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PHASE IA CULTURAL RESOURCES ASSESSMENT SURVEY OF THE PROPOSED MILVON-WEST RIVER RAILROAD TRANSMISSION LINE 115-KV REBUILD PROJECT IN MILFORD, ORANGE WEST HAVEN, AND NEW HAVEN, CONNECTICUT

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Introduction

Heritage Consultants, LLC (Heritage) is pleased to have this opportunity to provide The United Illuminating Company (UI), with the following Phase IA cultural resources reconnaissance survey of the Proposed Milvon-West River Railroad Transmission Line 115-kV Rebuild Project (the Project) in Milford, Orange, West Haven, and New Haven, Connecticut (Figure 1). The current assessment survey entailed completion of an existing conditions cultural resources summary based on the examination of data maintained in the cultural resources files of the Connecticut State Historic Preservation Office (CT-SHPO). It also includes a review of historical mapping, aerial photographs, topographic quadrangles, and soils data, as well as viewshed mapping of the existing Connecticut Department of Transportation (CT DOT) corridor, which was completed by All-Points Technology Corporation (APT) and made available to Heritage.

This investigation is based upon project location information provided to Heritage by UI. The objectives of this study were: 1) to gather and present data regarding previously identified cultural resources situated within the vicinity of the existing CT DOT corridor; 2) to investigate the existing CT DOT corridor in terms of its natural and historical characteristics; and 3) to evaluate the need for completing additional cultural resources investigations. In addition to the tasks completed during the desktop portion of the Phase IA cultural resources reconnaissance survey, Heritage personnel also completed a pedestrian survey of the existing CT DOT corridor and recorded the conditions of the areas where construction will occur.

Project Background and Description

The Project will include rebuilding two existing single-circuit 115-kilovolt (kV) overhead lines that are situated between the Milvon Substation in Milford and the West River Substation in New Haven, Connecticut (Figure 2; Sheets 1 through 12). The existing 115-kV lines are currently situated on bonnets that are located on top of the Metro North Railroad catenary structures where they were installed in the 1940s. The Project will include replacement and upgrade of related project items (see below) along an approximately 9.5 mile stretch along the existing CT DOT corridor that is used by Metro-North Railroad (MNR)/Amtrak Railroad. According to Project plans, 115-kV overhead lines also will extend to the Woodmont Substation in Milford, as well as to the Elmwest and Allings Crossing substations in West Haven. They currently connect to the Milvon, Woodmont, Allings Crossing, Elmwest and West River Substations. The rebuilt lines will similarly connect to these substations. The following sections were prepared by UI and they provide a detailed synopsis of the Project.

Recent engineering analyses, commissioned by UI, of the existing 115-kV lines along the existing CT DOT corridor between Milvon and West River substations determined that, to maintain the reliability of the bulk transmission grid, the transmission support structures need to be upgraded to meet current electrical codes and to withstand extreme weather conditions (e.g., hurricanes). Based on these engineering analyses, UI proposes to rebuild the 115-kV lines on double-circuit monopoles, expected to be located parallel to and mostly along the north side of the existing CT DOT corridor, on property mostly owned by CT DOT.[1] The primary components of the Project will include:

- Rebuild the two 115-kV lines in a double-circuit configuration, supported on galvanized steel monopole structures, between Milvon and West River substations. The new monopoles will be offset from the catenary structures based on the railroad corridor width and clearance requirements specified by CT DOT / MNR and electrical standards. This offset will vary based on location, but typically is expected to be 25 feet. The

[1] In locations where the width of the CT DOT property from the existing bonnet structures to the edge of the CT corridor boundary is less than approximately 55 feet, UI would have to acquire easements from other property owners for the new 115-kV lines.

centerline of the new monopoles will be approximately 15 feet from the edge of the existing CT DOT corridor boundary, where space is available within the CT DOT corridor, or from the edge of the new UI easement boundary.

- The new structure heights will vary by location. Based on current design information, the proposed pole heights, by segment, are:

  - Milvon to Woodmont: 80-140 feet. The tallest poles (125-140 feet) will be between the Milford Train Station and the Milford Cemetery. Structures adjacent to the US Route 1 crossing and the Indian River crossing will be approximately 120 feet tall. Along the remainder of the segment, structure heights will be 80-100 feet;

  - Woodmont to Allings Crossing: 75-115 feet;

  - Allings Crossing to Elmwest: 65-160 feet. The tallest poles (>120 feet) will be near the West Haven Train Station. The proposed parking garage between P1017N and P1018N requires the tallest poles of the Project (150 and 160 feet);

  - Elmwest to West River: 65-130 feet. The tallest poles (>120 feet) are between 1st Avenue and the I-95 crossing, as required to span the MNR under build and road overpasses.

- The new 115-kV lines will consist of 1590 ACSS conductors and 72-fiber optical ground wire (OPGW) shield wires. However, the new structures will be designed to support 2156 ACSS "Bluebird" conductors and to meet the clearance requirements for such conductors.

- Modify existing 115-kV connections, based on the configuration of the rebuilt 115-kV lines, to the Milvon and West River substations and to four other existing UI substations located adjacent to the existing CT DOT corridor (Woodmont, Allings Crossing, Elmwest, and West River) between Milvon and West River substations.

- Remove or modify certain steel monopoles that were installed as part of previous recent UI transmission upgrade projects (i.e., UI's 2015 Milvon Take-Off Structure Replacement Project [Structure P887N]; FAC-08 Project [Structure P898AS, P930AS, P959N, P968AS; P1015AS, P1026AS]; 2011 West Haven Train Station Project).

- Decommission and remove the existing 115-kV facilities on the railroad catenary structures (the bonnets may remain in place if CT DOT accepts ownership of them).

In terms of the Project description above, UI has conducted a careful study of the Project alignment and has sought to minimize potential direct impacts to the area. In doing so, its engineers have called for the construction of taller poles (especially in Milford) so that the Project can be implemented using less of them while still meeting engineering constraints and concomitant public safety. Another benefit of this approach will be the lessening of direct impacts to potentially sensitive resources along the existing CT DOT corridor, including wetlands and cultural areas such as the Milford Cemetery. A more robust discussion of the Project engineering is included in the attached memo generated by the design engineers (see Appendix 1). Finally, the Project plans, which are currently at 50 percent as shown in the attached

figures, may evolve as the Project proceeds through the regulatory/siting processes. As a result, the currently defined access, pull pads, work pads, etc., in this report may be modified. Final plans will be provided in a Development & Management.

Historical Background of the Project Region

New Haven County, which was formed in 1666, was one of the first four counties in Connecticut and originally encompassed the towns of Guilford, Branford, New Haven, and Milford (Rockey 1892). Orange separated from those towns in 1823 and West Haven separated from Orange in 1921. Historically, the interior portions of New Haven County were characterized by farms and agricultural land, and areas near the shoreline were supported by fishing, shipbuilding, and shipping. The oldest settlement in the county, New Haven, is now the largest city in the region. Early settlers of the regions were primarily farmers and raised crops such as corn, rye, oats, barley, and tobacco. During the eighteenth century some of them turned to grazing and raising livestock, including cattle, sheep, and pigs. Other forms of industry also appeared relatively early during the colonial period including gristmills, sawmills, and fulling mills (Van Dusen 1961).

As the eighteenth and early nineteenth century progressed, parts of New Haven County became industrial centers and the local populations in these areas increased. The establishment of better transportation and railroads also spurred development throughout the region. In 1848, the New York & New Haven railroad opened, and it extended from New Haven to the west to New York State. The New York & New Haven joined the Hartford & New Haven in 1872 to form the New York, New Haven, & Hartford Railroad Company, becoming the largest corporation of its kind in Connecticut at that time (Turner and Jacobus 1986). As of 1890, the population of New Haven County had reached 209,058 residents (Rockey 1892). Throughout the latter half of the twentieth century, industrialization subsided in the region and suburbanization increased, particularly after World War II. Populations shifted throughout the region as people moved from cities to towns when the automobile and the establishment of highways facilitated easier travel. By 2019, there were 854,757 people living in New Haven County (United States Census Bureau 2021).

<u>Capsule History of Milford</u>

Considered the sixth oldest town in Connecticut, Milford was settled in 1639 and was originally known as “Wepawaug” (Milford 2021; Barber 1837). Initially extending as far north as present-day Waterbury, the city now encompasses a 26.2 square mile area (Barber 1837, Connecticut 2020). In 1685, Milford received a town patent to become part of the Connecticut Colony. Early settlers in Milford raised crops and harvested oysters and clams along the shoreline of Long Island Sound. As of the late nineteenth and early twentieth centuries, Milford was still supported primarily by agricultural, but the production of seeds and straw hats had become prominent industries as well (Connecticut 1887, 1910). The population of Milford remained relatively small until the twentieth century, when it began to increase dramatically. In 1900, Milford was home 3,783 residents and by 1970 the population had reached 50,858 residents, after which it leveled off (Secretary of the State Denise W. Merrill 2021a, 2021b). Milford was incorporated as a city in 1959 and as of 2020, the population was recorded at 51,054 residents (Connecticut 2020, AdvanceCT and CTData Collaborative 2020a). In modern times, Milford has become a retail center and is the site of the headquarters of several corporations, including Schick-Wilkinson Sword, the razor manufacturer, and Subway World Headquarters, which are also two of the major employers in the city (AdvanceCT and CTData Collaborative 2020a).

Capsule History of Orange

The Town of Orange was incorporated in 1822 and was formed from the northern part of the city of Milford and the western part of the city of New Haven. Initially called Bryan's Farms, Orange became known as North Milford in 1804 before it joined with the community of West Haven to form the Town of Orange (Labaree 1933). The area that was North Milford was primarily agricultural historically, though it was the location of a seed manufacturer and several mills during the nineteenth century. During this time, the community of West Haven was considered an industrial center (Rockey 1892). This dynamic continued until the separation of West Haven in the early twentieth century. Today, Orange is a rural residential community with a population of just under 14,000 residents. It is also home to several corporations, including The United Illuminating Company and PEZ Candy (AdvanceCT and CTData Collaborative 2020b).

Capsule History of West Haven

West Haven was settled in 1648 and was originally known as West Farms, a part of New Haven. Located on the Long Island Sound shoreline, the residents of this community were heavily involved in shipbuilding and other maritime industries during the historical period (West Haven Historical Society 2021). In 1822, West Haven joined with North Milford to become the town of Orange. In 1873, it was incorporated as a borough with its own governing body. West Haven was an industrial center in the nineteenth century and produced buckles, pianos, keys, water pipes, and carriages (Rockey 1892). During the twentieth century, West Haven was the site of the American Mills Web Shop, a producer of elastics used in a variety of clothing products, as well as the Armstrong Rubber Company, a producer of tires (Connecticuthistory.org 2013a, 2013b). In 1921, the borough separated and became a separate town with 25,808 residents by 1930 (Secretary of the State Denise W. Merrill 2021a). In 1961, West Haven was eventually incorporated as a city and in 2020 the population was recorded at 58,318 residents (Connecticut 2020, AdvanceCT and CTData Collaborative 2020c). Today, the city is considered a business-friendly shoreline destination that is also the location of the University of New Haven and part of the Yale University West Campus (West Haven Historical Society 2021).

Capsule History of New Haven

Originally called "Quinnipiac," New Haven was founded in 1637 by the Reverend John Davenport and Theophilus Eaton, both of whom were colonists that migrated to the area from Massachusetts. Today, New Haven is the second largest city in Connecticut (behind Bridgeport) and is home to Yale University, which was founded in 1701 and is the third oldest university in the United States (AdvanceCT and CTData Collaborative 2020d; Yale University 2021). Early settlers in New Haven relied on farming, as well as harvesting oysters and clams from Long Island Sound (Barber 1837). New Haven became a major port and was incorporated as a city in 1784 (Rockey 1892). At the beginning of the nineteenth century, New Haven had 5,157 residents and an industrial base that produced leather, brass, combs, paper, and bells (Secretary of the State Denise W. Merrill 2021c, Rockey 1892). By the end of the nineteenth century, New Haven had a population of 86,045 residents and was a major manufacturing hub that manufactured a variety of items, including carriages, firearms, steam boilers, and rubber goods (Secretary of the State Denise W. Merrill 2021d, Connecticut 1891). In the twentieth century, New Haven's economy moved away from manufacturing and the suburbanization trend set in after World War II. While the number of inhabitants in the city still increased, the population peaked in 1960 at 164,443 residents (Secretary of the State Denise W. Merrill 2021a). By 2020, the population had decreased to 135,379 inhabitants. At that time, the city's largest employment sectors were health care and education and the largest employers were universities and hospitals, namely Yale University, Southern Connecticut State University, and Yale Medical Group, among others (AdvanceCT and CTData Collaborative 2020d).

Historical Mapping of the Project Existing CT DOT Corridor

As part of the Phase IA cultural resources assessment survey, Heritage reviewed historical maps showing the location of the proposed Project. The two maps series examined during the background review date from 1856 and 1890, respectively. These series were chosen because they cover the entirety of the existing CT DOT corridor unlike other historical map series that have incomplete coverage and only show small segments of coastal Connecticut.

The 1856 maps series, which is included in Figure 3; Sheets 1 through 4, depicts the historical development of the areas containing the existing CT DOT corridor as of the middle of the nineteenth century (H. & C.T. Smith 1856). The western portion of the existing CT DOT corridor between Structure P888N and the Indian River in Milford was well-settled as of 1856. The area contained dozens of residences, open space to the south, the New York & New Haven Railroad, and a "RR Station" (railroad station) along Railroad Avenue. Further to the east, between the Indian River and Oyster River, the 1856 maps depict little development. While there was a road network in place along this segment of the existing CT DOT corridor, this area contained only a few residences in the vicinity of the New York & New Haven Railroad alignment. This is likely due to the fact that this part of the region contained large wetland areas that were not considered suitable for habitation. The 1856 map series also shows that no appreciable amount of mid-nineteenth century development is evident until the western edge of West Haven. The portion of the existing CT DOT corridor, which crosses through West Haven proper, is located in an area that was characterized by a well-developed transportation network and numerous buildings. The latter consisted of dozens of residences, the West Haven Female Seminary, and several stores. The 1856 map series ends on the east on the eastern bank of the West River. In 1856, this area contained what appears to have been a newly developed road network leading to City Point, but not much else. Overall, the 1856 map series shows the Project region at the cusp of the Industrial Revolution. The area remained largely residential and was supported by nearby farms, small-scale milling operations, and small commercial business. The economic focus of this area was undoubtedly very local as of 1856.

The succeeding 1890 map series in Figure 4; Sheets 1 through 4 shows the region containing the existing CT DOT corridor 35 years later (USGS 1890). The initial stretch of the existing CT DOT corridor between Structure P888N and the Indian River also shows that this portion of Milford was well developed near the turn of the twentieth century (Figure 3; Sheet 1). Sheet 1 of Figure 4, shows that the area immediately to the west of Milford remained on a similar growth trajectory as that of 1856; however, this map sheet also shows that the railroad alignment in this area had been moved from the north to the south. As of 1890, the railroad alignment was altered to match the current alignment of the existing CT DOT corridor. Sheets 2 and 3 of Figure 4 also are similar to those of the 1856 series. These areas remained as a combination of open spaces and intermittent development, likely due to the presence of a large amount of wetlands in this area. Finally, the last sheet of Figure 4 shows the West Haven/New Haven portion of the existing CT DOT corridor as well-developed and containing dozens of structures, likely related to housing, commercial enterprises, and industrial manufacturing.

Aerial Imagery Depicting the Existing CT DOT Corridor

Heritage also reviewed aerial images as part of the Phase IA cultural resources assessment survey. They include aerial series dating from 1934, 1951, 1974, 1990, and 2019. These images document the overall development of the area containing the existing CT DOT corridor throughout the twentieth century and into the twenty first century.

The 1934 aerial image series is depicted in Figure 5; Sheets 1 through 12. This image series shows the existing CT DOT corridor in its modern location. As of 1934, the westernmost segment of the existing CT

DOT corridor between Structure P888N and the Indian River was characterized by a combination of open rural land in the west and the downtown area of Milford in the east. It is clear that farming remained important to the west of Milford center up to 1934 as evidenced by the presence of agricultural fields, but the core of the city now contained many more building representative of row housing, which is typical of a transition from agriculture to more of an industrially based economy where workers houses were located near commercial and industrial operations. The portion of the 1934 aerial image depicting the downtown Milford area also shows numerous larger buildings that are indicative of municipal, commercial, and/or manufacturing facilities, as well as the Milford Cemetery to the east. The section of the 1934 aerial image between the Indian River and the Oyster River is characterized by large undeveloped areas, especially on the northern side of the existing CT DOT corridor. The southern side of the P existing CT DOT corridor in this area contains many more buildings, including residences and commercial buildings. In general though, the existing CT DOT corridor remains a mixture of open spaces, wetlands, and agricultural fields until it intersects with the western edge of the downtown West Haven Area. That part of the existing CT DOT corridor was well developed by 1934 and contained hundreds of houses, commercial buildings, small factories, and roadways. As of 1934, the eastern end of the existing CT DOT corridor in New Haven contained a large wetland area adjacent to the West River and was a mixed use area consisting of housing and larger industrial buildings.

The subsequent 1951 aerial shown in Figure 6; Sheets 1 through 12, while not of the highest quality, offer some interesting insights into the Project region during the middle of the twentieth century. The area between Structure P888N in the west and the Milford town center remained largely unchanged with the exception that many of this area's agricultural fields were in the process of reforestation by the early 1950s. This is not surprising since farming declined rapidly in Connecticut between the 1930s and 1950s, and many former agricultural areas became suburbs after the close of World War II. The portion of the 1950 aerial image series depicting Milford center and the area immediately to the east of it shows that many more commercial and larger industrial buildings had been added in the vicinity of the existing CT DOT corridor. The 1951 aerial shows that with the exception of the construction of a large facility associated with the U.S. Electric Motors Facility on the northern edge of the existing CT DOT corridor, the remainder of the area extending to the western limits of downtown West Haven remained largely undeveloped at that time, though many of the former farm fields along this stretch had become reforested. The remaining images in the 1951 series show that West Haven development had expanded to the west except within the large wetland associated with the West River. That area remained open, while the easternmost end of the existing CT DOT corridor in New Haven continued to be developed. Mid twentieth century additions to the 1951 aerial series include many additional roadways, a rapid expansion of housing due to suburbanization, and the continued expansion of commercial and industrial facilities.

As documented by the aerial images in Figure 7; Sheets 1 through 12, large scale changes had occurred in the vicinity of the existing CT DOT corridor by 1974. The area between Structure P888N and the downtown area of Milford was almost entirely lacking in agricultural fields by that time, having been replaced by wooded areas, residences, new streets, and a large number of commercial and industrial facilities, many of which lined both the northern and southern edges of the existing CT DOT corridor. The former rural feel of that area had been replaced by modern characteristics. The downtown portion of Milford on both sides of the existing CT DOT corridor also was the location of significant changes related the construction of additional municipal and housing complexes, as well as more commercial and industrial enterprises. Still, the location of the Milford Cemetery remained largely unchanged with the exception of the pond within the southeastern corner of the burial ground. The pond within the cemetery continued to be silted in as it transitioned to wetlands rather than open water. The area to the east of Milford and extending to West Haven also witnessed increases in development between 1951 and 1974. While many of the large

wetland areas remained undeveloped, many of the former open spaces and agricultural fields along both side of the existing CT DOT corridor became developed and contained some very large scale enterprises. These include large warehouse complexes, manufacturing facilities, and truck depots, among others. The area immediately to the west of the West River remained a large wetland, but a highway alignment was built from north to southern along its western edge. The overall character of the 1974 aerial image series of one of significant development and increase in commercial and industrial enterprises.

The 1990 aerial series showing the existing CT DOT corridor is included in Figure 8; Sheets 1 through 12. The western portion of the existing CT DOT corridor between Structure P888N and the downtown area of Milford appears similar to that of 1974, with the inclusion of some additional commercial and industrial-sized facilities. The portion of the existing CT DOT corridor to the immediate east of the Milford downtown area also appears similar in character to the 1974 appearance, with numerous residences, commercial buildings, industrial facilities, and the Milford Cemetery present. Further to the east, in the area containing the Indian River and beyond, the existing CT DOT corridor was flanked on the north and south by many of the same buildings seen in the 1974 aerial, as well as several new, large facilities. The area near the West River also continued to be developed between 1974 and 1990, including the construction of the New Haven Fire Training Division complex immediately to the south of the existing CT DOT corridor on the east bank of the West River. Overall, the 1990 aerial image series shows that the region containing the existing CT DOT corridor continued on a trajectory of growth and development during the last decades of the twentieth century.

The final aerial image series reviewed as part of the Phase IA cultural resources assessment dates from 2019 and is depicted in Figure 9; Sheets 1 through 12. This series of images shows the existing CT DOT corridor in its essentially modern condition. While there are some differences between the 1990 and 2019 aerial image series, they are not dramatic. The area to the west of the Milford downtown center remained largely unchanged from 1990, and the area to the north and west of Structure P888N was largely undeveloped due to the presence of a large wetland system. Milford center itself also was not dramatically altered between 1990 and 2019, and the area in the vicinity of the Indian River remains similar in nature and content to that of 1974. The same is true for the portion the existing CT DOT corridor between the Indian River and the West River; however, one change in this area is the establishment of a large materials storage yard to the south of the existing CT DOT corridor and along the western bank of the West River. The overall impression of the existing CT DOT corridor depicted in the 2019 aerial image series is that of a well-developed residential, commercial, and industrial region. Almost all of the land along the existing CT DOT corridor that does not contain rivers or large wetland areas has been developed over the course of the last 150 years or so.

Archaeological Context and Potential of the Existing CT DOT Corridor

A review of previously recorded archaeological sites on file with the CT-SHPO in the vicinity of the existing CT DOT corridor was completed by Heritage during June of 2021 (Figure 10; Sheets 1 through 12). The literature review revealed that there are four archaeological sites that have been recorded in the area. They include Sites 84-65 and 84-73 in Milford, Connecticut and Sites 107-15 and 107-16 in Orange, Connecticut. These sites are discussed in turn below. No previously identified archaeological sites were detected in the New Haven and West Haven segments of the existing CT DOT corridor during the literature review.

<u>Site 84-65 (Milford)</u>

The official State of Connecticut form for Site 84-65 simply records this resources as the location of a prehistoric occupation (Figure 10; Sheet 2). The site form provides no other information pertaining to

methods of identification, recovered artifacts, recorder, date identified, site type, age of occupation or National Register of Historic Places (NRHP) eligibility for Site 64-65. This site is located almost 500 feet to the south of the existing CT DOT corridor and has been plotted within the current the east to west trending Broad Street alignment (Figure 9; Sheet 2). Based on this location, Site 84-65 likely has been destroyed by modern construction and will not be impacted by the Project. No additional examination of this site is warranted.

Site 84-73 (Milford)

This site, also known as the Peter Pond Project Site, was recorded by Jaclyn Nadeau of the Connecticut Office of State Archaeology at an unspecified date. The placement of Site 84-73 on the official site form corresponds to the location of the Milford Cemetery, which is situated along the northern edge of the existing CT DOT corridor in Milford, Connecticut (Figure 10; Sheet 3). According to the site form, while "looking for Peters Pond unmarked graves, excavators found three juvenile burials next to Mary's Pond, Peter's Mother." The recovered archaeological remains consisted of coffin nails, shroud pins, and wood samples dating from the eighteenth century. According to the site form, the excavated area, which contained good depositional integrity, measured 7 x 7 feet in size. The site form indicates that Site 84-73 is positioned in the southern portion of the Milford Cemetery and to the west of a large round wetland that once was referred to as Mary's Pond as shown on Sheet 4 of Figure 4. This archaeological site has not been assessed applying the NRHP criteria for evaluation (36 CFR 60.4 [a-d]). Since the Project has been designed to avoid the limits of the Milford Cemetery completely, neither Site 84-73 nor the Milford Cemetery will be impacted by proposed structure installation and the project. No additional examination of this site is recommended.

Site 107-15 (Orange)

Site 107-15 was recorded by Mary Harper of Archaeological and Historical Services, Inc., (AHS) in 2010. The site was identified during a Phase IB cultural resources reconnaissance survey of then-proposed upgrade areas associated with the Orange Train Station in Orange, Connecticut. According to the submitted site form, Site 107-15 yielded 1 quartz Lamoka-like projectile point, a single quartz bifacial retouch flake, 2 bottle glass shards, and 1 piece of window glass. The prehistoric component was attributed to a Late Archaic period of occupation (ca., 3,900 to 6,000 years ago) based on the recovery of the Lamoka-like projectile point, while the historical period component dated from an unknown time period. Despite the small amount of archaeological data recovered, Harper suggested that Site 107-15 may have been eligible for listing on the NRHP applying the criteria for evaluation (36 CFR 60.4 [a-d]). This site is located between Structures P982N and P983S along Access Road AR-P-982N-W in Orange, Connecticut (Figure 10; Sheets 7 and 8). It is recommended that Access Road AR-P-982N-W be cleared using hand techniques, that tree stumps not be grubbed in this area, and that the road be covered with timber matting during construction to avoid any potential ground disturbance and impacts to Site 107-15. If ground disturbance within the site area cannot be avoided through the use of the above-referenced Best Management Practices (BMPs), it is recommended that Phase II testing and evaluation be completed to determine the NRHP eligibility of Site 107-15.

Site 107-16 (Orange)

Sie 107-16 also was recorded by Mary Harper of AHS in 2010, and it was identified to the northeast of Site 107-15 during the Phase IB cultural resources reconnaissance survey of then-proposed upgrade areas associated with the Orange Train Station in Orange, Connecticut. Harper indicated that the site yielded "1 quartz drill and a charred unidentified botanical fragment." Based on the archaeological data recovered, the site could not be attributed to a particular period of occupation or cultural affiliation. Nevertheless, Harper indicated that "the charred botanical fragment may suggest a feature is present," and that Site

107-16 may have been eligible for listing on the NRHP. Thus, Phase II testing and evaluation of Site 107-16 was recommended to determine its NRHP eligibility applying the criteria for evaluation (36 CFR 60.4 [a-d]). This site is located well away from any of the proposed construction areas and will not be impacted by the proposed Project (Figure 10; Sheets 7 and 8). Therefore, no additional archaeological examination of Site 107-16 is recommended.

Soils Series Contained Within the Existing CT DOT Corridor

In order to further refine the archaeological context of the area and to evaluate the likelihood that any yet-to-be-identified archaeological sites may be located within the existing CT DOT corridor, Heritage reviewed soils within and immediately adjacent to the proposed construction areas (Figure 11; Sheets 1 through 12). With respect to the potential for identifying prehistoric archaeological sites, the existing CT DOT corridor was examined to determine which portions of it retained a no/low or moderate/high potential to yield intact archaeological deposits based on soils present, as well as slope, aspect, soils, and distance to water. In general, areas located less than 1,000 feet and no more than 2,000 feet from a fresh water source water and that contain slopes of 8 percent or less and well-drained soil types were deemed to retain a moderate/high potential for producing prehistoric archaeological deposits. This is in keeping with broadly based interpretations of prehistoric settlement and subsistence models that are supported by previous archaeological research. It is also may expected that there will be variability of prehistoric site types in the moderate/high sensitivity zones. For example, large Woodland period village sites and Archaic period seasonal camps may be expected along large river floodplains, near stream/river confluences, or in coastal environments. Smaller temporary or task specific sites may be expected on level areas with well-drained soils that are situated more than 1,000 feet but less than 2,000 feet from a water source. Finally, steeply sloping areas, poorly drained soils, or areas of previous disturbance are deemed to retain a no/low archaeological sensitivity since they are generally not habitable. The subtle nuances of prehistoric settlement and subsistence patterns are beyond the scope of research needed for the current investigation, but the methods of stratification discussed above are suitable for analyzing the Existing CT DOT corridor and associated construction areas.

The Existing CT DOT corridor was also assessed on the potential for yielding intact historical period archaeological sites. Project elements that are situated within 500 feet of a previously identified historical period archaeological site or an above-ground NRHP property/district that may have associated archaeological deposits also may be deemed to retain a moderate/high archaeological sensitivity if intact soil deposits are present. In contrast, those areas situated over 500 feet from any of the above-referenced property types may considered to retain a no/low historical period archaeological sensitivity.

As mentioned above, environmental characteristics influenced prehistoric and historical period site selection, where gently sloping areas with well-drained soils situated near fresh water sources were considered desirable locations. Figure 11; Sheets 1 through 12 show the various major types within the Existing CT DOT corridor They include Raypol silt loam (soil code 12), Dumps (soil code 302), Udorthents-Urban Land (soil code 306), and Urban Land (soil code 307). The Raypol silt loam soil series is attributed to wet areas. Dumps are those areas that have been filled with debris and highly modified. Udorthents-Urban Land include areas that have been developed in the past and have been subject to cutting, filling, smoothing, and reworking on a large scale. Finally, Urban Land soils are those types that have generally been disturbed in the past and are now covered with impermeable surfaces such as concrete, pavement, and buildings. None of the soil types located within the Existing CT DOT corridor are well correlated with either prehistoric or historical period site locations, and all of them would be considered no/low archaeologically sensitive areas.

Summary of Archaeological Context and Potential

The review of CT-SHPO files revealed that there are four previously recorded archaeological sites located within 500 feet of either side of the Project centerline; however, three of these (Sites 84-65, 84-73, and 107-16) are situated in areas that are well outside of the Project footprint and have no potential to be impacted by construction. In contrast, Site 107-15, is situated along the northern edge of Access Road AR-P-982N-W, which extends from Structure P982N to Structure P983N (Figure 10; Sheets 7 and 8). This site was identified by AHS in 2010 and assessed as potentially eligible for listing on the NRHP applying the criteria for evaluation (36 CFR 60-4 [a-d]). In order to avoid construction-related impacts to this site, it is recommended that Access Road AR-P-982N-W be cleared using hand techniques, that tree stumps in the area not be grubbed, and that the road is covered with timber matting during construction to avoid any potential ground disturbance. If these BMPs are employed, no additional archaeological examination of Site 107-15 is recommended. If the use of BMPs is not feasible given Project design constraints and there is the potential for construction-related impacts, it is recommended that Phase II NRHP testing and evaluation of Site 107-15 be completed. Based on the archaeological and environmental data at hand, the remainder of the Existing CT DOT corridor appears to have been largely disturbed and retains little, if any, potential to contain intact archaeological deposits. Other than consideration of the area containing Site 107-15, no archaeological examination of the Existing CT DOT corridor is recommended prior to construction.

National/State Register of Historic Places Within the Vicinity of the Existing CT DOT

The review of CT-SHPO files also revealed that there are five NRHP properties/districts recorded in the immediate vicinity of the Existing CT DOT corridor, all of which are located in Milford, Connecticut. No NHRP properties were identified within the vicinity of the Existing CT DOT corridor in Orange, West Haven, or New Haven. The identified NRHP resources consist of The Academy of Our Lady of Mercy—Lauralton Hall, River Park Historic District, U.S. Post Office – Milford Main, St. Peter's Episcopal Church, and Taylor Memorial Library. All of these resources are located in Milford and they are discussed in turn below. The review also indicated that there are no listed State Register of Historic Places properties situated within the immediate vicinity of the Existing CT DOT corridor; however, all of the NRHP properties/districts referenced above also are included in the State Register of Historic Places. The identified above-ground historic resources in the vicinity of the Existing CT DOT corridor centerline are discussed below.

The Academy of Our Lady of Mercy—Lauralton Hall

The Academy of Our Lady of Mercy—Lauralton Hall is situated at 200 High Street in Milford, Connecticut (Figure 13; Sheet 2). The Victorian era campus is the former estate of Charles Hobby Pond, former Lieutenant Governor and Governor of the State of Connecticut from 1851 through 1854. This property was added to the NRHP in August of 2011. The Academy was established in 1905 by the Sisters of Mercy as an independent high school for girls of the Roman Catholic faith. The Academy is an extension of the Roman Catholic Archdiocese of Hartford. It is the oldest Catholic college-preparatory school devoted to girls education in Connecticut. The Academy campus, which consists of 30 acres of land containing numerous education and outbuildings, parking areas, and recreation fields, is located one block to the northwest of the Existing CT DOT corridor. The school provides education for girls from throughout Connecticut. Notable past pupils include Democratic Congresswoman Rosa Delauro, para-normal investigator Lorraine Warren, and Senior Vice President of Communications for Comcast NBC Universal Kathy Kelly-Brown. The Academy of Our Lady of Mercy—Lauralton Hall is considered significant in the areas of architecture, education, and social history for the period of significance between 1864 and 1960. It was considered eligible for listing to the NRH under Criterion A, which stated that a property is associated with events that have made a significant contribution to the broad patterns of our history and Criterion C. The latter indicates that the property embodies the distinctive characteristics of a type, period,

or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.

River Park Historic District

The River Park Historic District was listed on the NRHP in 1986. It encompasses the residential and municipal center of Milford, Connecticut and it is situated between Boston Post Road to the north and Milford Harbor to the south (Figure 12; Sheets 2 and 3). A total of 192 buildings and sites have been recorded within the River Park Historic District. Of these, the majority (n=168) are considered contributing elements to the historic district. The heart of the River Park Historic District contains a municipal open space characterized by three parks, four bridges, and two dams. With the exception of the King's Bridge on Maple Street, which was built in 1952, all of the bridges and both dams pre-date 1936. The vast majority of the structures contained within this historic district were built between 1800 and 1950, with only 12 structures dating from prior to 1800. While various programs designed to improve the appearance of the River Park Historic District have altered it historical appearance, the layout of the River Park Historic District has remained similar to its original early colonial period form. Being a downtown historical district, institutional buildings are the primary architectural type representing the River Park Historic District. The Milford City Hall, for example, was built in 1916 in the Classical Revival Style. The United Church of Christ Congregational Church, which dates from 1823 also has a large presence within the district; it was constructed in the Adamesque Style. Other municipal and institutional buildings in the area include three public schools built between 1908 and the 1970s (Old Milford High School, Old Central Grammar School, and Milford High School). The River Park Historic District also contains the county courthouse and a post office to the south, both of which were constructed in the 1930s. The majority of the historic residences located within this historic district are relatively simple wood framed constructions that were built in the Vernacular Style and most date from after 1850. Very few examples of colonial period houses remain within the River Park Historic District. They include the Thomas Buckingham House at 61 North Street), which is thought to be the oldest house in Milford and constructed ca., 1650; Abijah Carrington House at 88 West Main Street; and the Samuel Durand House at 24 North Street, which is thought to date from 1725. According the NRHP nomination form, "the River Park Historic District comprises the residential and institutional center of Milford. It is a significant and distinguishable entity which illustrates the development of the town from settlement to the present (1650-1936) (Criterion A). Good representative vernacular examples of most of the major domestic styles are contained within the district, including a notable group of well-preserved Greek Revival-style houses (Criterion C)." Its period of significance is 1650 to 1936.

U.S. Post Office – Milford Main

The U.S. Post Office-Milford Main, also known as Milford Main Post Office, was listed on the NRHP in 1986. This historical post office building is located at 6 West River Street in Milford, Connecticut (Figure 12; Sheets 2 and 3). It is a Neo-Colonial building that was designed in 1929 by noted architect James A. Wetmore and built in 1931. Wetmore designed the building to be consistent with the 1926 Public Buildings Act, which mandated that new civic structures be similar to surrounding existing buildings of the area, in this case the adjacent county courthouse and nearby Milford City Hall. Wetmore designed a single-story building that is rectangular in plan. Construction plans called for the use of steel and concrete for the framing members to be faced in red brick and trimmed in limestone. The building is characterized by a low hip roof that is covered in slate tiles. Just below the roof line is a limestone cornice. The front facade of the buildings is five bays wide, with the two end bays sitting slightly back from the central ones. The projecting middle three bays have large sash windows topped by half-round windows and characterized by limestone accents. The main entry to the post office is in the center of the building; the doorway is framed by round columns and a modest entablature. There are also faux balconies beneath two of the

front elevation windows. The post office represents a fine example of Classical Revival design that is located amongst other of Milford's civic buildings. It is considered significant in the categories of architecture and community planning, which are encompassed within Criterion A and C of the NRHP criteria for evaluation (36 CFR 60.4 [a-d]), respectively.

St. Peter's Episcopal Church

St. Peter's Episcopal Church, which was added to the NRHP in 1979, is located at 61, 71, and 81 River Street in Milford, Connecticut (Figure 12; Sheets 2 and 3). This Gothic Revival church, which is located on the opposite side of the U.S. Post Office-Milford Main building discussed above, was built in the Gothic Revival between 1850 and 1851 using brownstone cut from the large quarries in Portland. The original building was expanded in the mid-1890s to include a parish hall and a rectory. The church was originally envisioned and designed by architect Frank Wills, who designed many buildings in the Gothic Revival Style. The plan of the church consists of a nave for the congregation, a chancel for the clergy and choir, and a tower-entrance; it does not contain side aisles, galleries, or transepts. According to the NRHP nomination form, St. Peter's Episcopal Church "is an excellent example of the Ecclesiological Movement in American church architecture, a movement which was a major factor in the development of the Gothic Revival style in this country. Further, the church is a representative example of the work of Frank Wills, a leader of this movement in America. Finally, the church is the only remaining 19th-century structure within an important historical area of Milford along River Street, from the town's traditional municipal center at the juncture of West River Street on the north, to the River Street railroad bridge on the south." For these reasons, it was considered eligible for listing under Criterion C of the NRHP criteria for evaluation (36 CFR 60.4 [a-d]).

Taylor Memorial Library

The Taylor Memorial Library was listed on the NRHP in 1979. This historical building is also known as Taylor Library or Old Library and it is located at 5 Broad Street in Milford, Connecticut (Figure 12; Sheets 2 and 3). The Taylor Memorial Library was designed by local architect designed by Joseph W. Northrop, a prominent architect from Bridgeport, Connecticut, and was constructed in 1894 and 1895 in the Richardsonian Romanesque Style. It is a masonry structure that is rectangular in plan and measures one-and-one-half stories in height. The building materials include a mixture local fieldstones, red sandstone, and yellow bricks. The main entrance to the library is along the south-facing façade and it slightly offset from the center of the building. It is located within a half-round arch topped opening surrounded by a three-part round-arched window and projecting roof gable. The front right corner of the building is characterized by a rounded projection that is covered with a bell-shaped roof. The interior of the building once contained rooms for the library stacks, a large hearth, and several windows that were made of finely crafted leaded panes. Several changes to the building after the 1920s included the replacement of the original slate roof with an asphalt one, the addition of a second set of doors to the library's entrance, the removal of the original stacks and gas lights, breakage and loss of some of the original windows, and the destruction of some of the original interior oak molding trim work. These alterations have diminished some of the library's historical integrity; however, the overall historic fabric of the building remains. The construction of the Taylor Memorial Library was funded by prominent citizen Henry Augustus Taylor. Mr. Taylor also was a railroad executive and the library is one of several buildings he funded in memory of his mother Mary. The Taylor Memorial Library is considered significant under Criterion C of the NRHP criteria for evaluation (36 CFR 60.4 [a-d]) for its association with Richardsonian Romanesque Style architecture, architect Joseph W. Northrup, and "unprecedented architectural patronage in Milford by Henry Augustus Taylor," a prominent railroad executive.

Metro-North Railroad (MNR)/Amtrak Railroad Alignment

In addition to the archaeological sites and NRHP properties/districts noted above, the current assessment survey also considered the potential visual effects to the Metro-North Railroad (MNR)/Amtrak Railroad alignment, which itself has historical origins. In order to evaluate possible effects to the alignment, it was necessary to produce a brief historical context for the railroad. That context is included below.

Railroad history in Fairfield and New Haven Counties began in the 1840s, when the state's third railroad, the New York & New Haven Railroad, was incorporated. This line extended from New Haven west into New York State. Its construction was completed in 1849 and the line featured a single 69-mile long iron track that was designed mainly for passenger transportation. During the 1860s, the New York & New Haven Railroad's prospered as a result of high levels of ridership. The improved economic position of the railroad company permitted increased investment of the line's infrastructure, including the replacement of the iron rails with steel ones, the construction of new stations, and the expansion of maintenance facilities. The railroad also began the shipping of freight during the 1860s.

In 1872, the New York & New Haven Railroad merged with the Hartford & New Haven Railroad to become the largest transportation company in Connecticut. The company was renamed the New York, New Haven, & Hartford Railroad. Over the succeeding three decades, company leaders carried out a series of acquisitions and long-term leases, through which the rail line became a near-monopoly on transportation in Connecticut. The New York, New Haven, & Hartford Railroad owned railroads (including almost 1,000 steam engines by 1904), steamboats, and electric trolley lines (Turner and Jacobus 1987). New York, New Haven, & Hartford Railroad also purchased a number of electricity generation facilities, and was one of the first entities in the region to experiment with electric engines. The initial success with electric propulsion was along the route between New Haven and New York, and the choice of overhead wire systems was made because the third-rail system was demonstrably unsafe on open tracks (Turner and Jacobus 1987).

The process of using electricity to power the railroad began in 1904, and it was initiated along a segment of track between Woodlawn, New York and Stamford, Connecticut. Opened for use in 1907, it was the country's first trunk line electrification and used alternating current, which was a break with the less efficient direct current systems that had been in common use up to that point. Much of the system was designed and built by Westinghouse Electric and Manufacturing Company, which was pioneering commercial use of alternating current at the time. Between 1911 and 1914, the process was continued an additional 45 miles to extending to New Haven were electrified. Power generation was at first handled by a plant in Cos Cob, Greenwich, which was the first facility for generating 11,000 volts of alternating current at 25 cycles for railroad use. This later became the standard for railroad electrification in the United States. The Cos Cob power plant included a monitoring and control system, as well as a mode of transmission of electricity along a series of overhead catenaries and trolley wires. Electricity was also provided to the various stations and maintenance facilities along the line. Finally, an electrical signaling and communications system were also added. This system has remained in place and in operation for over 100 years

As mentioned in the introductory section of this report, the Project calls for decommissioning and removal the existing 115-kV facilities on the railroad catenary structures and moving them to a series of free-standing monopoles. The bonnets currently supporting the electrical lines may remain in place if CT DOT accepts ownership of them. If not, they will be removed and the historical catenaries will remain in place in their original configuration. Based on the brief history of the railroad presented above, the current Metro-North Railroad (MNR)/Amtrak Railroad alignment and its associated infrastructure are historical in

origin and are of significance related to railroad history, transportation, and the nineteenth/twentieth century development of the Connecticut shoreline. While UI proposes to separate the existing electrical lines from the Metro-North Railroad (MNR)/Amtrak Railroad alignment and possibly the bonnets located on top of the historical catenaries, no adverse effect (direct or visual) to the character-defining features of the railroad and its associated infrastructure are anticipated.

Preliminary Viewshed Analysis

As part of the investigation of the Existing CT DOT corridor, All-Points Technology Corporation (All-Points) prepared a preliminary Viewshed Analysis (VA) showing the visibility of the proposed Project structures within a 0.8 km (0.5 mi) buffer to the north and south of the railroad alignment. The VA shows year-round visibility of the Project elements from various vantage points; it is a preliminary depiction, but is not expected to change drastically when finalized. A portion of the VA is presented in Figure 13. Only this section is included as it is the only portion germane to the discussion of potential visual effects to the NRHP above-ground cultural resources described above, namely The Academy of Our Lady of Mercy—Lauralton Hall, River Park Historic District, U.S. Post Office – Milford Main, St. Peter's Episcopal Church, and Taylor Memorial Library. The remainder of the VA includes areas where no NRHP properties/districts have been recorded; thus, is it not included in this report.

A review of Figure 12 shows that The Academy of Our Lady of Mercy—Lauralton Hall, River Park Historic District, U.S. Post Office – Milford Main, St. Peter's Episcopal Church, and Taylor Memorial Library will be affected visually by the proposed structures associated with the project. However, the effect will be variable across these five resources. The visual effect to The Academy of Our Lady of Mercy—Lauralton Hall will be the least noticeable. Because this NRHP property is largely screened from the Existing CT DOT corridor by intervening vegetation and buildings, the visual effect of the proposed structural elements will be limited to less than half of The Academy of Our Lady of Mercy—Lauralton Hall property and most of that will occur within the open athletic fields in the eastern portion of the property. Similarly, the visual effect to the River Park Historic District is also only partial, and it will be limited to the southern portion of this historic district only; this area encompasses the municipal center of Milford. The remaining above-ground resources, including the U.S. Post Office – Milford Main, St. Peter's Episcopal Church, and Taylor Memorial Library, all fall within parts of the VA that indicates the structural elements of the Project will be visible from their location on a year round basis.

Summary and Recommendations

This Phase IA survey included a review of various data related to existing CT DOT corridor and its immediate surroundings, including historical mapping, aerial imagery analysis, a literature search related to previously identified archaeological sites and NRHP-listed properties, a preliminary viewshed of the construction area and surroundings in Milford, and a consideration of the historical nature of the railroad alignment itself. The survey revealed that the Access Road AR-P-982N-W area is the only Project item situated in close proximity to a known archaeological site (107-15) in Orange, Connecticut. It is recommended that the BMPs described above be used in the vicinity of Site 107-15. If this is not feasible, it is recommended that Phase II NHRP testing and evaluation of Site 107-15 be completed prior to construction. All other improvements will be situated away from previously identified archaeological deposits in areas characterized by previous disturbances, wetlands, poorly drained soils, or paved surfaces. These areas can be considered to possess a no/low archaeological sensitivity. No additional archaeological examination of these areas is recommended prior to construction. The proposed Project also has been designed so that are no impacts to the Milford Cemetery.

This Phase IA survey also has resulted in the determination that The Academy of Our Lady of Mercy—Lauralton Hall, River Park Historic District, Milford Main Post Office, St. Peter's Episcopal Church, and Taylor Memorial Library in Milford will not be impacted directly by the proposed Project. However, given that the Project structures in the vicinity of these NRHP-listed properties will reach between 38.1 and 42.6 m (125 and 140 ft) above the ground surface, they will be visible from each of these properties and will represent an adverse effect to their viewsheds. Since the design engineers have determined that poles measuring between 38.1 and 42.6 m (125 and 140 ft) in height are necessary these areas for both engineering and public safety reasons, it is recommended that UI work in consultation with the CT-SHPO to mitigate the visual impacts of construction to The Academy of Our Lady of Mercy—Lauralton Hall, River Park Historic District, Milford Main Post Office, St. Peter's Episcopal Church, and Taylor Memorial Library.

Finally, the proposed Project will necessarily result in alterations to the existing CT DOT corridor, which contains the railroad, itself is a historical landscape feature. These alterations will include removal of the existing electrical lines from the bonnets on top of the historic railroad catenaries, possible removal of the bonnets themselves, and the installation of electrical transmission structures along the existing CT DOT (Figures 14 and 15). These changes are not expected to have any adverse effect on the historical character-defining features of the railroad features within the existing CT DOT corridor. Thus no additional recordation of the railroad or its associated historical elements is recommended prior to construction. Overview photos of a sample of the proposed structure changes and access roads/work areas are contained within Figures 16 through 33. As mentioned above, the access points shown in the attached figures are at the 50 percent design level and they may evolve as the Project proceeds through the regulatory and siting processes. Nevertheless, design changes to the access points are not anticipated to have effects on cultural resources as the edges of the existing CT DOT corridor have already been highly modified and no longer retain the potential to produce archaeological deposits except in the area of the Milford Cemetery and Site 107-15 in Orange, which in the case of the former will be avoided during construction completely or in the latter will subjected to BMPs to protect potential archaeological deposits. The finalized version of the access points will be included in a final Design & Management Plan.

AdvanceCT and CTData Collaborative

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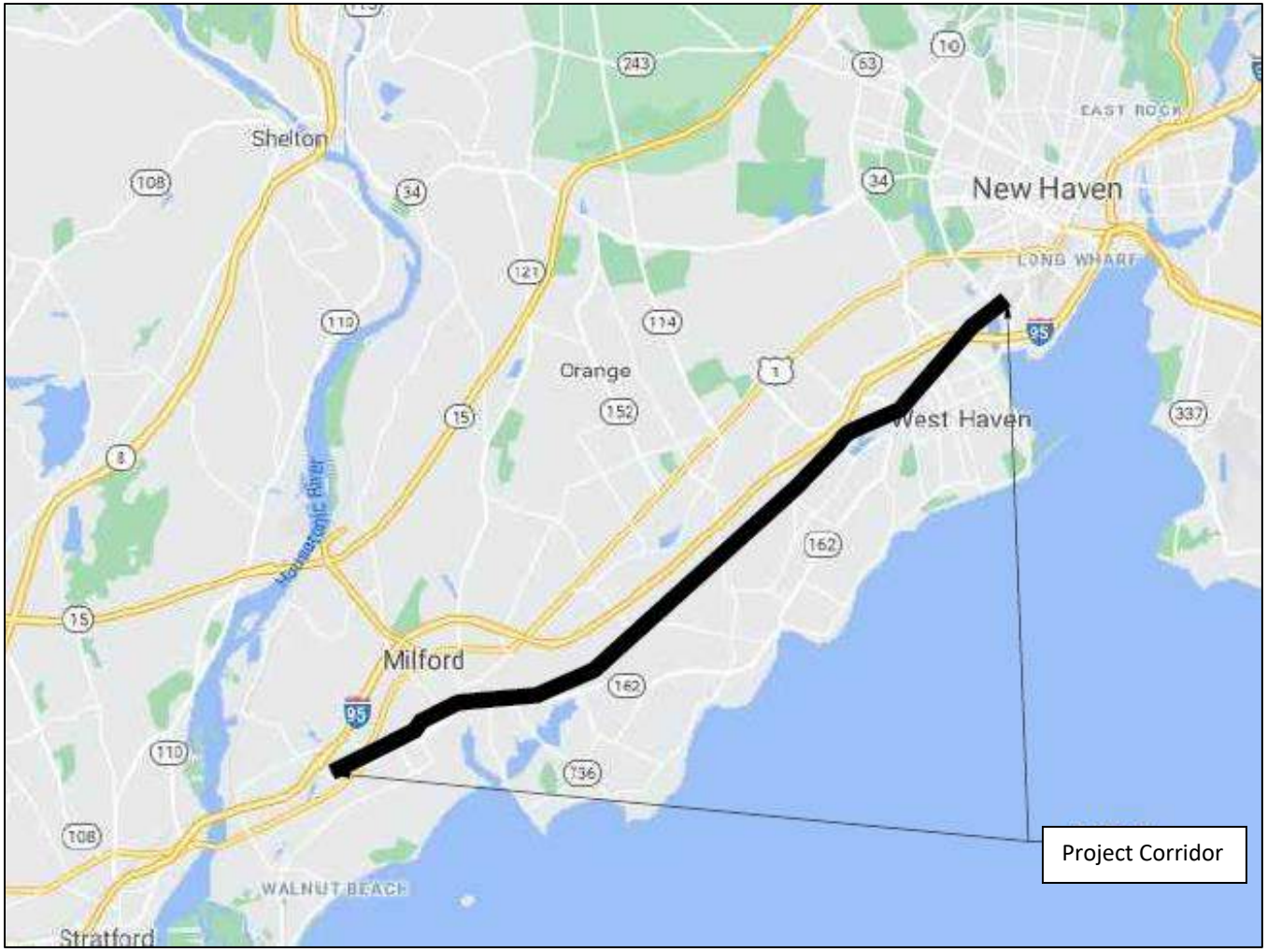


Figure 1. Location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut.

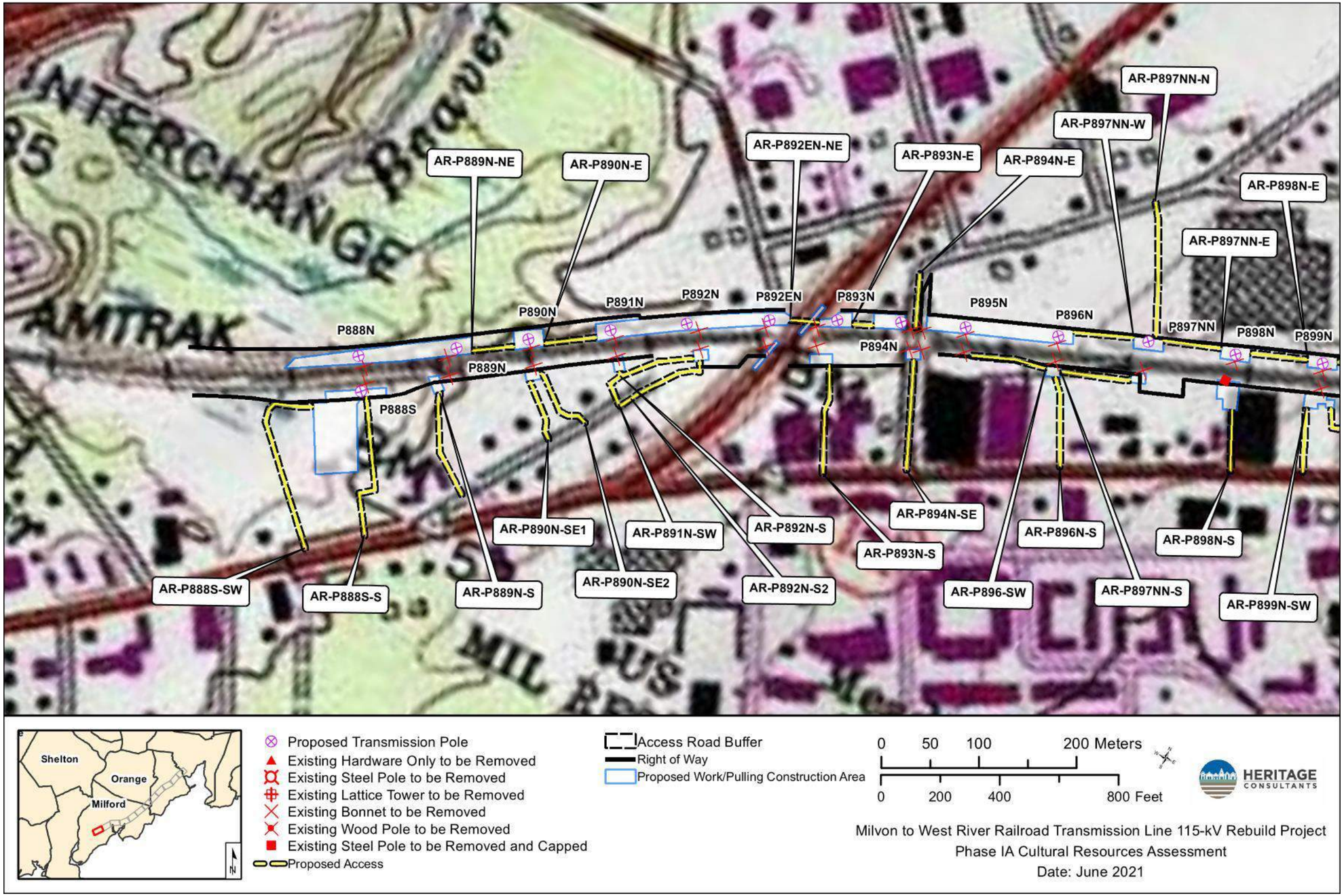


Figure 2; Sheet 1. Excerpt from a 1996 USGS 7.5' series topographic quadrangle image showing the proposed project items associated with the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut.

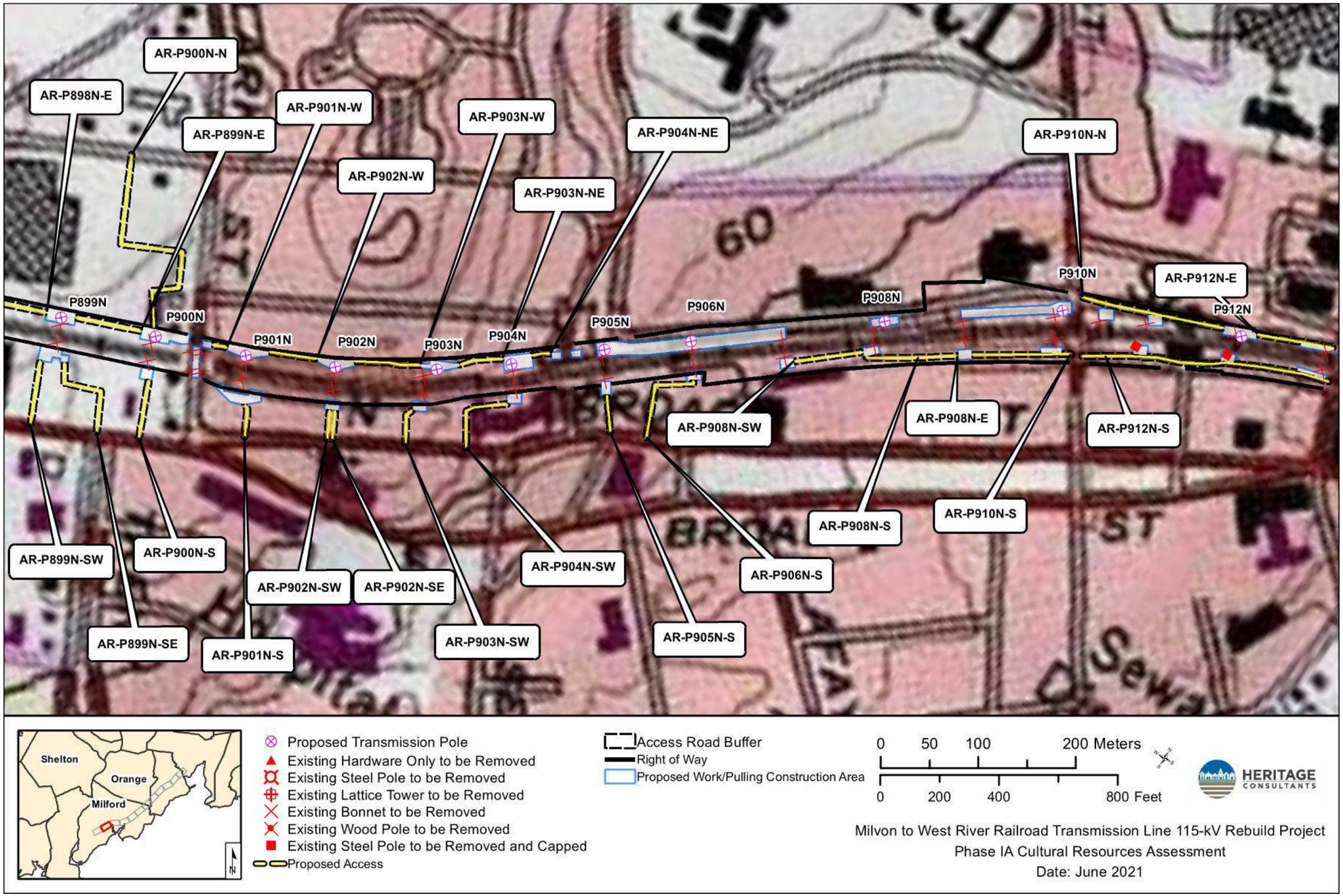


Figure 2; Sheet 2. Excerpt from a 1996 USGS 7.5' series topographic quadrangle image showing the proposed project items associated with the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut

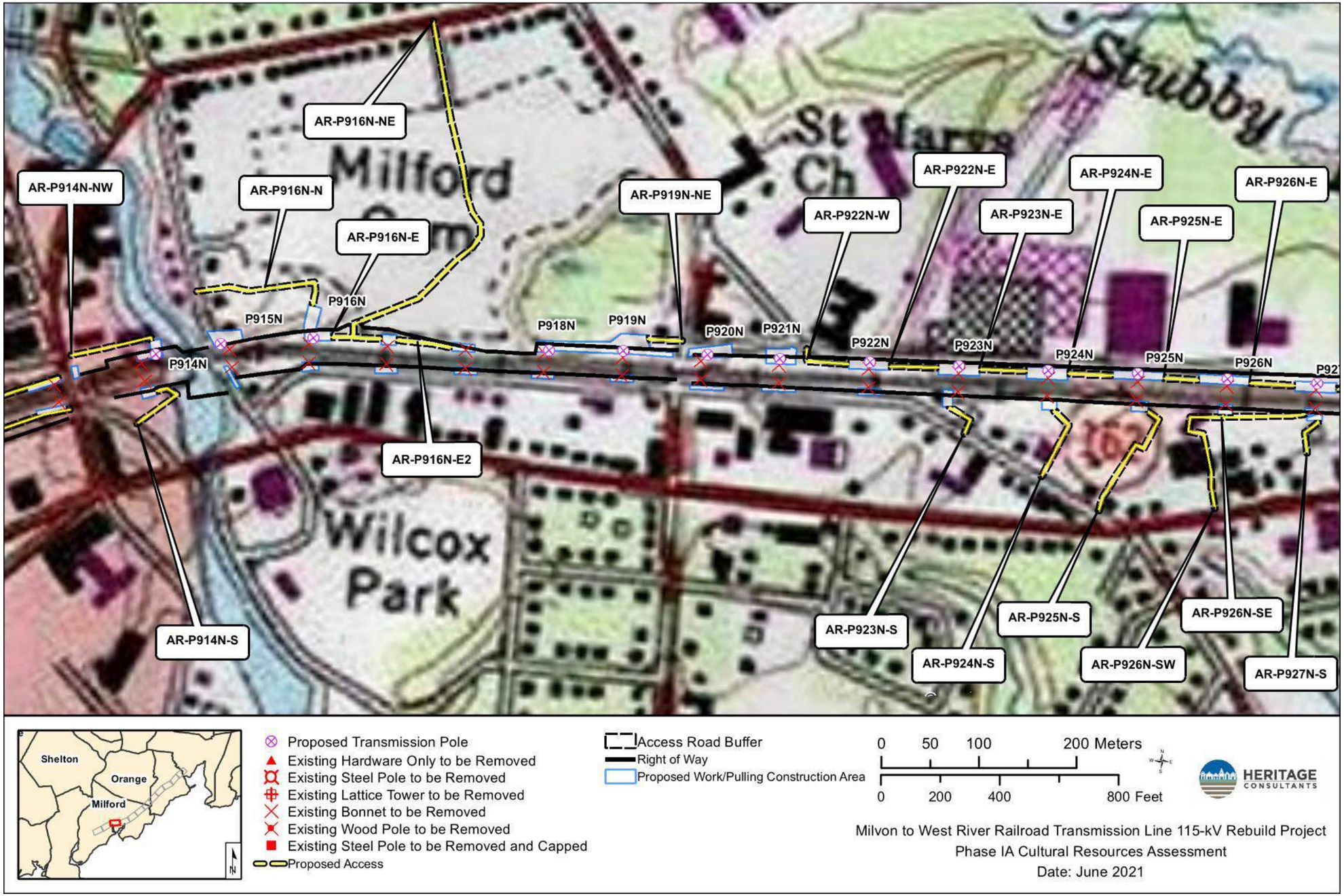


Figure 2; Sheet 3. Excerpt from a 1996 USGS 7.5' series topographic quadrangle image showing the proposed project items associated with the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut

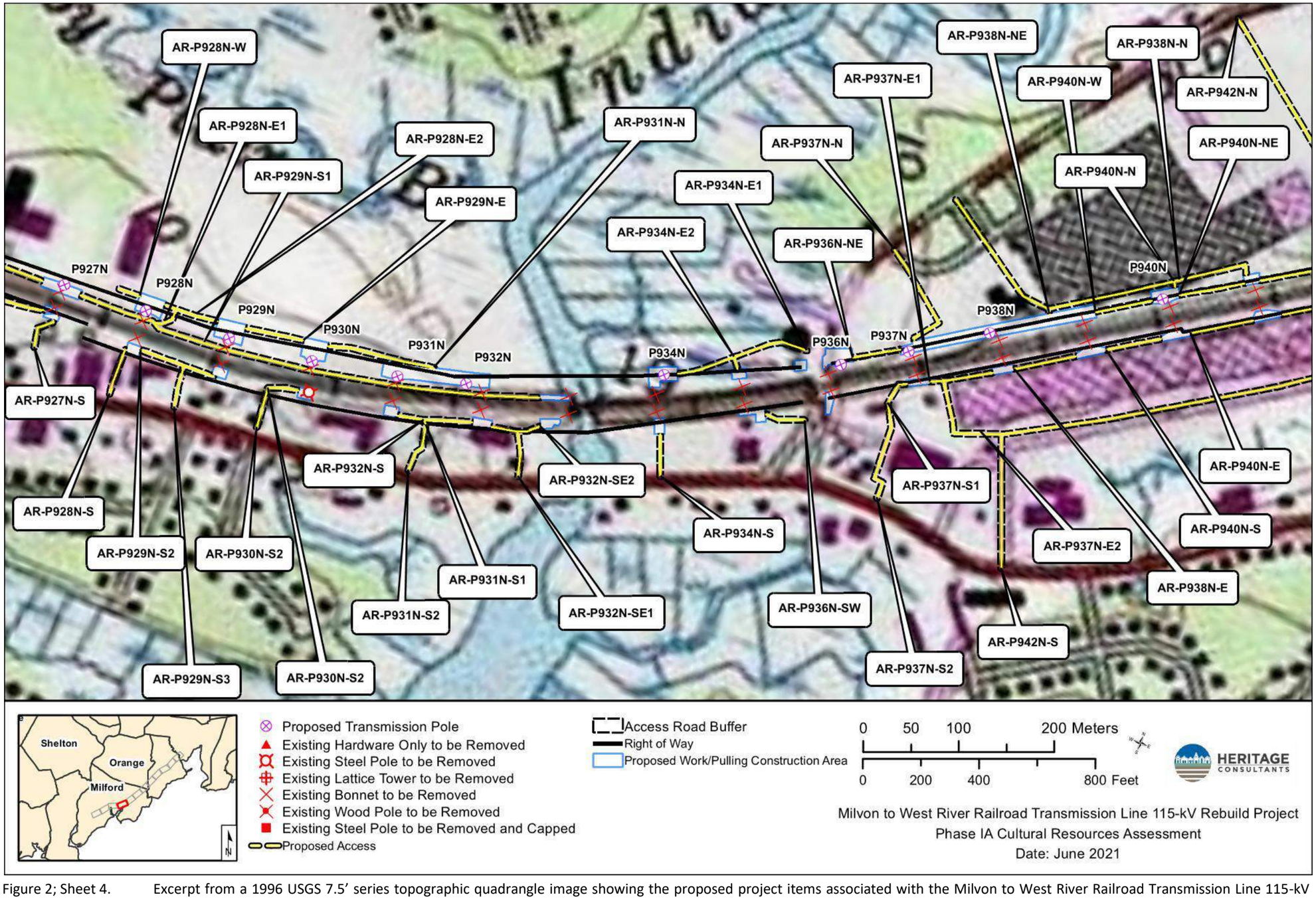


Figure 2; Sheet 4. Excerpt from a 1996 USGS 7.5' series topographic quadrangle image showing the proposed project items associated with the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut

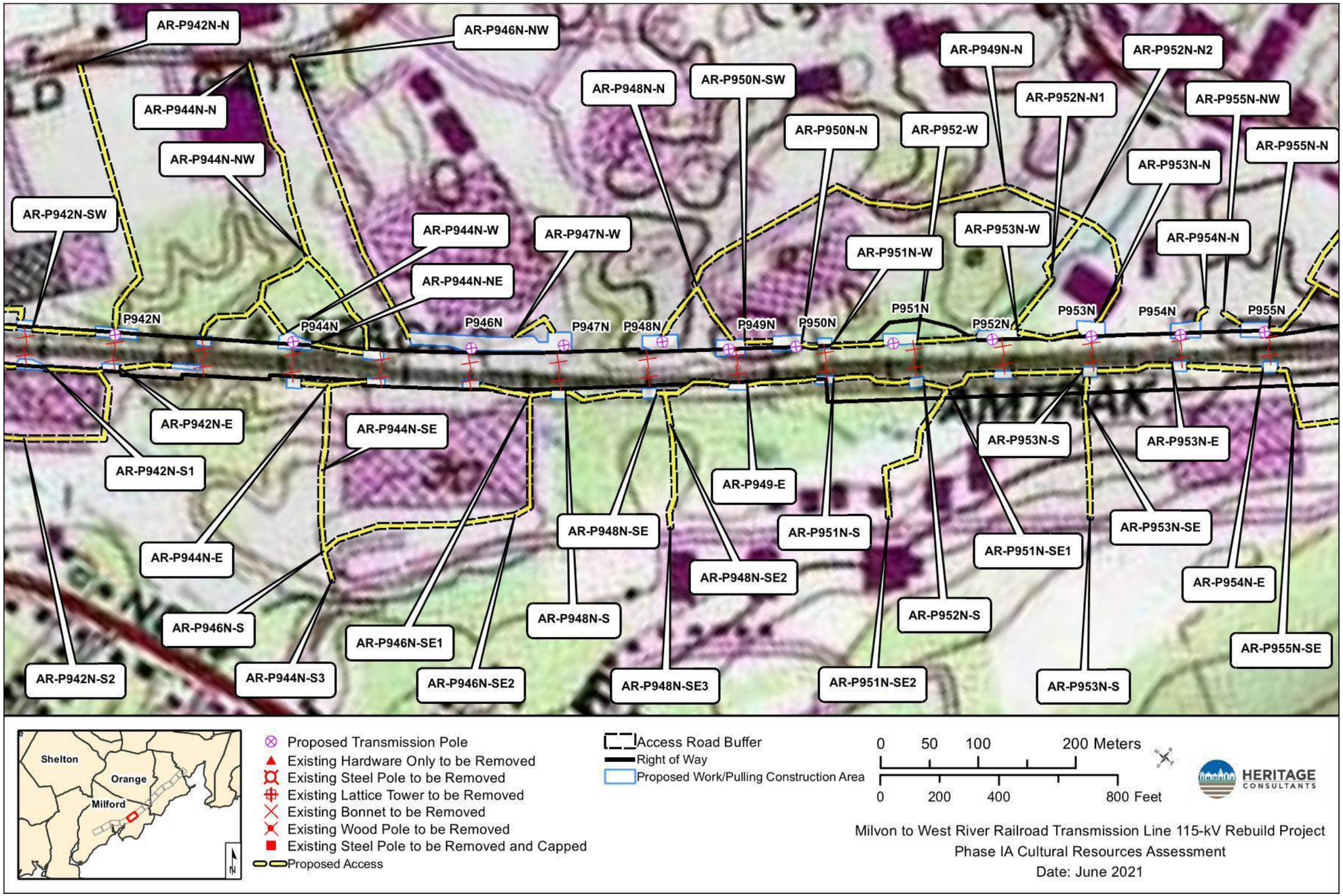


Figure 2; Sheet 5. Excerpt from a 1996 USGS 7.5' series topographic quadrangle image showing the proposed project items associated with the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut

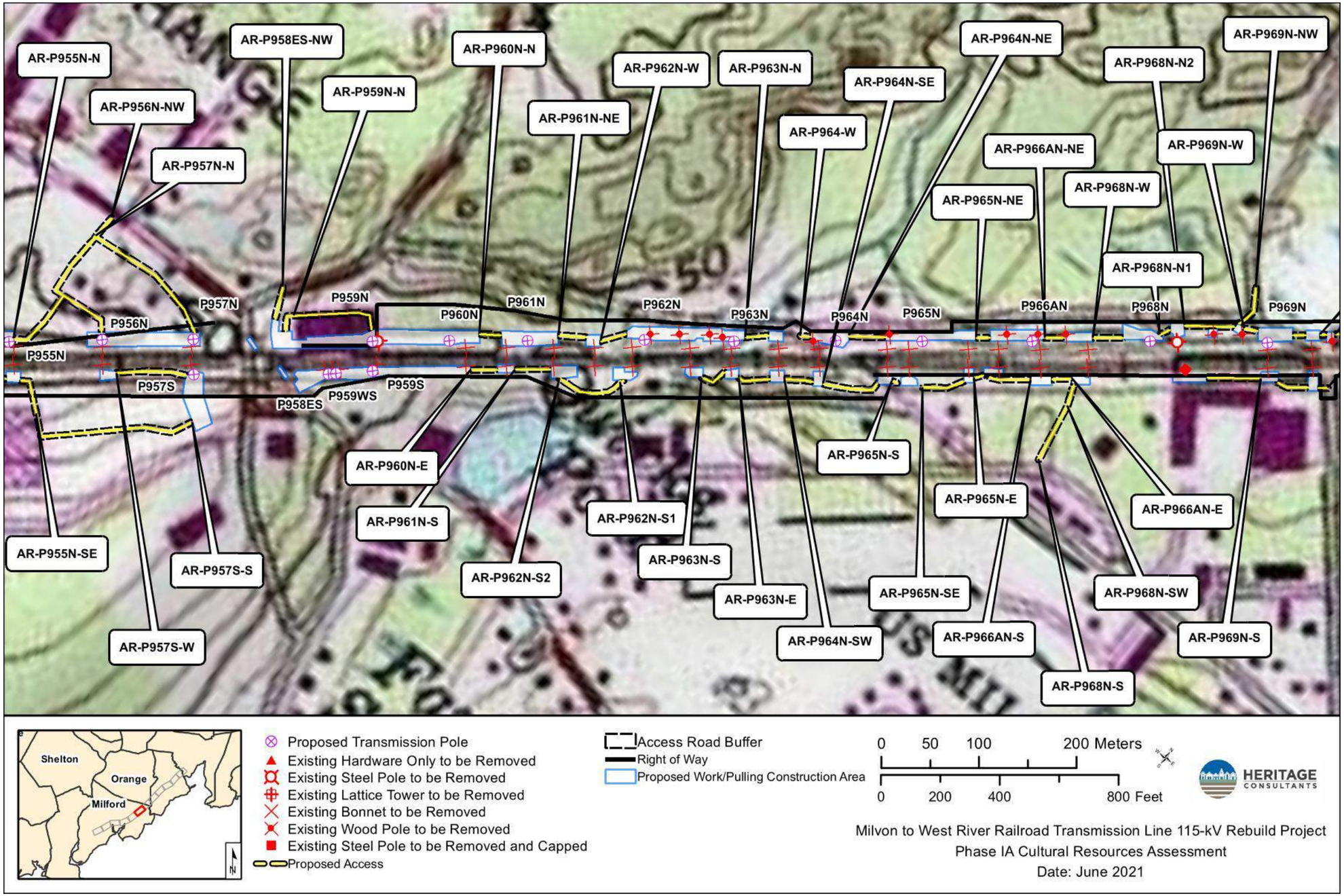


Figure 2; Sheet 6. Excerpt from a 1996 USGS 7.5' series topographic quadrangle image showing the proposed project items associated with the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut

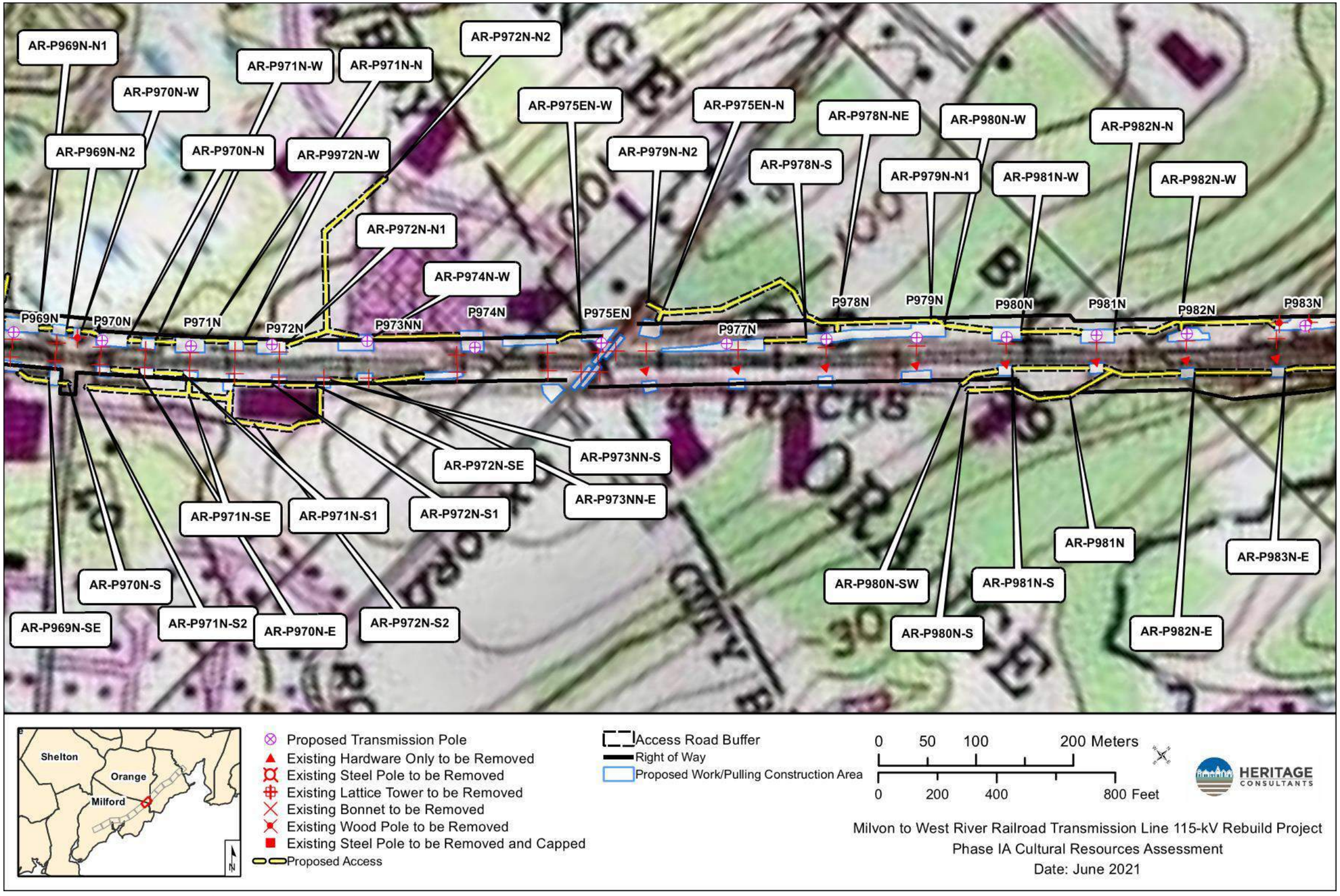


Figure 2; Sheet 7. Excerpt from a 1996 USGS 7.5' series topographic quadrangle image showing the proposed project items associated with the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut

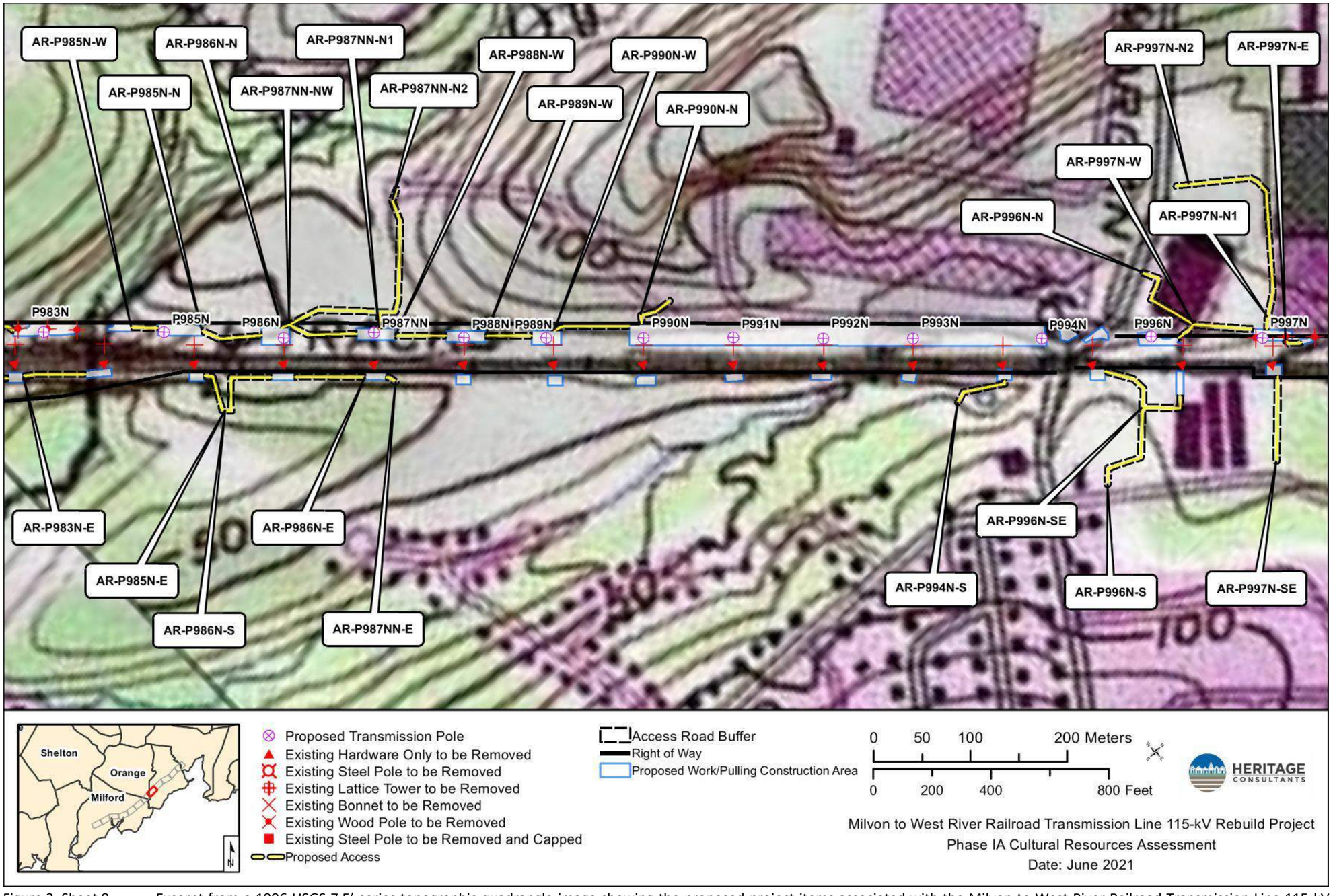


Figure 2; Sheet 8. Excerpt from a 1996 USGS 7.5' series topographic quadrangle image showing the proposed project items associated with the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut

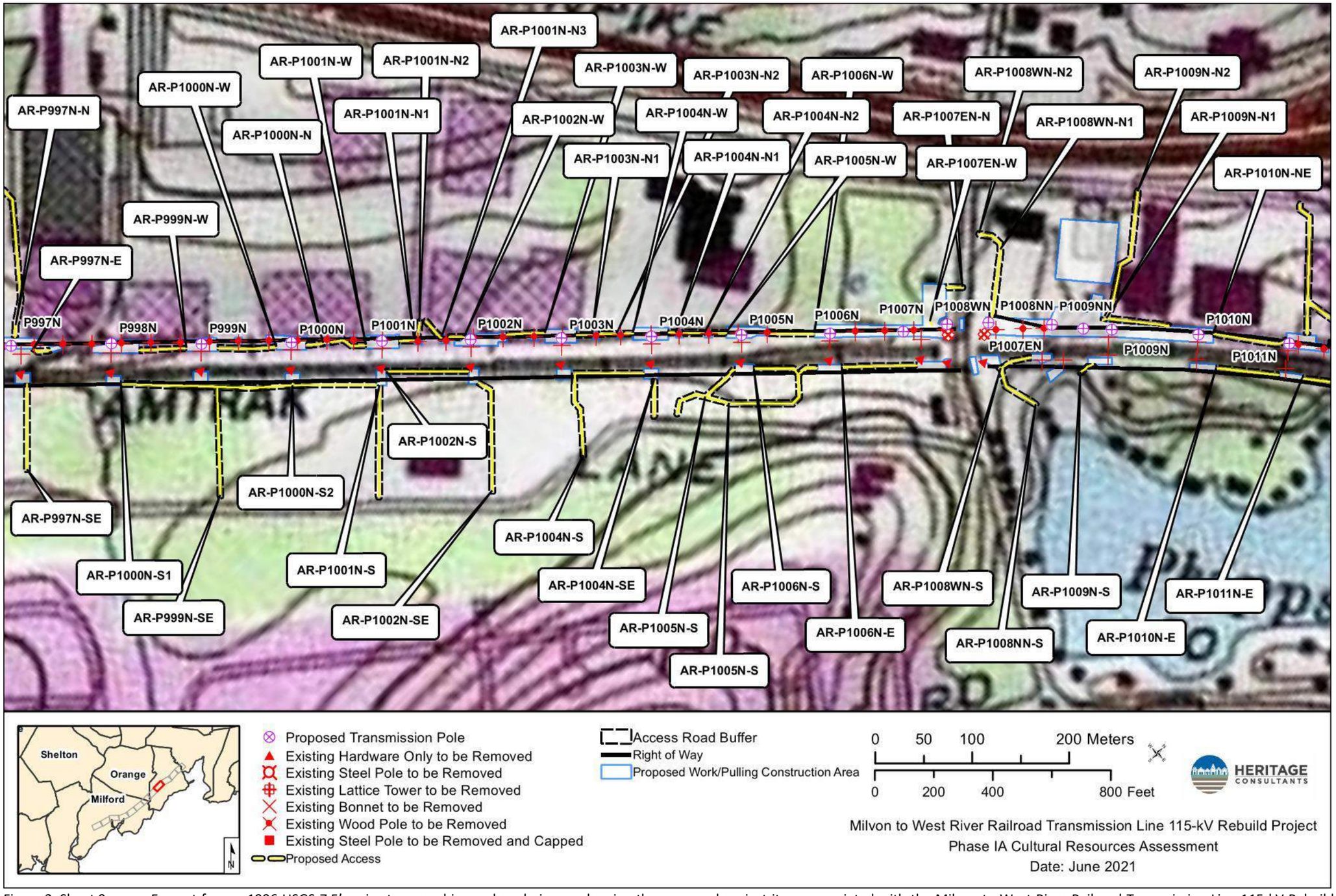


Figure 2; Sheet 9. Excerpt from a 1996 USGS 7.5' series topographic quadrangle image showing the proposed project items associated with the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut

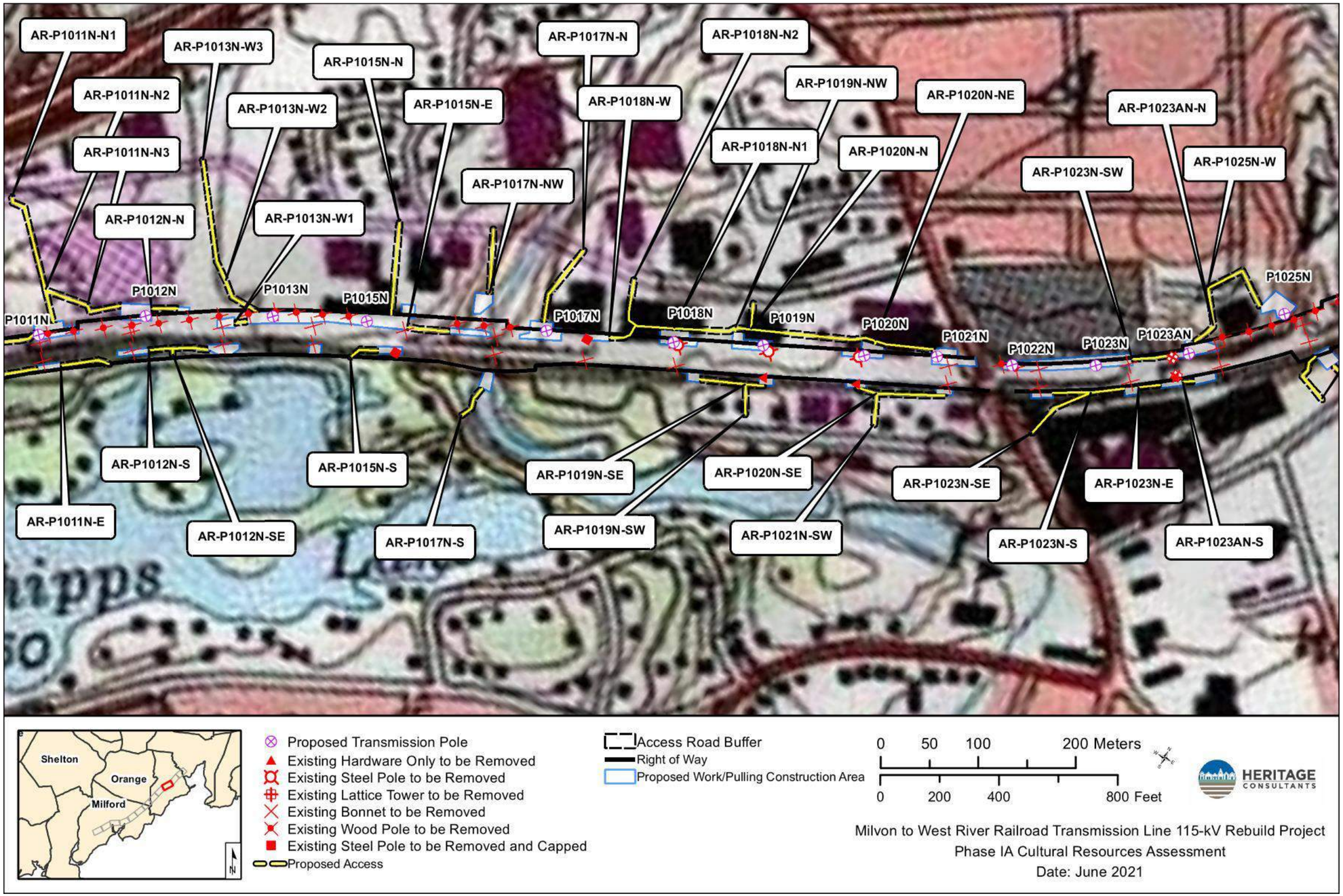


Figure 2; Sheet 10. Excerpt from a 1996 USGS 7.5' series topographic quadrangle image showing the proposed project items associated with the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut

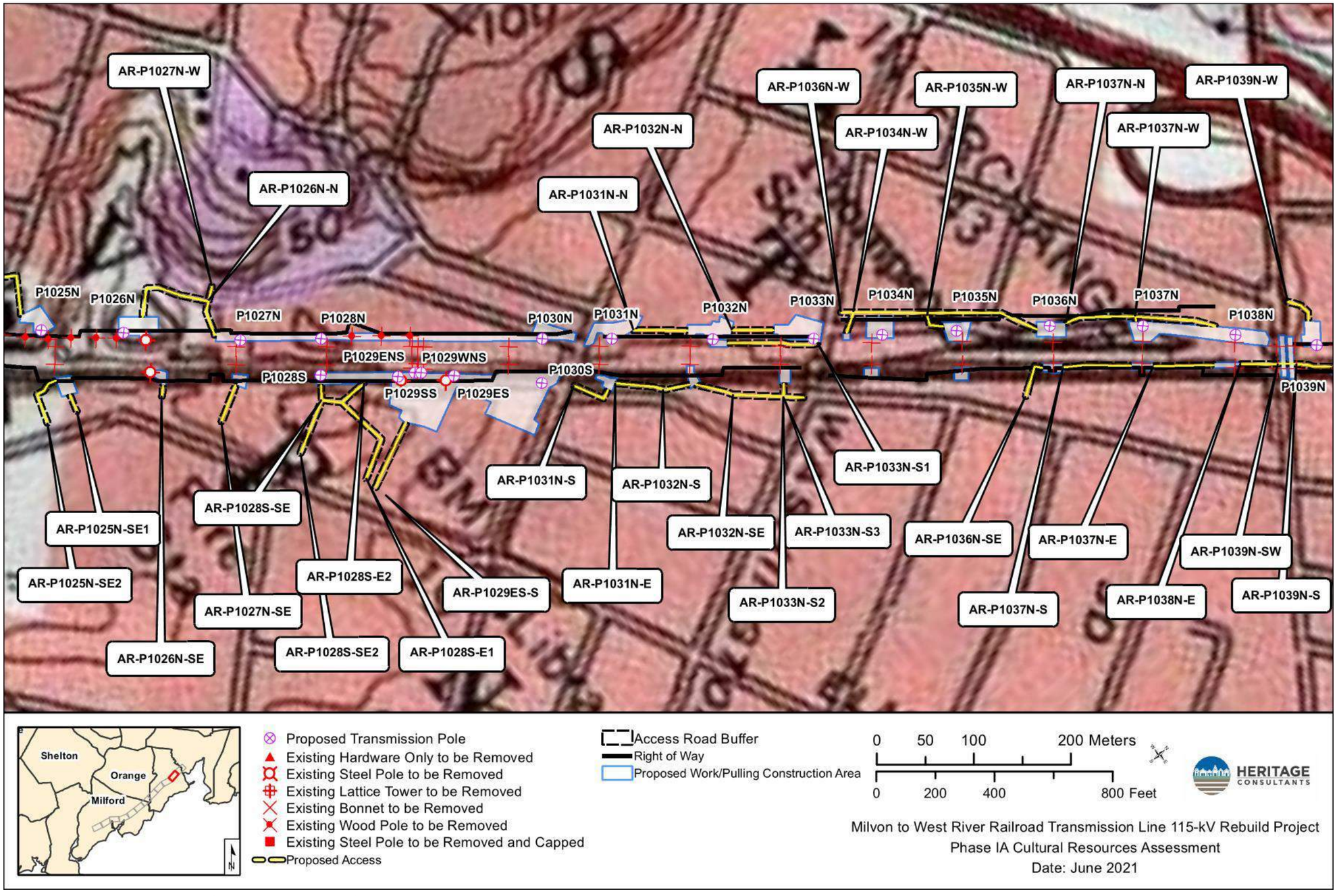


Figure 2; Sheet 19. Excerpt from a 1996 USGS 7.5' series topographic quadrangle image showing the proposed project items associated with the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut

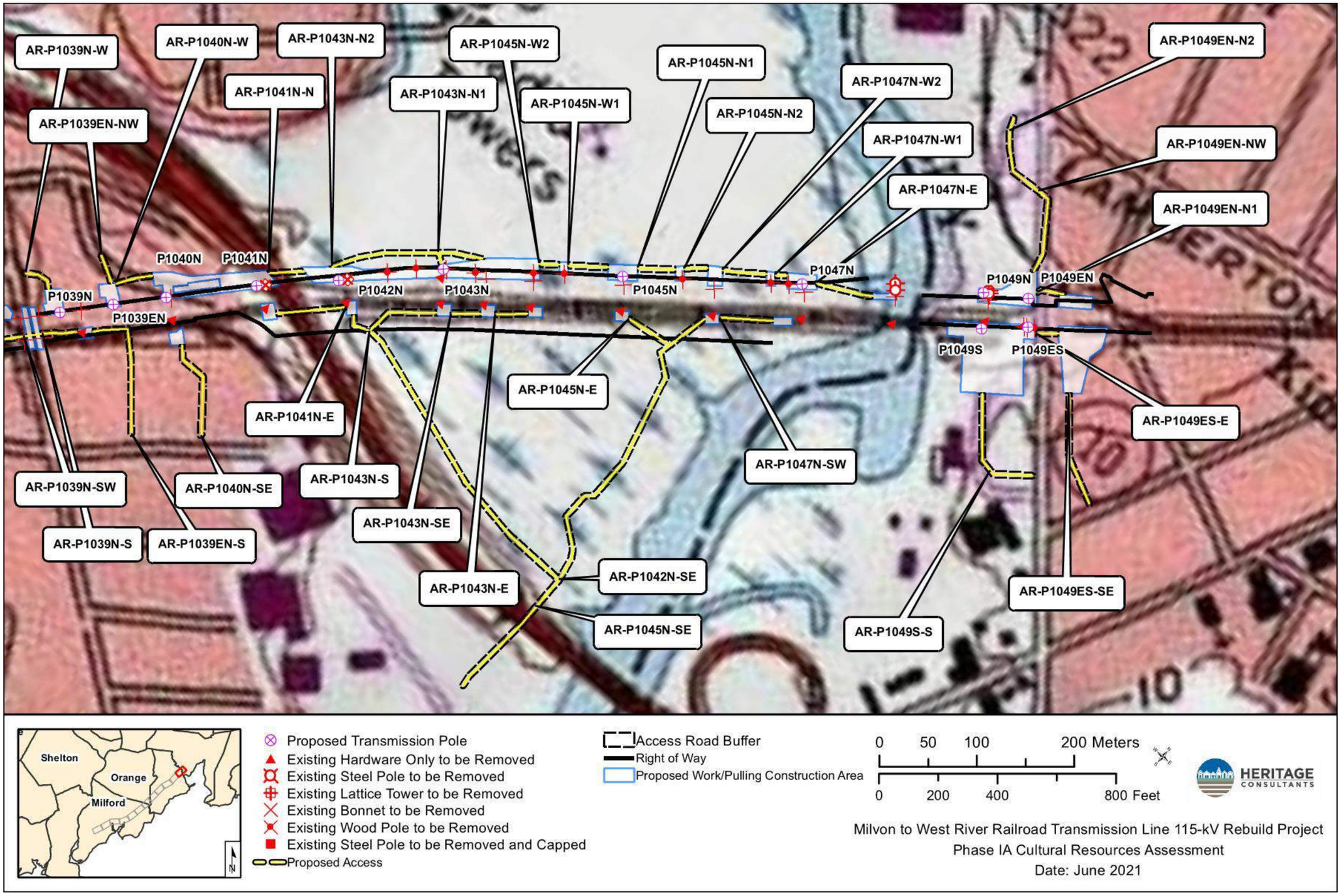


Figure 2; Sheet 12. Excerpt from a 1996 USGS 7.5' series topographic quadrangle image showing the proposed project items associated with the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut

Figure 3; Sheet 1. Excerpt from an 1856 map showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut (H. & C.T. Smith 1856).

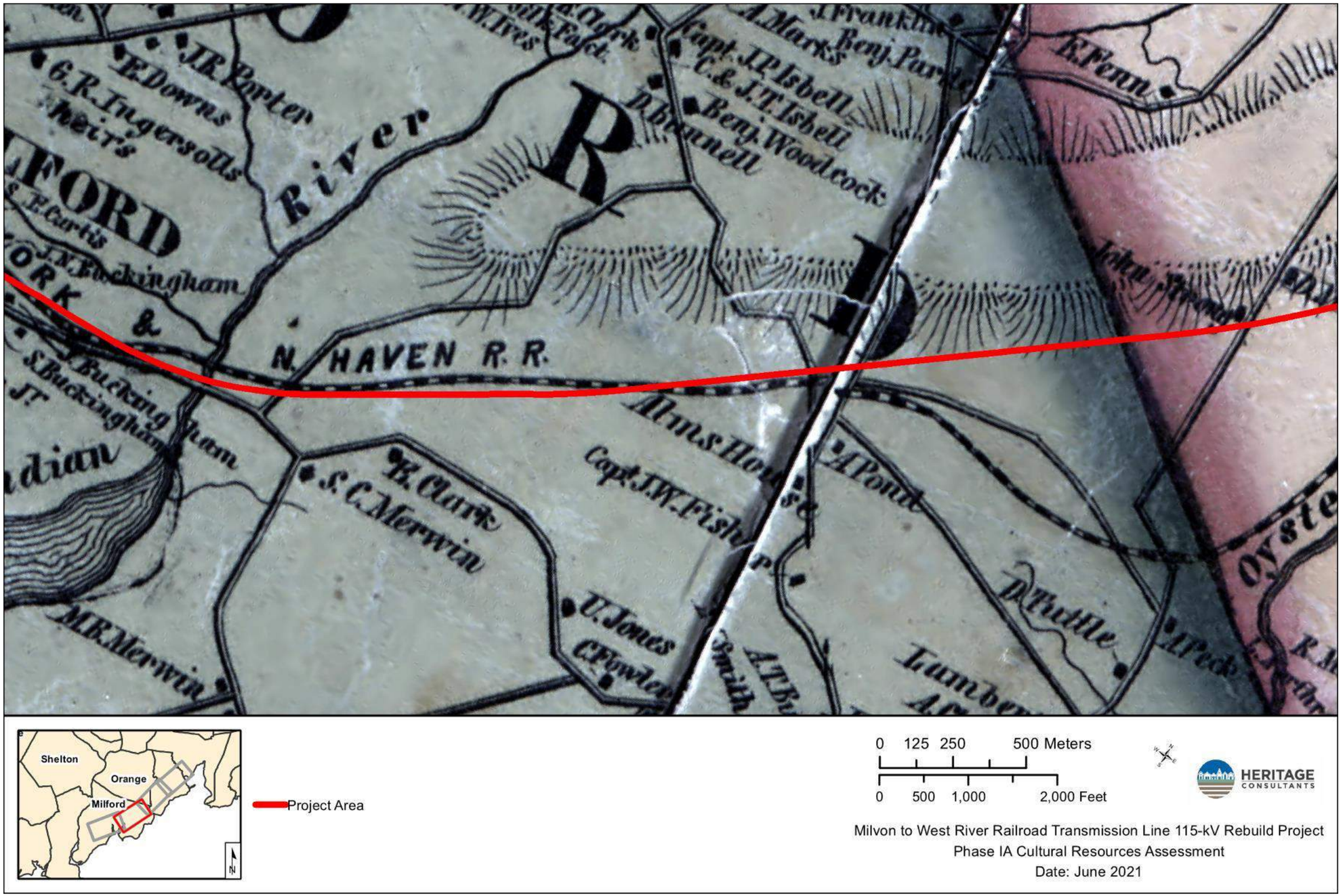


Figure 3; Sheet 2. Digital Excerpt from an 1856 map showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut (H. & C.T. Smith 1856).

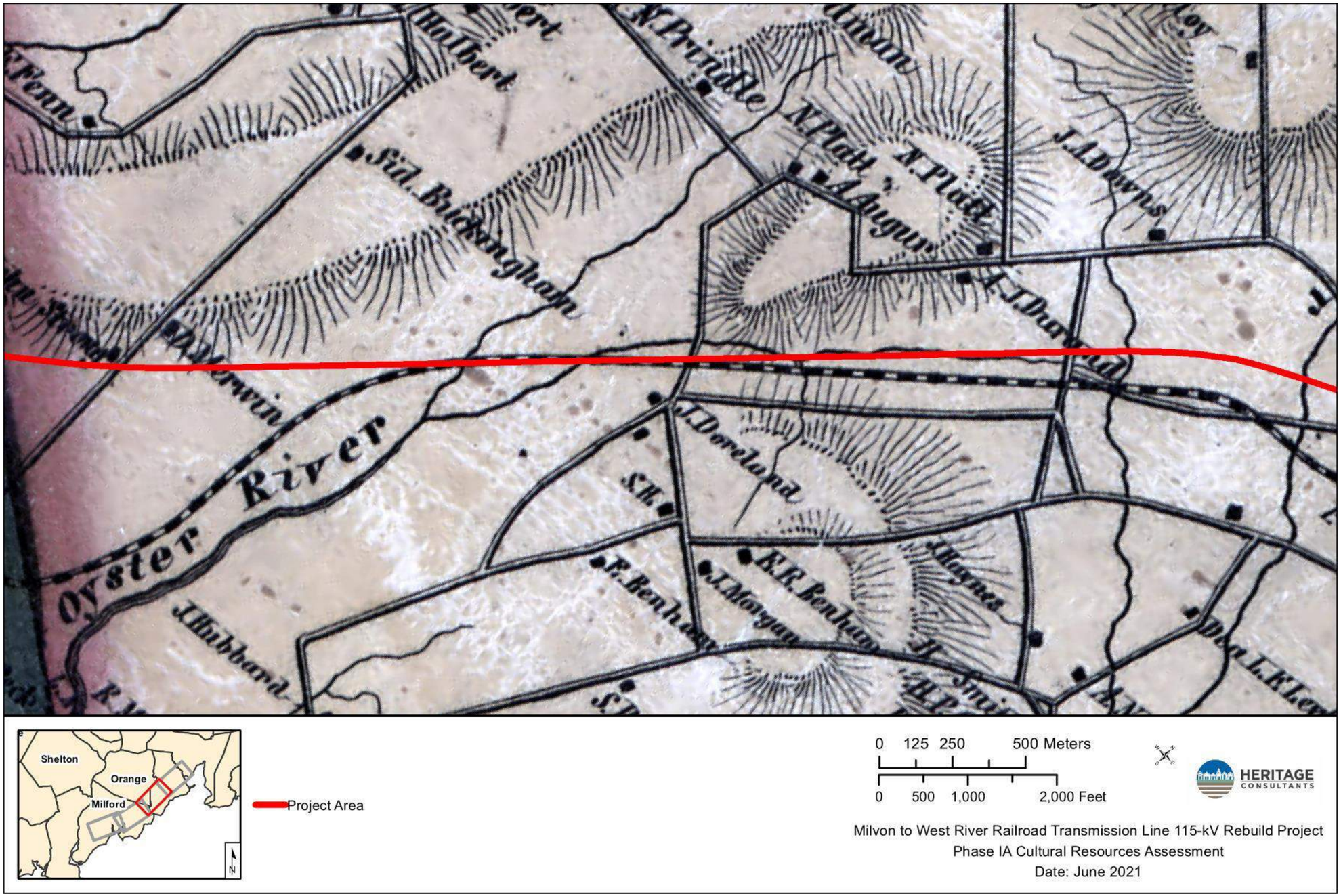


Figure 3; Sheet 3. Digital Excerpt from an 1856 map showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut (H. & C.T. Smith 1856)..

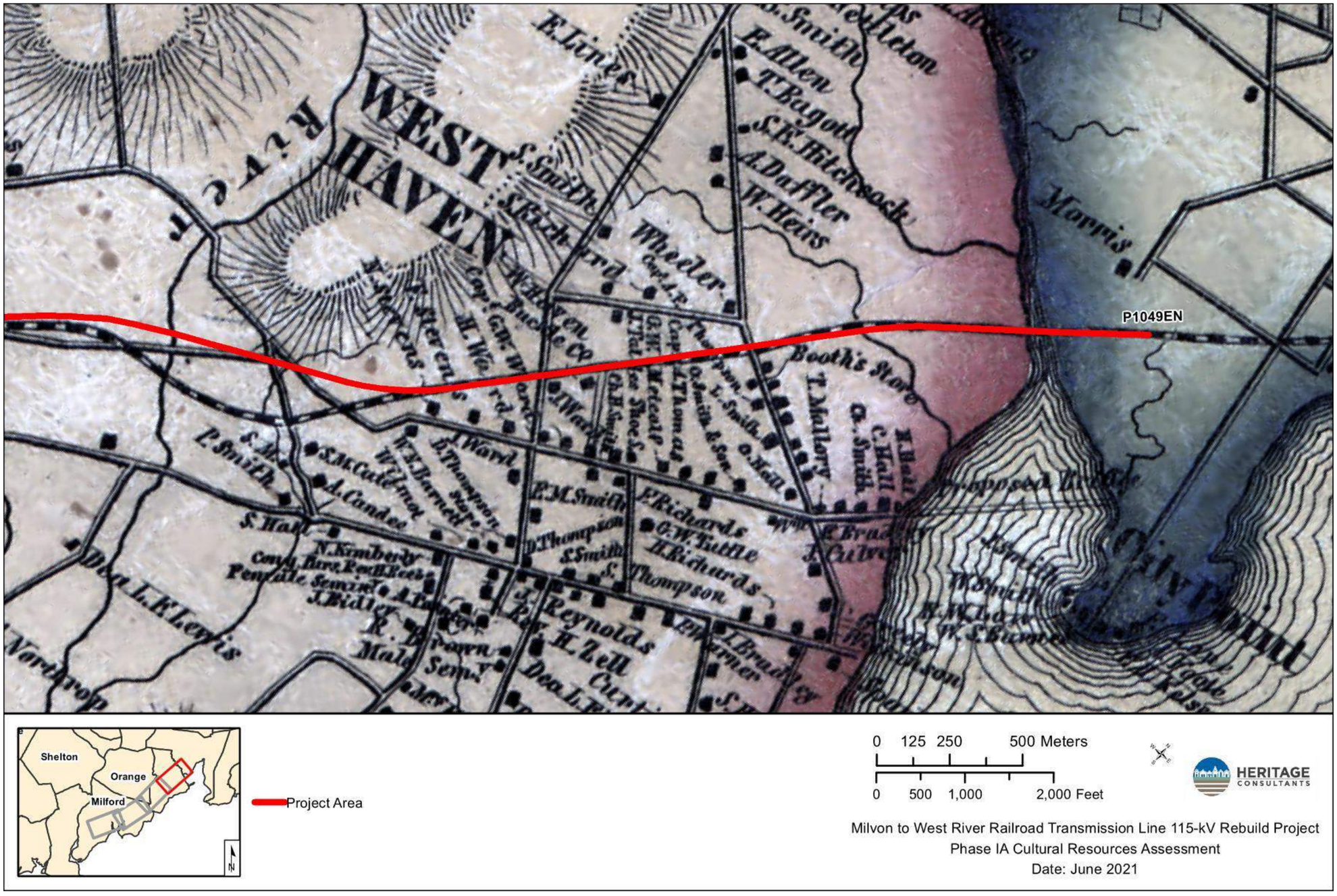


Figure 3; Sheet 4. Digital Excerpt from an 1856 map showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut (H. & C.T. Smith 1856).

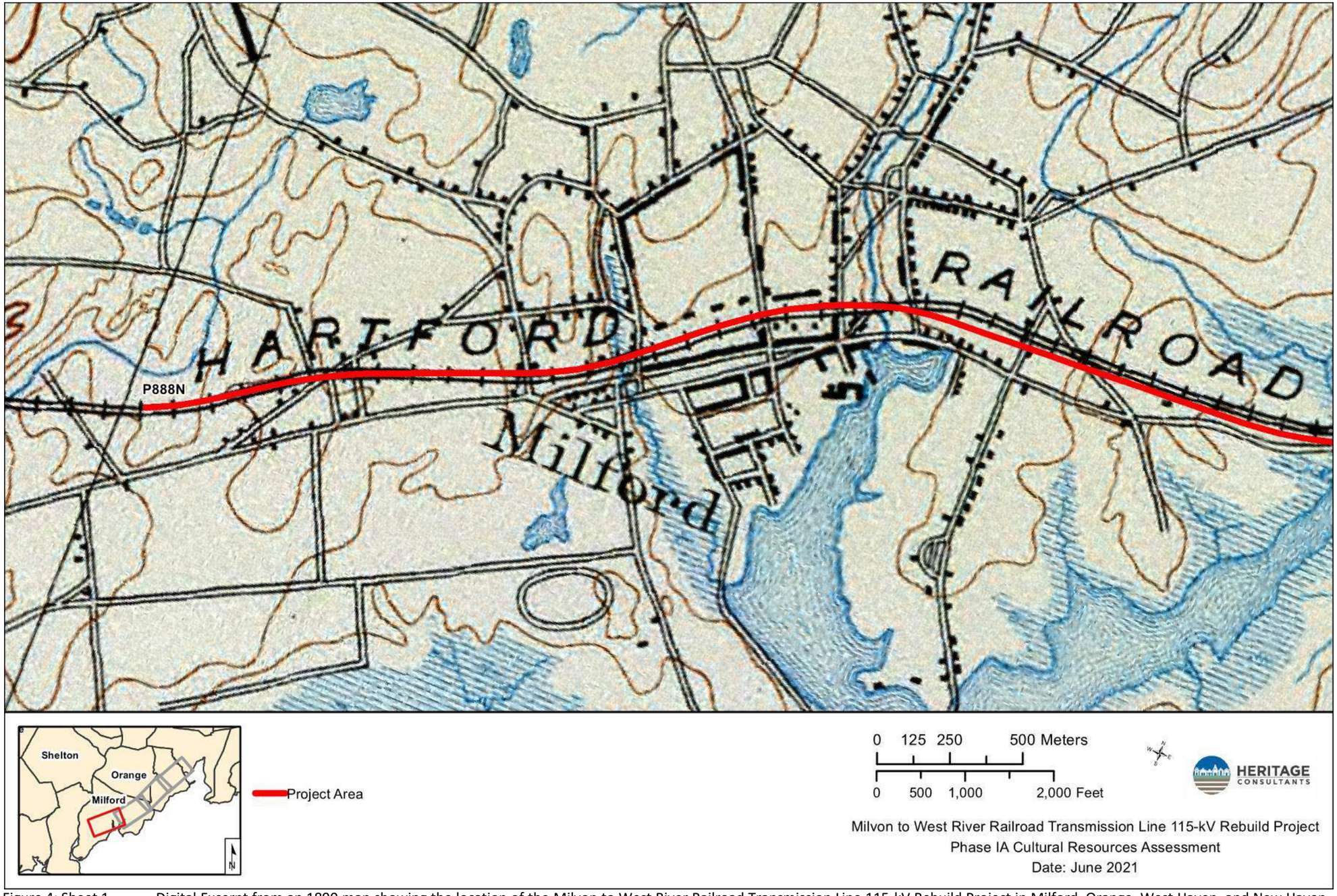


Figure 4; Sheet 1. Digital Excerpt from an 1890 map showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut (USGS 1890).

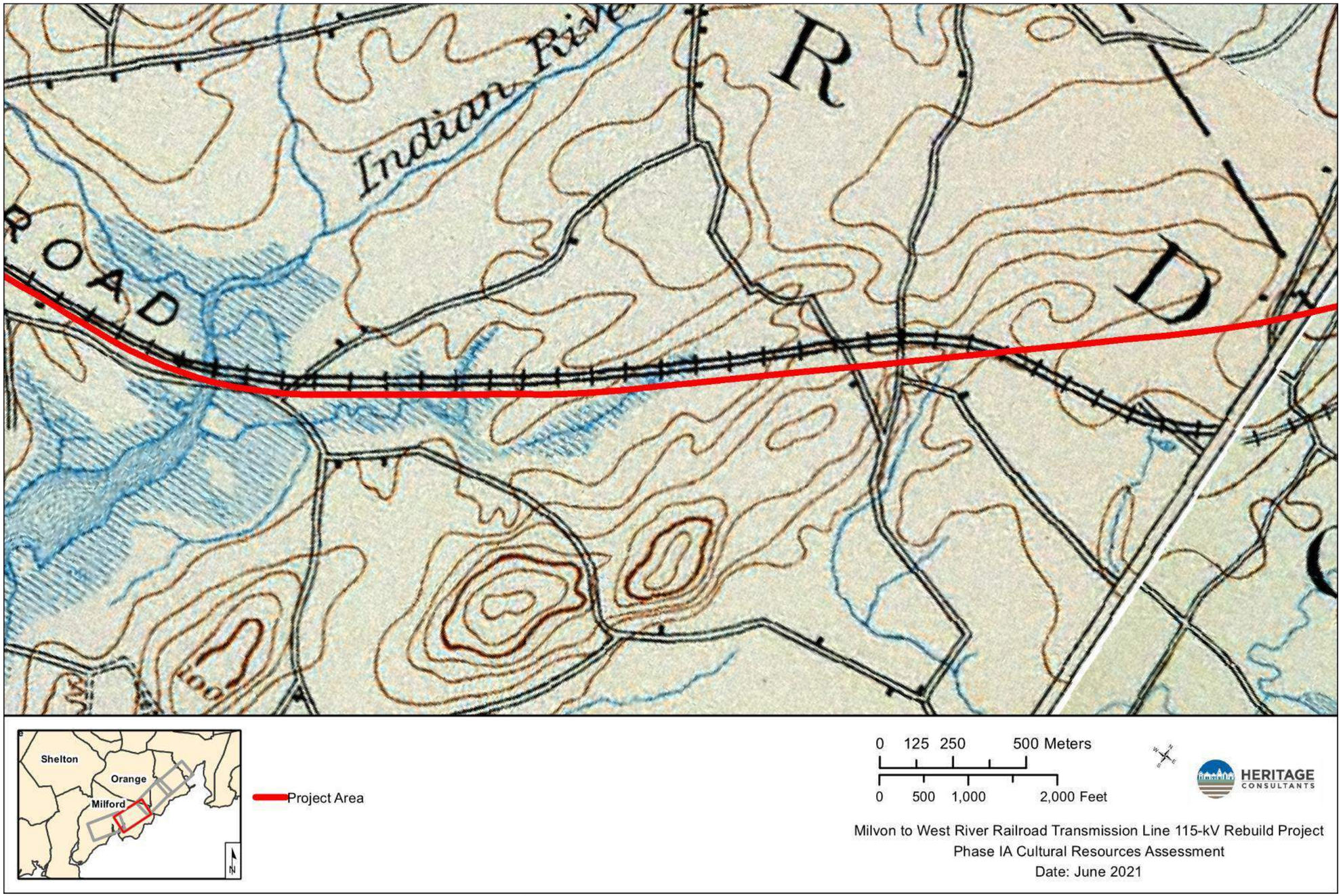


Figure 4; Sheet 2. Digital Excerpt from an 1890 map showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut (USGS 1890).

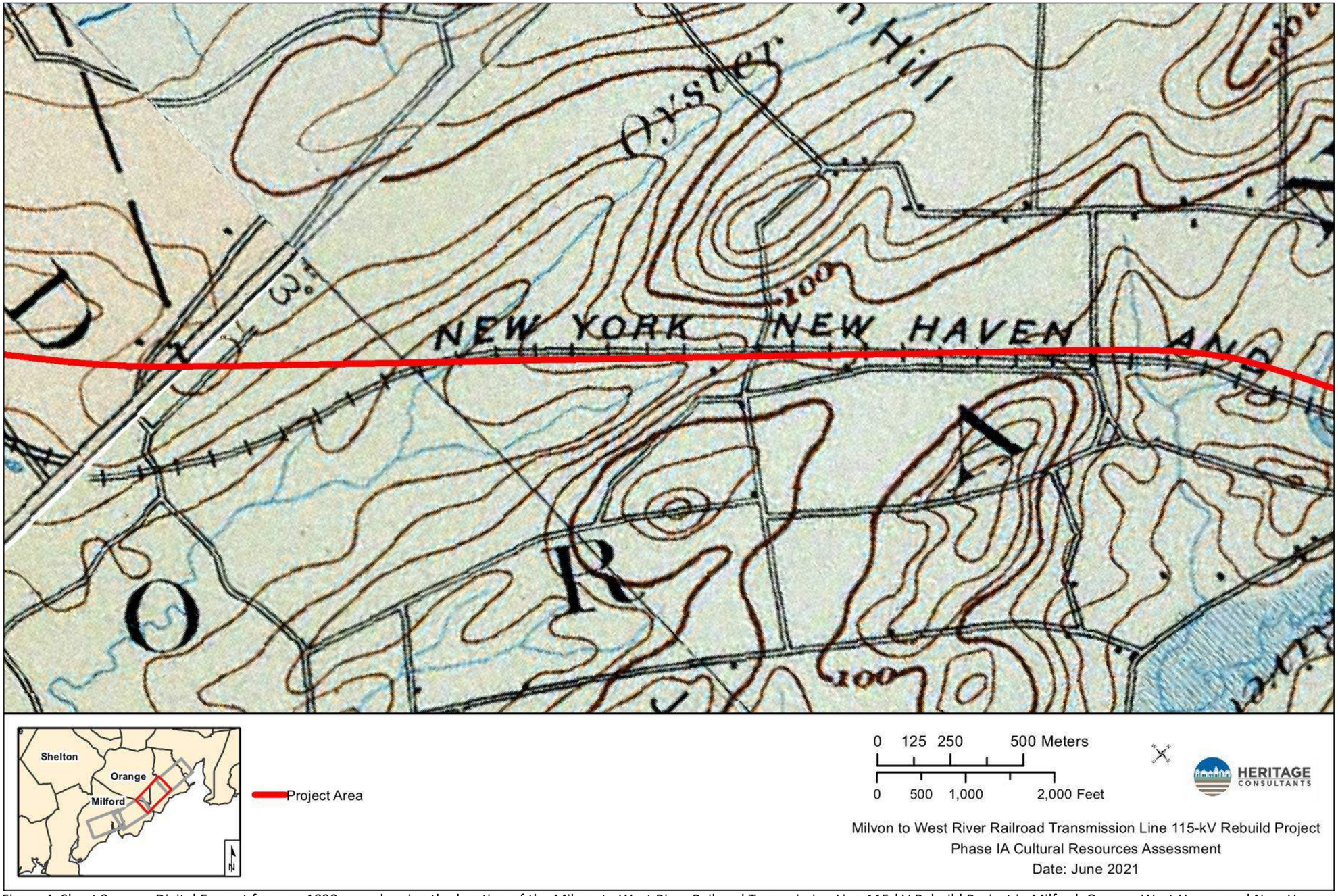


Figure 4; Sheet 3. Digital Excerpt from an 1890 map showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut (USGS 1890).

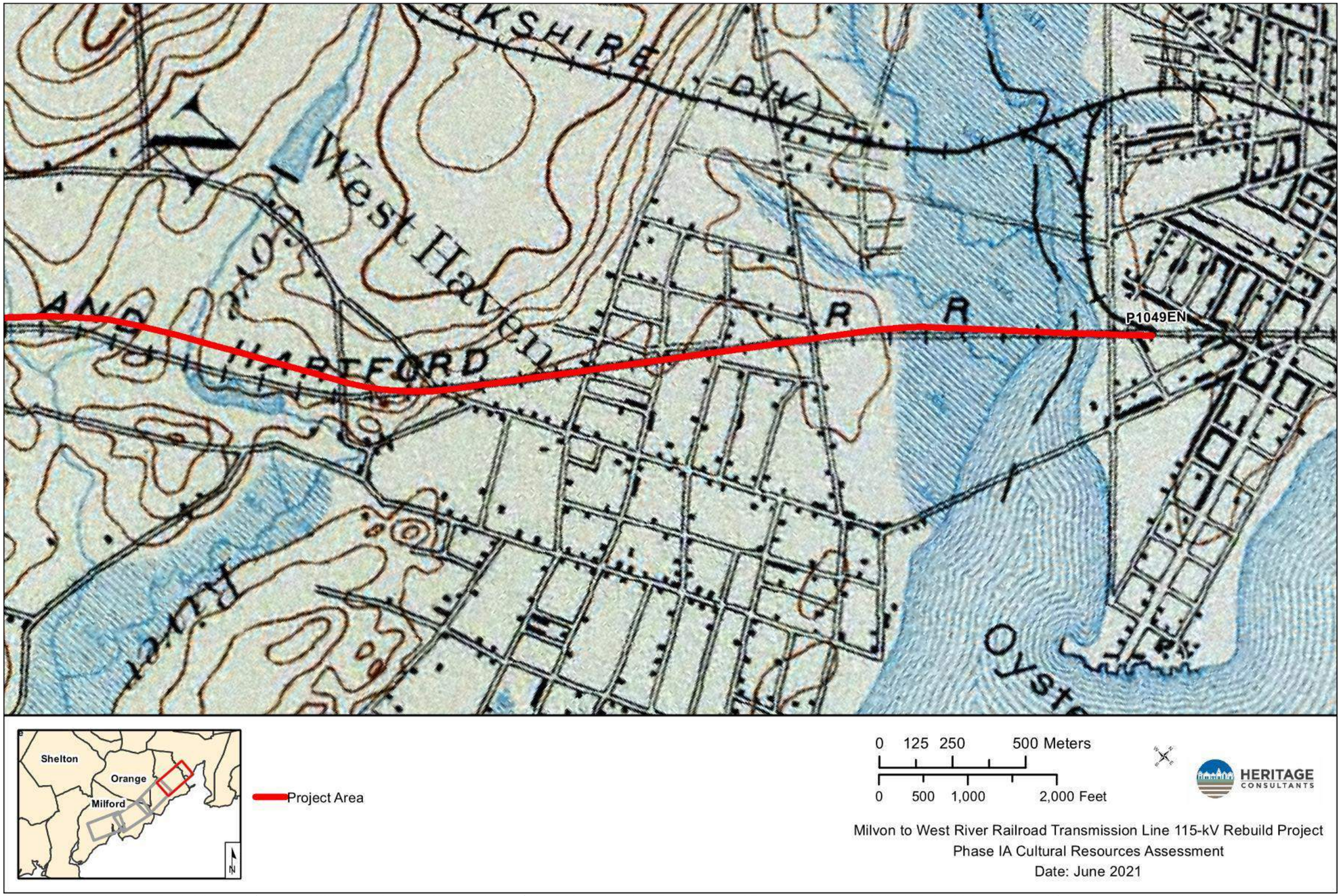


Figure 4; Sheet 4. Digital Excerpt from an 1890 map showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut (USGS 1890).

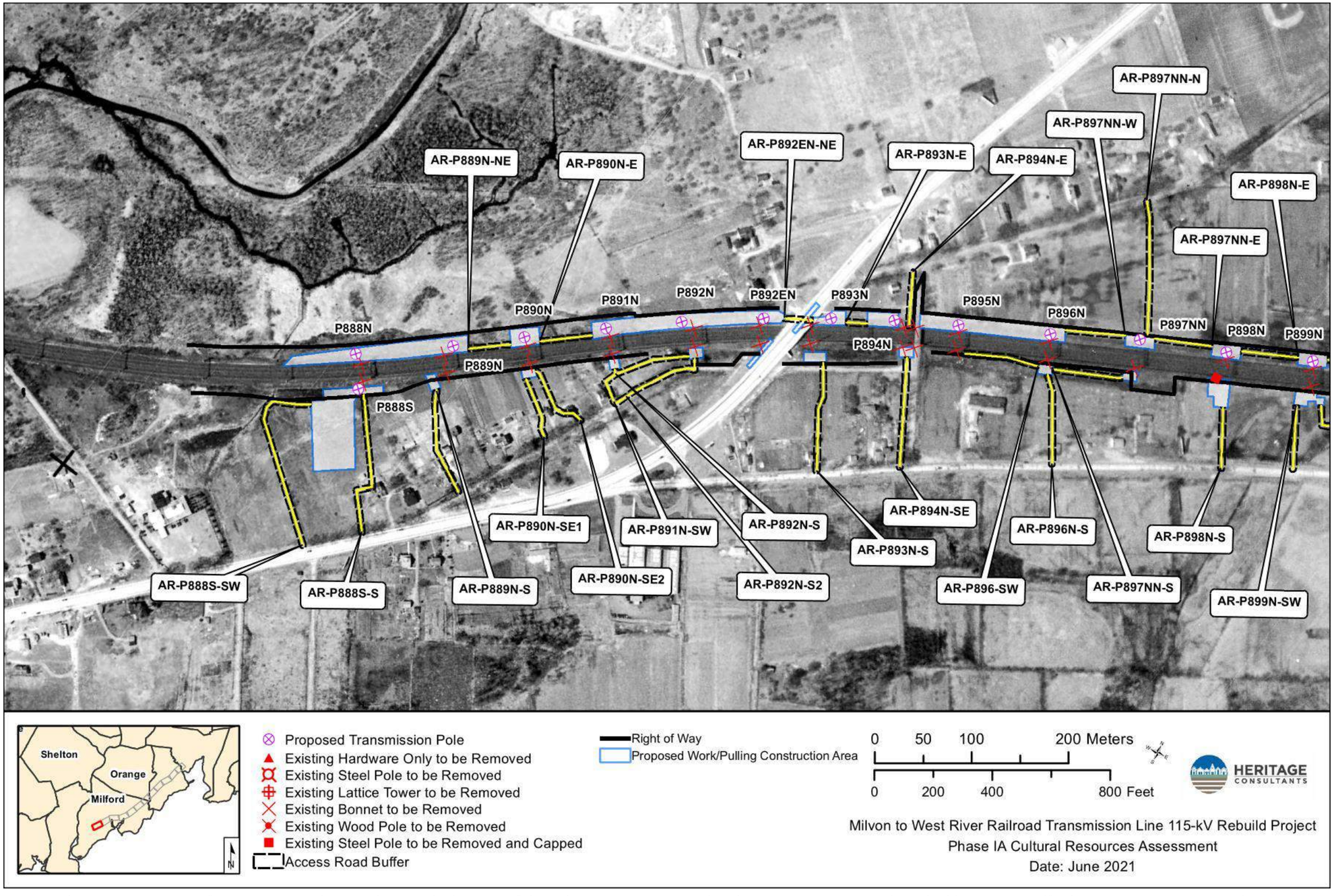


Figure 5; Sheet 1. Excerpt from a 1934 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

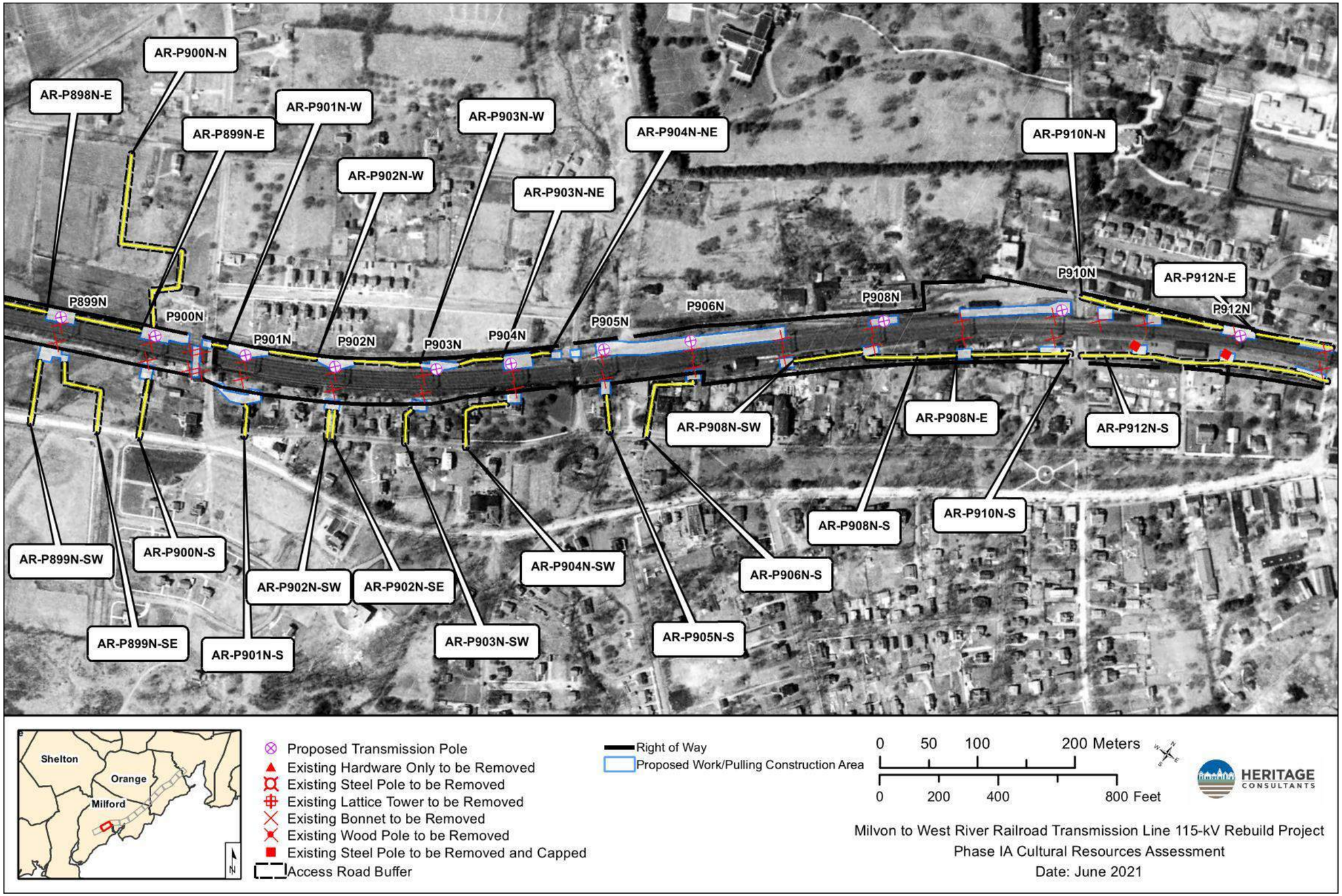


Figure 5; Sheet 2. Excerpt from a 1934 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

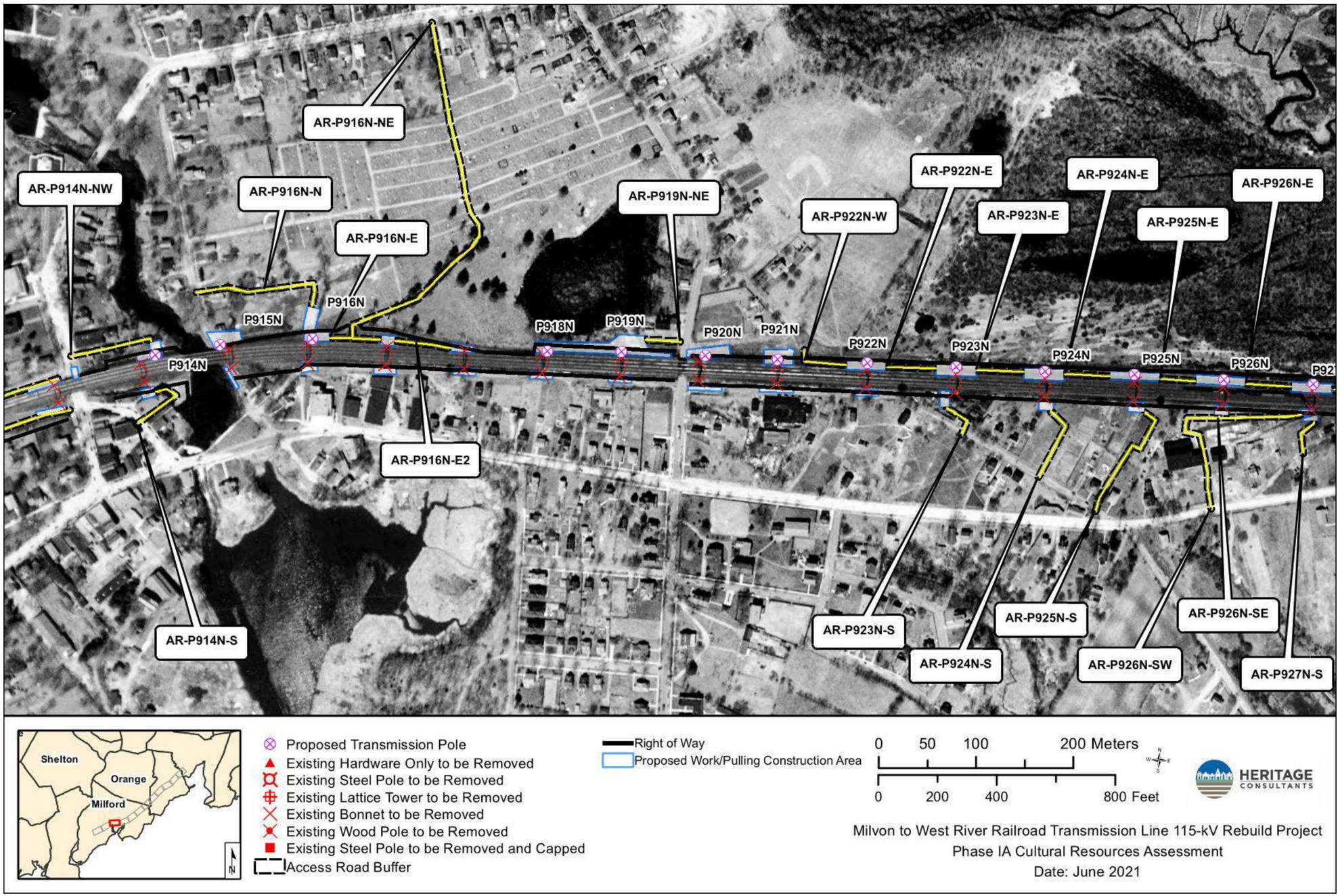


Figure 5; Sheet 3. Excerpt from a 1934 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

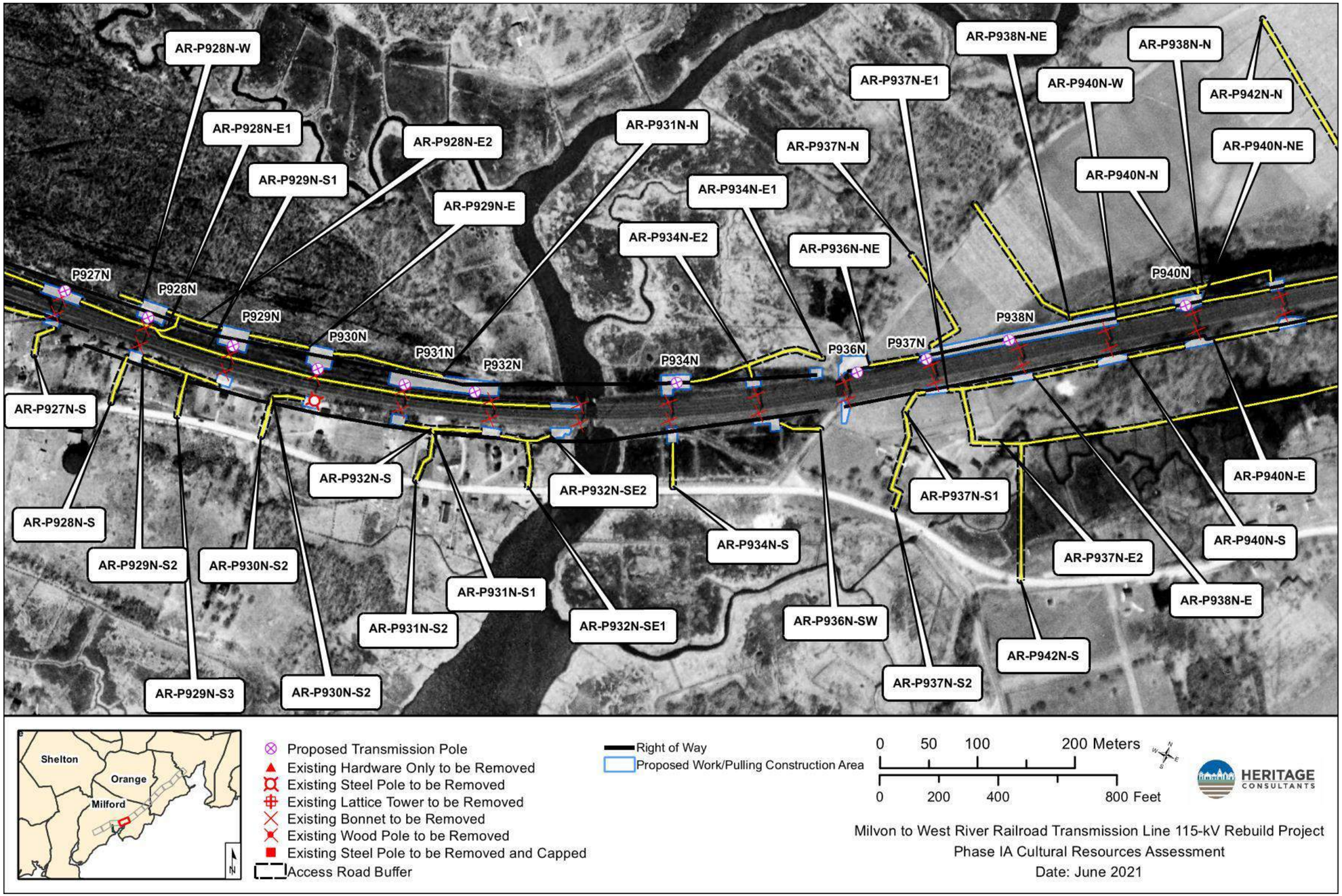


Figure 5; Sheet 4. Excerpt from a 1934 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

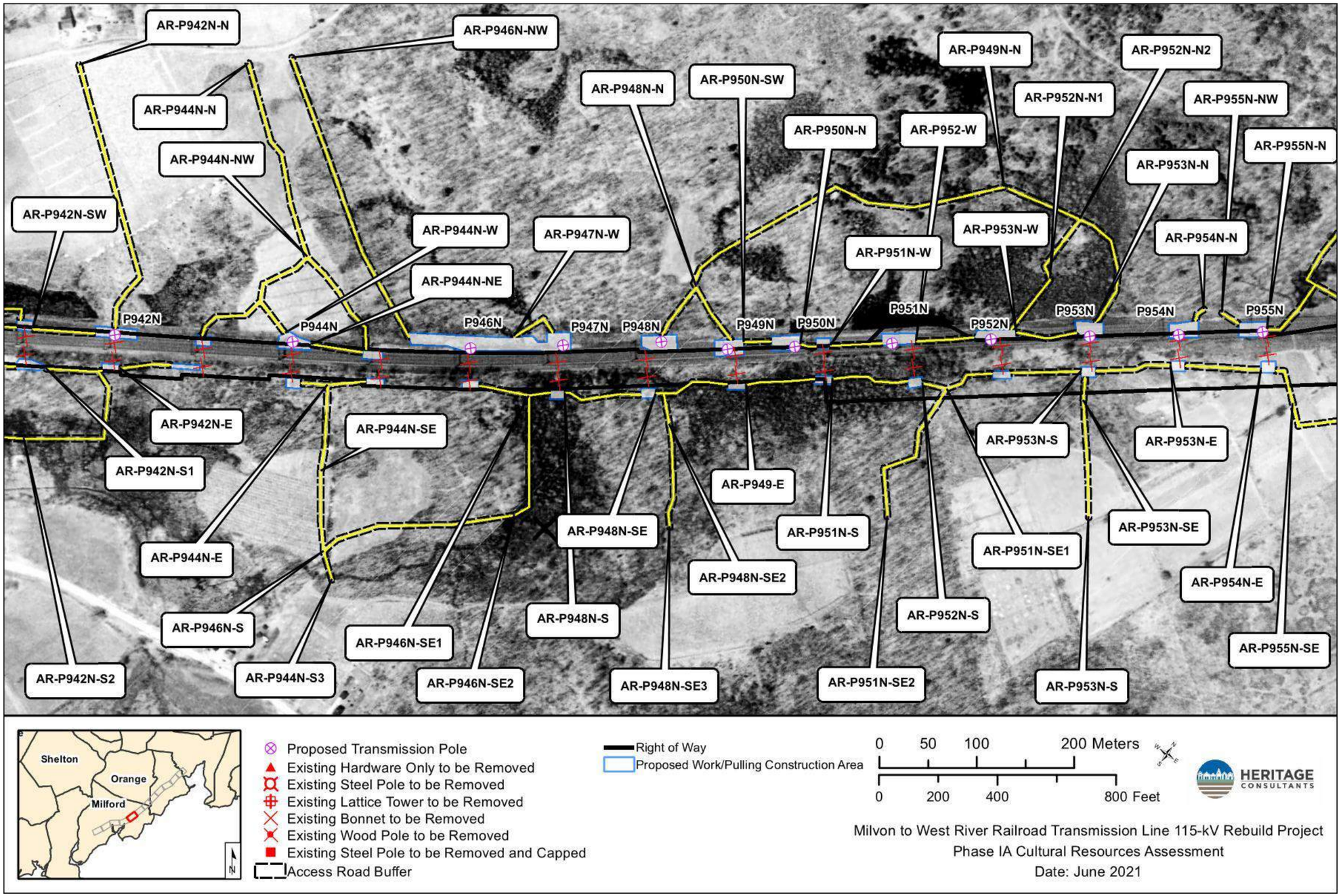


Figure 5. Sheet 5. Excerpt from a 1934 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

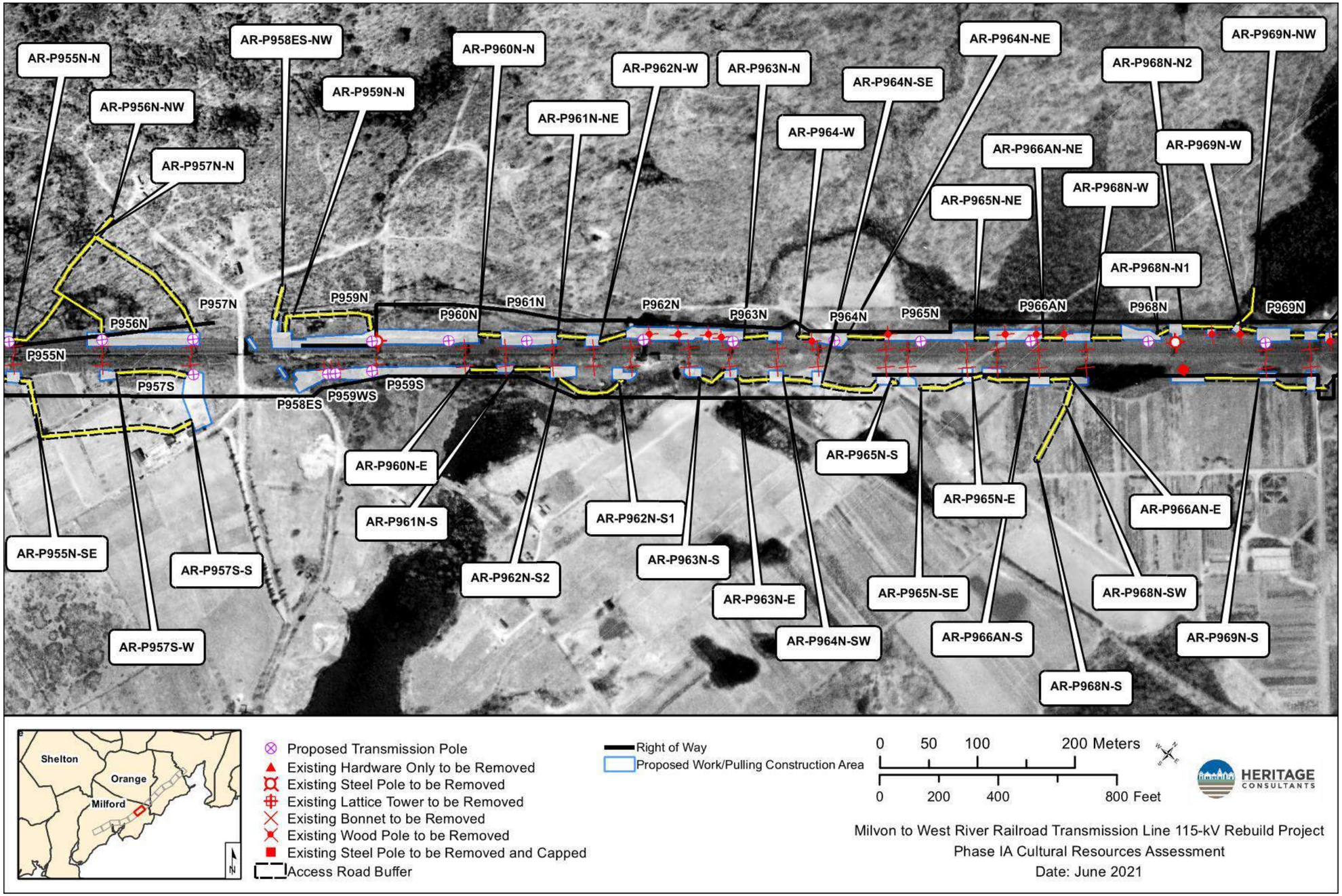


Figure 5; Sheet 6. Excerpt from a 1934 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

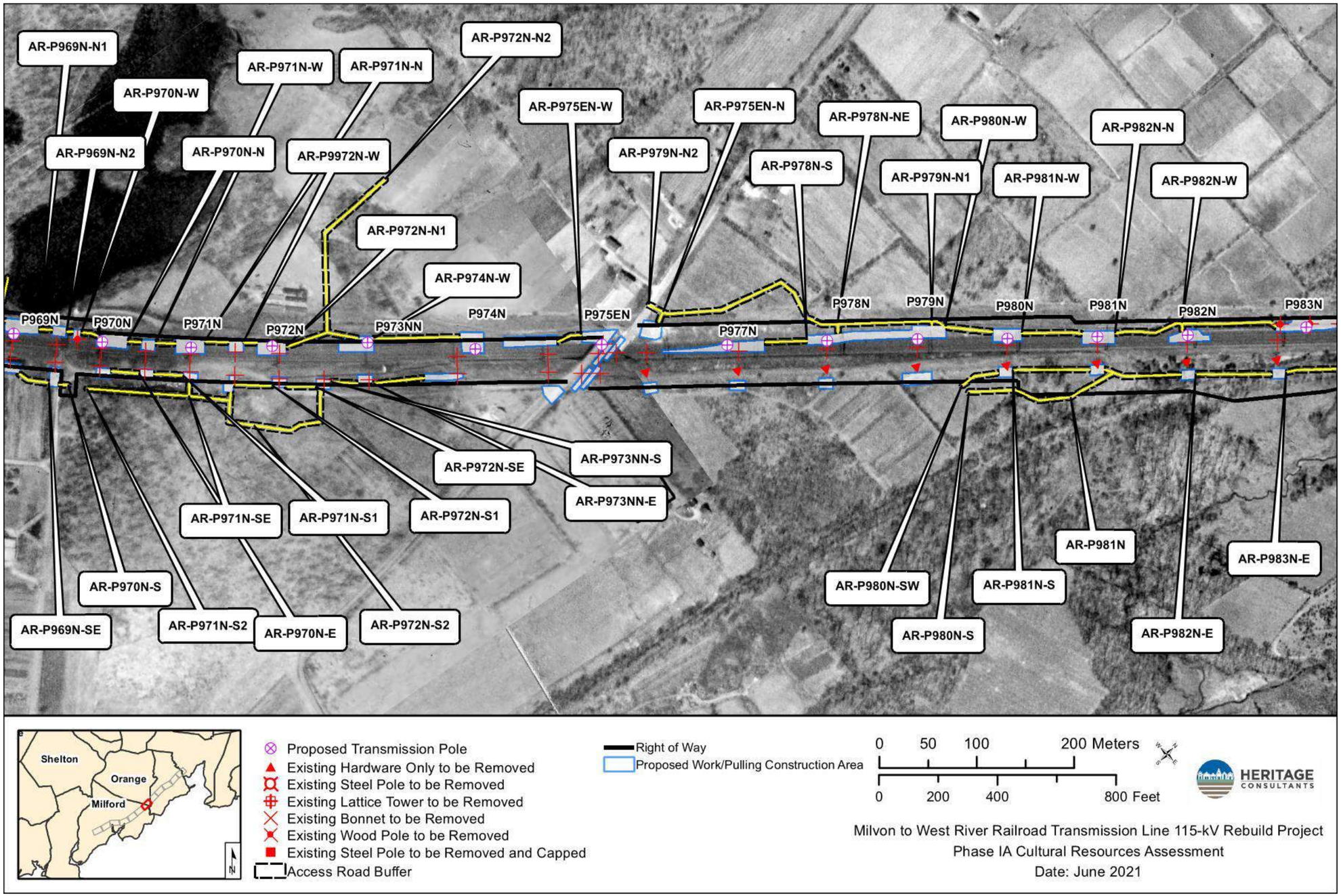


Figure 5; Sheet 7. Excerpt from a 1934 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

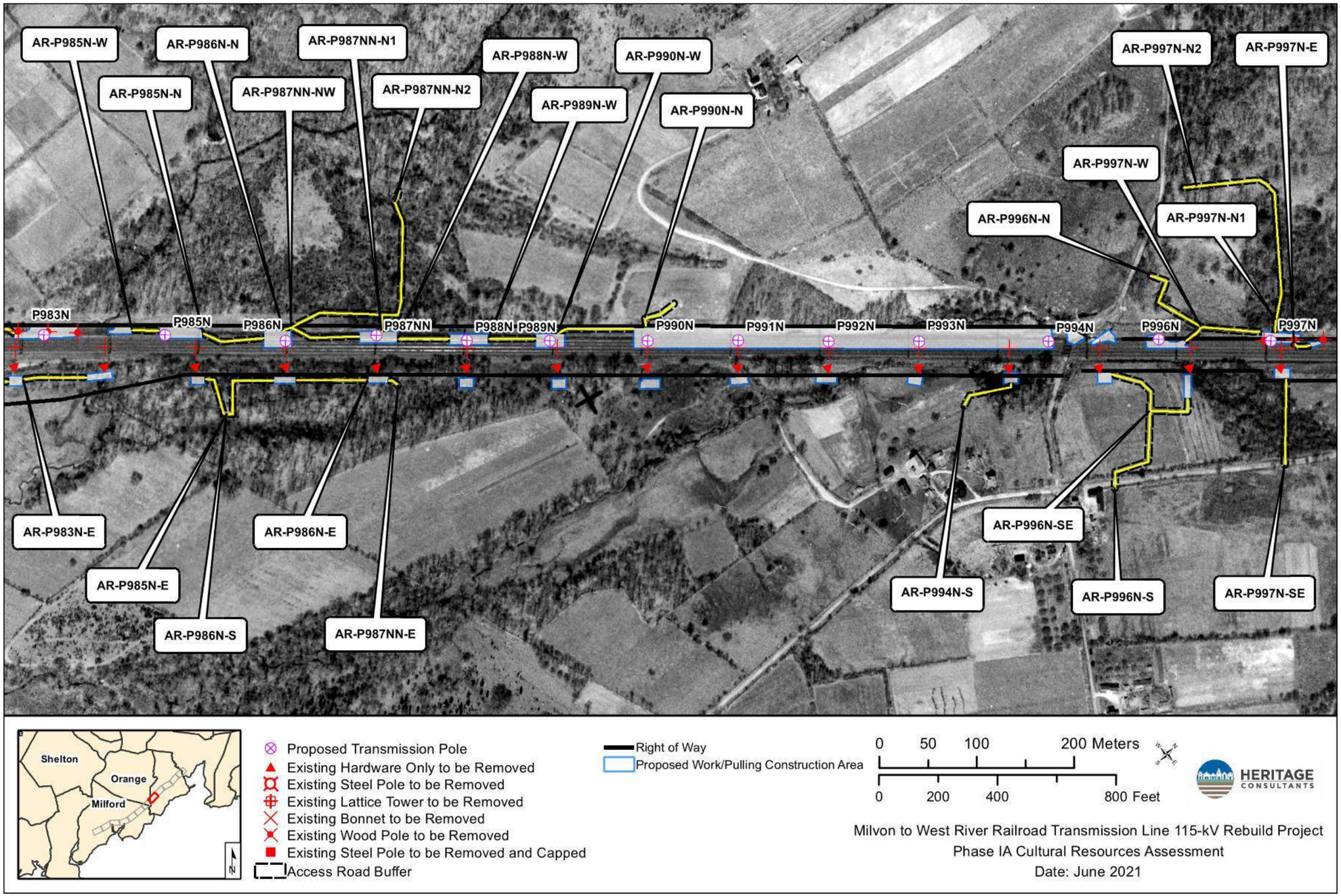


Figure 5; Sheet 8. Excerpt from a 1934 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

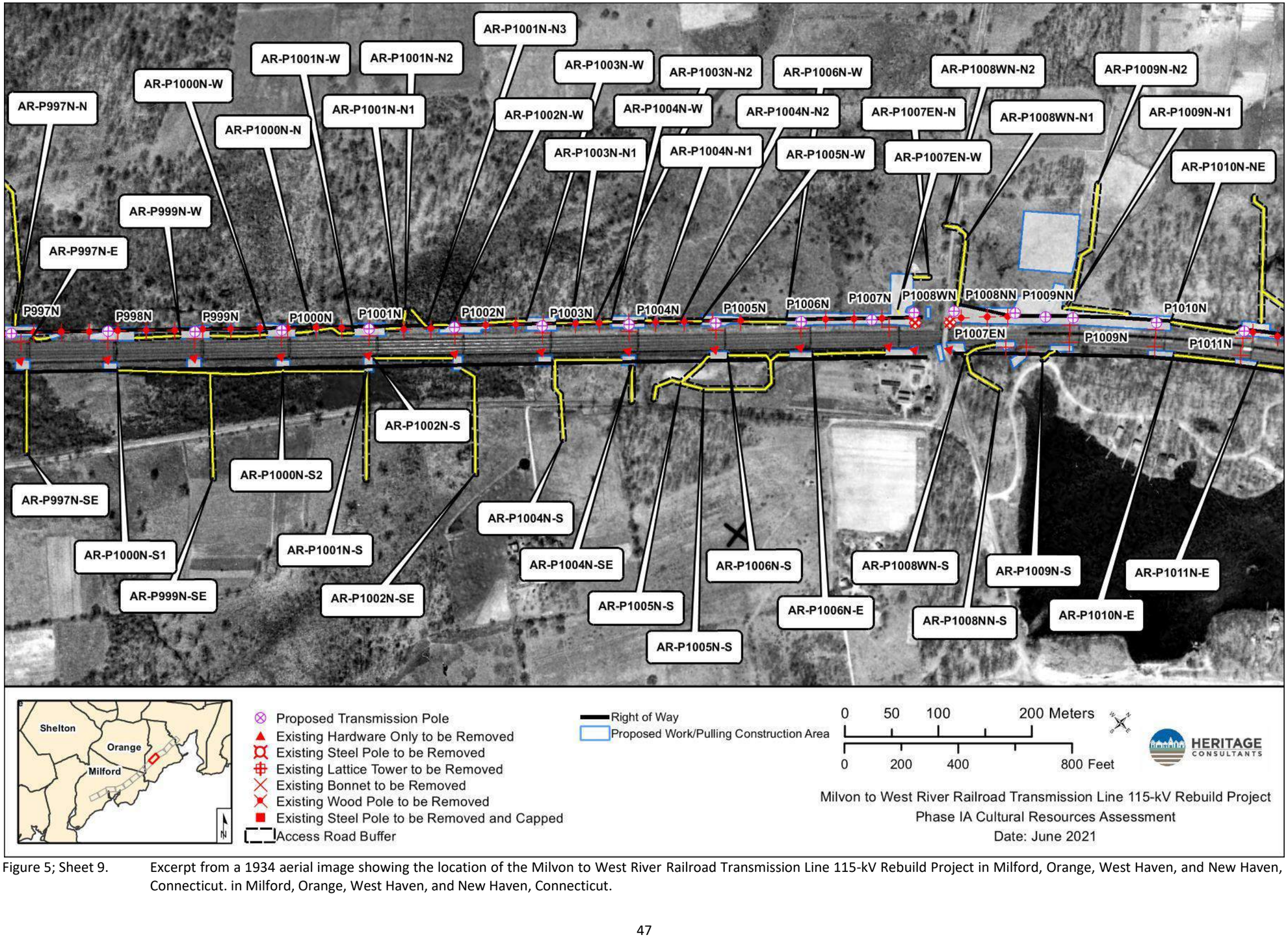


Figure 5; Sheet 9. Excerpt from a 1934 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

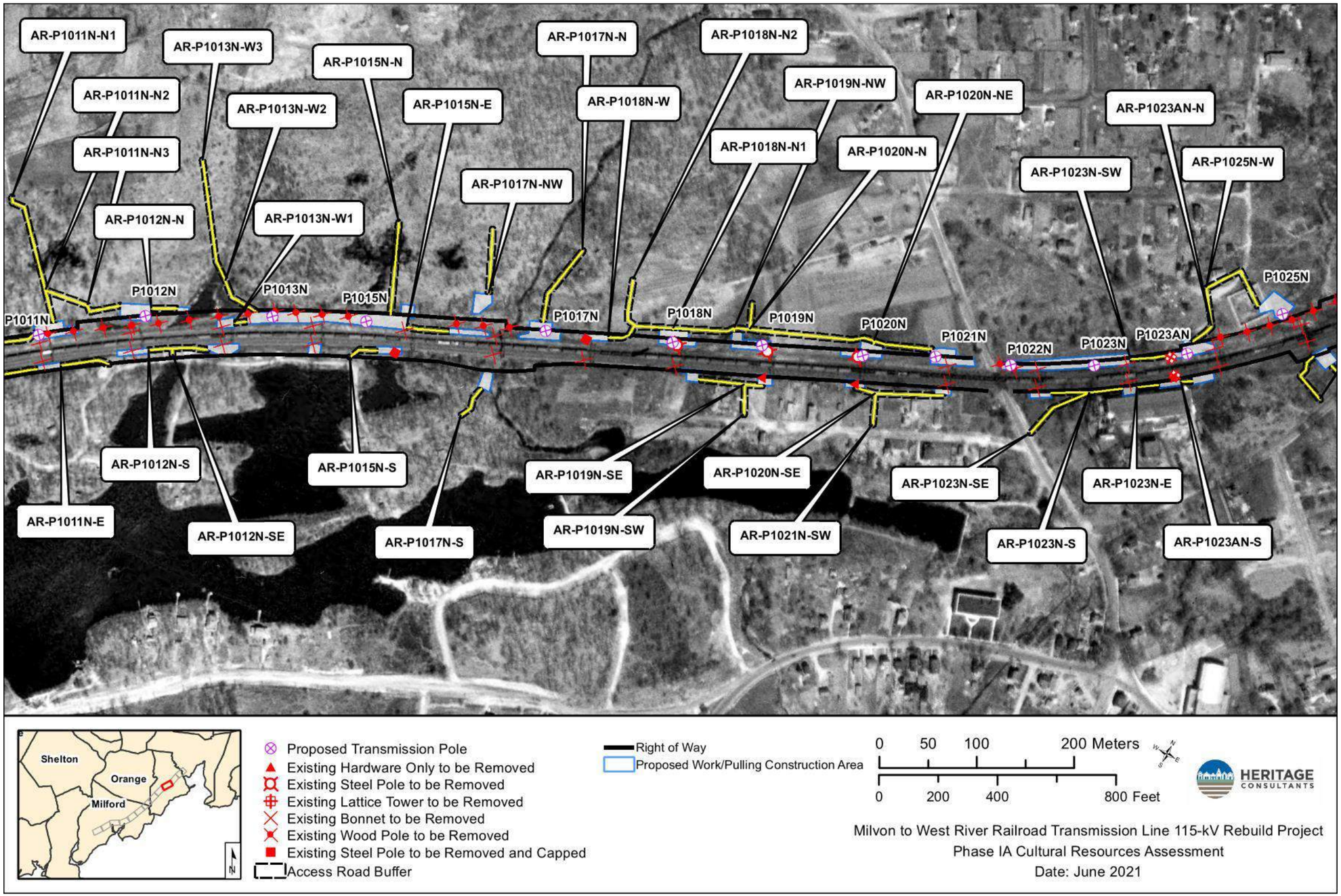


Figure 5; Sheet 10. Excerpt from a 1934 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

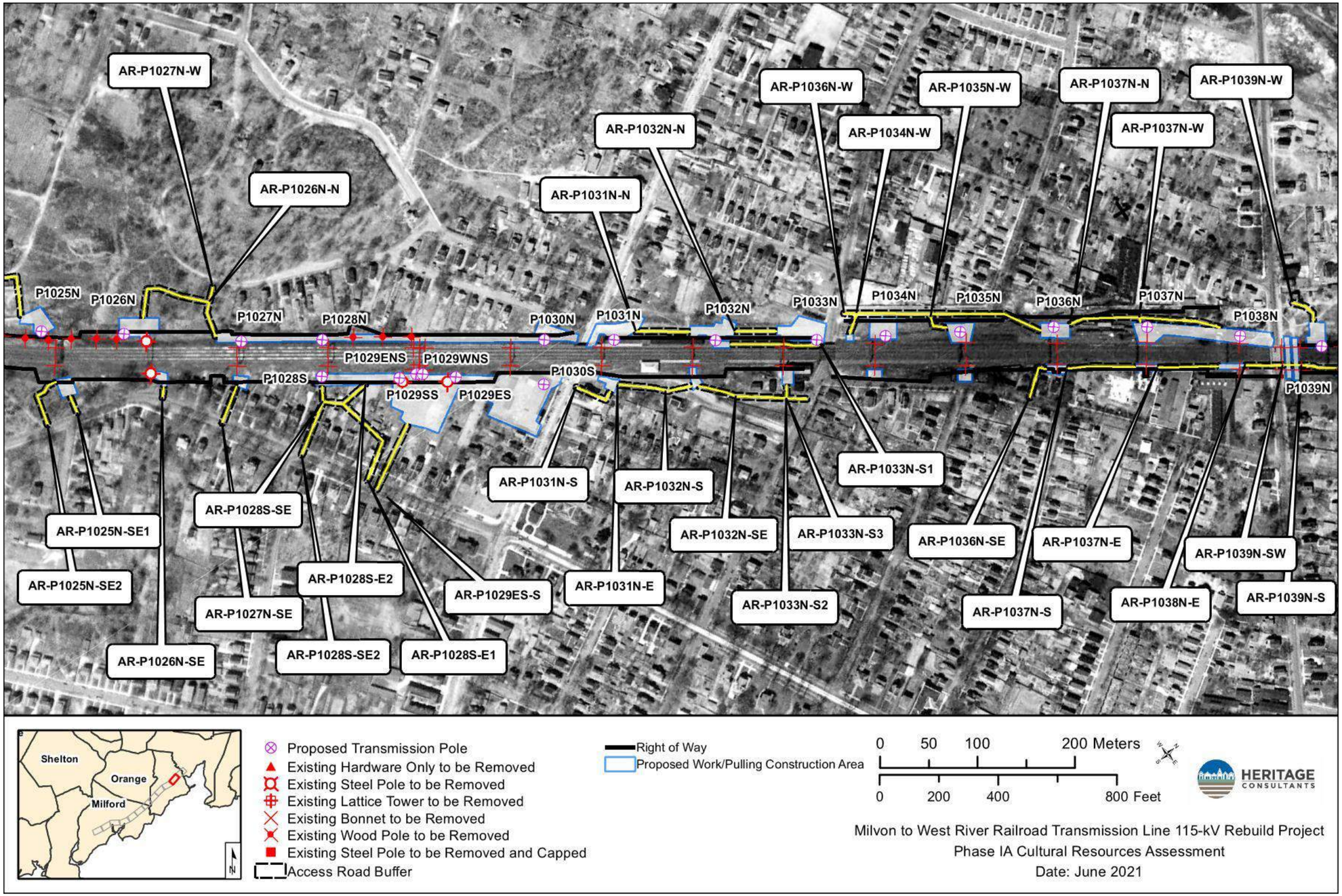


Figure 5; Sheet 11. Excerpt from a 1934 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

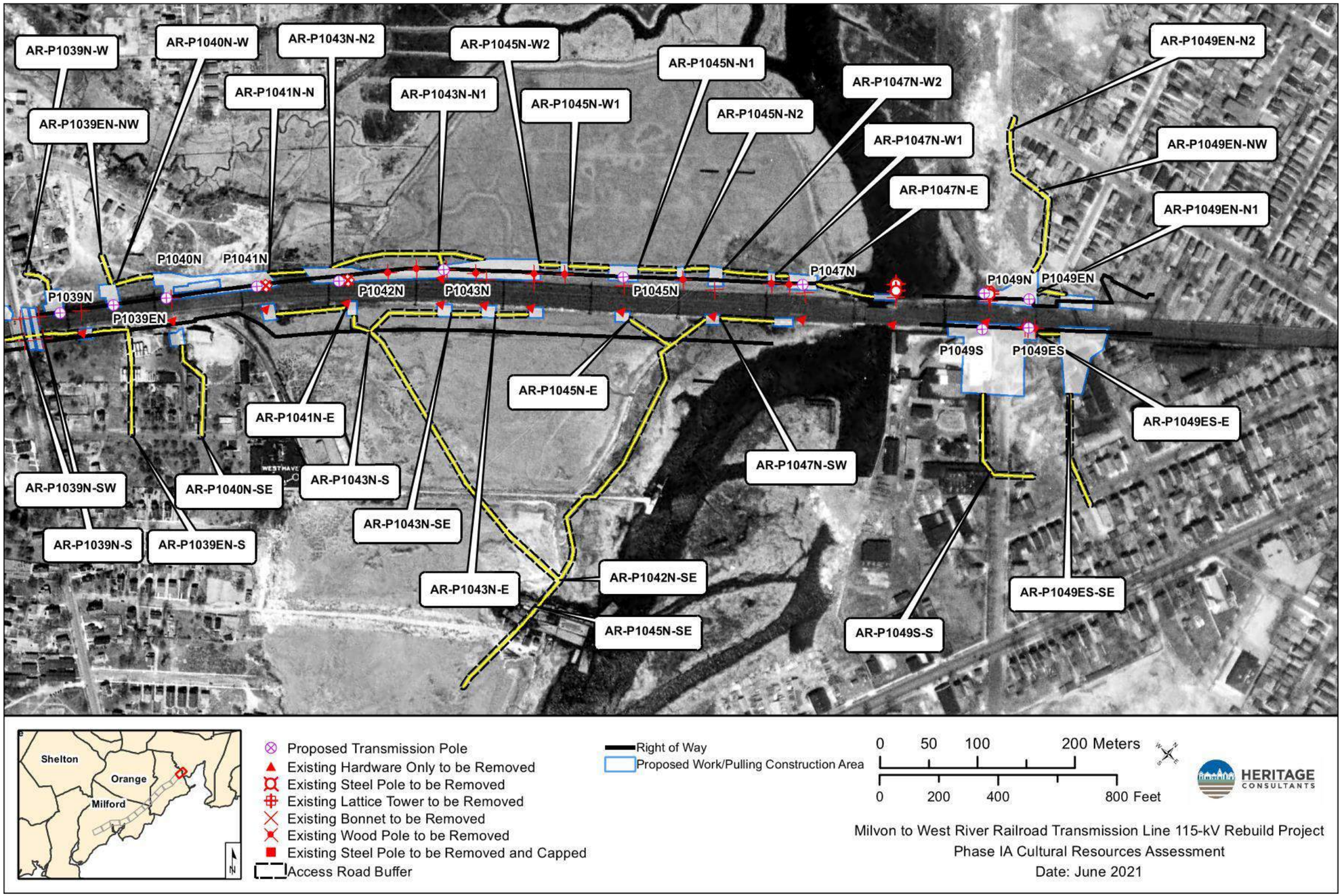


Figure 5; Sheet 12. Excerpt from a 1934 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

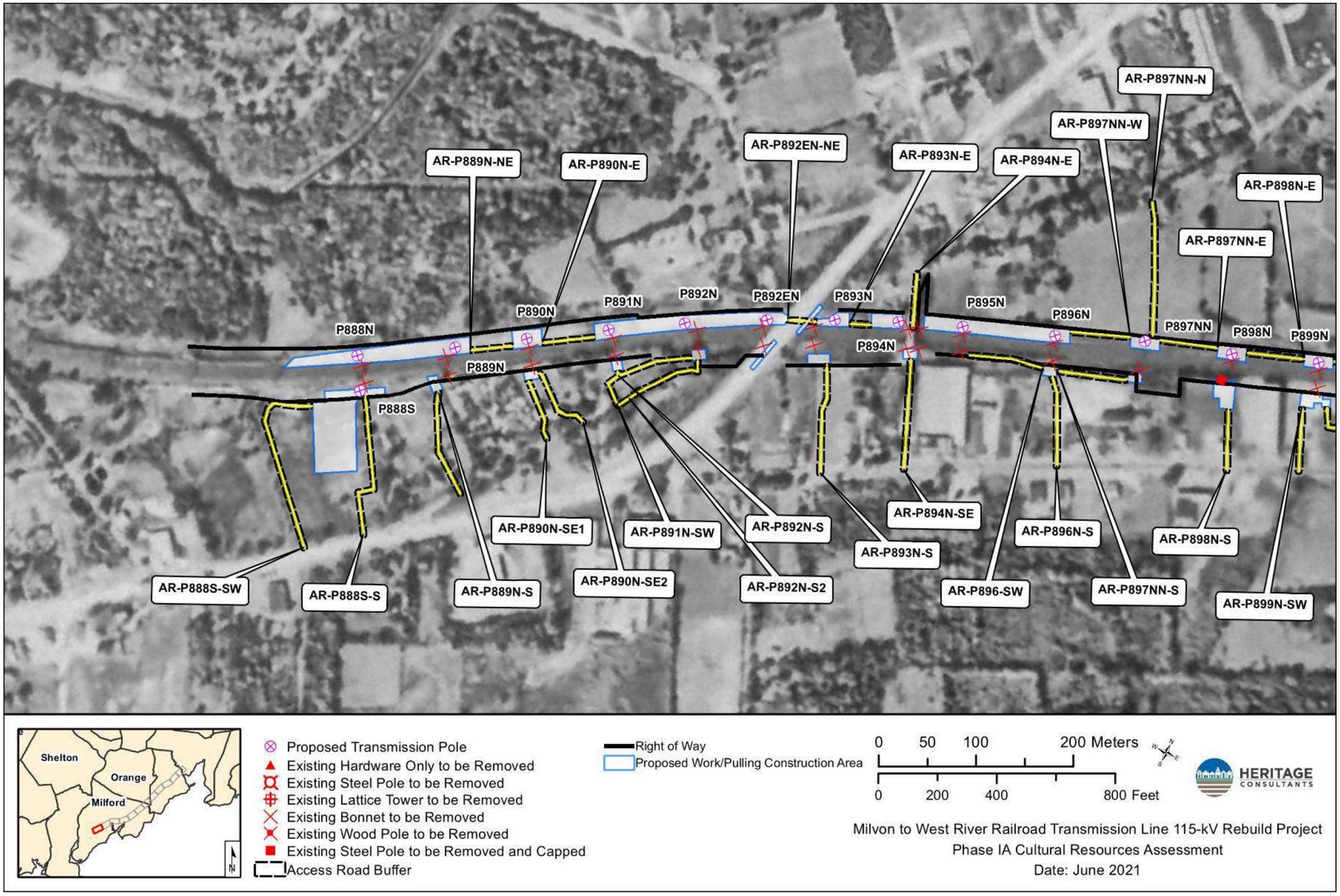


Figure 6; Sheet 1. Excerpt from a 1951 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

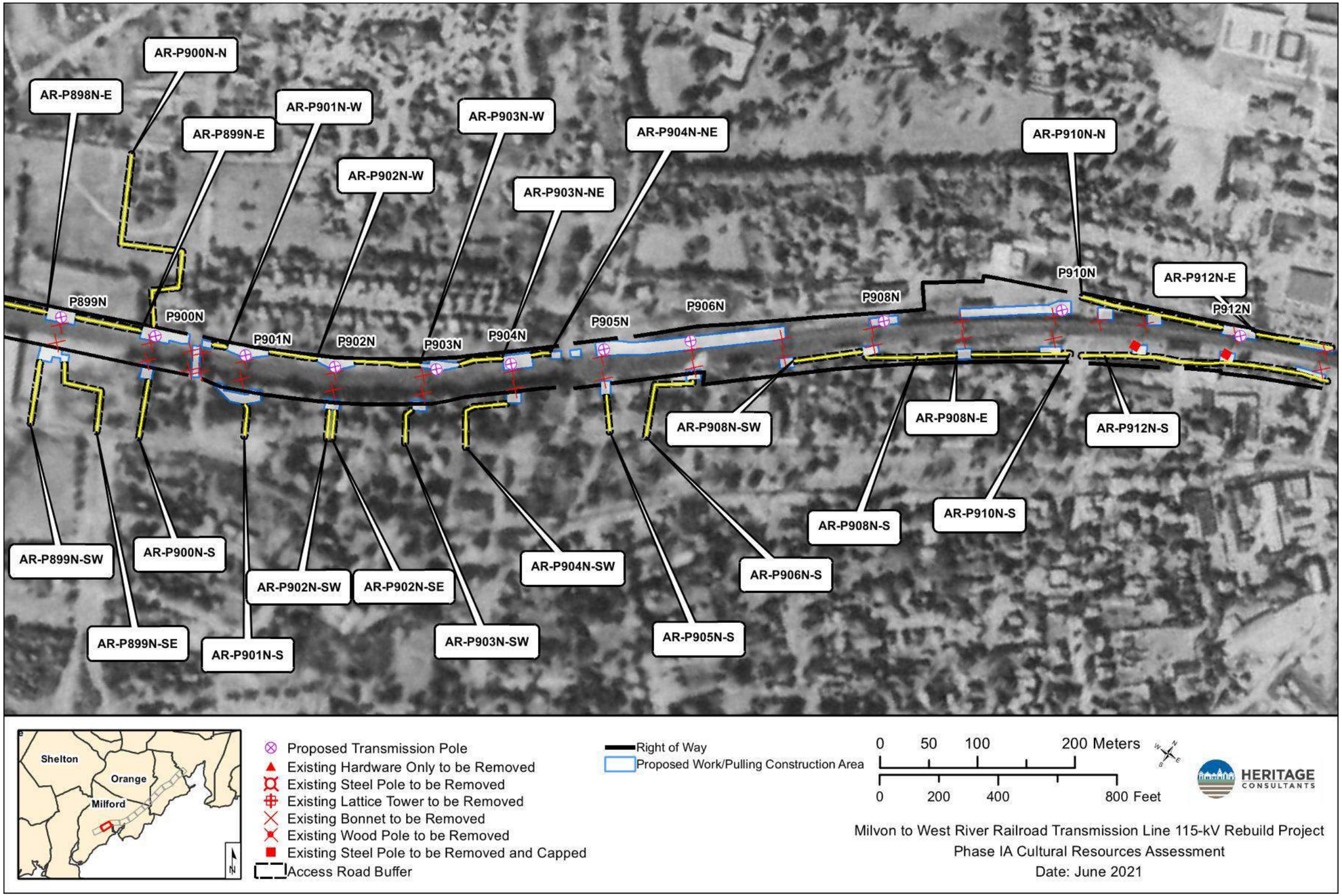


Figure 6; Sheet 2. Excerpt from a 1951 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

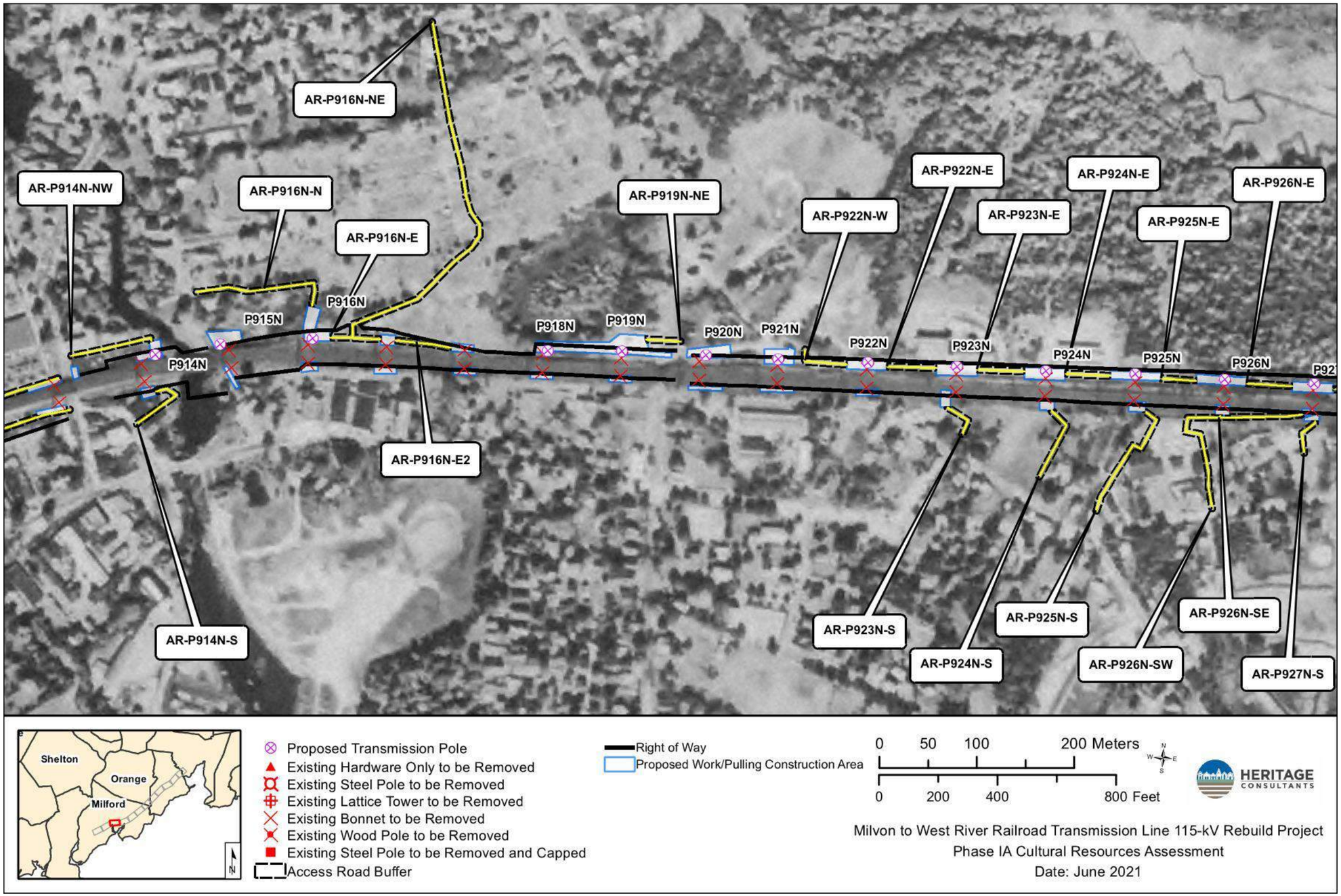


Figure 6; Sheet 3. Excerpt from a 1951 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

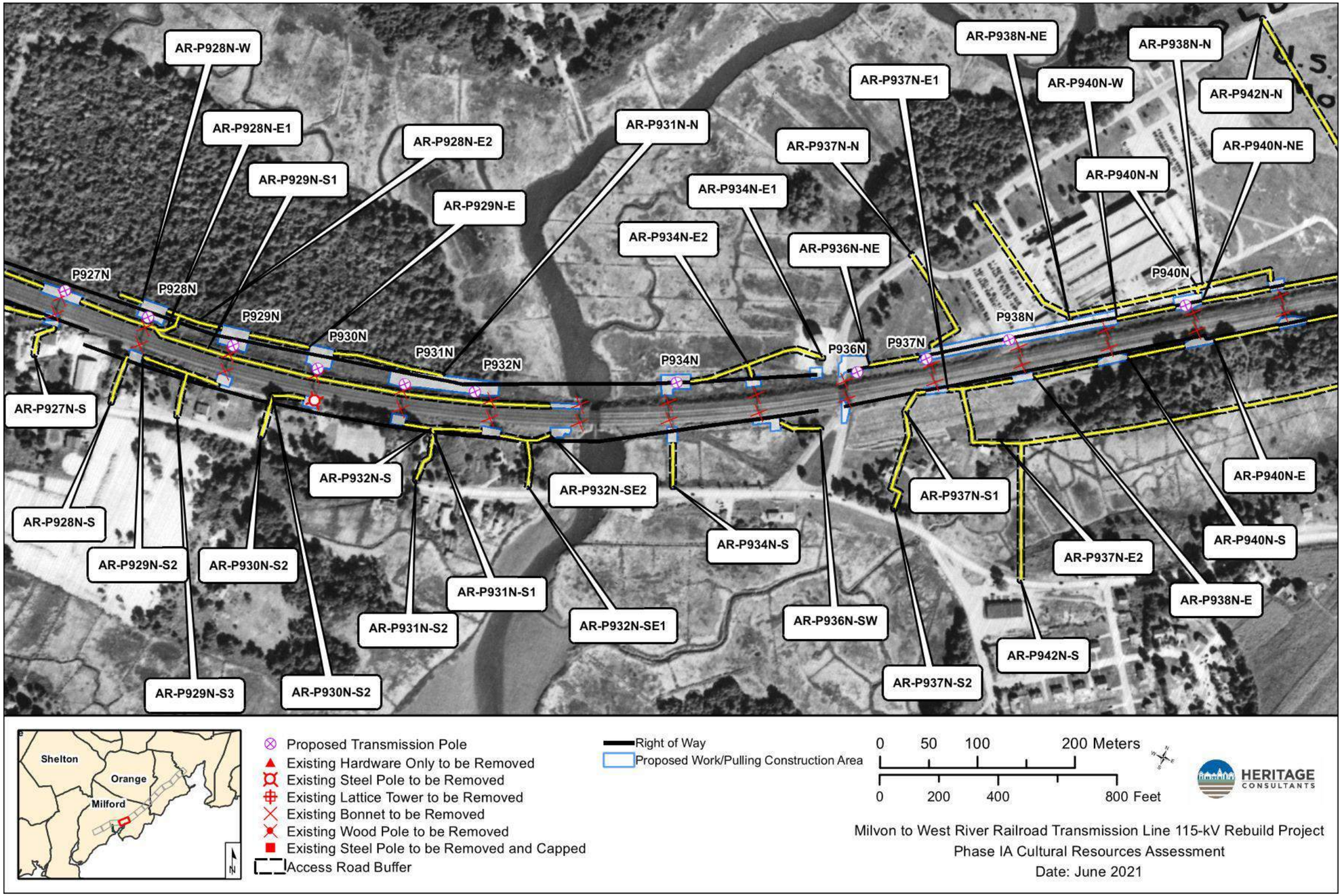


Figure 6; Sheet 4. Excerpt from a 1951 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

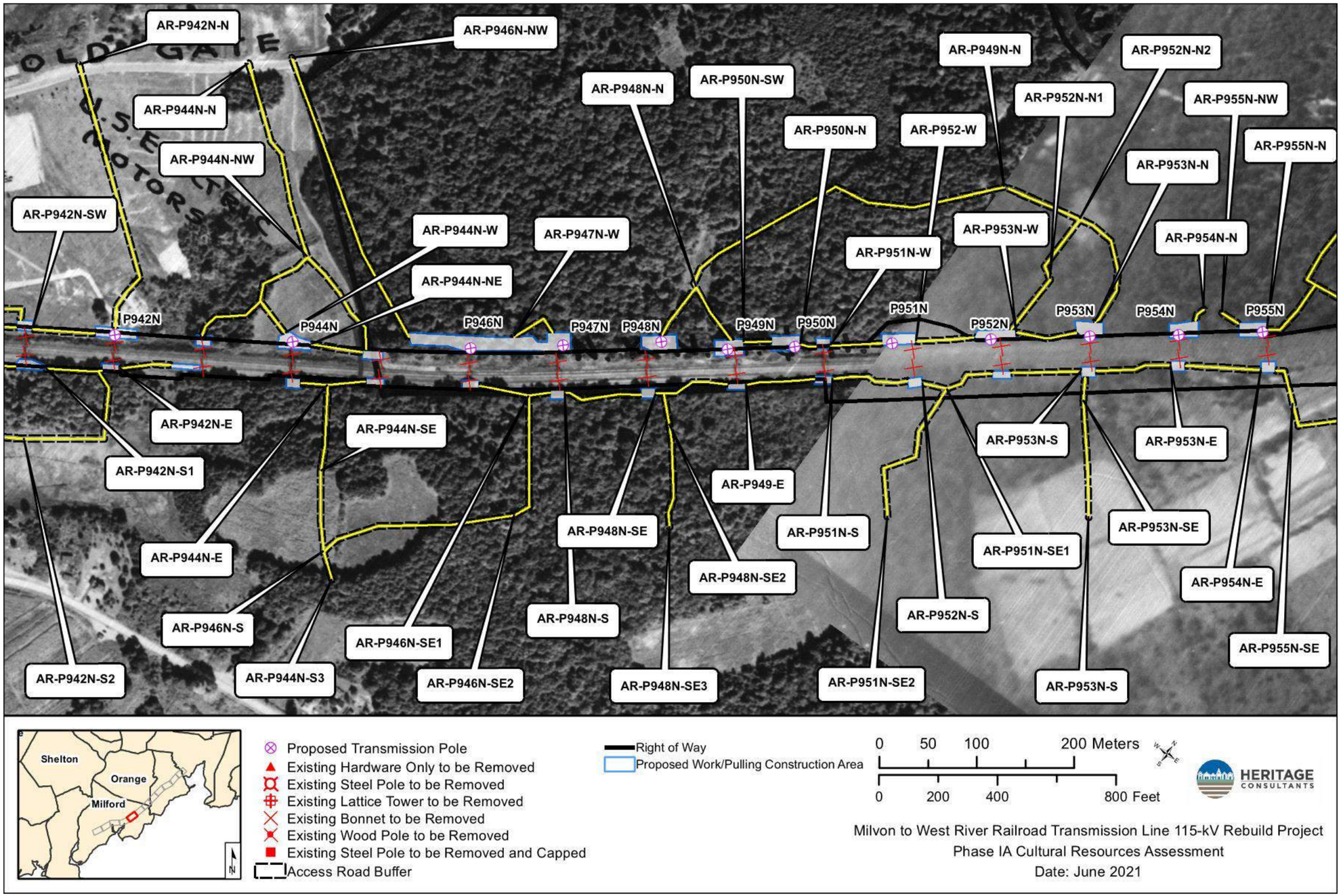


Figure 6; Sheet 5. Excerpt from a 1951 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

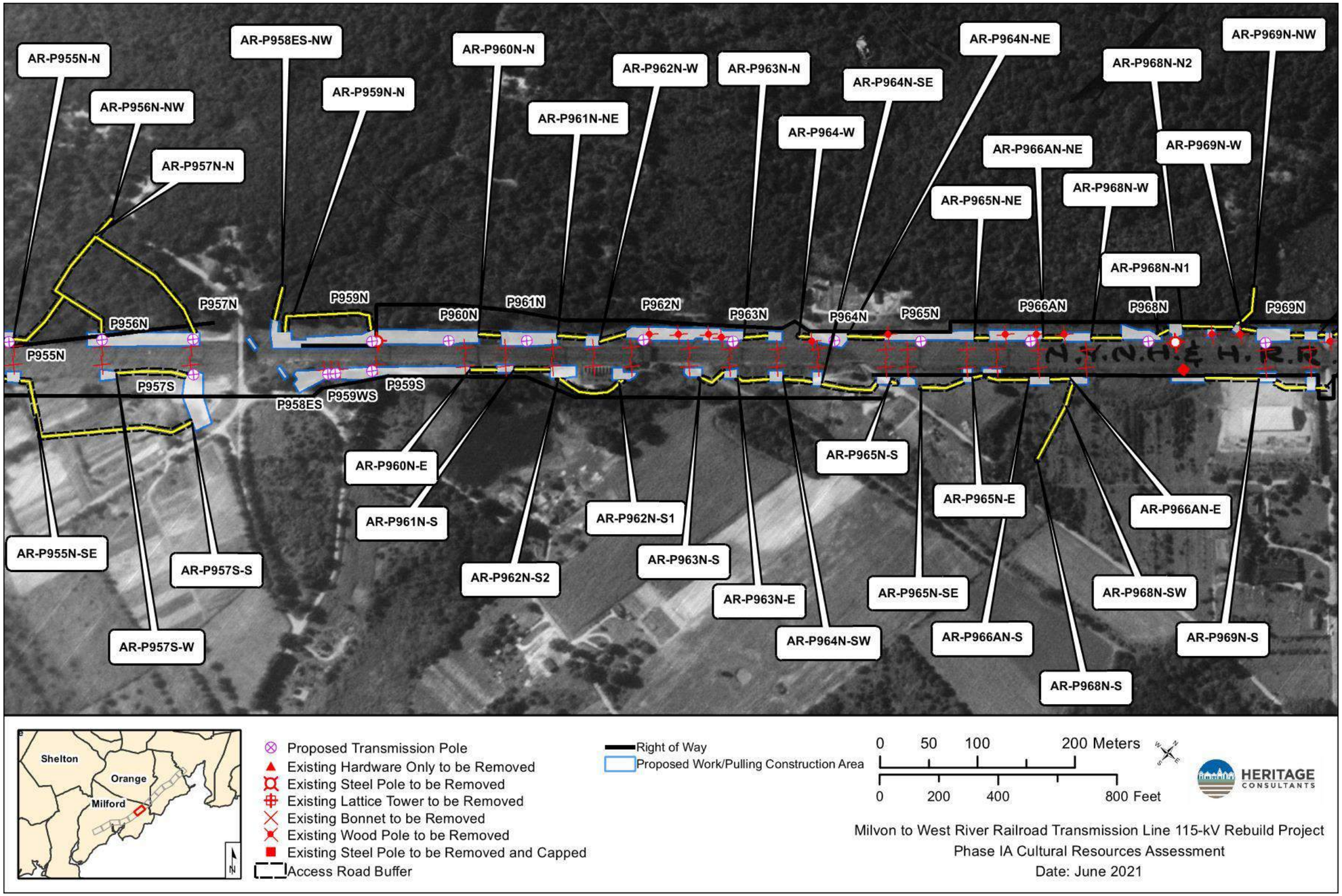


Figure 6; Sheet 6. Excerpt from a 1951 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

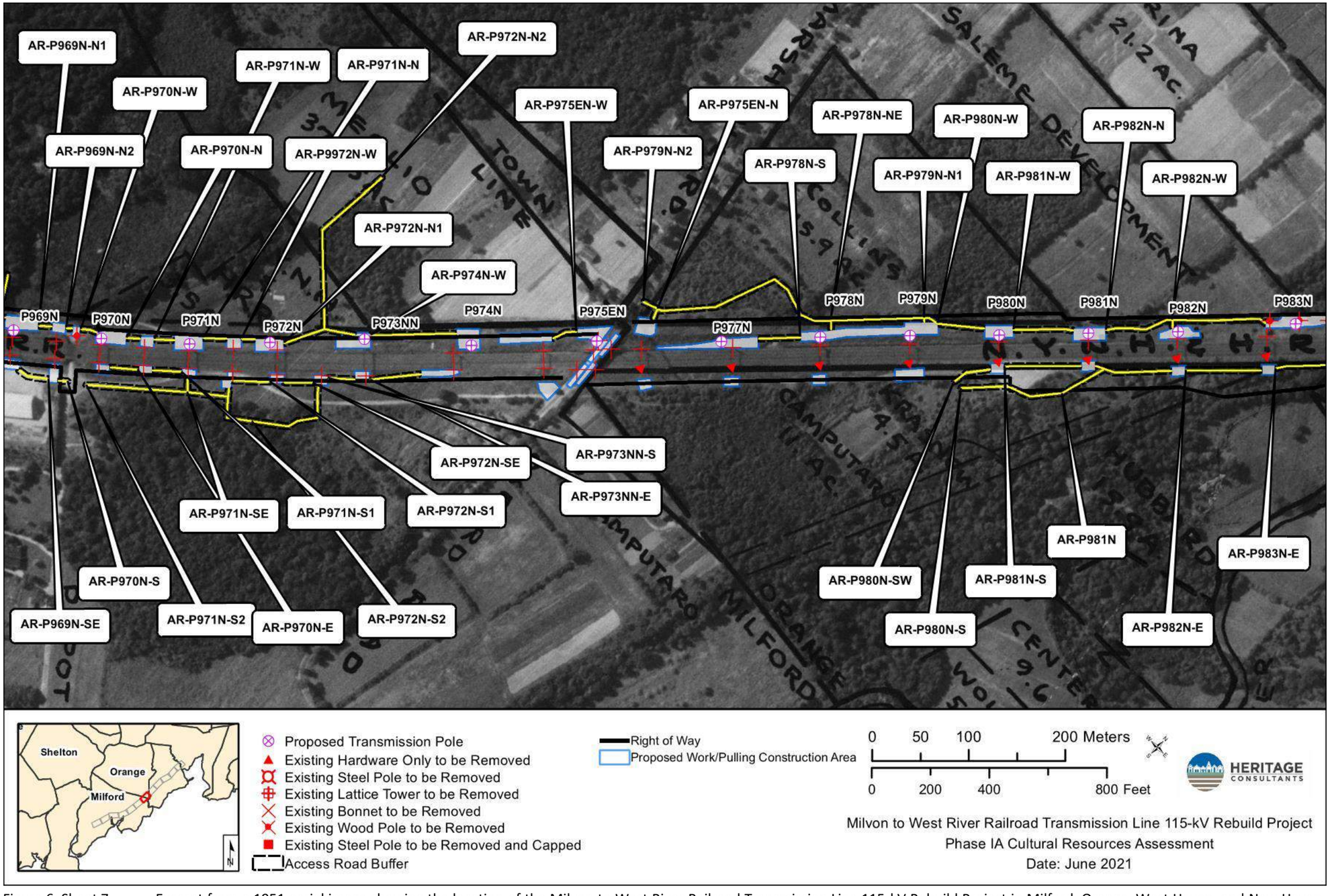


Figure 6; Sheet 7. Excerpt from a 1951 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

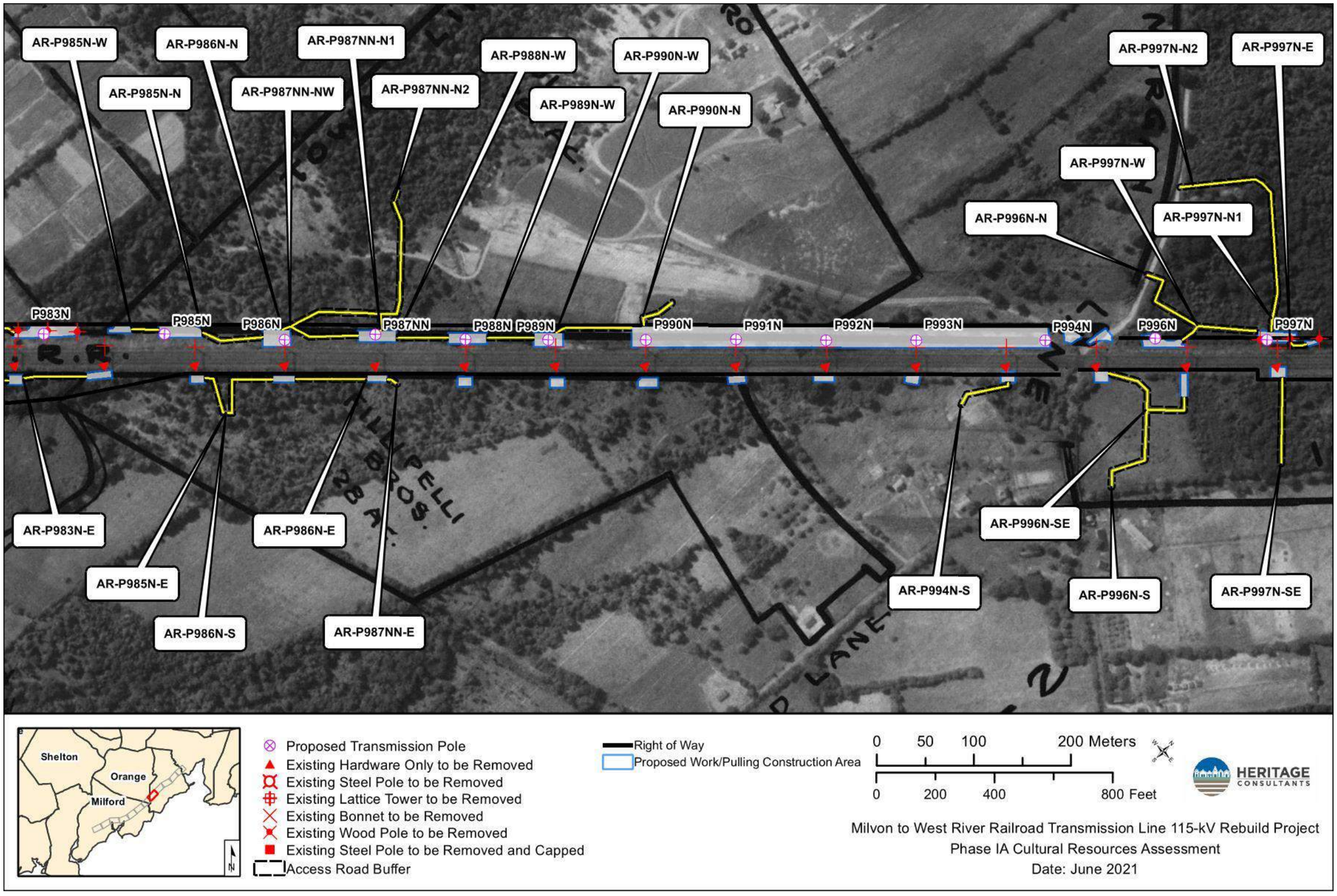


Figure 6; Sheet 8. Excerpt from a 1951 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

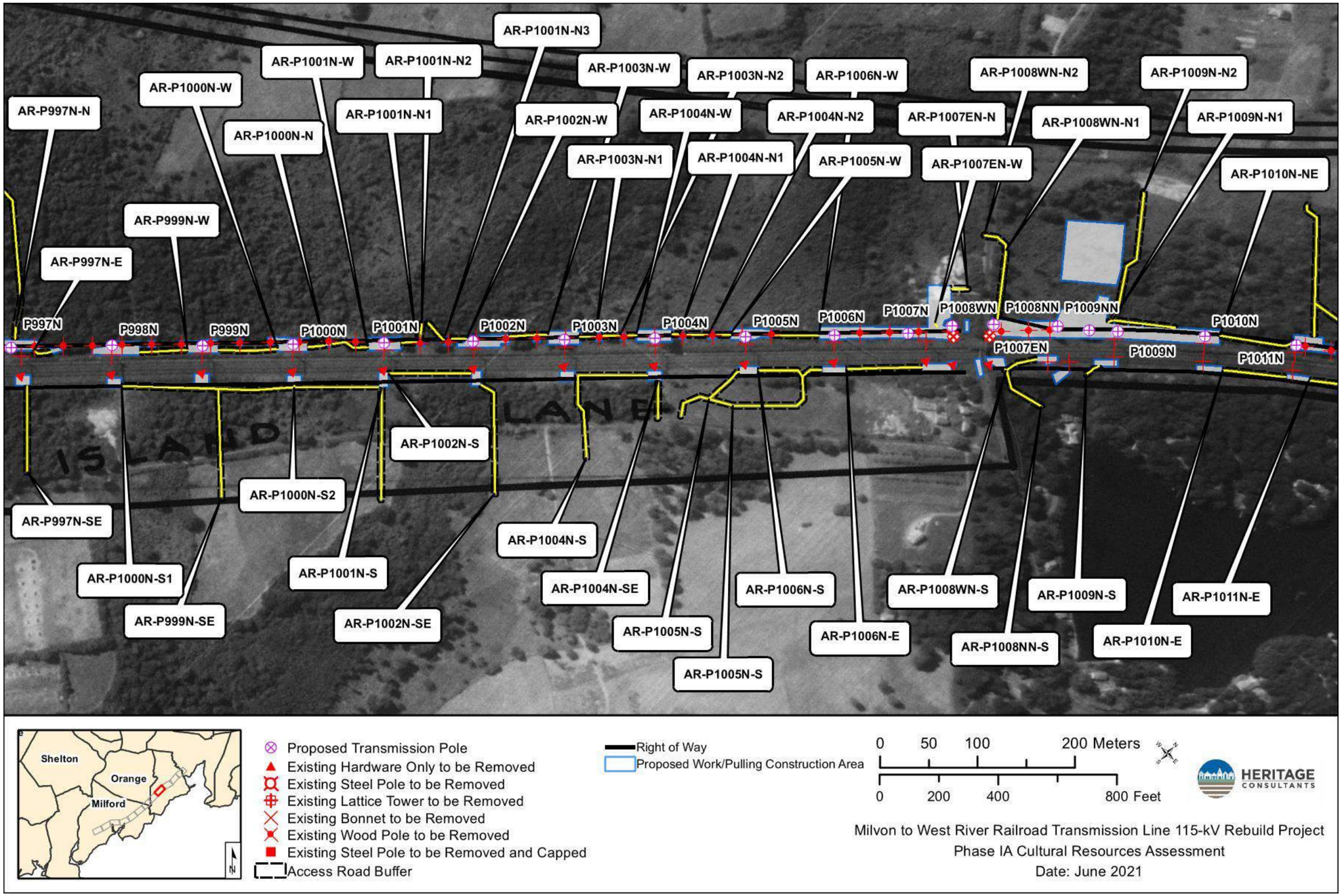


Figure 6; Sheet 9. Excerpt from a 1951 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

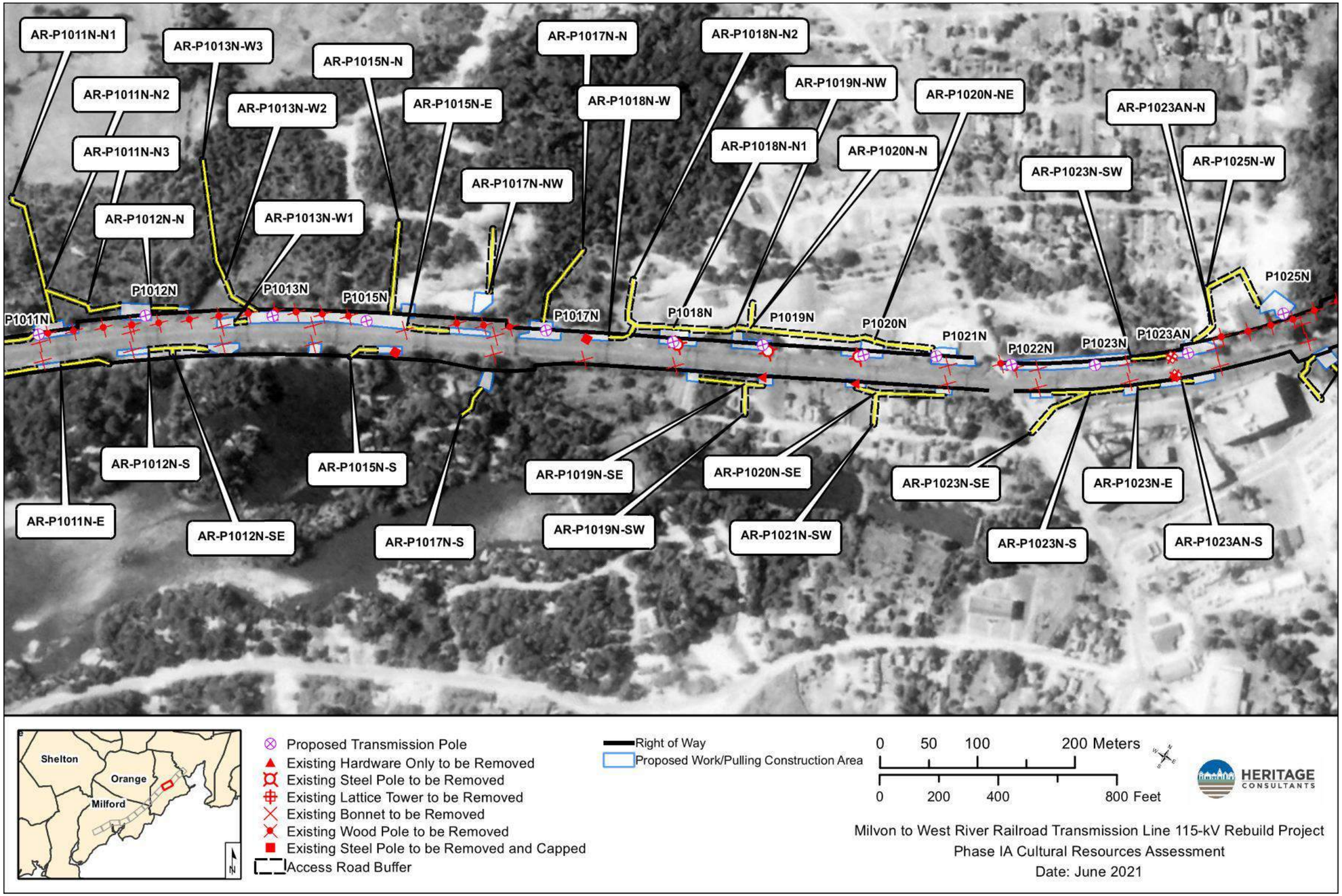


Figure 6; Sheet 10. Excerpt from a 1951 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

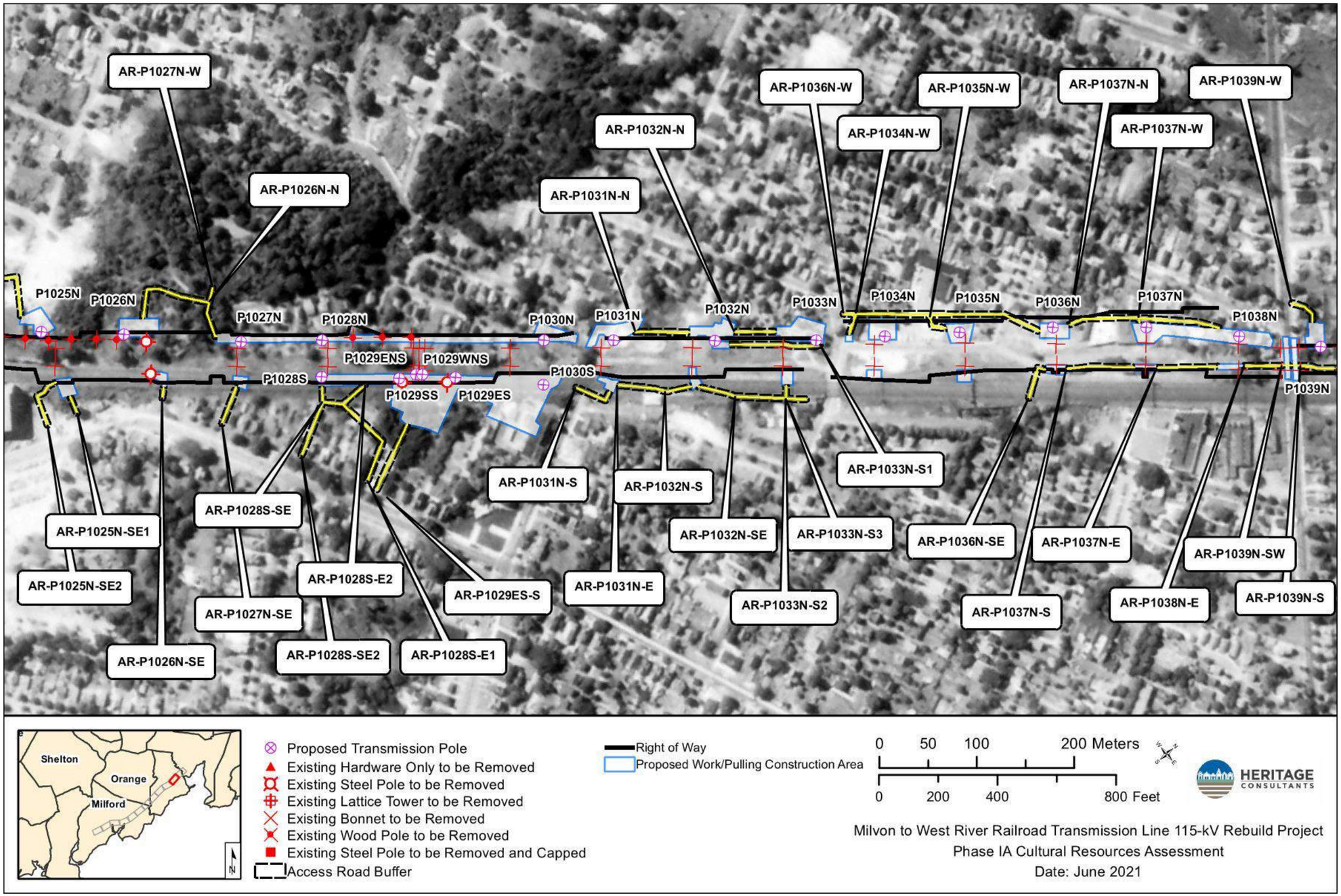


Figure 6; Sheet 11. Excerpt from a 1951 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

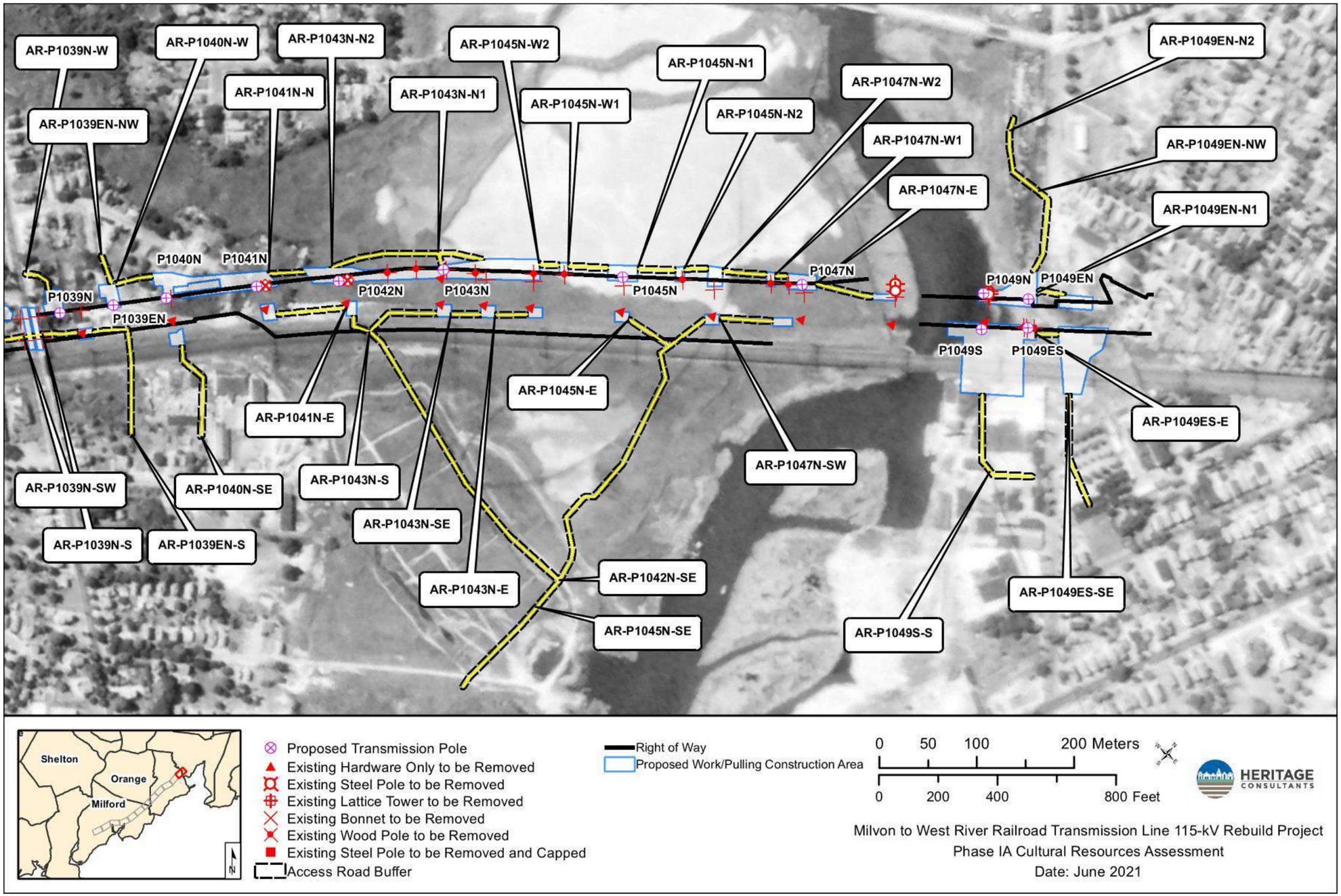


Figure 6; Sheet 12. Excerpt from a 1951 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

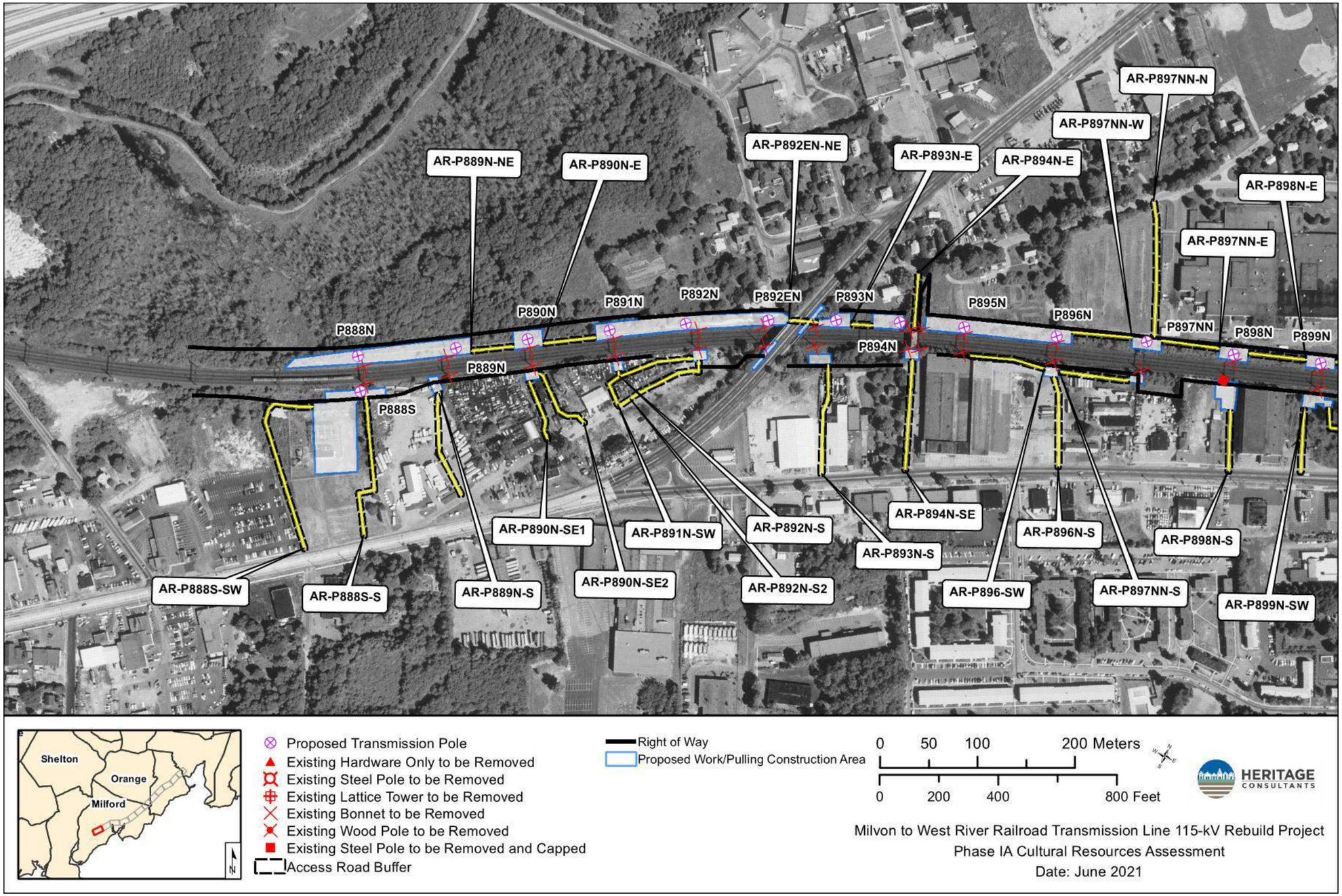


Figure 7; Sheet 1. Excerpt from a 1974 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

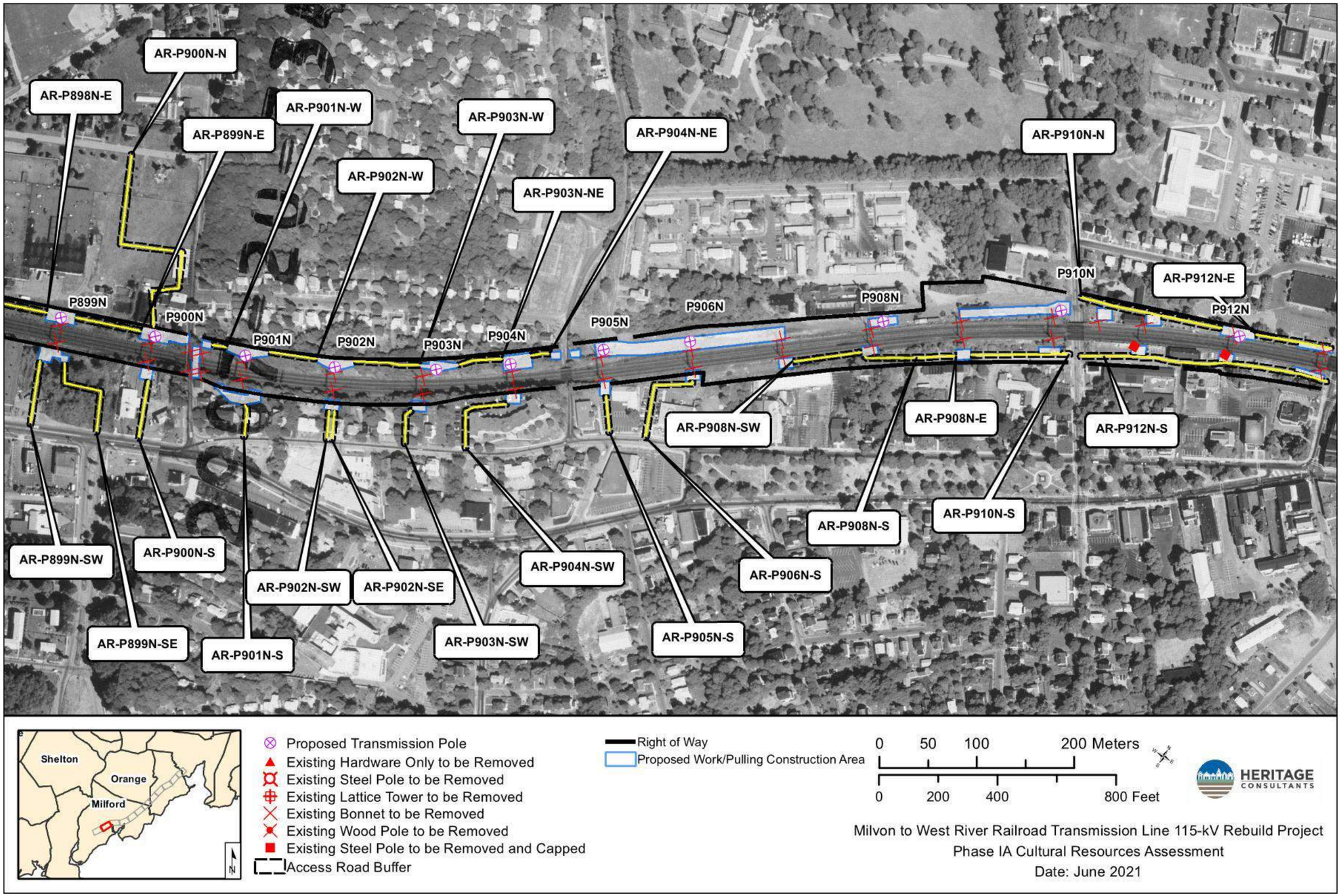


Figure 7; Sheet 2. Excerpt from a 1974 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

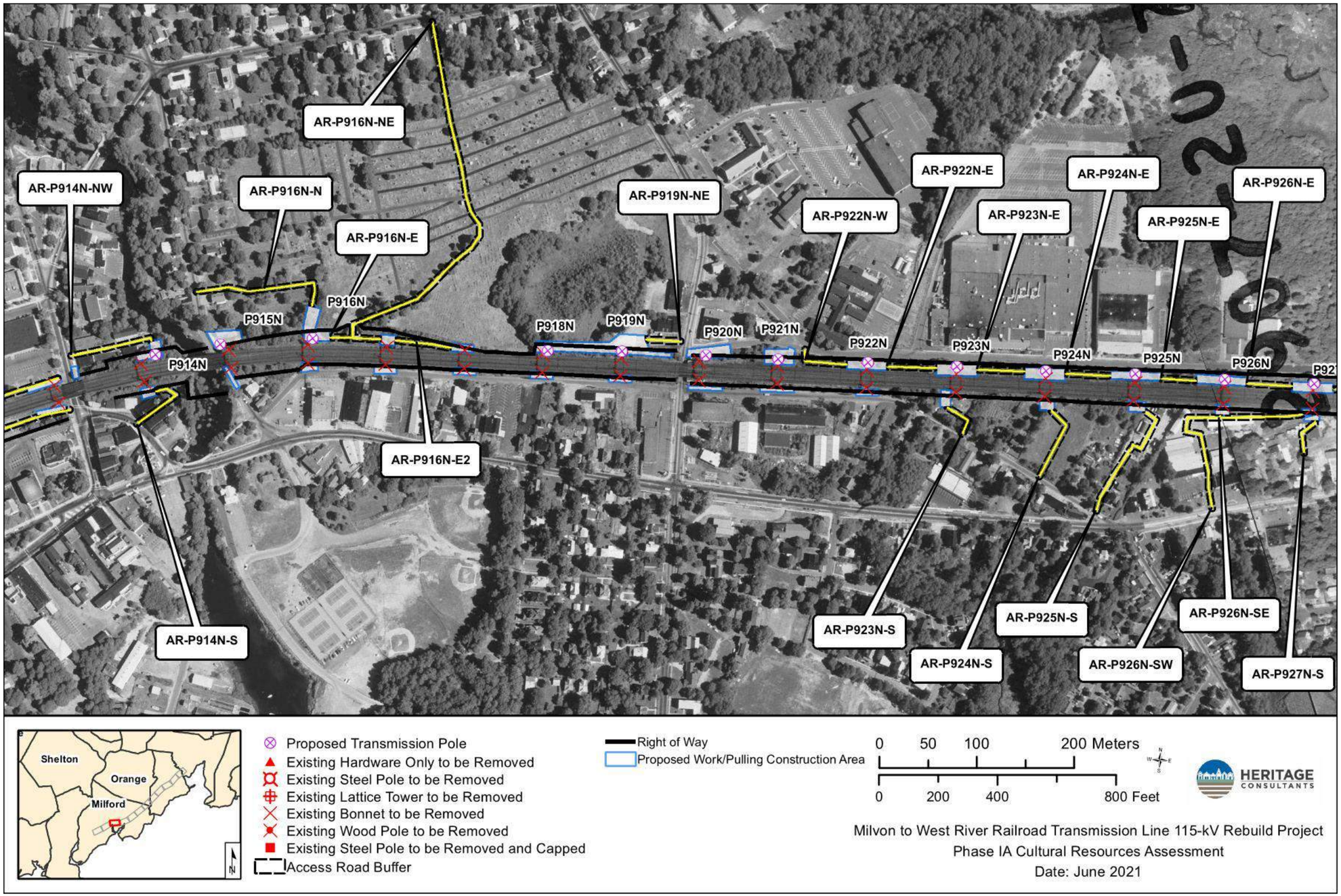


Figure 7; Sheet 3. Excerpt from a 1974 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

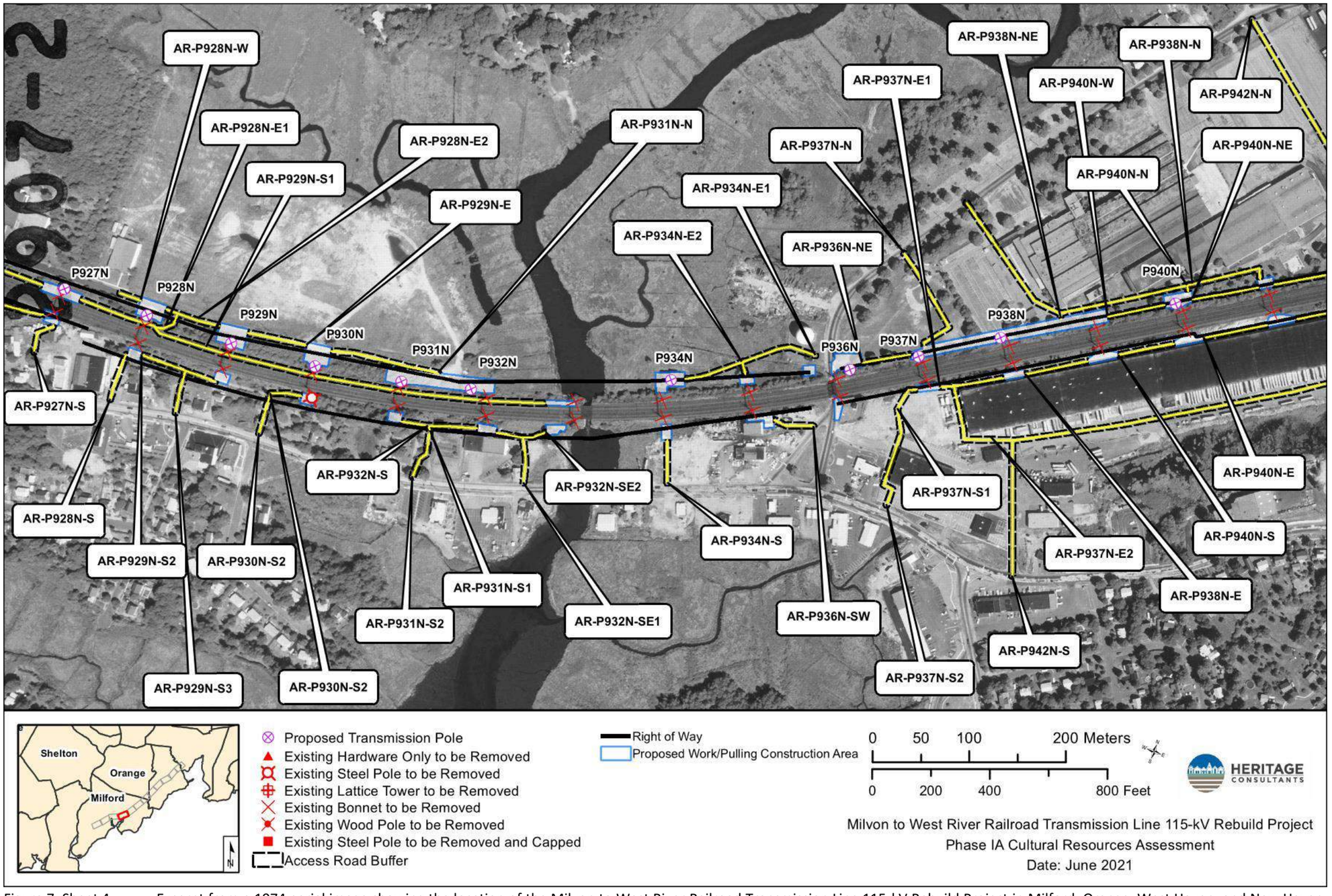


Figure 7; Sheet 4. Excerpt from a 1974 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

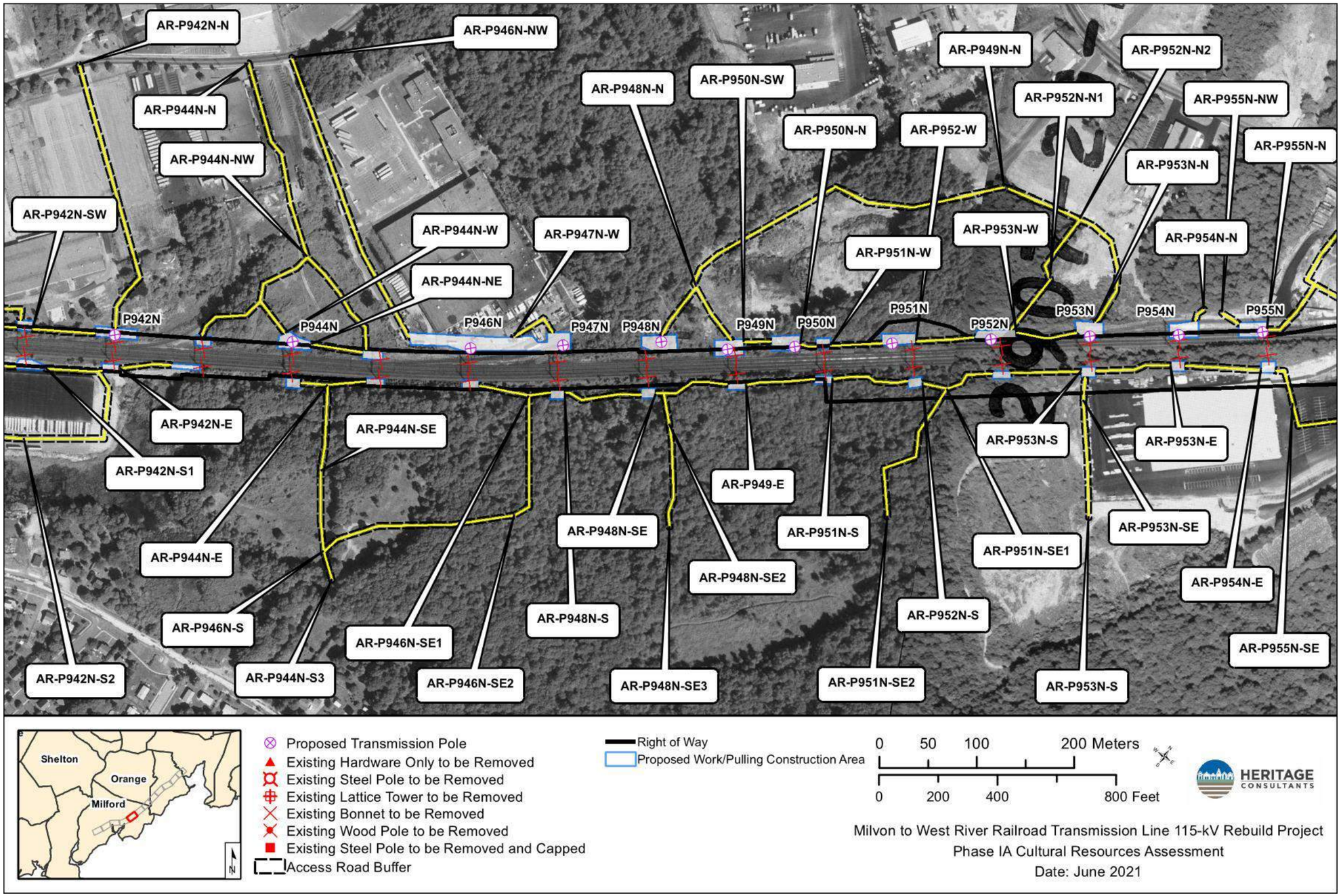


Figure 7; Sheet 5. Excerpt from a 1974 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

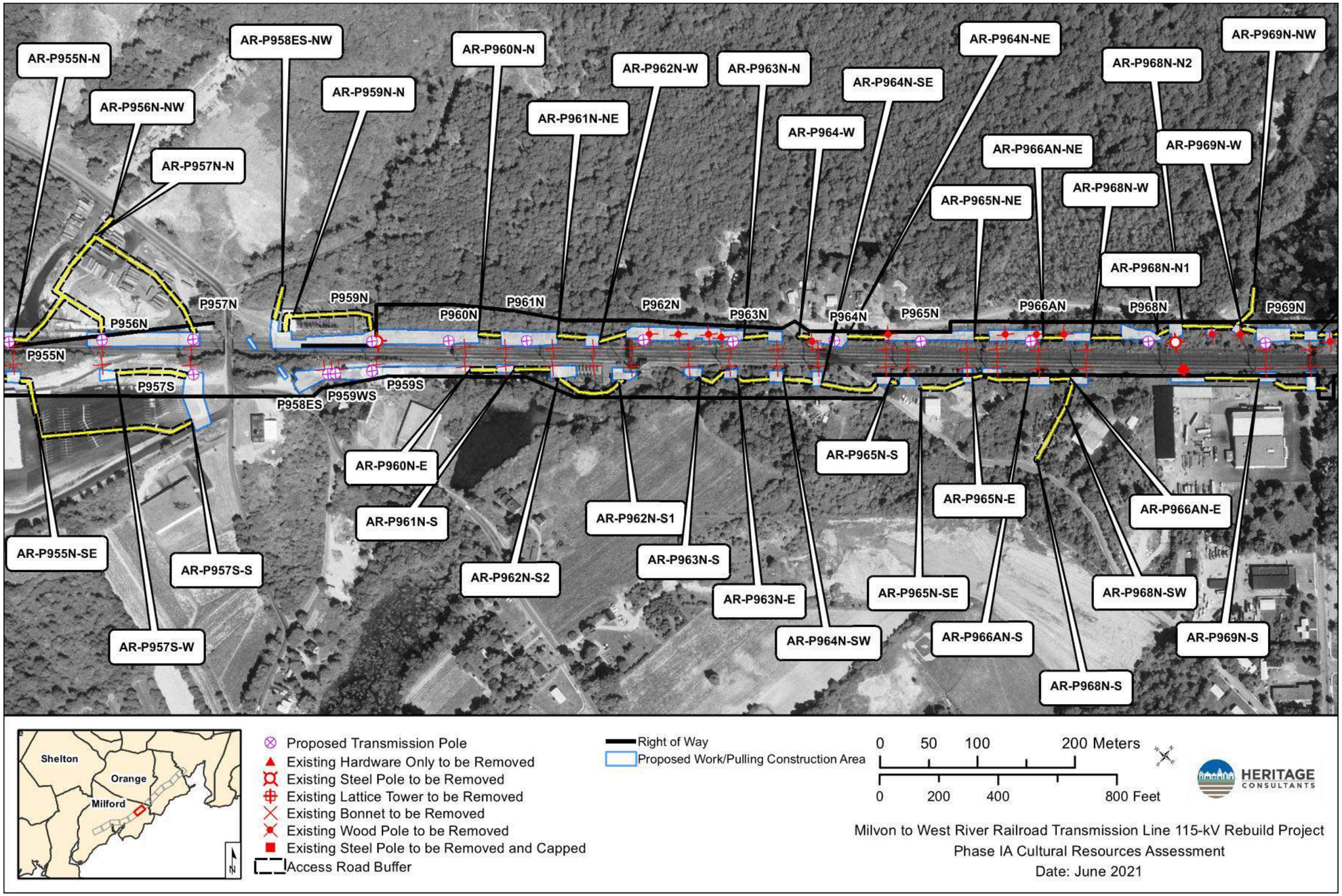


Figure 7; Sheet 6. Excerpt from a 1974 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

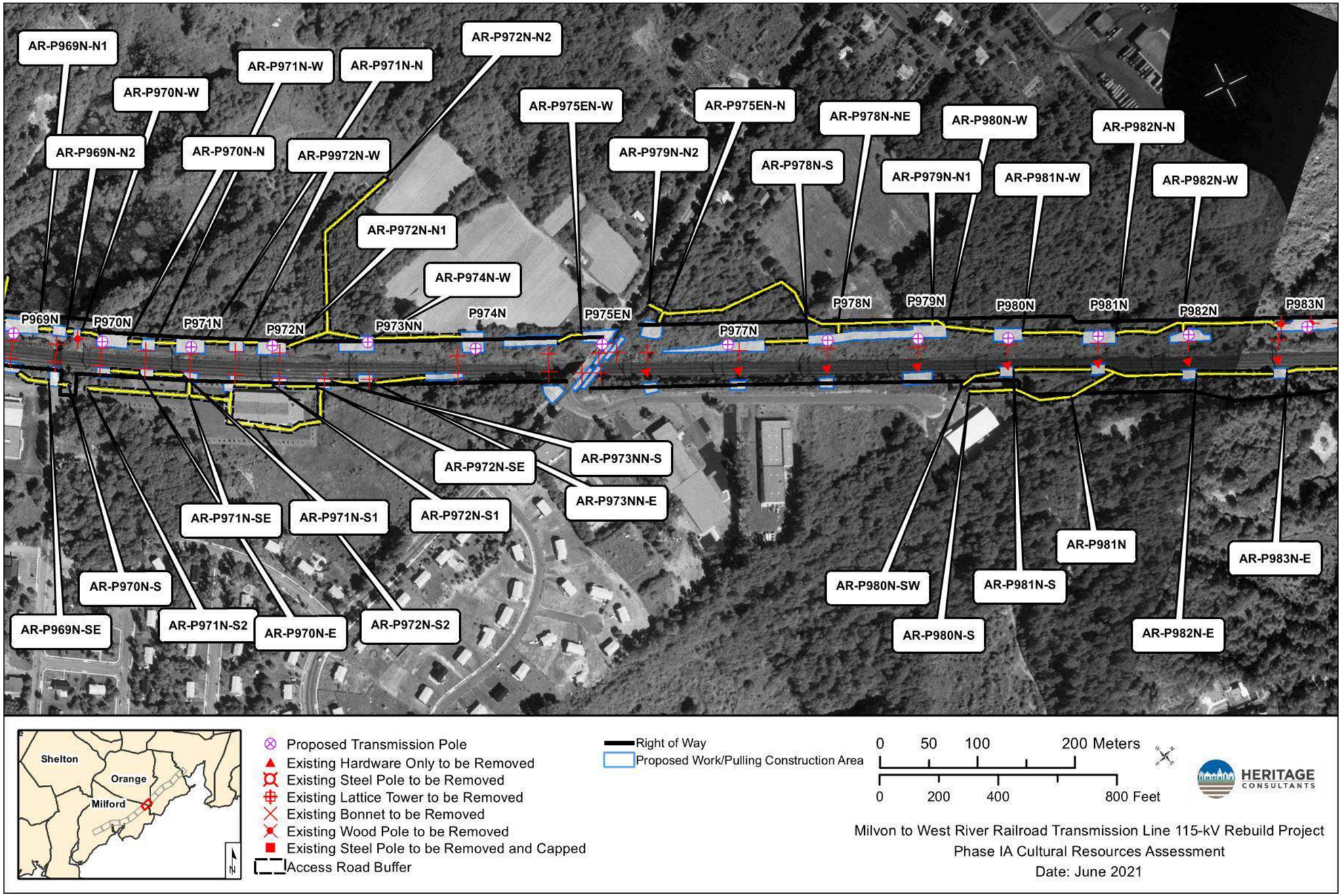


Figure 7; Sheet 7. Excerpt from a 1974 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

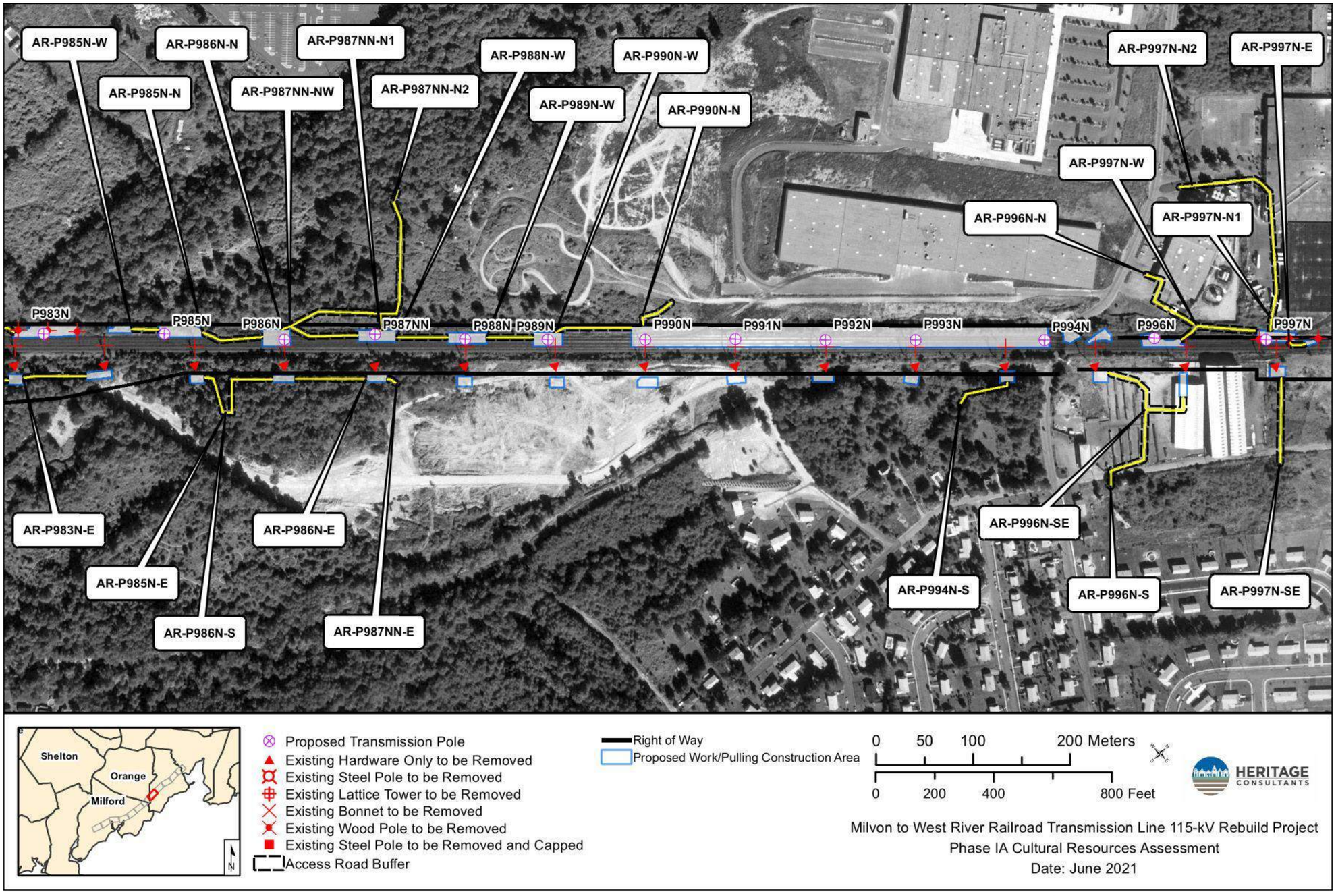


Figure 7; Sheet 8. Excerpt from a 1974 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

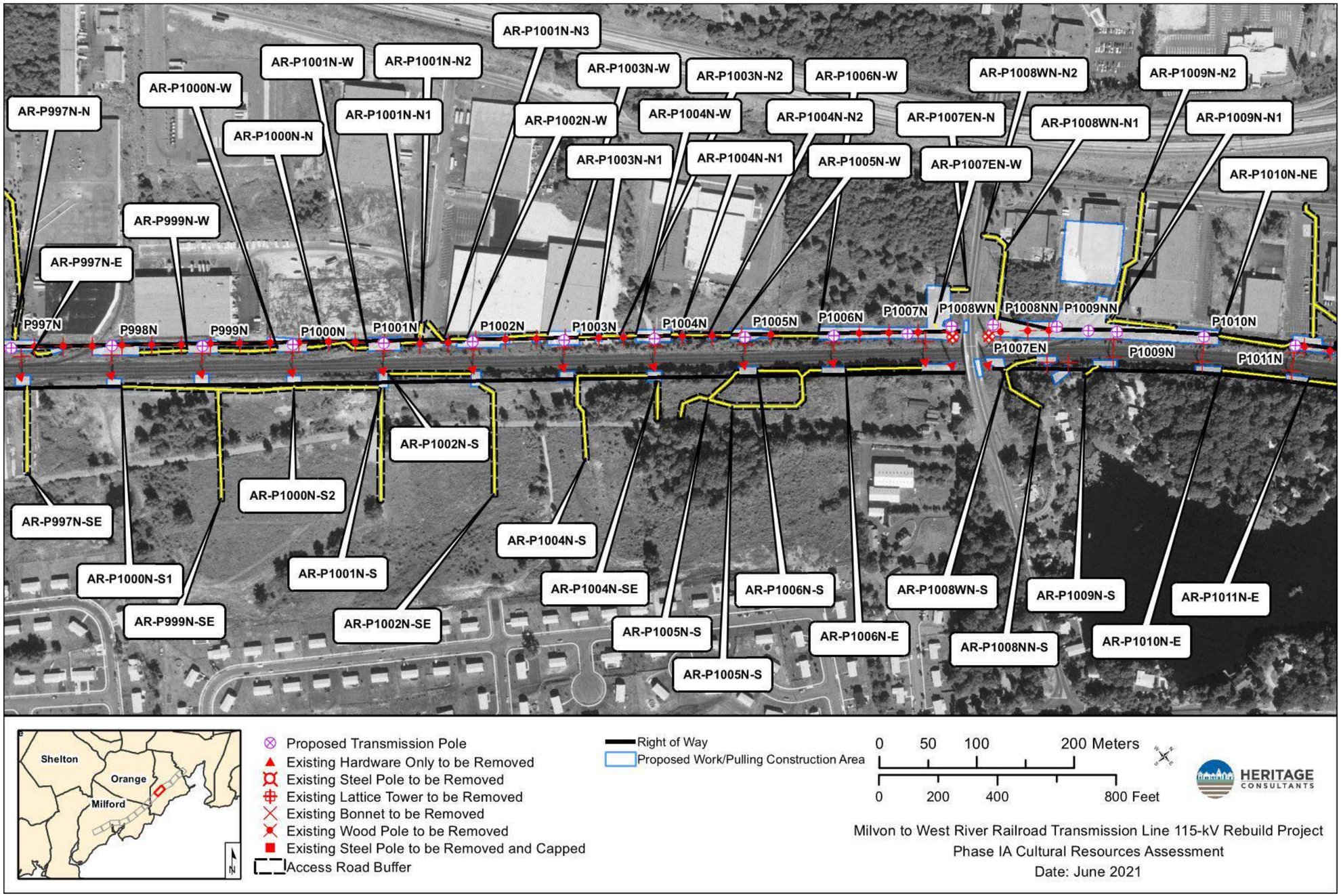


Figure 7; Sheet 9. Excerpt from a 1974 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

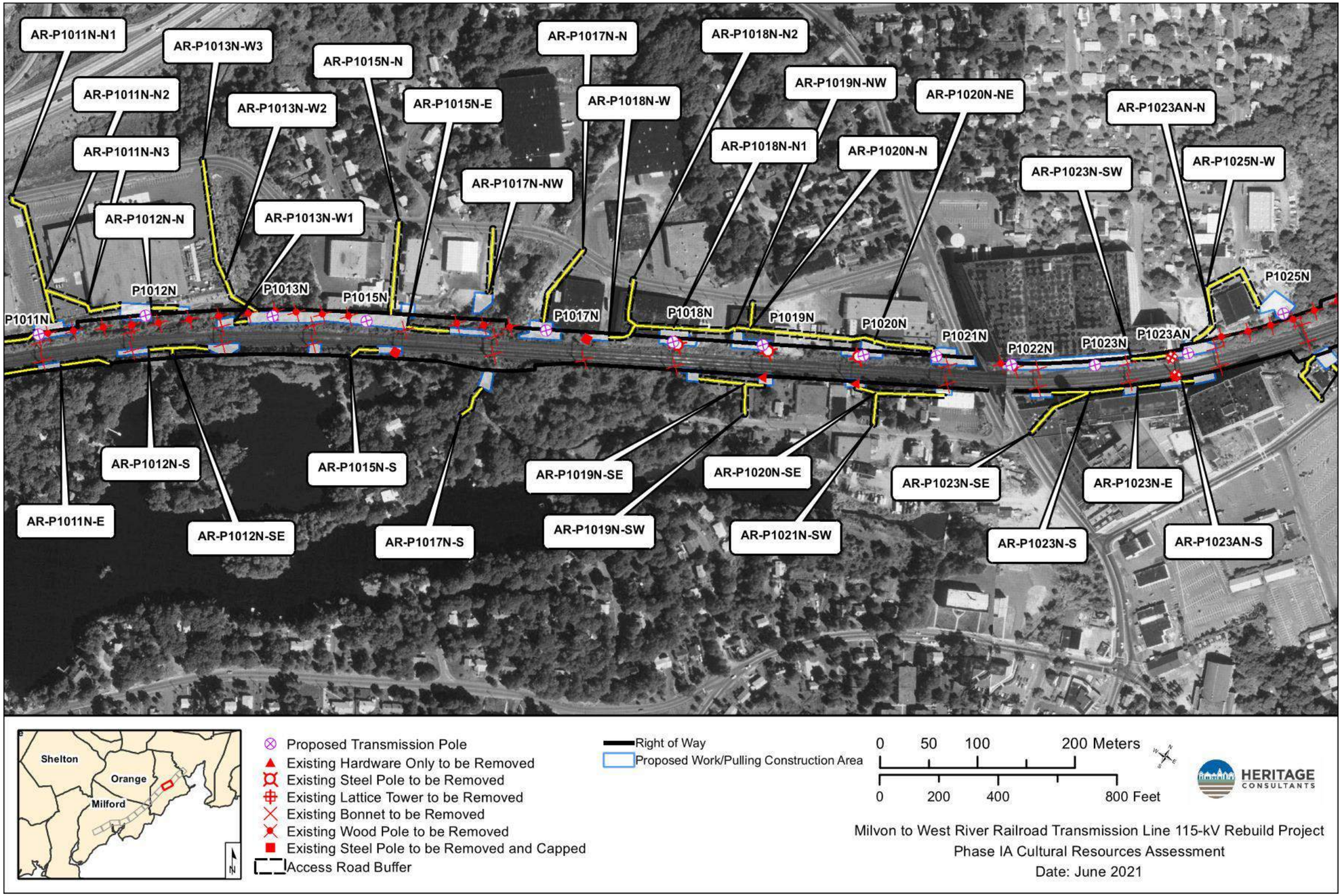


Figure 7; Sheet 10. Excerpt from a 1974 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

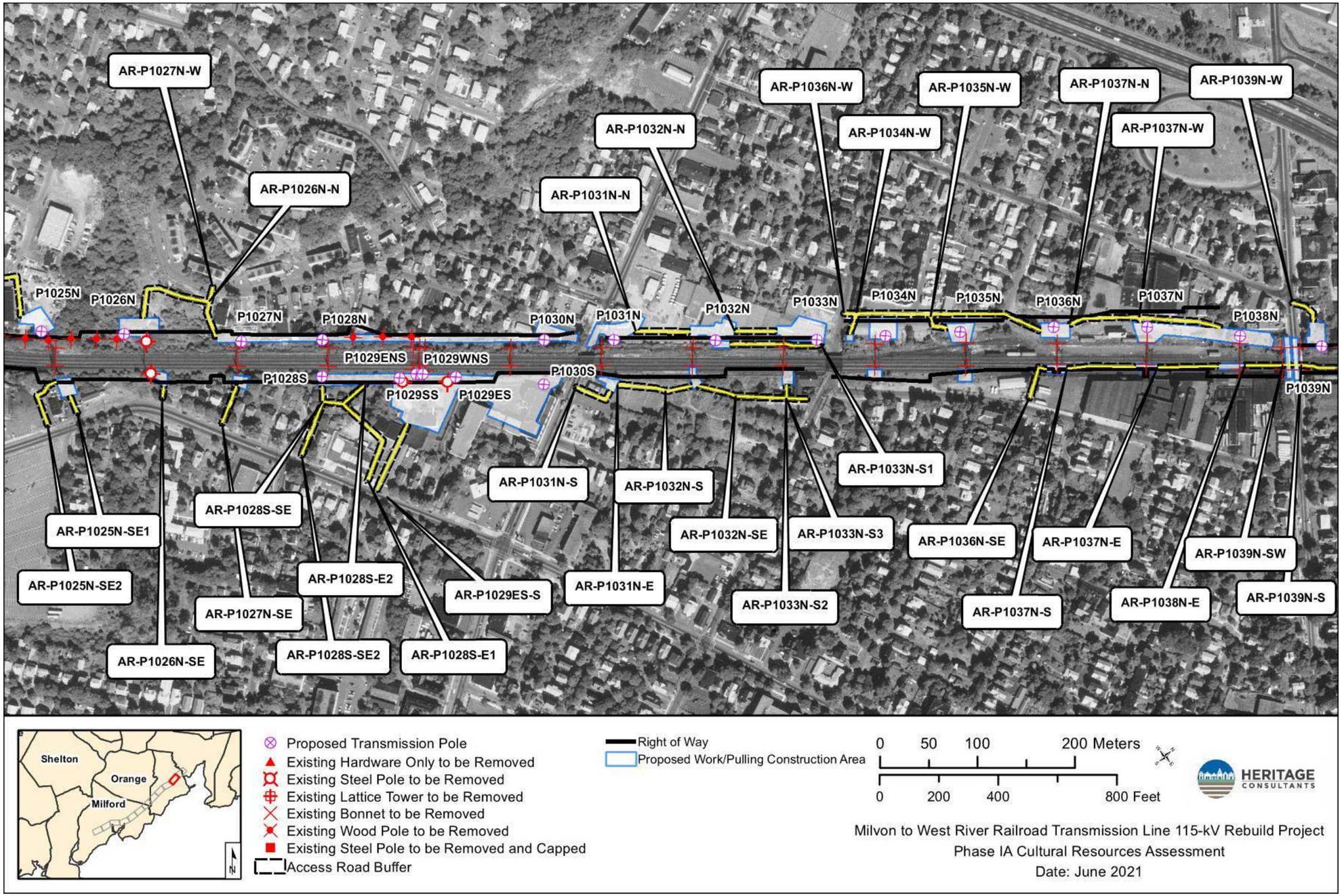


Figure 7; Sheet 11. Excerpt from a 1974 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

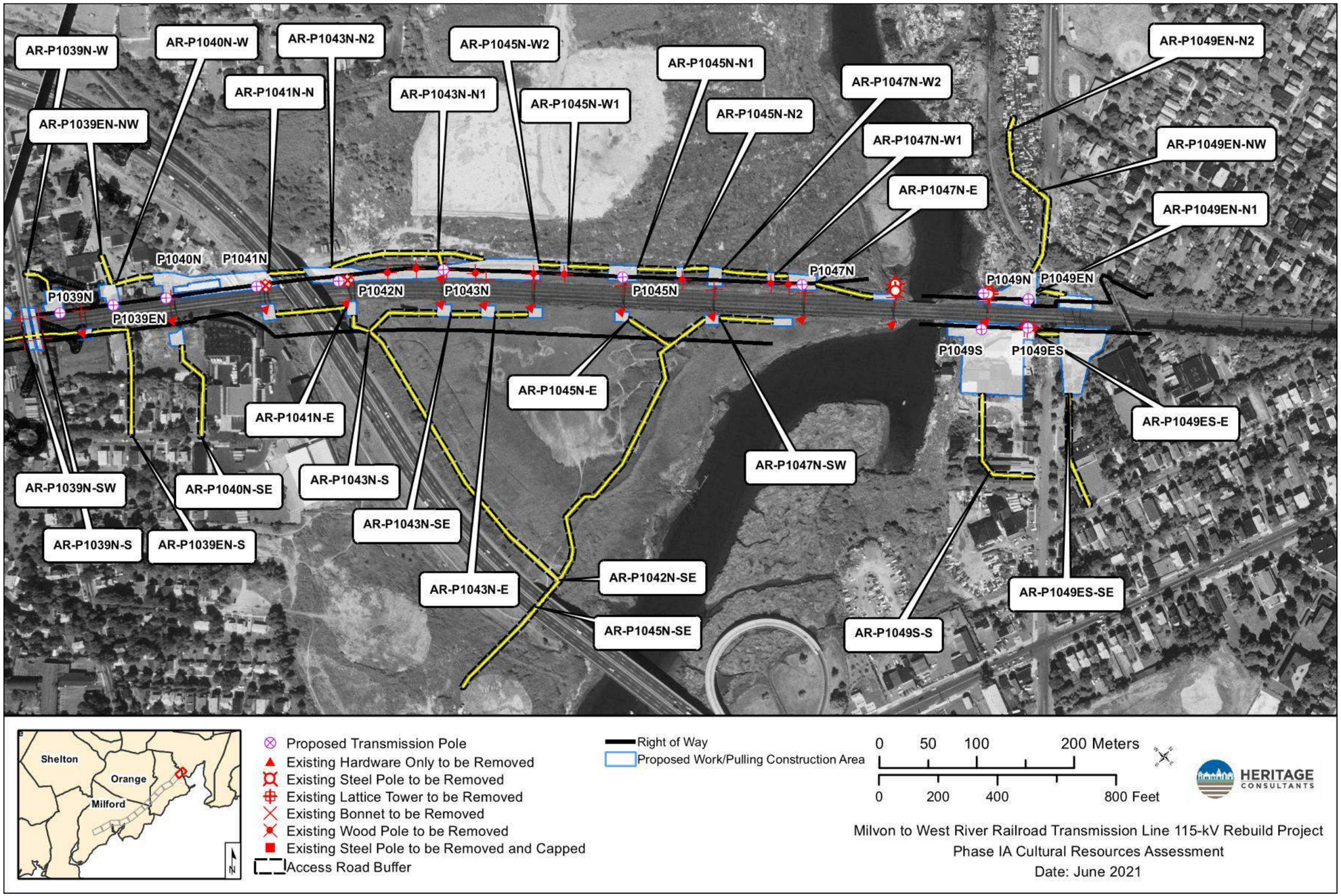


Figure 7; Sheet 12. Excerpt from a 1974 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

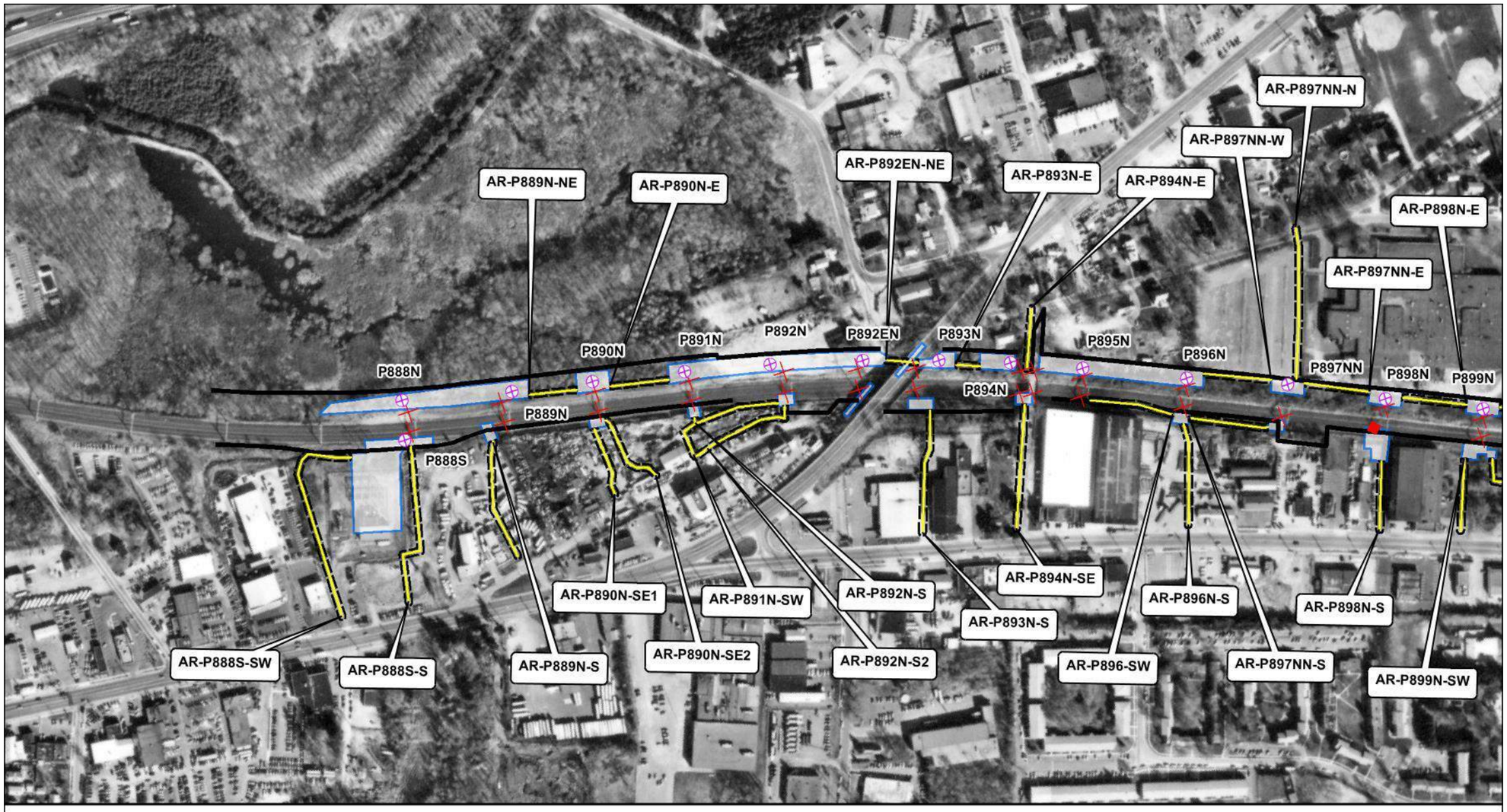


Figure 8; Sheet 1. Excerpt from a 1990 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

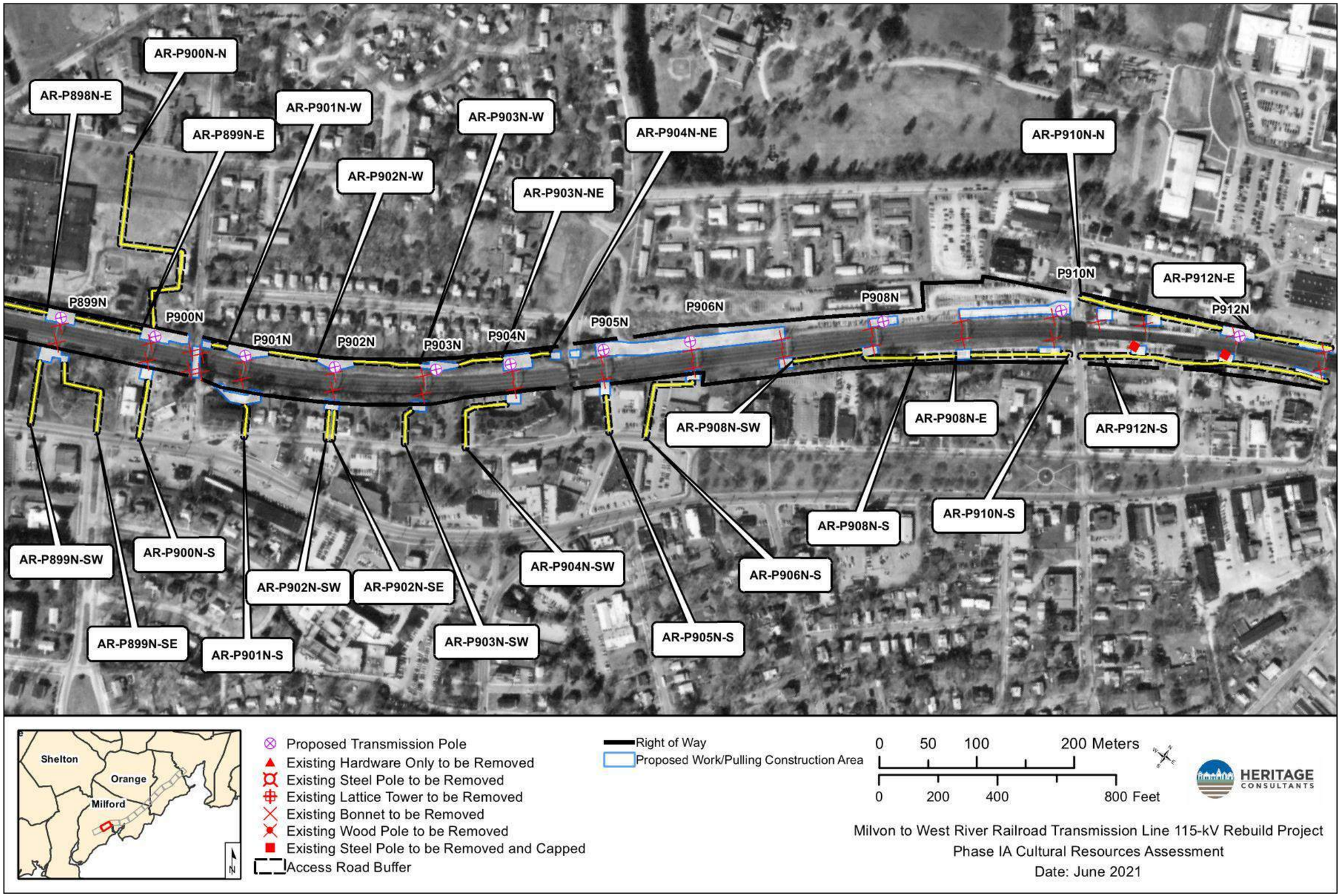


Figure 8; Sheet 2. Excerpt from a 1990 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

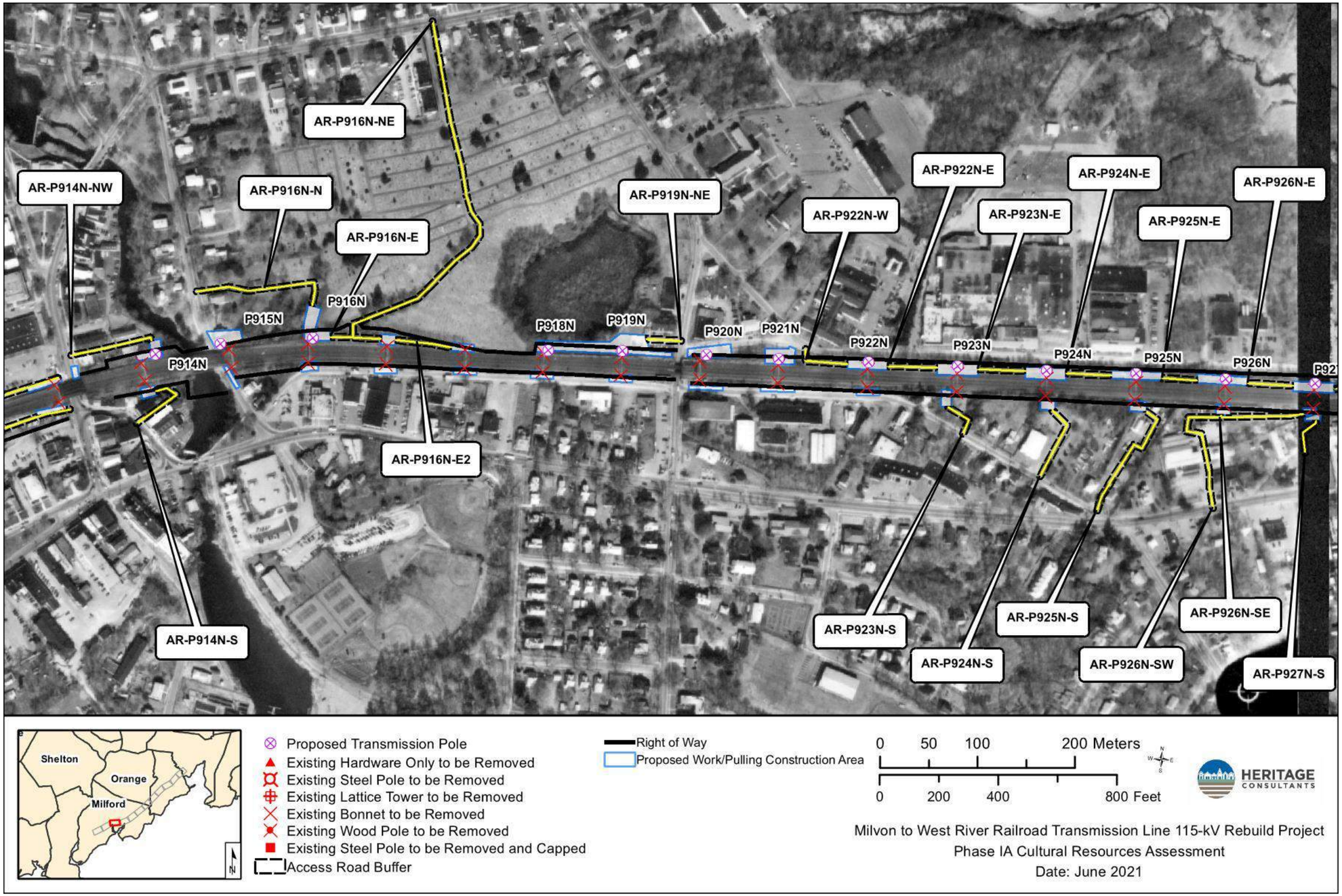


Figure 8; Sheet 3. Excerpt from a 1990 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

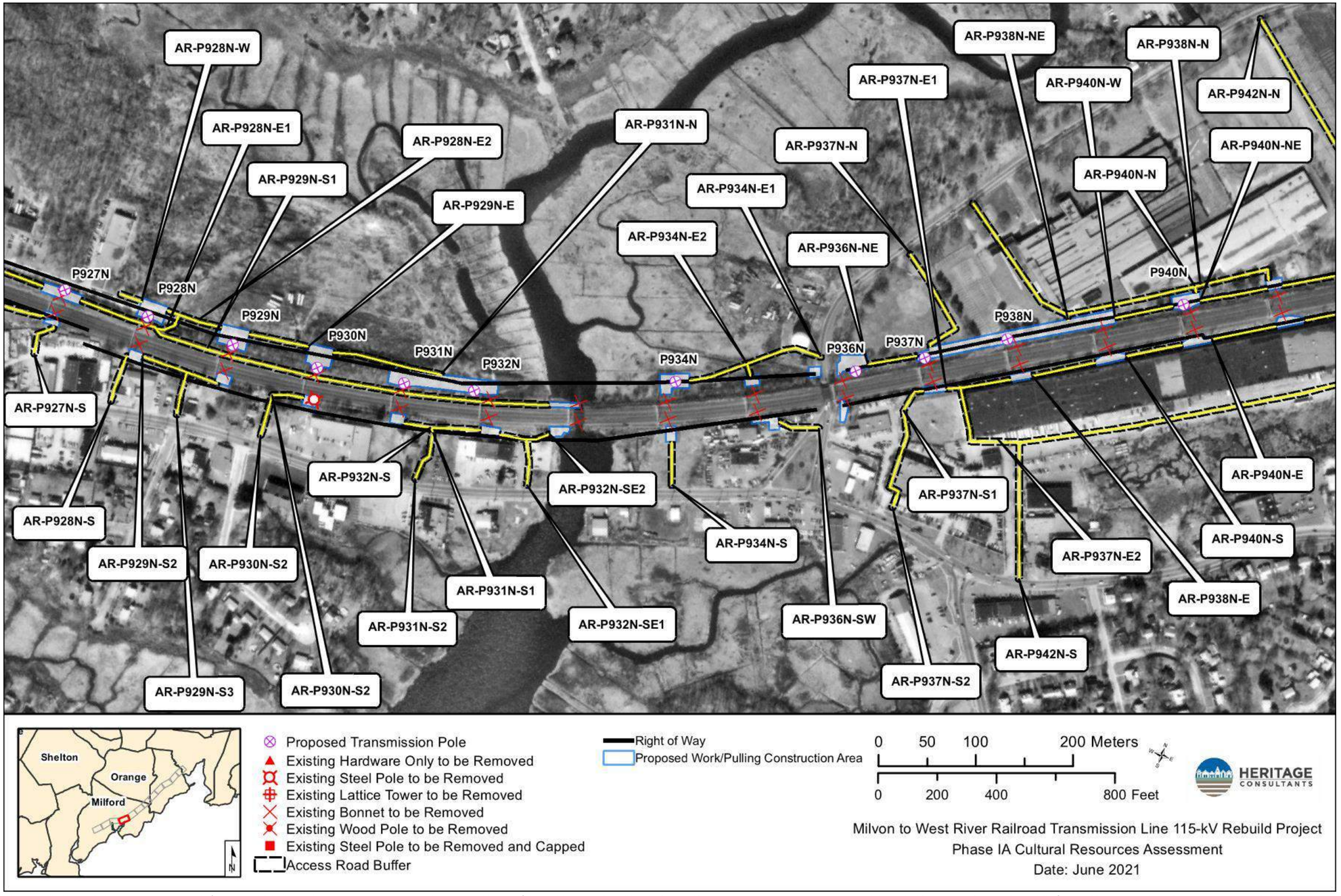


Figure 8; Sheet 4. Excerpt from a 1990 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

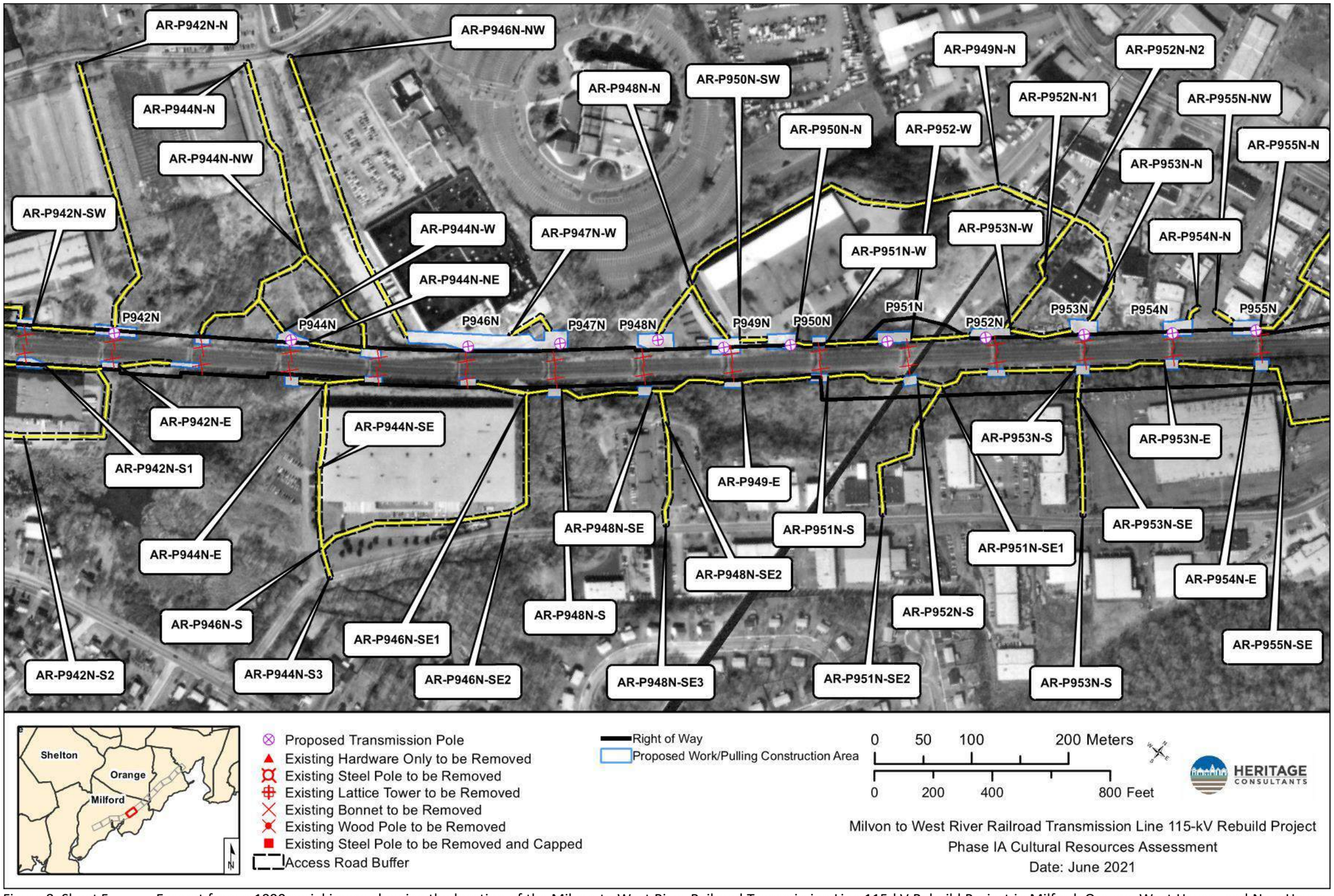


Figure 8; Sheet 5. Excerpt from a 1990 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

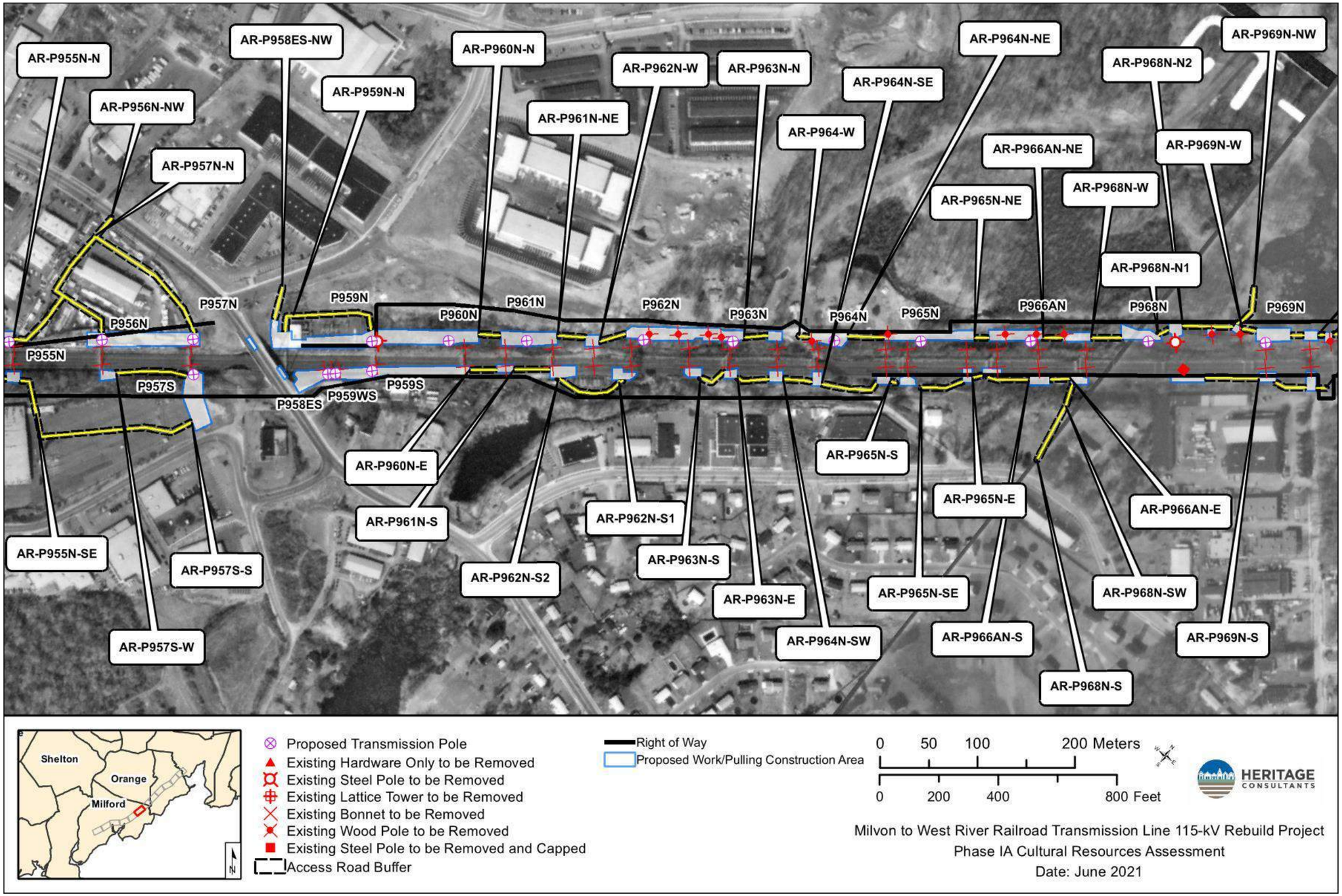


Figure 8; Sheet 6. Excerpt from a 1990 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

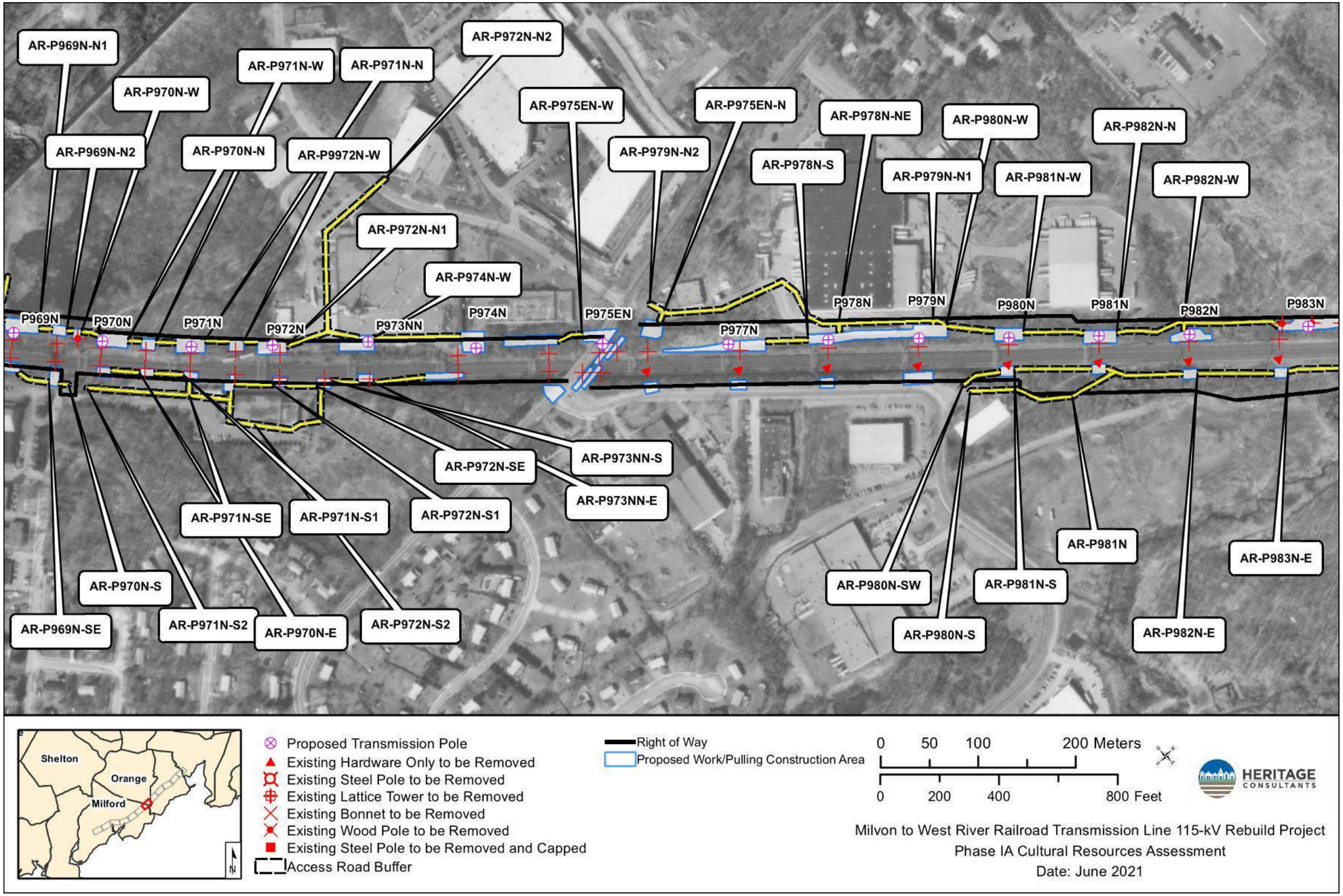


Figure 8; Sheet 7. Excerpt from a 1990 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

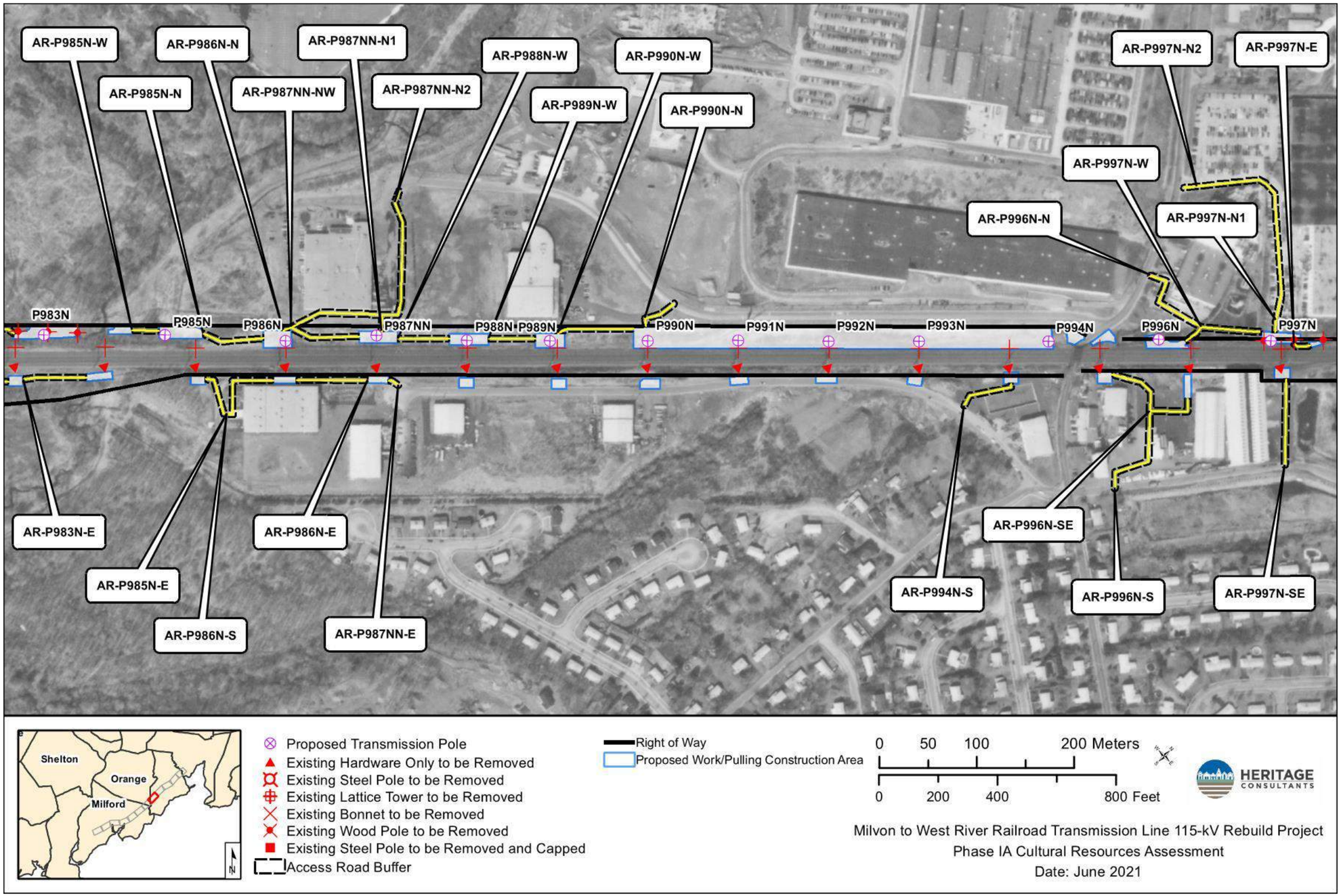


Figure 8; Sheet 8. Excerpt from a 1990 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

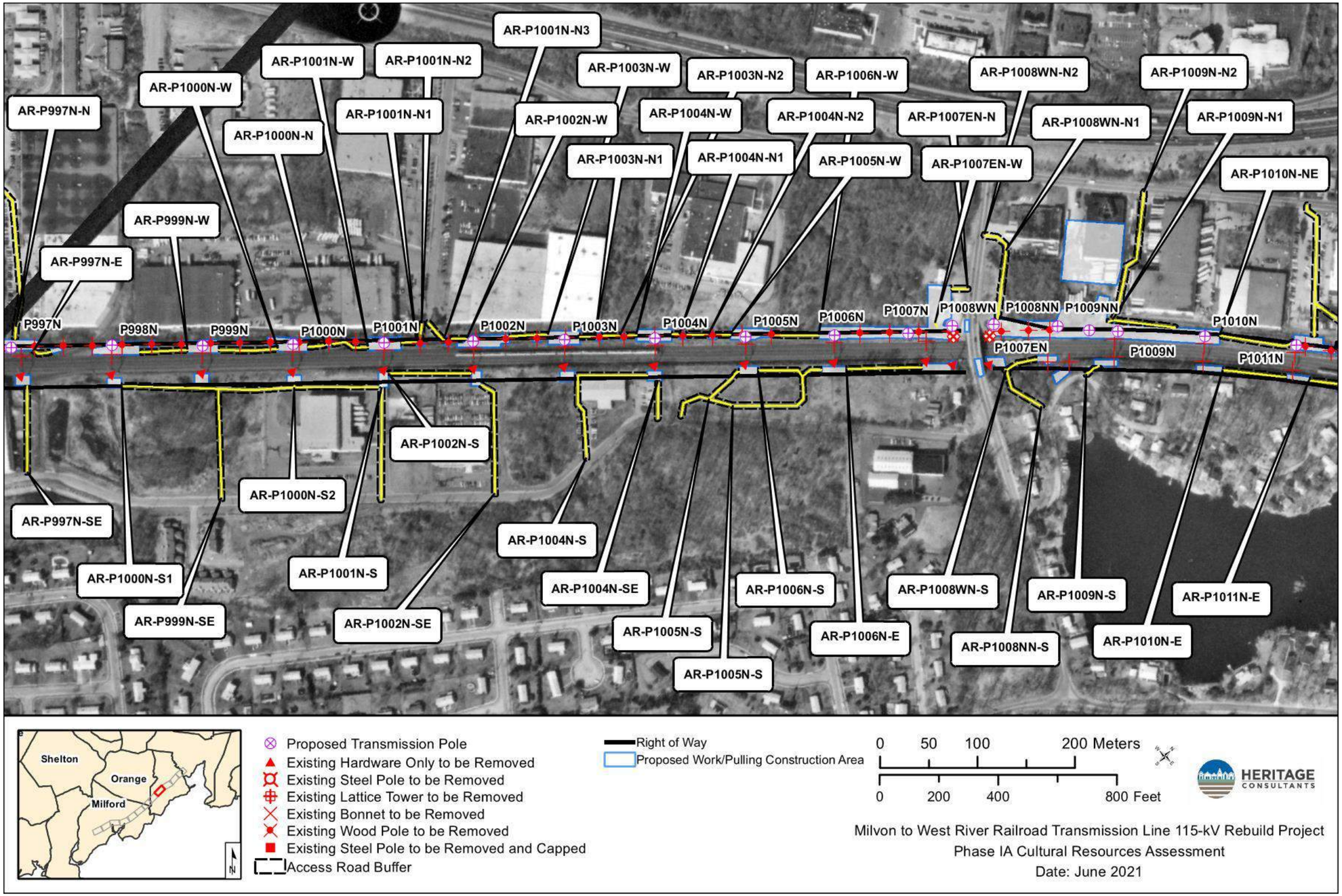


Figure 8; Sheet 9. Excerpt from a 1990 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

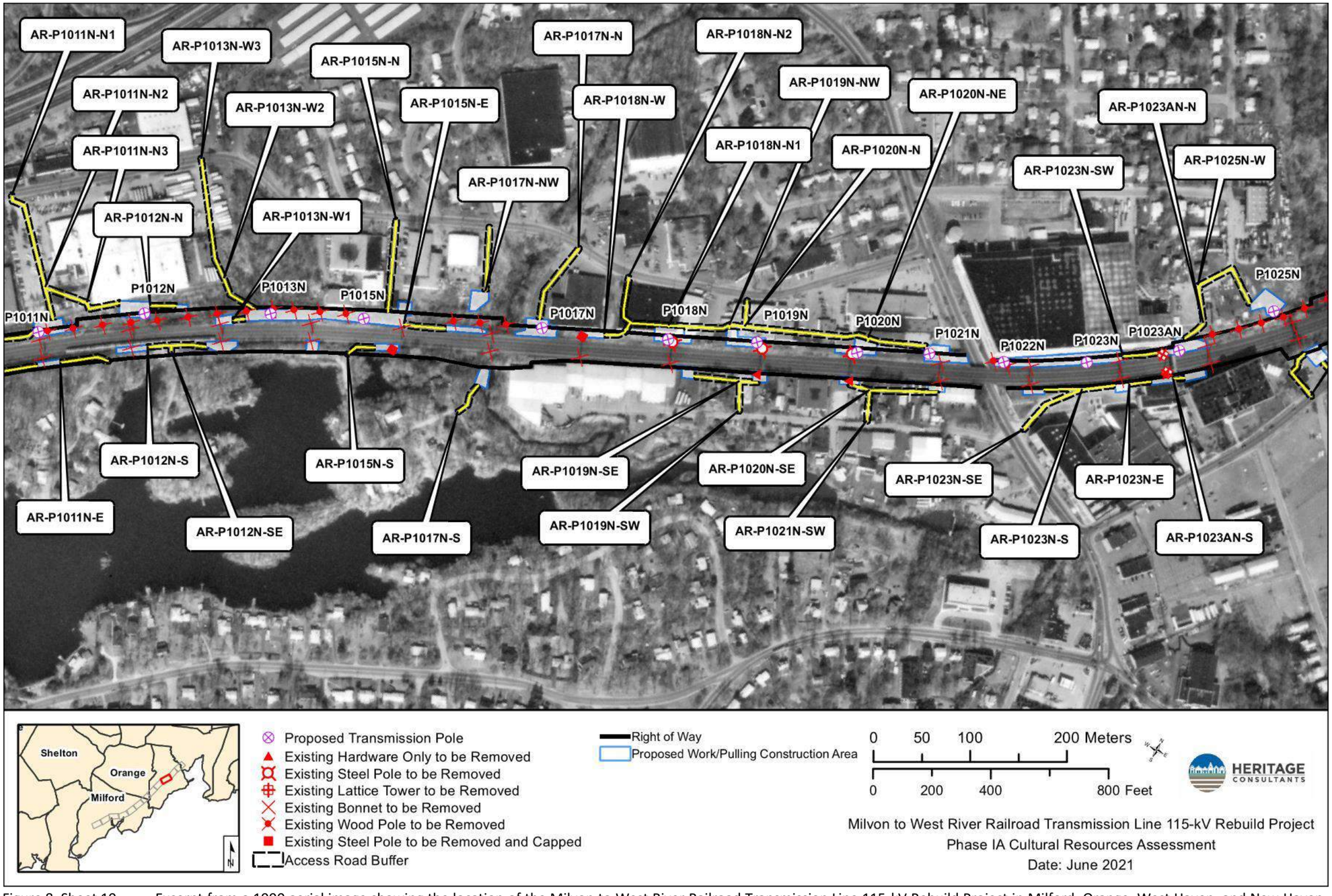


Figure 8; Sheet 10. Excerpt from a 1990 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

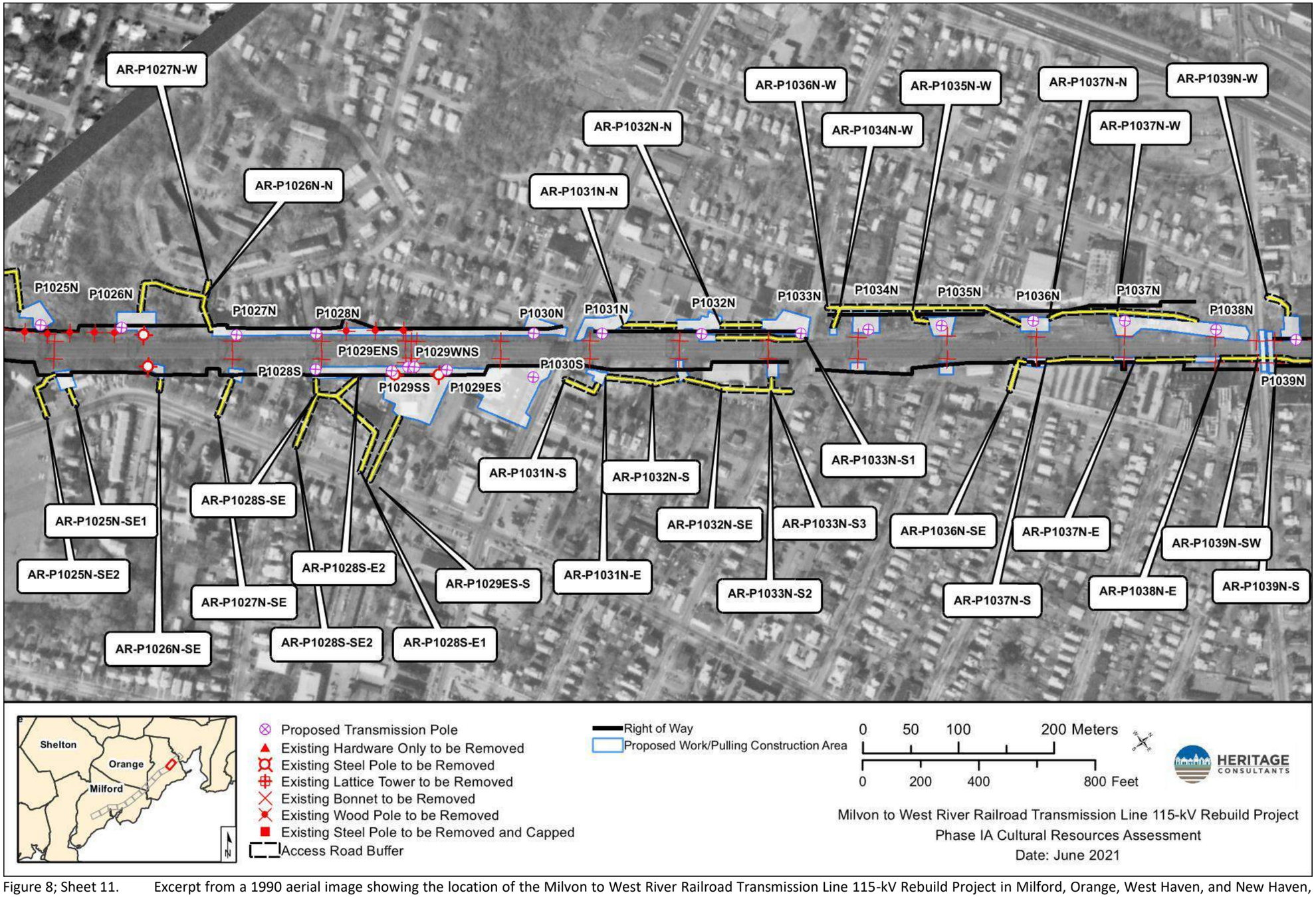


Figure 8; Sheet 11. Excerpt from a 1990 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

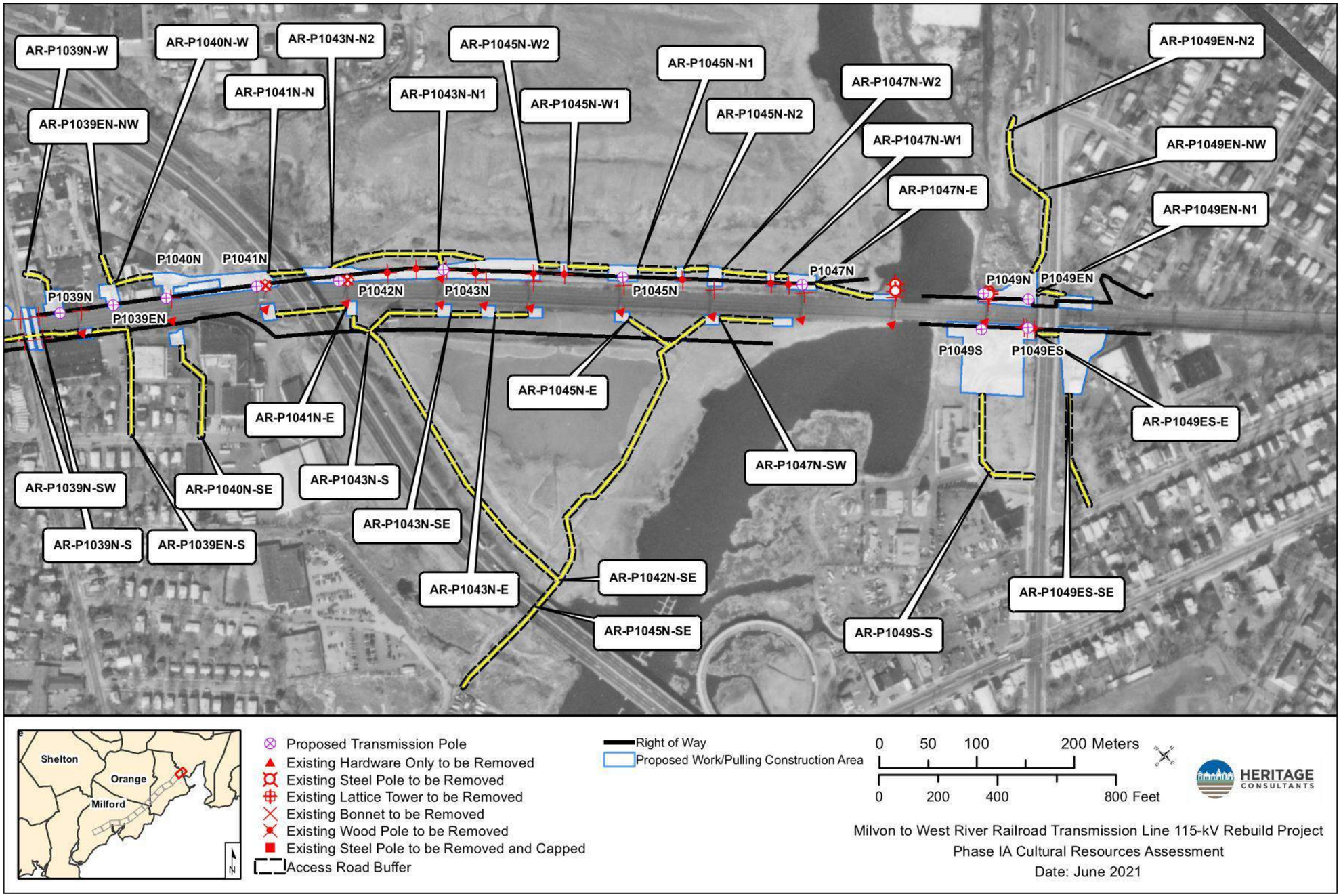


Figure 8; Sheet 12. Excerpt from a 1990 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

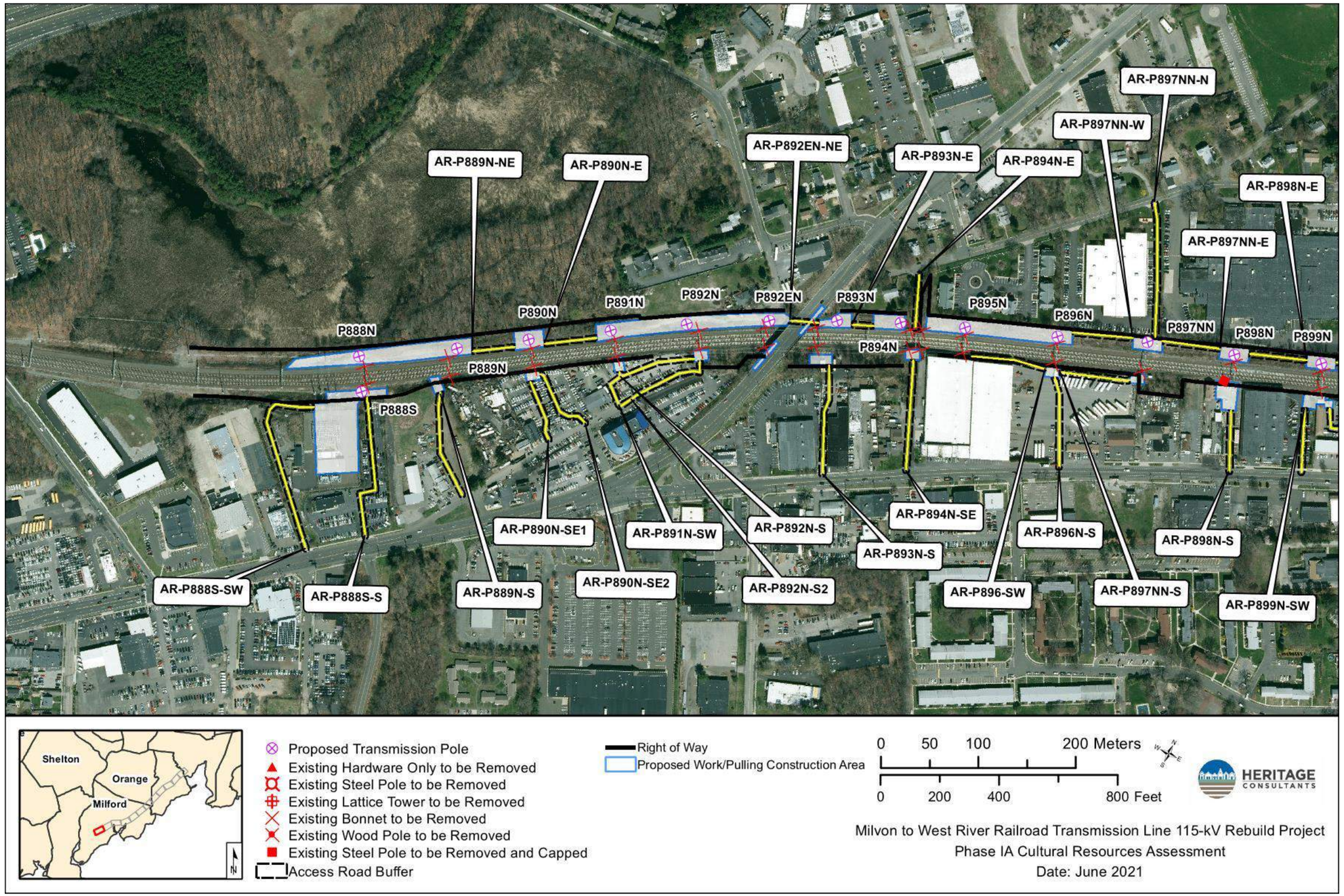


Figure 9; Sheet 1. Excerpt from a 2019 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

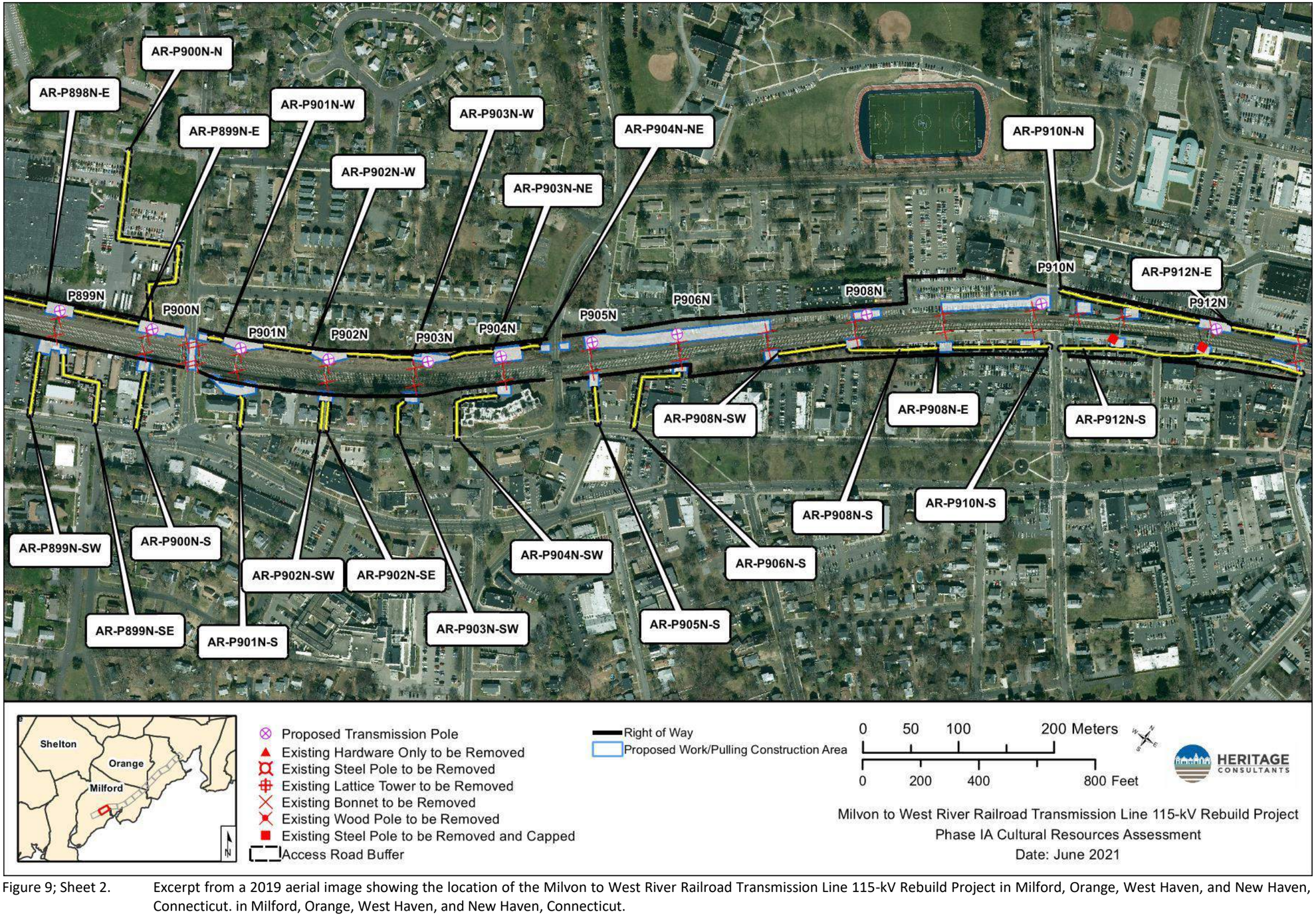


Figure 9; Sheet 2. Excerpt from a 2019 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

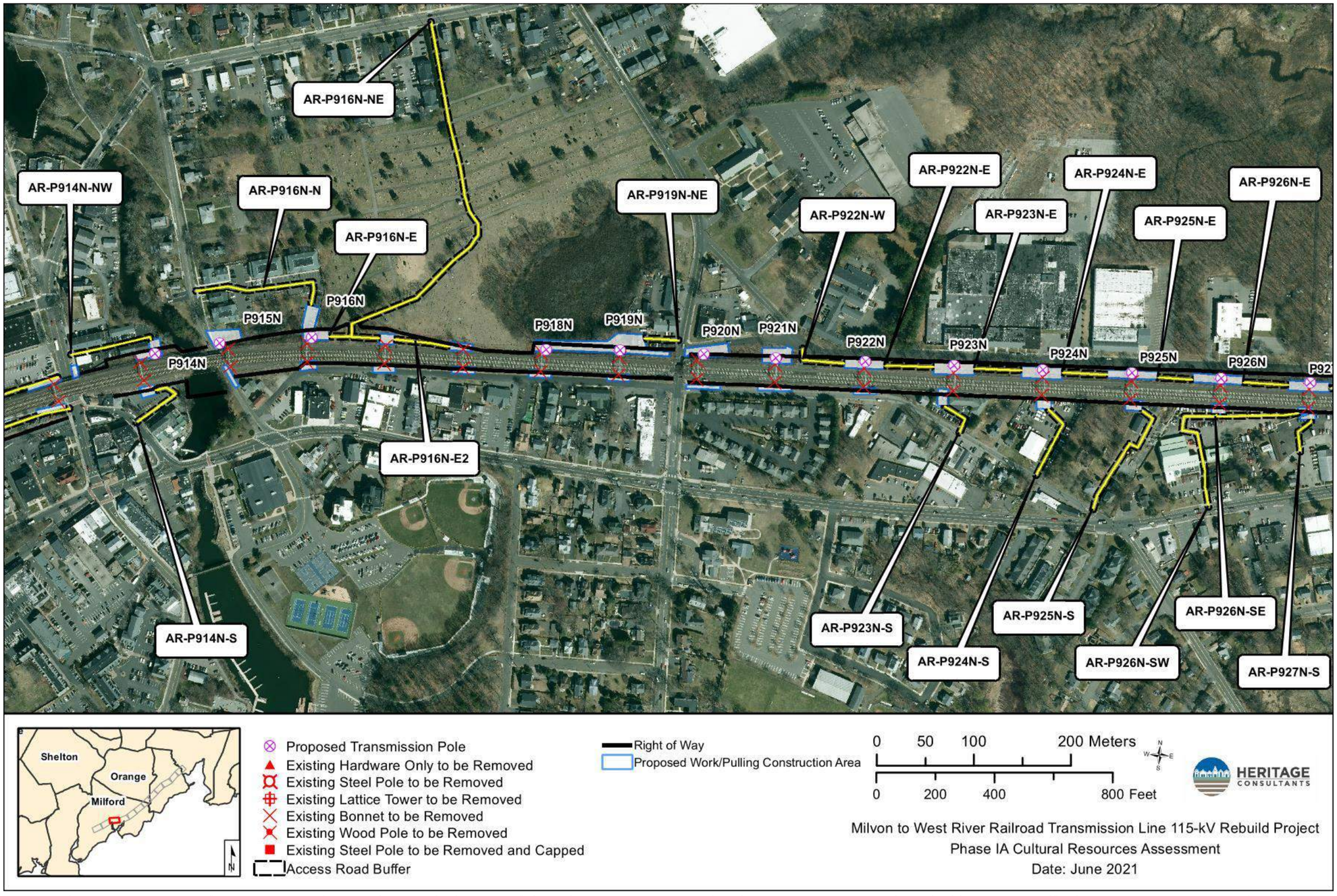


Figure 9; Sheet 3. Excerpt from a 2019 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

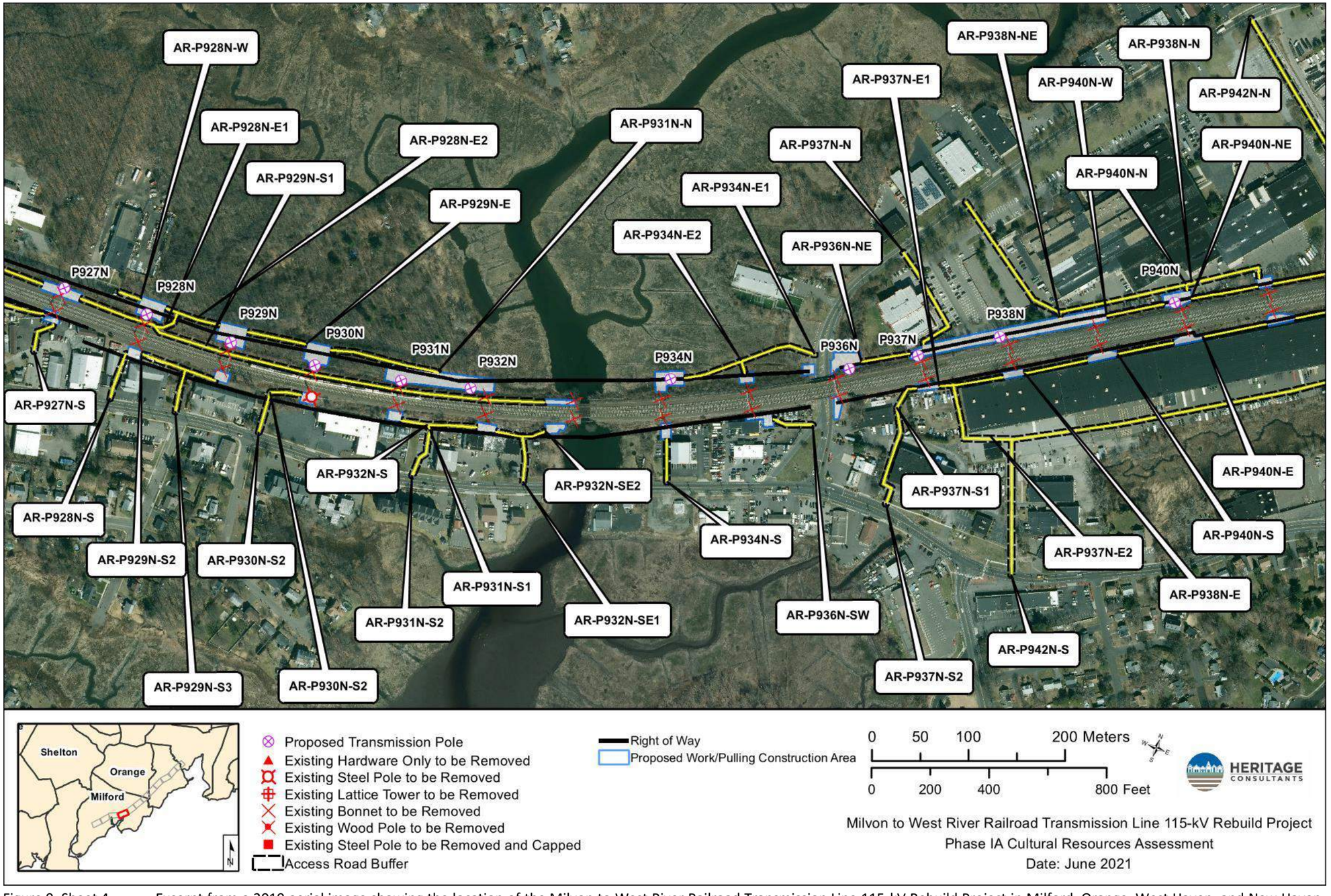


Figure 9; Sheet 4. Excerpt from a 2019 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

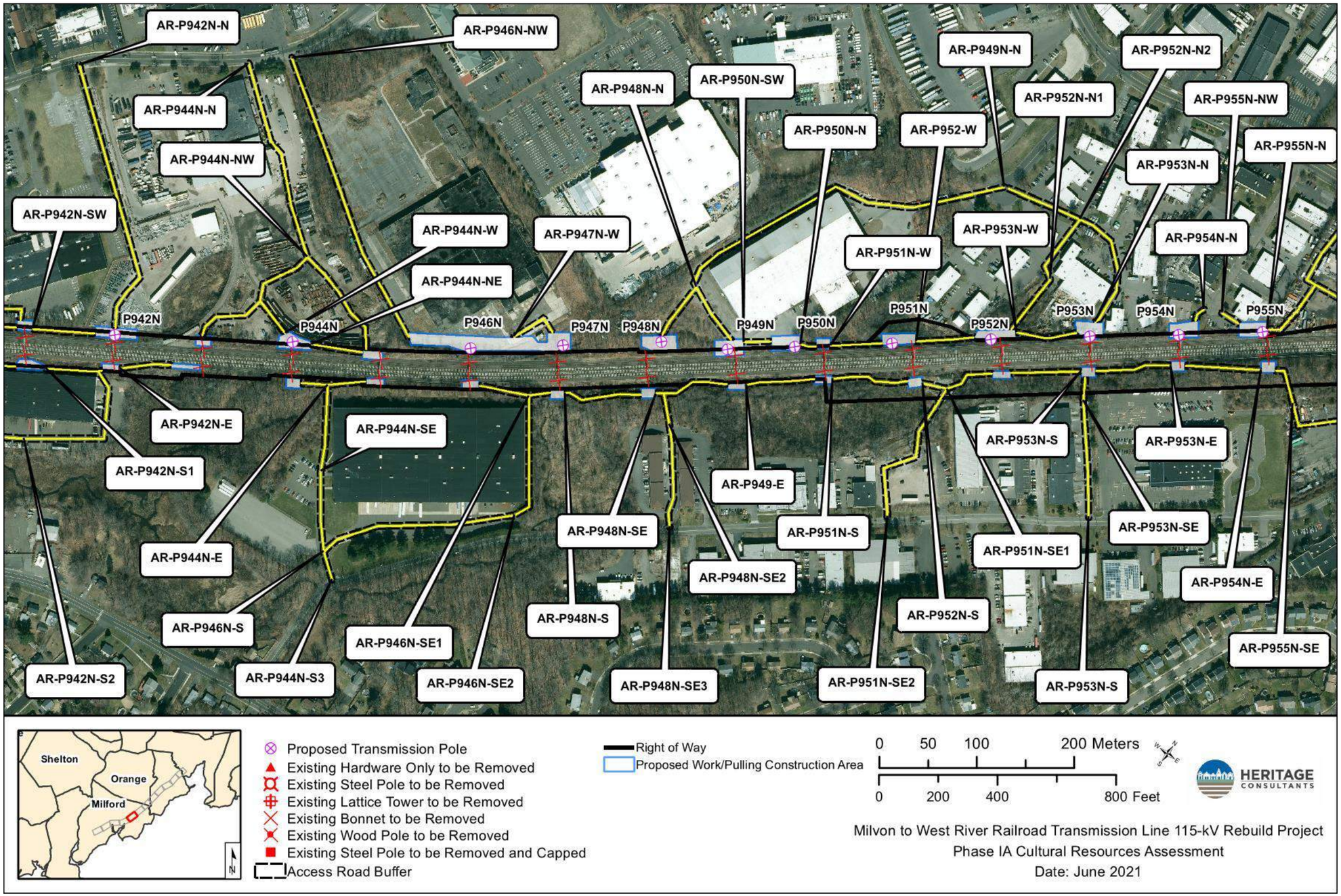


Figure 9; Sheet 5. Excerpt from a 2019 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

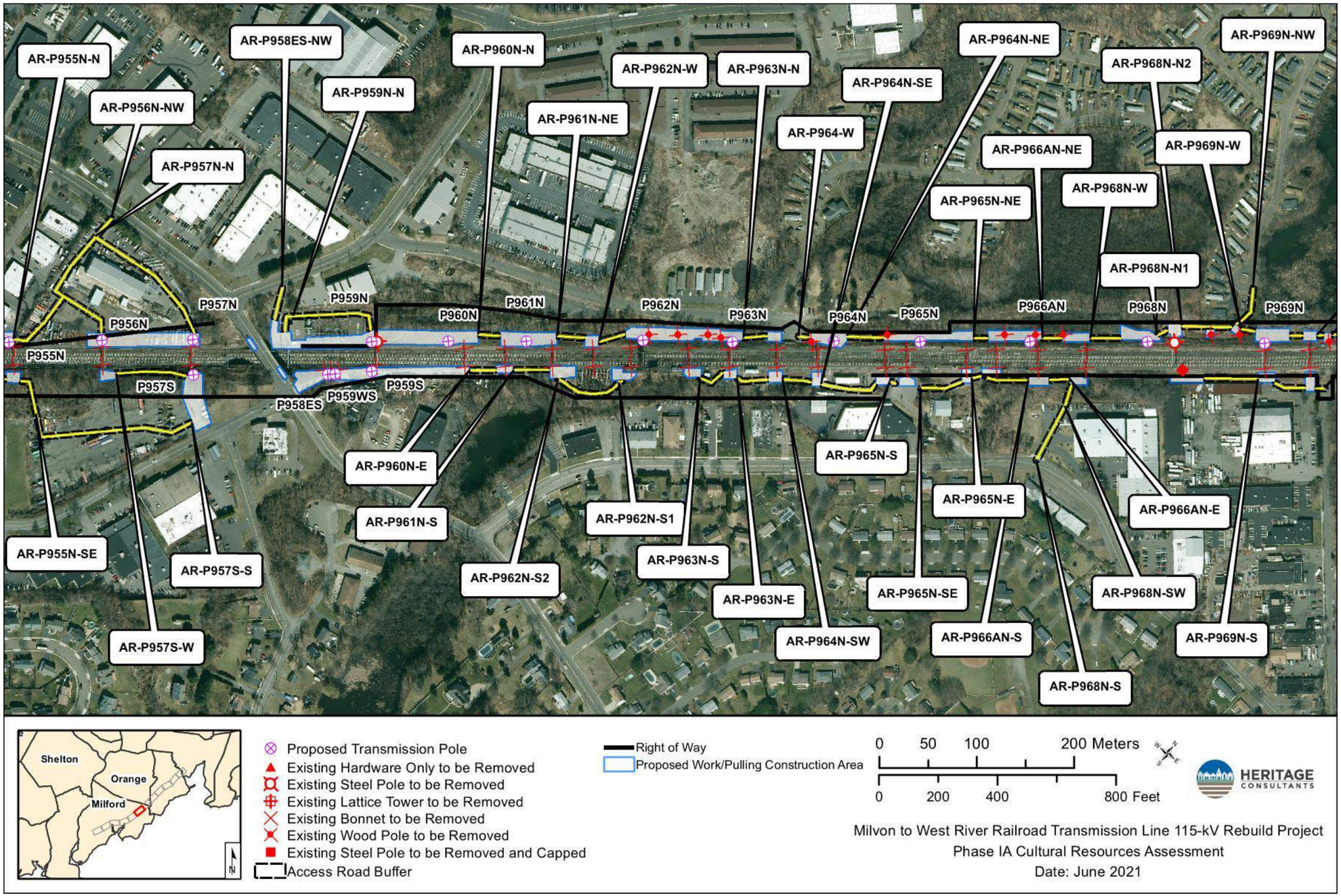


Figure 9; Sheet 6. Excerpt from a 2019 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

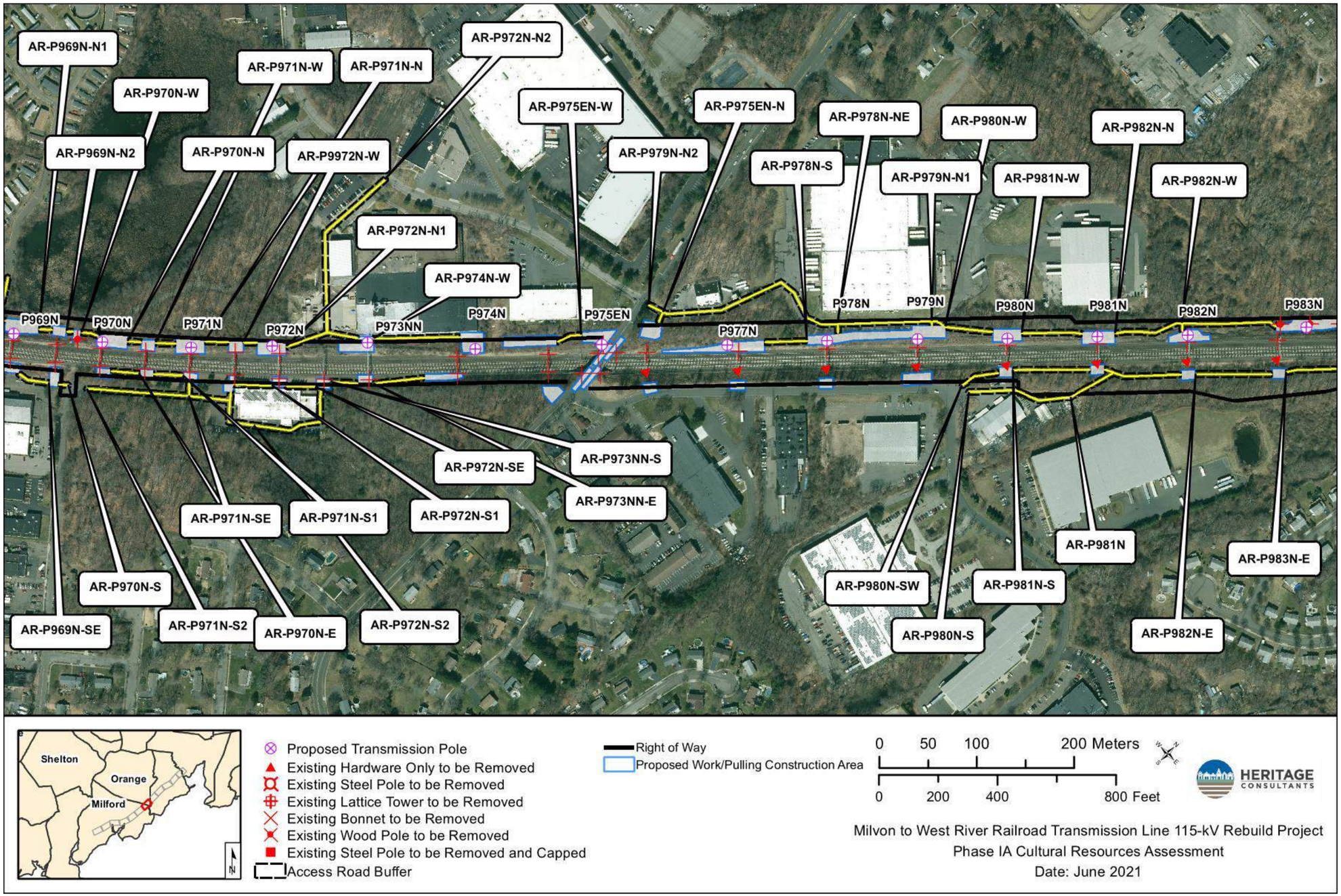


Figure 9; Sheet 7. Excerpt from a 2019 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

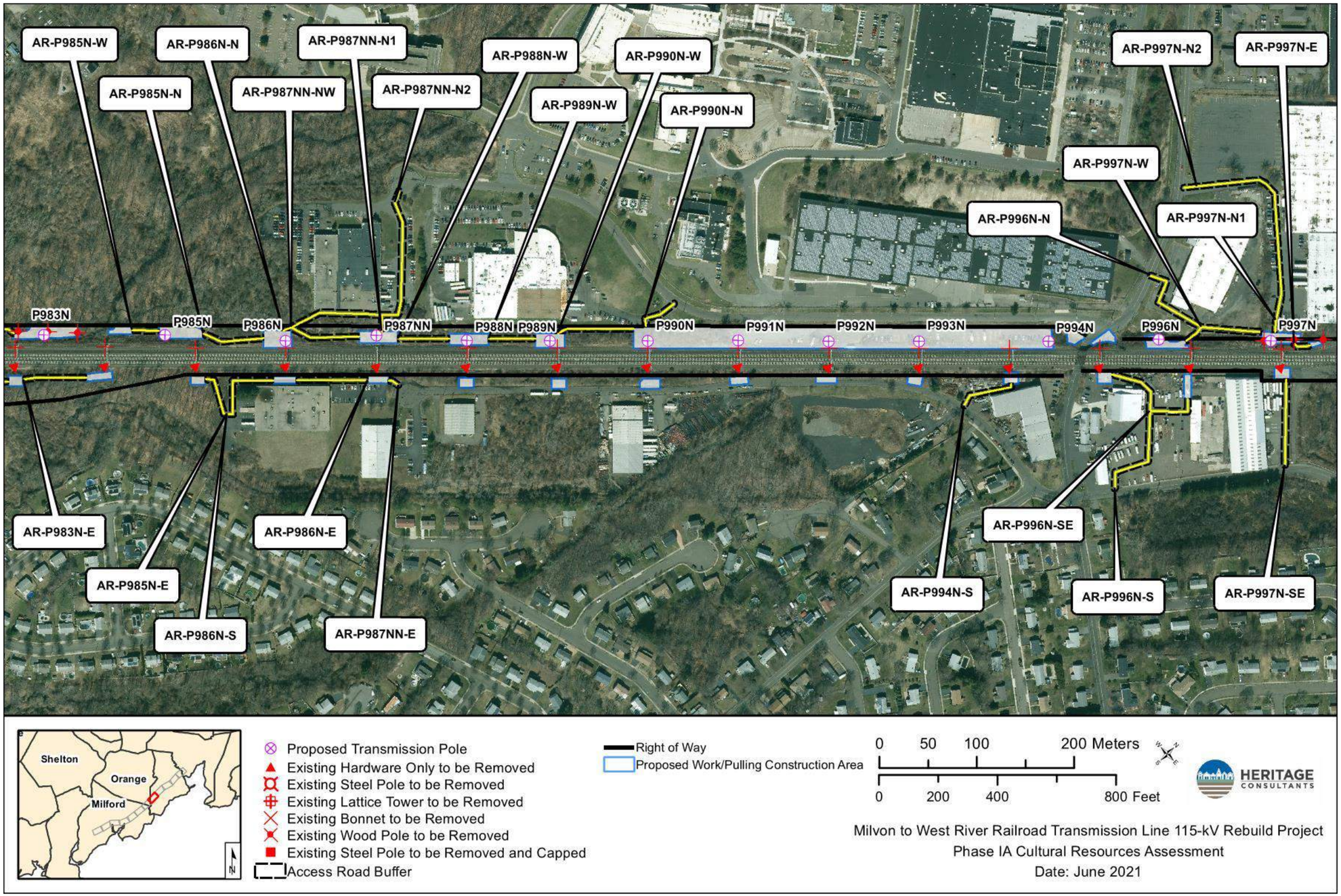


Figure 9; Sheet 8. Excerpt from a 2019 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

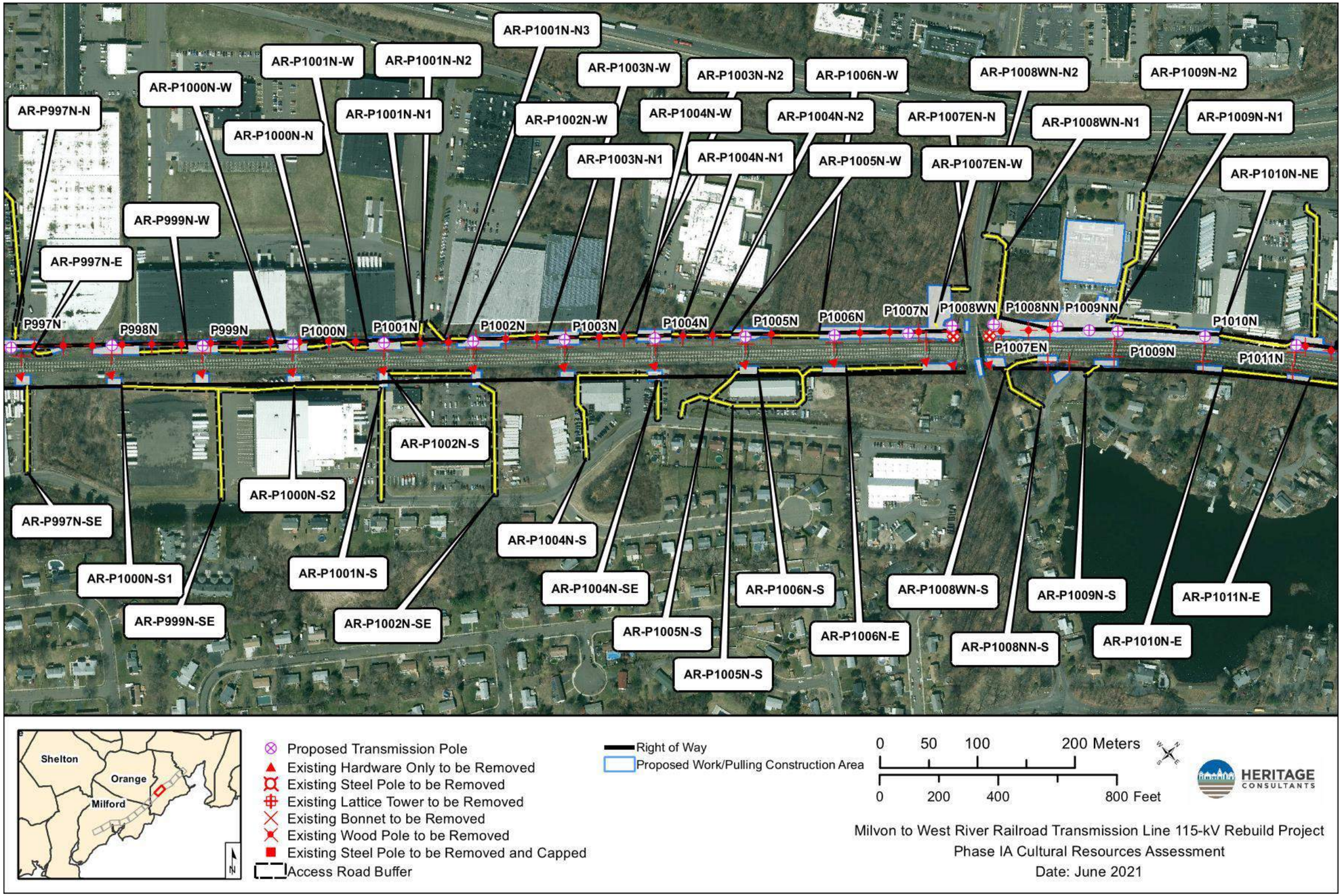


Figure 9; Sheet 9. Excerpt from a 2019 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

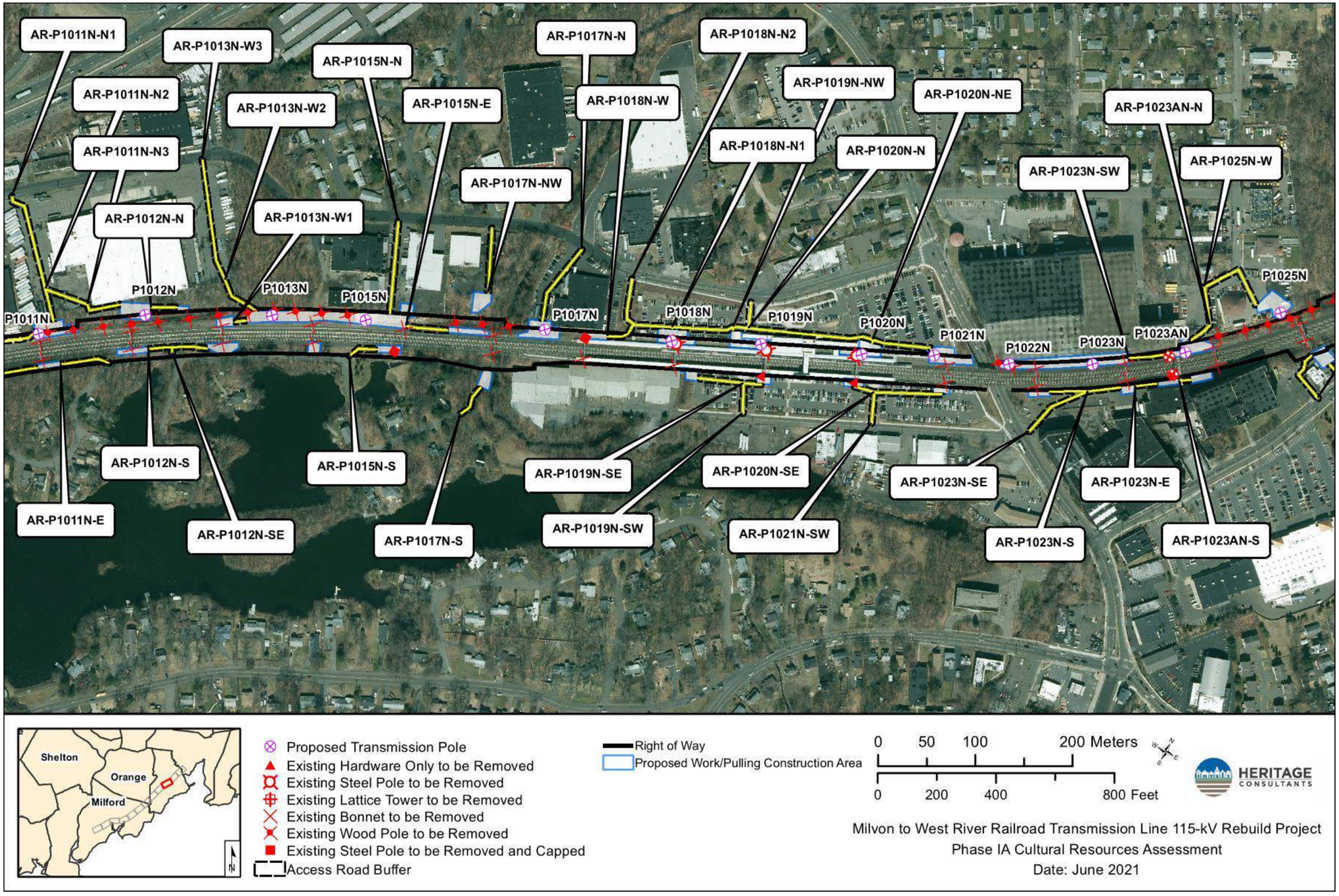


Figure 9; Sheet 10. Excerpt from a 2019 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

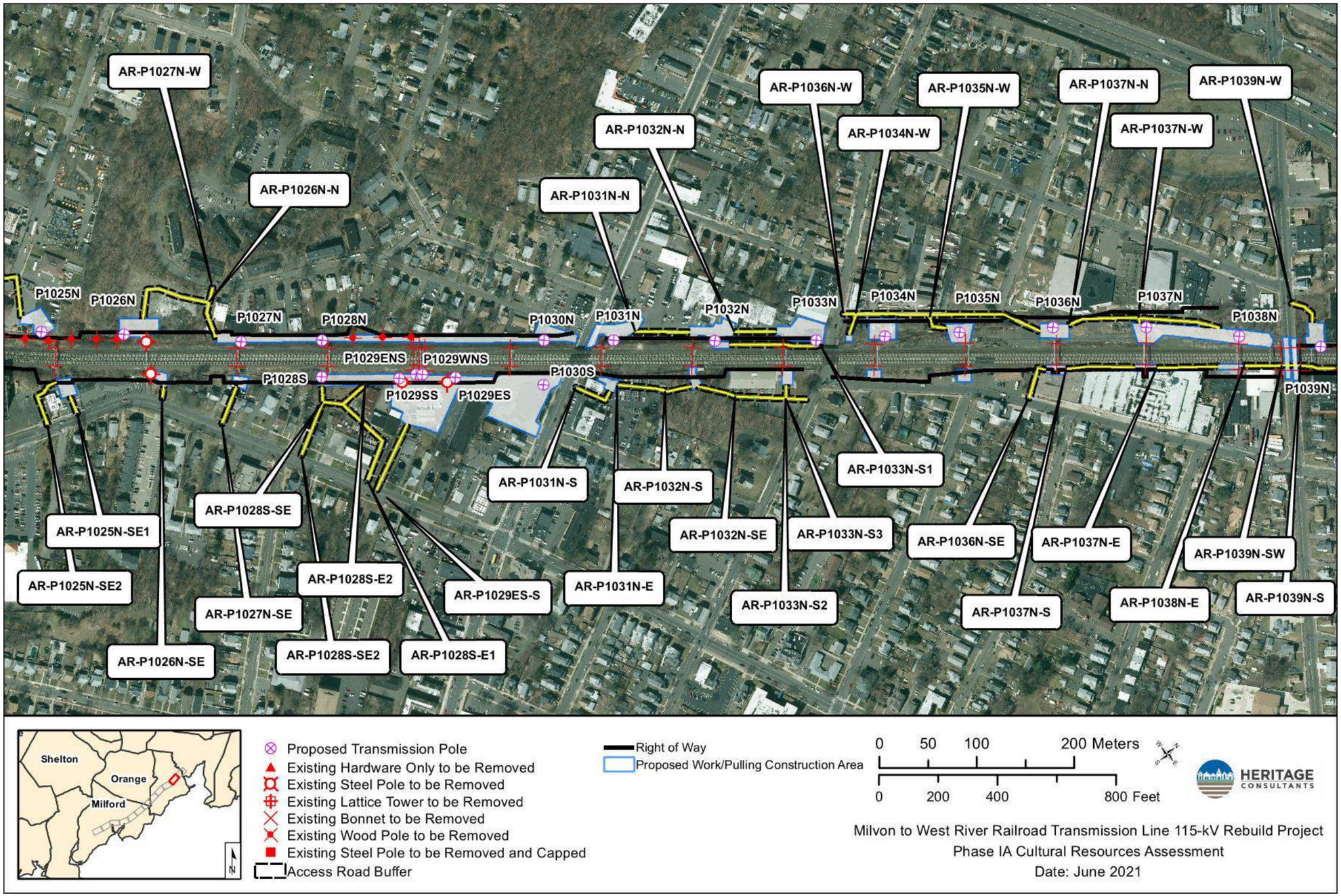


Figure 9; Sheet 11. Excerpt from a 2019 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

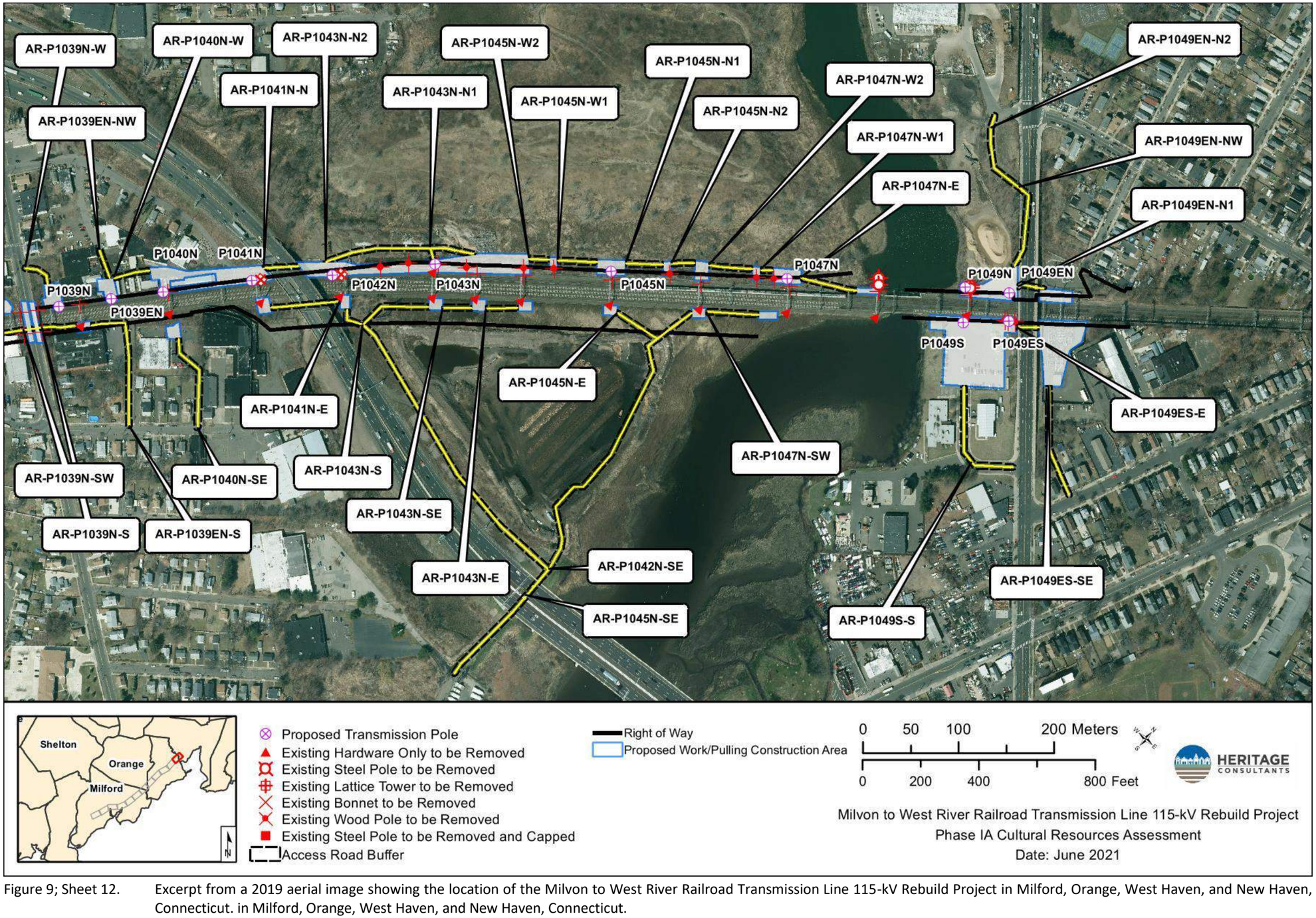


Figure 9; Sheet 12. Excerpt from a 2019 aerial image showing the location of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

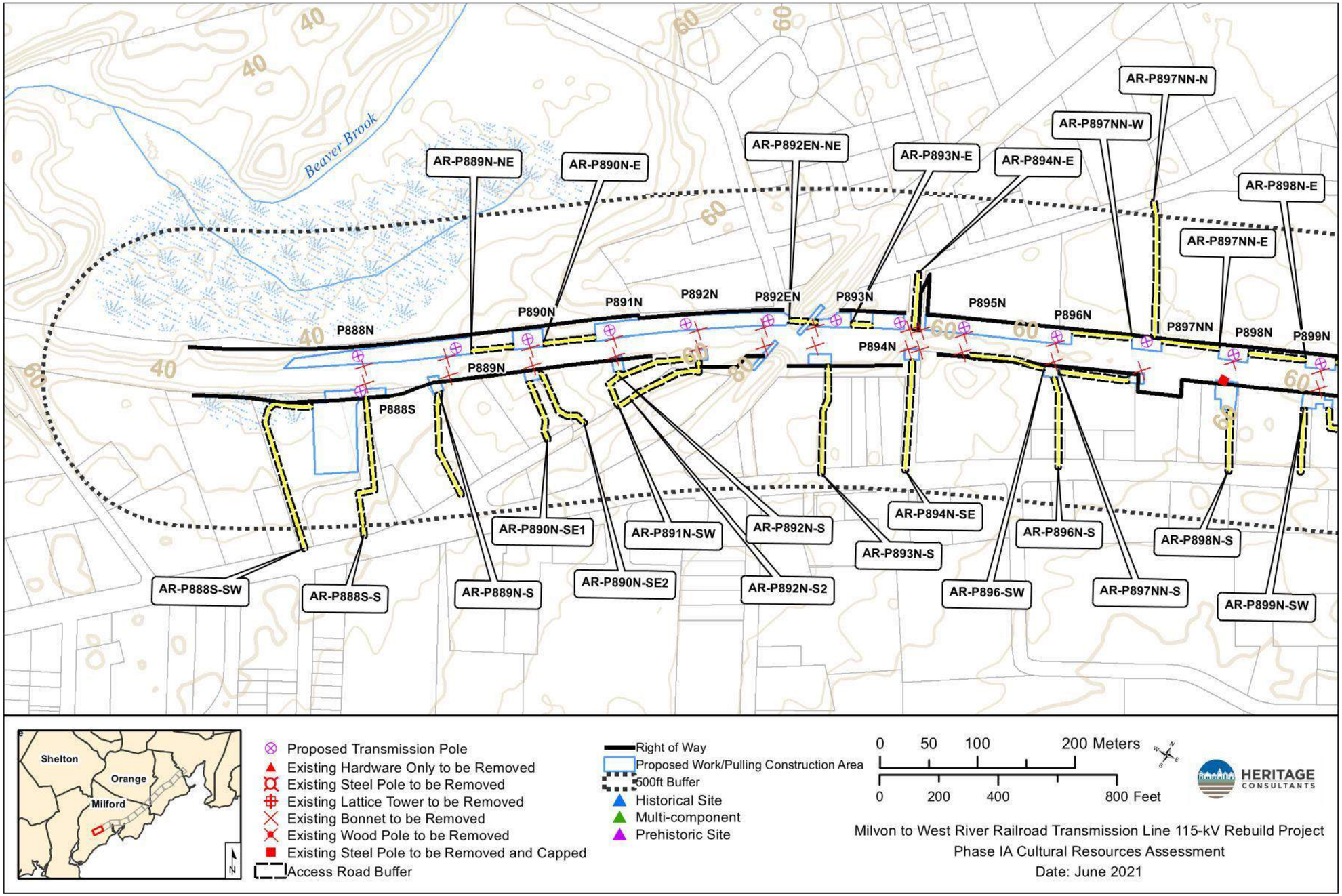


Figure 10; Sheet 1. Digital map showing the locations of previously recorded archaeological sites in the vicinity of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

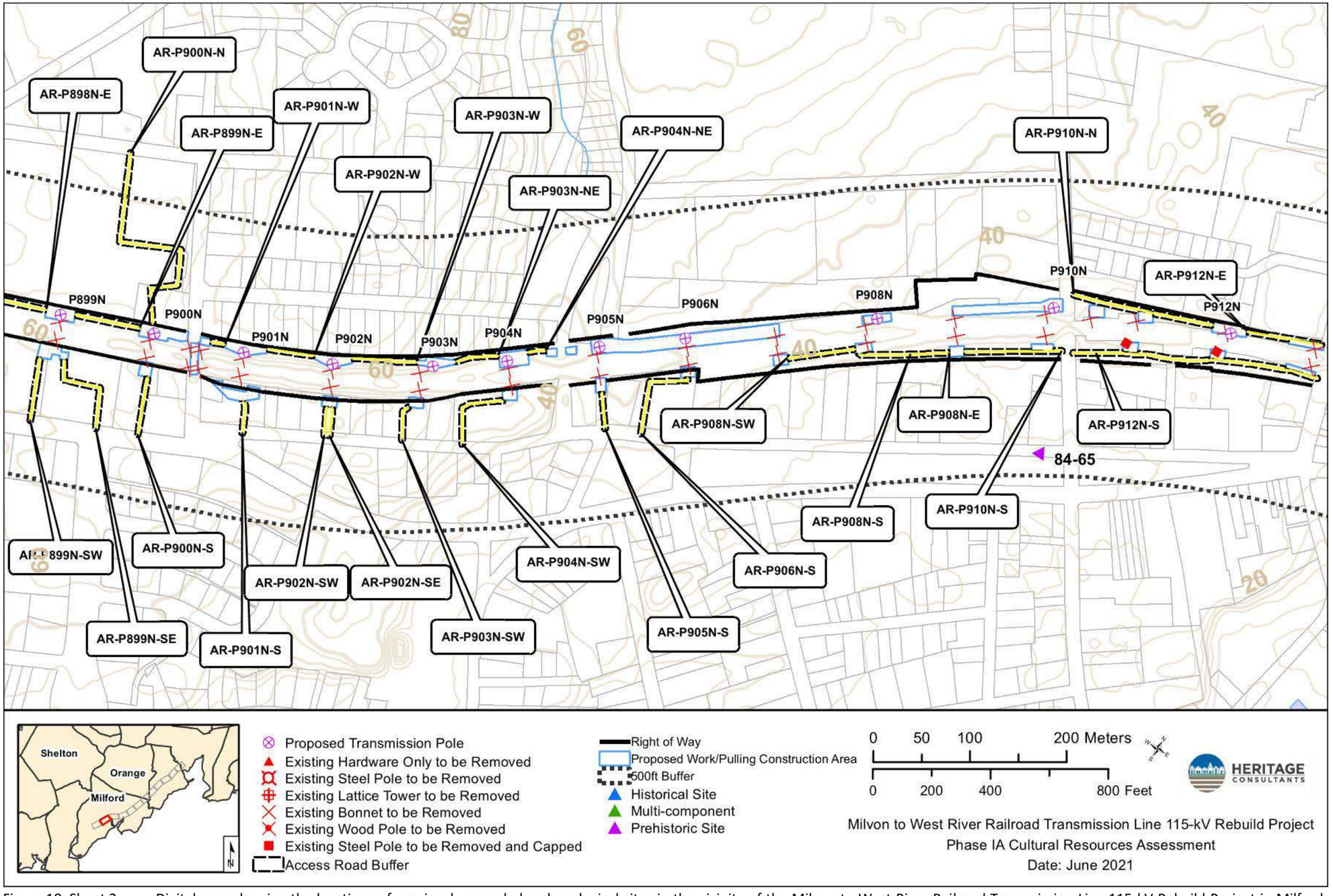


Figure 10; Sheet 2. Digital map showing the locations of previously recorded archaeological sites in the vicinity of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

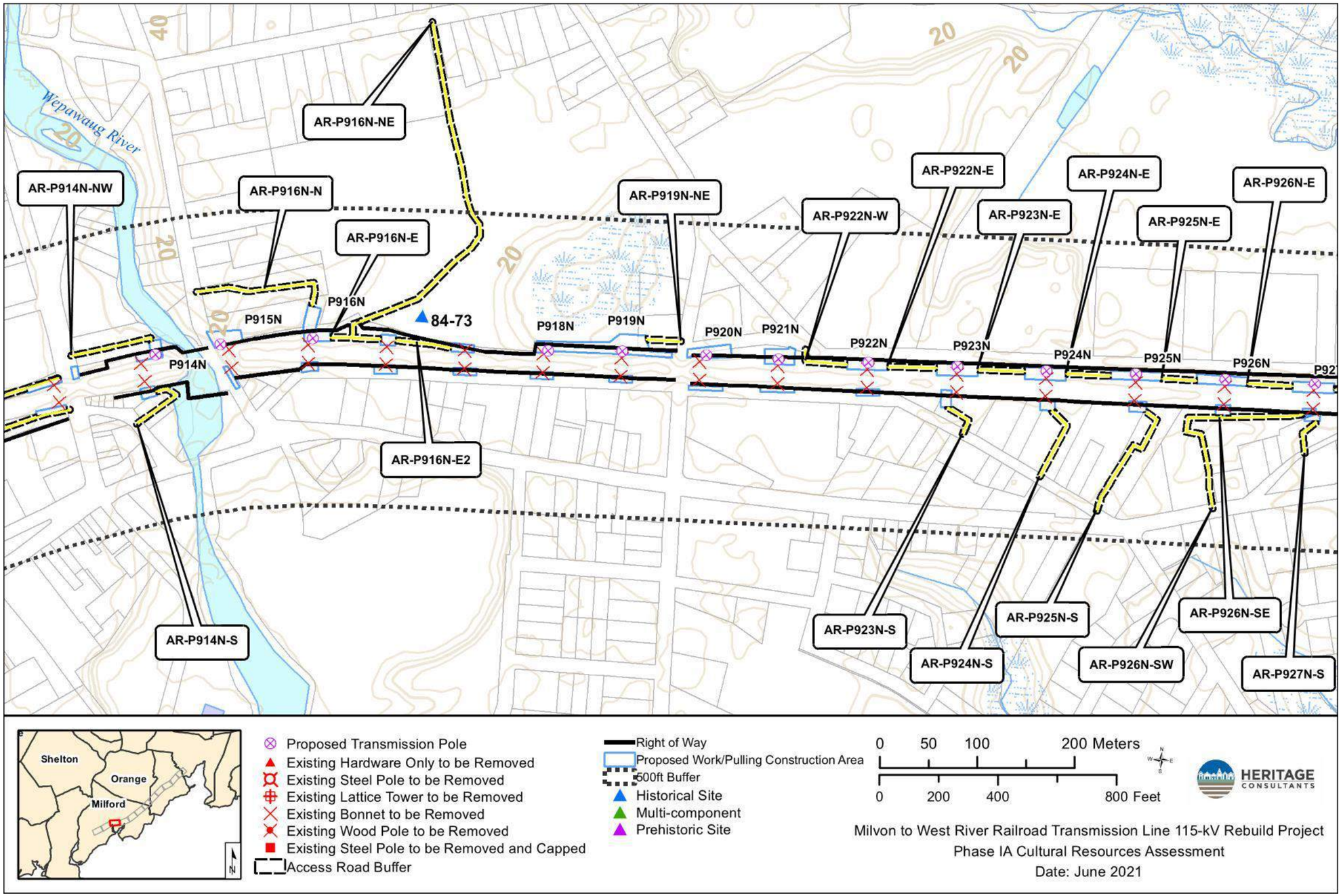


Figure 10; Sheet 3. Digital map showing the locations of previously recorded archaeological sites in the vicinity of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

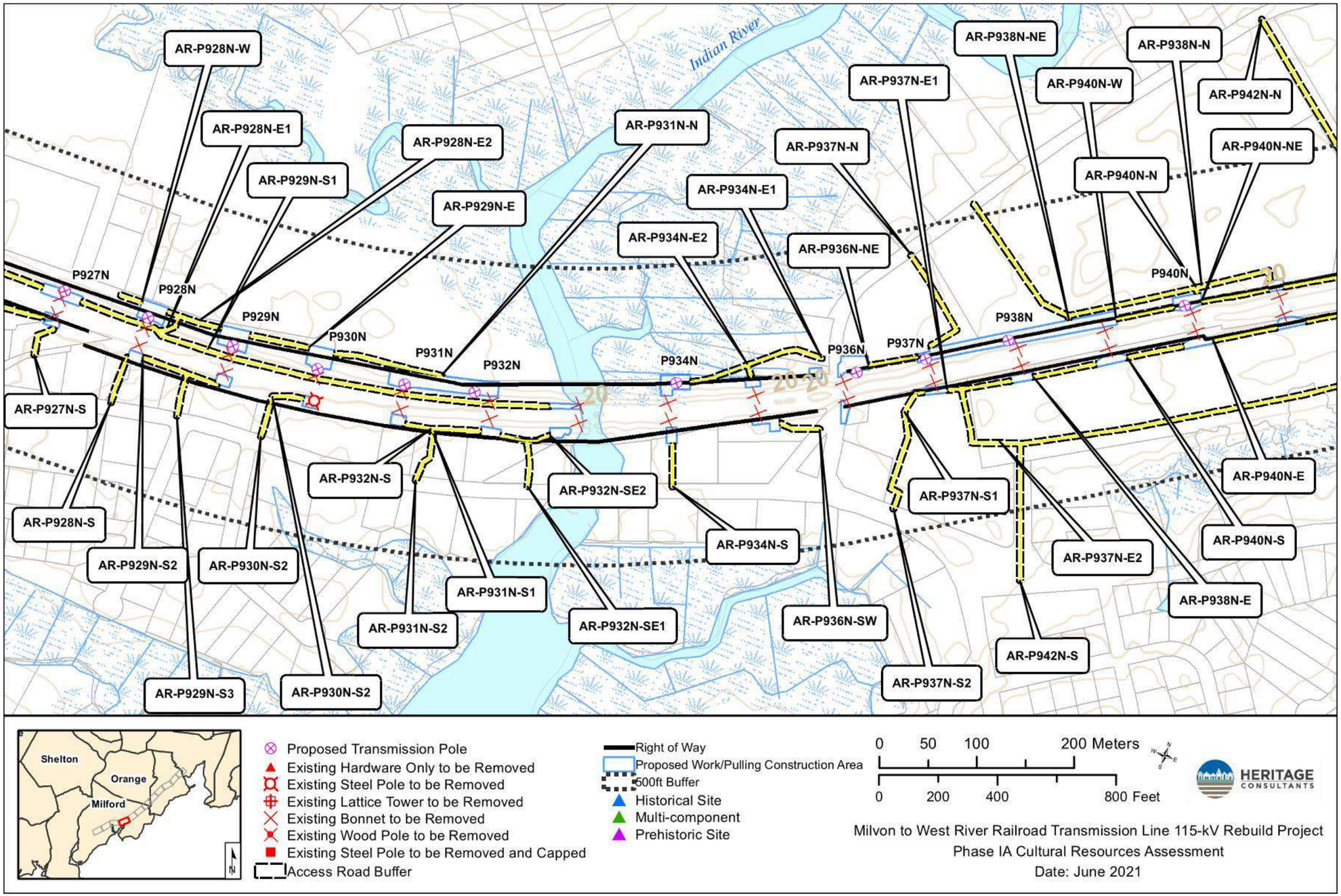


Figure 10; Sheet 4. Digital map showing the locations of previously recorded archaeological sites in the vicinity of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

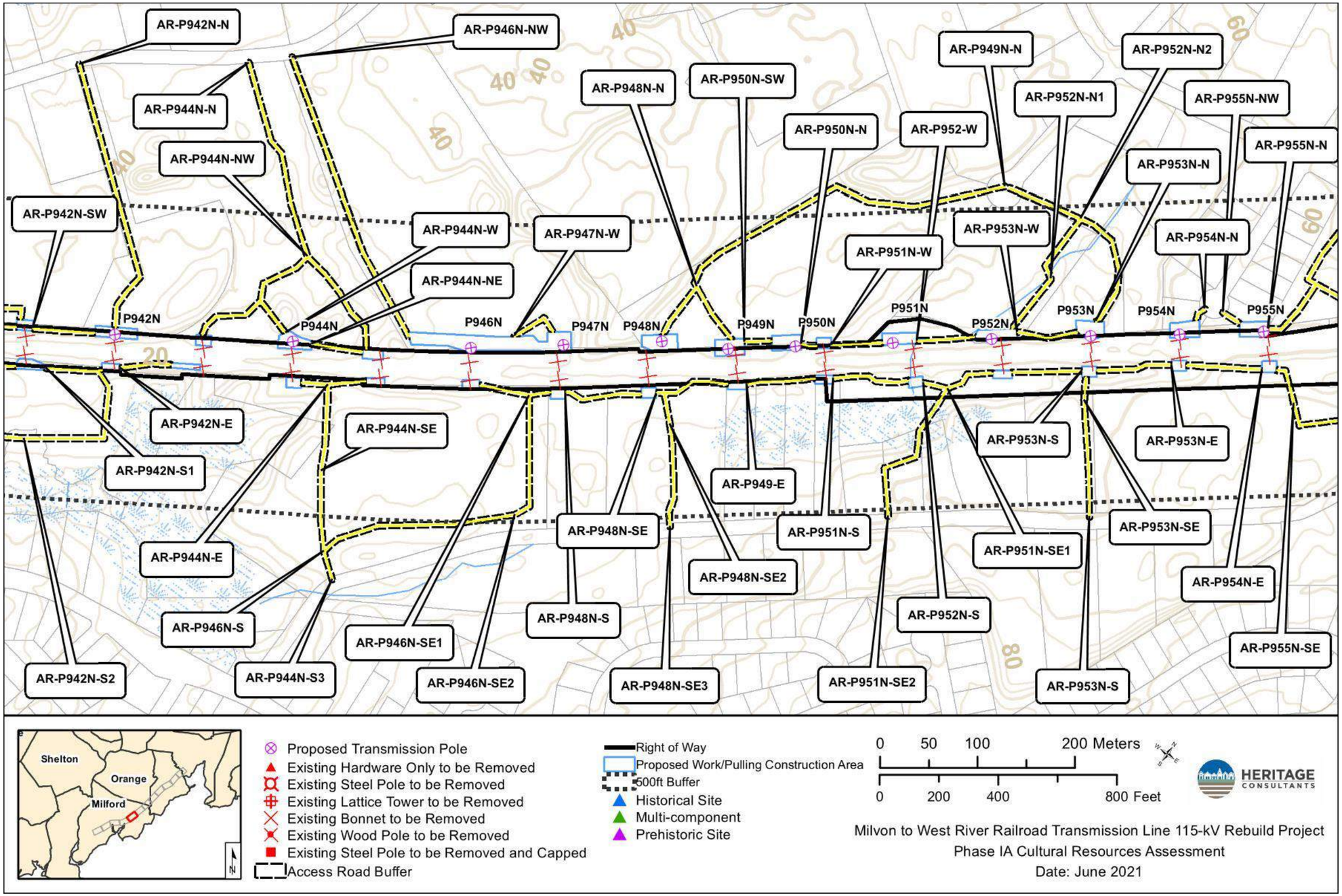


Figure 10; Sheet 5. Digital map showing the locations of previously recorded archaeological sites in the vicinity of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

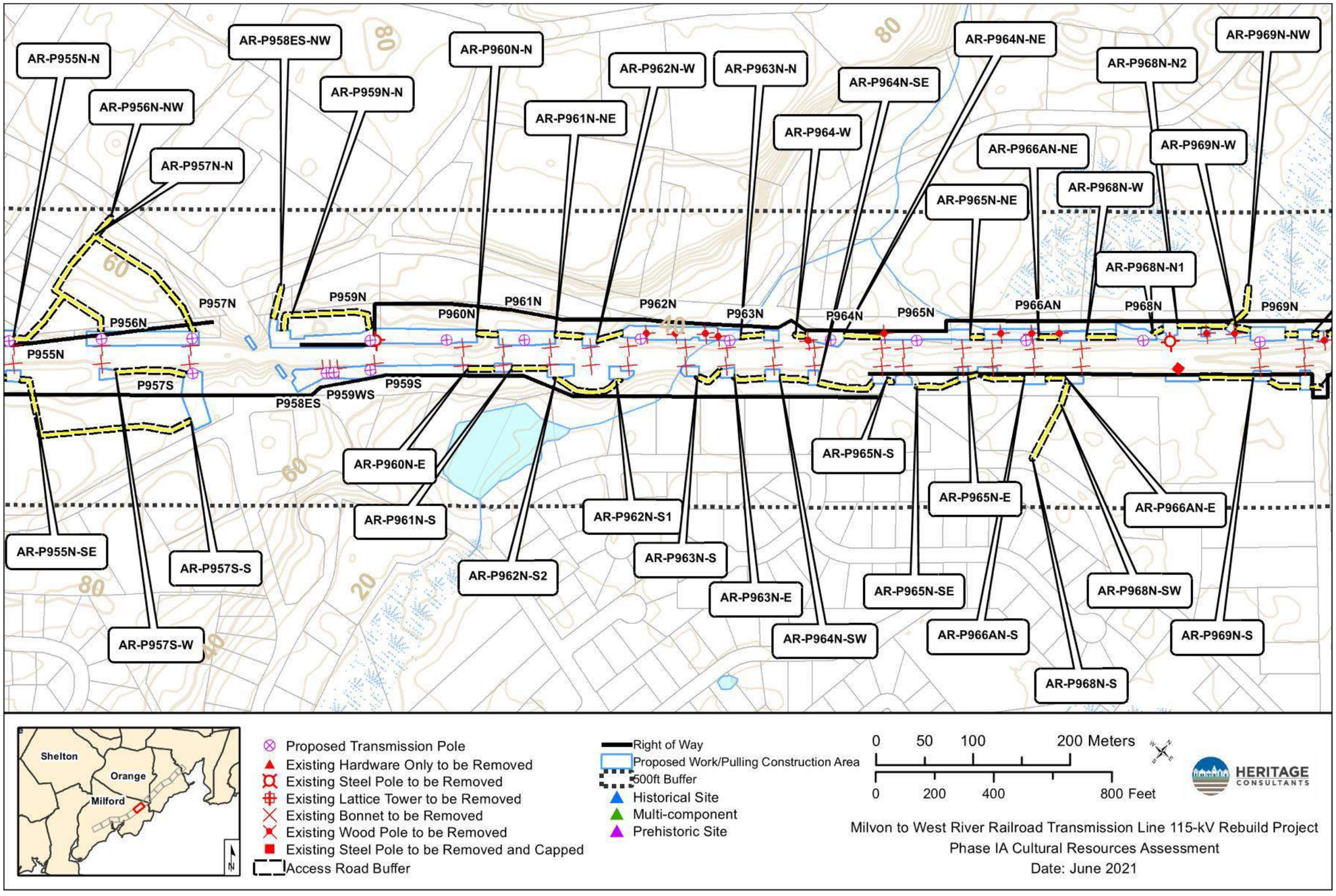


Figure 10; Sheet 6. Digital map showing the locations of previously recorded archaeological sites in the vicinity of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

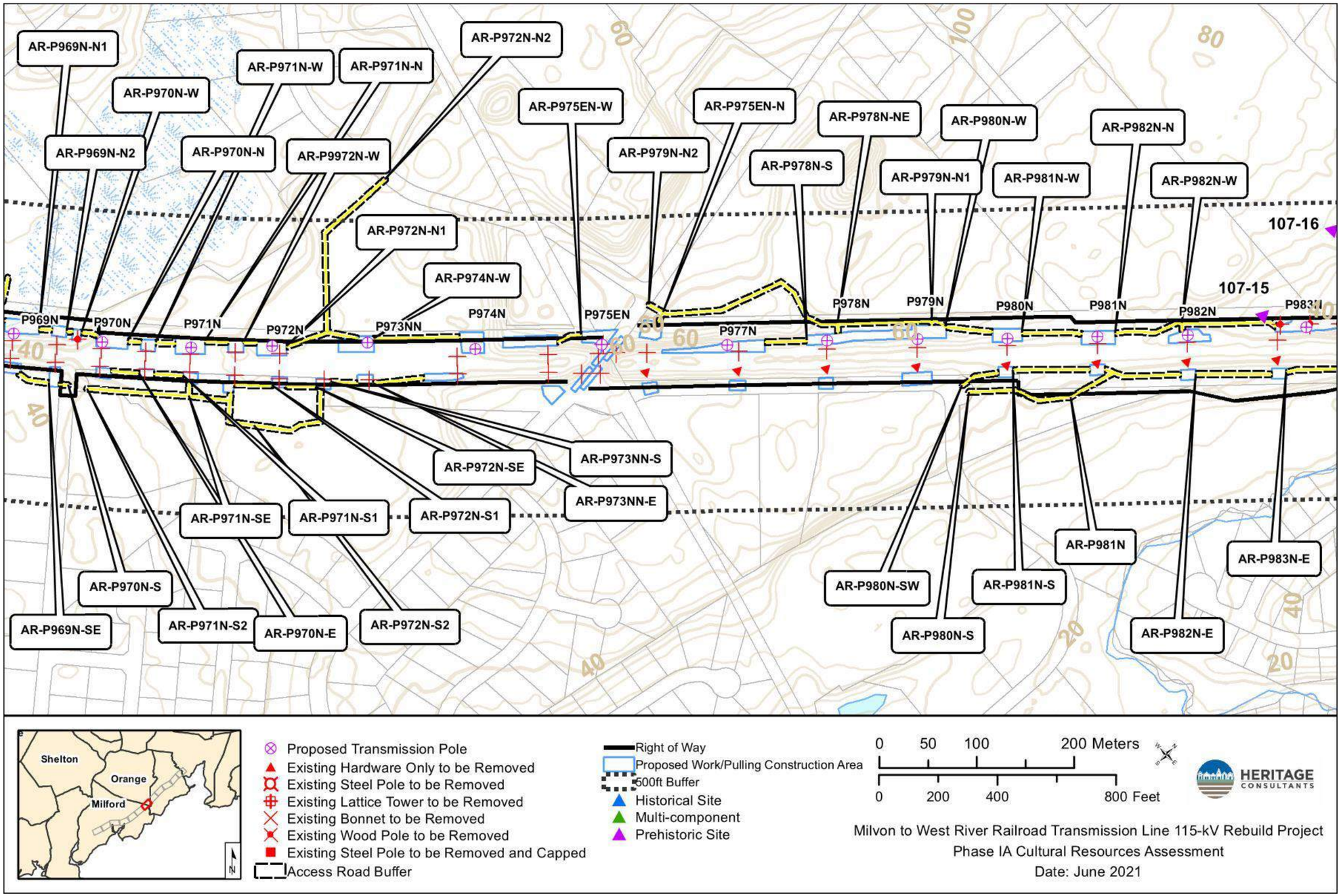


Figure 10; Sheet 7. Digital map showing the locations of previously recorded archaeological sites in the vicinity of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

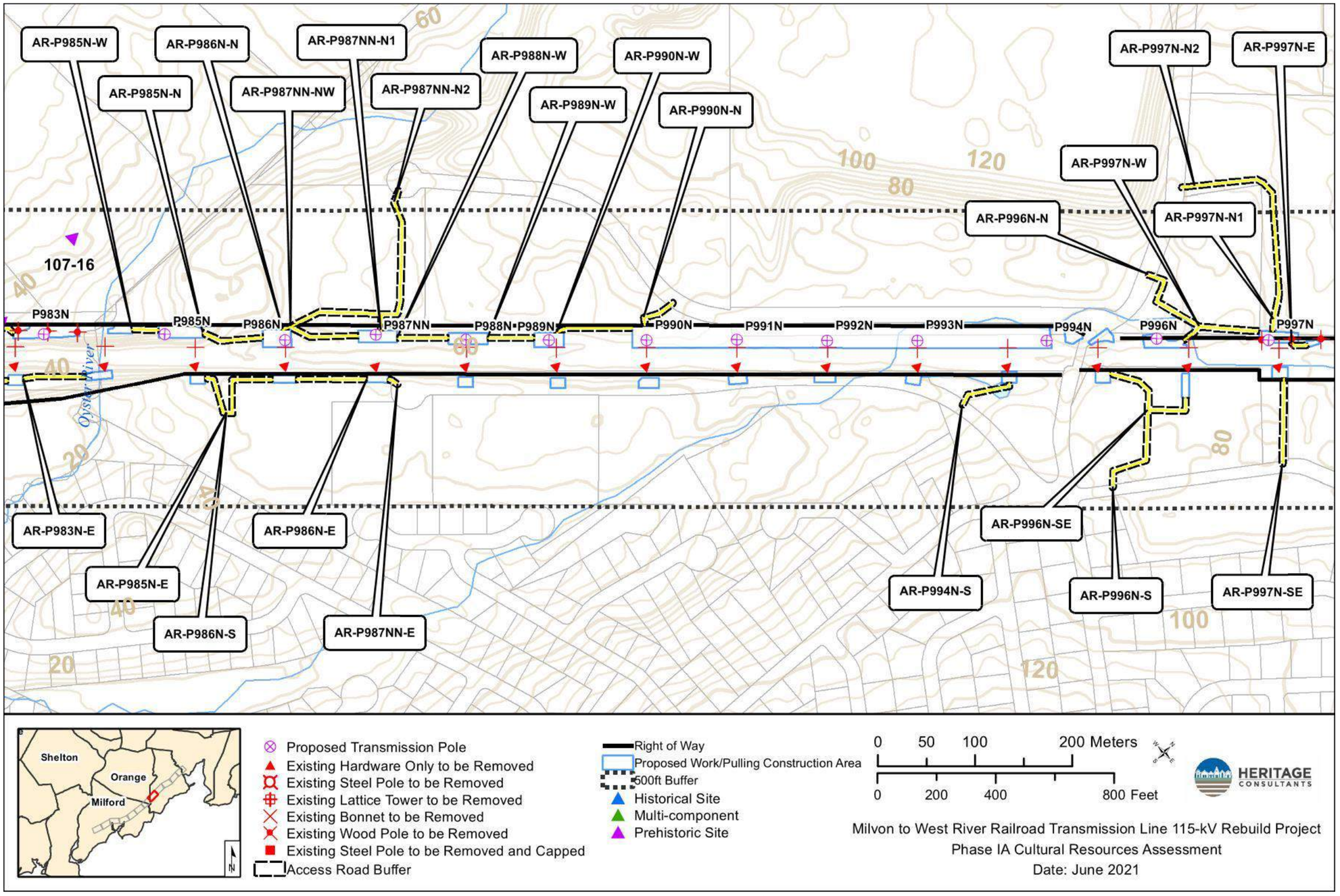


Figure 10; Sheet 8. Digital map showing the locations of previously recorded archaeological sites in the vicinity of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

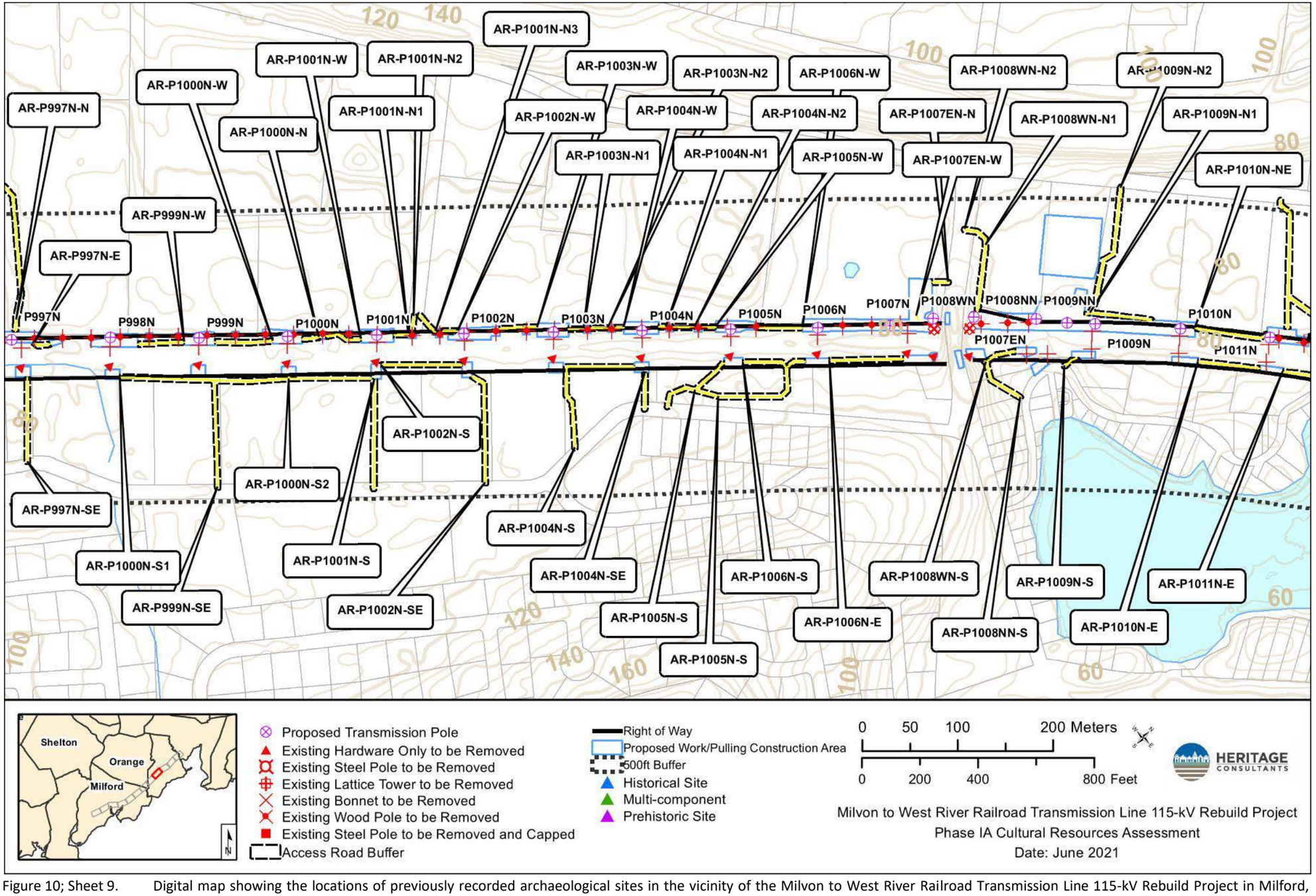


Figure 10; Sheet 9. Digital map showing the locations of previously recorded archaeological sites in the vicinity of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

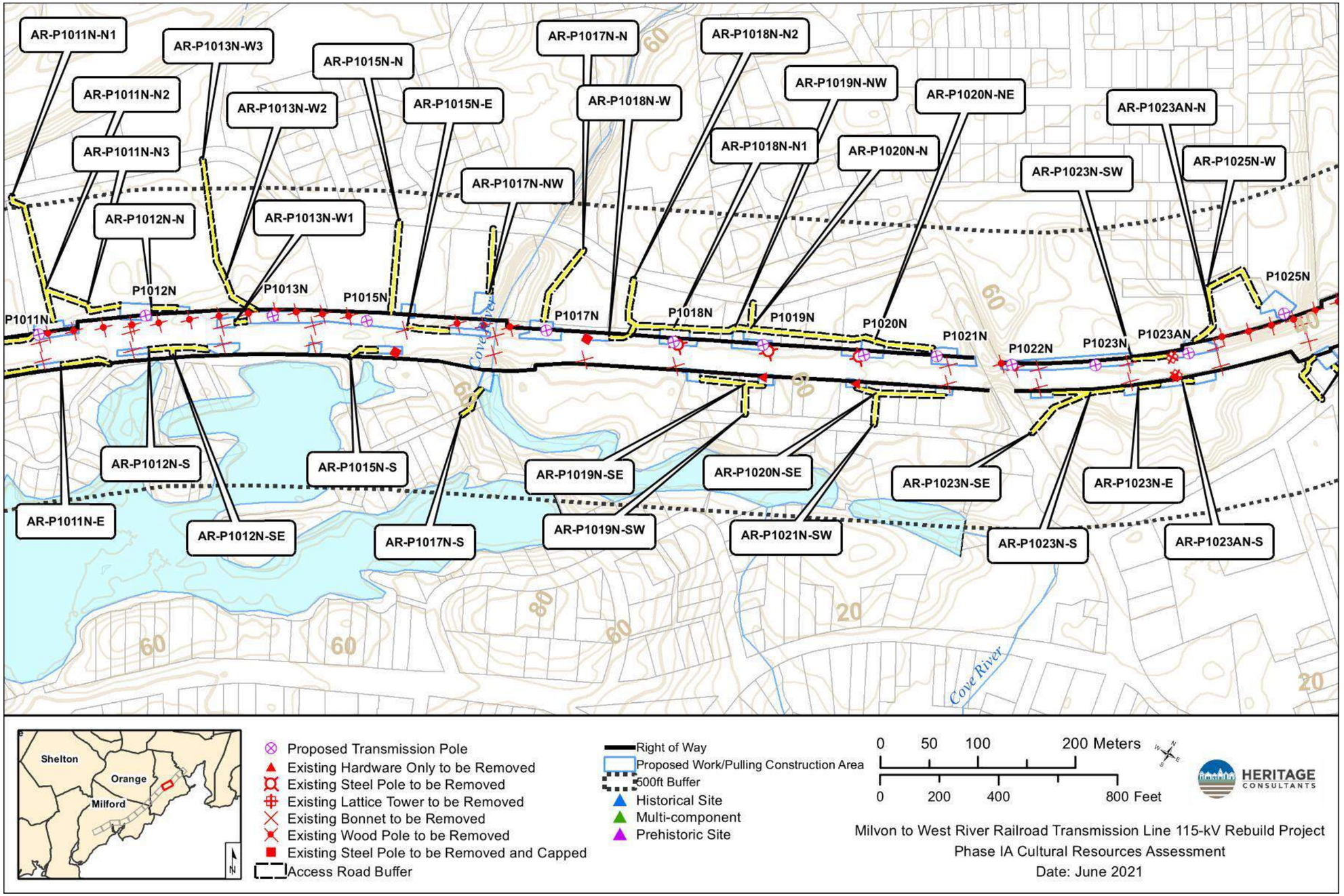


Figure 10; Sheet 10. Digital map showing the locations of previously recorded archaeological sites in the vicinity of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

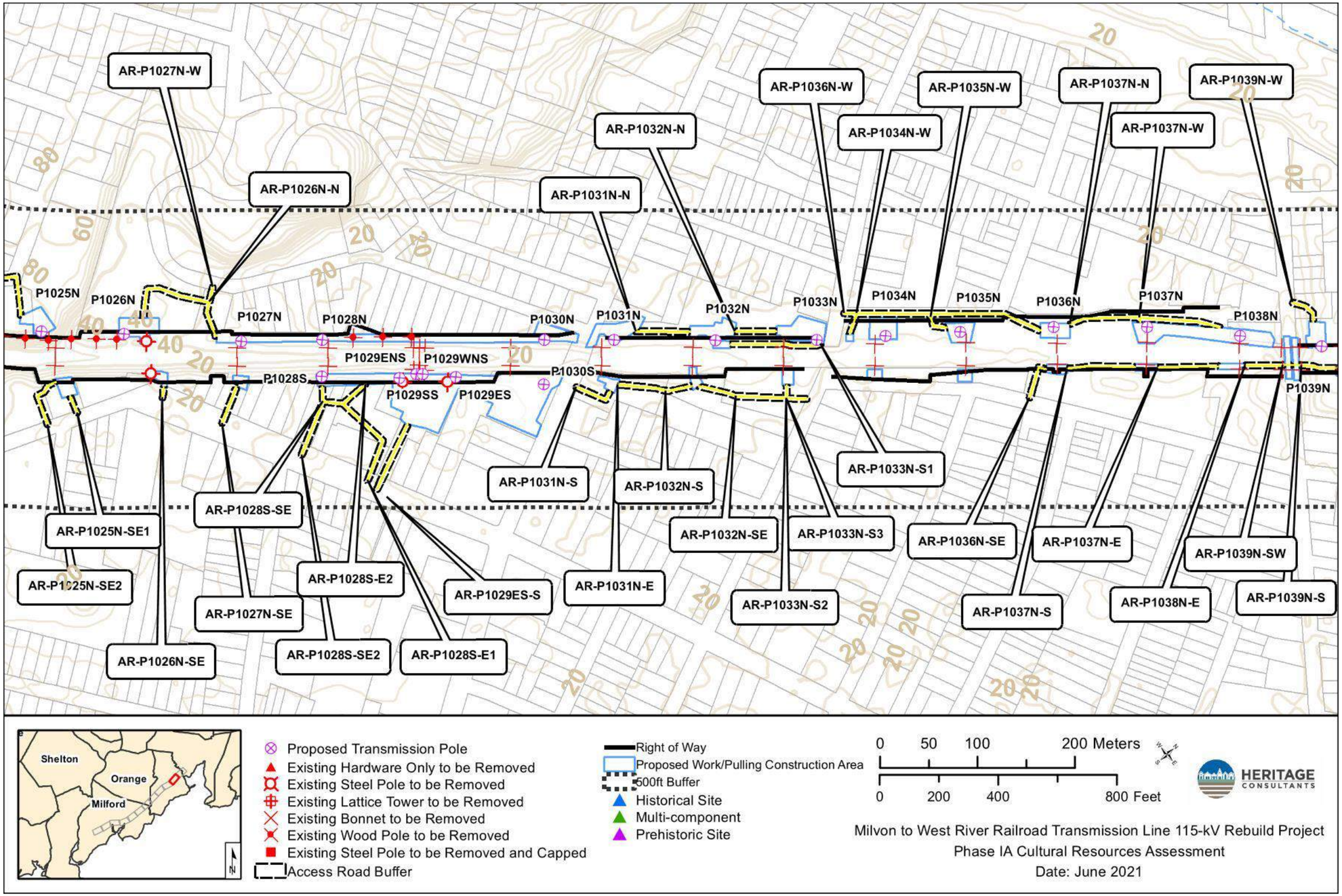


Figure 10; Sheet 11. Digital map showing the locations of previously recorded archaeological sites in the vicinity of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

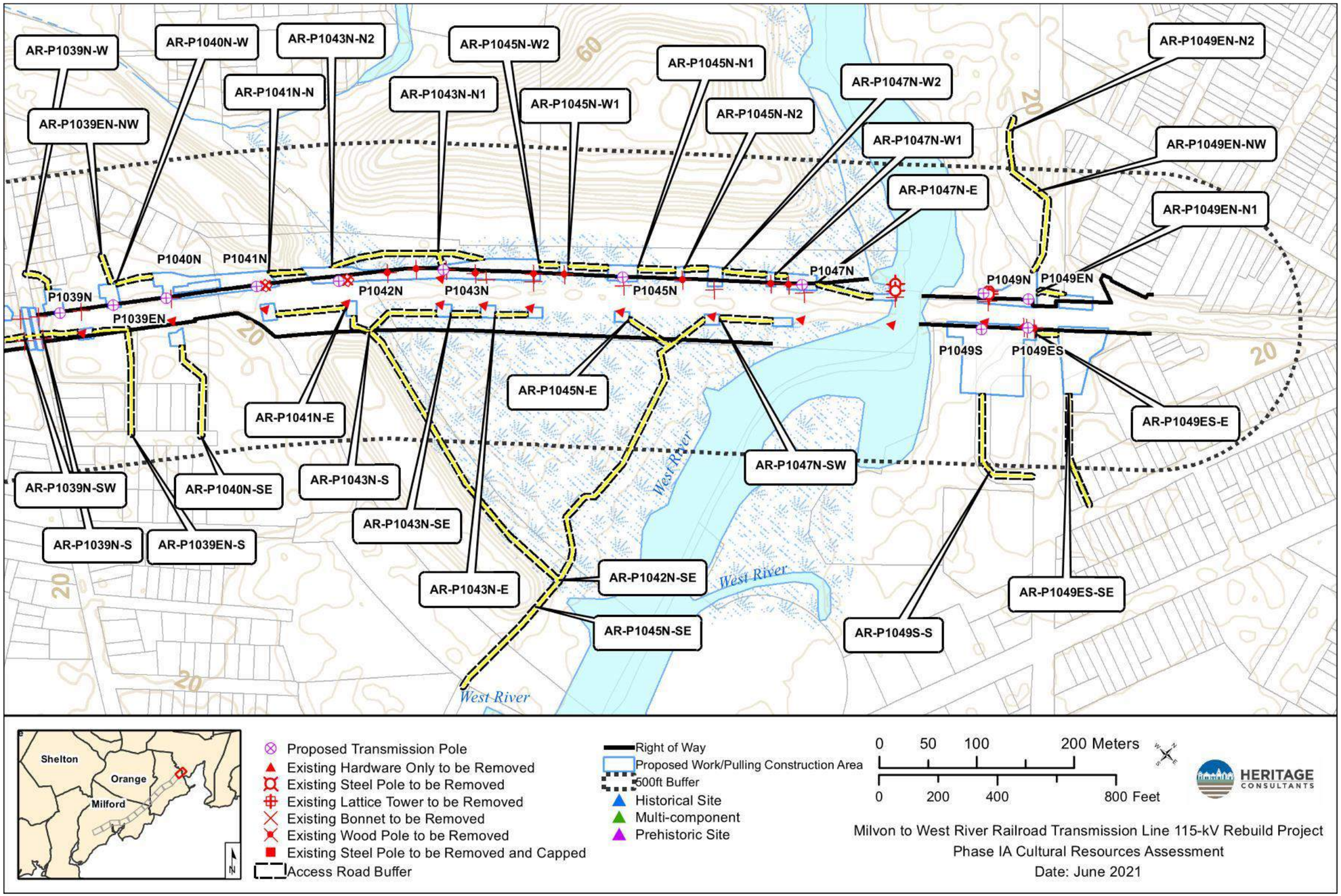


Figure 10; Sheet 12. Digital map showing the locations of previously recorded archaeological sites in the vicinity of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.

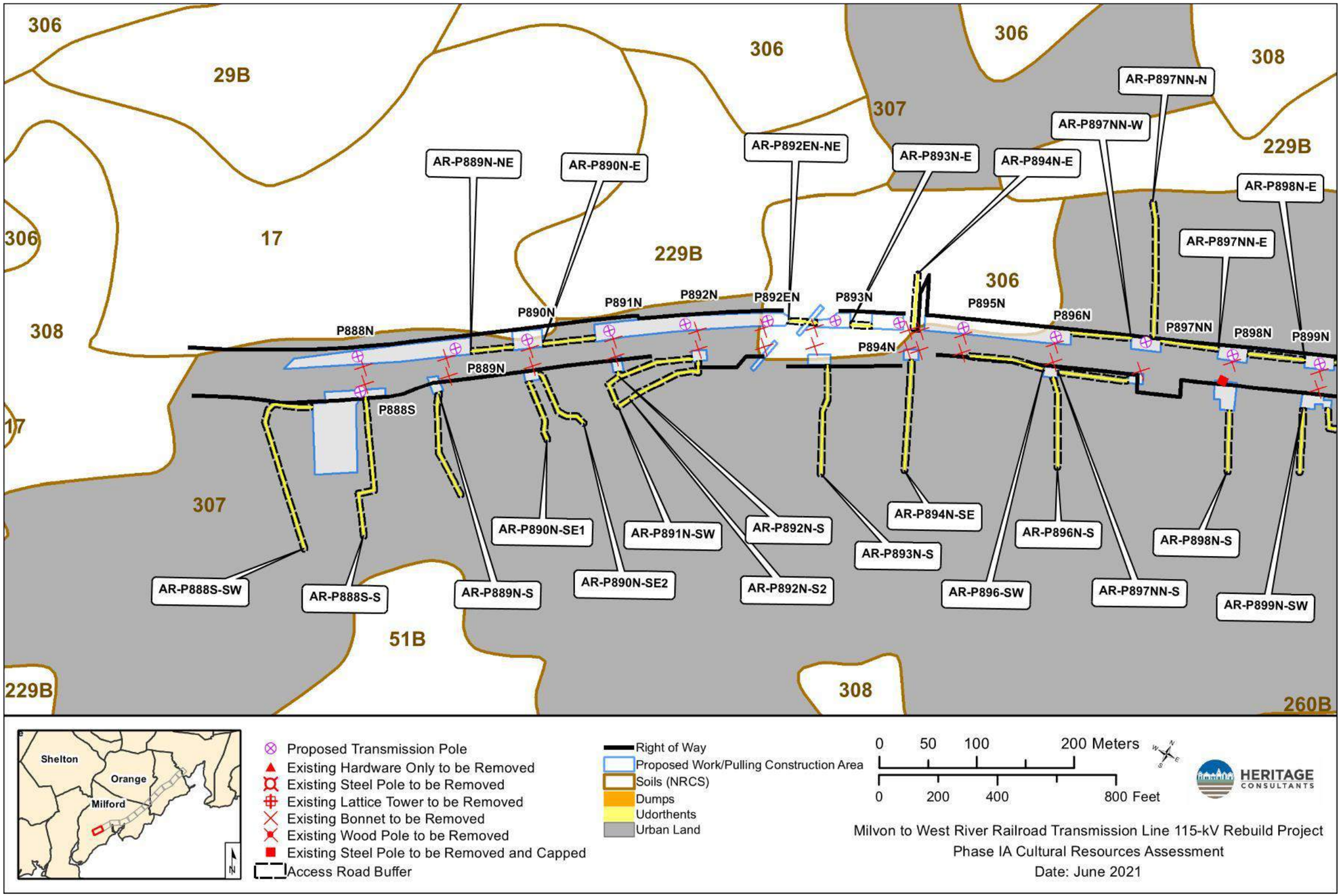
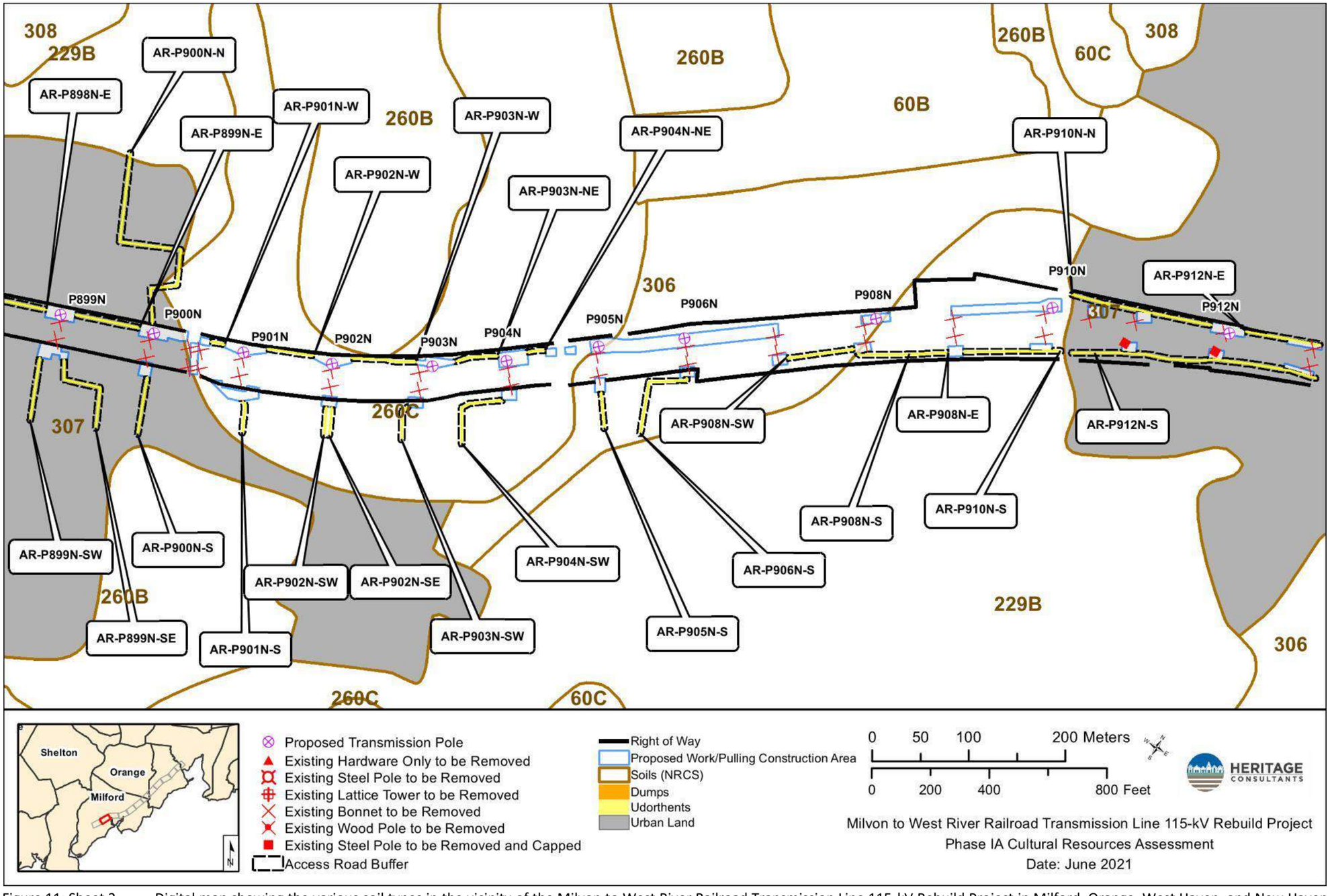


Figure 11; Sheet 1. Digital map showing the various soil types in the vicinity of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.



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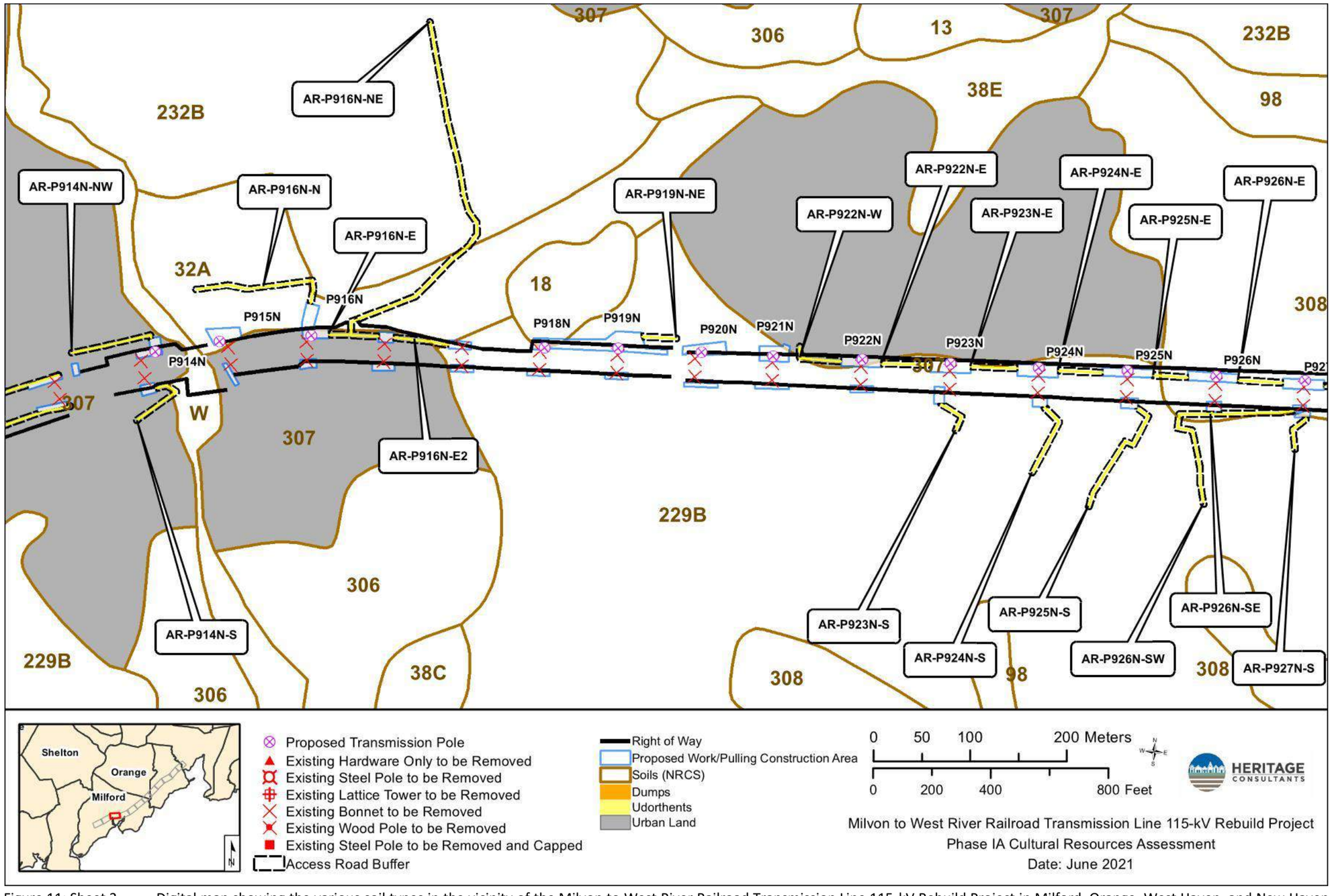

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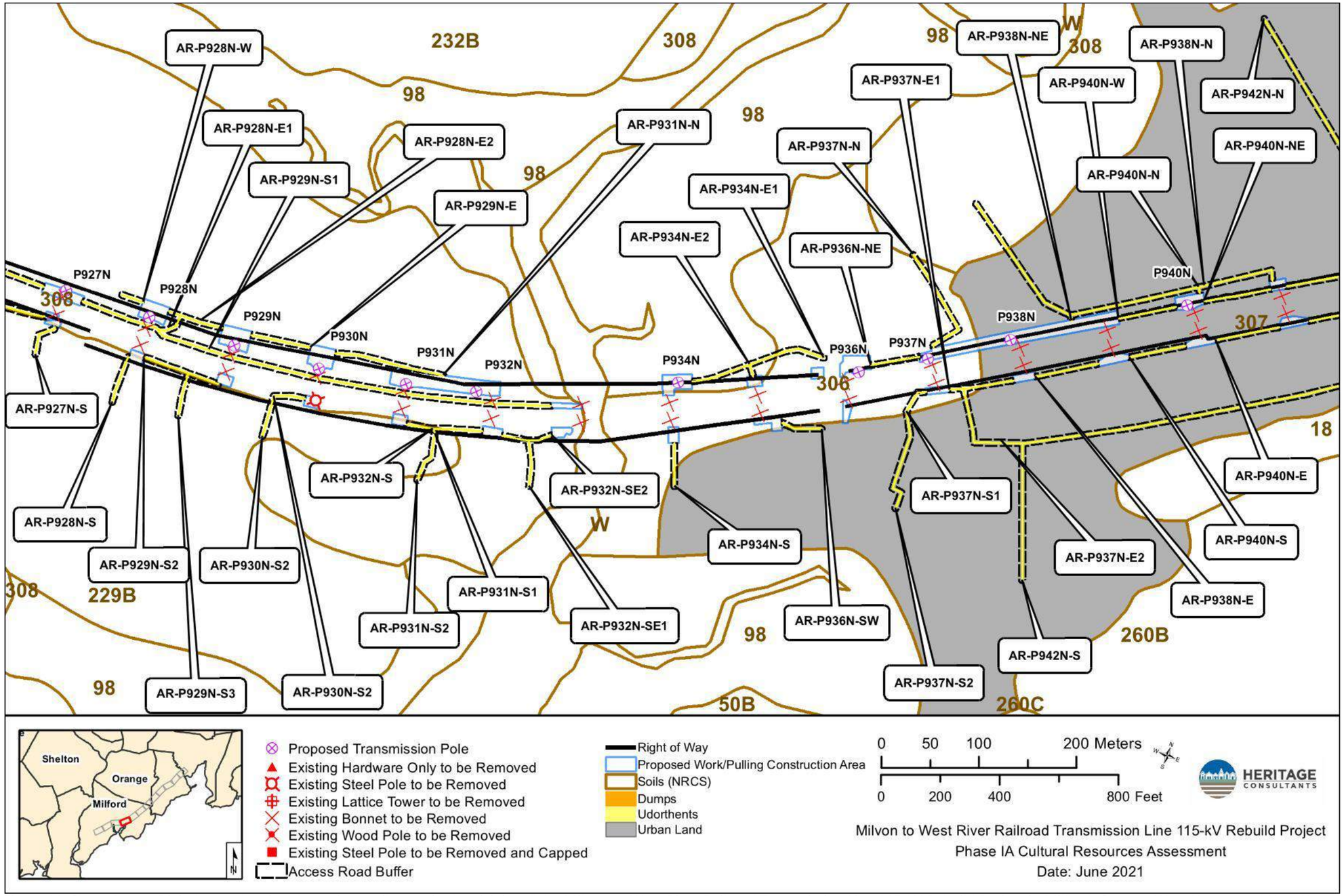

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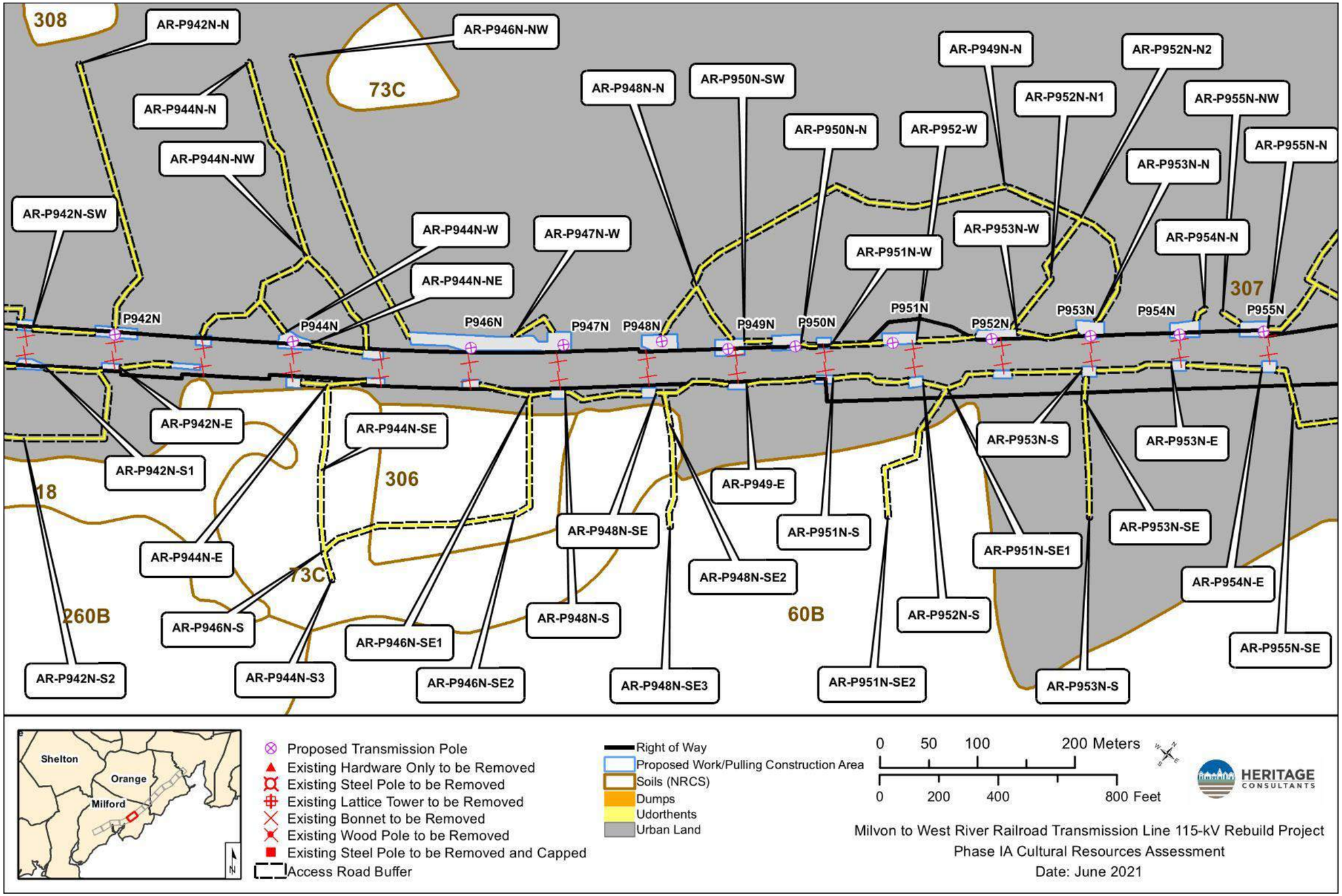
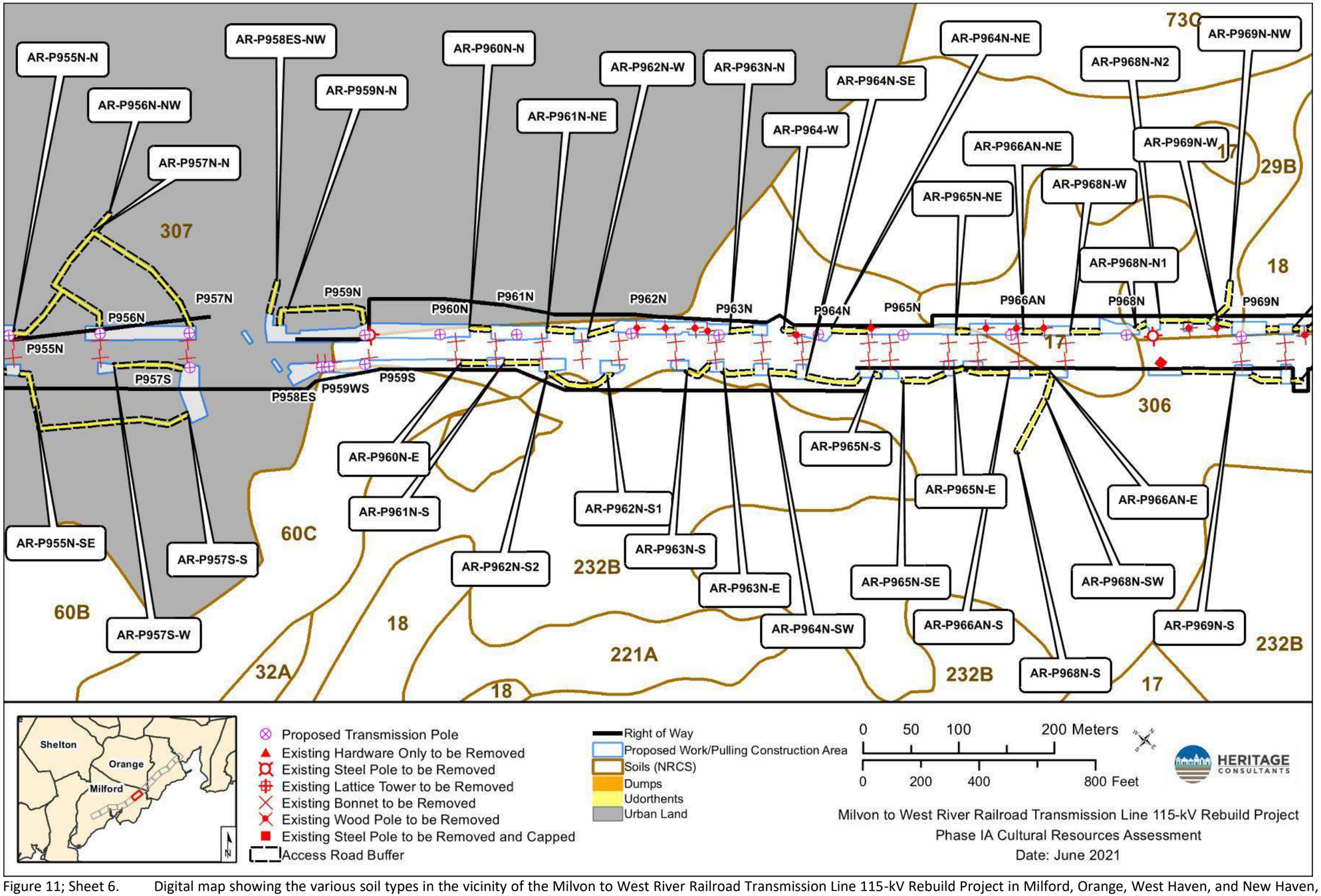


Figure 11; Sheet 5. Digital map showing the various soil types in the vicinity of the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project in Milford, Orange, West Haven, and New Haven, Connecticut. in Milford, Orange, West Haven, and New Haven, Connecticut.



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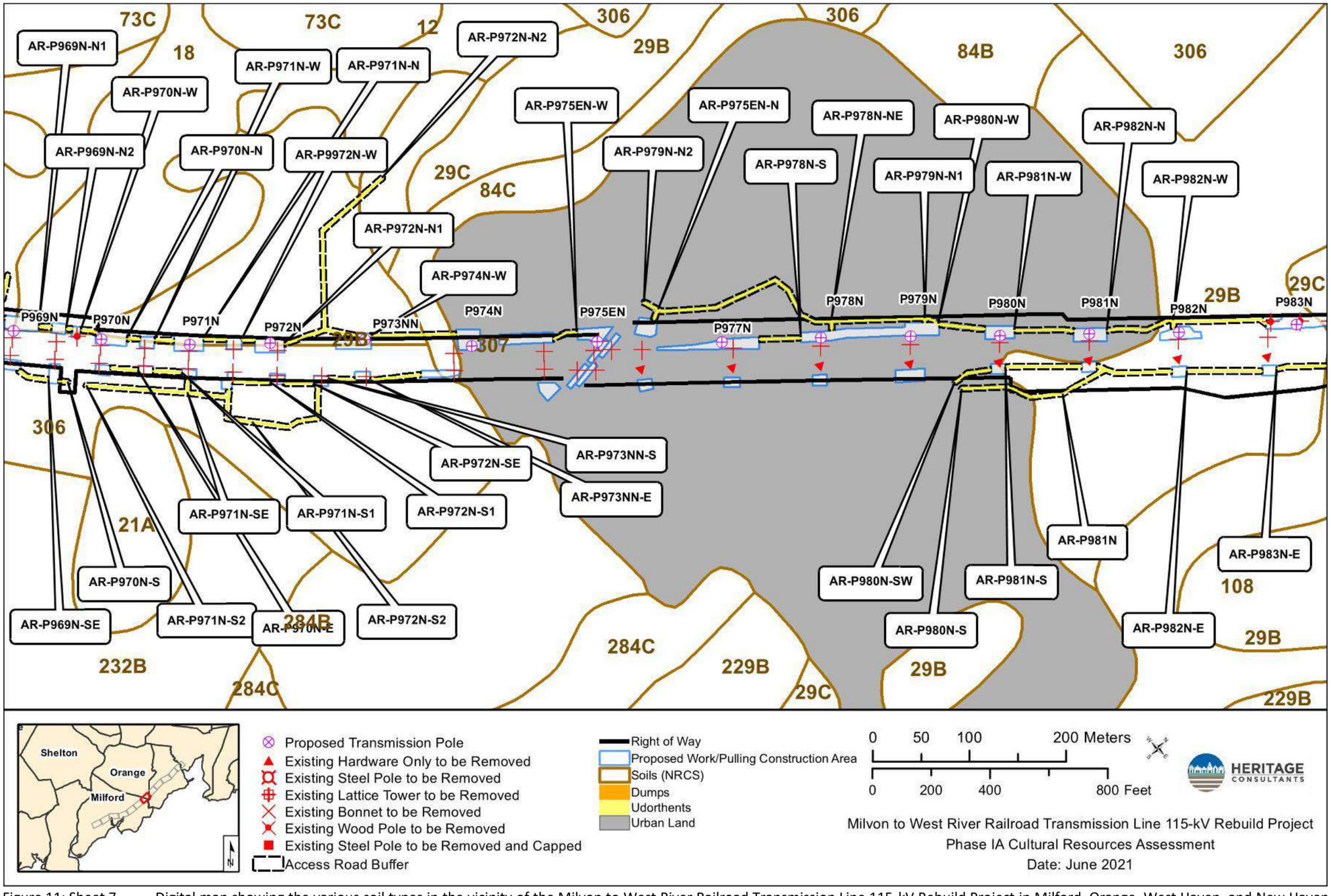

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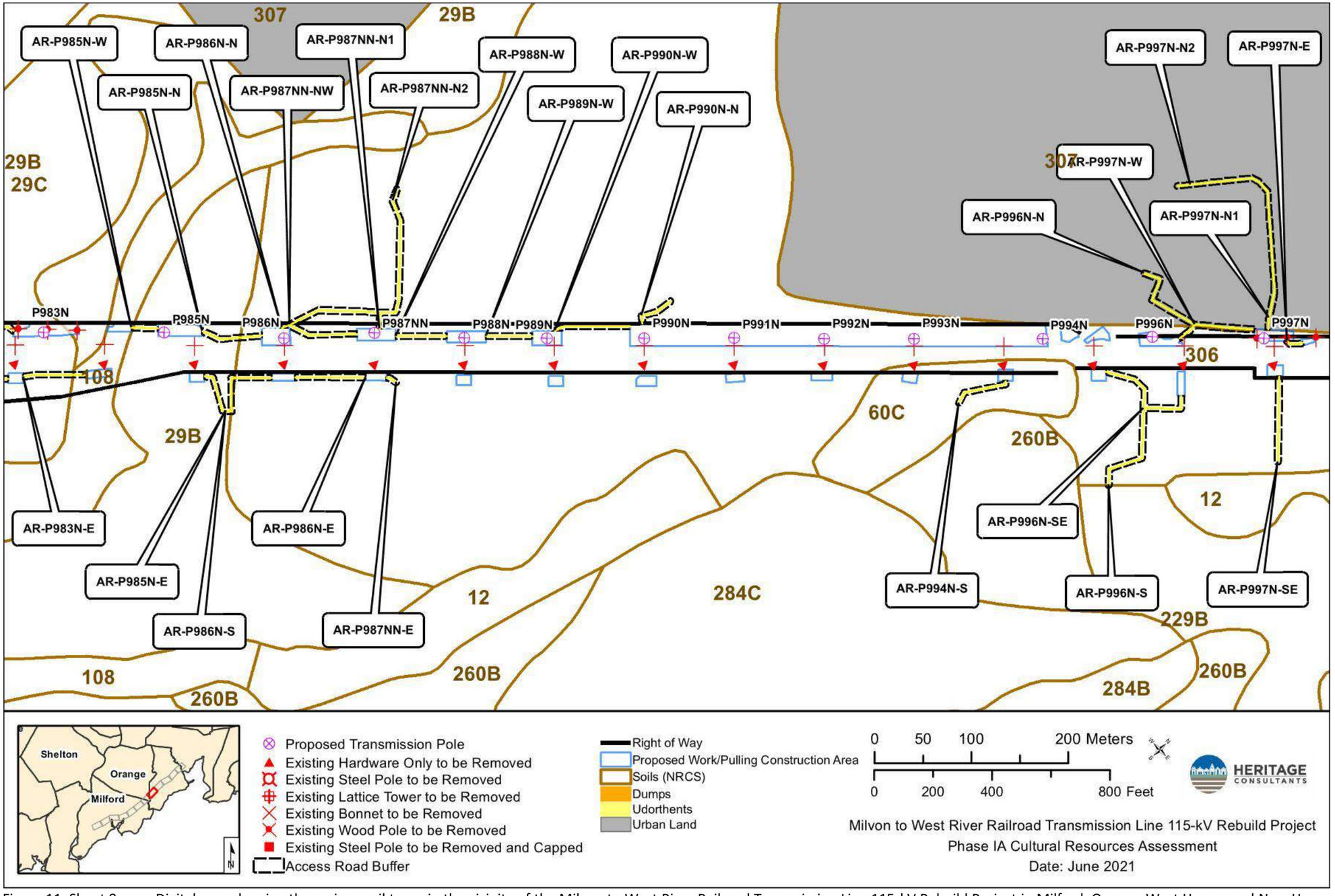

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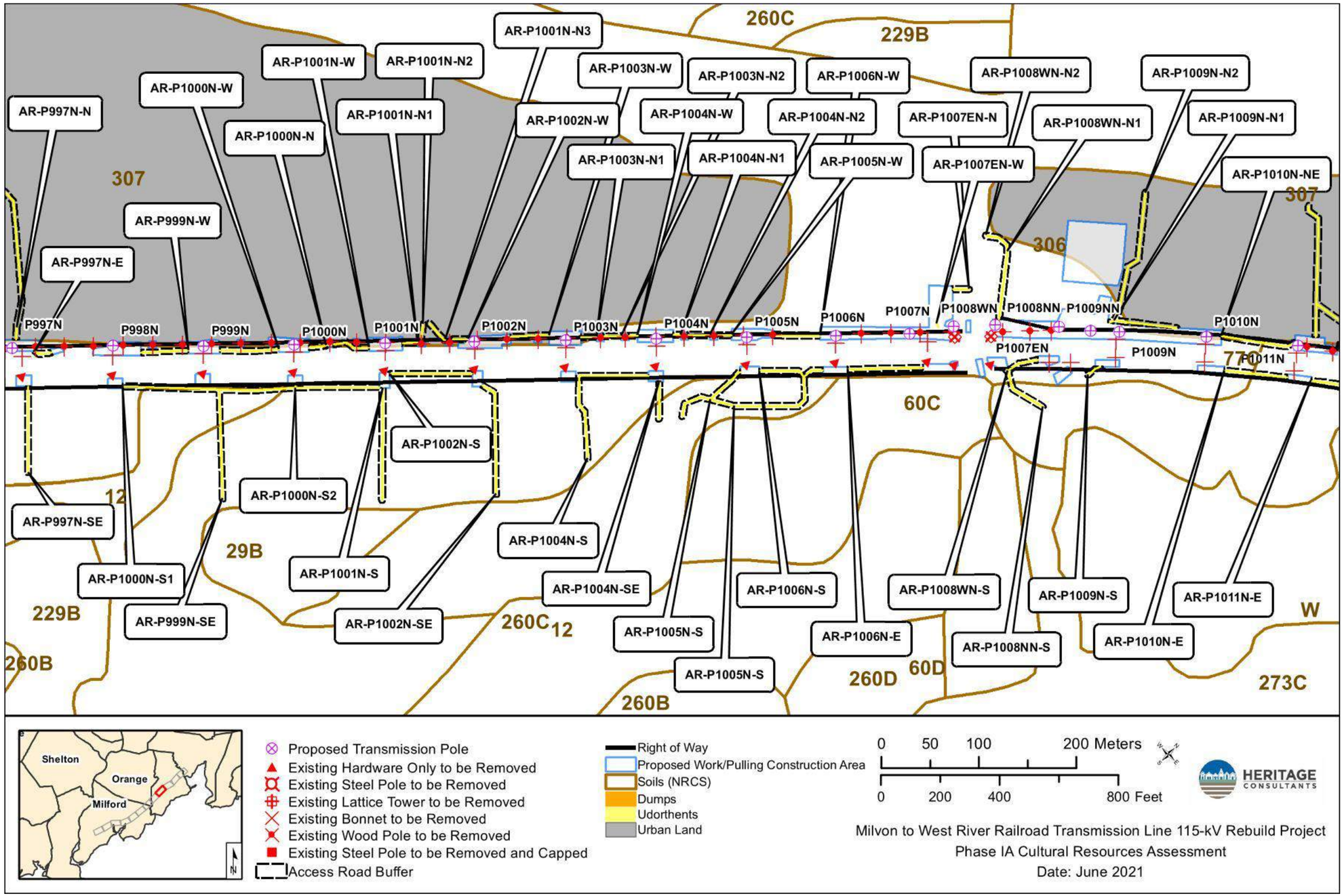

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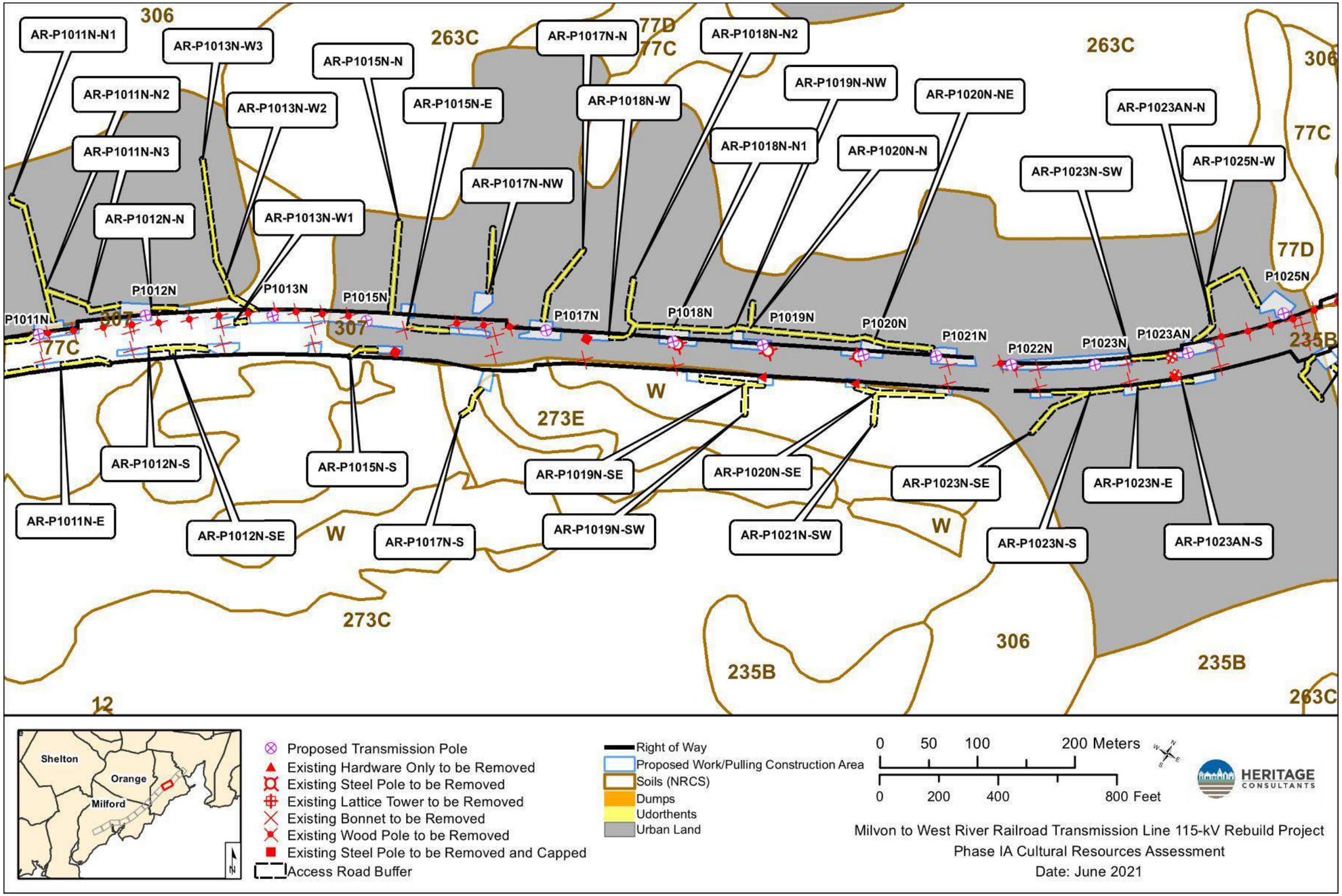

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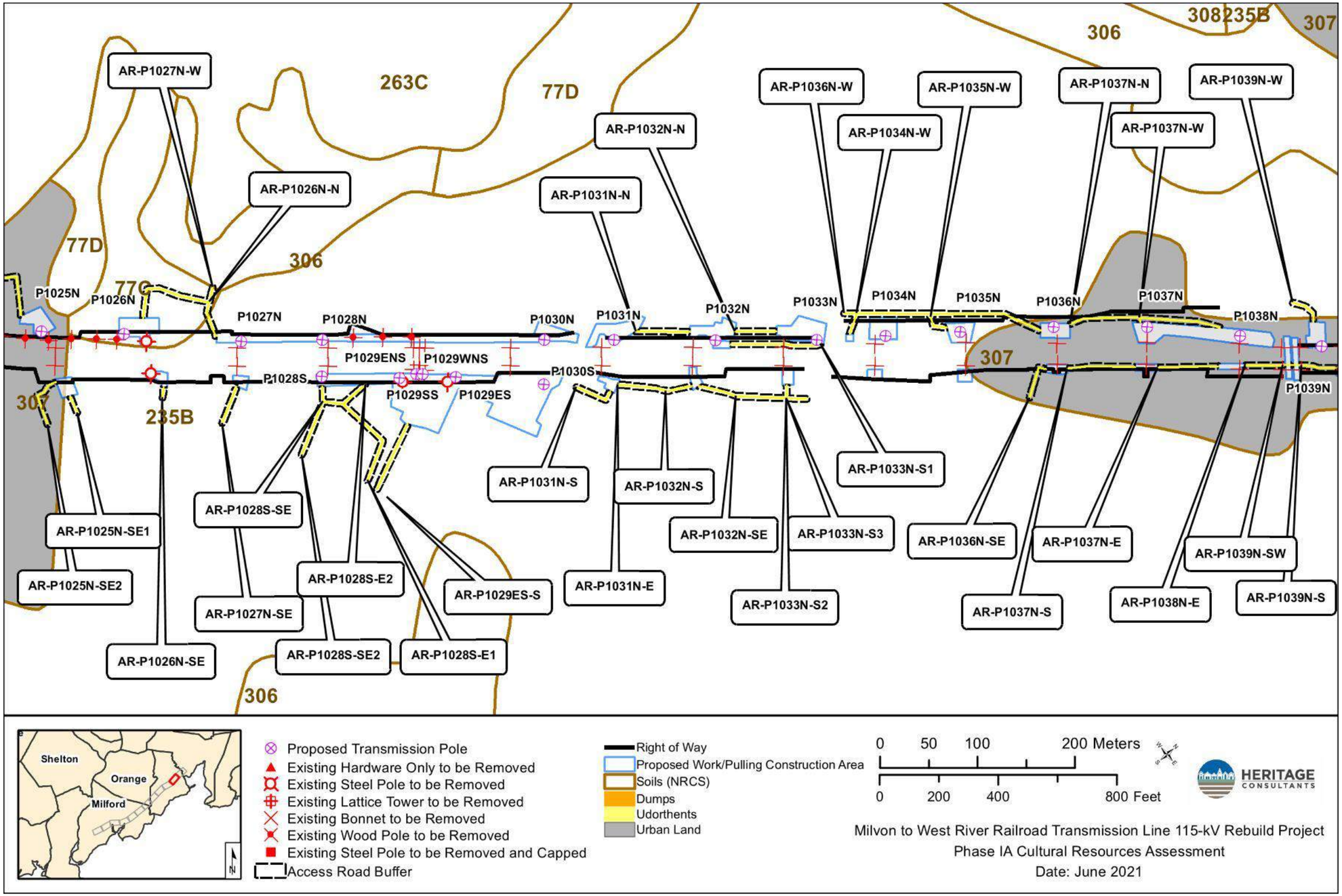

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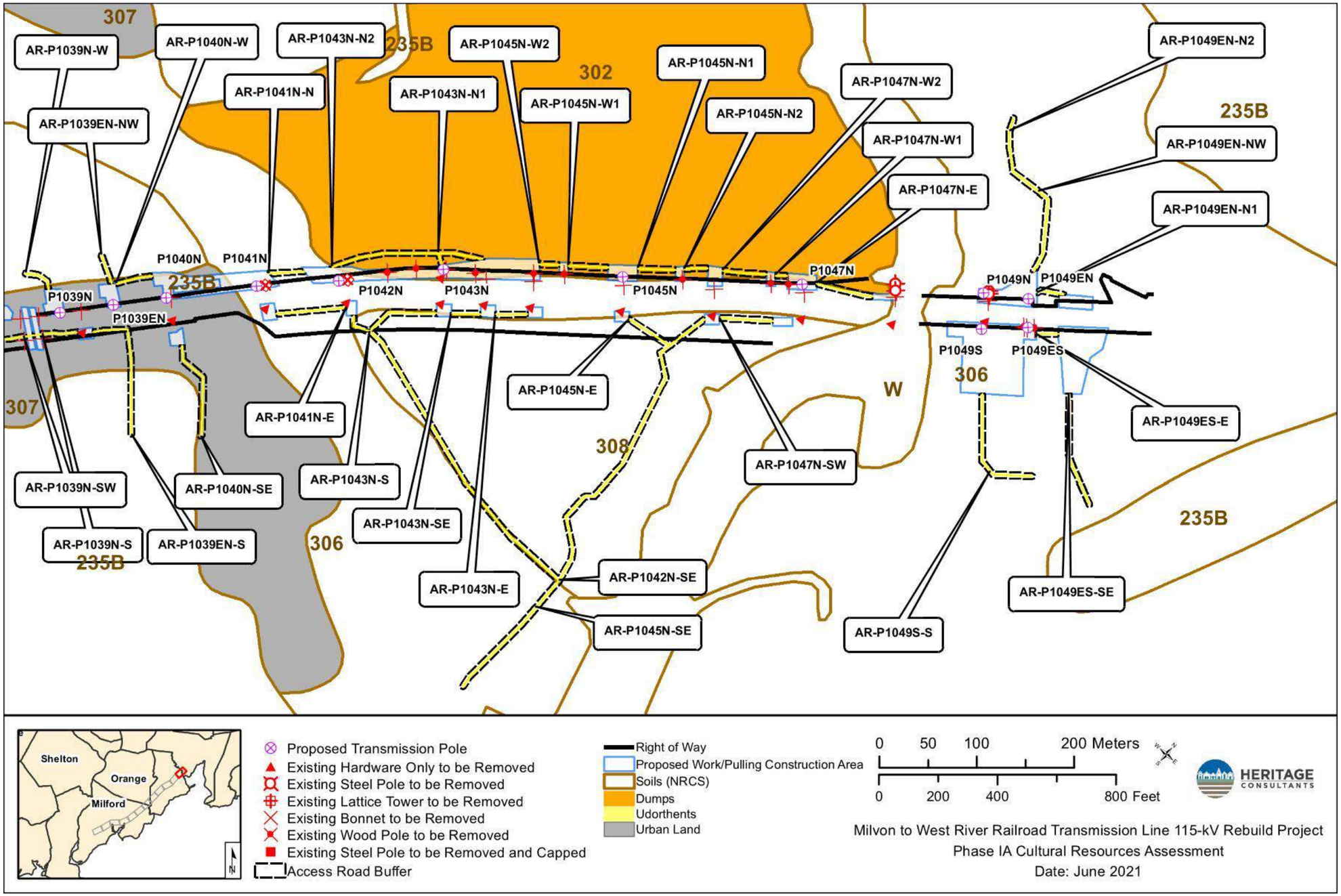

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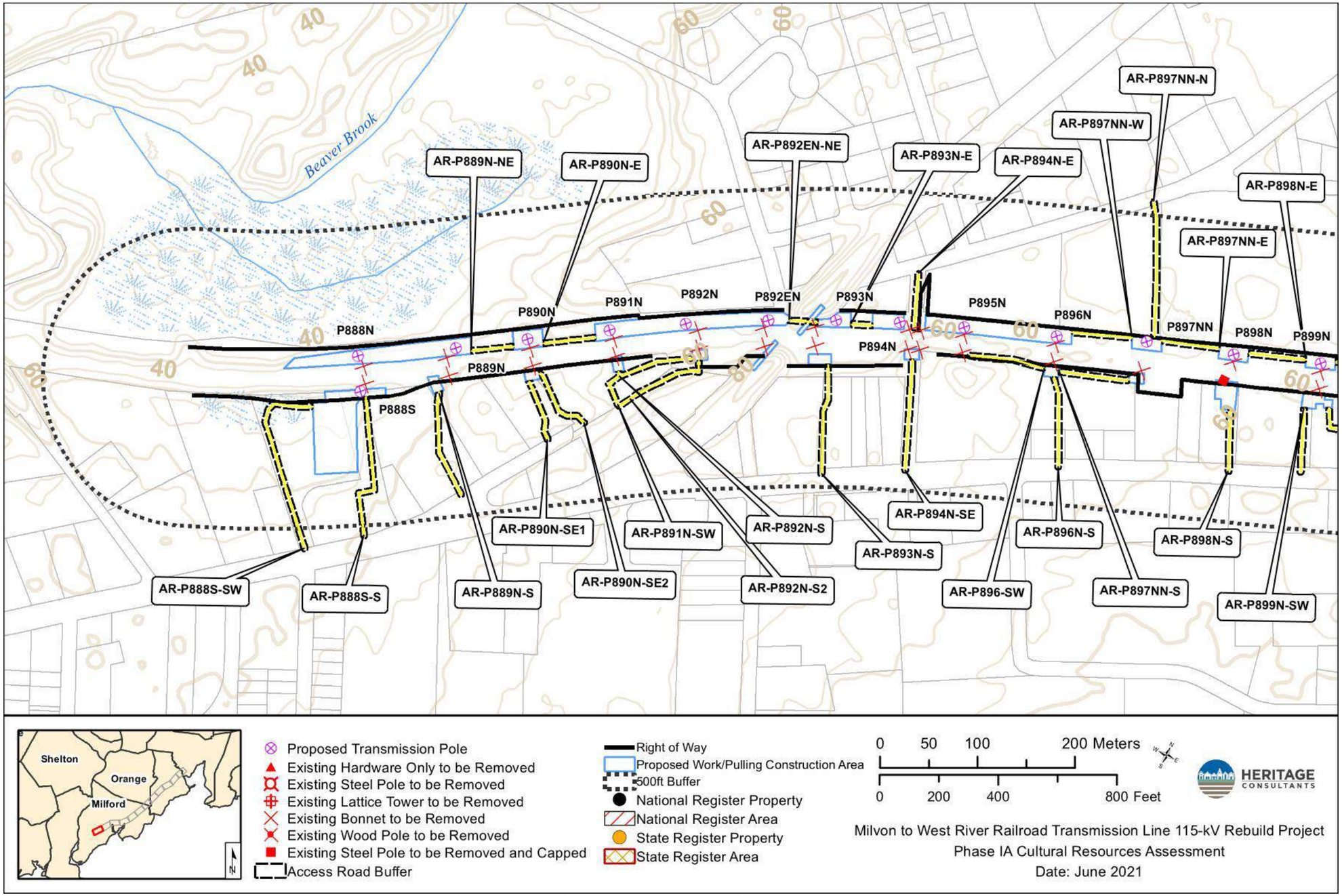

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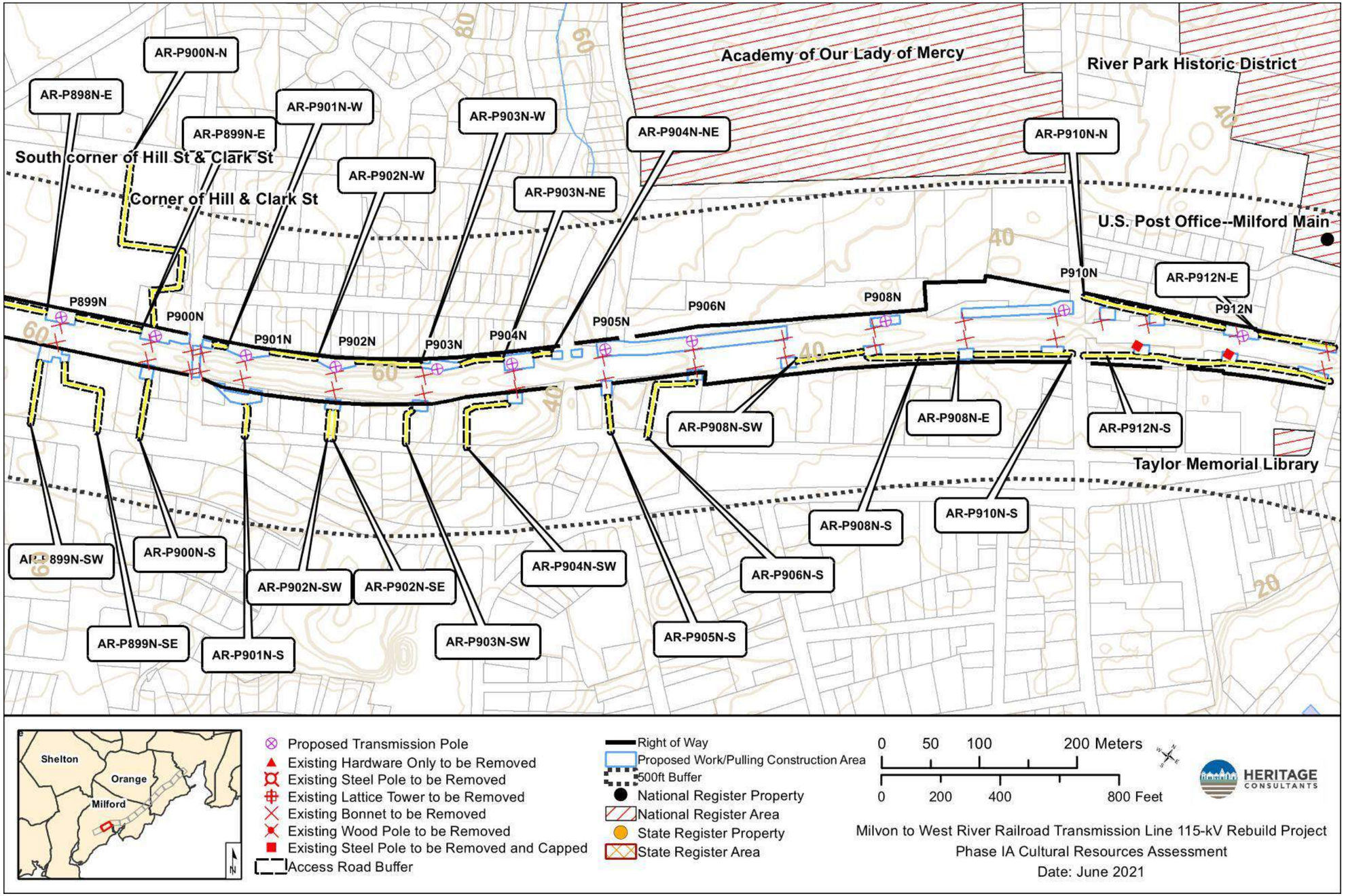

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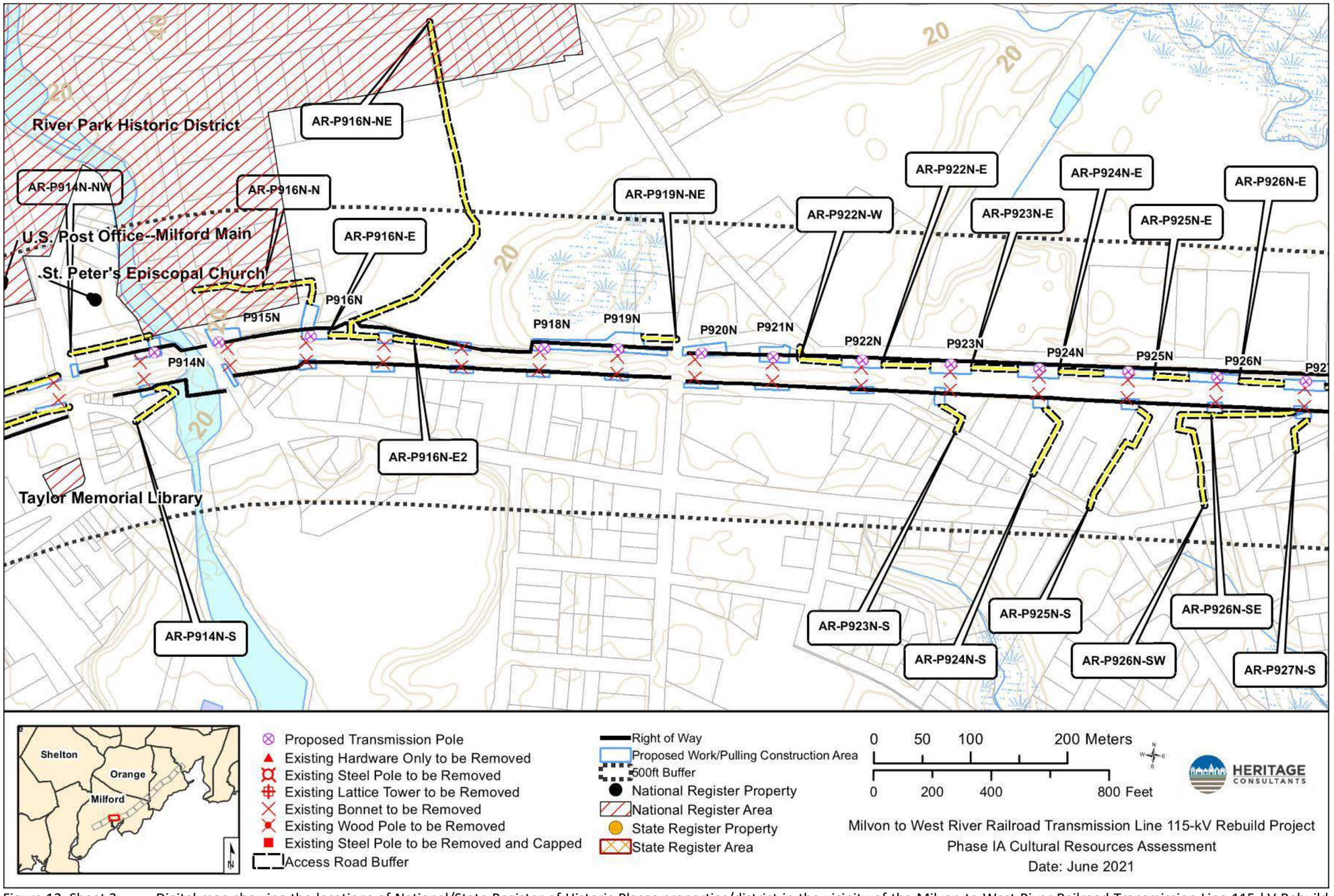

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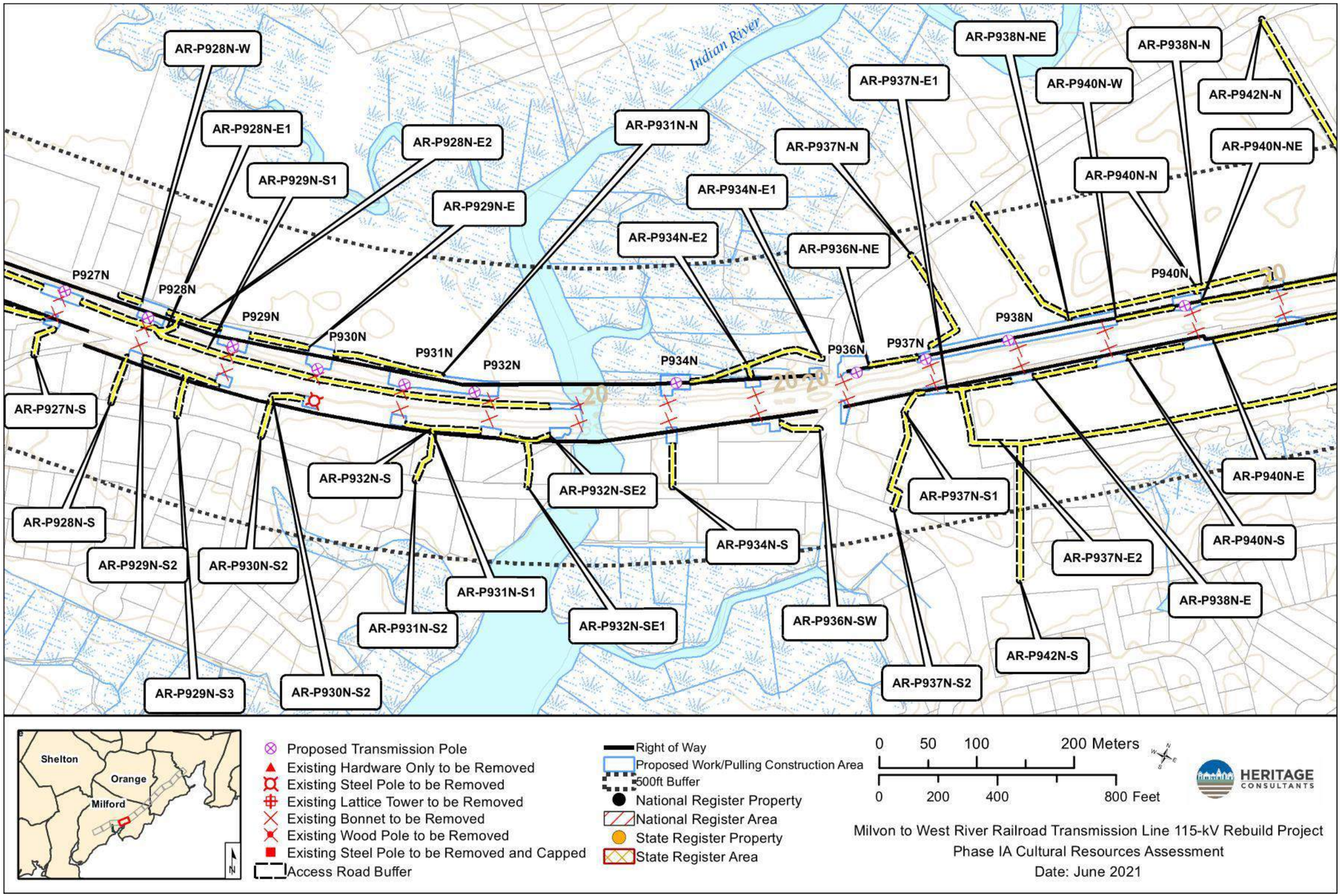

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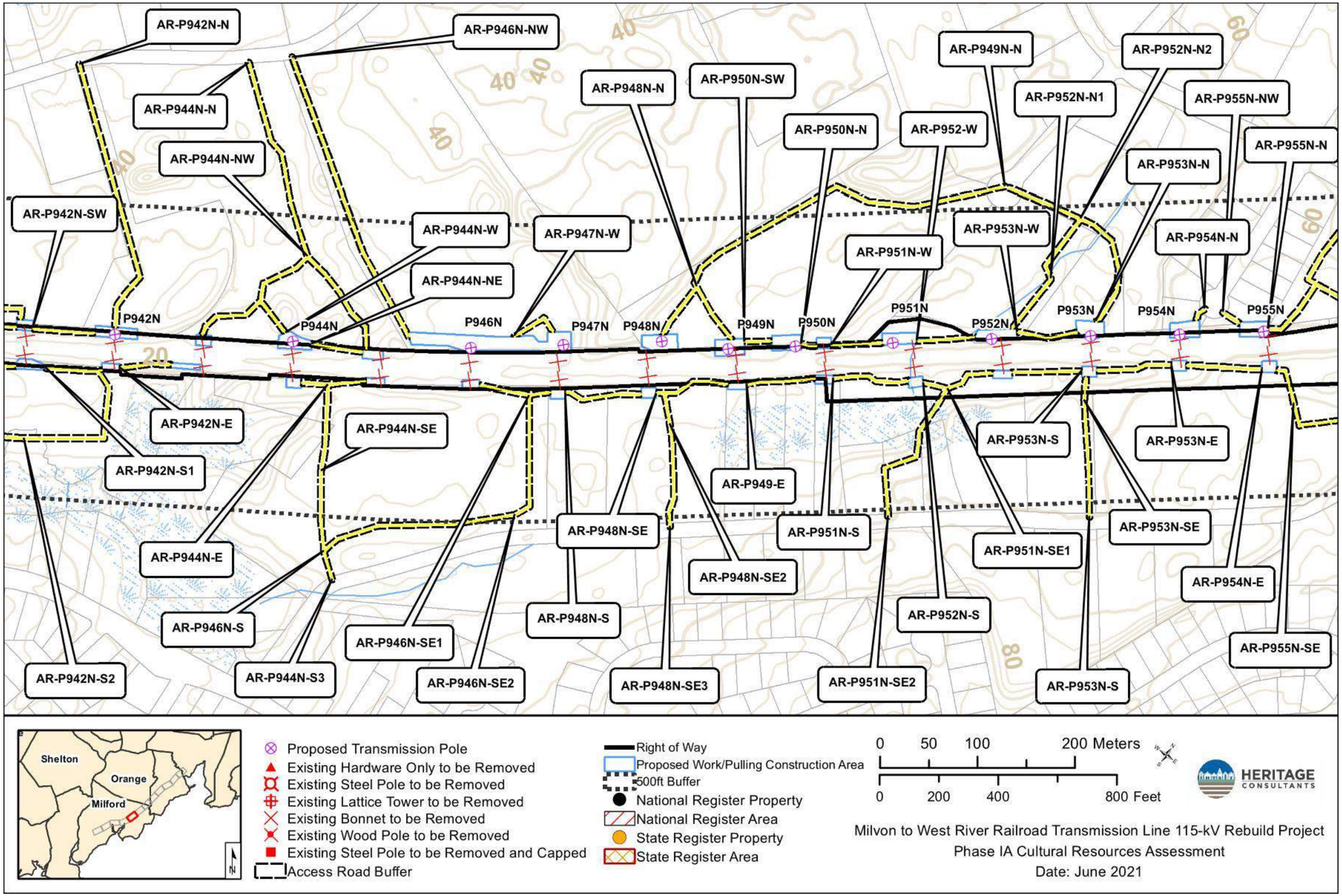

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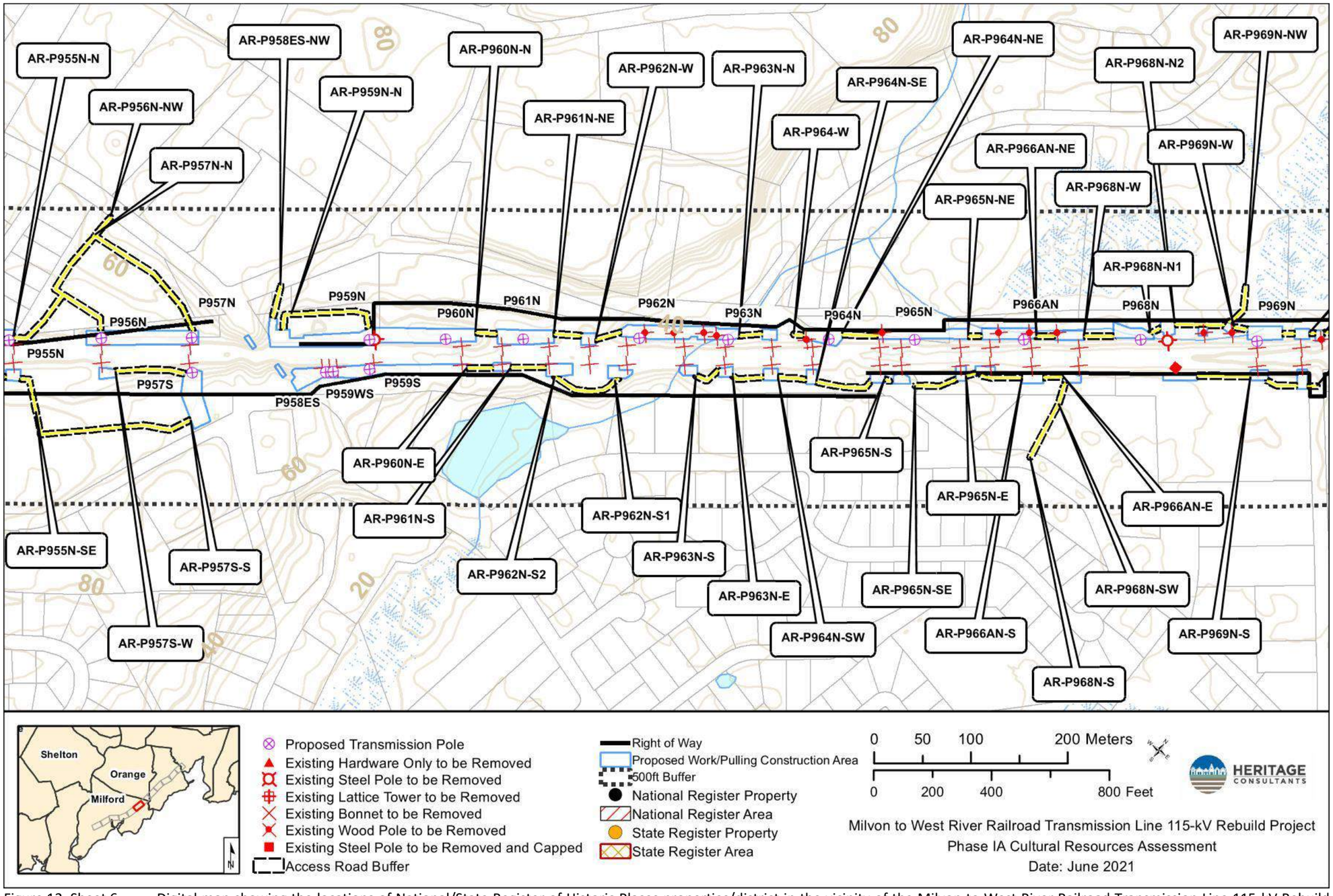

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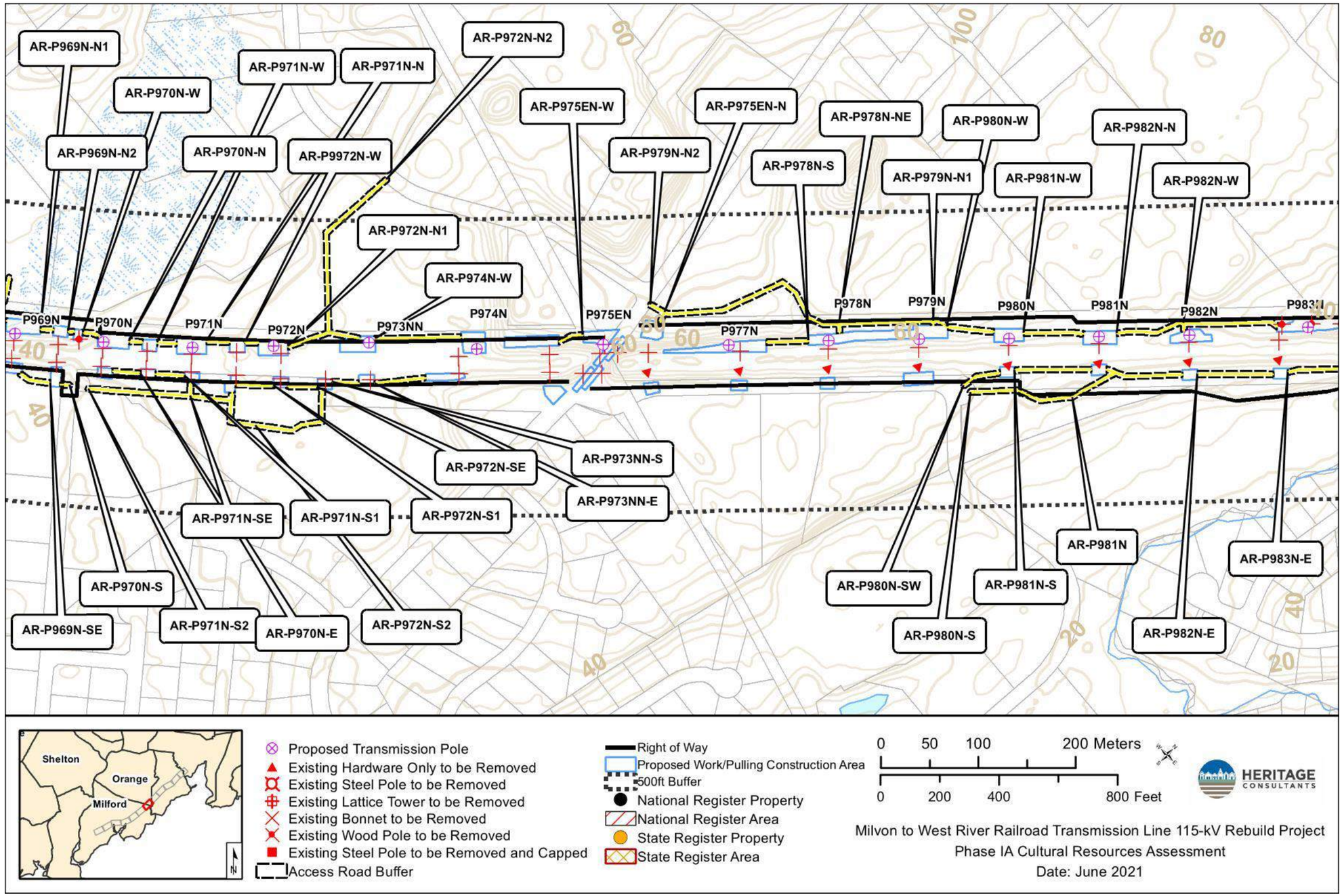

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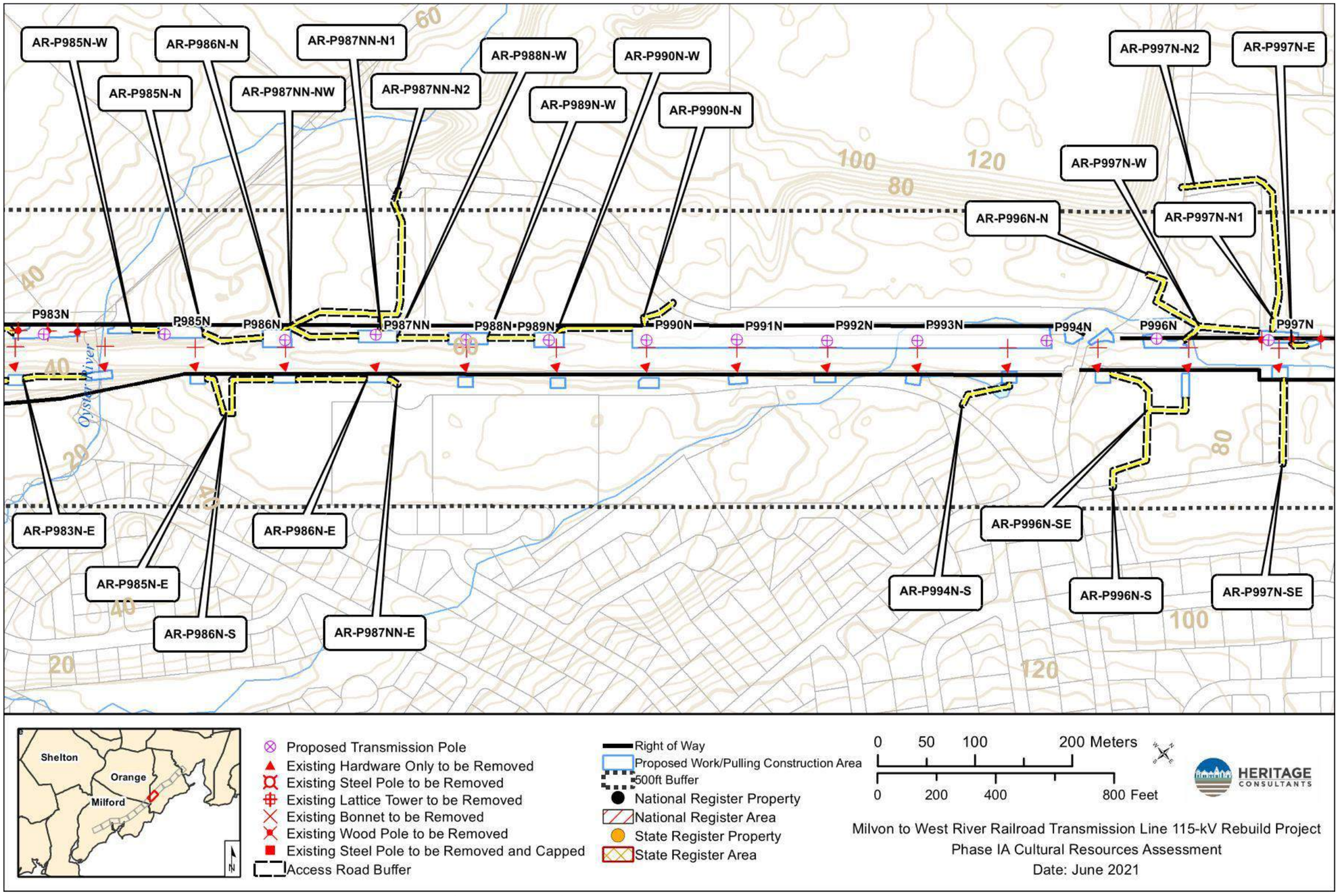

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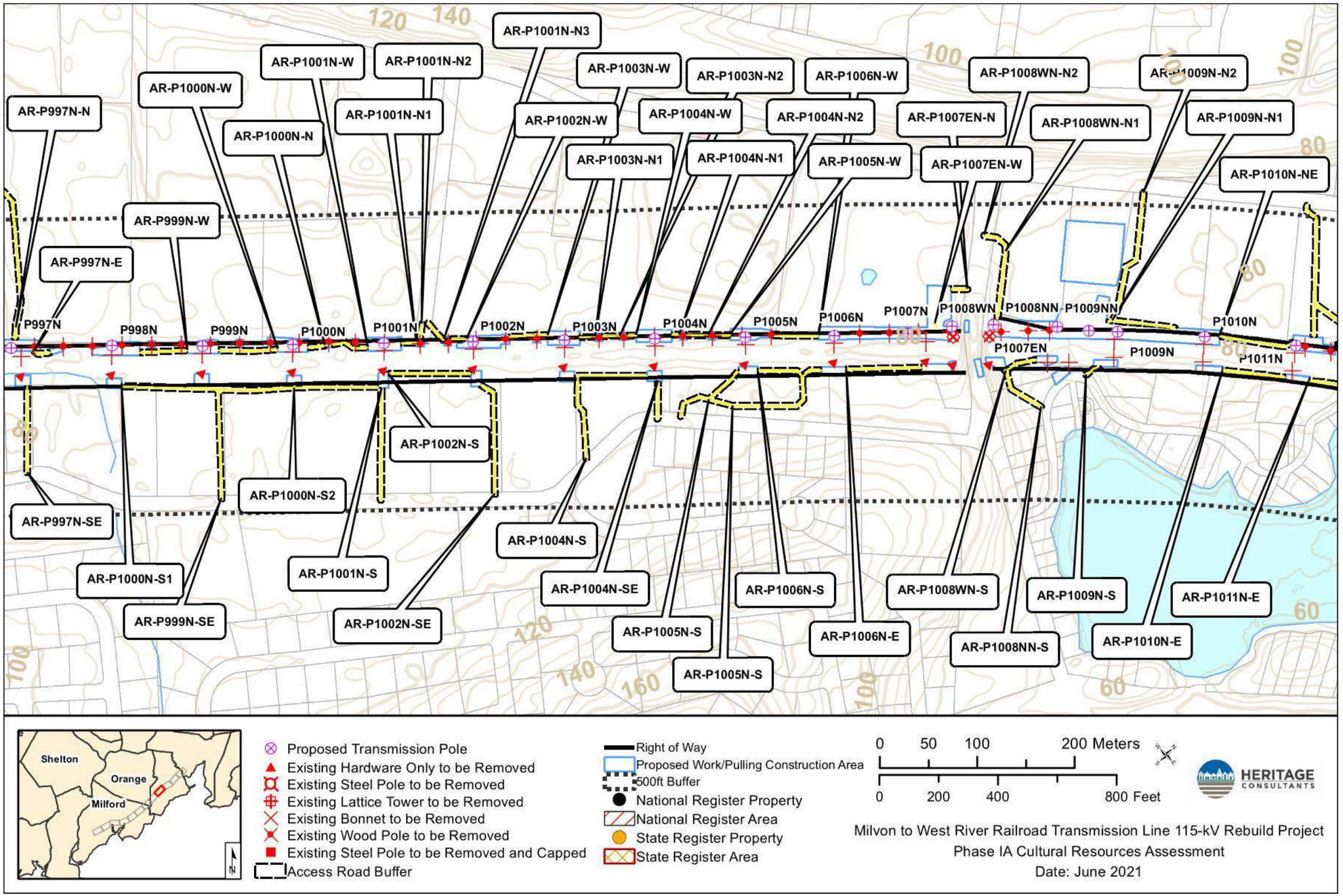

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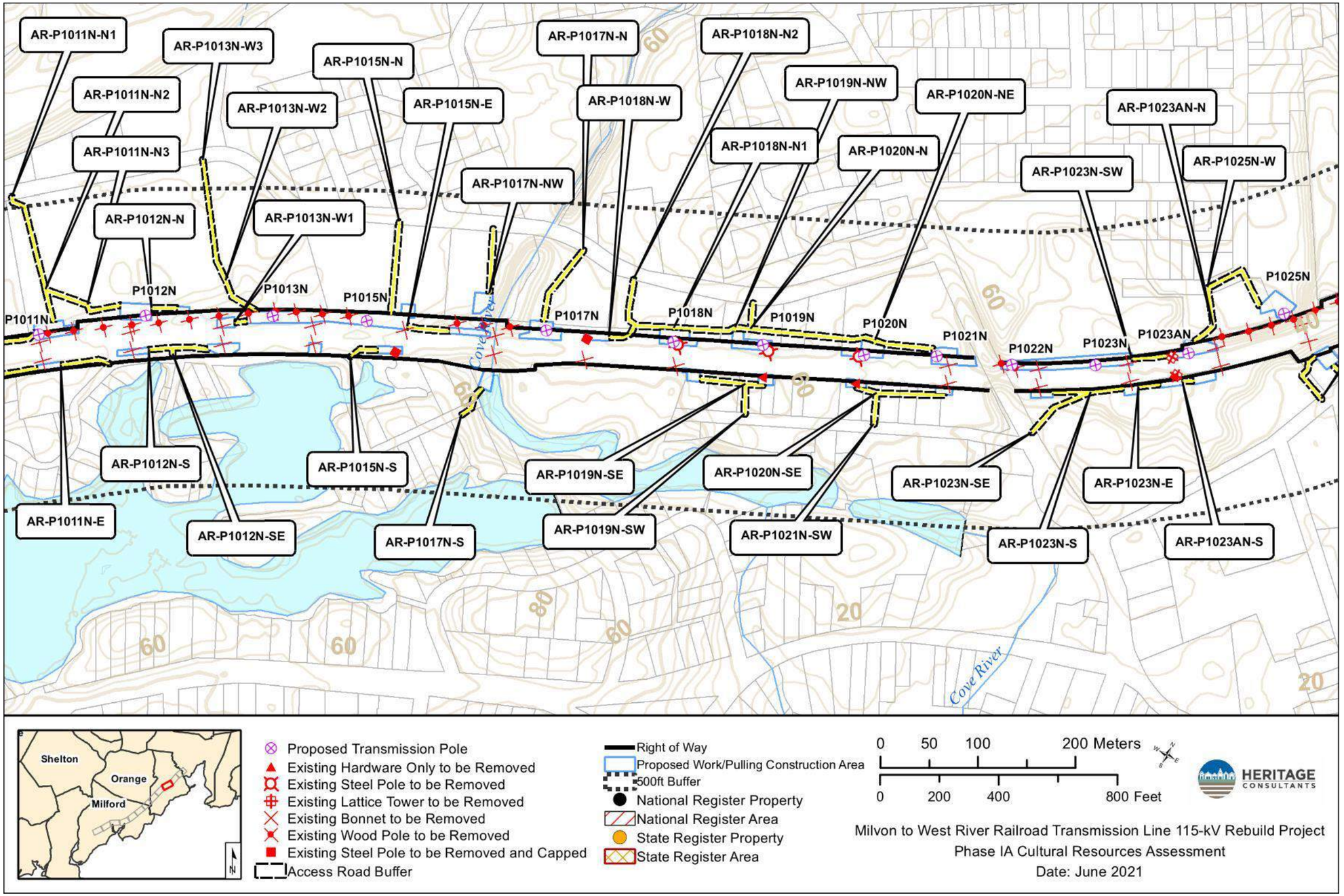

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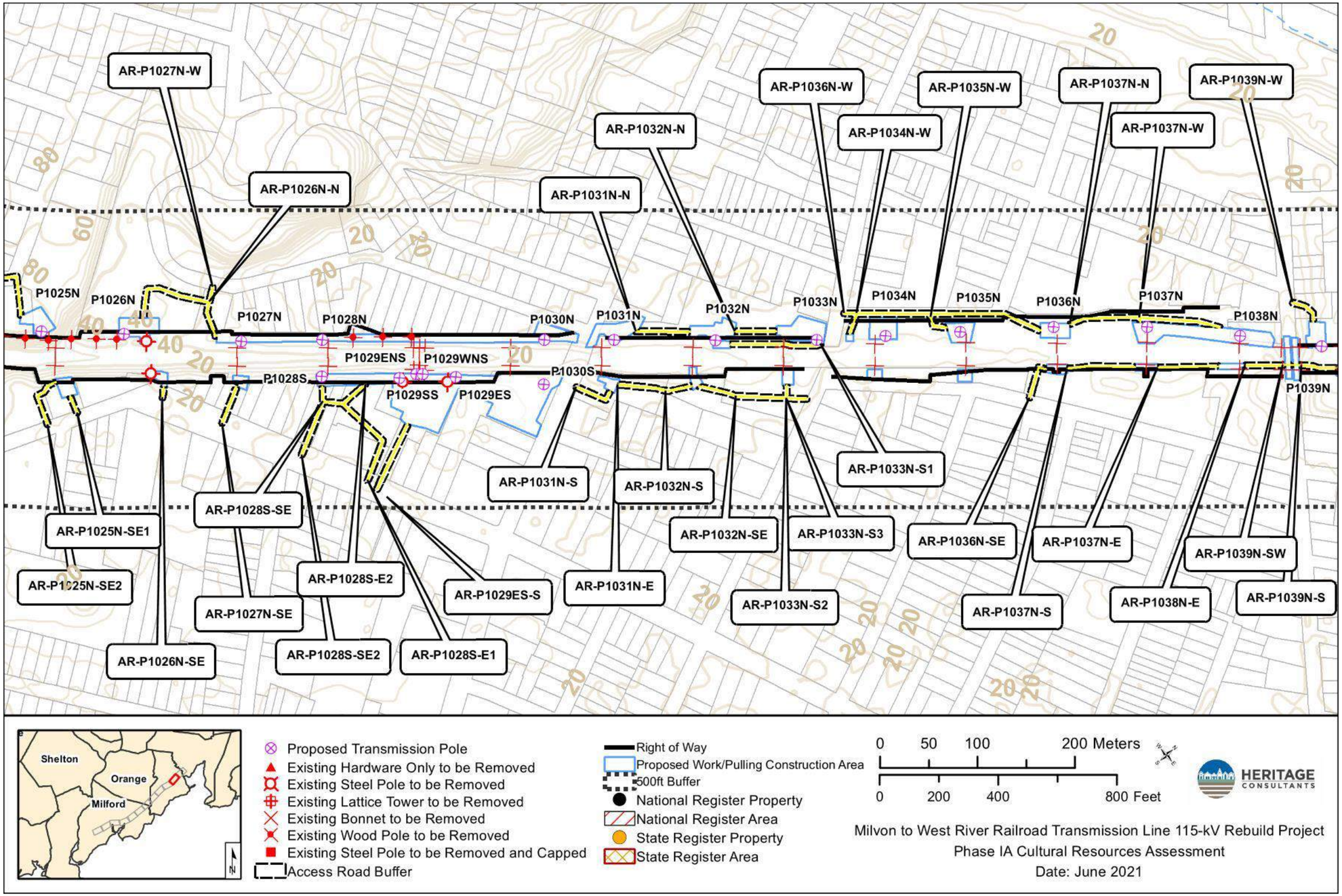

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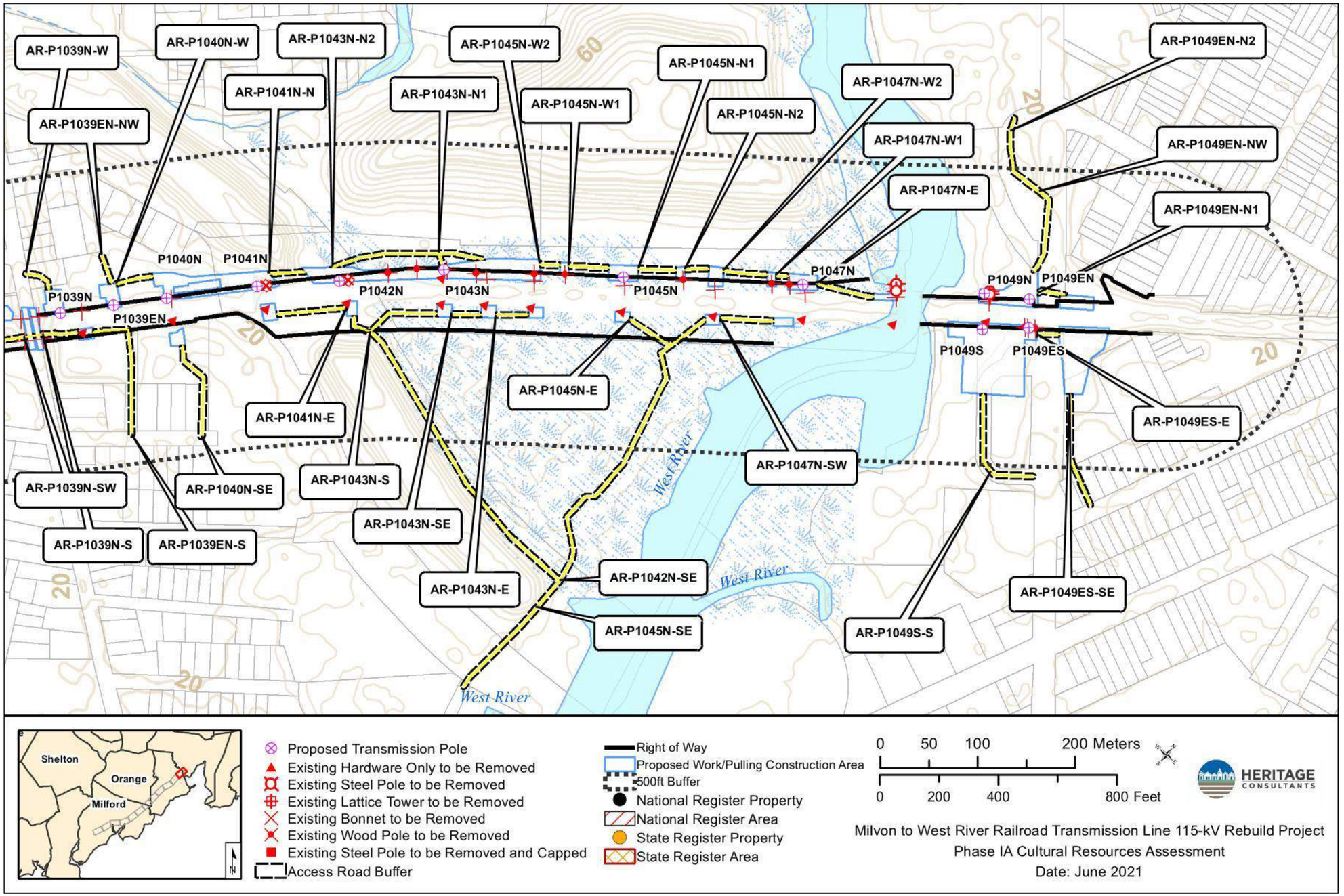

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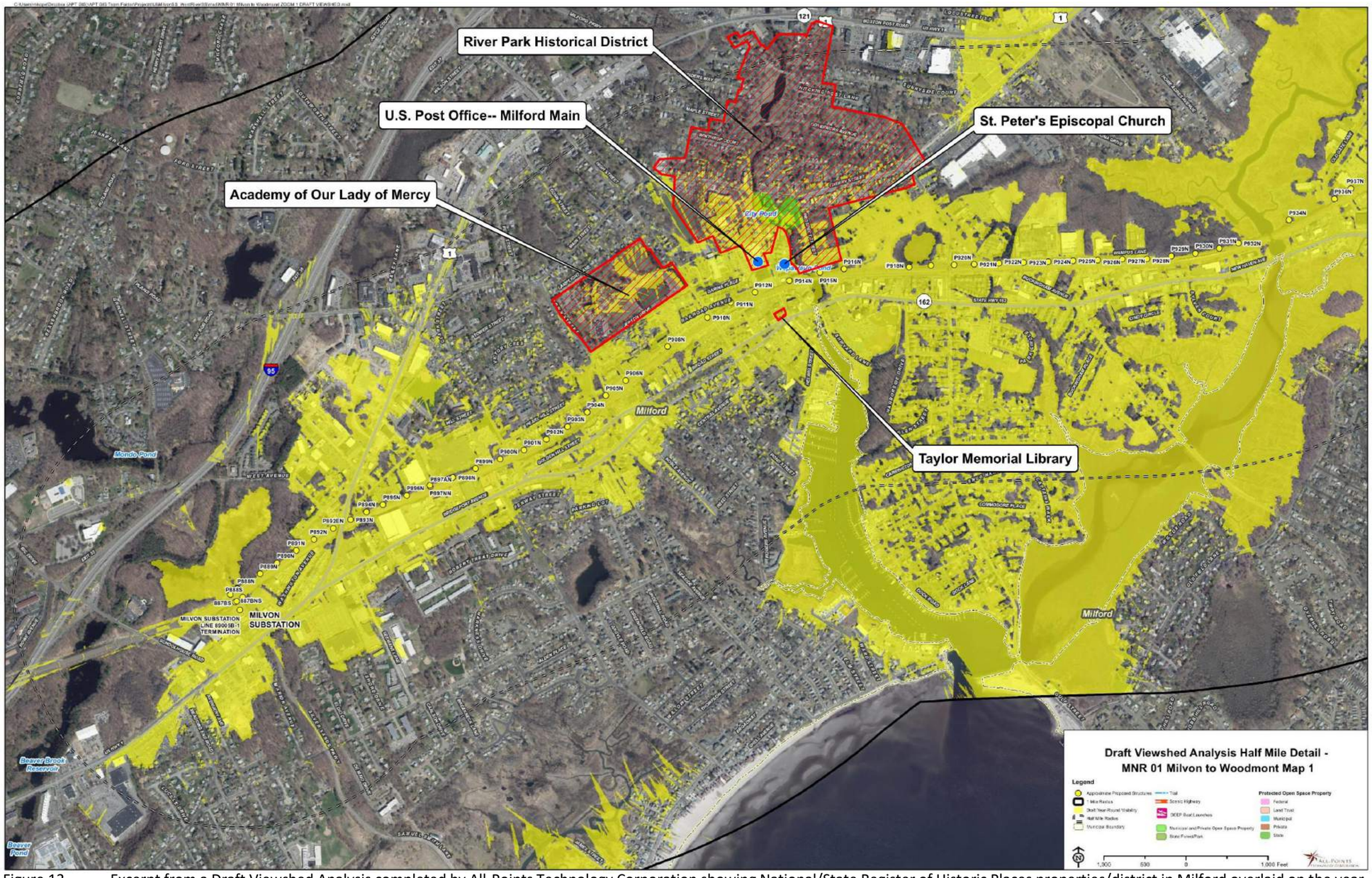

Figure 13. Excerpt from a Draft Viewshed Analysis completed by All-Points Technology Corporation showing National/State Register of Historic Places properties/district in Milford overlaid on the year-round visibility envelope from above-ground elements associated with the Milvon to West River Railroad Transmission Line 115-kV Rebuild Project.

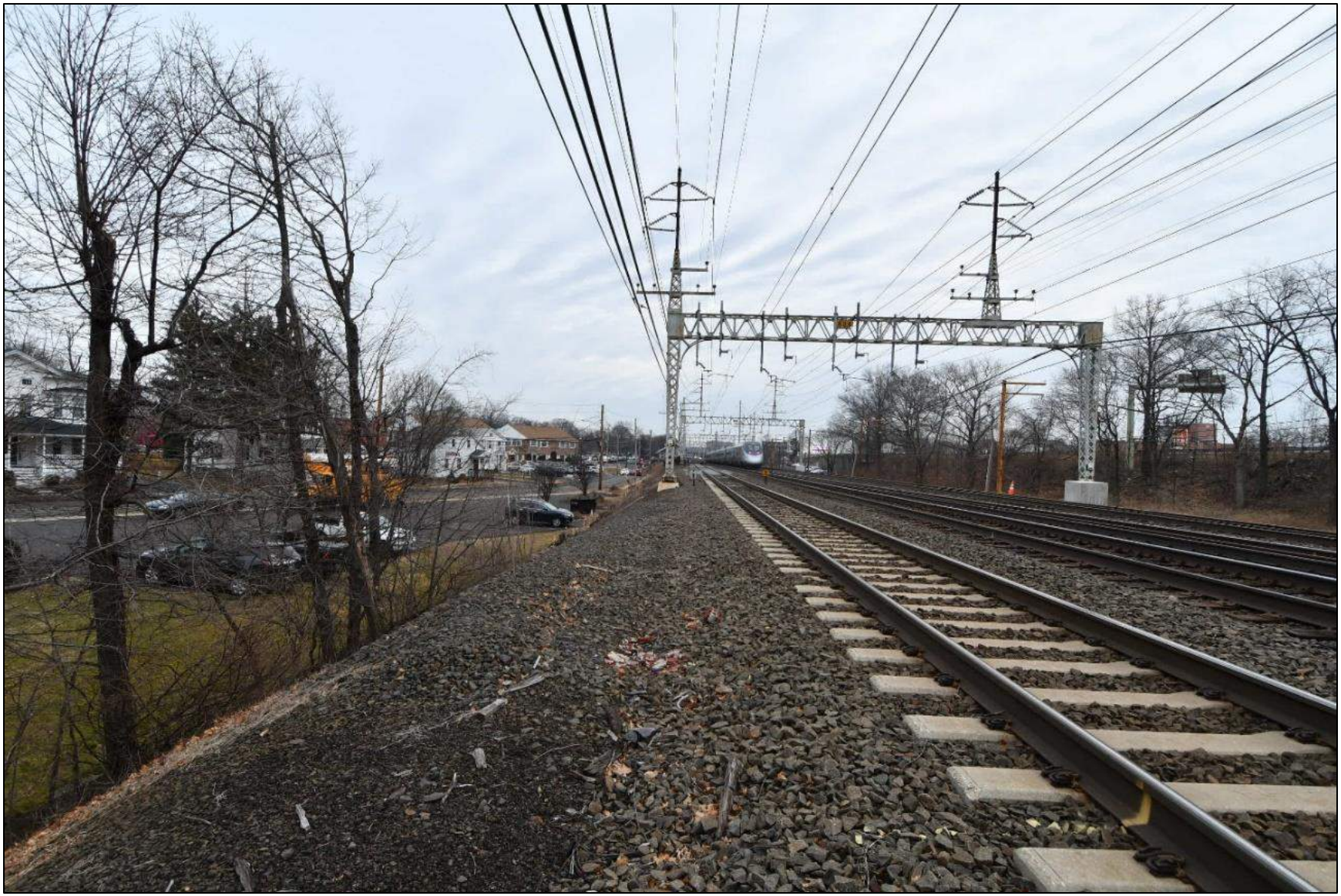

Figure 14. Overview photo of pre-construction conditions along an adjacent section of the existing CT DOT corridor.

Figure 15. Overview photo of post-construction conditions along an adjacent section of the existing CT DOT corridor (post-construction conditions along the existing CT DOT corridor will be similar in nature).

Figure 16. Overview photo showing proposed access road looking north from U.S. Route 1 in Milford.

Figure 17. Overview photo of proposed work/pulling pad location looking southeast from Prospect Street in Milford toward existing CT DOT corridor.

Figure 18. Overview photo of proposed work/pulling pad looking east along the existing CT DOT corridor toward Gulf Street in Milford.

Figure 19. Overview photo taken from proposed work/pulling pad looking northeast toward proposed access road connecting to Gulf Street in Milford.

Figure 20. Overview photo looking East showing proposed access road connecting proposed work pull pad to Gulf Street in Milford.

Figure 21. Overview photo taken from River Street looking east along proposed access road in Milford.

Figure 22. Overview photo taken from New Haven Avenue looking north toward proposed access road in Milford.

Figure 23. Overview photo taken from proposed access road looking west toward proposed work/pulling pad and existing CT DOT corridor in Milford.

Figure 24. Overview photo taken from Higgins Drive in Milford toward proposed access road and work/pulling pad.

Figure 25. Overview photo taken from Elm Street in West Haven looking north toward proposed access road and work/pulling pad.

Figure 26. Overview photo looking south toward proposed work/pulling pad area along the existing CT DOT corridor in Milford.

Figure 27. Overview photo looking east along proposed work/pulling pad along the existing CT DOT corridor in Milford (view from Milford Cemetery).

Figure 28. Overview photo taken from Buckingham Avenue looking west toward proposed work/pulling pad along the existing CT DOT corridor in Milford.

Figure 29. Overview photo looking east from proposed work/pulling pad area along the existing CT DOT corridor near Eastern Steel Road in Milford.

Figure 30. Overview photo looking southeast showing proposed work/pulling pad and proposed access road near Anderson Avenue in Milford.

Figure 31. Overview photo looking northeast showing proposed work/pulling pad and proposed access road along the existing CT DOT corridor near Heffernan Drive in West Haven.

Figure 32. Overview photo of existing CT DOT corridor looking southwest from the Allings Crossing Road Bridge crossing in West Haven.

Figure 33. Overview photo taken from the Allings Crossing Road bridge crossing in West Haven. The view is southwest.

APPENDIX 1

UI ENGINEERING MEMO

Westwood

Pole Height Briefing in Downtown Milford

UI 115 kV Railroad Project – Milvon to West River

Prepared For:

United Illuminating Company

Prepared By:

Westwood Professional Services

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Lansdale, Pennsylvania 19446

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Date: July 16, 2021

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Westwood

1.0 Project Introduction

The proposed UI 115 kV Railroad Project – Milvon to West River Project (Project) includes the installation new monopoles in Downtown Milford in the area of the Milford Historical District. These new monopoles will support two 115kV circuits and will be located on the north side of the existing CT DOT railroad corridor. The Project also includes the removal of the two existing 115kV circuits from the existing catenary support structures along the CT DOT railroad corridor, inclusive of the 115kV conductors, shield wires, insulators, and bonnets (steel flange columns) that are currently attached to the top of the existing catenary support columns. In total, 22 bonnets will be removed from the north side of the CT DOT railroad corridor and 19 bonnets will be removed from the south side of the CT DOT railroad corridor.

Through the project design evolution, as described in Section 2.0 below, UI deliberately increased the height of poles in order to reduce the number of poles in sensitive areas including the Milford Train Station and the Milford Cemetery along with avoiding conflicts with future plans for development within the City.

2.0 Project Design Basis

The initial design basis of the project located the new monopoles 25 feet north of the existing catenary support columns with span lengths of approximately 300 feet. Placing the monopoles directly adjacent to the existing catenary support columns would result in the shortest structure height. Under this initial design basis, the following items were the primary dictators of proposed structure height:

- Required clearance of 15' between the proposed UI 115kV conductors and Metro North electrical facilities
- 12' vertical spacing between the proposed UI shield wire and the top UI 115kV conductor
- 14' vertical spacing between the UI 115kV conductors
- Utilizing monopoles which support both UI 115kV circuits, instead two single circuit lines which would require two monopoles, one on the north and one on the south side of the railroad corridor.

Following this initial design basis, there would 21 monopoles in the area of the Milford Historical District and pole heights would be expected to be up to 105 feet given the existing heights of the Metro North electrical facilities and the related design constraints.

Due to the nature of the area including the existing landscape, sensitive land uses, and community facilities, structure locations had to be shifted from the initial design basis. UI, through its engineering contractor, Westwood, shifted structure locations for the following reasons:

- Conflicts with the surrounding built environment (i.e. buildings, adjacent distribution lines, and roadways)

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- Conflicts with underground obstructions identified during non-invasive due diligence subsurface surveys utilizing ground penetrating radar (GPR)
- Constructability Concerns
    - Structures were positioned where possible at either the top or the bottom of the railroad embankment slope to allow for better construction access and for future maintenance access, minimizing positions of monopoles mid-slope.
- Avoiding and minimizing impacts to culturally sensitive resources immediately adjacent to the railroad corridor
    - Milford Cemetery
    - Milford Train Station
- Avoiding conflict with future plans for development near the Milford Train Station in cooperation with the City.

Ultimately, the design of the Project has resulted in 15 monopoles in the area of the Milford Historical District. Of these 15 poles, only nine (9) monopoles will be greater than 105 feet in height (as measured from the existing ground surface).

Structure Number	Pole Height (ft)	Top of Pole Elevation Above Sea Level (ft)
P901N	105	178
P902N	95	166
P903N	90	159
P904N	105	161
P905N	115	169
P906N	120	172
P908N	135	178
P910N	140	175
P912N	125	166
P914N	135	165
P915N	145	167
P916N	135	171
P918N	135	162
P919N	105	130
P920N	105	132

3.0 Milford Cemetery

Through the non-invasive due diligence subsurface surveys, UI found multiple unmarked graves and other headstones within 25' of the existing catenary support structures. It was deemed that

avoidance of all below grade impacts was warranted, resulting in an approximately 800' span length between proposed monopoles P916N and P918N, and eliminating one or two structures that existed under the initial design basis.

As span length increases, conductor sag and conductor blowout both also increase resulting in the need for taller poles. To meet all electrical clearances with this larger span length, these two monopoles are required to be 135' tall. At an October 2020 meeting with the City of Milford, the City agreed that minimizing ground disturbance in this area was preferred.

4.0 Milford Train Station

Preliminary design plans had up to three structures to be installed in the grassy strip of land separating the Milford Train Station from a parking lot owned by the City of Milford to the north. Through the design process, UI met with the City of Milford numerous times during the process. Through these discussions, UI became aware of design plans for a mixed-use development at 44-64 River Street. UI also became aware of that the City of Milford would like to keep plans open for the development of the parking lots located adjacent to and north of the Milford Train Station. As such, UI decided it was best to avoid the grassy strip. To minimize impacts to the Milford Train Station as a whole, it was decided to utilize 600' spans in this area. To meet all electrical clearances given the limited flexibility in pole placement, the steel monopoles (P910N through P914N) are required to be above 125' in height as noted in the table above.

Due to being located at a lower ground elevation when compared to P914N and P916N, the height of P915N had to be taller so that the pole top elevations could remain approximately the same due so this structure would not experience any uplift forces.

Once P910N was increased to 140' tall, Structures P907N through P909N all had to increase in height by 10 to 35 feet to not experience any uplift forces. This, in conjunction with finding underground conduit at the original location for P909N, resulted in a decision to increase the height of P904N (5') through P906N (25') and P908N (15') in order to remove 2 poles (P907N and P909N).

5.0 Conclusion

As we upgrade the electrical transmission system, UI is forward looking in terms of designing this new infrastructure for future climate change and for future development in the area. UI has also taken the steps of having discussions with the City of Milford and this design is a product of those discussions, as we balance the engineering requirements with the surrounding ecological and community development interests. We believe that the reasoning for increased pole heights which minimizes the quantity of required poles, is justified, as explained within this briefing.

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