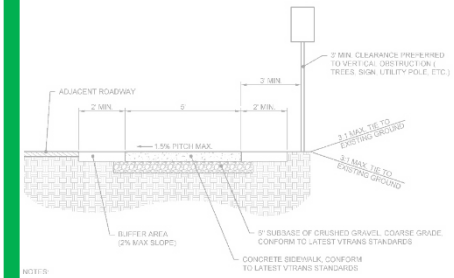
Preferred Alternative(s):

Alt. 1 – Sidewalk w/ Curb



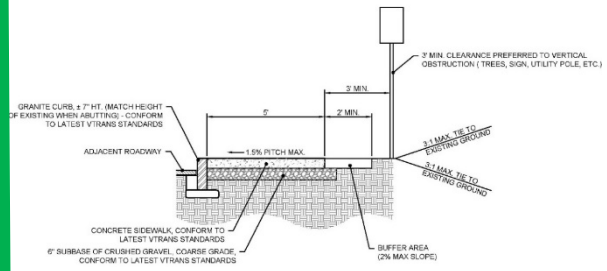
	Pro		Con
Safety	●	○	○
Cost	○	●	○
Context	●	○	○
Impacts	●	○	○

Alt. 3 – Sidewalk At-Grade



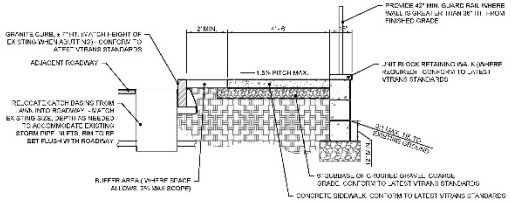
	Pro		Con
Safety	○	○	●
Cost	●	○	○
Context	○	●	○
Impacts	●	○	○

Alt. 2 – Sidewalk w/ Integral Curb



	Pro		Con
Safety	○	○	○
Cost	○	●	○
Context	●	○	○
Impacts	●	○	○

Alt. 4 – Sidewalk w/ Retaining Wall



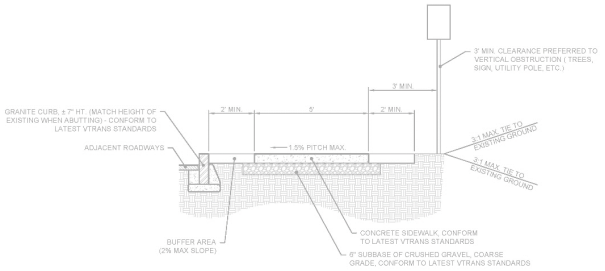
	Pro		Con
Safety	●	○	○
Cost	○	○	●
Context	○	●	○
Impacts	●	○	○

Weston & Sampson

area 3 – thrall avenue

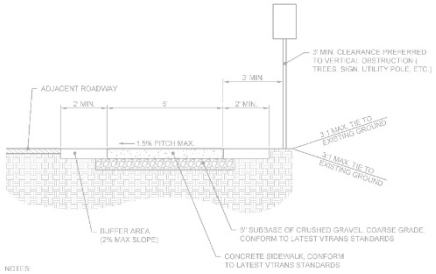
Preferred Alternative(s):

Alt. 1 – Sidewalk w/ Curb



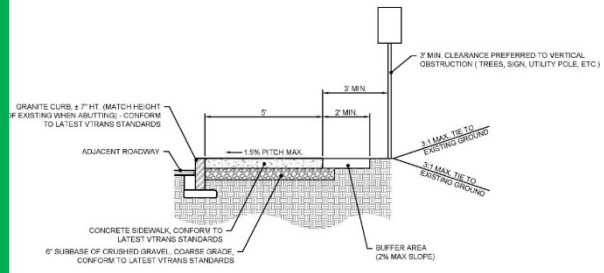
	Pro	Con
Safety	●	○
Cost	○	●
Context	○	●
Impacts	●	○

Alt. 3 – Sidewalk At-Grade



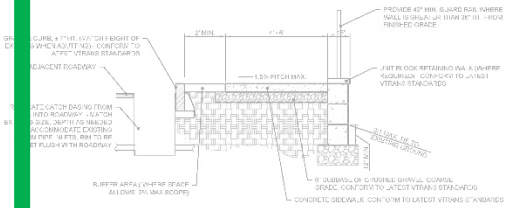
	Pro	Con
Safety	○	●
Cost	●	○
Context	○	●
Impacts	○	○

Alt. 2 – Sidewalk w/ Integral Curb



	Pro	Con
Safety	○	●
Cost	○	●
Context	●	○
Impacts	●	○

Alt. 4 – Sidewalk w/ Retaining Wall



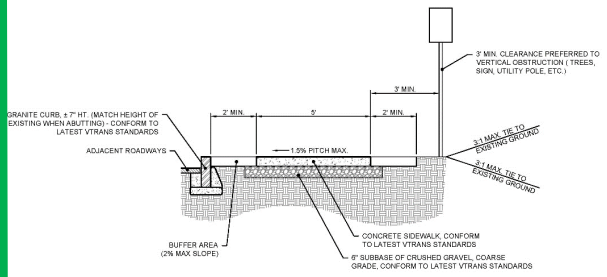
	Pro	Con
Safety	●	○
Cost	○	●
Context	○	●
Impacts	○	○

Weston & Sampson

area 4 – ross street

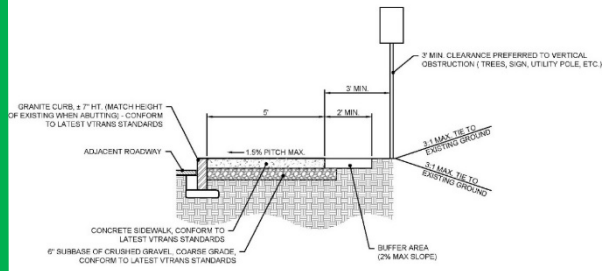
Preferred Alternative(s):

Alt. 1 – Sidewalk w/ Curb*



	Pro	Con
Safety	●	○
Cost	○	●
Context	●	○
Impacts	●	○

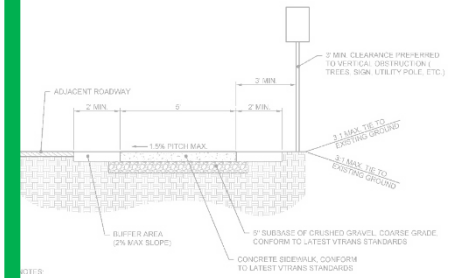
Alt. 2 – Sidewalk w/ Integral Curb*



	Pro	Con
Safety	○	●
Cost	○	●
Context	●	○
Impacts	●	○

* To be constructed in conjunction with roadway paving/reconstruction to adjust elevations to accommodate curb

Alt. 3 – Sidewalk At-Grade



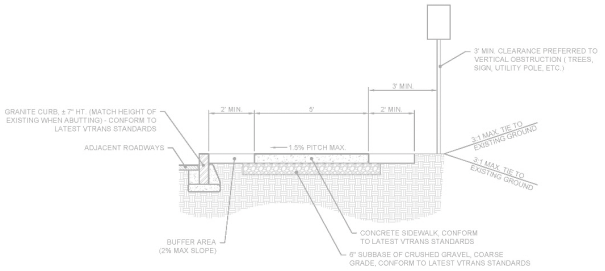
	Pro	Con
Safety	○	●
Cost	●	○
Context	○	●
Impacts	●	○

Weston & Sampson

area 5 – ross street

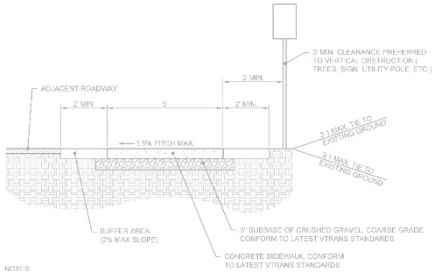
Preferred Alternative(s):

Alt. 1 – Sidewalk w/ Curb



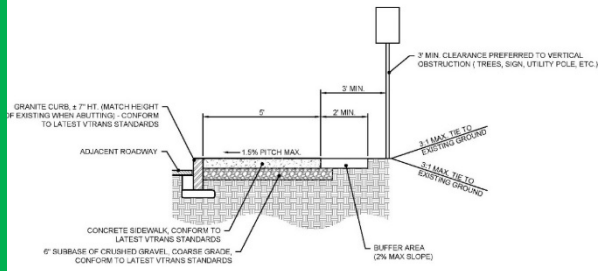
	Pro		Con
Safety	●	○	○
Cost	○	●	○
Context	○	●	○
Impacts	○	●	○

Alt. 3 – Sidewalk At-Grade



	Pro		Con
Safety	○	○	●
Cost	●	○	○
Context	●	○	○
Impacts	●	○	○

Alt. 2 – Sidewalk w/ Integral Curb*



	Pro		Con
Safety	○	●	○
Cost	○	●	○
Context	●	○	○
Impacts	●	○	○

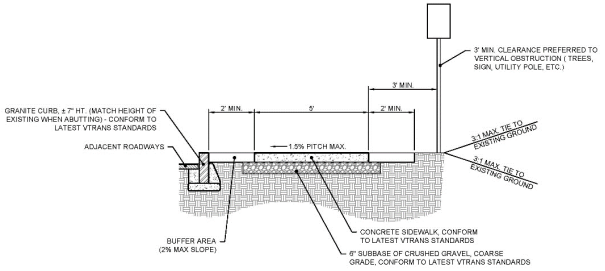
* To be constructed in conjunction with roadway paving/reconstruction to adjust elevations to accommodate curb

Weston & Sampson

area 6 – main street

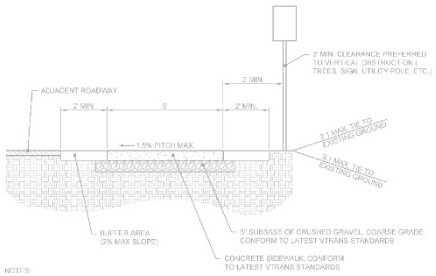
Preferred Alternative(s):

Alt. 1 – Sidewalk w/ Curb



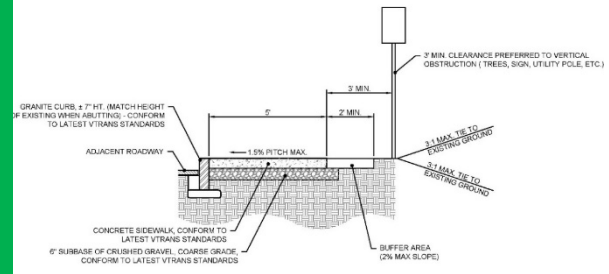
	Pro	Con
Safety	●	○
Cost	○	●
Context	○	●
Impacts	○	●

Alt. 3 – Sidewalk At-Grade



	Pro	Con
Safety	○	●
Cost	●	○
Context	○	●
Impacts	○	○

Alt. 2 – Sidewalk w/ Integral Curb



	Pro	Con
Safety	○	●
Cost	○	●
Context	●	○
Impacts	●	○

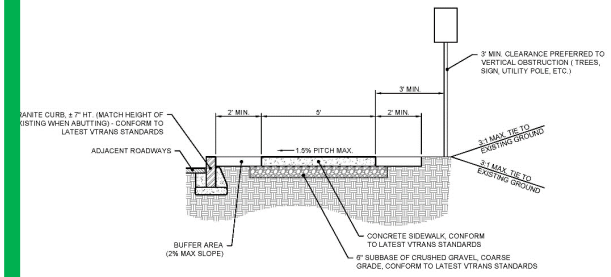
Note: Road Upgrades (bike lanes, crosswalks, etc.) completed within last 4 years.

Weston & Sampson

area 7 – dewey avenue

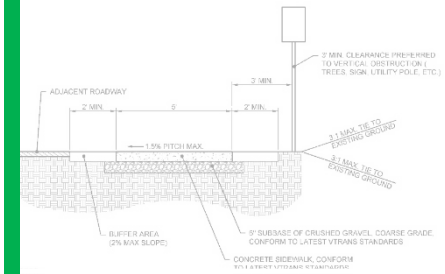
Preferred Alternative(s): North Side

Alt. 1 – Sidewalk w/ Curb



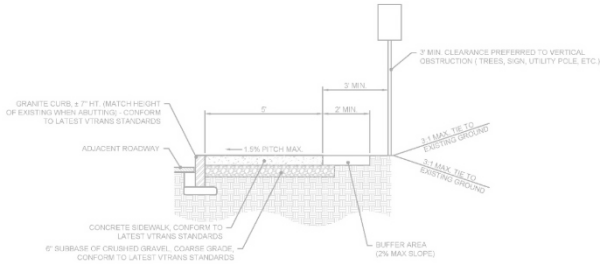
	Pro	Con
Safety	●	○
Cost	○	●
Context	○	●
Impacts	○	●

Alt. 3 – Sidewalk At-Grade



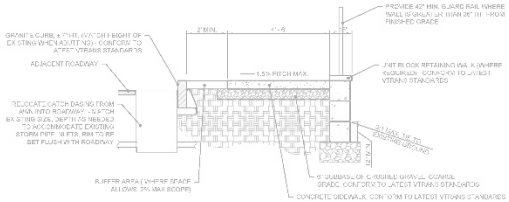
	Pro	Con
Safety	○	●
Cost	●	○
Context	○	○
Impacts	○	○

Alt. 2 – Sidewalk w/ Integral Curb



	Pro	Con
Safety	○	○
Cost	○	○
Context	○	○
Impacts	○	○

Alt. 4 – Sidewalk w/ Retaining Wall



	Pro	Con
Safety	●	○
Cost	○	●
Context	○	○
Impacts	○	○

Weston & Sampson

alternatives summary

- Each project area was assessed to determine which alternative would **best fit the condition and needs** of that project area (the "preferred alternative").
- A **"no build" option was considered** for each project area, however, was determined to not meet the purpose & need of the project.
- Selecting an alternative as "preferred" **does not preclude a different option** from being ultimately constructed pending additional field review & analysis.
- Selecting a preferred alternative **does not necessarily mandate construction of that alternative**, but rather identifies what would be the ideal condition if and when construction were to move forward.

Weston & Sampson

SIDEWALK SCOPING STUDY

Thank You!

Questions? Comments?

Daniel Biggs, RLA, ISA, CERP
Principal-in-Charge

Jack Grieshober, RLA
Sr. Project Landscape Architect

Weston & Sampson SM

1 Winners Circle, Suite 130, Albany, NY 12205
tel: 518-463-4400

MEETING MINUTES

PROJECT: West Rutland TAP TA 21(8) - Sidewalk Scoping Study	
W&S Project No.: ENG22-0265	
DATE: September 12th, 2022	**TIME:** 6:00 p.m.
SUBJECT: Alternatives Presentation Meeting Minutes	

1. Meeting Attendees:

- Town of West Rutland Selectboard
- Mary Ann Goulette – Town Manager, Town of West Rutland
- Steffanie Bourque – Rutland Regional Planning Commission
- Daniel Biggs, RLA – Weston & Sampson
- Jack Grieshober, RLA – Weston & Sampson

2. The Following Items Were Reviewed:

- Project Goals
- Purpose & Need Statement
- Summary of Local Concerns Meeting
- Alternatives Summary & Potential Conceptual Alternatives
- Questions & Comments

3. The Following Items Were Discussed:

- Presented the Project Goals, Purpose & Need Statement, and summary of the Local Concerns Meeting held on June 13th.
- Presented the strategy used for assessing conceptual alternatives, the potential impacts/concerns for each project area, and what potential alternatives were considered.
- Presented a summary analysis of each project area, the pros & cons of each potential alternative in those areas, and what the recommended or preferred alternative(s) is anticipated to be based on analysis to date.
- Opened for public & Town Selectboard comment.
    - Selectboard stated they were concerned with how the previous sidewalk improvement projects were implemented, noting that some improvements on Thrall Avenue have prevented fire apparatus from maneuvering a left turn onto Pleasant Street, potentially increasing response times.

  - Selectboard stated there were several issues with how recent sidewalk construction projects were implemented, including safety concerns with curb reveals, turning radii, etc. Suggested contacting the local fire company to inquire about turning radii for their vehicles.
- Discussed project schedule and next steps
  - Weston & Sampson described next steps of the project, including taking comments from today into consideration when selecting preferred alternatives, and that a draft report would be prepared for review by the Town prior to a Final Report being prepared for acceptance by the Selectboard.

4. Action Items:

- Weston & Sampson
  - Prepare Draft Report for Town review.

Signed: _____

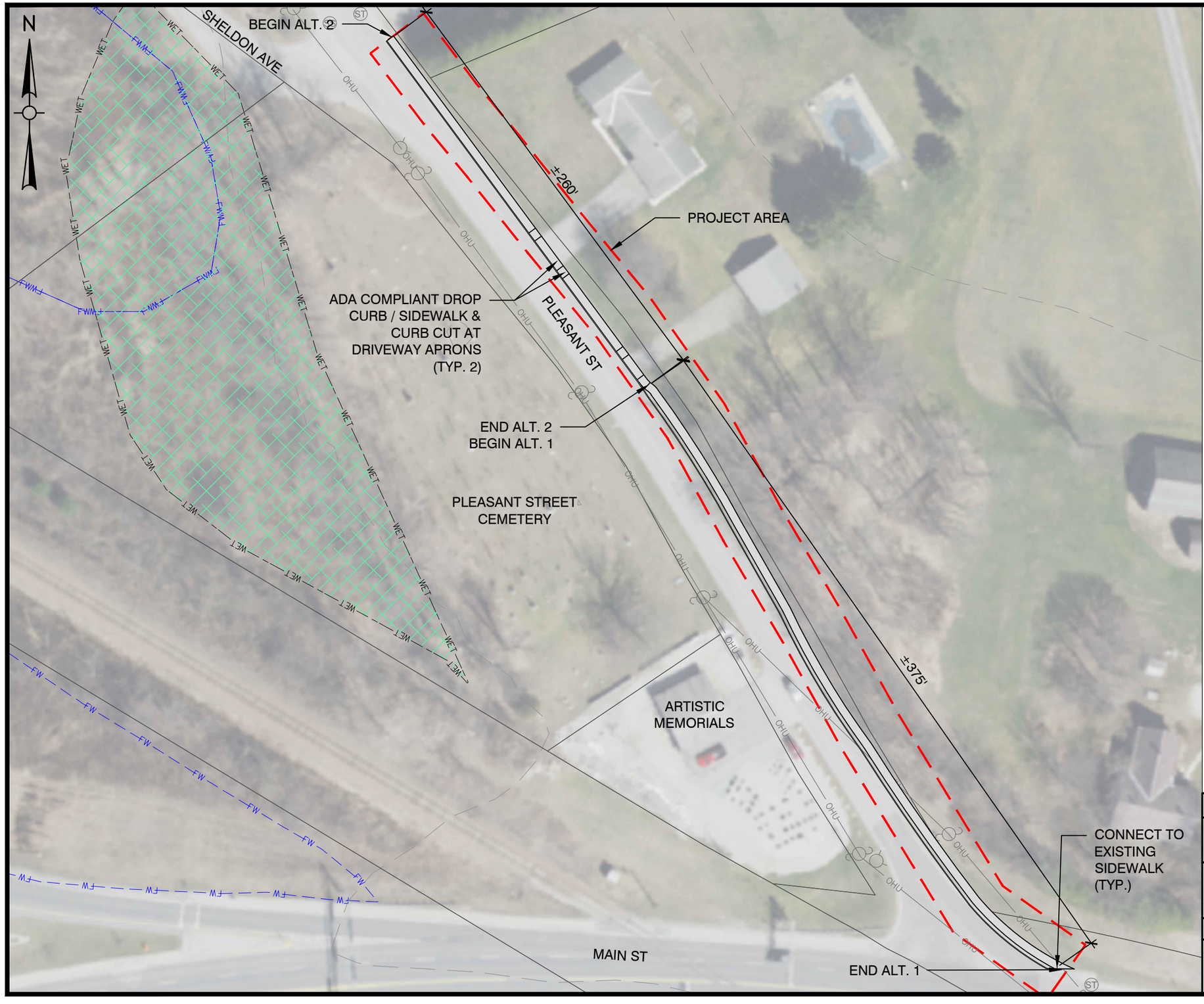
Date: September 13th, 2022

Cc: Derek Kenison – Vermont Agency of Transportation

Attachments: Alternatives Presentation

APPENDIX I

Concept Plans



LEGEND:

- APPROX. WETLANDS AREA
- APPROX. FLOOD HAZARD ZONE
- APPROX. DRAINAGE WAY / WATER BODY
- APPROX. RTE HABITAT CHECK ZONE
- APPROX. PARCEL BOUNDARY
- PROJECT AREA
- EXISTING BIKE / PEDESTRIAN FACILITY
- EXISTING STORM STRUCTURE
- EXISTING SANITARY STRUCTURE
- EXISTING UTILITY POLE
- EXISTING OVERHEAD UTILITY LINE
- EXISTING HYDRANT

NOTES:

1. BASE MAPPING, INCLUDING PROPERTY & R.O.W. LIMITS, IS DERIVED FROM PUBLICLY AVAILABLE GIS INFORMATION & AERIAL IMAGERY. EXISTING CONDITIONS ARE SUBJECT TO FIELD VERIFICATION BY A LICENSED PROFESSIONAL LAND SURVEYOR.
2. SITE VISIT TO DOCUMENT VISIBLE GROUND SURFACE FEATURES WAS CONDUCTED ON APRIL 5TH, 2022 BY WESTON & SAMPSON.
3. REFER TO DETAIL SHEETS FOR TYPICAL SECTIONS OF ALTERNATIVES.

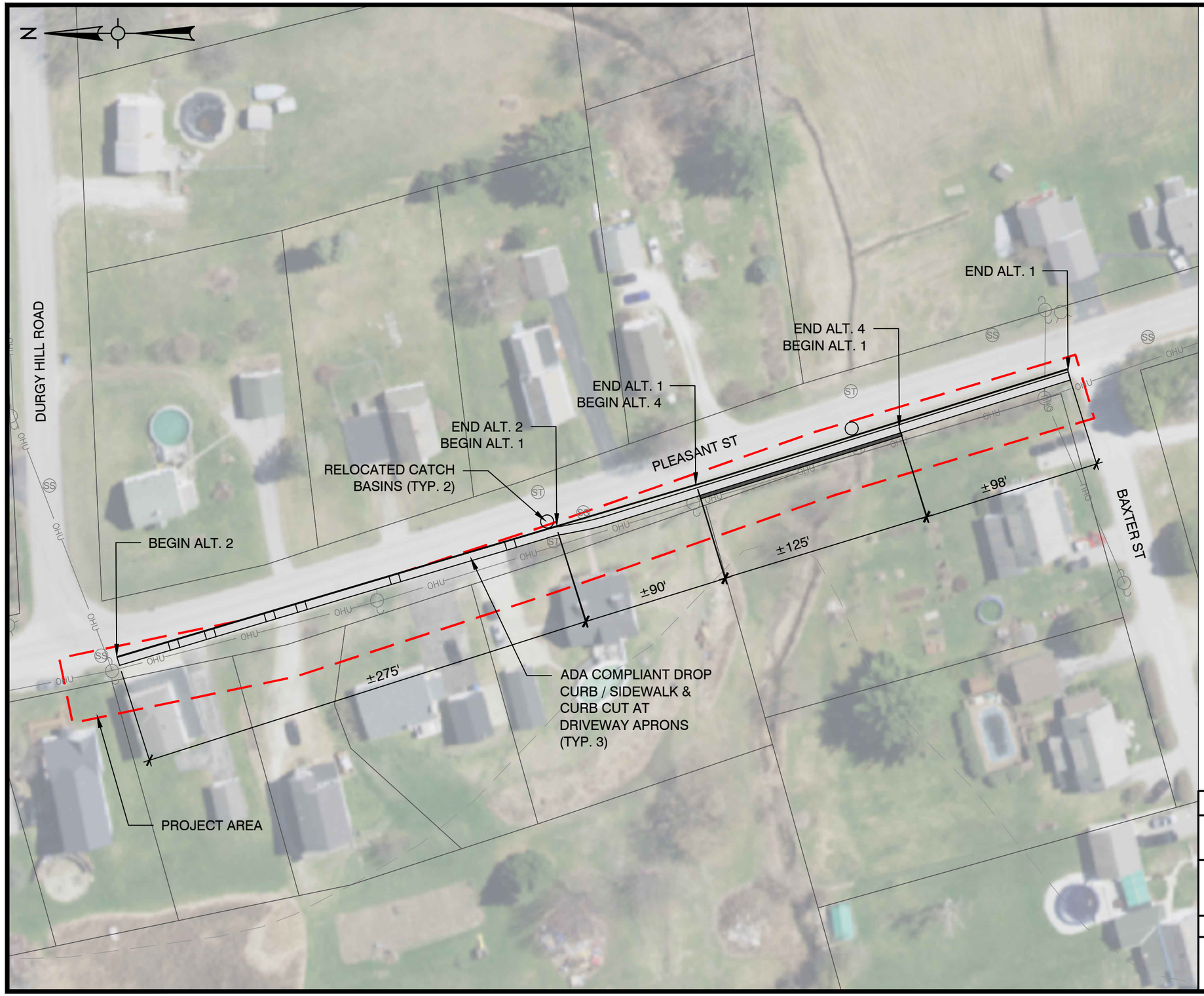
0 60 120

TOWN OF WEST RUTLAND, VERMONT
SIDEWALK SCOPING STUDY

CONCEPT PLAN
AREA '1' - PLEASANT STREET

DESIGNED BY: JWG	CHECKED BY: DPB	DATE: SEPT. 2022

Weston & Sampson



LEGEND:

- APPROX. WETLANDS AREA
- APPROX. FLOOD HAZARD ZONE
- APPROX. DRAINAGE WAY / WATER BODY
- APPROX. RTE HABITAT CHECK ZONE
- APPROX. PARCEL BOUNDARY
- PROJECT AREA
- EXISTING BIKE / PEDESTRIAN FACILITY
- EXISTING STORM STRUCTURE
- EXISTING SANITARY STRUCTURE
- EXISTING UTILITY POLE
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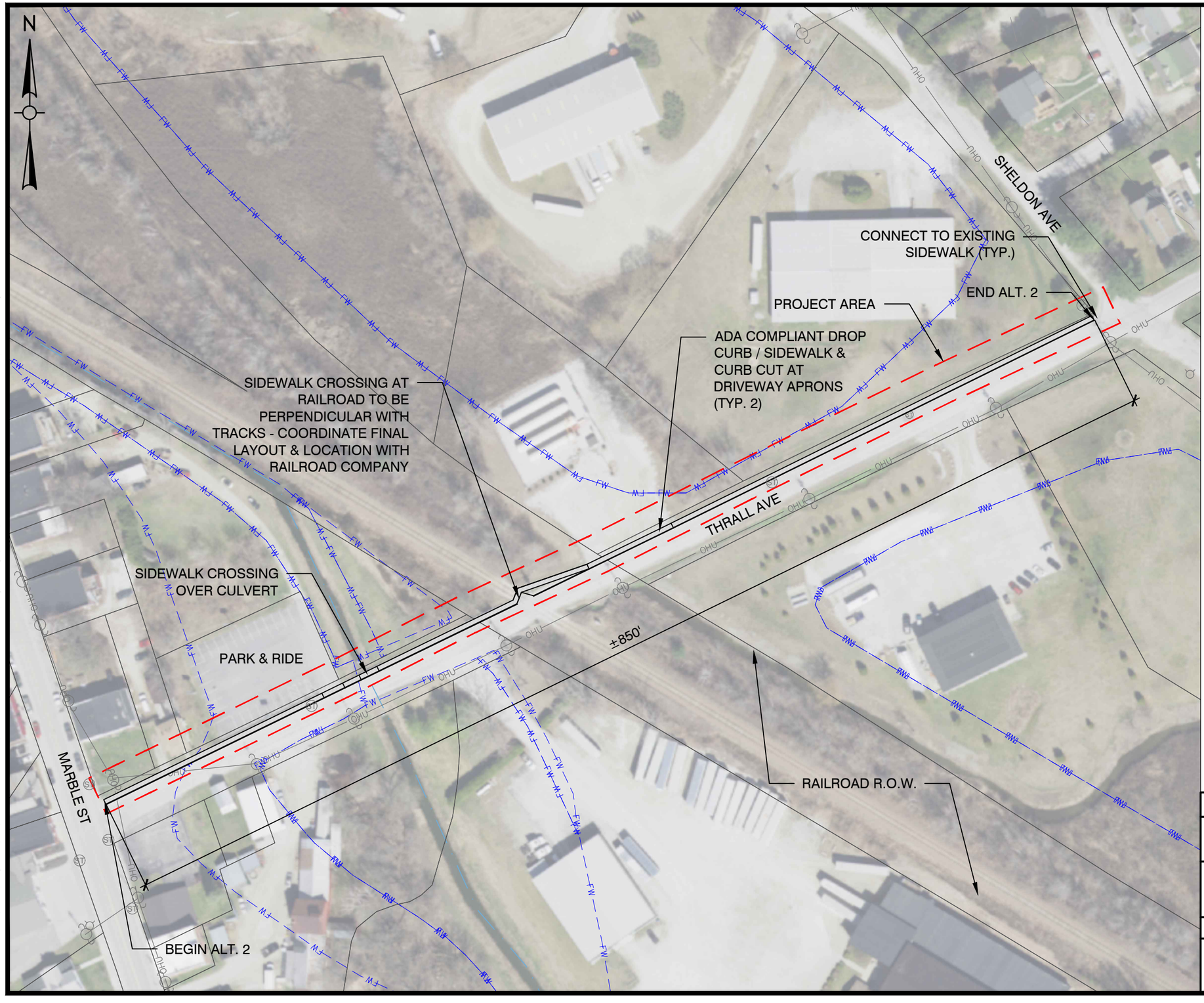
0 60 120

TOWN OF WEST RUTLAND, VERMONT
SIDEWALK SCOPING STUDY

CONCEPT PLAN
AREA '2' - PLEASANT STREET

DESIGNED BY: JWG	CHECKED BY: DPB	DATE: SEPT. 2022

Weston & Sampson℠



LEGEND:

- APPROX. WETLANDS AREA
- APPROX. FLOOD HAZARD ZONE
- APPROX. DRAINAGE WAY / WATER BODY
- APPROX. RTE HABITAT CHECK ZONE
- APPROX. PARCEL BOUNDARY
- PROJECT AREA
- EXISTING BIKE / PEDESTRIAN FACILITY
- EXISTING STORM STRUCTURE
- EXISTING SANITARY STRUCTURE
- EXISTING UTILITY POLE
- EXISTING OVERHEAD UTILITY LINE
- EXISTING HYDRANT

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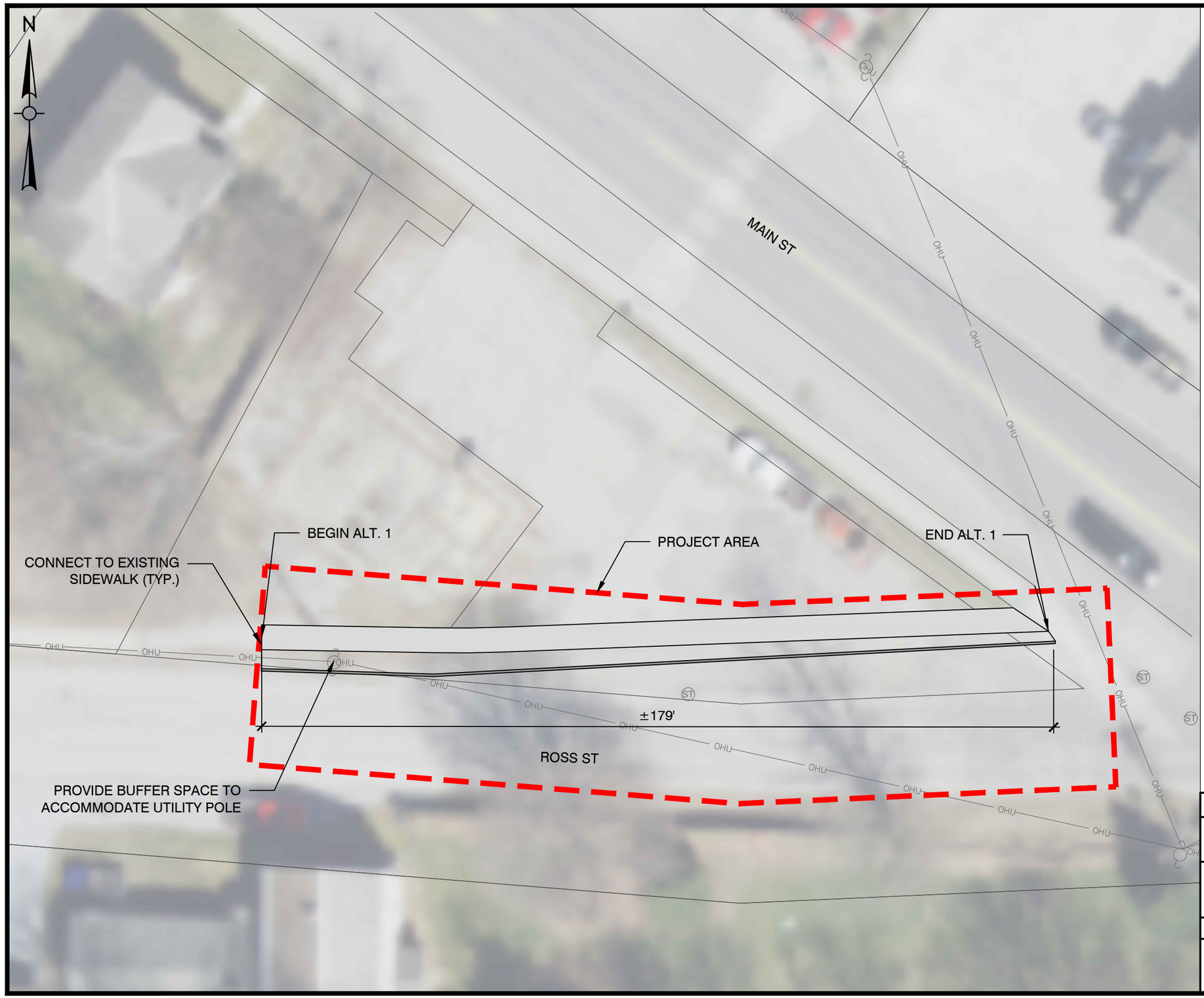
0 100 200

TOWN OF WEST RUTLAND, VERMONT
SIDEWALK SCOPING STUDY

CONCEPT PLAN
AREA '3' - THRALL AVENUE

DESIGNED BY: JWG	CHECKED BY: DPB	DATE: SEPT. 2022

Weston & Sampson



LEGEND:

- APPROX. WETLANDS AREA
- APPROX. FLOOD HAZARD ZONE
- APPROX. DRAINAGE WAY / WATER BODY
- APPROX. RTE HABITAT CHECK ZONE
- APPROX. PARCEL BOUNDARY
- PROJECT AREA
- EXISTING BIKE / PEDESTRIAN FACILITY
- EXISTING STORM STRUCTURE
- EXISTING SANITARY STRUCTURE
- EXISTING UTILITY POLE
- EXISTING OVERHEAD UTILITY LINE
- EXISTING HYDRANT

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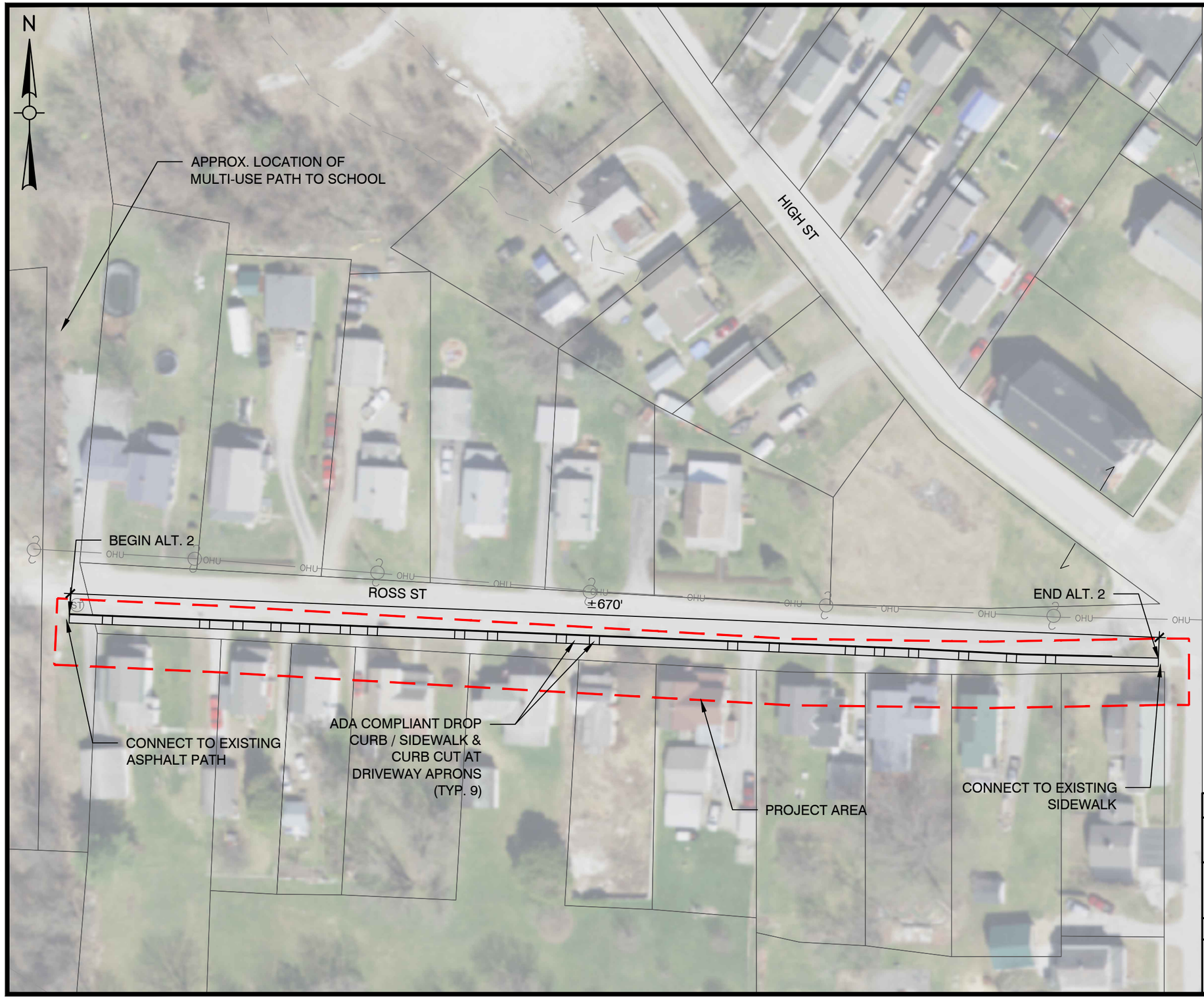
TOWN OF WEST RUTLAND, VERMONT
SIDEWALK SCOPING STUDY

CONCEPT PLAN
AREA '4' - ROSS STREET

DESIGNED BY: JWG	CHECKED BY: DPB	DATE: SEPT. 2022

Weston & Sampson



LEGEND:

- APPROX. WETLANDS AREA
- APPROX. FLOOD HAZARD ZONE
- APPROX. DRAINAGE WAY / WATER BODY
- APPROX. RTE HABITAT CHECK ZONE
- APPROX. PARCEL BOUNDARY
- PROJECT AREA
- EXISTING BIKE / PEDESTRIAN FACILITY
- EXISTING STORM STRUCTURE
- EXISTING SANITARY STRUCTURE
- EXISTING UTILITY POLE
- EXISTING OVERHEAD UTILITY LINE
- EXISTING HYDRANT

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3. REFER TO DETAIL SHEETS FOR TYPICAL SECTIONS OF ALTERNATIVES.

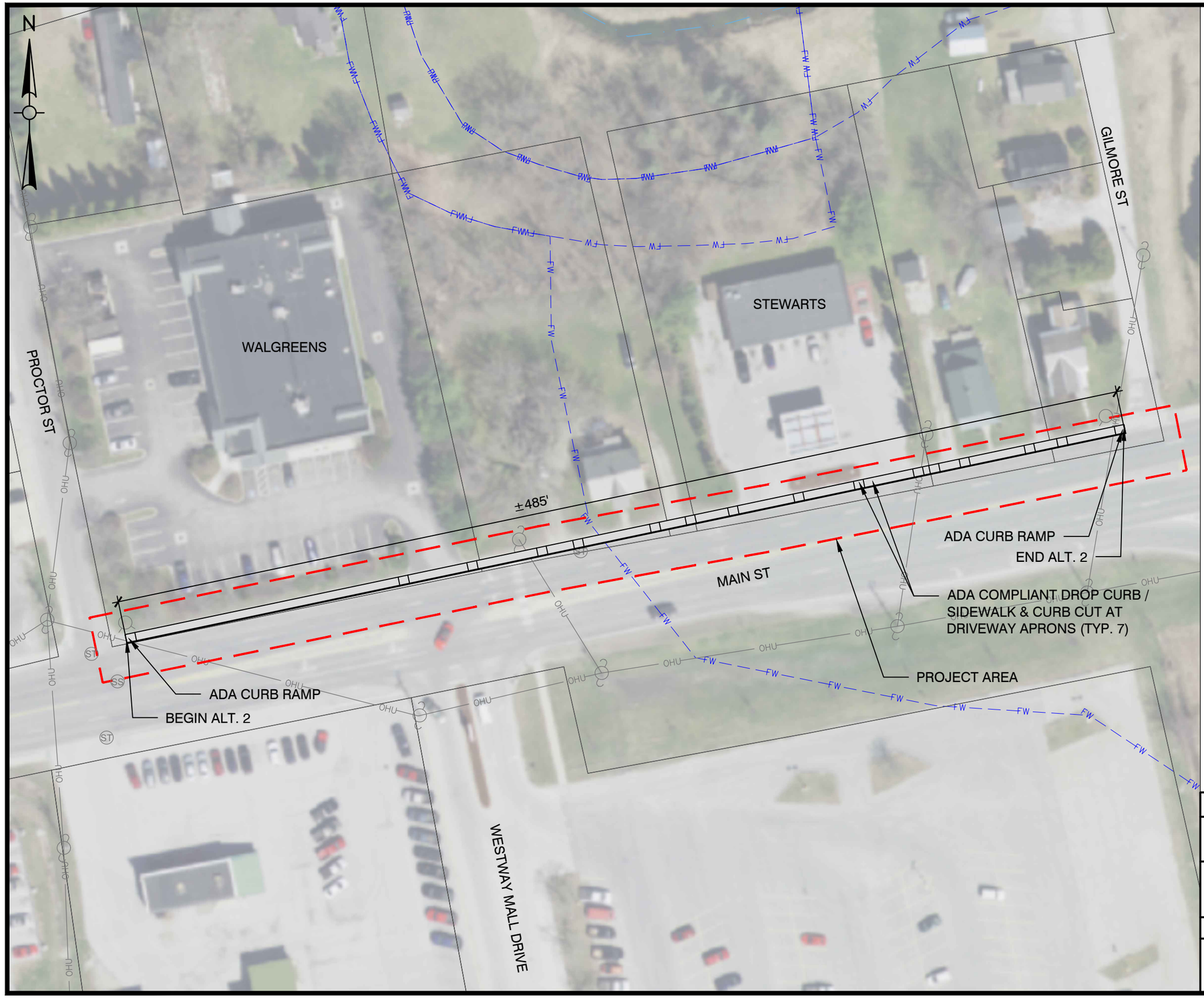
0 60 120

TOWN OF WEST RUTLAND, VERMONT
SIDEWALK SCOPING STUDY

CONCEPT PLAN
AREA '5' - ROSS STREET

DESIGNED BY: JWG	CHECKED BY: DPB	DATE: SEPT. 2022

Weston & Sampson℠



LEGEND:

- APPROX. WETLANDS AREA
- APPROX. FLOOD HAZARD ZONE
- APPROX. DRAINAGE WAY / WATER BODY
- APPROX. RTE HABITAT CHECK ZONE
- APPROX. PARCEL BOUNDARY
- PROJECT AREA
- EXISTING BIKE / PEDESTRIAN FACILITY
- EXISTING STORM STRUCTURE
- EXISTING SANITARY STRUCTURE
- EXISTING UTILITY POLE
- EXISTING OVERHEAD UTILITY LINE
- EXISTING HYDRANT

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3. REFER TO DETAIL SHEETS FOR TYPICAL SECTIONS OF ALTERNATIVES.

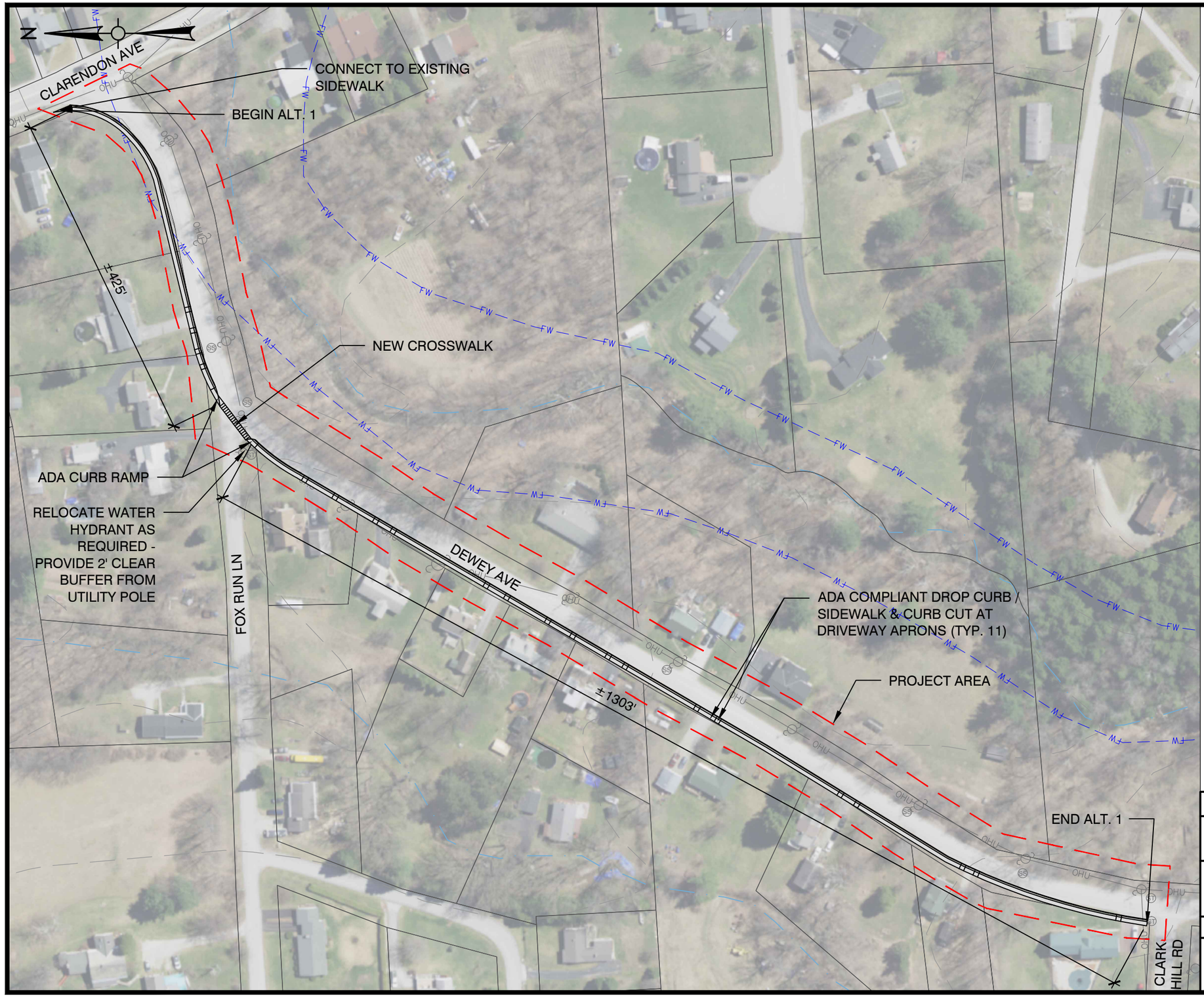
0 60 120

TOWN OF WEST RUTLAND, VERMONT
SIDEWALK SCOPING STUDY

CONCEPT PLAN
AREA '6' - MAIN STREET

DESIGNED BY: JWG	CHECKED BY: DPB	DATE: SEPT. 2022

Weston & Sampson



LEGEND:

- APPROX. WETLANDS AREA
- APPROX. FLOOD HAZARD ZONE
- APPROX. DRAINAGE WAY / WATER BODY
- APPROX. RTE HABITAT CHECK ZONE
- APPROX. PARCEL BOUNDARY
- PROJECT AREA
- EXISTING BIKE / PEDESTRIAN FACILITY
- EXISTING STORM STRUCTURE
- EXISTING SANITARY STRUCTURE
- EXISTING UTILITY POLE
- EXISTING OVERHEAD UTILITY LINE
- EXISTING HYDRANT

NOTES:

1. BASE MAPPING, INCLUDING PROPERTY & R.O.W. LIMITS, IS DERIVED FROM PUBLICLY AVAILABLE GIS INFORMATION & AERIAL IMAGERY. EXISTING CONDITIONS ARE SUBJECT TO FIELD VERIFICATION BY A LICENSED PROFESSIONAL LAND SURVEYOR.
2. SITE VISIT TO DOCUMENT VISIBLE GROUND SURFACE FEATURES WAS CONDUCTED ON APRIL 5TH, 2022 BY WESTON & SAMPSON.
3. REFER TO DETAIL SHEETS FOR TYPICAL SECTIONS OF ALTERNATIVES.

0 100 200

TOWN OF WEST RUTLAND, VERMONT
SIDEWALK SCOPING STUDY

CONCEPT PLAN
AREA '7' - DEWEY AVENUE

DESIGNED BY: JWG	CHECKED BY: DPB	DATE: SEPT. 2022

Weston & Sampson

APPENDIX J

Concept Cost Estimates

West Rutland Sidewalk Scoping Study
Concept Plans
West Rutland TAP TA 21(8)

	Estimate		
	Estimated Area 1 Cost:	**$ 232,000.00**	
	Estimated Area 2 Cost:	**$ 327,000.00**	
	Estimated Area 3 Cost:	**$ 308,000.00**	
	Estimated Area 4 Cost:	**$ 116,000.00**	
	Estimated Area 5 Cost:	**$ 232,000.00**	
	Estimated Area 6 Cost:	**$ 185,000.00**	
	Estimated Area 7 Cost:	**$ 564,000.00**	
	Contingency:	25%	
	Estimated Total:	**$ 1,964,000.00**	
	Spec Year	2018	
	Unit System:	English	
	Work Type:	Bike &/or Transportation Path	
	Highway Type:	Major Collector	
	Urban/ Rural Type:	Rural	
	Season:	2 Year Averaged Price List (8/18 - 6/20)	
		5 Year Averaged Price List (7/15 - 6/20)	
	District:	SW	
	Prepared by:	Weston & Sampson, Inc.	
		Jack Grieshober, RLA	
		Project Manager	

Concept Plans **11/15/2022**

West Rutland Sidewalk Scoping Study
West Rutland TAP TA 21(8)
Town of West Rutland, Vermont

Item No.	Item		Qty	Units		Unit Price	Subtotal Cost	Extended Cost
Area 1 - Pleasant Street (East Side) - Business Route 4 to Sheldon (±635 LF)								
201.11	Clearing and grubbing, including individual trees and stumps		0.09	Acre		$ 13,745.45	$ 1,183.00	
203.15	Common excavation	Sidewalk Subbase, 12" depth, 6' width	141.11	Cubic Yard		$ 13.08	$ 1,845.73	
203.28	Excavation of surfaces and pavements	12" depth	96.30	Cubic Yard		$ 36.42	$ 3,507.11	
301.25	Subbase of crushed gravel, coarse grade	Sidewalks, Curb	94.07	Cubic Yard		$ 36.54	$ 3,437.47	
616.21	Vertical Granite Curb		635.00	Linear Feet		$ 48.94	$ 31,076.90	
616.41	Removal of existing curb		180.00	Linear Feet		$ 6.30	$ 1,134.00	
618.10	Portland cement concrete sidewalk, 5 inch		352.78	Square Yard		$ 105.83	$ 37,334.47	
649.31	Geotextile under stone fill		423.33	Square Yard		$ 3.16	$ 1,337.73	
651.15	Seed		2.02	Pounds		$ 10.28	$ 20.72	
651.18	Fertilzer		2.02	Pounds		$ 4.61	$ 9.29	
651.20	Agriculture limestone		0.05	Ton		$ 776.49	$ 39.14	
651.35	Topsoil		24.64	Cubic Yard		$ 45.23	$ 1,114.47	
653.01	EPSC Plan		1.00	Lump Sum		$ 3,529.47	$ 3,529.47	
653.02	Monitoring EPSC Plan	4 Hrs/Wk over 4 Wks	16.00	Hour		$ 66.79	$ 1,068.64	
653.03	Maintenance of EPSC Plan (N.A.B.I.)		1.00	LU		$ 3,868.21	$ 3,868.21	
653.475	Silt Fence, Type I		635.00	Linear Feet		$ 4.10	$ 2,603.50	
653.55	Project demarcation fence		1290.00	Linear Feet		$ 4.66	$ 6,011.00	
656.85	Tree protection		1.00	Lump Sum		$ 4,245.94	$ 4,246.00	
630.10	Uniformed traffic officers		40.00	Hour		$ 64.86	$ 2,594.40	
630.15	Flaggers		40.00	Hour		$ 37.47	$ 1,498.80	
631.16	Testing equipment, concrete		1.00	Lump Sum		$ 835.72	$ 835.72	
635.11	Mobilization / demobilization	High - 10%	1.00	Lump Sum		$ 10,829.58	$ 10,829.58	
641.10	Traffic control	Moderate - 4%	1.00	Lump Sum		$ 4,331.83	$ 4,331.83	
							Subtotal Area 1	**$ 123,457.19**
							Contingency - 25%	$ 30,864.30
							Permitting & Approvals - 10%	$ 15,432.15
							Design & Construction Administration - 15%	$ 23,148.22
							Municipal Project Management - 10%	$ 15,432.15
							Construction Inspection - 15%	$ 23,148.22
							Total Area 1	**$ 232,000.00**
Area 2 - Pleasant Street (West Side) - Baxter to Durgy (±588 LF)								
201.11	Clearing and grubbing, including individual trees and stumps		0.08	Acre		$ 13,745.45	$ 1,113.00	
203.15	Common excavation	Sidewalk Subbase, 12" depth, 6' width	130.67	Cubic Yard		$ 13.08	$ 1,709.12	
203.28	Excavation of surfaces and pavements	12" depth	108.89	Cubic Yard		$ 36.42	$ 3,965.73	
301.25	Subbase of crushed gravel, coarse grade	Sidewalks, Curb	128.89	Cubic Yard		$ 36.54	$ 4,709.60	
604.415	Rehab. Drop inlets, catch basins, or manholes, class II	catchbasin relocation & rehabilitation	2.00	Each		$ 1,458.09	$ 2,916.18	
616.21	Vertical Granite Curb		588.00	Linear Feet		$ 48.94	$ 28,776.72	
616.41	Removal of existing curb		275.00	Linear Feet		$ 6.30	$ 1,732.50	
618.10	Portland cement concrete sidewalk, 5 inch		326.67	Square Yard		$ 105.83	$ 34,571.13	
618.30	Detectable warning surface		16.00	Square Feet		$ 38.05	$ 608.80	
649.31	Geotextile under stone fill		447.56	Square Yard		$ 3.16	$ 1,414.28	
651.15	Seed		1.83	Pounds		$ 10.28	$ 18.77	
651.18	Fertilzer		1.83	Pounds		$ 4.61	$ 8.42	
651.20	Agriculture limestone		0.05	Ton		$ 776.49	$ 35.45	
651.35	Topsoil		22.32	Cubic Yard		$ 45.23	$ 1,009.43	
653.01	EPSC Plan		1.00	Lump Sum		$ 3,529.47	$ 3,529.47	
653.02	Monitoring EPSC Plan	4 Hrs/Wk over 4Wks	16.00	Hour		$ 66.79	$ 1,068.64	
653.03	Maintenance of EPSC Plan (N.A.B.I.)		1.00	LU		$ 3,868.21	$ 3,868.21	
653.475	Silt Fence, Type I		588.00	Linear Feet		$ 4.10	$ 2,410.80	
653.55	Project demarcation fence		1196.00	Linear Feet		$ 4.66	$ 5,573.00	
656.85	Tree protection		1.00	Lump Sum		$ 4,245.94	$ 4,246.00	
Special Provision (900.675)	Unit Block Retaining Wall		875.00	Square Feet		$ 50.67	$ 44,336.25	
630.10	Uniformed traffic officers		40.00	Hour		$ 64.86	$ 2,594.40	
630.15	Flaggers		40.00	Hour		$ 37.47	$ 1,498.80	
631.16	Testing equipment, concrete		1.00	Lump Sum		$ 835.72	$ 835.72	
635.11	Mobilization / demobilization	High - 10%	1.00	Lump Sum		$ 15,255.04	$ 15,255.04	
641.10	Traffic control	Moderate - 4%	1.00	Lump Sum		$ 6,102.02	$ 6,102.02	
							Subtotal Area 2	**$ 173,907.48**
							Contingency - 25%	$ 43,476.87
							Permitting & Approvals - 10%	$ 21,738.44
							Design & Construction Administration - 15%	$ 32,607.65
							Municipal Project Management - 10%	$ 21,738.44
							Construction Inspection - 15%	$ 32,607.65
							Total Area 2	**$ 327,000.00**
Area 3 - Thrall (North Side) - Park & Ride to Sheldon (±850 LF)								
201.11	Clearing and grubbing, including individual trees and stumps		0.12	Acre		$ 13,745.45	$ 1,609.00	
203.15	Common excavation	Sidewalk Subbase, 12" depth, 6' width	188.89	Cubic Yard		$ 13.08	$ 2,470.67	
203.28	Excavation of surfaces and pavements	12" depth	157.41	Cubic Yard		$ 36.42	$ 5,732.78	
301.25	Subbase of crushed gravel, coarse grade	Sidewalks, Curb	125.93	Cubic Yard		$ 36.54	$ 4,601.33	
616.21	Vertical Granite Curb		850.00	Linear Feet		$ 48.94	$ 41,599.00	
616.41	Removal of existing curb		850.00	Linear Feet		$ 6.30	$ 5,355.00	
618.10	Portland cement concrete sidewalk, 5 inch		472.22	Square Yard		$ 105.83	$ 49,975.28	
618.30	Detectable warning surface		16.00	Square Feet		$ 38.05	$ 608.80	
649.31	Geotextile under stone fill		566.67	Square Yard		$ 3.16	$ 1,790.67	
651.15	Seed		1.70	Pounds		$ 10.28	$ 17.48	
651.18	Fertilzer		1.70	Pounds		$ 4.61	$ 7.84	
651.20	Agriculture limestone		0.04	Ton		$ 776.49	$ 33.00	
651.35	Topsoil		20.78	Cubic Yard		$ 45.23	$ 939.78	
653.01	EPSC Plan		1.00	Lump Sum		$ 3,529.47	$ 3,529.47	
653.02	Monitoring EPSC Plan	4 Hrs/Wk over 4 Wks	16.00	Hour		$ 66.79	$ 1,068.64	
653.03	Maintenance of EPSC Plan (N.A.B.I.)		1.00	LU		$ 3,868.21	$ 3,868.21	
653.475	Silt Fence, Type I		850.00	Linear Feet		$ 4.10	$ 3,485.00	
653.55	Project demarcation fence		1720.00	Linear Feet		$ 4.66	$ 8,015.00	
656.85	Tree protection		1.00	Lump Sum		$ 4,245.94	$ 4,246.00	
Special Provision (900.450)	Utility Modifications	Culvert Crossing	1.00	Lump Sum		$ 25,000.00	$ 25,000.00	
630.10	Uniformed traffic officers		40.00	Hour		$ 64.86	$ 2,594.40	
630.15	Flaggers		40.00	Hour		$ 37.47	$ 1,498.80	
631.16	Testing equipment, concrete		1.00	Lump Sum		$ 835.72	$ 835.72	
635.11	Mobilization / demobilization	High - 10%	1.00	Lump Sum		$ 16,888.19	$ 16,888.19	
641.10	Traffic control	Moderate - 4%	1.00	Lump Sum		$ 6,755.27	$ 6,755.27	
							Subtotal Area 3	**$ 163,952.93**
							Contingency - 25%	$ 40,988.23
							Permitting & Approvals - 10%	$ 20,494.12
							Design & Construction Administration - 15%	$ 30,741.18
							Municipal Project Management - 10%	$ 20,494.12
							Construction Inspection - 15%	$ 30,741.18
							Total Area 3	**$ 308,000.00**
Area 4 - Ross Street (North Side) - Main to Fence (End of Rigg's Parcel) (±179 LF)								
201.11	Clearing and grubbing, including individual trees and stumps		0.02	Acre		$ 13,745.45	$ 339.00	
203.15	Common excavation	Sidewalk Subbase, 12" depth, 6' width	39.78	Cubic Yard		$ 13.08	$ 520.29	
203.28	Excavation of surfaces and pavements	12" depth	66.30	Cubic Yard		$ 36.42	$ 2,414.51	
301.25	Subbase of crushed gravel, coarse grade	Sidewalks, Curb	26.52	Cubic Yard		$ 36.54	$ 968.99	
616.21	Vertical Granite Curb		179.00	Linear Feet		$ 48.94	$ 8,760.26	
618.10	Portland cement concrete sidewalk, 5 inch		99.44	Square Yard		$ 105.83	$ 10,524.21	
649.31	Geotextile under stone fill		119.33	Square Yard		$ 3.16	$ 377.09	
651.15	Seed		1.07	Pounds		$ 10.28	$ 11.04	
651.18	Fertilzer		1.07	Pounds		$ 4.61	$ 4.95	
651.20	Agriculture limestone		0.03	Ton		$ 776.49	$ 20.85	
651.35	Topsoil		13.13	Cubic Yard		$ 45.23	$ 593.72	
653.01	EPSC Plan		1.00	Lump Sum		$ 3,529.47	$ 3,529.47	
653.02	Monitoring EPSC Plan	4 Hrs/Wk over 2 Wks	8.00	Hour		$ 66.79	$ 534.32	
653.03	Maintenance of EPSC Plan (N.A.B.I.)		1.00	LU		$ 3,868.21	$ 3,868.21	
653.475	Silt Fence, Type I		179.00	Linear Feet		$ 4.10	$ 733.90	
653.55	Project demarcation fence		378.00	Linear Feet		$ 4.66	$ 1,761.00	
630.10	Uniformed traffic officers		40.00	Hour		$ 64.86	$ 2,594.40	
630.15	Flaggers		40.00	Hour		$ 37.47	$ 1,498.80	
631.16	Testing equipment, concrete		1.00	Lump Sum		$ 835.72	$ 835.72	
635.11	Mobilization / demobilization	High - 10%	1.00	Lump Sum		$ 5,384.43	$ 5,384.43	
641.10	Traffic control	Moderate - 4%	1.00	Lump Sum		$ 2,153.77	$ 2,153.77	
							Subtotal Area 4	**$ 61,382.47**
							Contingency - 25%	$ 15,345.62

								Permitting & Approvals - 10%	$ 7,672.81
								Design & Construction Administration - 15%	$ 11,509.21
								Municipal Project Management - 10%	$ 7,672.81
								Construction Inspection - 15%	$ 11,509.21
								Total Area 4	**$ 116,000.00**
Area 5 - Ross Street (South Side) - Franklin to End (±670 LF)									
201.11	Clearing and grubbing, including individual trees and stumps		0.11	Acre		$ 13,745.45	$ 1,480.00		
203.15	Common excavation	Sidewalk Subbase, 12" depth, 6' width	148.89	Cubic Yard		$ 13.08	$ 1,947.47		
203.28	Excavation of surfaces and pavements	12" depth	124.07	Cubic Yard		$ 36.42	$ 4,518.78		
301.25	Subbase of crushed gravel, coarse grade	Sidewalks, Curb	99.26	Cubic Yard		$ 36.54	$ 3,626.93		
616.21	Vertical Granite Curb		670.00	Linear Feet		$ 48.94	$ 32,789.80		
618.10	Portland cement concrete sidewalk, 5 inch		372.22	Square Yard		$ 105.83	$ 39,392.28		
649.31	Geotextile under stone fill		446.67	Square Yard		$ 3.16	$ 1,411.47		
651.15	Seed		1.34	Pounds		$ 10.28	$ 13.78		
651.18	Fertilzer		1.34	Pounds		$ 4.61	$ 6.18		
651.20	Agriculture limestone		0.03	Ton		$ 776.49	$ 26.01		
651.35	Topsoil		16.38	Cubic Yard		$ 45.23	$ 740.77		
653.01	EPSC Plan		1.00	Lump Sum		$ 3,529.47	$ 3,529.47		
653.02	Monitoring EPSC Plan	4 Hrs/Wk over 4 Wks	16.00	Hour		$ 66.79	$ 1,068.64		
653.03	Maintenance of EPSC Plan (N.A.B.I.)		1.00	LU		$ 3,868.21	$ 3,868.21		
653.475	Silt Fence, Type I		670.00	Linear Feet		$ 4.10	$ 2,747.00		
653.55	Project demarcation fence		1360.00	Linear Feet		$ 4.66	$ 6,338.00		
630.10	Uniformed traffic officers		40.00	Hour		$ 64.86	$ 2,594.40		
630.15	Flaggers		40.00	Hour		$ 37.47	$ 1,498.80		
631.16	Testing equipment, concrete		1.00	Lump Sum		$ 835.72	$ 835.72		
635.11	Mobilization / demobilization	High - 10%	1.00	Lump Sum		$ 10,843.37	$ 10,843.37		
641.10	Traffic control	Moderate - 4%	1.00	Lump Sum		$ 4,337.35	$ 4,337.35		
								Subtotal Area 5	**$ 123,614.41**
								Contingency - 25%	$ 30,903.60
								Permitting & Approvals - 10%	$ 15,451.80
								Design & Construction Administration - 15%	$ 23,177.70
								Municipal Project Management - 10%	$ 15,451.80
								Construction Inspection - 15%	$ 23,177.70
								Total Area 5	**$ 232,000.00**
Area 6 - Main Street (North Side) - Proctor to Gilmore (±485 LF)									
201.11	Clearing and grubbing, including individual trees and stumps		0.08	Acre		$ 13,745.45	$ 1,071.00		
203.15	Common excavation	Sidewalk Subbase, 12" depth, 6' width	107.78	Cubic Yard		$ 13.08	$ 1,409.73		
203.28	Excavation of surfaces and pavements	12" depth	89.81	Cubic Yard		$ 36.42	$ 3,271.06		
301.25	Subbase of crushed gravel, coarse grade	Sidewalks, Curb	71.85	Cubic Yard		$ 36.54	$ 2,625.47		
616.21	Vertical Granite Curb		485.00	Linear Feet		$ 48.94	$ 23,735.90		
616.41	Removal of existing curb		485.00	Linear Feet		$ 6.30	$ 3,055.50		
618.10	Portland cement concrete sidewalk, 5 inch		269.44	Square Yard		$ 105.83	$ 28,515.31		
618.30	Detectable warning surface		16.00	Square Feet		$ 38.05	$ 608.80		
649.31	Geotextile under stone fill		323.33	Square Yard		$ 3.16	$ 1,021.73		
651.15	Seed		0.97	Pounds		$ 10.28	$ 9.97		
651.18	Fertilzer		0.97	Pounds		$ 4.61	$ 4.47		
651.20	Agriculture limestone		0.02	Ton		$ 776.49	$ 18.83		
651.35	Topsoil		11.86	Cubic Yard		$ 45.23	$ 536.23		
653.01	EPSC Plan		1.00	Lump Sum		$ 3,529.47	$ 3,529.47		
653.02	Monitoring EPSC Plan	4 Hrs/Wk over 4 Wks	16.00	Hour		$ 66.79	$ 1,068.64		
653.03	Maintenance of EPSC Plan (N.A.B.I.)		1.00	LU		$ 3,868.21	$ 3,868.21		
653.475	Silt Fence, Type I		485.00	Linear Feet		$ 4.10	$ 1,988.50		
653.55	Project demarcation fence		990.00	Linear Feet		$ 4.66	$ 4,613.00		
630.10	Uniformed traffic officers		40.00	Hour		$ 64.86	$ 2,594.40		
630.15	Flaggers		40.00	Hour		$ 37.47	$ 1,498.80		
631.16	Testing equipment, concrete		1.00	Lump Sum		$ 835.72	$ 835.72		
635.11	Mobilization / demobilization	High - 10%	1.00	Lump Sum		$ 8,588.07	$ 8,588.07		
641.10	Traffic control	Moderate - 4%	1.00	Lump Sum		$ 3,435.23	$ 3,435.23		
								Subtotal Area 6	**$ 98,603.36**
								Contingency - 25%	$ 24,650.84
								Permitting & Approvals - 10%	$ 12,325.42
								Design & Construction Administration - 15%	$ 18,488.13
								Municipal Project Management - 10%	$ 12,325.42
								Construction Inspection - 15%	$ 18,488.13
								Total Area 6	**$ 185,000.00**
Area 7 - Dewey (North Side) - Clarendon to Clark Hill (±1,728 LF)									
201.11	Clearing and grubbing, including individual trees and stumps		0.36	Acre		$ 13,745.45	$ 4,907.00		
203.15	Common excavation	Sidewalk Subbase, 12" depth, 6' width	384.00	Cubic Yard		$ 13.08	$ 5,022.72		
301.25	Subbase of crushed gravel, coarse grade	Sidewalks, Curb	256.00	Cubic Yard		$ 36.54	$ 9,354.24		
616.21	Vertical Granite Curb		1728.00	Linear Feet		$ 48.94	$ 84,568.32		
618.10	Portland cement concrete sidewalk, 5 inch		960.00	Square Yard		$ 105.83	$ 101,596.80		
629.29	Relocate Hydrant		1.00	Each		$ 4,136.67	$ 4,136.67		
649.31	Geotextile under stone fill		1152.00	Square Yard		$ 3.16	$ 3,640.32		
651.15	Seed		6.95	Pounds		$ 10.28	$ 71.45		
651.18	Fertilzer		6.95	Pounds		$ 4.61	$ 32.04		
651.20	Agriculture limestone		0.17	Ton		$ 776.49	$ 134.92		
651.35	Topsoil		84.94	Cubic Yard		$ 45.23	$ 3,842.04		
653.01	EPSC Plan		1.00	Lump Sum		$ 3,529.47	$ 3,529.47		
653.02	Monitoring EPSC Plan	4 Hrs/Wk over 8Wks	32.00	Hour		$ 66.79	$ 2,137.28		
653.03	Maintenance of EPSC Plan (N.A.B.I.)		1.00	LU		$ 3,868.21	$ 3,868.21		
653.475	Silt Fence, Type I		1728.00	Linear Feet		$ 4.10	$ 7,084.80		
653.55	Project demarcation fence		3476.00	Linear Feet		$ 4.66	$ 16,198.00		
656.85	Tree protection		1.00	Lump Sum		$ 4,245.94	$ 4,246.00		
630.10	Uniformed traffic officers		80.00	Hour		$ 64.86	$ 5,188.80		
630.15	Flaggers		80.00	Hour		$ 37.47	$ 2,997.60		
631.16	Testing equipment, concrete		1.00	Lump Sum		$ 835.72	$ 835.72		
635.11	Mobilization / demobilization	High - 10%	1.00	Lump Sum		$ 26,339.24	$ 26,339.24		
641.10	Traffic control	Low - 3%, Excludes bridge subtotal	1.00	Lump Sum		$ 10,535.70	$ 10,535.70		
								Subtotal Area 7	**$ 300,267.32**
								Contingency - 25%	$ 75,066.83
								Permitting & Approvals - 10%	$ 37,533.42
								Design & Construction Administration - 15%	$ 56,300.12
								Municipal Project Management - 10%	$ 37,533.42
								Construction Inspection - 15%	$ 56,300.12
								Total Area 7	**$ 564,000.00**
								Overall Project Total	**$1,964,000.00**