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Archaeological Reconnaissance Survey for the Sudbury-Hudson Transmission Reliability Project, Towns of Sudbury, Hudson, Marlborough, and Stow, Middlesex County, Massachusetts

Prepared for

NSTAR Electric Co.
d/b/a/ Eversource Energy
Westwood, Massachusetts

Submitted to

The Massachusetts Historical Commission
Boston, Massachusetts

Prepared by

Commonwealth Heritage Group, Inc.
Littleton, Massachusetts

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ARCHAEOLOGICAL RECONNAISSANCE SURVEY FOR THE SUDBURY-HUDSON TRANSMISSION RELIABILITY PROJECT, TOWNS OF SUDBURY, HUDSON, MARLBOROUGH, AND STOW, MIDDLESEX COUNTY, MASSACHUSETTS

Prepared for

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Submitted to

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ABSTRACT

The archaeological reconnaissance survey was conducted for an approximately 9-mile long proposed project route, primarily along an unused railroad corridor/right-of-way, and under roadways for 1.3 miles. Six railroad station sites, a railroad section house and two colonial residential sites have been noted along the Project route. The South Sudbury Station site (SUD-HA-26) and the Walker Garrison House (SUD-HA-30) have been previously identified. Other station sites include the East Sudbury Station and Wayside Inn Station sites in Sudbury, and the Ordway Station, Gleasondale Station, and Gleason Junction Station sites in Hudson. The Boston & Maine Railroad Section House site consists of a standing ca. 1890 structure and yard area. A fieldstone-lined cellarhole was also identified in Sudbury in the Memorial Forest. All of these sites are considered to be potentially significant. In addition, the Project route has been assessed for archaeologically sensitive areas with recommendations for further investigation of sensitive areas within the area of potential direct effects.

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1.0 INTRODUCTION

NSTAR Electric Company d/b/a Eversource Energy (Eversource), has contracted Commonwealth Heritage Group, Inc. to conduct an archaeological reconnaissance survey (950 CMR 70) and a reconnaissance-level historic properties survey for the Sudbury-Hudson Transmission Reliability Project to be located in the towns of Sudbury, Hudson, Marlborough and Stow, Massachusetts.

Eversource proposes to construct a new, approximately 9-mile, underground 115-kilovolt electric transmission line sited primarily along an unused railroad corridor/right-of-way (ROW) owned by the Massachusetts Bay Transportation Authority (MBTA). This "New Line" passes through the municipalities of Sudbury, Hudson, Marlborough, and Stow and will connect Eversource's Sudbury Substation to Hudson Light and Power Department's substation. The "Sudbury-Hudson Transmission Reliability Project" (the "Project") consists of the New Line and necessary modifications at the Sudbury Substation.

During construction, vegetation removal would occur within a 30-foot-wide corridor along the Project ROW. The area of vegetation removal would be expanded in the vicinity of splice vault locations. Splice vaults would be located partially underneath a proposed access road with manhole covers adjacent to the road and in the shoulder. At each splice vault location, the limits of vegetation removal would be expanded to a total width of 40 to 50 feet for a length of 50 feet to accommodate temporary work pads for installation of the vault. Following construction, a 22-foot-wide corridor would be maintained; the remaining eight-foot width of the construction corridor would be allowed to naturalize. The maintained 22-foot corridor would contain a 14-foot-wide access road. The remaining eight-foot width would consist of herbaceous plants and low-growing shrubs. The configuration of these plantings would depend on their locations relative to the access road and the underground transmission line. Three bridges, located over water bodies along the Project ROW, would be either rehabilitated or replaced.

The Project is one of approximately 40 transmission solutions that emerged from an extended study of the regional transmission system performed by the ISO New England Inc. that identified and addressed reliability needs for the New England transmission system that serves northern Massachusetts and southern New Hampshire. The Project itself will resolve potential thermal overloads and low voltage conditions that could result in the loss of electric service to approximately 80,000 customers in Berlin, Framingham, Grafton, Hudson, Marlborough, Northborough, Shrewsbury, Stow, Southborough and Westborough, totaling over 400 megawatts of load.

Eversource considered many geographically distinct routes for the New Line, including the use of both overhead and underground designs. Eversource conducted extensive community outreach, participating in numerous working meetings with the municipalities, government officials, residents and other stakeholders. After carefully considering and analyzing the input received, Eversource's analysis demonstrated the clear advantages of constructing the Project underground along the MBTA corridor. Eversource determined that this approach will best balance the goals of minimizing cost and environmental impacts while meeting the identified needs.

The Project requires review and permitting by the US Army Corps of Engineers and will be reviewed by the Massachusetts Historical Commission under Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800). The Massachusetts Historical Commission (MHC) has determined that the project impact area is within and adjacent to historic and archaeological resources included in the MHC's Inventory of Historic Assets of the Commonwealth and/or State and/or National Registers of Historic Places (MHC letter dated June 30, 2017). As a result, the MHC has requested that an archaeological reconnaissance survey (950 CMR 70) and a reconnaissance-level historic properties survey be conducted for the currently proposed project area of potential effect (APE).

The purpose of the reconnaissance survey is to identify which parts of the Project's Area of Potential Effect (APE) are likely to contain sites of historical or archaeological significance. The reconnaissance survey will also identify recorded cultural resources that may be directly or indirectly affected by the Project. Reconnaissance surveys entail "small-scale archival and field research relative to the overall complexity of the target area and its resources, designed to provide a general impression of the area's archaeological properties" (Massachusetts General Laws, Chapter 9, Sections 26-27C (950 CMR 70)). This work was conducted under Permit No. 3783 issued on October 2, 2017 by the State Archaeologist at the MHC**.**

The reconnaissance-level historic properties survey has been submitted as a separate report. This document is the summary report for the archaeological reconnaissance survey, conducted in compliance with Section 106 of the National Preservation Act of 1966, as amended (36 CFR 800), with Massachusetts General Laws Chapter 9, Sections 26-27c, as amended by Chapter 254 of the Acts of 1988 (950 CMR 70-71); and with MEPA (301 CMR 11).

2.0 RECONNAISSANCE SURVEY RESEARCH DESIGN

2.1 STATEMENT OF PURPOSE

Eversource has contracted with Commonwealth Heritage Group. Inc. (Commonwealth) to conduct an archaeological reconnaissance survey for the Project to be located in the towns of Sudbury, Hudson, Marlborough and Stow, MA. The purpose of the reconnaissance survey is to identify which, if any, parts of the Project APE are likely to contain sites of historical or archaeological significance. The reconnaissance survey will also identify recorded cultural resources that may be directly or indirectly affected by the Project.

2.2 DOCUMENTARY RESEARCH

Documentary research for the present survey included review of files from the National and State Register of Historic Places, precontact and historical archaeological site files, historic maps and the town survey reports for the towns of Sudbury, Hudson, Marlborough and Stow, Middlesex County, Massachusetts on file at the MHC. This information has been used to assess the precontact and historic potential of the Project corridor and to further develop the precontact and historic context. In addition, cultural resource studies conducted in Sudbury and Hudson near the Project corridor have been reviewed.

Further research for the reconnaissance survey has involved gathering data on the Project corridor from additional historic maps. In particular, plans of the Massachusetts Central Railroad/Boston & Maine Railroad (1914) have been reviewed to aid in the identification of historic sites in proximity to the Project corridor. ENF response letters were taken into consideration and have included careful examination of precontact archaeological site information in Alfred Hudson's 1889 *History of Sudbury* to determine if any of these sites are in close proximity to the Project corridor. Additional research has also focused on archaeological sites identified during the course of the reconnaissance survey and on the history of the railroad corridor.

2.3 RECONNAISSANCE SURVEY FIELD METHODS

Along the MBTA ROW, the limit of work for the underground transmission line design includes a 30-foot-wide clearing corridor, with expanded areas of clearing at manhole locations measuring approximately 40 to 50 feet wide and 50 feet long. Underground installation within public roadways is assumed to require a 4-foot-wide trench, with 10-foot by 30-foot manholes every 1700 feet. Both the trench and the manholes are assumed to be within the paved limits of the roadway and would not require tree clearing.

The archaeological reconnaissance survey involved a field walkover of the Project route by Commonwealth's Principal Archaeologist and field assistant/project archaeologist to assess visible disturbance, rockiness, fill, presence of wetlands, and the soil characteristics along the proposed Project route. Most of the Project route is along an inactive railroad, with wood ties and steel rails still extant along most of the route. Historical maps show that the inactive railroad was

formerly the route of the Massachusetts Central Railroad between Waltham North and Berlin, Massachusetts.

Review of the Project route also included 40-ft to either side of the rail-bed centerline. In general, cut and fill land alteration can be expected along the Project route and mostly within the 80-ft wide corridor under reconnaissance review. Special attention has been given to areas of natural topography within 40 ft to either side of the inactive rail bed, the presence of wetlands, and soil characteristics along the route. Special attention has also been given to extant historic railroad features such as granite mile markers, former station sites, the extant section house, stone, cement or concrete features such as culverts, markers, or foundations, and remnant electrical railroad components.

The field walkover identified evidence of archaeological sites visible on the surface (e.g. exposed artifacts, historic foundations and other historic features) and previously disturbed areas. Land forms were assessed for archaeological sensitivity based on proximity to water, slope, soil conditions, rock outcrops, environmental resources and the level of prior disturbance. Soil cores were taken in areas of apparent natural topography with an open-face steel corer (3/4") to identify natural soil horizons, evidence of disturbance, and soil characteristics, with depths recorded in centimeters. Soil core descriptions were recorded, taking note of soil strata, presence or absence of disturbance, fill, natural strata, and evidence of hydric soils (ferric staining, olive-brown, gray or clayey soils).

The results of the walkover have been used to assess the archaeological sensitivity of the Project corridor. For example, areas of sandy, undisturbed natural strata on low to medium sloping terrain is considered to have high archaeological sensitivity based on the close proximity of brooks, wetlands, and reported precontact sites in the vicinity. Photographs were taken of the Project APE, documenting the existing conditions and any surface features or disturbed areas encountered. The results of the reconnaissance survey have identified areas that may warrant additional archaeological survey testing (i.e., intensive (locational) survey) to identify whether archaeological sites of potential significance are present.

3.0 PROJECT CONTEXT

3.1 ENVIRONMENTAL CONTEXT

The preferred route for the New Line is an approximately 9-mile, underground route between the Sudbury and Hudson Substations primarily along an inactive railroad corridor ("Corridor" or "ROW") owned by the Massachusetts Bay Transportation Authority ("MBTA"). The proposed New Line originates at the Sudbury Substation and travels northwest along the MBTA Corridor, crossing Hop Brook and Dudley Brook before entering Hudson and a short section of Marlborough, and then crossing Fort Meadow Brook and a short section of Stow before re-entering Hudson; after exiting the MBTA Corridor at Wilkins Street, the line travels underground within public roadways for 1.3 miles, first on Wilkins Street then continuing onto Forest Avenue and terminating at the Hudson Substation (Figures 1 and 2).

Sudbury is surrounded by the towns of Hudson and Marlborough to the west, Stow and Maynard to the northwest, Concord and Acton to the north, Wayland to the east, and Framingham to the south. Hudson is surrounded by the towns of Berlin and Bolton to the west, Marlborough to the south, Stow to the north, and Sudbury to the east.

Hudson is situated on hilly upland terrain with gravelly soil (MHC 1980a). Sudbury is situated on a rolling riverview plain and upland plateau with sandy soil (MHC 1980b). Several large natural and man-made ponds are present in both towns. Pine Lake, Willis Pond and Stearns Millpond are located in the northwest section of Sudbury, while Carding Millpond is in the southwest near Hop Brook. In northeast Hudson and southeast Stow are White Pond and Lake Boon. In the southeast portion of Sudbury, the Sudbury River forms a section of the southern border with Wayland, and flows north joining the Assabet River to form the Concord River, part of the Merrimack River drainage (MHC 1980b). Similarly, the Assabet River runs through Hudson with all brooks draining into it. In addition, there are several large wetland areas throughout the towns. Soils within the project area are varied (Table 1).

Table 1. Soils within the Project corridor.

#	Soil	Slope	Drainage	Description	Usage
6A	Scarboro mucky fine sandy loam	0-3%	Very poorly drained	Very deep soil in low areas on flood plains	Most acreage supports brush; poorly suited for farming, woodland and community development due to high water table; most areas protected by wetland legislation.
52A	Freetown muck	0-1%	Very poorly drained	Organic soils in depressions and on flat areas of uplands and glacial outwash plains.	Freetown series consists of nearly level, deep (5+ ft) very poorly drained organic soils in depressions and on flat areas of uplands and glacial outwash plains. Most acreage idle or wooded; poorly suited for farming and community development due to high water table; most areas protected by wetland legislation.
53A	Freetown muck,	0-1%	Very poorly drained	Organic soils in depressions and	Freetown series consists of nearly level, deep (5+ ft) very poorly

	ponded			on flat areas of uplands and glacial outwash plains.	drained organic soils in depressions and on flat areas of uplands and glacial outwash plains. Most acreage idle or wooded; poorly suited for farming and community development due to high water table; most areas protected by wetland legislation.
103B	Charlton-Hollis-Rock outcrop complex	3-8% slope	Well drained	Gently sloping soils on uplands where underlying bedrock is near the surface, stones and boulders 10 inches to 10 feet in diameter cover 0-10% of the surface	Most areas are covered by trees; poorly suited for cultivated crops, hay, and improved pasture limited by exposed bedrock, slope, and stones on the surface; woodland uses are limited by shallow depth to bedrock, low available water capacity, and slope; excavation for building site development is difficult due to rock outcrops and slope.
104D	Hollis-Rock Outcrop-Charleton complex	15-25%	Well to somewhat excessively drained	Undulating and rolling shallow soils, areas of exposed bedrock, and very deep soils on hills and ridges	Major limitations due to rockiness and depth to bedrock. Slope is the main limitation to use of these soils as building sites. In addition, on the Hollis soil, shallow depth to bedrock is also a limitation.
253A 253B 253C 253D	Hinckley loamy sand	0-3% 3-8% 8-15% 15-25%	Excessively drained soils	Soil is found on glacial outwash plains, terraces, eskers, and kames	Major limitations related to droughtiness: soil fairly suited to cultivate crops, pasture lawns and landscape. Used for home sites, crops, pasture and woodland. Irrigation is needed for best plant growth due to droughtiness.
254A	Merrimac fine sandy loam	0-3%	Somewhat excessively drained	Located on glacial outwash plains, terraces and kames	Merrimac series consists of nearly level to steep, deep (5+ ft) and somewhat excessively drained soils on glacial outwash plains, terraces and kames. They formed in water-sorted, sandy glacial material (USDA 1995:20). Favorable soil type for archaeological site locations.
255A 255B	Windsor loamy sand	0-3% 3-8%	Excessively drained	Formed in glacial sandy outwash and are located on glacial outwash plains, terraces, deltas and escarpments	Most areas farmed, some developed; well suited for cultivated crops, hay, and improved pasture, limited by drought and erosion; suitable for building development but poor filter capacity can result in pollution of ground water. Favorable soil type for archaeological site locations.
256A	Deerfield	0-3%	Moderately	Located on	Most areas farmed, some

	loamy sand		well drained	glacial outwash plains, terraces and deltas and have a seasonally high water table	developed; well suited for cultivated crops, hay, and improved pasture.
259A	Carver loamy coarse sand	0-3%	Excessively drained	Located on glacial outwash plains, terraces and deltas	Most areas farmed, some developed; well suited for cultivated crops, hay, and improved pasture, limited by drought and erosion; suitable for building development but poor filter capacity can result in pollution of ground water. Favorable soil type for archaeological site locations.
259B	Carver loamy coarse sand	3-8%	Excessively drained	Located on glacial outwash plains, terraces and deltas	Most areas farmed, some developed; well suited for cultivated crops, hay, and improved pasture, limited by drought and erosion; suitable for building development but poor filter capacity can result in pollution of ground water. Favorable soil type for archaeological site locations.
305E	Paxton fine sandy loam	25-35%	Well drained	Very deep soil on drumlins and drumlin-like land	Moderately permeable soil used mostly as cropland or hayland; however, some has been developed for residential usage. No major limitations restrict woodland management; well suited for cultivated crops, hay, and improved pasture but erosion is a hazard, so minimum tillage, cover crops and stripcropping should be used; regeneration and suitable planting sites can be established through shelterwood cutting, seed-tree cutting, and clearcutting. Slope is the major limiting factor in terms of construction. Buildings should be designed to conform to the natural slope of the land in order to reduce the risk of erosion.
307C	Paxton fine sandy loam, extremely stony	8-15%	Well drained	Very deep soil on drumlins and drumlin-like land	Most of these areas are used for urban development. There is poor potential for cultivated crops, hay and improved pasture. Regeneration and suitable planting sites can be established through shelterwood cutting, seed-tree cutting, and clearcutting.
600	Pits, Gravel			Excavated Pits	Irregularly shaped areas from which gravel has been removed for construction purposes.
602	Urban land	Nearly		Disturbed soil	Area where soil has been altered

		level to steep		type.	or obscured by structures, paved areas, and railroad yards that cover 75% or more of the surface area.
626B	Merrimac-Urban land complex	0-8%	Somewhat excessively drained	Located on glacial outwash plains, terraces and kames	Developed land.
656	Udorthents –urban land complex	0-25%	Somewhat excessively to moderately well drained	Excavated and filled land, a disturbed soil type	Soil can be identified at widely separated areas in urban land so that the general nature of the area can be determined.

3.2 PRECONTACT CONTEXT

The following section presents a general summary of the archaeological research on Native American societies that inhabited southern New England following the end of the last Ice Age. The prehistory of eastern North America is divided into three major chronological stages of cultural development: Paleoindian (12,000-9,000 Before Present or BP), Archaic (9,000-3,000 BP), and Woodland (3,000-450 BP). The Archaic and Woodland periods are further divided into Early, Middle, and Late sub periods.

The purpose of this introductory section is to sketch the main trends of Massachusetts prehistory and to identify evidence pertinent to the Project Area, in order to provide the Precontact background necessary for assessing the potential for archaeological resources within the Project Area.

For most of the Precontact period in the region, river drainages define physiographic units within which human communities operate. This pattern follows from the longitudinal diversity of habitats that occurs along drainages, forming ecologically unique wetland habitats, together with the transportation routes afforded by their water courses. In the clearest examples, rivers provide access to maritime and upland resources at each end of the drainage, and to the diverse habitats in between. The exploitation of those habitats can be integrated into a seasonal round that differs at various historical moments.

The following review is arranged chronologically by major periods recognized for New England. Each chronological section will present the major trends and patterns.

Paleoindian (12,000-9,000 BP) and Early Archaic (9,000-8,000 BP)

The late Pleistocene geological period witnessed major environmental changes which, in time, impacted the peopling of the Americas, and thus the earliest Native American occupations in the New England area. Southern New England was covered by a sheet of ice 1.5 km. thick, which extended over what are now Long Island, Martha's Vineyard and Nantucket. At this time, the sea level was about 100 m. lower than it is at present, because of the enormous amount of water tied up in the glacial ice sheets. Only when the ice sheet began to melt, beginning ca. 15,000 BP, was southern New England habitable; by ca. 13,000 BP the ice sheet had retreated to expose

Connecticut, Rhode Island, and southeastern Massachusetts and by ca. 12,000 BP all of New England was uncovered (Stone and Borns 1986).

During this time, sea levels rose sharply as deglaciation liberated enormous amounts of water, while isostatic rebound of land depressed by the weight of the former ice sheet quickly elevated large regions, especially in Maine. The physical landscape of New England in the terminal Pleistocene period was very different from that of today. The coastline was well seaward of its present position, and the modern coastal configuration was not reached until about 3000 BP, when sea levels were still several meters below those of the present. Deglaciation created large lakes in the Hudson-Champlain drainages and in the Connecticut Valley and many other smaller bodies of water in Massachusetts (Curran and Dincauze 1977, Dincauze 1974, Koteff 1982, Larsen and Hartshorn 1982, Stone and Peper 1982). The major lake systems were drained by 12,500 BP, while the smaller bodies of water gradually filled with sediment, leaving marshes, bogs, ponds and small lakes. With progressive deglaciation and rising regional temperatures, vegetation changed relatively quickly, from tundra to spruce parkland (by ca. 9000 BP) to an oak-hemlock association (by 7000 BP); at the same time, general climatic conditions shifted from cool and dry (ca. 11,000 BP) to warmer and moister (ca. 9000 BP) and then warmer and drier again (ca. 8000-5000 BP). The human communities that initially colonized southern New England thus were faced with a rapidly changing landscape, one in which resources were of low density and relative unpredictability.

This condition resulted in a very generalist adaptation, with emphasis on flexibility, mobility, large and probably loosely defined foraging territories, and maintenance of wide kinship ties (Dincauze 1980; Snow 1980). While subsistence strategies for Paleoindians have not been determined, Snow (1980) has argued that Paleoindian subsistence was focused on migratory big game animals such as caribou, mammoth or mastodon, while exploiting other food resources as the people chanced upon them. An alternate view by Dincauze (1981) is that the Paleoindians were generalist foragers. One proposed model for this period postulates that glacial lake basins were the focus of occupations; these areas included a mosaic of habitats that provided richer subsistence possibilities than elsewhere in New England (Nicholas 1988). In New England, Paleoindian sites often reflect occupations of the recently drained proglacial lake bottoms and wetlands (Thorbahn 1982, Thorbahn and Cox 1983). Another model proposes the possibility that Paleoindians may have used pioneering or staging areas from which large, more-or-less permanent groups sent out smaller groups to colonize or pioneer the newly deglaciated terrain (Dincauze 1993, 1996). As the physical environment began to stabilize (i.e. changed less quickly and became more predictable) into a closed boreal environment dominated by spruce, fir and birch, human groups grew less generalized in adaptation and settled into more restricted foraging territories (Dincauze 1980, Meltzer 1988).

Diagnostic artifacts from the Paleoindian period include finely flaked fluted lanceolate points (Clovis and Folsom), with three phases identified on the basis of point styles (Spiess et. al.1998). The nearest well documented Paleoindian site is the Bull Brook site in Ipswich, Massachusetts, which covered an area of about 20 acres (Dincauze 1996). Bull Brook is one of six large Paleoindian non-quarry sites that have been documented in the Northeast. These sites contain the earliest point styles for their respective areas and are believed to date from the eleventh millennium BP (Dincauze 1974, Spiess et. al. 1998, Curran 1999). According to the pioneering model advanced by Dincauze (1996:10), these sites may represent marshaling areas for people who had just crossed into new, unoccupied terrain. These sites would be used for the gathering, arranging and allocating of resources and information preparatory to dispersing in smaller groups.

Analysis of metric data of fluted point assemblages and raw material sources has added insight for an alternate chronological sequencing of sites reflecting exploration and early colonization of the Northeast (Curran 1999).

Paleoindian artifacts included the fluted points but also a variety of other tools, including scrapers, (presumably for working animal hides), gravers and bifacial blades. Lithic materials used consisted primarily of fine quality microcrystalline rock, often from sources more than a hundred miles away from the site of recovery.

The Early Archaic period is still being evaluated as to whether the changes in artifacts used to define this period represent continuity of Paleoindian populations. Dincauze (1990) used the common term pioneers for Paleoindian and Early Archaic populations (Pioneers and Late Pioneers, respectively). Snow (1980:171) considered that there was continuity from the Paleoindian Period into the Early Archaic Period, with "restricted wandering" of groups within territories during the Early Archaic.

A major change in artifacts from the Early Archaic period was that fluted points were no longer used. Late Paleoindian diagnostic artifacts include Dalton-like points and unfluted Eden lanceolate points; the latter are rare in Eastern Massachusetts, while the former may date into Early Archaic times (E. Johnson and Mahlstedt 1984a). Early Archaic diagnostic points include Bifurcate Base, Kirk Stemmed, and Kirk Corner Notched points. Overlapping dates for the late Paleoindian and Early Archaic as well as the small number of Early Archaic sites in the Northeast still challenge this research issue. The latter may reflect low population numbers during the Early Archaic (Salwen 1978), the combined outcome of site destruction and meager or inadequate surveys, or our inability to recognize the entire range of artifact types for the period (Dincauze and Mulholland 1977). Some Early Archaic sites may have been buried or destroyed by rising sea levels or river alluvium (Dincauze and Meyer 1977). Subsequent collection research has found a wider range of sites with Bifurcate Base points than had previously been recognized (E. Johnson 1984). This may reflect a wider range of food resources being exploited. Sites containing a predominately non-bifacial quartz tool tradition referred to as the Gulf of Maine tradition are commonly found in Maine and northern New England (Robinson 1992) from this time period. Similar sites containing this tool tradition have been found at Lake Winnipesaukee (Bolian 1980) and within the Merrimack River drainage (Robinson 1992; Dudek 2005). At least one significant habitation site utilizing a similar quartz tool technology has been found in southern New England; this latter site had deep pit features, interpreted as pit houses, with an abundance of charred hazelnut shells (Forrest 2000; Jones and Forrest 2003).

Most Early Archaic sites have been discovered in southern New England and in coastal areas. These small groups, it appears, did not camp together in larger numbers as did the earlier Paleoindians, with the result that there may be fewer recognized sites with sparse evidence of human presence. Sites from the Early Archaic period are perhaps best known in southeastern Massachusetts, especially in the Taunton River drainage (for example, the Titicut and Seaver Farm sites, Dincauze and Mulholland 1977; Double-P site, Thorbahn 1982; the upper Taunton concentration, Taylor 1976). The Titicut site is the largest site identified from the Early Archaic period. It has been interpreted as a base camp for several families. Several Early Archaic sites identified in Massachusetts contained evidence that suggests that small hunting groups returned to camps with seasonal regularity. Deep pit features that may have been used for storage were discovered in the Taunton and Shawsheen River drainages (Simon 1982; Harrison and

McCormack 1990, Glover and Doucette 1992). These sites contained material suitable for radiocarbon age determinations, stone tools diagnostic of the Early Archaic Period, or both.

During the Paleoindian and Early Archaic periods, most diagnostic tools were made of non-local or exotic stone, a pattern that generally is predominant throughout southern New England. However, it has recently been argued that until more Paleoindian and Early Archaic components are excavated and archaeologists achieve better microscopic identifications of stone types and their origins, this pattern may be an artificial one reflecting biases in sample size and archaeological recovery history (Moeller 1999:72-73). Locally, the stone use pattern changed during the Middle Archaic period, when points were almost all made from local or near-local materials and exotic stones were rarely used.

The site located near the project area, 19-MD-207 (the Heard Pond Site), is associated with many precontact Native American periods, including Paleoindian and Early Archaic. This site contained 2,095 artifacts, including the base of a possible fluted point. In addition, 19-MD-209, associated with the Heard Pond site, is considered an Early Archaic site. The Erwin Farm site, 19-MD-190, described as a village site on Pelham Island, is a multi-component site which has an Early Archaic component, and is located within 3 km of the project area.

The Middle Archaic (8000-6000 BP)

Throughout southern New England, human occupation becomes more evident and apparently more complex during the Middle Archaic. In southern New England, a mixed pine-oak forest was established and expanding north by 8500 BP, followed by an oak-hemlock forest in southern New England by about 6000 BP (Dincauze 1976:119). The greater number of sites from this time relates to a presumed increase in population density, while the greater disparity in size and differentiation of individual sites suggests a more complexly ordered social landscape than previously found. Stemmed bifacial points, atlatls (spear-thrower weights), pecked, ground and polished woodworking tools such as axes, adzes and celts, and plant-processing tools, such as mortars, pestles, grinding stones and nutting stones, are new forms in use during this time. The cultural traditions of the Middle Archaic complexes, as seen at the Neville site, reveal a close relationship to the Atlantic seaboard (Mid-Atlantic) and piedmont (Southeast) regions during the Middle Archaic period (Dincauze 1976:124).

Dincauze and Mulholland (1977) have suggested that effective integration of seasonally available resources into a single adaptive schedule appeared during this period, while maintenance of territorial boundaries between groups intensified in consequence of this emergent adaptation; this response may have been a consequence of more stable regional environments. The predominant settlement pattern would be one of small sites oriented toward seasonally abundant resources, including spring fish runs. The earliest documented or inferred harvesting of anadromous fish during spring runs up the Connecticut (Thomas 1980) and the Merrimack (e.g., Dincauze 1976, Barber 1980) rivers, marks both a fundamental adaptation to foraging possibilities and a seasonal determinant of site location, meaning spring occupations at rapids, falls and constrictions on larger river courses. Exploitation of anadromous fish would continue throughout the rest of regional prehistory as a principal component of aboriginal economies. On the Mashantucket Pequot Reservation in southeastern Connecticut, the Great Cedar Swamp was important in seasonal subsistence rounds during the Neville phase from 8000 to 7000 BP. Several settlement models for New England “suggest that subsistence activities became more intensively focused on

the valley floors of the major river drainages with the onset of the Hypsithermal after about 7500 radiocarbon years ago" (Jones 1999:120).

During the Middle Archaic period, there is a wide variety of environmental settings for sites, including the margins of bogs, swamps, rivers, lakes and ponds, with differentiation of sites based on size and apparent function. This may reflect the incipient seasonal rounds or scheduled subsistence activities, possibly related to a growing territoriality within drainage areas (Dincauze and Mulholland 1977). Site types include semi-permanent base camps along rivers, streams or wetlands, special-purpose camps in uplands or near wetlands, rockshelters, stone quarries, and workshop areas.

Evidence of site differentiation and a more complexly ordered social landscape can be extrapolated from a number of large Middle Archaic sites containing a variety of features. At the Annasnappet Pond site in the Taunton River drainage, 119 cultural features were identified, while three of nine loci formed a nearly continuous distribution of Middle Archaic and Late Archaic material over nearly 14,000 sq. m. A mortuary feature containing calcined human cranial fragments, winged atlatl weights and Neville points at the Annasnappet Pond site was radiocarbon-dated to 7570 $\pm$ 150 BP (Cross 1999); it is the only known human burial associated with Neville points in the Northeast. Middle Archaic radiocarbon dates were obtained from nine features, while the overall Middle and Late Archaic assemblage from the site included 70,000 pieces of debitage, 166 Neville points, 31 Neville Variants, 38 Stark points, four Merrimack points, cylindrical and winged atlatl weights, ground hematite, bifaces, drills, cores and unifaces (Cross 1999:60-63).

Extensive archaeological excavations along the Merrimack River relating to this time period have been conducted at the Shattuck Farm site in Andover and at the Neville and Smyth sites in the Manchester/Amoskeag falls area of southern New Hampshire. Dincauze identified three distinct temporal complexes of tools spanning the Middle Archaic period (7,740 $\pm$ 280 to 5,910 $\pm$ 180 BP); these were the Neville, Stark, and Merrimack complexes, stratigraphically separated at the site (Dincauze 1976). Circumstantial evidence revealed a focus on fishing at the Neville site during most of the Middle Archaic, with a reduced emphasis on fishing in the Merrimack complex.

Cross (1999), examining the distinction between the Neville and Stark point types, has demonstrated differences in production technology and functional qualities of Neville and Stark points at the Annasnappet Pond site that imply differences in use (Neville points being used on atlatl darts while Stark points may have used on thrusting spears). Cross posits that, to judge from the functional and technological differences, the two kinds of bifaces may therefore be contemporary (Cross 1999:72). While Dincauze (1976) has argued for temporal overlap with Starks' becoming more common over time, a closer examination of different temporal contexts in southern New England throughout the entire span of the Middle Archaic may resolve this issue.

Site 19-MD-207 (the Heard Pond Site), is associated with many precontact Native American periods, including the Middle Archaic. Other Middle Archaic sites within 3 km of the project area include the Baldwin Pond site (19-MD-167), the Erwin farm site (19-MD-190), the Danforth Street Playground site (19-MD-214), the Bennett site (19-MD-485) and the First River Terrace site (19-MD-724). In addition, 19-MD-208 and 19-MD-209, both associated with the Heard Pond site, contain a Middle Archaic component.

Late Archaic Period (6000-3000 BP)

Many attributes of this period are well rooted in the Middle Archaic, but become much more evident in the Late Archaic. In some regions outside New England, the period is characterized by a shift to reliance on protocultigens or intensive gathering, perhaps precipitated by environmental changes. In southern New England, however, no one has yet identified cultivated or domesticated plants in a context earlier than the Woodland period. In the Southeast, in the Savannah River area of Georgia and South Carolina and in northeast Florida, the emergence of pottery has been dated as far back as 4500 BP (Sassaman 1999). In the Northeast, pottery did not come into use until around 3200 BP, while soapstone vessels were in use during the latter part of the Late Archaic into the Early Woodland, from about 3700 to 2400 BP (Sassaman 1999).

Another marker of the period is the proliferation of archaeological tool traditions and phases: Laurentian (Brewerton), Narrow Point (Small Stemmed), and Broadpoint or Susquehanna (Cook 1976, Custer 1984). A fourth tradition, the Maritime Archaic, is found primarily in coastal areas of northern New England, Nova Scotia, New Brunswick, Newfoundland, and Labrador. These Late Archaic traditions have been long-standing topics of discussion on their relationship to each other and their social and adaptational placement in Southern New England prehistory (W. Ritchie 1971; Dincauze 1975). Each of these artifact assemblages has identifiable antecedents, originating mostly in the Middle Archaic (Cross 1996:48). Dincauze associates the Laurentian Tradition with the west, in the Great Lakes and Ohio River drainages, rather than the Atlantic drainage (Dincauze 1976:125). Pfeiffer (1990:85-104) has argued that the Late Archaic Laurentian tradition, or Lake Forest adaptation, of southern New England was the progenitor of both the Susquehanna tradition, or River Plain adaptation, and the Narrow Point tradition, or Mast Forest adaptation. These adaptations were coexistent, and may have vied for territory (Pfeiffer 1990:85). The Narrow Point appears to have been a local development not derived from outside the region (Dincauze 1976).

Debate about the Late Archaic Period centers on what the observed relationships of the tools mean in terms of the people behind them. Some of the tools co-occur at sites sequentially, others contemporaneously. The orthodox view is that correctly tying an artifact assemblage to one of these traditions allows an archaeologist to infer an adaptation category, including subsistence adaptation and possibly a belief system (Dincauze 1972, 1975; Pagoulatos 1988; Pfeiffer 1984; Turnbaugh 1975). Some archaeologists also tie these artifacts to genetic populations, and believe that they imply the movement, contemporaneity, or physical descent of the actual people who used the tools. Susquehanna Broad-like projectile points (E. Johnson and Mahlstedt 1984a) and Wayland Notched (Hoffman 1991:20) have, in some cases, also been associated with mortuary sites (Dincauze 1968; Hoffman 1991:20). Stone-tool production may have been undertaken by a small group of experienced, older artisans whose skills and knowledge were respected and called upon. The lithic assemblages of such artisans would look very much the same and exhibit fewer signs of accidental breakage. There may also have been specific spaces set aside for use by such artisans in some settlements (Cross 1990 has an in-depth discussion of these possibilities in New England).

The Late Archaic is the most visible period of Massachusetts prehistory, in terms both of numbers of sites and of typological attribution of materials. Even allowing for the chronological ambiguity of Small Stemmed points (cf. Mahlstedt 1987) and their use into the Middle Woodland in the Connecticut River Valley (Hasenstab et. al. 1990), and Late Woodland/Contact Period use on Martha's Vineyard (Herbster and Cherau 2003), Late Archaic patterns in Massachusetts indicate

unprecedented population density, with communities well settled into narrow foraging territories defined by drainages and highly specialized to the habitats within these drainages. Confined to these territories, extractive activities were seasonally adjusted to meet the opportunities of the annual cycle. Sites were located in a wide variety of topographic situations -- river banks; margins of lakes, ponds, bogs and springs; around meadow lands; in rockshelters and at quarries; and along the coastline. The differentiation of site sizes suggests use of a radiating, seasonally-dynamic settlement pattern (Dincauze 1974, 1975, 1980; Thorbahn and Cox 1983). Although some technological innovations (e.g., the stone bowl) are apparent in this period, and some long-distance exchange of materials occurred, emphasis seems to have been placed increasingly on locally available raw materials for chipped stone tools, often distributed within river drainages.

The settlement pattern of human communities during this period is best viewed as a response to establishment of the temperate forest in which resources are heterogeneous but relatively stable and predictable. This period was marked by a progressive drying and warming trend, beginning perhaps ca. 6000 BP and peaking at ca. 4000-3000 BP. In southeastern Massachusetts, the water table was significantly lower and surface-water flow was reduced, leading to a disappearance of all but the largest bodies of water (Thorbahn 1982). The latter changes may not have been the result of climatic drought, but rather of local geomorphic changes causing lowered stream flow (Simon 1991:69). These climatic trends, if regional in scale, would intensify the association between human communities and water, particularly in summer. As sea levels approached those of the present, shorelines stabilized and extensive shellfish beds developed, while anadromous fish populations may have benefited from the expanded continental shelf (Luedtke 1985:289). The Boylston Street Fish Weir site in Boston reveals intensive estuarine exploitation of fish populations by Late Archaic peoples (F. Johnson et. al. 1942, F. Johnson 1949). The Boylston Street Fish Weir is an extensive structure of wooden stakes set in the tidal mud flats of the Back Bay some 4,000 years ago, and was presumably designed to capture fish and other marine resources at low tide.

Around 4600 BP (Webb 1982:570) there was a dramatic decline in hemlock pollen, which is attributed by Davis (1981) to an as-yet-unidentified insect predator and/or disease rather than climate. Hemlock is today a very competitive species in the region, the loss of which caused what appears to have been a long-term increase in species diversity. At approximately this time oak, white pine, and hickory increased dramatically throughout the region, while chestnut first appeared. This combination of events (added to warm temperatures) would have created a very suitable environment for aboriginal populations (Mulholland 1984:335). Oak and to some extent white pine provide food for game animals like deer and turkeys, while hickory and chestnut provide food for both game animals and people. At Kampoosa Bog in Stockbridge, Massachusetts, this environmental change coincided with evidence that people began visiting the bog more often and in greater numbers. There was also evidence to suggest that the people used fire to improve and maintain the natural abundance of important plants and animals in the area (E. Johnson 1996:22; E. Johnson et. al. 1994).

The pattern of a riverine-uplands subsistence settlement system apparently emerged during the Middle Holocene, between 6000 and 5000 BP, when the climax oak-hickory forest had matured and population levels increased, leading to regional Late Archaic strategies of extensive and intensive resource exploitation (Dincauze 1974, 1990). In the Sudbury-Assabet region, the number and diversity of Late Archaic sites and their distribution in riverine and inter-riverine, upland settings suggest a "broad-base [collecting, see Binford 1980] approach to resource use and considerable attention to small scale environmental features," including "bogs and kettle-hole

swamps" (D. Ritchie 1983a:89). Duncan Ritchie's work in the Sudbury-Assabet area (1980a:87-88, 1983), indicates that patterns of upland use became more intensive about 4,500 years ago; more activities were now taking place there and some localities began to be reused time and again. Evidently, these shifts were shaped by ongoing environmental histories; as the region's deciduous forest ecosystems became more varied and productive, longer settlement occupations became possible (D. Ritchie 1983a:89-91).

Research by Curtiss Hoffman (1985) suggests that the process of diversifying and intensifying land and resource use increases measurably in many southern New England regions between 5000+ and 2700 BP. In these regions, some landscapes became a locus for year-round settlement and resource exploitation in the Middle Holocene, a pattern seen in some coastal settings and along major rivers (Bernstein 1990 and 1993, Handsman 1995, Kenyon and McDowell 1983). Studies of local collections and excavations around the Cedar Swamp Wetland System demonstrate that some parts of the Sudbury-Assabet uplands contained extensive and diverse complexes of Late Archaic sites where Native people hunted deer, collected and processed hickory nuts and aquatic plants, and fished. Sites are so numerous and sometimes so often reused that Hoffman is certain that the archaeological record between 4500 and 4000 BP (and for some time after) represents a "climax" of extensive, year-round occupation by sedentary groups of hunter-gatherers (Hoffman 1990:110-149).

The Late Archaic archaeological record in the uplands of the Assabet and Sudbury rivers reveals that a greater range of activities took place on a seasonal, multiseasonal, or even year-round basis. Along the upper reaches of the Assabet in Marlborough, a complex of sites (19-MD-489 to -493) discovered near I-495 suggests a pattern of upland adaptation. Features such as hearths and concentrations of chipping debris (stone-tool manufacture, repair, and resharpening) from the Robin Hill, Cook, and Howe sites are evidence of the periodic use of particular localities by successive generations during the Late Archaic (D. Ritchie et. al. 1984). Similarly, multiple surface hearths, tool-making workshops, and activity areas at the Old Stony Brook site near Crane Swamp in Marlborough are cited as evidence of recurrent use of a short-term campsite (Dudek, Trubowitz, et. al. 2001). The archaeological record at the Flagg Swamp Rockshelter, excavated in 1980 as part of a larger study of Route 85 in Hudson and Marlborough, suggested a "winter camp repeatedly inhabited by small, complete social and economic groups," who went there to hunt deer and turtle, to fish, and then to return to their base settlements, possibly located along the Concord or lower Merrimack rivers, or along the nearby coast (Huntington 1982). Further east, a town historian in the 1890s described a site next to a small wetland in Sudbury where hundreds of points, some woodworking tools, and burned rock features were found (D. Ritchie 1980a:87).

Late Archaic cemetery sites also suggest that native communities were well established within river drainages and upland areas. The site Wapanucket 8 is located in the Taunton River drainage and contained a ceremonial complex, around 4,300 years old, with 11 cremation burials clustered within a larger pit (Robbins 1968). The Mansion Inn and Vincent sites, the latter 1 km south of the Project route, are both located in the uplands above the Sudbury River and are cremation cemeteries about 3,500 years old. Habitation areas do not seem to be directly associated with either site. At each, assemblages of burned artifacts, cremated human remains, and burned wood and reddened earth (both from the nearby crematories) were deposited into shallow pits; some pits were used only once while others were the locus of multiple reburials. Typically, the artifacts in the pits included a full range of household and subsistence technologies such as wood- and hide-working tools, projectile points and knives, pestles, and hammer stones. Less abundant were single specimens or sets of finely flaked bifaces, known as Mansion Inn blades (Dincauze

1968:16-17, 48, 64-66). At Mansion Inn, the archaeological data indicate "the cemetery was used repeatedly through a fairly long span of time" (Dincauze 1968:66), leading one to infer that the surrounding region was home to generations of Native people.

Nearly all Late Archaic point types are present in collections from Shattuck Farm, where Small Stemmed and Small Triangles points constitute the vast majority. However, the primary area of occupation was the alluvial terrace (Luedtke 1985:290-291). This is cited as evidence for a base camp, due to the site location and diversity of artifact types reflecting a wider range of activities at the site. Foster's Pond produced sites with similar qualities, also suggestive of base camps (Bullen 1949). At Shattuck Farm, bird bones, nutshells, and beaver bone suggest a fall occupation, while fish bone may be from spring or fall species. A spring through fall occupation is suggested by the presence of snake and turtle bone at the site in Late Archaic contexts. The presence of turtle remains suggests that the marsh there was in existence during and after Late Archaic times. Late Archaic contexts from Shattuck Farm and Bullen's sites have considerable evidence of food-processing activities but little evidence of storage, which in turn suggests a forager adaptation (Luedtke 1985:293). Features present at these sites included several small refuse pits and rock platforms. Ground stone tools were associated with Late Archaic contexts, as seen in the Shawsheen valley by Bullen (1949). This is interpreted as a focus on heavier woodworking than is found later on, possibly indicating a shift from dugout canoes to birch-bark canoes during the Woodland periods (Luedtke 1985:291).

Bullen's work at Foster's Pond investigated a number of sites from the terminal or later Late Archaic period and included a possible cache of large stemmed points from the Atlantic phase at one site (1949:60). Susquehanna tradition points were associated with "storage pits" and rock platforms at the Hoffman site (Bullen 1949:21). Luedtke (1985:294) suggests that changes in site location at Shattuck Farm following the Late Archaic period may have begun during the later Late Archaic, possibly related to a shift from a foraging to a collecting strategy, as suggested by Thorbahn (1982) for the Taunton River area. If the pits identified by Bullen were used for food storage at the Hoffman site, then intensified collecting for the purposes of food storage may date to the later Late Archaic, prior to the earliest documented use of pottery in the area. Chenopod consumption appears with the Middle Archaic (e.g., at the Heath Brook site in Tewksbury), and storage of chenopod is evident by the end of the Late Archaic (McBride and Dewar 1987:308). Archaeological work on a Late Archaic site in Westfield (19-HD-109) documented several grass-lined storage pits that contained Chenopodium seeds (Hasenstab et. al. 1990). These plant remains are (apparently) morphologically wild, and reflect collection rather than cultivation.

The Vincent site cremation cemetery is located 1 km south of the Project route in Sudbury near Allowance Brook. Site 19-MD-207 (the Heard Pond Site) is associated with many precontact Native American periods, including the Late Archaic. A total of 25 sites within 3 km of the Project route are dated to the Late Archaic, or are multi-component sites with a Late Archaic component. Site 19-MD-210 in Wayland contained several burial pits with over 2,000 artifacts, including steatite bowls, a copper adze, Mansion Inn blades, and Wayland Notched points dating from the Late to Terminal Archaic period.

The Woodland Period (3000-450 BP)

The Woodland is traditionally divided into Early (3000-1700 BP), Middle (1700-1000 BP) and Late (1000-500 BP) periods, defined by changing artifact types.

This period is marked by basic technological and economic changes, notably the production and use of pottery and a gradual shift to food production (maize, beans, squash, sunflower and other vegetables). Horticulture is documented for the Late Woodland on Martha's Vineyard (W. Ritchie 1969) but perhaps began by ca. 2000 BP (Thorbahn 1982). Within Massachusetts generally, the Woodland periods are best known in the coastal regions and in the Connecticut River Valley. In both cases, this higher visibility may be ascribed to local opportunities for increasing sedentism and larger communities – in the former area due to a combination of horticulture with rich marine resources and in the latter area to large expanses of soils well suited to horticulture in combination with rich fishing, harvesting and other terrestrial resources.

The Early Woodland Period (3000 to 1700 BP)

The shift from the Late Archaic period to the Early Woodland period includes several changes on which archaeologists generally agree. These changes consist of the introduction of ceramics, the formation of stable estuaries with tidal flats (Cross 1996:5-6), an apparent increase in the amount of exotic raw materials used such as non-local chert, red ochre, and copper (especially in mortuary contexts), and an inferred increase in formalized trade and communication. Some influences from the Adena culture to the west have been noted in artifact types of the period.

While some archaeologists have suggested that there was a regional demographic collapse and a shift during the Terminal Archaic to coastal settings, thus largely depopulating interior upland regions (Dincauze 1974:49-50), survey information from southeastern Massachusetts shows no decline in numbers of sites during the Early Woodland (Thorbahn 1982), and comparable patterns are evident in other parts of Massachusetts. Loring (1985) found continuity of subsistence patterns from the Late Archaic, with little more change than the grafting of long-distance trade onto existing developments, such as increasing sedentism, evident in the Late Archaic period.

Archaeologists have since improved their ability to recognize habitation assemblages of the Early Woodland period, as Shaw (1996a:67-79) points out. In addition to classic Meadowood and Rossville projectile points and cache blades and Vinette I ceramics, thicker side-notched bifaces, lobate-stemmed Adena, rare Fulton Turkey Tail, Small Stemmed points, and modified Vinette I ceramics are consistently reported from Early Woodland contexts. It is clear that Precontact peoples used some tools for much longer than just one period. Small Stemmed points are associated with the Late Archaic and Early Woodland periods and may have been in use as late as the Middle Woodland. Rossville points also occur in Middle Woodland contexts, and perhaps Late Woodland.

The site located near the project area, 19-MD-207 (the Heard Pond Site), is associated with many precontact Native American periods, including the Early Woodland. Other Early Woodland sites within 3 km of the project area include the Green Hill Farm site (19-MD-198), the Heard Pond Esker site (19-MD-205), the Godard site (19-MD-206), the Richardson Farm site (19-MD-716), and the First River Terrace site (19-MD-724). The Sand Hill site (19-MD-196) in Sudbury, the Pine Street Knoll site (19-MD-729) in Framingham and the Boatstone site (19-MD-628) in Wayland are both listed as “possible Early Woodland.

The Middle Woodland Period (ca. 1700-1000 BP)

This period is marked by an increase in the number of exotic finished goods, indicating long-distance trade, and by changes in mortuary practice (increase in secondary interments, less use of

ocher, fewer grave goods, and more variation in preparation of the dead). While the roots of ceramic and lithic variability are found in the preceding periods, more rapid variation in sequence through time and more regional variation characterize this period. Ceramics vary more in decoration and form. Lithic projectile points are less important in the tool kit, and bone and antler tools are preserved at some sites where matrix conditions are appropriate (Shaw 1996b:84-87). By the end of the period there is evidence of maize horticulture (Thorbahn 1982).

There is overlap in the dates of ceramic types formerly considered diagnostic of the Early and Middle Woodland. Some Vinette I ceramics date to the first few centuries of the new period. The new Middle Woodland ceramics are cord-impressed, fabric-impressed, or smoothed in Southern New England. Most are decorated with dentate or cord-wrapped-stick impressions. Dentate-stamped, scallop-shell-impressed and cord-wrapped-stick-impressed decorations characterize the middle Middle Woodland, with decoration at times confined to the rim or shoulder. Scallop-shell-impressed or pseudo-scallop-shell-impressed ceramics are recovered more commonly in Northern New England (Shaw 1996b:90). Decoration may be only around the rim or shoulder. These designs are often applied in a rocker fashion, or in vertical or horizontal zones. Undecorated fabric-paddled pieces with smoothed interiors also occur.

Fox Creek and Steubenville bifaces characterize this part of the period (Moore 1997). There is some overlap in time between the Fox Creek and Jack's Reef points during this part of the Middle Woodland. Jack's Reef points, often made of non-local chert (Shaw 1996b:92-93), continue to be used into the Late Woodland. Exotic lithic materials increase in the Middle Woodland, except in the Champlain drainage. Some lithic tool types, such as Rossville (Shaw 1996b:90) and Small Stemmed (Hasenstab et. al. 1990) continue into the Middle Woodland.

Late Middle Woodland ceramics include types that continue in the Late Woodland, such as the cord-wrapped-stick-impressed ceramics. Projectile points now include concave-base triangular points often made of local materials. These points also continue into the Late Woodland period (Shaw 1996b:93).

Settlement and subsistence are similar to the Early Woodland period, but sedentism increases. Stays at large sites along waterways increase in duration, while upland areas are used short-term for procurement. Long-distance communication and exchange appear to shut down by the end of the period. Middle Woodland sites in coastal areas and New York have produced house remains. Middle Woodland sites tend to have more pit features, which vary greatly in shape and size, and are frequently dug out and reused for trash (Shaw 1996b:94-100).

Research issues for the period are similar to those of the Early Woodland period, from which it is divided only by arbitrary artifact style boundaries. These issues include explanation of the quick adoption of ceramic styles, the role of exchange networks, and the description of the behavior behind increasing regional style variation in artifacts (Shaw 1996b:100).

The site located near the project area, 19-MD-207 (the Heard Pond Site), is associated with many precontact Native American periods, including the Middle Woodland. Other Middle Woodland site within 3 km of the project area include the Baldwin Pond site (19-MD-167) in Wayland, the Green Hill Farm site (19-MD-198) in Sudbury, and the First River Terrace site (19-MD-724) in Framingham. In addition, 19-MD-209 is associated with the Heard Pond site and contains a Middle Woodland component.

The Late Woodland Period (ca. 1000-500 BP)

The Late Woodland represents the regional demographic peak prior to European contact, a florescence that may be related to increasing food production, sedentism, and population agglomeration. The period is characterized by changes in burial ceremony. Burials can be single or mass, as in ossuaries, and can be primary, secondary, or cremation. Group interments tend to be at special mortuary sites, while single burials are usually at habitations.

Ceramics are often shell-tempered or made with fine grit temper and thinner bodied; there is a shift to globular forms, and the addition of collars, sometimes decorated with human faces. Elaborate collars similar to those of Iroquois ceramics are found in the Merrimack and Champlain drainages. Triangular projectile points consisting of smaller Madison points or larger Levanna points are diagnostic for this period. This period is marked by an increasing importance of food production (maize, beans, squash, sunflower and other vegetables) in coastal or riverine zones, which begins by ca. 840 BP on Martha's Vineyard (W. Ritchie 1969).

These changes in assemblage, and by implication, adaptation, are attributed to increasing population and concentration of people at larger sites. Research issues include the extent of permanency in Late Woodland settlements, the nature of such settlements (i.e., whether such settlements were villages; Hasenstab 1999; Kerber 1988; Luedtke 1988; Thorbahn 1988) and the identification of horticulture with non-native plants and definition of the effects on humans. In addition, researchers might ask about the use of different ecozones, the reality of population growth, and whether or not climate change (e.g., the Little Ice Age), affected settlement and subsistence. There is some evidence of the development of long-distance exchange again, and some workers have suggested that a native beaver trade was developed before Contact. Regional differences are visible; in Vermont, there are fewer late Late Woodland sites than early Late Woodland. This may be a response to Iroquois settlement changes. In southern New England, horticulture did not replace existing gathering and hunting strategies and large settlements did not replace small seasonal sites. Differential dependence on horticulture is likely to have affected society and politics. Cultural differentiation of the Iroquois from the Algonquin also presents research opportunities (Shaw 1996c).

The site located near the project area, 19-MD-207 (the Heard Pond Site), is associated with many precontact Native American periods, including the Late Woodland. Other Late Woodland sites within 3 km of the project area include the Baldwin Pond site (19-MD-167), the Erwin Farm site (19-MD-190), the Paine site (19-MD-463), the First River Terrace site (19-MD-724), and the Wash Brook #2 site (19-MD-923).

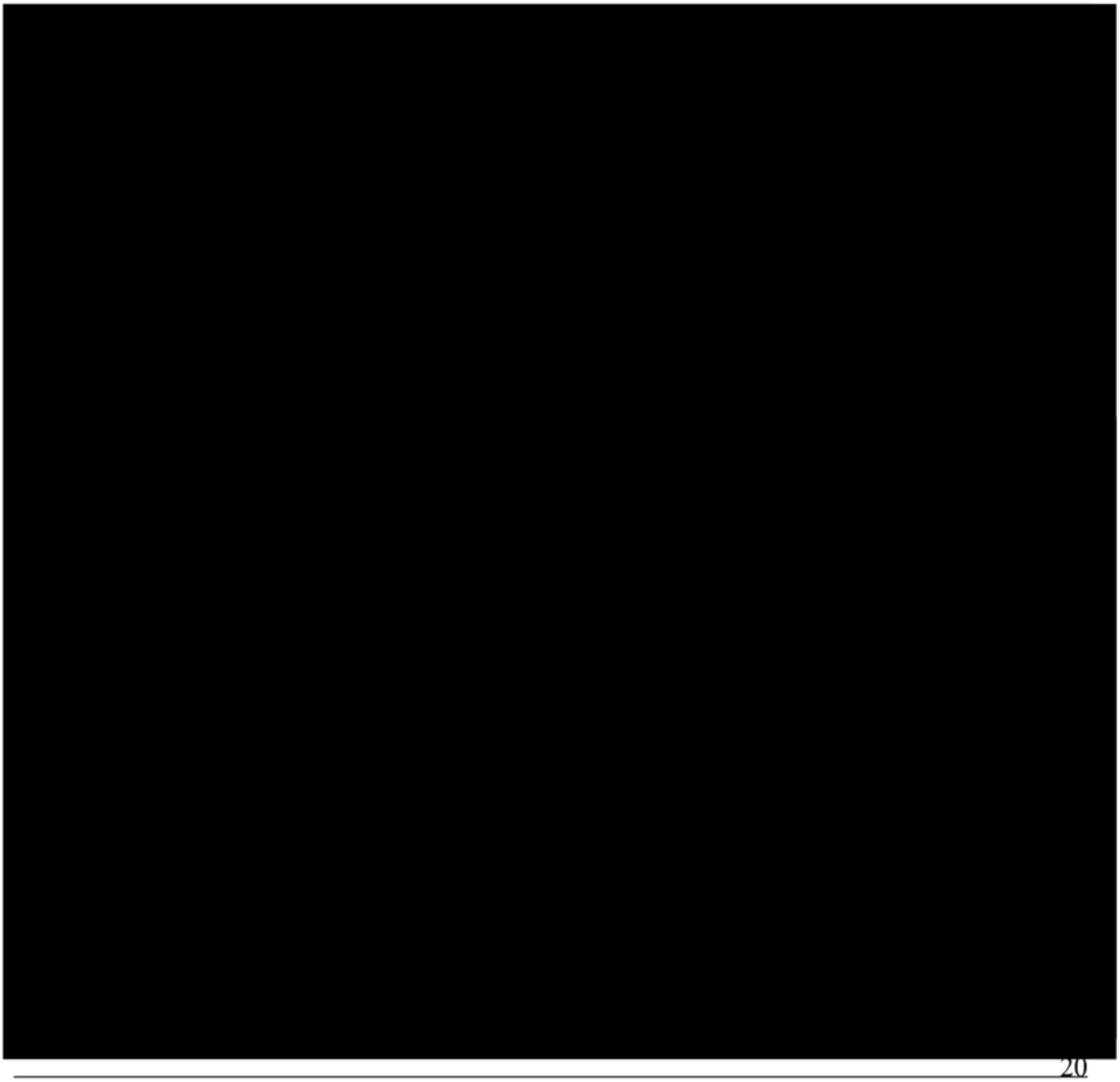
The Contact Period (AD 1500-1620) and post-Contact Native American Presence (AD 1620-1700)

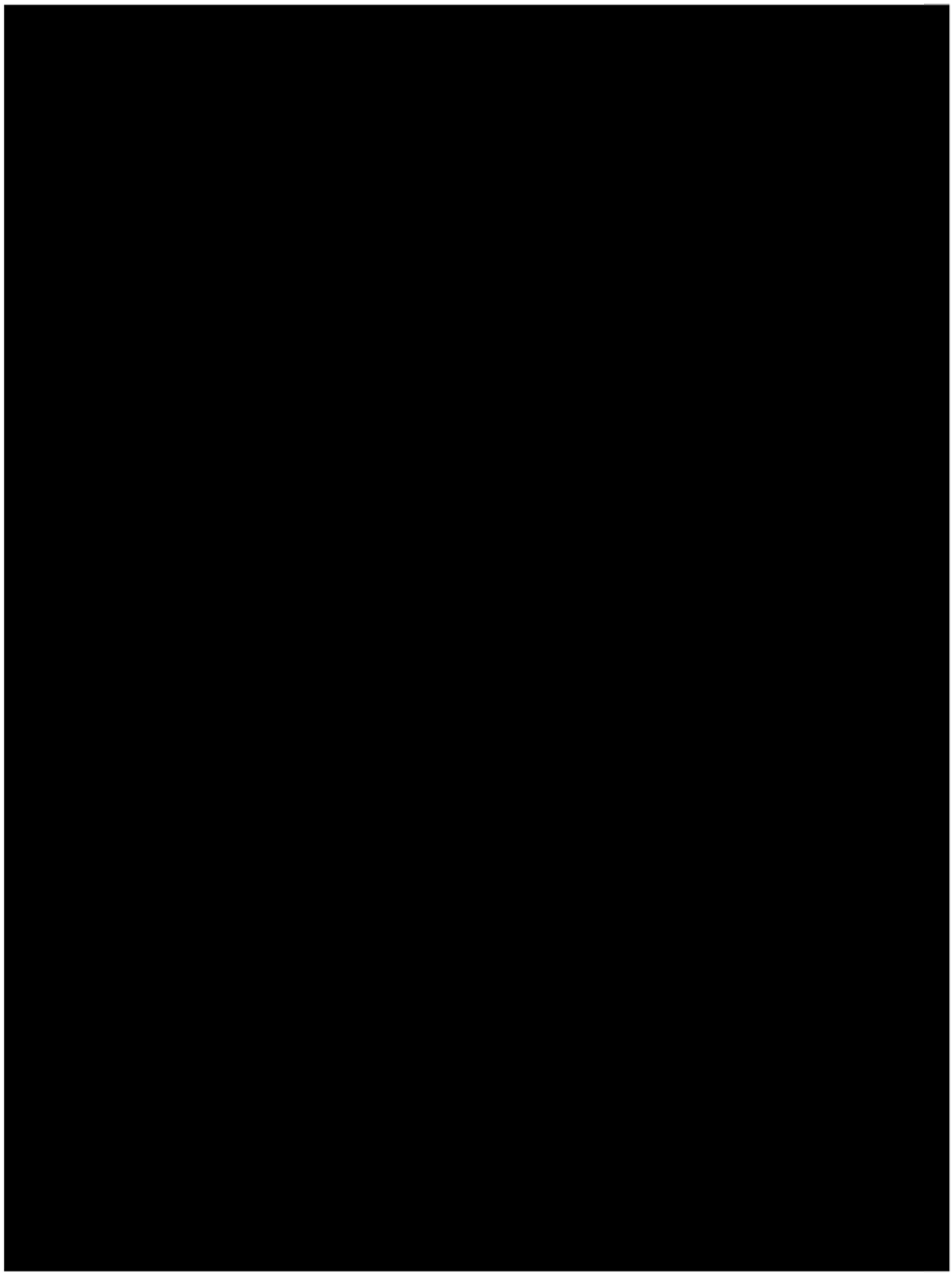
This period marks the initial presence in the region of European explorers and fishermen, followed in the early seventeenth century by English colonization. From the Native viewpoint, the period was one of intense social, economic and demographic disruption and eventually virtual extinction. The Sudbury area bordered between traditional Nipmuck territory on the upper Sudbury and Assabet Rivers and upland lakes and the coastal tribes, with the Massachusetts to the east (MHC 1980a:2).

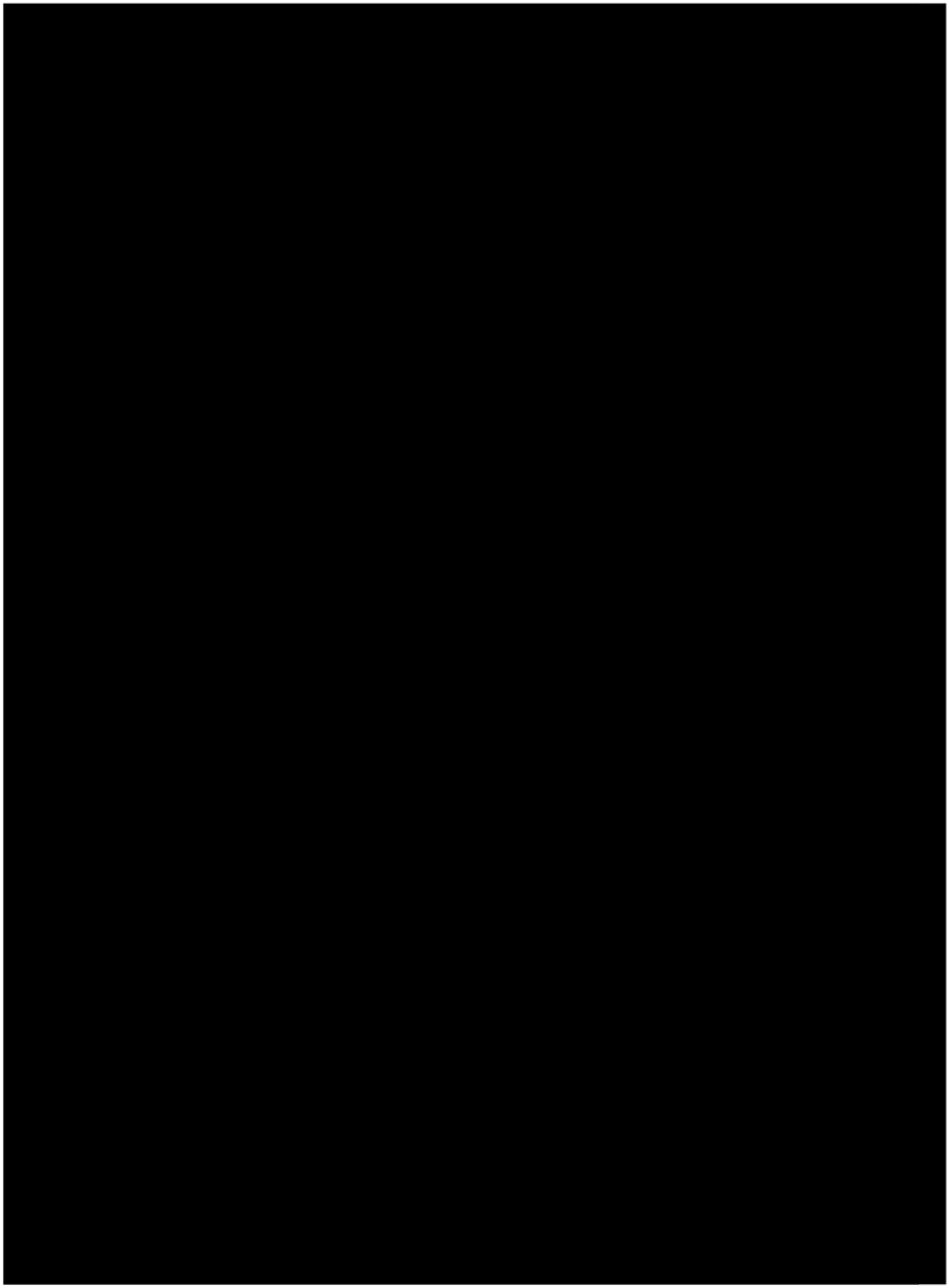
Sudbury and Wayland are located at the junction of the Sudbury River and the Boston Basin uplands and was therefore a major point of confluence for trails crossing westward around the river wetlands, most importantly Old Connecticut Path (Route 126). Additional secondary river crossings are located at Pelham Island Road and Stone Bridge Road. A single path running north from Wayland to Concord parallels the river and is presently known as Oxbow and Moore Roads. The same path running south extends to the junction of Five Paths where Routes 126 and 27 meet and probably extends further south (possibly present-day Cochituate Road/Route 27) toward the town of Natick (MHC 1980a:1-2).

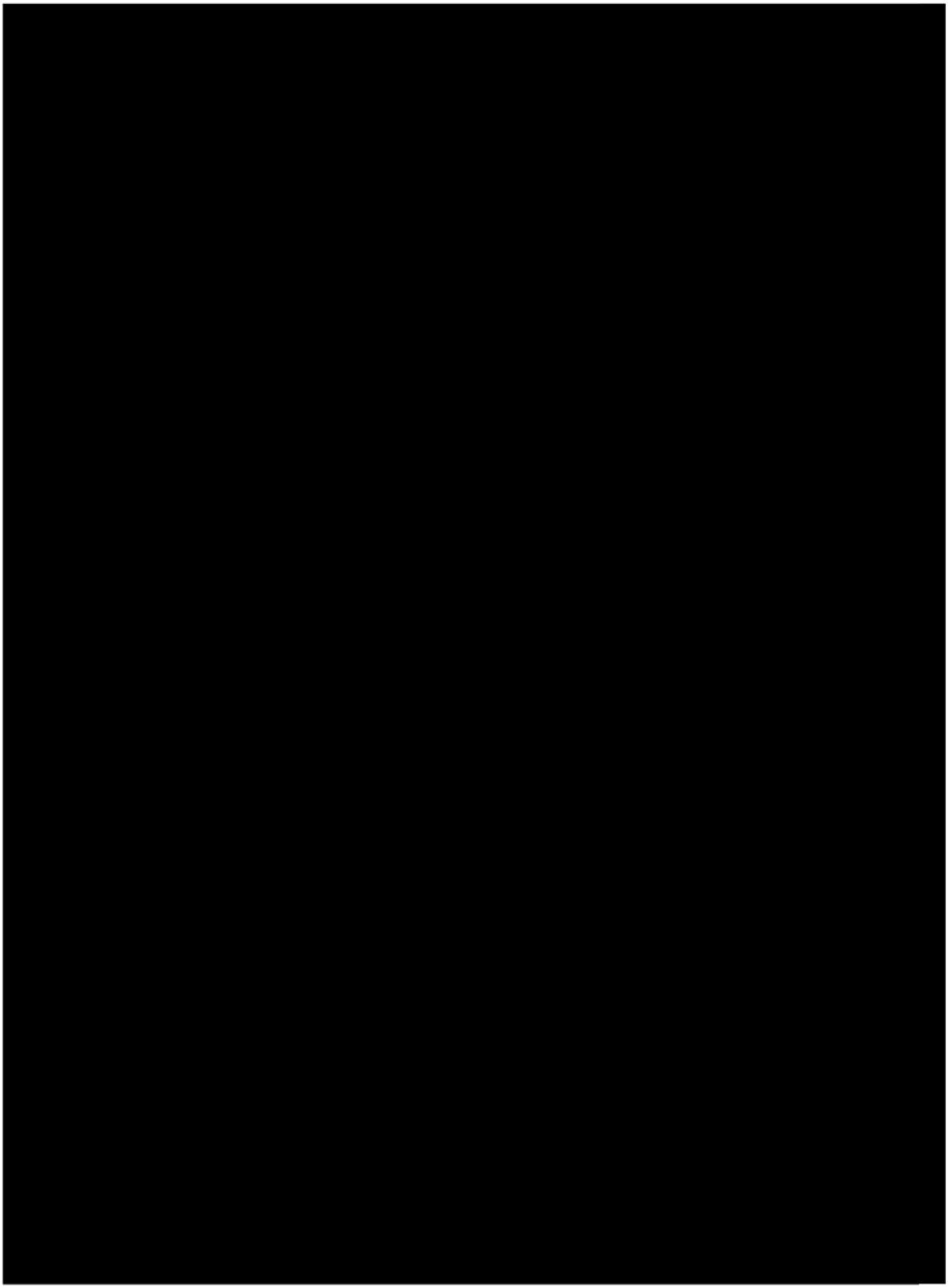
There are few occupied sites reported for this period, generally located along well-drained terraces and on knolls and uplands above the river, particularly at points of tributary confluence and near falls (MHC 1980a:2). A single site, the Gleason Street site (19-MD-516) in Wayland is associated with the Contact Period.

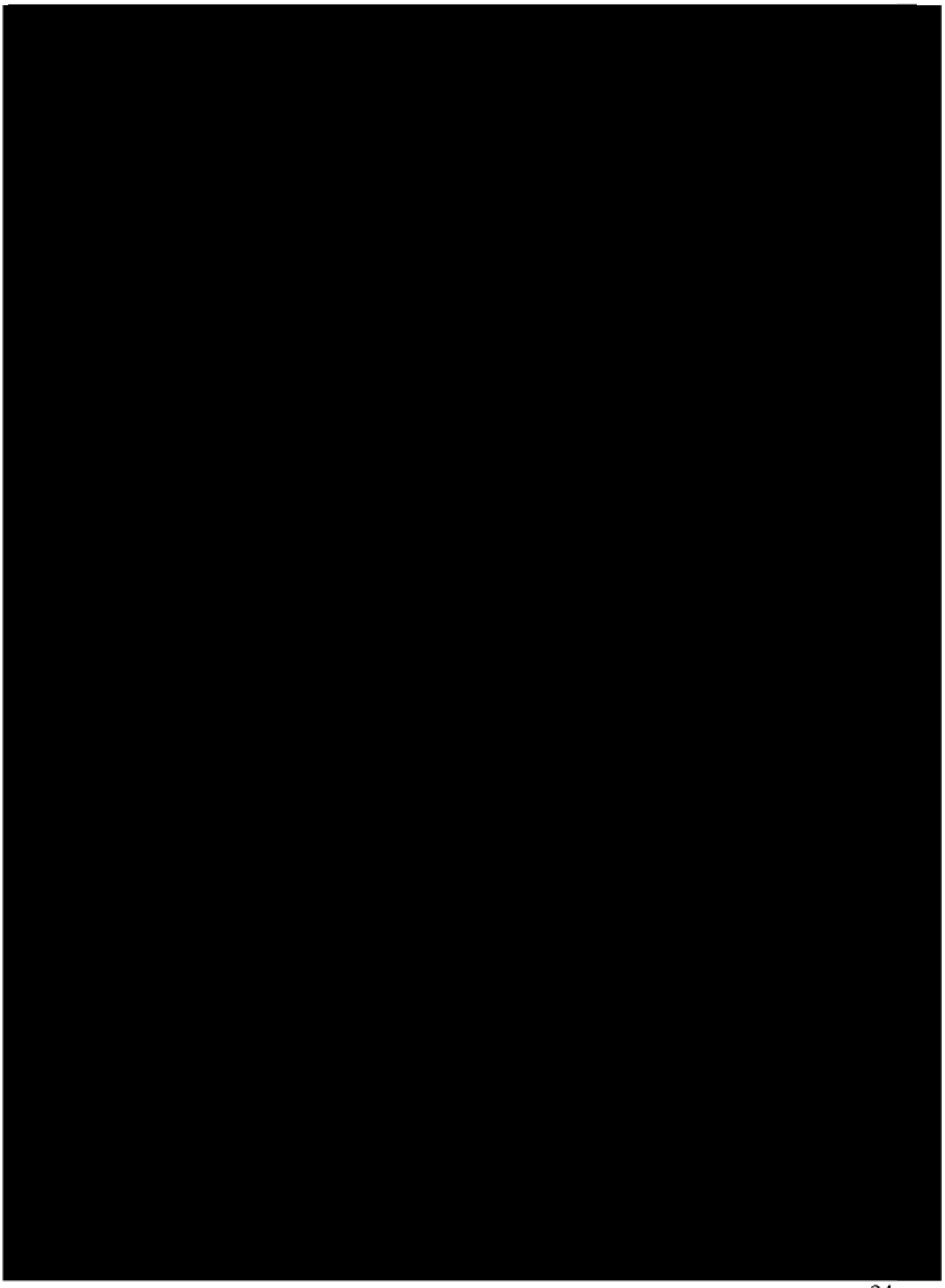
3.2.1 KNOWN PRECONTACT SITES IN THE PROJECT VICINITY

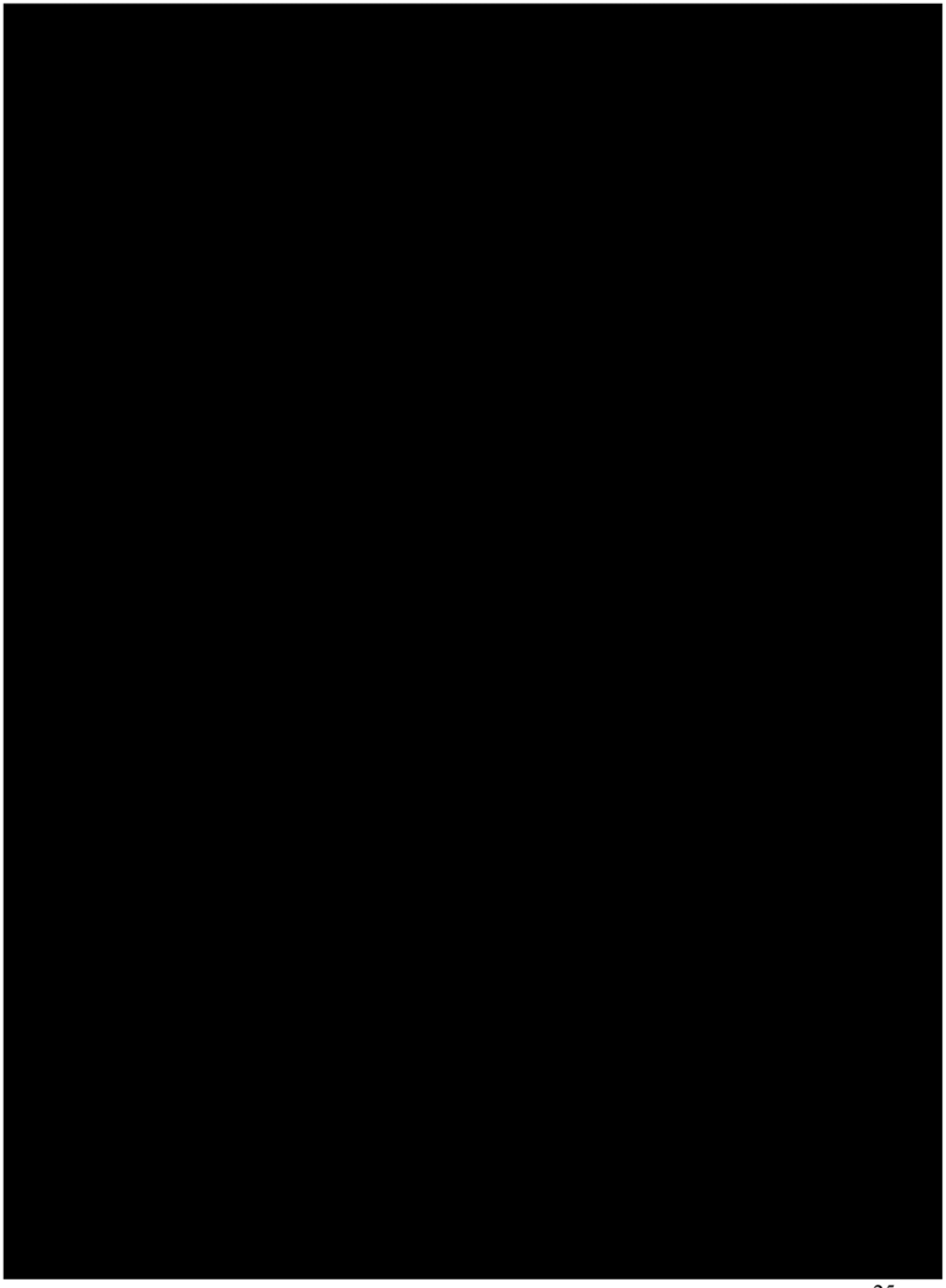


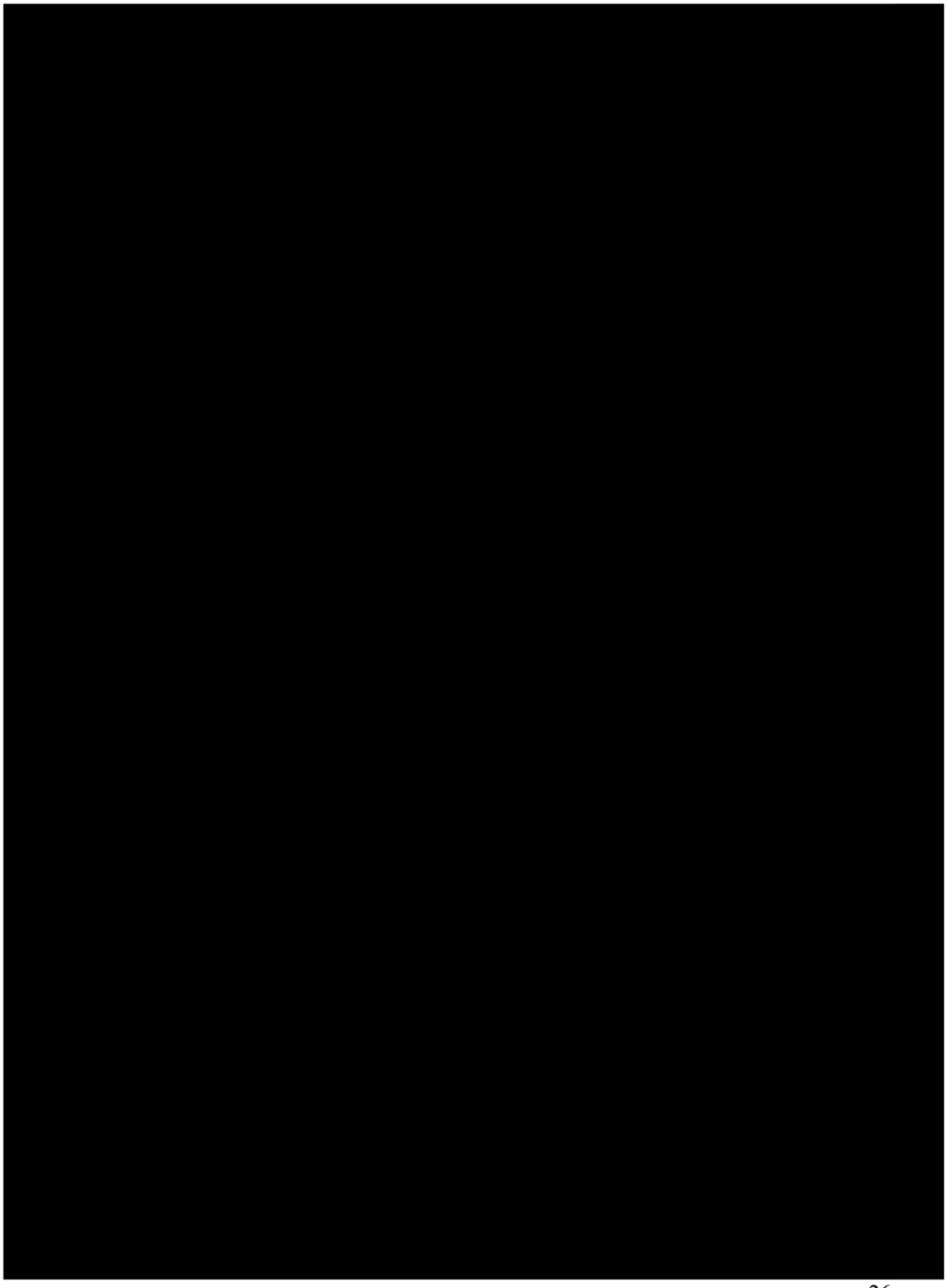












3.2.2 *POTENTIAL FOR PRECONTACT SITES*

Precontact archaeological sites have been identified in a variety of settings, but are found most often in particular environmental contexts (Funk 1972; Root 1978; Thorbahn et al. 1980; McManamon 1984; Mulholland 1984; Thorbahn 1984; Nicholas 1990). In southern New England archaeology, precontact site location is typically linked to three variables: terrain, soils, and water -- in the formula "flat to low slope, well-drained sandy soil, near water." These variables, in turn, combine with other factors, which include the collection of special resources (e.g., lithic material for tools; clay; seasonal nuts, fruits, seeds, small fishes, and game,), the pursuit of special tasks, often seasonally determined (e.g., exploitation of fish runs), and the use of transportation routes (provided by bays and rivers). The combination of all these factors provides a framework within which the precontact settlement of the project area, and indeed of most of southern New England generally, can be analyzed, and by which archaeological site location can be predicted through archaeological models (Casjens 1979, Dincauze 1974, Hoffman 1985, Kenyon and McDowell 1983, D. Ritchie 1983). A study of site locations and catchments conducted for the Concord River watershed (Casjens 1979) found that sites were located on floodplains, flat uplands, knolls, ridges and an island; gentle terrain with arable soil and variety in the form of wetlands in the surrounding catchments also seem to factor in site locations.

The project vicinity contains archaeological sites associated with Native American activities. Activities included tool production and maintenance and probable hunting and foraging and possibly fishing activities. The project area has not been investigated archaeologically; however, nearby Heard Pond, nearby wetlands, and the close proximity to the Sudbury River would have all been attractive resources for Native American hunting and foraging activities in precontact times.

Based on the above information, precontact archaeological sensitivity for the project area is assessed as follows:

> High sensitivity: Areas within 100 m of fresh water or wetlands; on low to moderate slopes (0 - 15 percent); on moderately well drained to excessively drained soils; and/or within 100 m of a reported archaeological site or natural resource area (i.e. steatite or quartz vein outcrops or rockshelters), and with no apparent/moderate disturbance.
>
> Medium sensitivity: Areas between 100 m and 200 m of fresh water or wetlands; on low to moderate slopes (0 - 15 percent); and on moderately well drained soils; and/or between 100 m and 200 m of a reported archaeological site or natural

resource area (i.e. steatite or quartz vein outcrops or rockshelters), and with no apparent/moderate disturbance.

Low sensitivity: Areas greater than 200 m of fresh water or wetlands, on moderate to steep slopes (15 – 25+ percent); on poorly drained soils, more than 200 m of a reported archaeological site or natural resource; and/or with extensive disturbance.

The project route has high sensitivity areas for precontact archaeological resources where the route is located within 100-200 m a recorded archaeological site, rivers, brooks or wetlands, on well-drained soil with a slope of less than 8%. Potential sites may include campsites for short or longer durations, tool manufacture or maintenance areas, or for hunting, fishing and foraging activity areas used by Native Americans. In addition to field reconnaissance, review of Native American sites in Sudbury reported in Alfred Hudson's 1889 *History of Sudbury* was undertaken to determine if any of these sites are in close proximity to the Project corridor.

3.3 HISTORIC CONTEXT

Eversource plans to install a new electrical transmission line between Sudbury Substation on Boston Post Road (Route 20) in the Town of Sudbury and the Hudson Substation on Forest Avenue in the Town of Hudson. Approximately 9 miles in length, the proposed transmission line would be built underground, primarily along an inactive railroad corridor owned by the MBTA. Beginning at the Sudbury Substation, the line would trend northwestward along the MBTA corridor through Sudbury; the route then enters the Town of Hudson and concurrently a short northern portion of the City of Marlborough, before entering the Town of Stow and then re-entering the Town of Hudson; at Wilkins Road the proposed line would leave the MBTA corridor and follow existing public roadways for 1.3 miles, terminating at the Hudson Substation (Figure 1a/b). This plan is known as the Preferred Route or *Project corridor*.

Sudbury

Wayland, Sudbury and northern Framingham were originally included in a 5-mile land grant issued by the General Court in 1638. Approximately 16 men and their families moved from Watertown to the newly granted land with more settlers arriving in the spring from Watertown, Cambridge and Charlestown. A year later the General Court ordered that "the newe Plantation by Concord shall be called Sudbury." It was the nineteenth town settled in Massachusetts Bay Colony. Located at the junction of the Sudbury River and the uplands of the Boston Basin, the area was a major connecting point for native trails crossing west around the river wetlands that included two regional paths, the Great Trail and the Connecticut Path. English settlers who traveled from Watertown followed these native trails to find food for their livestock (Scott 1989, MHC 1980a).

The initial Euro-American settlers did not have a centralized town. Sudbury consisted of scattered farms, including several that were built as garrison houses (MHC 1980:2). Since Sudbury was considered a frontier town, it had "limited settlement and economic development due to problems of access and fear of natives" (MHC 1980a).

Through the eighteenth century the town's economy relied on agriculture and grazing with small-scale industrial activities associated with lumbering. The first two saw mills were constructed

along Hop Brook in 1659 and 1677. As nearly all of the settlement was destroyed from a native raid in 1676 during King Philip's War, a gradual rebuilding continued through the end of the century. In 1673 the Boston Post Road (also known as Upper Post Road, present-day Route 20), which basically followed the Connecticut Path, was opened for mail delivery from Boston to Springfield. With Sudbury Center located in present-day Wayland, present-day Sudbury witnessed a scattered settlement pattern during this time period (MHC 1980a).

After 1720 South Sudbury developed as a village center due to proximity to the Upper Post Road and industrial activities along Hop Brook. Following the construction of a meeting house in 1723, the area became the West Precinct of the town. In 1780 the East Parish split off from the town forming present-day Wayland. By 1830 South Sudbury contained saw, grist and fulling mills; brickyards; tanneries, and a malt house. Other new industries in the town included copper smiths, an axe shop and a shoemaker (MHC 1980a). Three mills operated along Hop Brook in the southwestern section of the town with bog iron harvested in the lowlands of north Sudbury. While a number of industrial activities occurred throughout the town, agriculture still remained the economic mainstay through the end of the nineteenth century.

Two railroad lines passed through Sudbury in the late nineteenth century. In 1871 the Old Colony passed north-south through the town center and in 1881 the Massachusetts Central passed east to west through South Sudbury. While the railroads were responsible for a slight increase in the foreign-born population, they proved a catalyst for the export of the town's agricultural products. As a result, 30 greenhouses were constructed between 1882 and 1889 and a machine manufactory was constructed in South Sudbury (MHC 1980a).

With the arrival of the automobile in the twentieth century transportation routes expanded and improved, small estates of Boston businessmen were established near Sudbury Center, and scattered residential development occurred to the north of Sudbury Center (MHC 1980a).

The Project Corridor

Beginning at the Sudbury substation the Project corridor heads southwesterly until reaching the Boston Post Road and Hop Brook at which point it follows a northwesterly trajectory to the Hudson border (Figure 1). At the end of the eighteenth century the Project corridor began to the south of Boston Post Road running somewhat parallel to it until it crossed the road in close proximity to Hop Brook. The alignment then ran northwesterly cross country recrossing Hop Brook before reaching the Marlborough (now Hudson) border (Figure 3). As the 1794 map series was only required to depict certain features, including county roads, mills, meetinghouses, rivers, streams, the map does not depict houses and town roads that were present at that time.

During the first quarter of the nineteenth century a clustered settlement developed in the area where the Project corridor crossed Hop Brook and the Boston Post Road. As the Project corridor headed northwesterly to the Marlborough (now Hudson) border it crossed three town roads (Horse Pond Road, Peakham Road and Dutton Road, respectively) in an area of scattered farmsteads before recrossing Hop Brook (Figure 4). By the mid nineteenth century a mill village was firmly established along the Boston Post Road between the beginning of the Project corridor by the present Sudbury substation to its crossing of Hop Brook and the Boston Post Road. Heading northwesterly the Project corridor crossed the same three roads before recrossing Hop Brook and then a new road (Moore Road) before reaching the Marlborough (now Hudson) border. Even though this area now features an interconnected roadway system to two villages

(Sudbury Center and the Mill Village) to the east and two smaller mill settlements to the west, the Project corridor was located in an area with a scattered settlement pattern (Figure 5, note addition of Precontact sites identified in Alfred Hudson's 1889 *History of Sudbury* - Identified with HSP #s). During both time periods the Project corridor came into close proximity to residences from its beginning by the present Sudbury substation to the crossing of Hop Brook and the Boston Post Road.

By the end of the nineteenth century the Project corridor followed the rail bed of the Massachusetts Central Railroad from the location of the Sudbury substation to the Hudson border (Figure 6). Though now the rail bed of the Boston and Maine Railroad, the same conditions prevailed in the mid twentieth century (Figure 7).

Marlborough, Hudson and Stowe

Marlborough was included in the Sudbury grant of 1638 part of which was granted for an Indian Praying Town in 1654. The Praying Town grant included the whole northeast quadrant of the town. Incorporated as a town in 1660, Marlborough's town center was destroyed during King Philip's War (MHC 1980b).

Present-day Hudson was an outlying district of Marlborough consisting of scattered farms with no village center. Agriculture and grazing were the main economic activities with the only significant waterpower located along the Assabet River at Feltonville (present-day Hudson Center). A gristmill constructed along the Assabet River circa 1698 served as the primary gristmill for Marlborough during the early eighteenth century (MHC 1980c).

In 1743 the residents of Feltonville unsuccessfully petitioned the General Court to break away from Marlborough to become a separate town. Through the eighteenth century this section of Marlborough witnessed extremely small growth with colonial highways remaining as local routes. Small-scale industrial activities included the introduction of a tannery in 1799 (MHC 1980c; https://en.wikipedia.org/wiki/Hudson,_Massachusetts).

During the first quarter of the nineteenth century the small village that developed along the Assabet River contained 16 houses, one store, a small cotton factory, and a small shoe factory. Circa 1844 box-making factories supplied the shoe industry leading to an increase in the production of shoes. A railroad link by the Central Massachusetts Railroad Company to the mills along the Assabet River occurred in the 1850s. As a result, the town's population increased and larger factories, some of the first in the country to use steam power and sewing machines, were constructed. By 1860, Feltonville had 17 shoe and shoe-related factories attracting immigrant workers from Ireland and French Canada. In 1865 residents of Feltonville again petitioned the General Court to become a separate town and in 1866 the town of Hudson was incorporated. Over the next twenty years Hudson grew as two woolen mills, an elastic-webbing plant, a piano case factory, and a factory for waterproofing fabrics with a rubber coating were constructed (MHC 1980c; https://en.wikipedia.org/wiki/Hudson,_Massachusetts).

During the early twentieth century local roads that were improved as auto highways led to rapid growth that included some resort development around the lakes near Marlborough State Forest. Industrial development continued along the railroad line to the east of town. Following World War II, developers purchased some farms that surrounded the town center leading to residential development that more than doubled Hudson's population. More recently high-tech companies

have built plants in the town (MHC 1980c; https://en.wikipedia.org/wiki/Hudson,_Massachusetts).

The Project Corridor

After entering Hudson the Project corridor heads northwesterly, passing through a small section of Stow before heading southwesterly and then westerly towards its terminus at the Hudson substation (Figure 2). At the end of the eighteenth century the Project corridor would have crossed two county roads (White Pond Road and Main Street) and a brook (Fort Meadow Brook) that powered Maynard's gristmill to the south. After crossing the brook the corridor passed through a small section of Stow before recrossing the second county road (Main Street) as it headed southwesterly towards its terminus to the east of the Assabet River (Figure 8). Again this map series was only required to depict certain features, including county roads, mills, meetinghouses, rivers, streams; the map does not depict houses and town roads that were present at that time.

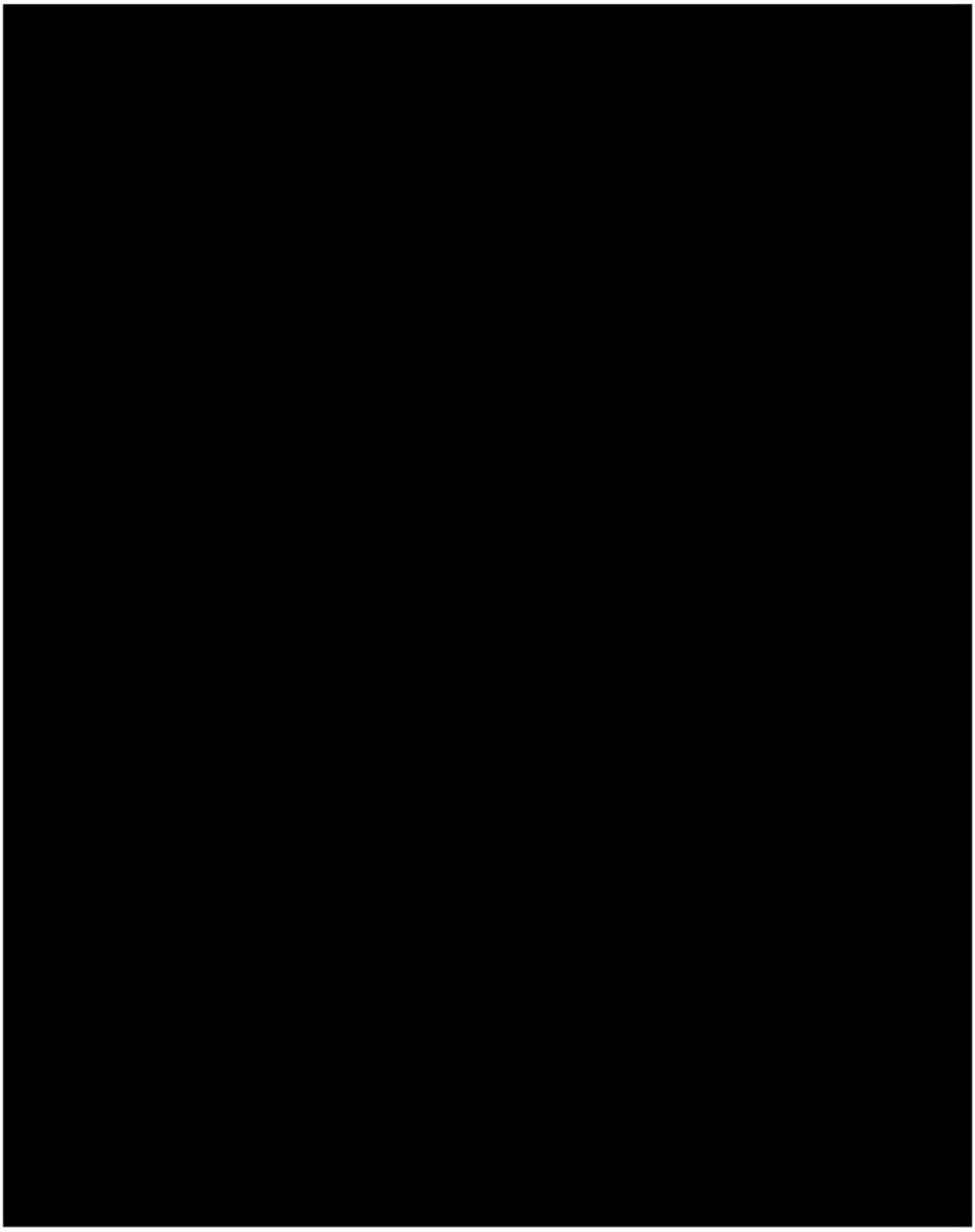
By the first quarter of the nineteenth century a number of town roads and paths provided a variety of connections to the eighteenth century county roads. About midway between White Pond Road and Main Street the Project corridor crossed a path (Parmenter Road) leading to the residence of L. Bruce before crossing Main Street near the location of the Pauper Establishment. After crossing Fort Meadow Brook the Project corridor crossed Marlboro Road, which became Marlborough Street in Stow, passing westerly through a small section of Stow. The Project corridor then headed southwesterly cross country before recrossing Main Street by a small cluster of houses. The alignment headed cross country for a short distance before heading westerly across Forest Avenue and a small path that headed to the Assabet River to the west. Prior to reaching the river the Project corridor headed southerly from the path ending near a house along the path (Figures 9 and 10).

Conditions had not changed to any great extent by the mid nineteenth century. At this time Parmenter Road was a road connecting White Pond Road and Main Street. After crossing through Stow and recrossing Main Street, still the location of a small cluster of houses, the Project corridor headed southwesterly and then westerly along Forest Avenue, the western section of which is no longer a path. Several houses were located along this section of Forest Avenue (Figure 11).

By the end of the century the Project corridor followed the rail bed of the Central Massachusetts Railroad from the Sudbury border through Stow until it reached Wilkins Street. The alignment then followed Wilkins Street on which there were a number of houses to Forest Avenue that also had several houses by the terminus at the Hudson substation (Figure 12). The same conditions prevailed in the mid twentieth century (Figure 13).

3.3.1 KNOWN HISTORIC SITES

There are ten historic archaeological sites listed in the archaeological site files of the MHC that are located within 1 km of the Project corridor in Sudbury and one in Hudson. Table 3 lists these recorded historic archaeological sites as they appear from east to west in proximity to the Project corridor.



Of the above listed historic archaeological sites in Sudbury and Hudson, six (60%) are located in proximity to the Boston Post Road, an eighteenth century road in Sudbury in the area known that was known as Mill Village in the nineteenth century; two (20%) are associated with seventeenth

century garrison houses; one (10%) is associated with a mill site; one (10%) is associated with a poor farm located in proximity to Main Street, an eighteenth-century county road in Hudson; and one (10%) is associated with the railroad. The sites reflect various stages of the area's history from the seventeenth through the nineteenth centuries, including life in a village, life in an area of scattered settlement, and life working at a small industrial site. The Project corridor has the potential to expand on this knowledge, particularly as early farms and mills were established in a dispersed settlement pattern in both towns.

In addition to the reported historic archaeological sites, a number of historic districts and historic properties are in proximity to the Project corridor, including districts or properties listed on the National Register of Historic Places (NR) and/or on the State Register of Historic Places (SR).

National Register/State Register Districts or Properties crossed by or adjacent to the Project Corridor

Property	Name/Address	Town	Comments
HUD.F*	Goodale Homestead 100 Chestnut St, Hudson, includes HUD.103 outside ¼ mile.		NR Individual Property (1/21/1975)
SUD.K	Goodnow Library, 21 Concord Rd, Sudbury		NR Individual Property (5/22/2002)
SUD.40	Bogle-Walker House, 55-62 Goodmans Hill Rd, Sudbury		
SUD.78	Goodnow Library, 21 Concord Rd, Sudbury		Same as SUD.K
SUD.907	Civil War Union-Soldier Monument, 21 Concord Rd, Sudbury, In SUD.K		
SUD.919	1767 Milestone, Boston Post Rd, Sudbury		NR 04/07/1971
SUD.920	1767 Milestone, Boston Post Rd, Sudbury		NR 04/07/1971
SUD.922	Boston Post 1767 Milestone, Boston Post Rd, Sudbury		NR 04/07/1971, also in SUD.D

*Crossed by the Project route; **Adjacent to the Project route.

Other Districts and Properties within ¼ mile of the Project Route

Property	Name/Address	Town	Comments
HUD.D	Lake Boon	Hudson	HUD#s .142 to .274
HUD.105	W. & J. Wilkins Farm, 460-462 Main St, Hudson		
HUD.107	J. & L. Wilkins House, 15 Glendale Rd, Hudson		
HUD.108	J. Ordway Farm, 31 Parmenter Rd, Hudson		
HUD.800	Pauper's Burying Ground, 560 Main St, Hudson, NR eligible (Bell 1993)		
HUD.908*	Fort Meadow Brook Railroad Bridge, Hudson		
STW.D	Gleasondale	Stow	40 properties
SUD.B*	South Sudbury	Sudbury	
SUD.C**	Natick Research and Development, Sudbury, No form		
SUD.D**	Sudbury First Industrial Area, Sudbury		Local historic district
SUD.F**	Wayside Inn Historic District/Peakham-Southwest District, Sudbury, SR, Local historic district		
SUD.I**	King Phillip Historic District, Sudbury		SR, Local historic district, 74 properties

- SUD.P* George Pitts Tavern Historic District, Sudbury A small district of 14 properties named for a former tavern in the area that no longer exists; designated as a local historic district and listed in the State Register of Historic Places.
- SUD.18 T. Johnson House, 189 Boston Post Rd, Sudbury, ca. 1750
- SUD.19 A. Goodnow House & Farm, 174 Boston Post Rd, Sudbury, ca. 1825
- SUD.39 J. Goodnow House, 34 Goodmans Hill Rd, Sudbury, ca. 1750
- SUD.282* B&M Railroad Section Tool House, Boston Post Rd, Sudbury, SR, in SUD.P. MHC opinion: NR eligible in a district only.
- SUD.313 232 Peakham Rd, Sudbury (listed as in SUD.F, no form).
- SUD.320 G. Hall House, 271 Boston Post Rd, Sudbury
- SUD.327 Thompson-Hayden House, 112 Codjer Ln, Sudbury
- SUD.329 M. Goodnow House, 30 Coolidge Ln, Sudbury
- SUD.330** Goodnow/Ranstrom House, 277 Landham Rd, Sudbury, ca. 1900
- SUD.331 Ranstrom/Mercury House, 271 Landham Rd, Sudbury, ca. 1922
- SUD.332 N. Mercury House, 267 Landham Rd, Sudbury, ca. 1924
- SUD.341 C. Wilson House, 266 Peakham Rd, Sudbury
- SUD.900* MA Central Railway Bridge 128 over Hop/Landham Brook, Sudbury
- SUD.901* MA Central Railway Bridge 127 over Hop Brook, Sudbury
- SUD.911 Goodenow Garrison House marker, Old County Rd, Sudbury
- SUD.921 Landham Rd Bridge over Landham Brook, Sudbury, MHC opinion: Not NR Eligible
- SUD.925 Buddy Dog Sculpture, 151 Boston Post Rd, Sudbury, 1977

*Crossed by the Project route; **Adjacent to the Project route.

The inventory of historic properties indicates extant architectural resources dating as early as the mid eighteenth century and including in the Project corridor railroad bridges and a Boston & Maine Railroad Section Tool House. The 1890 Boston & Maine Railroad Section House (SUD.282) is adjacent to the Project corridor rail bed on the north side along the Boston Post Road/Route 20. This is one of only two railroad section houses on the MBTA commuter rail system. The MHC opinion statement lists the structure as NR-eligible within a district only. This area of the Boston Post Road is within the George Pitts Tavern Historic District (SUD.P), a small district of 14 properties designated as a local historic district and listed in the State Register of Historic Places. The George Pitts Tavern Historic District is within the South Sudbury inventory area (SUD.B) and adjacent to the Sudbury First Industrial Area, a local historic district (SUD.D). Other historic districts within ¼ mile include the King Phillip Historic District, a local historic district on the State Register (SUD.I), and the Goodnow Library (SUD.K) at 21 Concord Road, a NR-listed Property.

The MHC inventory also includes two Massachusetts Central Railway bridges that are crossed by the Project corridor: Bridge 128 over Hop Brook (SUD.900) and Bridge 127 (SUD.901) across Hop Brook, both dating from 1881 with riveted plate deck girders, stone abutments and timber piers.

3.3.2 POTENTIAL FOR HISTORIC SITES

A predictive model for historic potential is developed through the synthesis of historic data such as early maps, town histories, deed research, other historic sources, and environmental characteristics. Historic geographers and historic archaeologists have developed general models of settlement patterns in New England. These models are useful in estimating the distribution of

historic archaeological sites during different periods (Waldbauer 1986; J. Wood 1978). In addition, economic geographers have formulated models of historic settlement systems that rely on proximity to natural resources such as bodies of water, arable soils, granite outcrops, and gravel or clay beds (Haggett et al. 1977). These variables can affect transportation, communication, and trade networks. Proximity to settlement concentrations, freshwater springs or streams, or water-power sources is a positive element of historic archaeological potential. Environmental data can contribute to an understanding of locational patterns of property types such as farmsteads, cranberry bogs, gravel or sand quarries, mills, and maritime industries.

Historic potential is stratified as follows:

> High sensitivity: Areas within 100 m. of a historic road or known historic site; on low to moderate slopes (0 - 15 percent); within 100 m of fresh water and/or a water-power source; within 1,000 m. of a settlement concentration; and with no apparent/moderate disturbance.
>
> Medium sensitivity: Areas greater than 100 m of a historic road but within 100 m. of stone walls; on low to moderate slopes (0 - 15 percent); within 200 m of fresh water and/or a water-power source; and within 1,000 m. of a settlement concentration, with no apparent/moderate disturbance.
>
> Low potential: Areas greater than 100 m of historic roads and stone walls; on moderate to steep slopes (15 – 25+ percent); no fresh water and/or power source in the vicinity; a settlement concentration > 1,000 m. away; and/or an area with extensive disturbance.

Both Sudbury and Hudson were included in seventeenth century land grants that for the most part witnessed a dispersed settlement pattern through the eighteenth century. The Project corridor crosses/recrosses eighteenth-century county roads in Sudbury and in Hudson as well as streams with eighteenth-century mills. Nineteenth-century village development along the Project corridor occurred in Mill Village (now South Sudbury) in Sudbury and in Feltonville (now Hudson Center) in what was then Marlborough. Following the arrival of the Old Colony Railroad in 1871 and the Massachusetts Central (later the Boston and Maine) Railroad in 1881, the Project corridor witnessed disturbance from the construction of the rail bed from its beginning at the Sudbury substation in Sudbury to Wilkins Street in Hudson. Given the number of inventoried sites though, the Project corridor still has the potential for unrecorded structures and/or features associated with seventeenth through nineteenth century development of both Sudbury and Hudson. The location of the Walker Garrison House (SUD-HA-30) needs to be established with respect to its proximity to the Project corridor. Another site of potential proximity to the Project is the Hudson Poor Farm. The Hudson Poor Farm Cemetery (HUD-HA-1) is located north of Main Street in Hudson and was subjected to a data recovery (Bell 1993). The Poor Farm itself was located south of Main Street and shows as the Alms House on the 1856 Walling map, south of the Project corridor but in close proximity (Figure 11).

In addition, railroad-related sites can be expected and include one recorded historic archaeological railroad station site. Former railway stations include the inventoried South

Sudbury Station site (SUD-HA-26); the East Sudbury Station and the Wayside Inn Station in Sudbury; and the Ordway Station, the Gleasondale Station and the Gleason Junction Station in Hudson; at least four of these five unrecorded archaeological sites are within the Project corridor. Review of plans of the railroad, in conjunction with field reconnaissance, will aid in identifying other railroad-related features.

4.0 RESULTS OF THE ARCHAEOLOGICAL RECONNAISSANCE SURVEY

4.1 RESULTS OF THE DOCUMENTARY RESEARCH

Further research for the reconnaissance survey has involved gathering data on the Project corridor from additional historic maps. In particular, plans of the Massachusetts Central Railroad/Boston & Maine Railroad have been reviewed which have aided in the identification of historic sites in proximity to the Project corridor (Figure 14, Appendix I). Review of Native American sites in Sudbury reported in Alfred Hudson's 1889 *History of Sudbury* was undertaken to determine if any of these sites are in close proximity to the Project corridor. Additional research has also focused on archaeological sites identified during the course of the reconnaissance survey and on the history of the railroad corridor and is discussed in Section 4.2.

Based upon the review of Hudson's 1889 *History of Sudbury* no previously unrecorded archaeological sites occur within the Project ROW. The History does allow for the identification of other ancient Native American sites that have not been previously inventoried.

4.2 RESULTS OF THE ARCHAEOLOGICAL FIELD RECONNAISSANCE SURVEY

The archaeological field reconnaissance survey was conducted under Permit No. 3783 issued by the State Archaeologist. The field walkover of the Project route was conducted by Commonwealth's Principal Archaeologist and field assistant/project archaeologist to assess visible disturbance, rockiness, fill, presence of wetlands, and the soil characteristics along the proposed Project route. Sensitivity Plans are presented in Appendix II.

Most of the Project route is along an inactive railroad, with wood ties and steel rails still extant along most of the route. Historical maps show that the inactive railroad was formerly the route of

the Massachusetts Central Railroad between Waltham North and Berlin, Massachusetts. The Central Massachusetts Railroad began in 1868 with authorization to construct the Wayland & Sudbury Branch Railroad on a 6.75-mile alignment between Stony Brook on the Fitchburg Railroad at Weston and Mill Village in Sudbury. The railroad was chartered in 1869, with a 98-mile route between Stony Brook and Northampton authorized, and incorporated as the Wayland & Sudbury Branch Railroad. It was shown as the proposed Massachusetts Central Railroad on the 1875 map of South Sudbury. The railroad opened to Hudson in 1881 as part of the Boston-Northampton main line, but the railroad languished until 1883 when it was reorganized as the Central Massachusetts Railroad. Service to Hudson was restored in 1885. It passed to the Boston & Lowell Railroad in 1886. In 1887 the line was leased to the Boston & Maine Railroad for 99 years. Freight traffic to points west increased with completion of the Hudson River Bridge at Poughkeepsie in 1889. This bridge was built by the Central New England Railroad but was used by a consortium of railroads. Between 1907 and 1914, the Boston & Maine Railroad maintained a successful freight business, but subsequent market conditions worked to marginalize this success. Despite setbacks the railroad embarked on a modernization program which helped to stabilize the Central Massachusetts line. World War I brought increased traffic, but the Great Depression brought decline. Rail traffic surged again during World War II and stabilized after the war. Despite the proliferation of automobiles, Wayland, Weston, and Sudbury became rail-commuter suburbs, and frequent trains provided service from these communities to Boston. While rail freight could not compete with motor freight, passenger service continued into the 1960s. Passenger service from Boston terminated at Hudson in 1958 and ceased in 1965. Passenger service to South Sudbury continued until 1971, with service discontinued on November 26, 1971; for the most part, the line became inactive in 1980 (Crouch and Conard 1975; Karr 1996).

Review of the Project route included 40-ft to either side of the rail-bed centerline. The Project route is described from east to west and divided into sections by road or stream crossings. In general, cut and fill land alteration was witnessed along the Project route and mostly within the 80-ft wide corridor under the field reconnaissance assessment. Special attention has been given to areas of natural topography within 40 ft to either side of the inactive rail bed, proximity of uplands to streams and wetlands, and soil characteristics along the route. Soil cores were taken in areas of apparent natural topography with an open-face steel corer (3/4") to identify natural soil horizons, evidence of disturbance, and soil characteristics, with depths recorded in centimeters.

Special attention has been given to extant or documented historic railroad features such as granite mile markers, former station sites, the extant section house, and features such as culverts, mile markers, rail rests, foundations, and remnant electrical railroad components

In general, the designation of High or Medium-High for sensitivity was assessed in areas where well drained landforms were adjacent or within 100 m of streams or rivers or known or identified resources (reported archaeological sites, foundations, or railroad building sites), and disturbance was minimal. The designation of Medium was assessed in areas where well drained landforms were within 200 m of streams, rivers or wetlands or identified resources, and disturbance was minimal. The designation of Medium to Low was assessed in areas where well drained landforms were moderately sloped, within 200 m of streams, rivers or wetlands or identified resources, and/or disturbance was moderate. These areas were generally considered to be low in sensitivity but contained some areas of potential sensitivity, such as a small rise or terrace, or other landscape feature that might have attracted utilization by Native Americans or historic-era settlers.

Low sensitivity areas include hydric/wetland or poorly drained areas, moderate or heavily disturbed areas, and/or steep terrain and/or with little to no intact soil due to cut-and fill railroad alteration or more recent grading or industrial excavation or landscape alteration.

Sudbury Substation 342 to Landham Road, Sudbury, MA — This segment spans from the Sudbury Substation 342 (Plates 1 and 2) to the inactive railroad/MBTA ROW (Plate 3) within the paved asphalt driveway (Plate 4). Soils primarily consist of Udorthents-Urban land complex (656) at Landham Road and the substation, with an area of Windsor loamy sand, 3 to 8 percent slopes (255B), between the disturbed areas. Windsor loamy sand is a favorable soil type for archaeological site locations and precontact site 19-MD-518 to the south adjacent to this area.

The substation is built on raised/filled land, with the access road to the substation also built-up on fill (Plate 3). The ground near the substation has been disturbed, and localized grading disturbance is noted closer to the rail bed. Soil conditions suggest poor drainage, but due to proximity to precontact site 19-MD-518, the area is given medium archaeological sensitivity where grading disturbance is minimal or absent. West beyond this visible disturbance, the rail bed is cut through a low wooded upland, with natural stratigraphy confirmed in soil cores. This area is considered to have medium to high archaeological sensitivity due to proximity to precontact site 19-MD-518. East of Landham Road, the rail bed is built with a low cut on the north side and a filled bed on the south side (Plate 5). Coring encountered fill, gravel refusal, and disturbance south of the rail bed at 25 m and 100 m east of Landham Road. Recent apartment building construction has taken place to the north, which has created grading disturbance close to the rail bed. To the south an open field with berms and grading disturbance is present.

The Landham Road Bridge and original grade crossing has been replaced in recent years, and an earthen bank has been built up on either side, drastically altering the setting. The East Sudbury Railroad Station was formerly located on the east side of the bridge south of the railroad (Plate 6). This area has been graded and filled, but the location of the former railroad station is given high historic sensitivity as the site could be buried under fill in this area. The location is across Landham Road from the Frank W. Goodnow/Wandla C. Ranstrom House (SUD.330) at 277 Landham Road, dating from ca.1900. The house lot was created from an 80-acre tract known as Smithfield.

Landham Road to Boston Post Road/Route 20, Sudbury, MA — This segment consists of wooded wetlands and low uplands near Hop Brook. The Project route crosses Hop Brook before reaching Boston Post Road/Route 20. Soils primarily consist of very poorly drained Scarboro mucky fine sandy loam, 0 to 3 percent slopes (6A), and very poorly drained Freetown muck, 0 to 1 percent slopes (52A), with very poorly drained Freetown muck, ponded, 0 to 1 percent slopes (53A) near Route 20. Localized areas occur of Hollis-Rock outcrop-Charlton complex on 15 to 25 percent slopes (104D) on uplands at mid-span, and excessively drained Windsor loamy sand, 3 to 8 percent slopes (255B), a favorable soil type for archaeological site locations, near Landham Road. Udorthents-Urban land complex (656) occurs at Landham Road and at a commercial complex to the north at the intersection of Landham Road and Route 20.

Starting at Landham Road, the historic archaeological site SUD-HA-14/the Lanham School site is nearby but presently under a traffic island in Landham Road by Boston Post Road/Route 20 north of the inactive railroad. The site does not extend south to the Project ROW. The uplands north of the rail bed cut west of Landham Road have been significantly altered. North of the railroad is the

location of precontact site 19-MD-924, which consists of an isolated find of one Transitional Archaic projectile point. But the location presently consists of a complex of businesses and parking lots across the area with significant grading and is considered to have a low sensitivity. To the south of the rail cut there has been grading disturbance of the uplands, but any undisturbed uplands are assessed as having a medium to high archaeological sensitivity.

The rail bed is terraced west throughout this area, with a cut on the north side and fill on the south side. South of the rail is low wet terrain, most of it in wetlands. North of the rail bed is primarily a steep graded slope with cut for the rail bed. Any undisturbed uplands in this area are assessed as having a medium to high archaeological sensitivity due to proximity to Hop Brook to the south and precontact site 19-MD-716 to the north. Most of the area has been disturbed within 40 ft of the rail bed.

West of the disturbed uplands the ground drops to the south into wetlands approaching a small brook. This low area has a former cattle crossing/pass, with a granite mile marker north of the raised railroad (Plate 7). There is also a concrete post in the same area (Plate 8) and three concrete bench supports, referred to as a "rail rest" on the 1914 railroad plans (Appendix I), a common feature along the railroad both between and near stations. Vegetation is thick in this area.

To the west of the wetlands and the small brook, the rail bed is slightly raised through an area of undulating terrain and across a somewhat graded terrace to the south along Hop Brook and adjoining wetlands, with low ground and wetlands to the south, and sloping and sometimes cut ground to the north. A metal signal tower is present on the north side of the rail bed (Plate 9), as well as a concrete electrical box and metal lid.

Approaching low uplands to the west on the north side of the rail bed, borrow pits were noted as well as a dump area partially in a borrow pit and partially on an upland knoll, mostly 40 ft beyond the rail bed. The dump includes a ca. 1930s automobile that has been partially disassembled with parts scattered about (Plate 10). Other railroad-related features were present west of this before the crossing of Hop Brook, including a toppled electrical box on an iron post with an associated concrete base, and a standing telegraph pole, both to the north of the rail bed. From this area the rail approaches the Hop Brook crossing. The north side of the ROW limits has a medium to high sensitivity in undisturbed uplands. South of the rail bed is low sensitivity wetlands.

Hop Brook is crossed by the Massachusetts Central Railway Bridge 127 (SUD.901) (Plates 11 and 12). The Massachusetts Central Railway Bridge 127 (SUD.901) is a plate-girder structure from 1881 and at the time of the MBTA bridge survey in 1987 was thought to be one of the four earliest plate-girder spans in the state rail system. The structure was modified in 1908 with the insertion of two wood-pile bents beneath the plate girders (Myruski and Meyer 2017).

Past the bridge, the Project route trends northwest (for the remainder of the Project route until just before Wilkins Street in Hudson) and passes a small concrete slab enclosure present to the north of the railroad in this area near Hop Brook (Plate 13). Other buried industrial features related to former mills may be present in the area, and although scoured by stream erosion, additional historic research and physical examination of the area is warranted. The rail bed is slightly raised through an area of undulating terrain and across a somewhat graded terrace south along Hop Brook. This area has a medium sensitivity both sides of the rail bed as there is intermittent grading disturbance and brook slope erosion, with low sensitivity in wetlands to the north.

The Project route approaches the Boston Post Road/Route 20 with Hop Brook adjacent to the north. The 1890 Boston & Maine Railroad Section House (SUD.282, Plates 14 and 15) is adjacent to the rail bed on the north side. This is one of only two railroad section houses on the MBTA commuter rail system. The section tool house is a one-story, gable-front, wood-frame structure with clapboard siding. It is one of numerous similar structures that once populated the rail alignment. Each section house was maintained by a small crew and housed a hand-propelled track car that was used in track inspections. This structure was likely used until the mid-1950s after which it stood vacant until 1971 when it was restored by P.R.I.D.E. (Post Road Indeed Deserves Effort) (Myruski and Meyer 2017). The MHC opinion statement lists the structure as NR-eligible within a district only. The building location and adjacent yard features are within an area considered to have a high sensitivity for archaeological cultural resources.

This area of the Boston Post Road (Plate 16) is within the George Pitts Tavern Historic District (SUD.P), a small district of 14 properties designated as a local historic district and listed in the State Register of Historic Places. The George Pitts Tavern Historic District is within the South Sudbury inventory area (SUD.B) and adjacent to the Sudbury First Industrial Area, a local historic district (SUD.D). Other historic districts within ¼ mile include the King Phillip Historic District (SUD.I), a local historic district on the State Register, and the Goodnow Library (SUD.K) at 21 Concord Road, a NR-listed Property. The George Pitts Tavern Historic District (SUD.P) is located along the south side of Boston Post Road and both sides of Maple Avenue between Boston Post Road and Maple Meadows. The 14 individual properties date from the 1800s and 1900s (SUD.30, 282, 334-336, 363-371). At its north end the district boundary is crossed by the Project ROW.

The Sudbury First Industrial Area (SUD.D) is a locally-designated district located entirely within South Sudbury (SUD.B). It straddles Boston Post Road near the Concord Road intersection and includes 13 individual properties. The boundary includes 1767 Milestone #24 (SUD.922), located near the northwest corner of Boston Post Road and Concord Road. This property is one of 40 similar highway markers along Boston Post Road that were collectively listed in the National Register on April 7, 1971. The district boundary extends southward across Hop Brook into the Project ROW, but the individual properties are all located approximately 300 feet or more from the Project ROW.

Boston Post Road/Route 20 to Union Avenue, Sudbury, MA — This segment consists of a narrow stretch of low flat terrain, along a drainage ditch adjacent to Station Road and commercial industries. Soils consist of Udorthents-Urban land complex (656) from Union Avenue east to very poorly drained Freetown muck, ponded, 0 to 1 percent slopes (53A) from mid-span to the Boston Post Road/Route 20.

This segment runs along the south side of a deep water-filled drainage ditch situated between the rail bed and Station Road (Plate 17). The route is low with dense brush. Other than the railroad bed and tracks, the only other feature identified was located near the edge of the vegetated railroad near Route 20 and consists of the partially buried metal base and post of what is likely a railroad-related feature. It may have been a sign post or base for an electrical device. This segment is assessed as having a low archaeological sensitivity due to disturbance, low terrain, and wetlands. Avoidance or further documentation of the metal post feature may be warranted.

Union Avenue to Horse Pond Road, Sudbury, MA — This segment spans gently undulating wooded terrain near residential developments to the north and an industrial complex to the south. Just west of Union Avenue two railroads (the Massachusetts Central Railway and the New York, New Haven, and Hartford Railroad) formerly intersected. Soils consist of excessively drained Windsor loamy sand, 0 to 3 percent slopes (255A), with very poorly drained Freetown muck, 0 to 1 percent slopes (52A) at wetlands to mid-span, followed by moderately well drained Deerfield loamy sand on 0 to 3 percent slopes (256A), with Udorthents-Urban land complex (656) to the south and along Union Avenue.

The former junction of the Massachusetts Central Railway (Project route) and the New York, New Haven, and Hartford Railroad is presently an open grassy area along a broad asphalt paved driveway to a lumber business. The latter railroad started as the Old Colony (Penn central) in 1871 from Concord to Framingham (identified as the Framingham and Lowell Railroad on the 1875 Beers Atlas), passing through the town center of Sudbury (MHC 1980a). The railroad tracks have been removed in this area and at Union Avenue, but a number of railroad-related features are present including a painted granite mile marker north of the rail bed west of Union Avenue (Plates 18 to 20). There is also a concrete marker and a 1950s building near or on the site of the former junction railroad station (Plate 19). The manager of the present building recalled that the railroad station was razed in the 1950s and was adjacent to the west. This is the location of historic archaeological site SUD-HA-26, the South Sudbury Railroad Station site, a ca. 1870-1881 junction depot. The date of ca. 1850-1875 on the site inventory form is entirely too early, as the earliest of the railroads did not open until 1871; the 1875 Beers atlas also depicts the depot as being south of this area along the north side of the Boston Post Road/Route 20, though that depot could have been moved by 1889 to the location noted for site SUD-HA-26, as the depot is shown on the 1889 Walker Atlas on the south side of Massachusetts Central Railway just east of the railroad junction. Besides archaeological site SUD-HA-26 and noted granite and concrete markers, there are small concrete pads and a granite slab visible on the ground surface, the latter possibly from foundations or a cover capping a well. Despite previous impacts to this area, the location is assessed as a high sensitivity area.

West of the rail junction, three concrete bench supports for a rail rest are present. The rail bed is raised on a bed of fill in the vicinity of a wetland crossing, with an excavated pond just over 40 ft north of the rail bed. Past the wetlands there are sandy uplands to the north of the rail bed; the sandy uplands exhibit natural stratigraphy (medium sensitivity). One concrete marker and four electrical boxes were present along the north side of the rail bed (Plates 21 to 24). The terrain rises and the rail bed is in a cut through the wooded uplands of medium archaeological sensitivity. To the south cleared and developed land with asphalt pavement and buildings characterizes the land south of the Project ROW from Union Street past the Raytheon fence (Plate 25).

To the northwest approaching Horse Pond Road, low terrain and wetlands and an unnamed brook are present. The first of several intermittent telegraph line poles was seen on the north side of this stretch (Plate 26). The rail bed is raised on fill 8 to 10 ft high, with a concrete culvert at the intermittent stream (Plates 27 and 28).

Immediately east of Horse Pond Road (Plate 29) the terrain is wooded and level, with residences to the north and south. This is a narrow stretch of medium sensitivity.

Horse Pond Road to Peakham Road, Sudbury, MA – This segment spans gently undulating wooded terrain bordering on the back lots of adjacent residential developments. Soils consist of excessively drained Windsor loamy sand, 3 to 8 percent slopes (255B), with very poorly drained Freetown muck, 0 to 1 percent slopes (52A) at Dudley Brook.

Continuing west of Horse Pond Road, a number of railroad features are present in wooded level terrain, including a large signal tower (Plate 30, cover) present on the south side of the railroad (Plate 78), and an adjacent covered circular electrical box (Plate 31). The signal tower was over 15 ft in height and had a steel ladder affixed to it. Two telegraph line poles were also noted to the north of the rail, with plastic and rubber insulators on one crossbeam. A granite mile marker was noted on the north side of the rail bed (Plate 32), with a rail rest of three concrete bench supports nearby to the east. The terrain undulates and the rail bed is set in a shallow cut (Plate 33). A railroad electrical box was located on the north side of the rail bed approaching Dudley Brook (Plate 34). The wooded, level and slightly undulating terrain is assessed as having medium archaeological sensitivity.

Dudley Brook and wetlands were present on both sides of the rail bed, with the rail bed raised in this area (Plate 35), crossing Dudley Brook over a low culvert of double pipes of corrugated galvanized iron set below mortared granite. West of this the rail bed continues through a cut in undulating terrain east of Peakham Road (Plate 36). Immediately east of Peakham Road there was an electrical box, possibly for a gate crossing or signal, on the north side of the rail bed (Plate 37). The wooded, level and slightly undulating terrain is assessed as having medium archaeological sensitivity, while the wetlands, railroad cuts and steep terrain is assessed as low archaeological sensitivity.

Peakham Road to Dutton Road, Sudbury, MA – This segment spans gently undulating wooded terrain near residential developments. Soils primarily consist of excessively drained Windsor loamy sand, 3 to 8 percent slopes (255B), a favorable soil type for archaeological site locations, and excessively drained Hinckley loamy sand, on 8 to 25 percent slopes (253C, 253D). Other soil types include Charlton-Hollis-Rock outcrop complex on 3 to 8 percent slopes (103B) nearer Dutton Road at a railroad cut.

The Wayside Inn Historic District/Peakham-Southwest District (SUD.F) abuts the south side of the Project route from Peakham Road to Dutton Road. The Wayside Inn Historic District/Peakham-Southwest District is a locally-designated, 745-acre, mostly rural tract with a historic core near its southwest corner; it is listed on the State Register. No inventoried structures are adjacent to the Project route, the nearest being SUD.308 at 290 Dutton Road, over 500 ft to the south. The core area includes the Wayside Inn (SUD.4), dating from 1716, Redstone School (SUD.3), dating from 1798 and rebuilt in 1927, Wayside Inn Grist Mill (SUD.1), dating from ca.1927, and Martha-Mary Chapel (SUD.2), dating from ca.1938. The historic core was listed in the National Register on April 23, 1973 as Wayside Inn Historic District (SUD.E). While the local district boundary is located adjacent to the Project ROW on its northeast side for a distance of ca. 3,000 feet, the buildings of the historic core are located more than a mile southwest of the Project ROW.

The rail bed west of Peakham Road is raised above the surrounding wetlands and a small brook on a high bed of fill (Plate 38). Toward Dutton Road the railroad continues through level wooded terrain followed by uplands with a deep railroad cut through steep terrain and stone retaining

walls on the north and south sides (Plate 39). One concrete marker was identified in this area along the north side of the railroad where the cut was less deep. Coring south of the rail bed encountered fill over natural undisturbed stratigraphy.

The area between Dutton Road and Peakham Road is assessed as having low sensitivity in wetland areas and steep (cut) terrain. Areas with shallower cuts (less than 4 ft) retain medium to low sensitivity in the undulating wooded terrain beyond the railroad cut, most of which is outside of the Project ROW.

Dutton Road to Old Concord Road/Marlboro Road and the Hudson/Marlborough Line, Sudbury, MA – This segment spans gently undulating wooded terrain and the Hop Brook and related wetlands. Soils east of the Hop Brook wetlands to Dutton Road consist of excessively drained Hinckley loamy sand, 8 to 15 percent slopes (253C), with small areas of excessively drained Windsor loamy sand, 0 to 3 percent slopes (255A) and very poorly drained Freetown muck, 0 to 1 percent slopes (52). Soils primarily consist of excessively drained Carver loamy coarse sand on 0 to 8 percent slopes (259A, 259B) and excessively drained Hinckley loamy sand, 3 to 8 percent slopes (253B) from Old Concord Road to Hop Brook, with localized areas of Windsor loamy sand, 0 to 3 percent slopes (255A) and Charlton-Hollis-Rock outcrop complex on 3 to 8 percent slopes (103B) just east of Old Concord Road. At Hop Brook soils consist of very poorly drained Freetown muck, ponded, 0 to 1 percent slopes (53A).

The west side of Dutton Road south of the rail bed was the former site of the Wayside Inn Railroad Station; presently the area consists of level terrain in a wooded setting, an area of high sensitivity (Plate 40). Concrete bench supports for a rail rest are present on the north side of the rail bed further west (Plate 41), and a granite mile marker was noted on the north side of the rail bed west of Dutton Road (Plate 42). The rail bed continues on a raised bed, with a steep drop towards wetlands to the south, and level, wooded terrain to the north (Plate 43). Medium sensitivity is conferred outside of wetlands, with high sensitivity for the Wayside Inn Station site.

The terrain east of Hop Brook past the initial wetlands includes the rail bed within a cut, with small berms on either side (Plate 44). The Walker Garrison House archaeological site (SUD-HA-30) is to the south of this area on the land of the Willard Walker estate. The house dates ca 1667 and burned in 1905. According to the MHC inventory form it was set fire to by the "2:17 train," implying close proximity to the railroad. The house was north of a bend in Dutton Street and to the east of an unnamed deadend road. From Bing aerials a rectangular foundation measuring approximately 40-x-35 ft in size, likely that of the Walker Garrison House, can be seen on the grassy lawn of the Walker estate, approximately 50 ft (15.2 m) from the rail bed to the nearest (northeast) corner of the foundation. While this feature can be avoided by the Project, this segment of the Project outside of the rail bed cut is conferred high sensitivity. There is also an apparent large rectangular foundation southeast of the one noted above, which may be that of a later barn on the same estate. The colonial settlement of the property precedes the railroad by over 200 years and may contain archaeological deposits from other unrecorded structures or activities related to the early settlement of this area and is conferred high sensitivity

The rail bed crosses Hop Brook on the Massachusetts Central Railway Bridge 128 (SUD.900) at Milepost #22.24 (Plates 45 and 46). This plate-girder structure dates from 1881; at the time of the MBTA bridge survey in 1987 it was thought to be one of the four earliest plate-girder spans in the

state rail system. The structure was modified in 1908 with the insertion of two wood-pile bents beneath the plate girders.

West of the bridge the rail bed passes through a sand barrens environment that includes an excavated sand pit on the south side (Plate 47). This excessively drained area is conferred medium to high sensitivity near the brook on minimally disturbed or undisturbed uplands. Following this the rail bed is cut through a wooded rise (Plate 48) with good integrity outside of the cut. Approaching the location of what the 1914 railroad plans show as an "abandoned highway" that is otherwise not shown on any of the historic maps consulted, a fieldstone-lined cellar hole for a house foundation was identified 46 ft (14 m) south of the rail bed and east of wetlands (Plate 49). The cellar foundation measures 20 ft on a side and likely dates between the colonial period and the early nineteenth century. No previously reported archaeological sites are in this area and no historic structures show in the area on nineteenth century maps. Given the early date of the Walker Garrison House (SUD-HA-30) to the east of Hop Brook, this site could relate to the early settlement of the area. The foundation is located in the Memorial Forest and should be avoided and protected. The upland area within 150 ft (45.7 m) of the foundation is considered to have a high sensitivity, with medium sensitivity for uplands further east and west outside of the rail cut.

West of the cellar hole the rail bed is elevated through wetlands and adjacent low areas by a height of about 10 ft, before leveling off with the surrounding terrain (Plate 50). The terrain becomes more level for a stretch, but to the north of the rail bed an artificially level surface was apparent that ran parallel with the railroad. Coring was unable to penetrate more than 10 cm along the route. The 1950 USGS Maynard quadrangle indicates a railroad spur and a road in the near vicinity which has apparently impacted this area.

To the northwest approaching the Old Concord Road/Marlboro Road (now a restricted-access dirt road), the railroad is cut through a wooded rise with the sides of the cut 7 to 8 ft deep (Plate 51); there is also a gas pipeline right-of-way in this area as well as grading and berms. Undisturbed areas are conferred a medium sensitivity, but this generally falls outside of the Project ROW.

Old Concord Road/Marlboro Road is immediately west of the tri-town junction of Hudson/Marlborough/Sudbury, and the modern (1993) granite marker is located right in the middle of the rail bed (Plate 52). While one side of the marker bears the date 1993, the other three sides each have a letter designation for the town they represent (H/M/S).

The non-wetland, wooded uplands areas north and south of the rail bed with intact natural stratigraphy are assessed as having medium sensitivity. Wetlands and cut and fill areas, roadway and pipeline disturbed areas are considered to have low sensitivity. The Walker Garrison house site and the newly identified cellar foundation north of the rail bed are potentially significant historical archaeological sites conferring high sensitivity. Uplands in the sand barrens west of Hop Brook are conferred medium to high sensitivity depending upon the extent of prior disturbance; the sand pit is conferred low sensitivity.

Old Concord/Marlboro Road and the Hudson/Marlborough/Sudbury Line to White Pond Road, Hudson, MA – This segment spans gently undulating wooded terrain and agricultural fields. Soils primarily consist of excessively drained Windsor loamy sand, 0 to 3 percent slopes (255A), a favorable soil type for archaeological site locations, with localized areas of moderately

well drained Deerfield loamy sand on 0 to 3 percent slopes (256A), and excessively drained Carver loamy coarse sand on 3 to 8 percent slopes (259B), both near Old Concord Road/Marlboro Road.

Northwest of the tri-town junction Hudson/Marlborough/Sudbury granite marker (Plate 52) there is a granite mile marker for the railroad noted north of the rail bed in dense brush (Plate 53). This is just to the northwest of the Old Concord Road/Marlboro Road crossing of the rail bed (Plate 54). Three concrete bench supports for a rail rest were also noted west of granite marker on the north side of the rail bed. South of the rail bed low open fields and low berms and mounds are near the rail bed (Plate 55). This seemed to characterize the south side of the rail bed to White Pond Road, with the rail bed being somewhat raised in this area (Plate 56).

To the northwest to White Pond Road, the terrain north of the rail bed is mostly level and wooded, with localized wetlands in places. Coring in the area showed that natural stratigraphy is present. The Natick Research and Development Laboratories (SUD.C) in Hudson and Stow encompasses part of this area and consists of an 81-acre, largely-wooded tract on the east side of Bruen Road, south of Hudson Road. It is part of the U.S. Army Natick Soldier Systems Center (NSSC) or Natick Labs, a military research complex in Natick, Massachusetts. The installation is charged with the research and development, including fielding and sustainment, of food, clothing, shelter, airdrop systems, and other service member support items for all branches of the military (NSSC 2017). The parcel boundary is located adjacent to the Project ROW for a distance of ca. 1,700 ft (518.1 m). The nearest military-related buildings (not accessible from public ROW) are located ca. 700 ft (213.3) north of the Project ROW. The area between these buildings and the Project ROW is heavily wooded.

The non-wetland wooded areas north of the rail bed that retain natural stratigraphy are assessed as having medium sensitivity for archaeological resources. South of the rail bed the terrain is assessed as having a low sensitivity due to disturbance, low terrain, and wetlands.

White Pond Road to Parmenter Road, Hudson, MA – This segment spans gently undulating wooded terrain, wetlands, and more undulating wooded terrain. Soils primarily consist of excessively drained Windsor loamy sand, 0 to 8 percent slopes (255A, 255B), a favorable soil type for archaeological site locations, with very poorly drained Freetown muck, 0 to 1 percent slopes (52A) across wetlands. Other soil types include well drained Paxton fine sandy loam on 8 to 15 percent slopes, extremely stony (307C), and moderately well drained Deerfield loamy sand on 0 to 3 percent slopes (256A), both present east of Parmenter Road and west of the wetlands.

From White Pond Road in Hudson (Plate 57) the rail bed continues west through a level wooded area and then on an elevated bed through broad hydric wetlands (Plate 58). West of the wetlands, the rail bed is cut through several knolls, sometimes with stone retaining walls (Plate 59). The rail bed passes through undulating wooded terrain. Coring in the area confirmed that natural stratigraphy is present. A granite mile marker was present north of the rail bed in a more level stretch near a knoll (Plates 60 and 61). To the northwest of this approaching Parmenter Road (a.k.a. Ordways Crossing), three concrete supports for a rail rest bench were noted on the north side of the rail bed (Plate 62). The Ordway Railroad Station was located on the south side of the tracks on the east side of the road (Plate 63) according to the 1922 Walker atlas (Figure 14), while the 1914 railroad plans suggest the station shelter was located north of the tracks (Appendix I); in

either case the locale is considered highly sensitive. Residences are presently located to the north and south of the Project ROW.

The non-wetland wooded areas that retain natural stratigraphy are assessed as having a medium sensitivity for archaeological resources. The vicinity of the Ordway Station is conferred high sensitivity.

Parmenter Road to Main Street, Hudson, MA – This segment spans gently undulating (low rises and dips) wooded terrain adjacent to a golf course to the south nearer Parmenter Road and industrial lots to the north along Main Street. Soils consist of excessively drained Windsor loamy sand, 0 to 3 percent slopes (255A), a favorable soil type for archaeological site locations; moderately well drained Deerfield loamy sand on 0 to 3 percent slopes (256A) near a brook; and excessively drained Carver loamy coarse sand on 0 to 3 percent slopes (259A) near Parmenter Road, also a favorable soil type for archaeological site locations. Udorthents-Urban land complex (656) characterizes Main Street and adjacent lots.

West of Parmenter Road, natural water resources in this area are limited to an intermittent stream in the vicinity of the golf course in an area of undulating wooded terrain (Plate 64). The golf course to the south borders the wooded terrain. Precontact site 19-MD-932, the Ordway Farm, is located farther south and consists of six artifacts recovered by a surface collection. To the north wooded terrain is present on either side of the intermittent stream, with a stone field wall noted. The rail bed is at times in a shallow cut or on a low raised bed through this segment. The golf course is within the NR-listed Goodale Homestead parcel at 100 Chestnut St, Hudson (HUD.F), which abuts the Project route, but the NR-listed homestead itself (HUD.103) is over a half mile from the Project route. The Goodale Homestead (HUD.F/103) consists of a 266-acre tract that is located adjacent to the Project ROW for a distance of ca. 1,500 ft (457 m) along its northeast side. The farmstead consists of a 2.5-story timber-frame dwelling, dating from 1702, a barn, and several other outbuildings. The farmstead is located on the southwest side of the tract, ca. 3,600 ft (1097 m) from the Project ROW. Aside from the immediate vicinity of the farm buildings, the heavily-wooded tract has been redeveloped as the Charter Oak Country Club.

In the east half of this segment, a round concrete electrical box (Plate 65) was noted south of the rail bed, possibly for a signal light no longer present. To the northwest a concrete railroad whistle post (Plate 66) was also noted to the south. Approaching Main Street the rail bed is in a cut several feet deep, passing several industries and parking lots to the north and one on the south, with otherwise gently undulating wooded terrain (Plates 67 and 68). While there are variable degrees of disturbance to the north of the rail bed, interspersed with more intact topography, to the south of the rail bed the woods retain intact natural stratigraphy.

The nineteenth-century Hudson Poor Farm was located in the parcel to the west adjoining the railroad ROW south of Main Street and shown as the Alms House on the 1856 Walling map (Figure 11). Initially established in 1821 from a prior farm, the farm was in operation as a public institution until 1942, with demolition of the buildings in the 1960s (Bell 1993). The building nearest to the Project ROW was the barn, which was located approximately 50 ft to the west of the Project ROW. Presently a self-storage business with over a half dozen buildings is located on the parcel, with a water retention basin near the tree line by the Project ROW. Any archaeological deposits from the Hudson Poor Farm near the Project ROW are likely to be peripheral to the Poor

Farm; but the wooded, non-wetland, areas that retain natural stratigraphy along this segment are assessed as having a medium sensitivity for archaeological resources.

Main Street to Fort Meadow Brook, Hudson, MA – This segment spans a short section of wooded upland, an industrial complex, a large gravel pit and a broad wetland. Soils consist of Udorthents-Urban land complex (656) from Main Street through the industrial complex, a large gravel pit (600) on the north side of the rail line, and very poorly drained Freetown muck, 0 to 1 percent slopes (52A) across the expansive wetland around Fort Meadow Brook. A thin stretch of excessively drained Hinckley loamy sand, 8 to 15 percent slopes (253C) is located north of the rail bed in a wooded area near Main Street.

This portion of the rail bed is north of the former Hudson Poor Farm, where the Poor Farm Cemetery (HUD-HA-1) and a precontact find spot (19-MD-895) are present further south near Main Street. South of the rail bed in this area are parking lots and businesses, while north of the rail bed the ground is wooded and includes a knoll (Plate 69). This wooded section is south of and adjacent to precontact site 19-MD-514, identified from collector activities but without description. To the south of the rail bed much of the area has been excavated out for a parking lot. The wooded knoll is conferred high sensitivity.

An industrial complex follows to the west on both sides of the rail bed, with a granite railroad mile marker (Plate 70) and three concrete bench supports for a rail rest located near the mile marker. West of this where the paved access road crosses to a business complex (Plate 71). This is followed to the west by an industrial complex north of the rail bed, consisting of a former gravel pit and used for stockpiled fill, and several industries (Plate 72). This former gravel pit was the location of precontact site 19-MD-513, identified from collector activities with six artifacts, including a Small Stemmed point, three tools and two chipping waste. The area has significant disturbance and is conferred low sensitivity.

The rail bed is built up along expansive wetlands of Fort Meadow Brook approaching a railroad bridge over Fort Meadow Brook. Hydric wetlands are present both north and south of the raised rail bed; low sensitivity. The old rail line bridges Fort Meadow Brook with a dilapidated wooded bridge listed in the MHC inventory as HUD.908 (Plate 73). The Fort Meadow Brook Milestone #25.37 Bridge (HUD.908) dates from 1939 and is a timber-pile trestle consists of three six-pile bents. It is a modern example of a common bridge form, widely used throughout the region (Candice and Meyer 2017).

In summary, the wooded/knoll area near Main Street retains natural stratigraphy and is assessed as having a high sensitivity for precontact archaeological resources. The remainder of this segment is assessed as having a low sensitivity for archaeological resources due to either disturbance (right up to the edge of the wetlands) or hydric wetlands.

Fort Meadow Brook to Chestnut Street, Hudson, MA – This segment spans the wetland around Fort Meadow Brook, open disturbed ground with a large sand and gravel pit, and a short area of wooded undulating terrain. Soils consist of very poorly drained Freetown muck, 0 to 1 percent slopes (52A) across the expansive wetland around Fort Meadow Brook, and excessively drained Hinckley loamy sand, 0 to 8 percent slopes (253A, 253B) from Chestnut Street to the large gravel pit (600).

From the Fort Meadow Brook Railroad Bridge (Plate 73), the raised rail bed continues west across a large body of water consisting of hydric wetlands surrounding Fort Meadow Brook (Plate 74). From the west shore of the wetlands, the rail bed runs through a significantly disturbed area (Plate 75), with graded, excavated, open land to the north, and otherwise irregular undulating terrain caused by earth-moving machinery to the south. The USGS maps indicate that gravel pits are present both north and south of the inactive railroad. Coring confirmed stripped-off soil horizons. East of Chestnut Street about 50 ft, a remnant of a mortared brick foundation or footer was visible north of the rail bed within a graveled access road (Plates 76 and 77). This is the location of the Gleasondale railroad train station (Figure 14), also on the 1952 Hudson USGS quadrangle. This historic archaeological site has visible evidence of a brick foundation (Plate 76), and is considered a high sensitivity area. The remainder of the segment has suffered from significant earth-moving activities or is located in wetlands.

In general, this segment is assessed as having a low sensitivity for archaeological resources due to either disturbance or hydric wetlands. The noted brick foundation of the Gleasondale Station is an archaeological site of high sensitivity.

Chestnut Street to Wilkins Street, Stow and Hudson, MA – This segment spans wooded and agricultural land from Chestnut Street to Wilkins Street. Soils consist of excessively drained Hinckley loamy sand, 3 to 8 percent slopes (253B) near Chestnut Street, with Freetown muck to the north of the route for most of the segment. Somewhat excessively drained Merrimac fine sandy loam on 0 to 3 percent slopes (254A) is near Wilkins Street, followed by very poorly drained Scarboro mucky fine sandy loam, 0 to 3 percent slopes (6A) in a wooded area; and well drained Paxton fine sandy loam on 25 to 35 percent slopes (305E), within a steep orchard.

Chestnut Street is built-up on a high bed of fill, with steep banks to either side down to the inactive railroad (Plate 78). Formerly there was a bridge over the railroad at this location. To the west, a small portion of the town of Stow is present to the north of the Project route. The Gleasondale inventory area (STW.D) is located north of the Stow line within one-quarter mile of the Project route, but no structures are within view. A knoll is present in Stow north of the rail bed just west of the wetlands that span to Chestnut Street. The knoll is considered to have high archaeological sensitivity for precontact sites. Most of the ground north of the rail bed and west of the Stow line in Hudson consists of wooded terrain (Plate 79), generally with medium archaeological sensitivity except in wetlands. A large masonry and concrete cattle pass is present under the railroad west of the Stow line (Plate 80). On the north side of the rail bed to the west are three concrete supports for a rail rest bench along the railroad (Plate 81) and a granite mile marker (Plate 82). A large orchard is present on the south side of the rail bed that drops steeply down to the mostly level rail bed, with rocky slopes (Plate 83). The entire orchard area to the south is assessed as having a low sensitivity due to steep rocky slope and prior grading.

From the orchard to Wilkins Street there are some wooded rises within 40 ft of the rail bed that may retain archaeological sensitivity. Stone field walls were also noted and coring revealed intact natural stratigraphy. This area is considered to have medium archaeological sensitivity. Following the crossing of the unnamed stream and wetlands, intact wooded terrain is present north and south along the raised rail bed, which is significantly raised above the surrounding landscape by a height of 10 ft or more, with low wooded ground to the north and south, some of it wetlands. Residential development is present south and partly north of the rail bed. Just east of Wilkins Street is a possible location for the former Gleason Junction Railroad Station on the south side of the rail bed (Plate 84), based on the 1922 Walker atlas (Figure 14). The area is presently disturbed

with piles of fill, and the 1914 railroad plans do not indicate this being the location of the station site. The location is given high sensitivity until additional research can determine if this is the location of the former railroad station. At Wilkins Street the Project route drops down a steep bank to the road below (Plate 85). A railroad bridge formerly crossed over Wilkins Street, with concrete rubble evident on the north side of the crossing at the toe of the railroad embankment.

Wilkins Street to Forest Avenue to the Hudson Municipal Substation 384, Hudson, MA – From Wilkins Street the proposed New Line/Project route will be set within the existing roadway. The inactive railroad previously crossed Wilkins Street over a bridge, with the earthen rail bed still remaining on either side of the road (Plate 85). The Project route then proceeds south within Wilkins Street through a residential neighborhood (Plate 86). The Project route continues straight on Wilkins Street through the Main Street intersection (Plate 87), where there is a name change of the roadway to Forest Avenue. The Project route continues on Forest Avenue past Glendale Road (Plate 88), residences and a school, and then past Old North Road (Plate 89), and John Robinson Drive (Plate 90), at which point the neighborhood becomes one of a mixed commercial and residential area approaching the Marlboro Street intersection (Plate 91). From here to the Hudson Substation property Forest Avenue is lined with ornamental stone walls, initially on both sides (Plate 92 and 93), then only along the south side of the road. The approaching driveway is asphalt paved to Hudson Municipal Substation 384, with a parallel graded dirt access road to the west of the asphalt (Plate 94). Grading has taken place around and within Hudson Municipal Substation 384 (Plates 95 and 96). Soils from the substation to Forest Avenue consist of somewhat excessively drained Merrimac-Urban land complex on 0 to 8 percent slopes (626B), which consist of excavated and filled land, a disturbed soil type. The entire Project route from Wilkins Street to the Hudson Municipal Substation 384 is considered to have a low sensitivity for below ground cultural resources due to prior grading and road and utility disturbance.

4.3 ARCHAEOLOGICAL SITES IDENTIFIED

Six railroad station sites, a railroad section house and two colonial residential sites have been noted along the Project route. Of these nine historic archaeological sites, two were previously inventoried as archaeological sites and one of the sites has an unclear location with respect to the Project route. These sites are summarized in Table 4. No new precontact archaeological sites have been identified as a result of the archaeological reconnaissance survey and previously recorded precontact sites have not been confirmed by research as being within the Project ROW; however, archaeologically sensitive areas have been identified along the Project corridor, including several adjacent precontact sites, and these areas will be discussed in Section 4.4.

In addition, the **Central Massachusetts Railroad** appears to possess significance as a historical resource. It is a linear complex with numerous contributing components. Within the project ROW, four of these components were previously identified as individual historic properties:

- **Boston and Maine Railroad Section Tool House** (SUD.282) is located immediately northeast of the former railroad alignment. Dating from 1890, the section tool house is a 1-story, gable-front, wood-frame structure with clapboard siding. It is one of numerous similar structures that once populated the rail alignment. Each section house was maintained by a small crew and housed a hand-propelled track car that was used in track inspections. This structure was likely used until the mid-1950s after which it stood vacant until 1971 when it was restored by P.R.I.D.E. (Post Road Indeed Deserves Effort).
- **Massachusetts Central Railway Bridge 128** (SUD.900), Hop Brook at Milepost #22.24. This plate-girder structure dates from 1881; at the time of the MBTA bridge survey in 1987 it was thought to be one of the four earliest plate-girder spans in the state rail system. The structure was modified in 1908 with the insertion of two wood-pile bents beneath the plate girders.

- **Massachusetts Central Railway Bridge 127** (SUD.901), Hop Brook at Milepost #19.47. This plate-girder structure dates from 1881; at the time of the MBTA bridge survey in 1987 it was thought to be one of the four earliest plate-girder spans in the state rail system. The structure was modified in 1908 with the insertion of two wood-pile bents beneath the plate girders.
- **Fort Meadow Brook Milestone #25.37 Bridge** (SUD.908) Dating from 1939, this timber-pile trestle consists of three six-pile bents. It is a modern example of a common bridge form, widely used throughout the region.

The Central Massachusetts Railroad began in 1868 with authorization to construct the Wayland & Sudbury Branch Railroad on a 6.75-mile alignment between Stony Brook on the Fitchburg Railroad at Weston and Mill Village in Sudbury. The following year creation of the Massachusetts Central Railroad, a 98-mile route between Stony Brook and Northampton, was authorized, incorporating the Wayland & Sudbury Branch Railroad. The tracks to Hudson were opened on 1881, but the railroad languished until 1883 when it was reorganized as the Central Massachusetts Railroad. Service to Hudson was restored in 1885. In 1887 the line was leased to the Boston & Maine Railroad for 99 years. Freight traffic to points west increased with completion of the Hudson River bridge at Poughkeepsie in 1889. This bridge was built by the Central New England Railroad but was used by a consortium of railroads.

Between 1907 and 1914, the Boston & Maine Railroad maintained a successful freight business, but subsequent market conditions worked to marginalize this success. Despite setbacks the railroad embarked on a modernization program which helped to stabilize the Central Massachusetts line. World War I brought increased traffic, but the Great Depression brought decline. Rail traffic surged again during World War II and stabilized after the war. Despite the proliferation of automobiles, Wayland, Weston, and Sudbury became rail-commuter suburbs, and frequent trains provided service from these communities to Boston. While rail freight could not compete with motor freight, passenger service continued into the 1960s. This service was discontinued on November 26, 1971, and for the most part, the line became inactive in 1980 (Crouch and Conard 1975).

Steel rails and wood ties remain extant for most of the route. In addition to trackage, the following railroad-related features are identified by segment:

- *Landham to Boston Post*: East Sudbury Station; granite mile marker; concrete post; 3 concrete bench supports (rail rest); signal tower; concrete electrical box; electrical box on iron post with concrete base; concrete slab enclosure; bridge (SUD.901); concrete marker; tool house (SUD.282);
- *Boston Post to Union*: metal base and post for sign or electrical device;
- *Union to Horse Pond*: Site SUD-HA-26 South Sudbury Station; a junction depot, switch house, and freight house; granite slab concrete pads; concrete marker; granite mile marker; junction of 2 rail lines; 3 concrete bench supports (rail rest); 4 electrical boxes; concrete marker; concrete culvert at intermittent stream;
- *Horse Pond to Peakham*: signal tower; circular electrical box; 3 concrete bench supports (rail rest); granite mile marker; galvanized iron/granite culvert; electrical box;
- *Peakham to Dutton*: Wayside Inn Station; concrete marker; stone retaining walls;

- *Dutton to Old Concord*: concrete bench support (rail rest); granite mile marker; bridge (SUD.900);
- *Old Concord to White Pond*: granite mile marker; concrete bench support (rail rest);
- *White Pond to Parmenter*: Ordway Station; stone retaining walls; granite mile marker; 3 concrete bench supports (rail rest);
- *Parmenter to Main*: concrete electrical box; concrete marker;
- *Main to Fort Meadow Brook*: 3 concrete bench supports (rail rest); granite mile marker
- *Fort Meadow Brook to Chestnut*: bridge (HUD.908); brick foundation of Gleasondale Station; and
- *Chestnut to Wilkins*: granite mile marker; 3 concrete bench supports (rail rest); large masonry culvert; possible site of Gleason Junction Station.

The extant railroad features likely meet the 50-year age consideration of the National Register. Granite markers may date from the 1870s, while concrete and metal features may date from the early to mid-twentieth century. The property retains integrity of location and feeling, and much of the infrastructure is intact, although in deteriorating condition. To add further identification to the above features and to aid in identifying additional features that may be missing, buried, displaced or otherwise missed, the 1914 railroad plans were reviewed and itemized in Table 5. From the plans, for instance, it was learned that the concrete bench supports are referred to as rail rests and concrete posts with a "W" are referred to as whistle posts.

Table 5. Railroad features recorded on the 1914 Boston and Maine Railroad Right-of-Way and Track Maps.

Feature	Location	Town	Segment	Comments
East Sudbury Station	759+60	Sudbury	Sudbury Substation to Landham Rd	Plate 6 No visible remains
Flag signal	760+24.1	Sudbury	Sudbury Substation to Landham Rd	
Bridge #126	760+56	Sudbury	Landham Rd (Saxonville Rd)	Plate 6 Bridge replaced
Cattle pass #126A	766+20	Sudbury	Landham Rd to Main St	
Marker N-85/B-19	766+91	Sudbury	Landham Rd to Main St	Plate 7 Intact Granite Mile Marker
Culvert 126B stone box	771+04	Sudbury	Landham Rd to Main St	
P.C.	773 +43.72	Sudbury	Landham Rd to Main St	
P.T.	776 +85.57	Sudbury	Landham Rd to Main St	
Rail Rest	778 +45	Sudbury	Landham Rd to Main St	Concrete supports
Culvert 18" C.I. Pipe	779 +62	Sudbury	Landham Rd to Main St	
P.C.	780 +51.98	Sudbury	Landham Rd to Main St	
Signal	781 + 84.9	Sudbury	Landham Rd to Main St	Plate 9, partially intact
Culvert 18"C.I. Pipe	782 + 64	Sudbury	Landham Rd to Main St	
P.T.	787+82.5	Sudbury	Landham Rd to Main St	
P.C.	790 + 35	Sudbury	Landham Rd to Main St	
Bridge #127 Steel Deck Girder	792 + 86	Sudbury	Landham Rd to Main St	Crossing Landham Brook; SUD.900; Plates 11 and 12

Feature	Location	Town	Segment	Comments
Whistle Post	793 + 52	Sudbury	Landham Rd to Main St	
P.T.	800	Sudbury	Landham Rd to Main St	
Culvert 127A 24" C.I.P.	804 + 79	Sudbury	Landham Rd to Main St	
Whistle Post	805 + 75.6	Sudbury	Main St/Boston Post Rd	
Sec. Ho.	806 + 09	Sudbury	Main St/Boston Post Rd	Section House Plates 13-15
Auto Highway flashers	807 + 07	Sudbury	Main St/Boston Post Rd	
P.S.	807 + 80	Sudbury	Main St to Union Ave	
P.C.	810 + 35	Sudbury	Main St to Union Ave	
Culvert 127B C.I.P 2.5' x 1.5' St. Box	813 + 83	Sudbury	Main St. to Union Ave	
P.T.	814 + 86.5	Sudbury	Main St to Union Ave	
Signal	818 + 79.5	Sudbury	Union Ave	
Crossing Sign	818 + 88.0 819 + 21.4	Sudbury	Union Ave	
Marker N-84/B-20	819 + 83	Sudbury	Union Ave	Intact Granite Mile Marker Plates 18, 20
South Station	820 + 26	Sudbury	Union Ave	South Sudbury Station site (SUD-HA-26) under pavement, Plate 18
Lowell RR crossing	820 + 63 820+ 84	Sudbury	Union Ave	
Whistle Post	821 + 1.0	Sudbury	Union Ave	Plate 19
Signal E-2	822 + 82	Sudbury	Union Ave to Horse Pond Rd	
P.S.	823+ 07	Sudbury	Union Ave to Horse Pond Rd	
Rail Rest	824 + 49	Sudbury	Union Ave to Horse Pond Rd	Concrete supports
Culvert 127C 1'x2' St. Box	828 + 19	Sudbury	Union Ave to Horse Pond Rd	
Space Limit	828 + 48.7	Sudbury	Union Ave to Horse Pond Rd	
Whistle Post	832 + 41	Sudbury	Union Ave to Horse Pond Rd	
Culvert 127D 1'x2'St Box	844 +17	Sudbury	Union Ave to Horse Pond Rd	
Rail Rest	850 + 75	Sudbury	Union Ave to Horse Pond Rd	Concrete supports
Whistle Post	852 + 29	Sudbury	Union Ave to Horse Pond Rd	

Feature	Location	Town	Segment	Comments
Culvert 127E 2'x2' Conc. Box	860 + 60	Sudbury	Union Ave to Horse Pond Rd	Plate 27
Crossing sign	865 + 74	Sudbury	Horse Pond Rd	
Block Sig #M208	870 + 0	Sudbury	Horse Pond Rd to Peakham Rd	Partially intact, Plate 30
Rail Rest	872 + 25	Sudbury	Horse Pond Rd to Peakham Rd	Concrete supports
Marker N-83 B-21	872 + 67	Sudbury	Horse Pond Rd to Peakham Rd	Intact Granite Mile Marker Plate 32
Whistle Post	877 + 55.4	Sudbury	Horse Pond Rd to Peakham Rd	Gate. Wood Box
Whistle Post	878 + 87.5	Sudbury	Horse Pond Rd to Peakham Rd	
Culvert #127F Dble 3x3 St Box	882 + 06	Sudbury	Horse Pond Rd to Peakham Rd	
Auto Highway flashers	no data	Sudbury	Peakham Rd	Plate 37
Culvert #127G 2'x2' conc. Box	894 + 80	Sudbury	Peakham Rd to Dutton Rd	
Culvert #127H 2.5'x3' conc. Box	894 + 80	Sudbury	Peakham Rd to Dutton Rd	
Culvert #127I 1.5'x2' conc. Box	903 +49	Sudbury	Peakham Rd to Dutton Rd	
Whistle Post	904 +11.2	Sudbury	Peakham Rd to Dutton Rd	
1'x1'xSt. Box	905	Sudbury	Peakham Rd to Dutton Rd	
Whistle Post	908 + 28.2	Sudbury	Peakham Rd to Dutton Rd	
Crossing Sign	921 + 28 921 + 63	Sudbury	Dutton Rd	
Flag Stop	921 + 74	Sudbury	Dutton Rd	
Wayside Inn Station	921 + 74	Sudbury	Dutton Rd	Crossing Abandoned Hwy Plate 40, no remains visible
Rail Rest	924 + 24	Sudbury	Dutton Rd to Hudson Town line	Concrete supports Plate 41
Marker N-82 x B-22	925 + 46	Sudbury	Dutton Rd to Hudson Town line	Intact Granite Mile Marker Plate 42
Culvert #127J 2'x2' St. Box	928 + 26	Sudbury	Dutton Rd to Hudson Town line	
Whistle Post	934 +82.2	Sudbury	Dutton Rd to Hudson Town line	
Bridge #128 Dk.Pl. Gir	938 + 03	Sudbury	Dutton Rd to Hudson Town line	SUD.901 Plates 45 and 46

Feature	Location	Town	Segment	Comments
Rail Rest	947 + 60	Sudbury	Dutton Rd to Hudson Town line	Concrete supports
Whistle Post	964	Sudbury	Dutton Rd to Hudson Town line	near Abandoned Hwy
P.S.	969 + 12	Sudbury	Dutton Rd to Hudson Town line	
Culvert #129A 2'x2.5' St. Box	969 + 71	Sudbury	Dutton Rd to Hudson Town line	
Town Border	976 + 98.9	Sudbury-Hudson-Marlboro	Sudbury/Marlboro/Hudson Town line	Granite maker from 1993; Plate 52
Mile Post N-81 B-23	978 +32	Hudson	Marlboro Rd (Old Concord Rd) to Mirror Lake/White Pond Rd	Intact Granite Mile Marker Plate 53
Rail Rest	980 + 64.5	Hudson	Marlboro Rd to Mirror Lake/White Pond Rd	Concrete supports
Culvert #129B 12" VIT pipe	982 + 74	Hudson	Marlboro Rd to Mirror Lake/White Pond Rd	
Whistle Post	988 + 37.7	Hudson	Marlboro Rd. to Mirror Lake/White Pond Rd	
Whistle Post	990 + 60.3	Hudson	Marlboro Rd. to Mirror Lake/White Pond Rd	
Culvert #129C1? 12" Tile	991 + 18	Hudson	Marlboro Rd to Mirror Lake/White Pond Rd	
P.S.	993 + 56	Hudson	Marlboro Rd. to Mirror Lake/White Pond Rd	
Crossing Sign	1000 + 40	Hudson	Mirror Lake/White Pond Rd	
Crossing Sign	1000 + 82.2	Hudson	Mirror Lake/White Pond Rd	
Whistle Post	1014 + 91.5	Hudson	Mirror Lake/White Pond Rd to Ordway Cross (Parmenter Rd)	
Whistle Post	1028 + 1.1	Hudson	Mirror Lake/White Pond Rd to Ordway Cross	
Whistle Post	1031 + 34	Hudson	Mirror Lake/White Pond Rd to Ordway Cross	
Mile Post N-80 B-24	1031 + 34	Hudson	Mirror Lake/White Pond Rd to Ordway Cross	Intact Granite Mile Marker Plates 60 and 61
Rail Rest	1014 + 91.5	Hudson	Mirror Lake/White Pond Rd to Ordway Cross	Concrete supports Plate 62
Flag Stop	1038 + 78	Hudson	Ordway Crossing (Parmenter St)	

Feature	Location	Town	Segment	Comments
Shelter	1038 + 84	Hudson	Ordway Crossing	Ordway Station site Plate 63
Crossing Sign	1039 + 07	Hudson	Ordway Crossing	
Crossing Sign	1039 + 80	Hudson	Ordway Crossing	
Culvert #129C 24" Tile	1046 + 81	Hudson	Ordway Crossing to Main St Rt 62	
Whistle Post	1052 + 72.6	Hudson	Ordway Cross to Main St/Rt 62	
Whistle Post	1053 + 45.4	Hudson	Ordway Cross to Main St/Rt 62	Plate 66
Whistle Post	1057 + 41.4	Hudson	Ordway Cross to Main St/Rt 62	
Crossing Sign	1070 + 46	Hudson	Main St/Rt 62	
Crossing Sign	1070 + 96.2	Hudson	Main St/Rt 62	
Culvert 6x8 Open W.B. 12" C.I.Pipe	1070 + 40.6	Hudson	Main St/Rt 62 to Chestnut Street	Auto Flasher & Wig Wag
P.S.	1073 + 72.5	Hudson	Main St/Rt 62 to Chestnut Street	
P.S.	1077 + 93	Hudson	Main St/Rt 62 to Chestnut Street	
Whistle Post	1084 + 13.4	Hudson	Main St/Rt 62 to Chestnut Street	
Rail Rest and Mile Post N-79 B-25	1085 + 81	Hudson	Main St/Rt 62 to Chestnut Street	Concrete supports; Intact Granite Mile Marker Plate 70
Farm Crossing	1087 + 14	Hudson	Main St/Rt 62 to Chestnut Street	
Bridge #130	1103 + 78	Hudson	Main St/Rt 62 to Chestnut Street	
Rail Rest	1110 + 95	Hudson	Main St/Rt 62 to Chestnut Street	Concrete supports
P.C.	1115 + 9	Hudson	Main St/Rt 62 to Chestnut Street	
Tell Tale	1119 + .09	Hudson	Chestnut Street	
Bridge #131	1119 + 37	Hudson	Chestnut Street	Crossing Fort Meadow Brook; HUD.908; Plate 73
Shelter	1119 + 37.7	Hudson	Chestnut Street	Gleasondale Station site, Plates 76 and 77
Framed Trestle	1119 + .09	Hudson	Chestnut Street	Filled, Plate 78
Tell Tale	1121 + 30	Hudson	Chestnut Street to Stow town line	
Bridge #132 6x6 Conc. Box Cattle Pass	1133 + 38	Hudson	Stow Town line to Hudson Wilkins Street	Cattle pass, Plate 80

Feature	Location	Town	Segment	Comments
Rail Rest and Mile Post N-78 B-26	1138 + 53	Hudson	Stow Town line to Hudson Wilkins Street	Concrete supports; Intact Granite Mile Marker Plates 81 and 82
Culvert 132A 2x3 Conc. Box	1144 + 90	Hudson	Stow Town line to Hudson Wilkins Street	
Bridge #133 Thru Pl. Girder	1152 + 88	Hudson	Wilkins Street	
P.S.	1153 + 68	Hudson	Wilkins Street	

Town Marker and Railroad-Related Features – The granite town marker at the Sudbury-Hudson-Marlborough boundary near Old Concord Road will require avoidance and protection. Railroad-related features include the 1890 Boston & Maine Section Tool House at Hop Brook and Boston Post Rd in Sudbury (standing structure, SUD.282; the only other extant railroad section house on the MBTA commuter rail system is in Ipswich, MA and was assessed as NR-eligible), bridges, granite mile markers, concrete markers, concrete bench supports, former railway station sites, electrical boxes, electrical rail devices, signal towers, telegraph poles, and the railroad itself, including the steel rails, wood ties, rail bed, and railroad cuts. Related railway features can also include barrow pits and drainage systems, which in most cases will not be of special consideration as cultural resources.

A relevant study was conducted for the Wayland Center Railroad Complex (Cherau et al. 2001) in Wayland, adjacent to Sudbury. This cultural resource site examination will be discussed briefly as it provides some context for understanding the potential significance of the railway features and the potential relevance for avoiding railroad-related features in the planning of the Sudbury to Hudson Project. The site examination included archival research and field investigations for identified railroad-related historical and archaeological features. Subsurface testing was conducted at nine locations of visible and documented site elements. These activities resulted in the documentation of several railroad-related structures (passenger platform, freight car remains, water tank foundations) and features (switch stand, lamp post, spare rail racks, and a whistle post) adjacent to the north and south sides of the historic track structure. A number of railroad-related structures and features were also identified on both the west and east sides of Route 27 in proximity to the project area. These included the passenger station (standing structure), freight house (standing structure), track structure, two switch stands, a stop sign post, a derail mechanism, a stone retaining wall, four telegraph poles, a whistle post, and a possible mile post marker. A documented engine house and turntable pit, historic lumber storage building and a coal pit were also visually verified in proximity to the tracks. These features represented the remains of the late nineteenth/early twentieth-century rail that served commercial enterprises.

The Wayland Center Railroad Complex was developed over a period of about 40 years, from 1880 to about 1920. The identified historic and archaeological buildings, structures, and features that comprise the Wayland Center Railroad Complex, both within and adjacent to the project area, were assessed as significant resources to be considered collectively eligible to the National Register of Historic Places under Criteria A (Event), C (Design/Construction), and D (Information Potential). The Wayland Center Railroad Complex played an important role in the socioeconomic development and transformation of the town in the nineteenth and twentieth centuries. The surviving structural and archaeological resources at the complex represent key components of a typical late nineteenth-century railroad passenger, freight, and locomotive

servicing facility. Only a small portion of the Wayland Center Railroad Complex was within the current boundaries of the Wayland Center National Register Historic District and the Wayland Center Local Historic District. Because of the National Register eligibility of the whole complex, it was recommended that the boundaries of the historic district be revised to the west and east to include all of the newly identified railroad-related historical and archaeological resources. It was recommended that the railroad complex resources identified within the project area be avoided during construction, or further documentation (archival and photographic documentation, archaeological testing) might be warranted (Cherau et al. 2001).

Granite Town Marker at the Sudbury-Hudson-Marlborough Boundary near Old Concord Road

The location Sudbury-Hudson-Marlborough boundary near Old Concord Road is presently marked with a granite post measuring 10 inches on a side and with a height of 47 inches above the ground surface (Appendix III). The post is marked on the west with the date of "1993"; on the north side with "H" for Hudson; on the east side with "S" for Sudbury; and on the south side with "M" for Marlborough. The 1914 railroad plans (Appendix I: V-5 Page 19) show this point in the boundary of the three towns as located in the middle of the railroad by Marlboro Road (a.k.a. Old Concord Road). The 1914 plans do not indicate that a granite boundary stone was present at the spot or offset nearby. It would not have been possible for a granite post to have been located in the middle of the railroad, though a low stone stub or metal marker may have been set between the railroad ties previously. Presently the railroad ties and tracks in this area have been removed and the present marker was presumably installed around 1993, as the date on the stone and subsequent markings suggest. Since the present granite marker is less than 50 years of age it is not considered to be potentially eligible for the National Register of Historic Places. However, avoidance and protection of the town boundary stone is proposed in Appendices II and III as the marker is protected under Massachusetts General Laws.

Boundary markers are regulated under Massachusetts General Laws Chapter 42, Boundaries of Cities and Town, Sections 1-12. Following are various sections dealing with town markers that appear pertinent to this review (www.massachusettsgenerallaws.com/generallaws.htm):

Section 2. Locating and marking of town boundary markers; recordation; copy of records to contiguous towns: The boundary markers of every town shall be located, the marks thereon renewed, and the year located marked upon the face thereof which bears the letter of the town locating its boundary, once every five years, by at least two of the selectmen of the town or by two substitutes designated by them in writing. The marking shall be made with a paint or other suitable marking material.

The proceedings shall be recorded with the town clerk and the board of selectmen of the town in writing signed under penalty of perjury setting forth which boundary marks were located, and those which were not located. A copy of such records shall also be sent, by registered letter, to the town clerk and the board of selectmen of any contiguous town.

Section 4. Boundary monuments, erection: The selectmen of contiguous towns shall, at the joint and equal expense of such towns, erect permanent stone monuments at every angle of their respective boundary lines and wherever a highway crosses such lines, unless such monument, two feet high from the ground, already exists or unless such lines are bounded by the sea or by a

permanent stream. The monuments shall be well set in the ground, at least four feet high from its surface, and shall have the initial letters of the respective names of such towns legibly cut thereon.

Section 10. Obliteration of monuments; restrictions: No person, except as hereinafter provided, shall remove, obliterate or cover up any monument or mark designating a boundary line of a town. The county commissioners of the county where any such monument or mark is wholly or partly situated may grant to any person making written application permission to remove, cover up or obliterate the same, first making provision for preserving the exact location of the original boundary or mark by causing proper witness marks to be set up, or other means taken, which shall, with proper designation and measurement, indicate the position of the original mark or monument. The commissioners shall cause a full description and designation of such witness marks and monuments so made and set up to be recorded in the office of the town clerk of the contiguous towns, and a copy of such description to be forwarded to the state secretary. This section shall not apply to monuments and marks designating boundary lines of the commonwealth.

Section 11. Penalty for illegal obliteration of boundary markers: Whoever violates any provision of the preceding section, or willfully or maliciously disturbs or injures the monuments or marks aforesaid, shall be punished by a fine of not more than fifty dollars or by imprisonment for not more than six months.

Section 12. Location of disputed boundaries; procedure: If the true boundary between two or more adjacent counties, cities, towns or districts is doubtful or in dispute, the land court may determine the location thereof upon the petition of one or more of such counties, cities, towns and districts and after such notice to all other counties, cities, towns and districts interested as the court shall order, and the court may make such order as to the setting of durable bounds to perpetuate the lines the location of which is so determined, and as to the costs and expenses of the proceedings, as law and justice may require.

4.4 SUMMARY OF ARCHAEOLOGICALLY SENSITIVE AREAS

Archaeologically sensitive areas identified: The following sensitive areas were identified in or near the limits of the Project ROW. Due to final grading plans not being available at the time of the field reconnaissance, these areas have not been refined further but are shown in the Appendix II sensitivity plans to aid in further refinement once final grading plans become available. The extent of tree clearing or the limit of work were also not available in the field; however, the summary below and the plans in Appendix II will aid in determining a scope of further field investigation where warranted.

Sudbury Substation 342 to Landham Road, Sudbury, MA – Most of the route is either disturbed or in low sensitivity wetlands/low terrain. The wooded uplands with intact natural stratigraphy south of the rail bed east of Landham Road: medium archaeological sensitivity. East Sudbury Station site: high archaeological sensitivity,

Landham Road to Boston Post Road/Route 20, Sudbury, MA – Most of the route is either disturbed or in low sensitivity wetlands/low terrain. Uplands with intact natural stratigraphy from the Boston Post Road/Route 20 at the 1890 Boston & Maine Railroad Section House to the railroad bridge at Hop Brook: high archaeological sensitivity at section house, otherwise medium sensitivity. The wooded uplands with

intact natural stratigraphy north of the rail bed at mid-span and south of the rail bed near Landham Road: medium-high archaeological sensitivity.

Boston Post Road/Route 20 to Union Avenue, Sudbury, MA – No archaeologically sensitive areas identified. Mostly buried metal post base noted.

Union Avenue to Horse Pond Road, Sudbury, MA – The wooded uplands with intact natural stratigraphy: medium archaeological sensitivity. Historic archaeological site SUD-HA-26, the South Sudbury Railroad Station site near/west of Union Avenue: high archaeological sensitivity.

Horse Pond Road to Peakham Road, Sudbury, MA – The wooded uplands with intact natural stratigraphy: medium archaeological sensitivity.
Peakham Road to Dutton Road, Sudbury, MA – Undulating wooded uplands beyond the railroad cut: medium to low archaeological sensitivity.

Dutton Road to Old Concord Road and the Sudbury Line, Sudbury, MA – Non-wetland wooded uplands that retain natural stratigraphy north of the rail bed: medium sensitivity. The Wayside Inn train station west near Dutton Road, the vicinity of the Walker Garrison House site SUD-HA-30 and a stone-lined house/cellar foundation south of the rail bed are potentially significant historical sites with high archaeological sensitivity. The sand barrens west of Hop Brook are conferred medium to high archaeological sensitivity.

Old Concord Road and the Sudbury Line to White Pond Road, Hudson, MA – Non-wetland wooded uplands that retain natural stratigraphy north of the rail bed: medium archaeological sensitivity.

White Pond Road to Parmenter Road, Hudson, MA – Non-wetland wooded uplands with natural stratigraphy (along western part of segment and by White Pond Road): medium or medium to high archaeological sensitivity. The Ordway Railroad Station site east of Parmenter Road: high archaeological sensitivity.

Parmenter Road to Main Street, Hudson, MA – Wooded, non-wetland, areas with natural stratigraphy (along most of the segment): medium archaeological sensitivity.

Main Street to Fort Meadow Brook, Hudson, MA – The wooded/knoll area north of rail bed west of Main Street: high archaeological sensitivity.

Fort Meadow Brook to Chestnut Street, Hudson, MA – The Gleasondale train station east near Chestnut Street: high archaeological sensitivity.

Chestnut Street to Wilkins Street, Hudson and Stow, MA – Intact wooded upland terrain north and south along the raised rail bed (outside of wetlands): medium archaeological sensitivity; knoll in Stow north of the rail bed and just west of the wetlands along Chestnut Street: high archaeological sensitivity. The possible site of the Ordway Junction Railroad Station by Wilkins Street: high archaeological sensitivity pending further review.

Wilkins Street to Forest Avenue to the Hudson Municipal Substation 384, Hudson, MA – Paved roadways, graded and landscaped ground near the substation: low archaeological sensitivity.

5.0 CONCLUDING SUMMARY AND RECOMMENDATIONS

The archaeological reconnaissance survey was conducted for an approximately 9-mile long proposed project route, primarily along an unused railroad corridor/right-of-way, and under roadways for 1.3 miles. Six railroad station sites, a railroad section house and two colonial residential sites have been noted along the Project route. The South Sudbury Station site (SUD-HA-26) and the Walker Garrison House (SUD-HA-30) have been previously identified. Other station sites include the East Sudbury Station and Wayside Inn Station sites in Sudbury, and the Ordway Station, Gleasondale Station, and Gleason Junction Station sites in Hudson. The Boston & Maine Railroad Section House site consists of a standing ca. 1890 structure and yard area. A fieldstone-lined cellarhole was also identified in Sudbury in the Memorial Forest. All of these sites are considered to be potentially significant. In addition, the Project route has been assessed for archaeologically sensitive areas with recommendations for further investigation of sensitive areas within the area of potential direct effects.

Possible effects that the project could have on identified historic properties are considered with reference to federal guidance for implementation of Section 106 of the National Historic Preservation Act of 1966, as amended. While this guidance is intended for application to National Register-listed and eligible properties, it is here applied to other sites, as well. Under Section 106, an *effect* is defined as an alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the National Register (36 CFR 800.16[i]). The effects that an undertaking will have on a historic property are predicted based on the distinguishing characteristics of the property and the design and anticipated consequences of the undertaking.

An *adverse effect* is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association (36 CFR 800.5[a][1]). Based on available information, the project is anticipated to cause physical (trenching, grading, and tree clearing) alterations near historic properties.

The following analysis is focused on previously and newly identified archaeological sites and related historic properties that are likely to be altered physically by the project. The relevant archaeological properties are listed in Table 6.

Table 6. Identified archaeological sites and matrix of effects and recommendations.

Affected Property	Avoidance Possible	Possible Action		
In proximity to either trenching, grading or vegetative removal		**Avoidance of archaeological site during construction**	**Minimization of vegetative removal (i.e., no stump removal/cut off at ground surface)**	**Archaeological Intensive (Locational) Survey Testing to further evaluate**
Massachusetts Central Railroad	Partial	X	X	Further documentation, not necessarily testing
South Sudbury Station	Yes	X	X	Site is under

Affected Property	Avoidance Possible	Possible Action		
(SUD-HA-26)				pavement, but other components may warrant testing
Walker Garrison House (SUD-HA-30)	Partial	X	X	Site is on private property, but Project ROW nearby warrants testing
East Sudbury Station site	Partial	X	X	Testing and research is recommended
Boston & Maine Railroad Section House	Partial	X	X	Testing and research is recommended
Wayside Inn Station site	Partial	X	X	Testing and research is recommended
Memorial Forest cellar hole	Partial	X	X	Cellar hole is outside of ROW, but Project ROW nearby warrants testing
Ordway Station site	Partial	X	X	Testing and research is recommended
Gleasondale Station site	Partial	X	X	Testing and research is recommended
Gleason Junction site	Partial	X	X	Testing and research is recommended

Table 6 lists avoidance as partially possible in most cases. The concern is not with visual impacts, but with direct ground disturbance at the archaeological site areas. Most railroad station sites may be able to be avoided from direct trenching and grading, but the location of the trench and access road will need to be considered with respect to each station site location. As most of the railroad station sites are not visible on the ground surface, historic research in conjunction with archaeological intensive survey testing may be necessary to identify exactly where each station site was located. Limitation of vegetation removal by leaving stumps and cutting vegetation flush with the ground surface (i.e., no grading) where possible can help to minimize disturbance to the site areas. As archaeological site boundaries for railroad stations will include the locations of the former station buildings as well as related cultural deposits (c.f., buried artifacts, walkways, pavements or ramps) it can be expected that site boundaries may include part of the rail bed itself, an area that cannot necessarily be avoided by the Project.

The Massachusetts Central Railroad was newly-identified as a historic property, the boundaries of which are presented in Appendix II as the current MBTA ROW/Existing Limit of Ownership (Exist MBTA L.O.). Based on previous documentation and the reconnaissance field

examination, the property appears to include numerous railroad-related features, including four previously identified historic properties (SUD.282/900/901/908). Between the Sudbury Substation on the east and Wilkins Street on the west, the Project ROW is located entirely within the former railroad ROW. Should the Massachusetts Central Railroad be determined significant, the project would have a physical adverse effect. The adverse effect could be minimized through avoidance of railroad-related features during planning and construction. If avoidance is not possible, such features should be further documented (e.g., research, photography, archaeological testing and/or public interpretation) in consultation with the MHC and other consulting parties prior to disturbance or demolition. Rehabilitation of the railroad bridges should be planned and executed in consultation with the MHC and other consulting parties. The work should be conducted in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties* (www.nps.gov/tps/standards/treatment-guidelines-2017.pdf) by an individual who meets historic preservation professional qualification standards in Engineering (www.nps.gov/history/local-law/gis/html/quals.html).

In addition to the above resources, the field assessment identified areas of high, medium to high, medium, and medium to low archaeological sensitivity. In general, cut and fill land alteration characterizes the railroad bed. Wetlands, low adjacent terrain, and disturbed areas were assessed as having a low archaeological sensitivity. Well drained uplands outside of rail bed disturbance were assessed as having a medium or high archaeological sensitivity, depending upon land form, proximity to natural resources (i.e., streams or rivers), or previously reported or newly identified archaeological sites. An archaeological sensitivity assessment of the currently proposed Project route has identified sensitive areas that are recommended for intensive (locational) archaeological survey in order to locate and identify any significant archaeological resources that may be affected by the Project. Not all sensitive areas can be avoided nor will they necessarily have archaeological sites. An intensive (locational) archaeological survey must be conducted under a permit issued by the State Archaeologist at the MHC (Massachusetts General Laws, Chapter 9, Sections 26-27C (950 CMR 70)); intensive (locational) archaeological surveys generally involve subsurface testing with manually-excavated shovel test pits (square test pits 50-x-50 cm in size), with vertical depth recordation by soil horizon and recovery of cultural materials by sifting soil through hardwire cloth (1/4" screens). Testing intervals are typically at 10-meter intervals, with shorter intervals around identified cultural resource areas. Archaeological testing will allow for the identification of potentially significant archaeological resources, which can then be considered for avoidance and protection or further evaluation.

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FIGURES

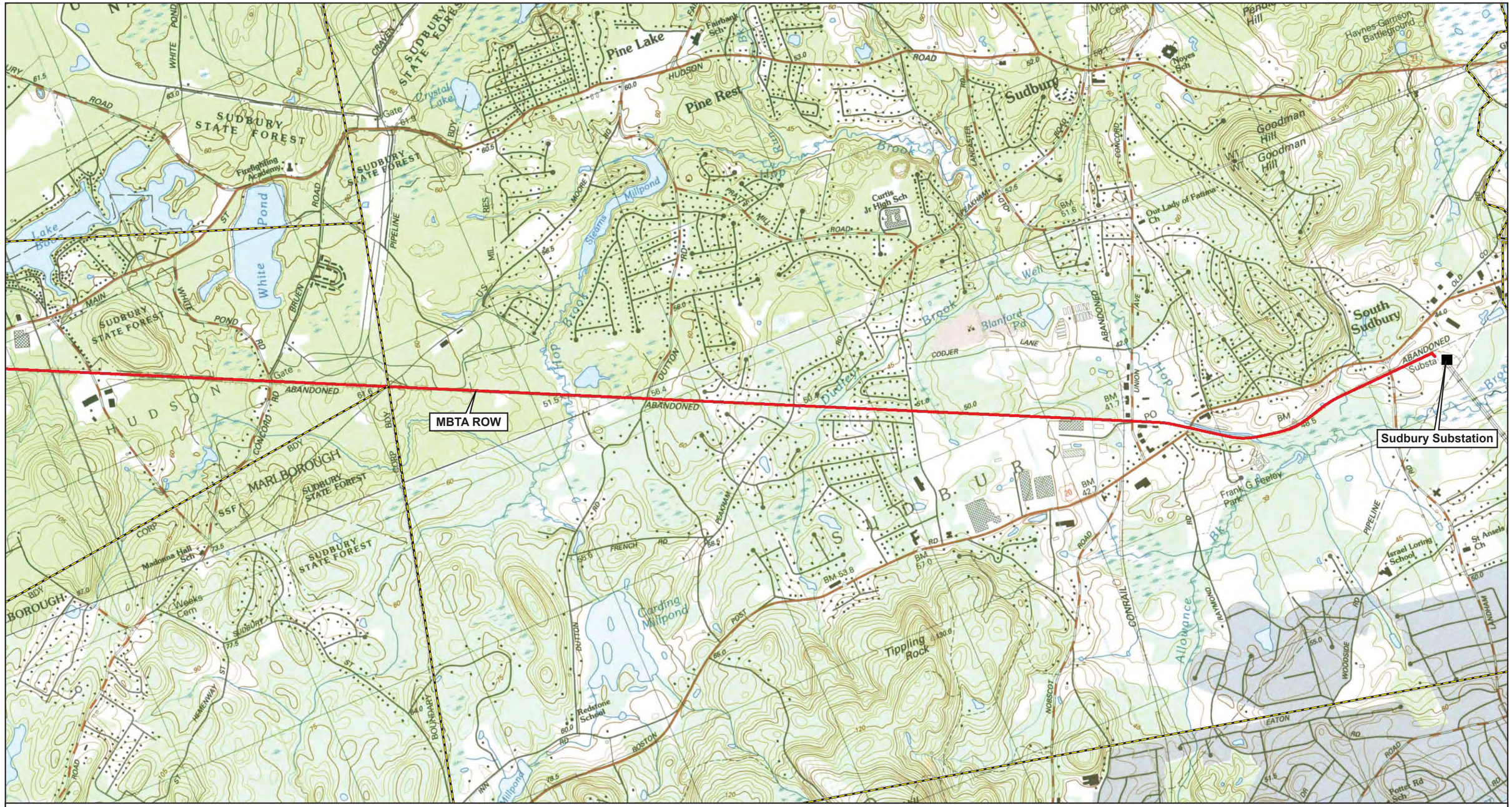


Figure 1. Proposed route of the Sudbury-Hudson Transmission Reliability Project in Sudbury, Marlborough, and Hudson on current USGS Quadrangle.

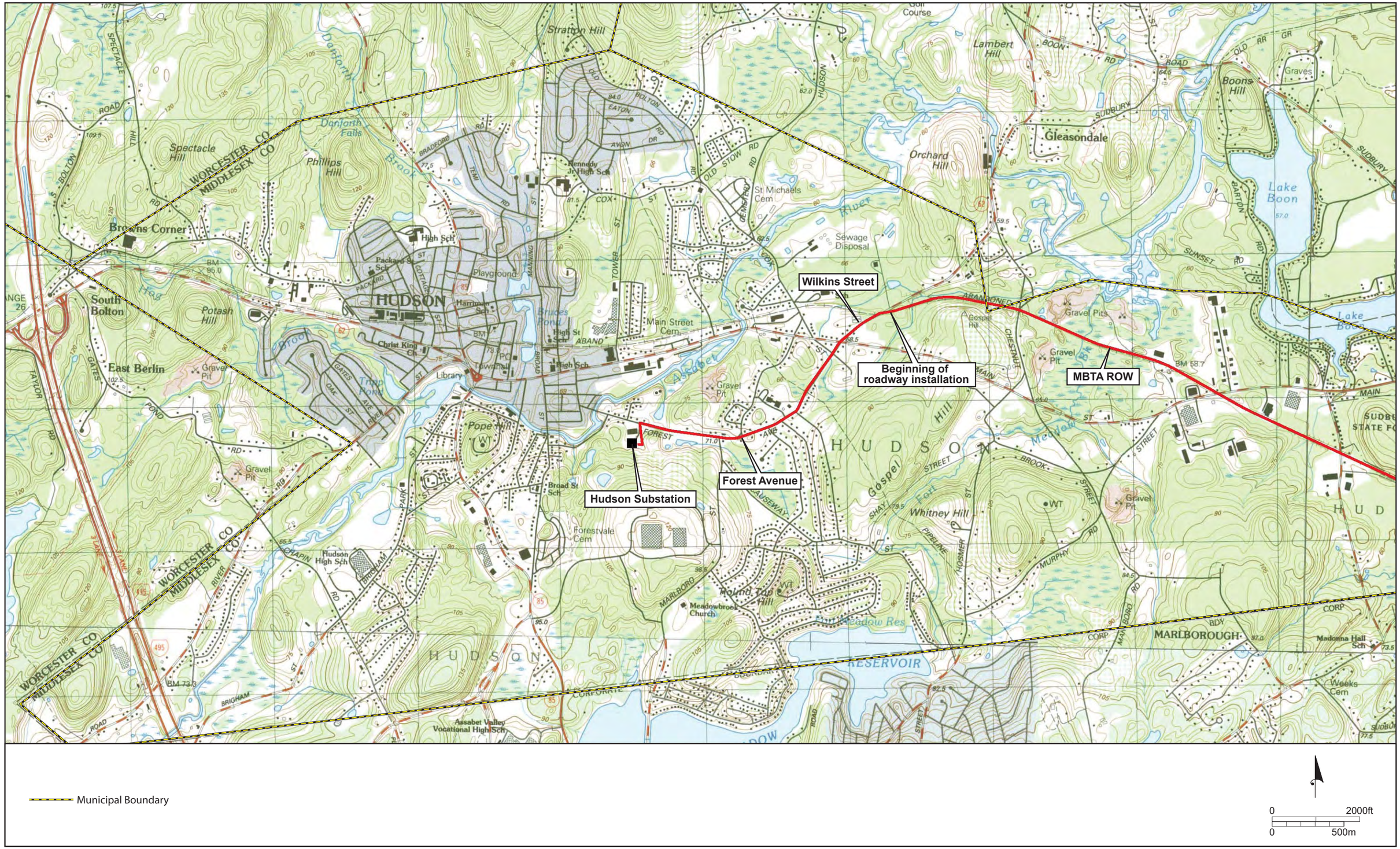


Figure 2. Proposed route of the Sudbury-Hudson Transmission Reliability Project in Hudson and Stow on current USGS Quadrangle.

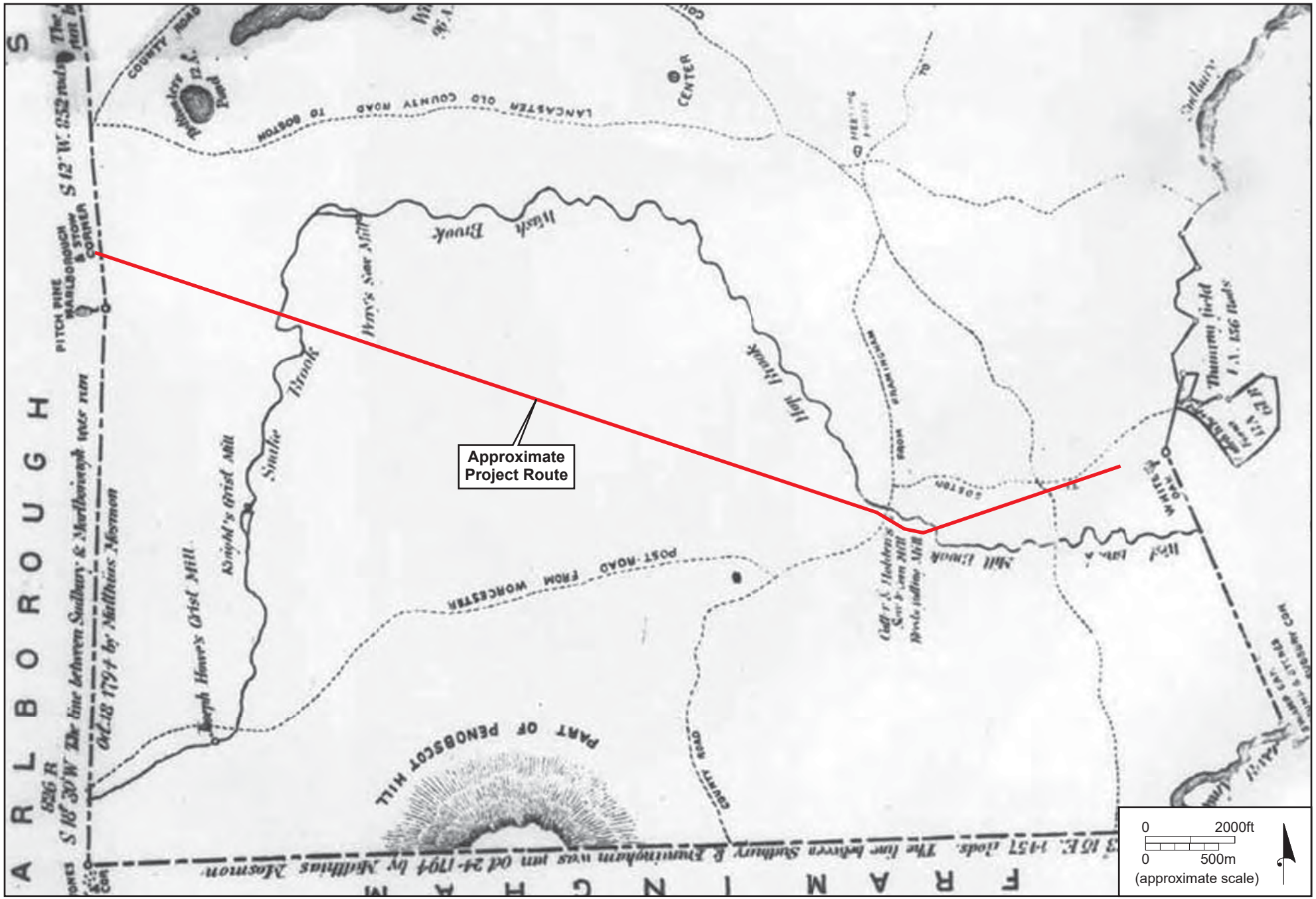


Figure 3. Approximate project location on the 1795 plan of Sudbury (Mosman 1795).

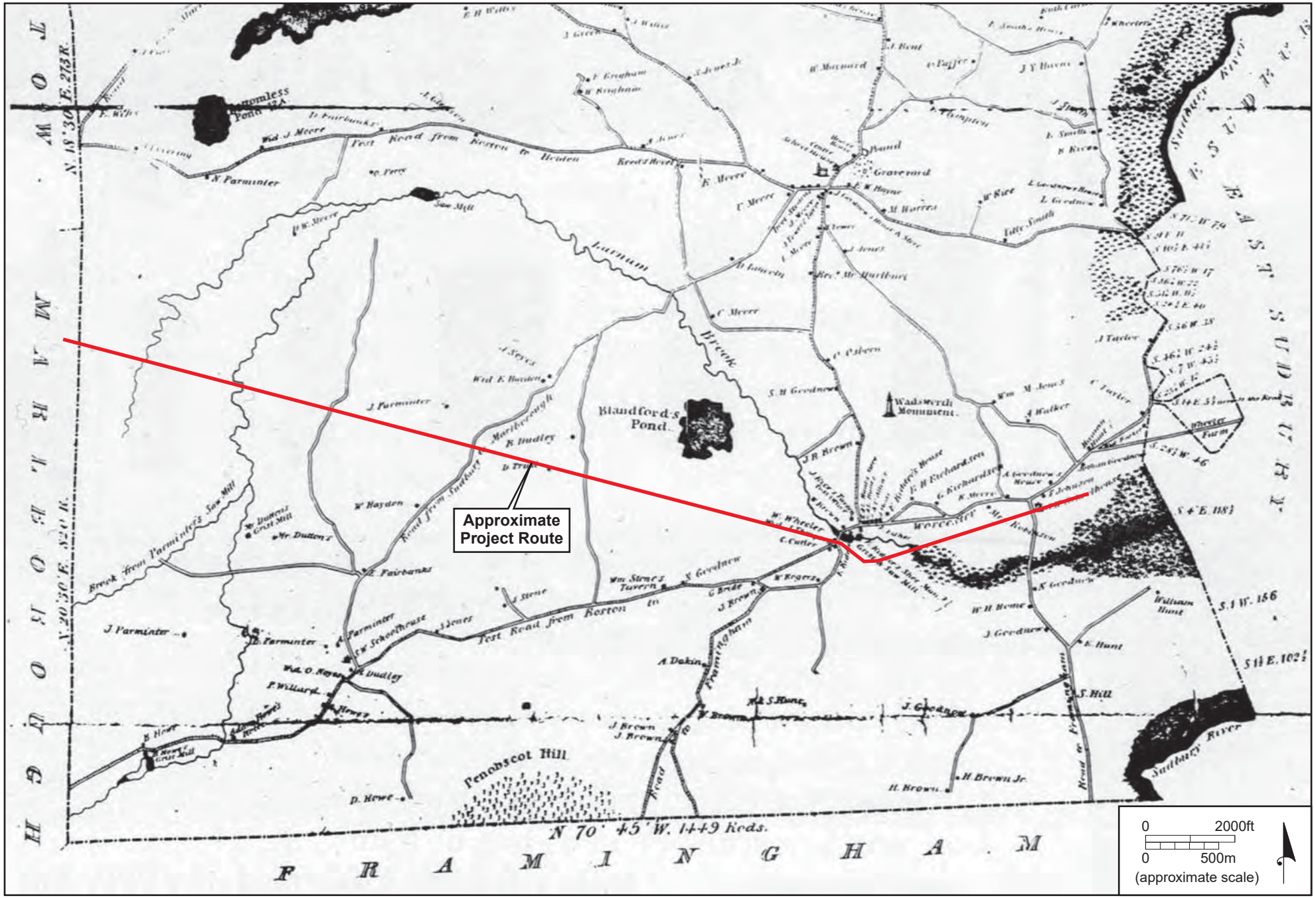


Figure 4. Approximate Project route on the 1830 map of Sudbury (Wood 1830).

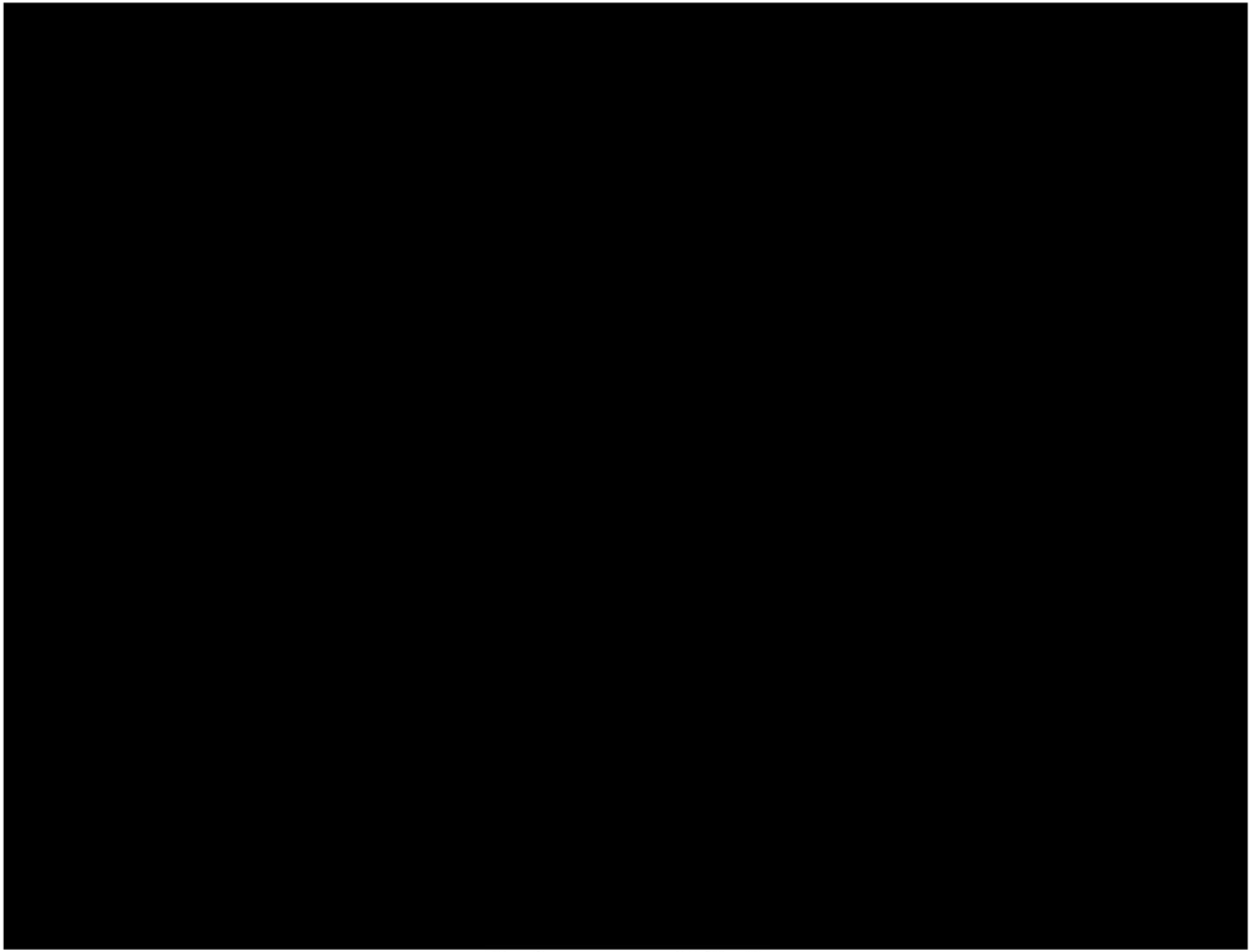


Figure 5. Approximate Project route in Sudbury on the 1856 Walling county map (Walling 1856), with precontact site locations shown that are mentioned in Alfred Hudson's 1889 *History of Sudbury* (Identified with HSP #s).

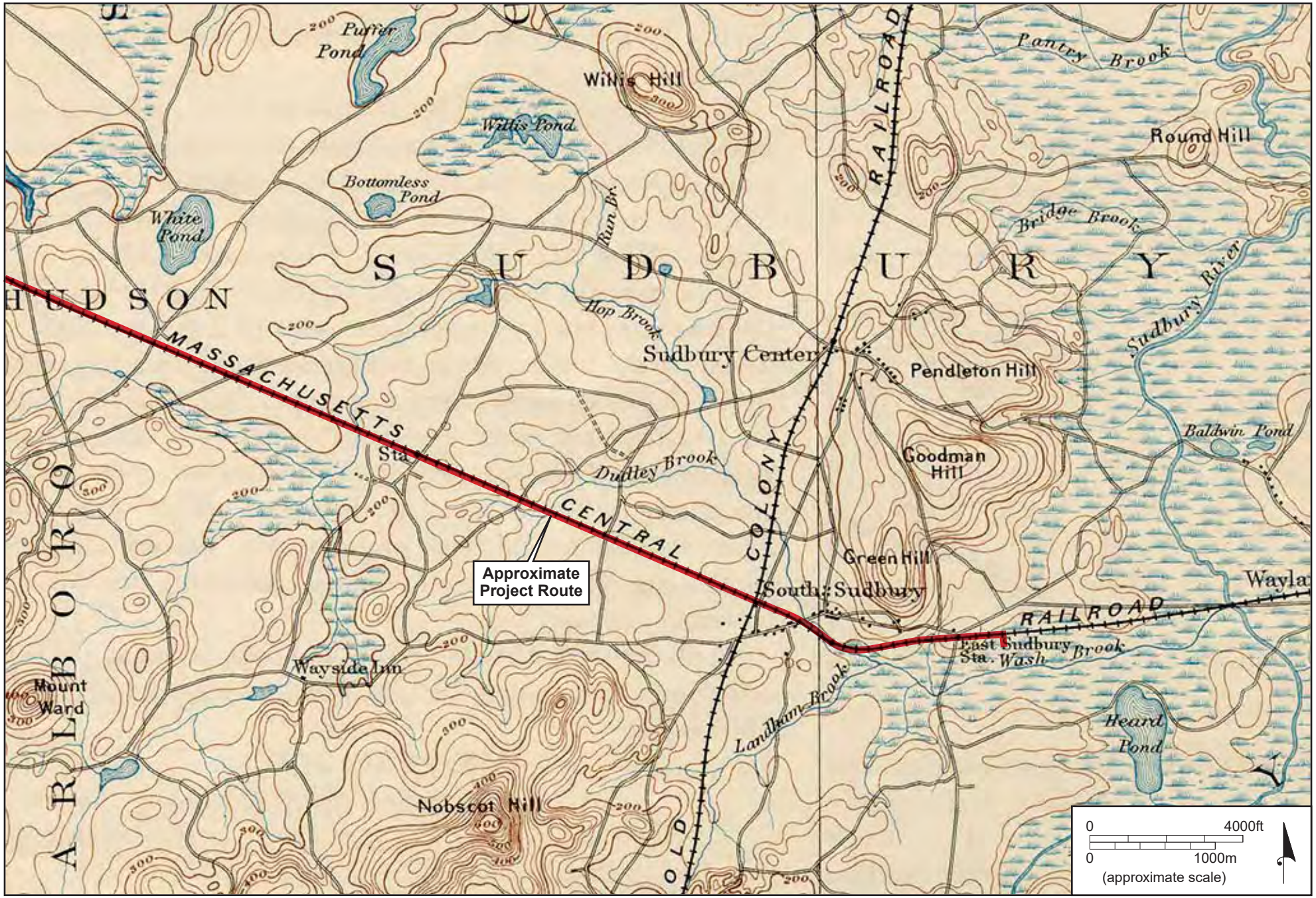


Figure 6. Approximate Project route in Sudbury on the 1894 USGS Framingham Quadrangle (USGS 1894).

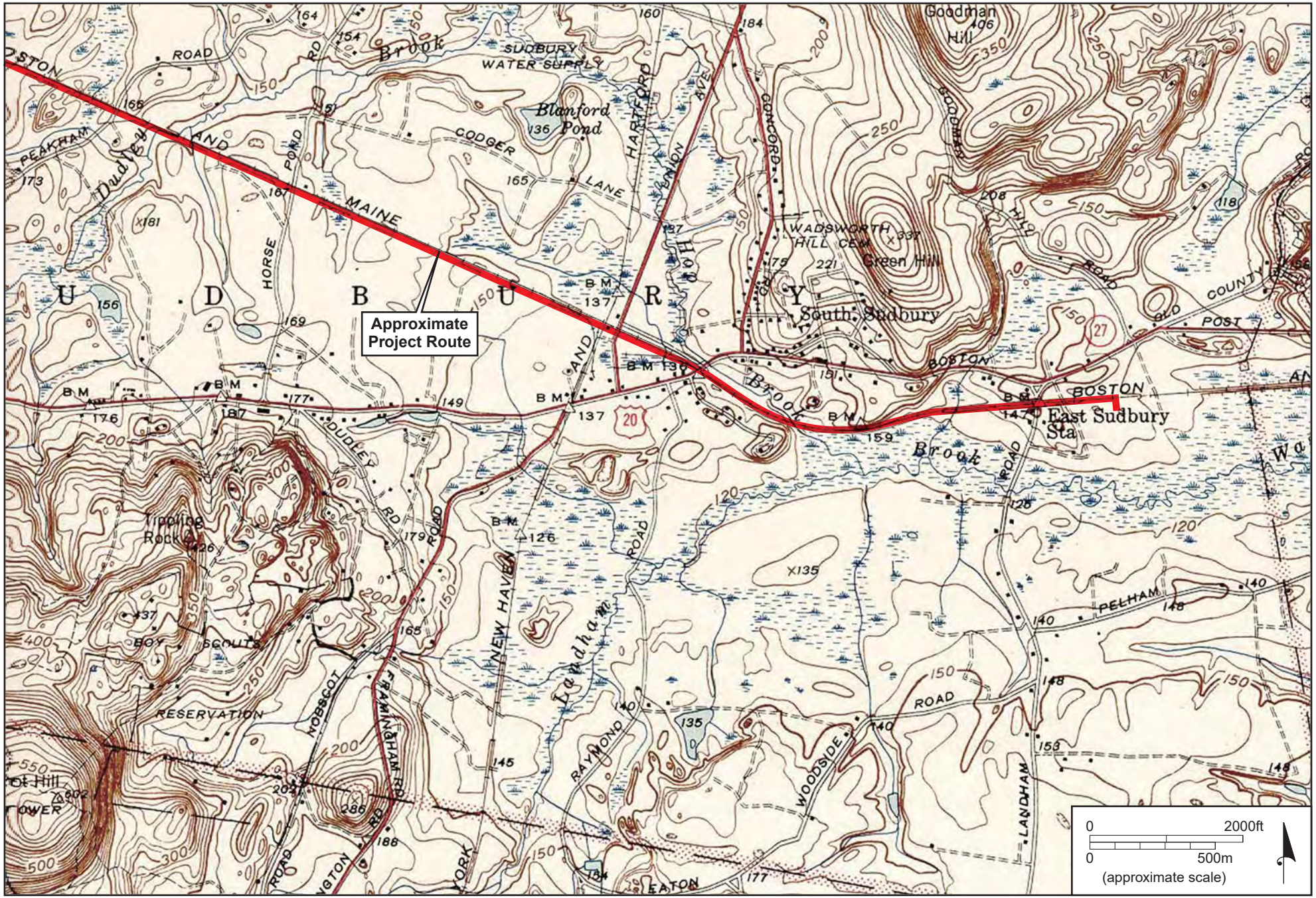


Figure 7. Approximate Project route in Sudbury on the 1943 USGS Framingham Quadrangle (USGS 1943).

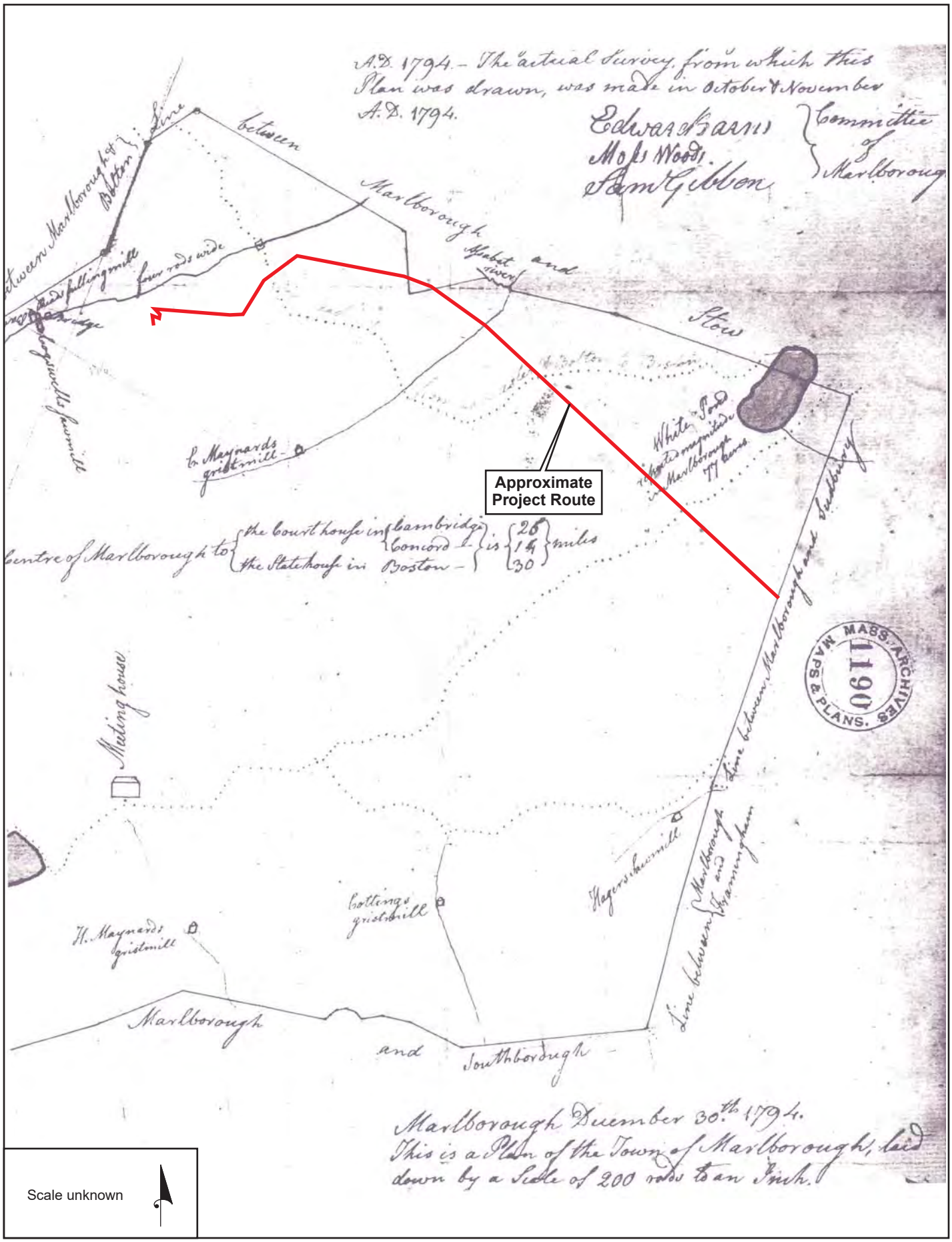


Figure 8. Approximate Project route on the 1794 plan of Marlborough (Peters 1794).

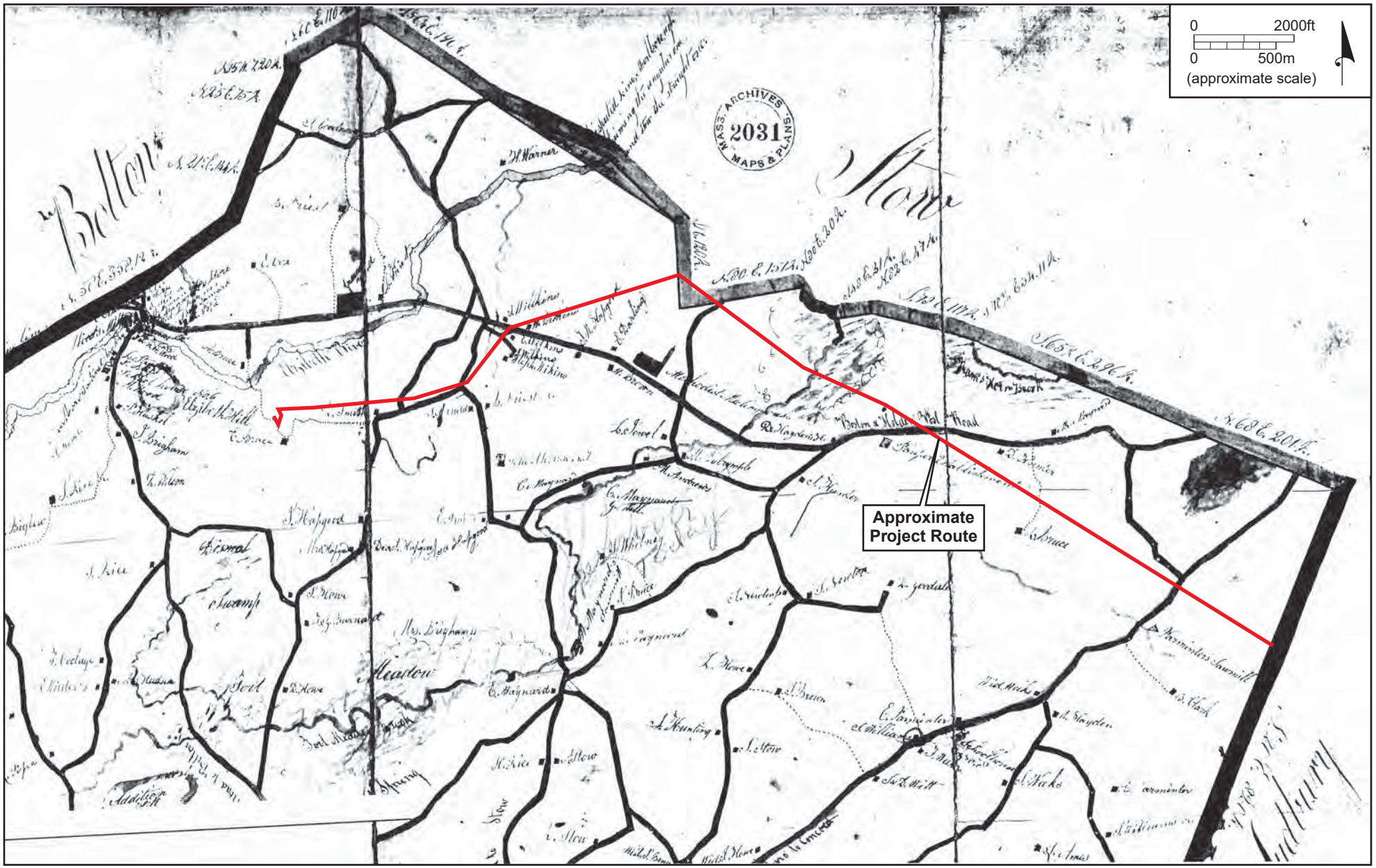


Figure 9. Approximate Project route on the 1830 map of Marlborough (Anonymous 1830).

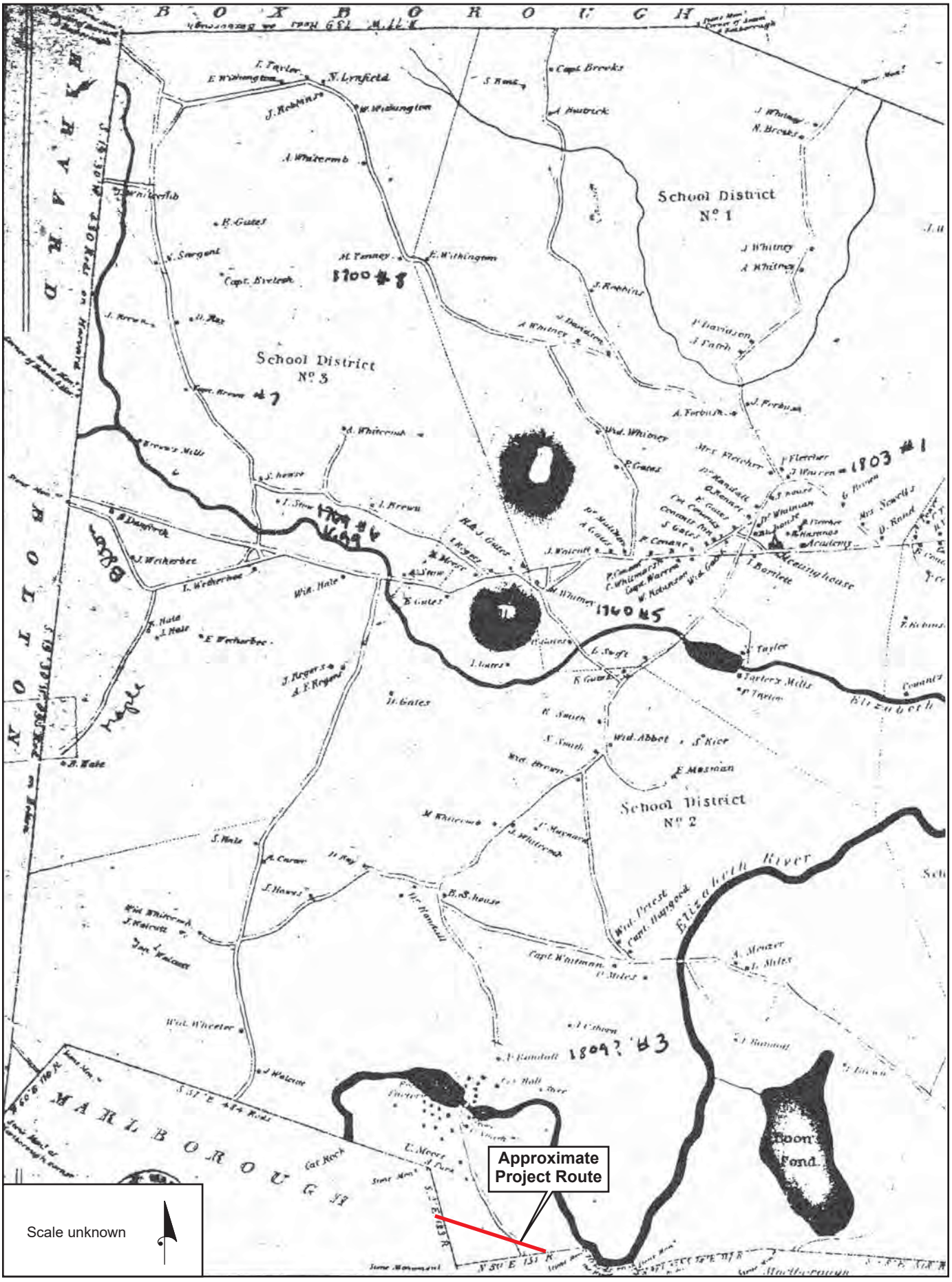


Figure 10. Approximate Project route on the 1832 map of Stow (Tower 1832).

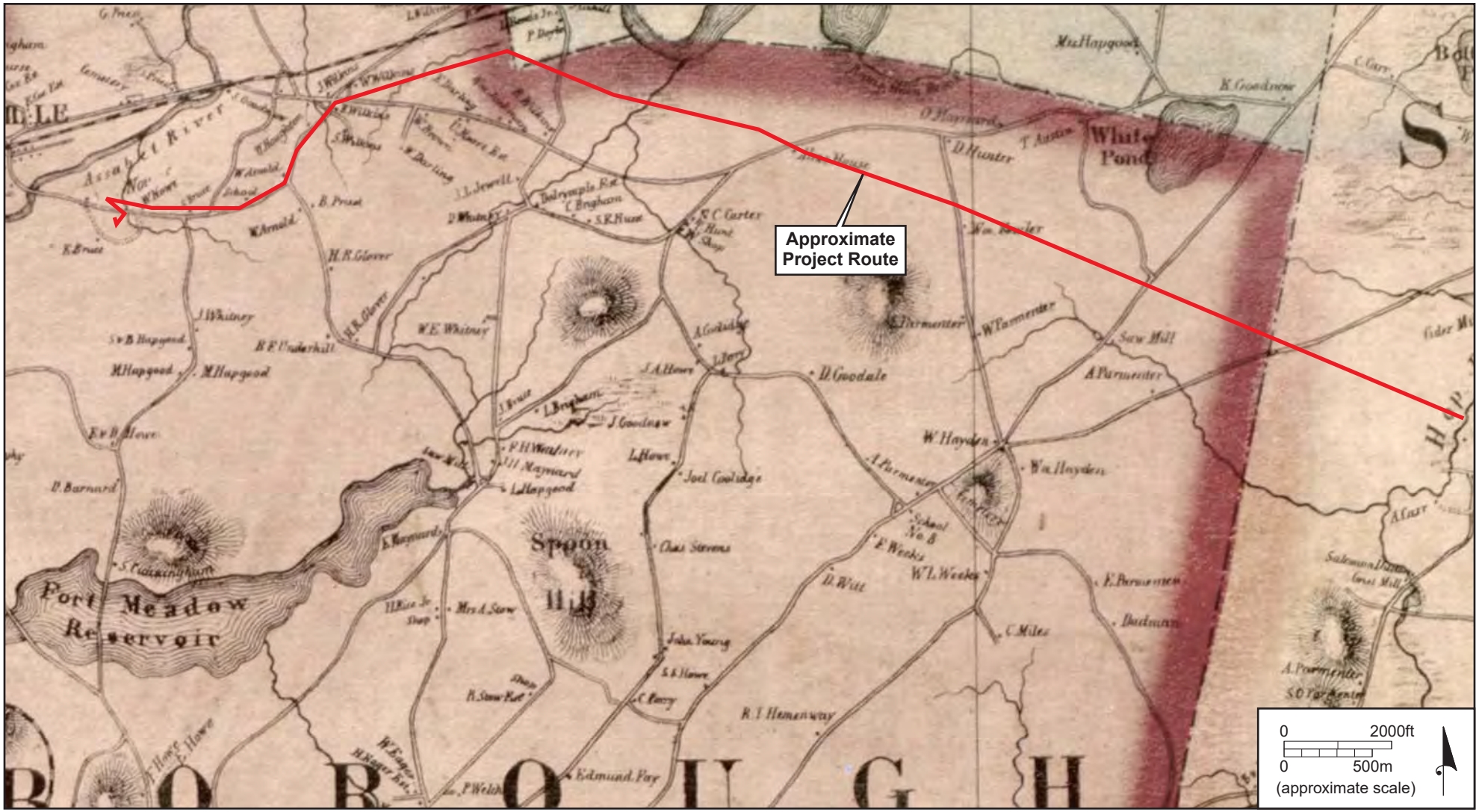


Figure 11. Approximate Project route in Hudson, Marlborough and Stow on the 1856 Walling county map (Walling 1856).

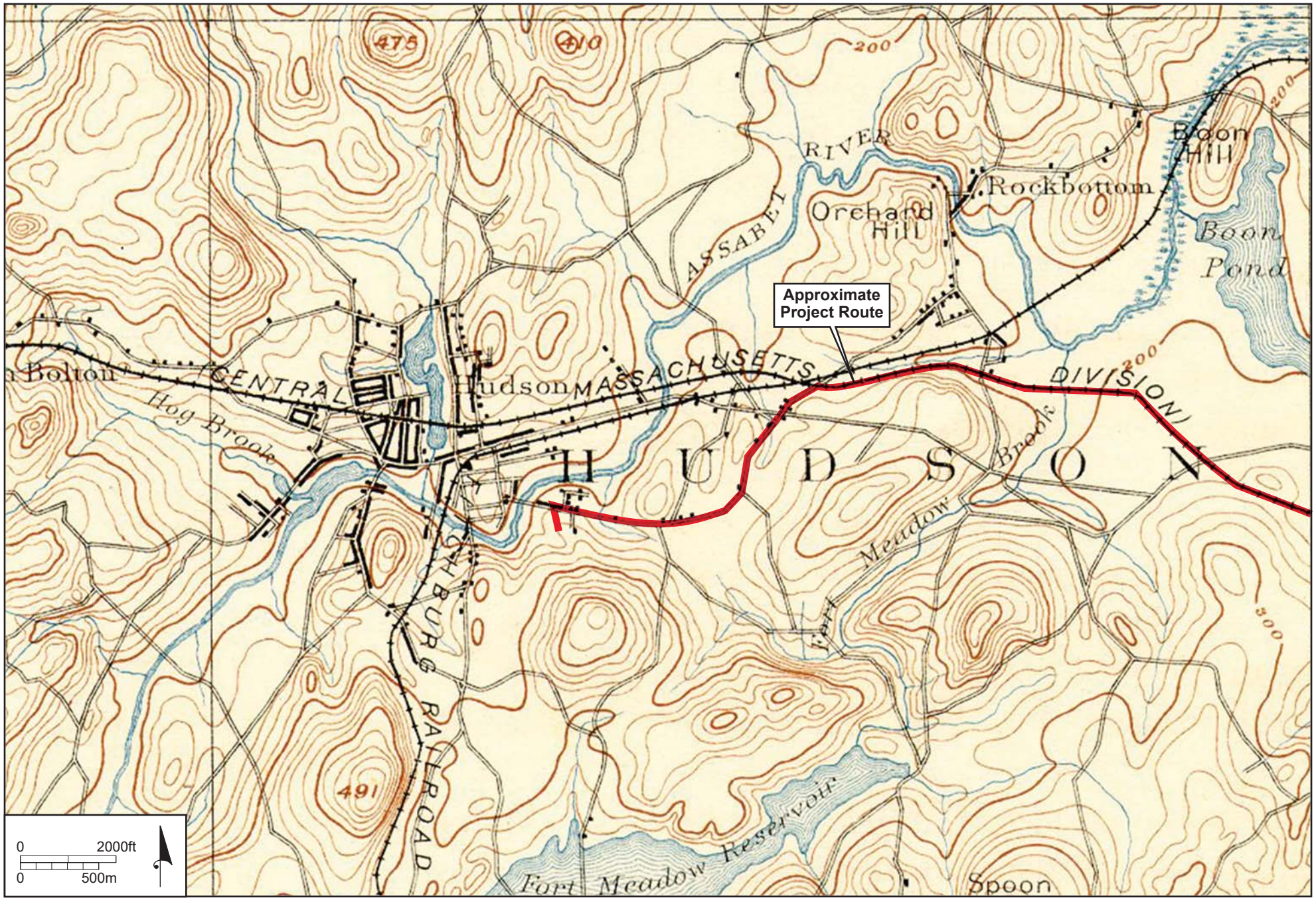


Figure 12. Approximate Project route in Hudson, Marlborough and Stow on the 1898 USGS Marlborough Quadrangle (USGS 1898).

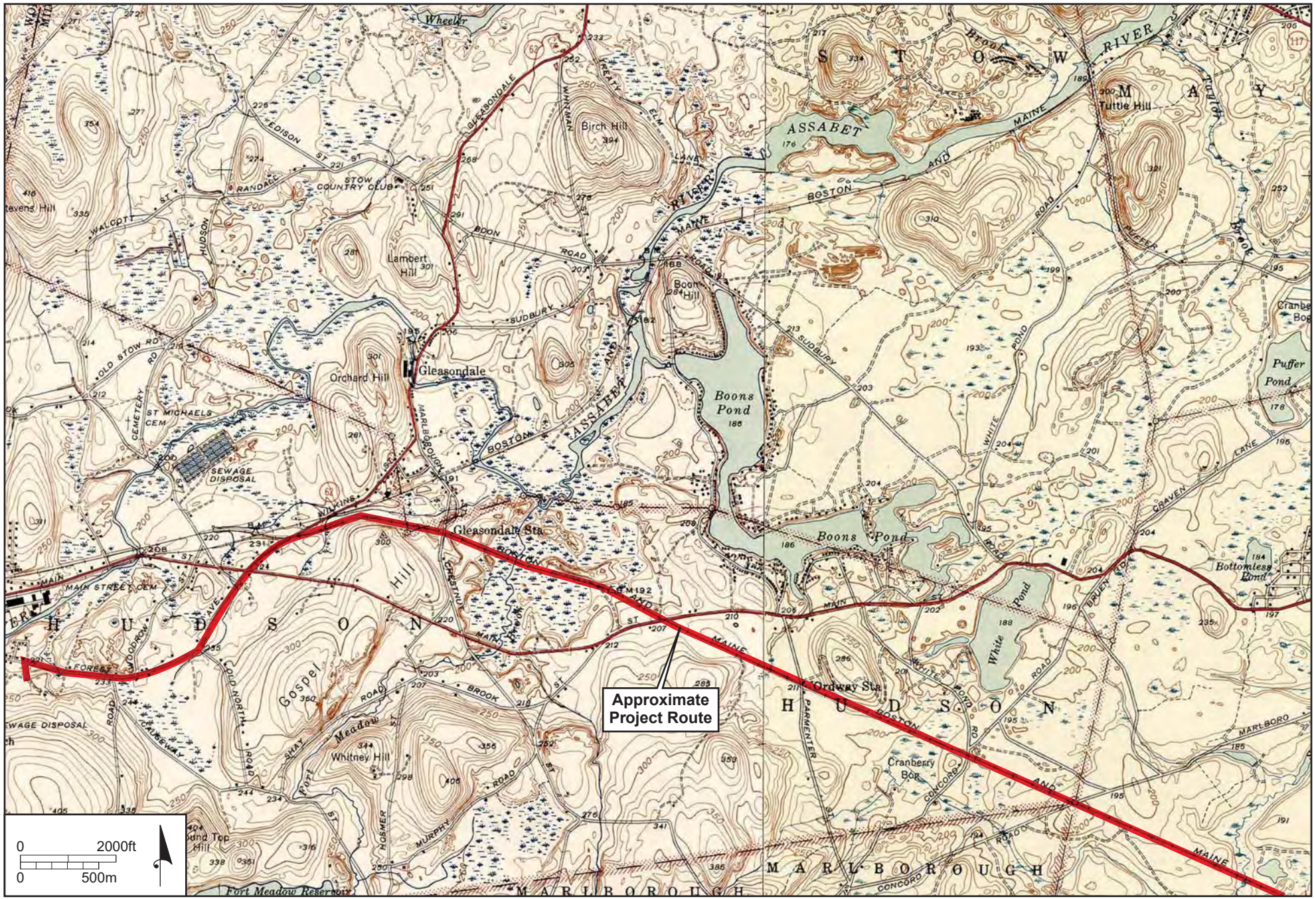


Figure 13. Approximate Project route in Hudson, Marlborough and Stow on the 1943 USGS Hudson and Maynard Quadrangles (USGS 1943).

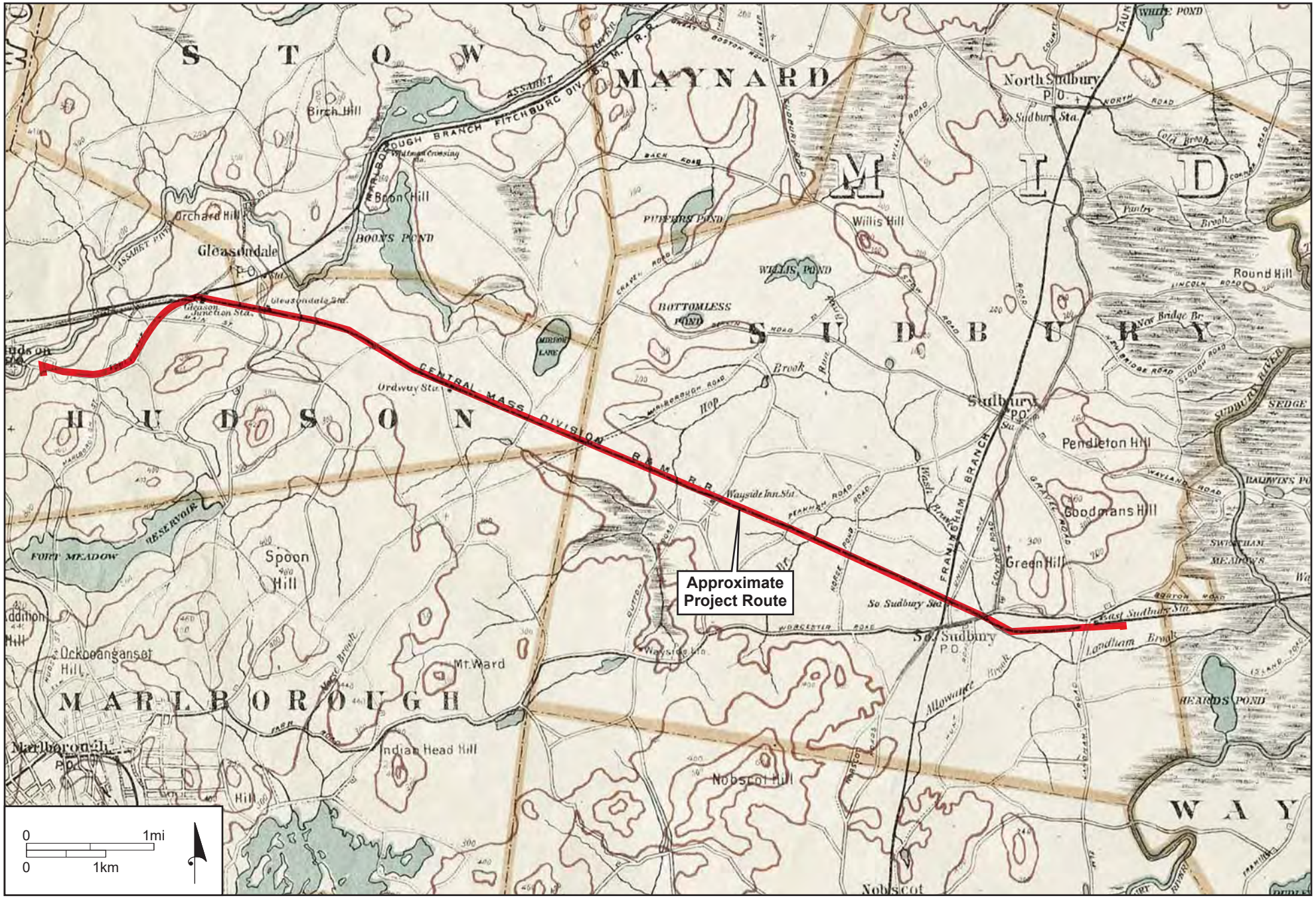


Figure 14. Project corridor on the 1922 Walker atlas (Walker 1922).

PLATES

Plate 1. ROW north of Sudbury Substation 342, view southeast.

Plate 2. ROW north of Sudbury Substation 342, view southwest.

Plate 3. Low cut section of rail bed east of access road, view east.

Plate 4. Access road crossing to Sudbury Substation 342, view southeast.

Plate 5. Cut and filled section of rail bed east of Landham Road, view east.

Plate 6. Cut rail bed and site of East Sudbury Station south of rail with Landham Road bridge/crossing to west, view south.

Plate 7. Granite mile marker north of the raised rail bed, view northeast.

Plate 8. Concrete post north of raised rail bed, view east.

Plate 9. Signal tower north of terraced rail bed, view north.

Plate 10. Dump on knoll and barrow pit north of rail bed includes a ca. 1930s auto, view east.

Plate 11. Railroad bridge support over Hop Brook, view east.

Plate 12. Railroad bridge across Hop Brook, view southeast.

Plate 13. Concrete slab feature along terraced rail bed section, view east.

Plate 14. 1890 B & M Railroad Section House and rail bed, view southeast.

Plate 15. 1890 B & M Railroad Section House, north adjacent to rail bed, view northeast.

Plate 16. Route 20/Boston Post Road crossing, view southeast.

Plate 17. East of Union Avenue, low damp area with channeled stream to north, view southeast.

Plate 18. Granite mile marker and location of former South Sudbury Station (SUD-HA-26) south of the rails, now asphalt covered with 1950s building, view southeast.

Plate 19. Concrete marker and 1950s building near former junction railroad station (SUD-HA-26), view southwest.

Plate 20. Granite mile marker north of the rail bed west near Union Avenue, view east.

Plate 21. The first of four electrical boxes north of the rail bed nearing Union Avenue, view south.

Plate 22. The second of four electrical boxes north of the rail bed nearing Union Avenue, view southwest.

Plate 23. The third of four electrical boxes north of the rail bed nearing Union Avenue; note telegraph pole to left, view east.

Plate 24. The fourth of four electrical boxes north of the rail bed nearing Union Avenue, view east.

Plate 25. Railroad cut north of fenced Raytheon parcel, view southeast.

Plate 26. Telegraph line pole in Sudbury north of the rail bed, view north.

Plate 27. Concrete culvert at intermittent stream, view west.

Plate 28. Raised rail bed at wetlands east of Horse Pond Road, view southeast.

Plate 29. Former railroad crossing of Horse Pond Road in Sudbury, view southeast.

Plate 30. Electrical box with cover and signal tower (over 15 ft tall) south of rail bed and west of Horse Pond Road, view southeast.

Plate 31. Electrical box with cover near signal tower south of rail bed and west of Horse Pond Road, view southeast.

Plate 32. Granite mile marker north of rail bed and west of Horse Pond Road, view southeast.

Plate 33. Railroad cut east of Dudley Brook, view southeast.

Plate 34. Electrical box east side of Dudley Brook, north of rail bed, view northeast.

Plate 35. Raised rail bed at Dudley Brook wetlands, view southeast.

Plate 36. Railroad cut immediately east of Peakham Road, view southeast.

Plate 37. Electrical box for crossing gate or signal east side of Peakham Road, view north.

Plate 38. Raised rail bed through wetlands west of Peakham Road, view southeast.

Plate 39. Railroad cut and retaining walls through wooded rise, view east.

Plate 40. Location of former Wayside Inn Station south of rail just west of Dutton Road crossing in Sudbury, view southwest.

Plate 41. Concrete bench supports north of rail bed and west of Dutton Road, view south.

Plate 42. Granite mile marker north of rail bed and west of Dutton Road, view south.

Plate 43. Raised rail bed west of Dutton Road, view southeast.

Plate 44. Railroad cut and berm, view southeast.

Plate 45. Railroad bridge support over Hop Brook, view west.

Plate 46. Railroad bridge across Hop Brook, view southeast.

Plate 47. Railroad bed through excavated sand pit, view southeast.

Plate 48. Railroad cut through wooded rise, view southeast.

Plate 49. Fieldstone-lined cellar of historic house, 46 ft south from the railroad, view southeast.

Plate 50. Railroad through level terrain, view southeast.

Plate 51. Railroad cut through wooded rise, view southeast.

Plate 52. Tri-town granite marker, within the rail bed west of Old Concord Road, at the town boundaries of Hudson, Sudbury and Marlborough, view southeast.

Plate 53. Granite mile marker north of rail bed and boundaries of Hudson, Sudbury and Marlborough, view northeast.

Plate 54. Railroad crossing of Old Concord Road near tri-town junction, view southeast.

Plate 55. Graded and bermed land south of rail bed, view south.

Plate 56. Raised rail bed east of White Pond Road, view east.

Plate 57. Former railroad crossing of White Pond Road in Hudson, view southeast.

Plate 58. Raised rail bed through wetlands east of Parmenter Road, view southeast.

Plate 59. Railroad cut with field stone retaining wall, view east.

Plate 60. Granite mile marker north of rail bed and east of/by Parmenter Road, view south.

Plate 61. Granite mile marker and knoll north of rail bed east of Parmenter Road, view northeast.

Plate 62. Raised rail bed and concrete bench support (to left) east of Parmenter Road, view southeast.

Plate 63. Location of former Ordway Station south of rail just east of the crossing at Parmenter Road in Hudson, view southwest.

Plate 64. Raised rail bed through wooded gently undulating terrain near golf course, view southeast.

Plate 65. Railroad electrical component/cement box, view southeast.

Plate 66. Railroad whistle post, view southeast.

Plate 67. Railroad cut/fill through wooded gently undulating terrain east of Main Street, view southeast.

Plate 68. Railroad cut at crossing of Main Street in Hudson, view southeast.

Plate 69. Railroad cut with wooded knoll (to left) near precontact site 19-MD-514, view southeast.

Plate 70. Granite mile marker west of Main Street, north of rail bed and east of paved access road, view south.

Plate 71. Crossing of paved access road west off Main Street, view southeast.

Plate 72. Industrial area/gravel pit, view northeast

Plate 73. Dilapidated bridge across Fort Meadow Brook, view southeast.

Plate 74. Filled rail bed across Fort Meadow Brook wetlands, view southeast.

Plate 75. Crossing of gravel pit access road, view north to leveled gravel pit.

Plate 76. Foundation remnant of mortared brick east of Chestnut Street, view east.

Plate 77. Level rail bed east of Chestnut Street, with foundation remnant, view southeast.

Plate 78. Filled Chestnut Street road bed, view east.

Plate 79. Raised rail bed approaching Chestnut Street, view east.

Plate 80. Partially buried concrete and granite block cattle crossing from orchard hill, view south.

Plate 81. Concrete bench support near/west of mile marker, view northeast.

Plate 82. Granite mile marker north of rail bed across from orchard, view east.

Plate 83. Terraced rail bed at orchard (to right) east of Wilkins Street, view east.

Plate 84. Raised rail bed east of Wilkins Street, with possible former Gleason Junction Railroad Station location to left, view west.

Plate 85. Raised rail bed at Wilkins Street crossing, view east.

Plate 86. View south of Project route within Wilkins Street.

Plate 87. View south of Project route within Wilkins Street to Main Street intersection.

Plate 88. View south of Project route within Forest Avenue from Glendale Road.

Plate 89. View south of Project route within Forest Avenue from Old North Road.

Plate 90. View south of Project route within Forest Avenue from John Robinson Drive.

Plate 91. View southwest of Project route within Forest Avenue to Marlboro Street intersection.

Plate 92. View southwest of Project route within Forest Avenue lined with ornamental stone walls, west of Marlboro Street intersection.

Plate 93. View southwest of Project route within Forest Avenue lined with stone wall.

Plate 94. View southeast of asphalt paved driveway to Hudson Municipal Substation 384.

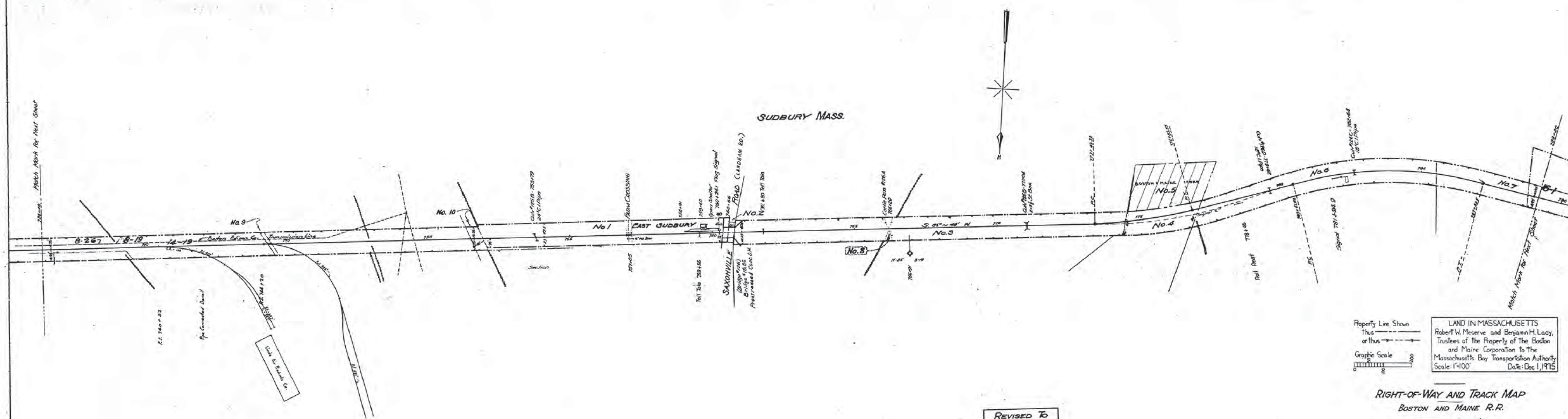
Plate 95. Graded yard at Hudson Municipal Substation 384, view southwest.

Plate 96. Hudson Municipal Substation 384, view southwest.

APPENDIX I

1914 Boston and Maine Railroad
Right-of-Way and Track Maps

Parcel No	Custodians No.	Kind of Instrument	Date of Instrument	Grantor	Grantee	Recorded Middlesex County Book	Page	Date	Remarks
1	CRB11, p15	C. Award	Sept. 16, 1873	George Coolidge	Mass. Cent. R.R.	CC Rec.	Sept. Tr.	1873 Case # 289	
1	CM-128	F. War.	Oct. 25, 1880	"	"	1557	9	Dec. 16, 1880	
2	CRB15, p1	C. Decree	Sept. 6, 1881	Town of Sudbury	"	CC Rec.	Jan. Tr.	1881 Case # 7	Rt. to cross under highway
3	CM-190	F. War.	Nov. 18, 1872	Arnold Farr	"	1238	68	Nov. 23, 1872	
4	CM-253	"	Mar. 22, 1873	Lizzie H. Hall, et al	"	1256	656	Apr. 25, 1873	
5	"	"	"	"	"	"	"	"	Not in use
6	CM-157	"	May 7, 1881	James Dana	"	1587	17	Dec. 19, 1881	
7	CM-480	"	Jan. 14, 1873	Farwell Smith	"	1248	245	Feb. 27, 1873	
8	7699	"	Apr. 25, 1930	Novello L. Coolidge	B&M R.R.	5456	448	Apr. 26, 1930	Release of Cattlepass
8-19	9865	Indenture	Apr. 24, 1951	B & M R.R.	Boston Edison Co.				Transmission Line Easement
9	10834	Indenture	Oct. 20, 1959	Boston Edison Co.	Boston & Maine R.R.				Exchange of Crossing Rights
10	10834	"	"	Boston & Maine R.R.	Boston Edison Co.				" " "
8-19	9865-C	"	Sept. 24, 1962	"	"				Transmission Line Easement (Amended)
8-26	9865-E		July 30, 1969	B. & M. Corp.	"				Indenture to allow second Circuit to Operate at higher Voltage



Property Line Shown thus ——— or thus —x— — —x—

Graphic Scale 0 100 200

LAND IN MASSACHUSETTS
Robert W. Meserve and Benjamin H. Lacy, Trustees of the Property of the Boston and Maine Corporation to the Massachusetts Bay Transportation Authority
Scale: 1"=100' Date: Dec 1, 1975

RIGHT-OF-WAY AND TRACK MAP

BOSTON AND MAINE R.R.

Operated by the

BOSTON AND MAINE R.R.

STATION 736+40 TO STATION 789+20

SCALE: 1-IN = 100-FT. JUNE 30, 1914.

Office of Valuation Engineer. Boston, Mass.

REVISED TO	
PHYSICAL FEATURES	LAND LINES
Sept. 1929	Apr. 1930
June 1951	Jun 1960
	Oct. 1975

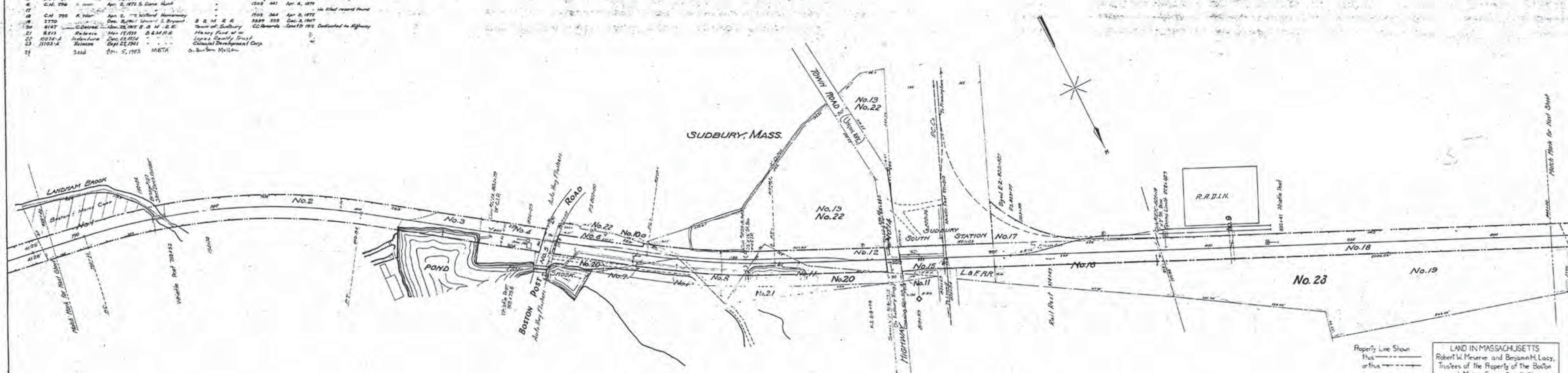
Sheet No. 15 of Ninety-eight primary sheets and one supplemental sheets of Boston and Maine R.R. Southern Division Main Line from survey station 736+40 to survey station 789+20.

Valuation Engineer.

Lawrence B Boyd

V-5
15

Parcel No.	Custodians No.	Kind of Instrument	Date of Instrument	Grantor	Grantee	Recorded Middlesex County Book	Page	Date	Remarks
1	C.M. 256	Full War.	June 19, 1872	Elizabeth Hunt	Mass. Cent. R.R.	1717	161	June 26, 1872	
2	C.M. 104	"	Oct. 23, 1872	Christopher G. Cutler	"	1261	470	Jan. 3, 1873	
3	D.2-T p.3	Filed Loc.	July 31, 1872	A.B. Richardson	"	Co. Eng'r Records Shelf 60			
4	C.M. 104	F. War.	Oct. 29, 1872	Christopher G. Cutler	"	1261	470	Jan. 3, 1873	
5	C.28 B p.1	C. Decree	Sept. 6, 1881	Town of Sudbury	"	C.C. Records		Jan. Term 1881	Case 7, Rt to cross grade
6	C.M. 211	F. War.	Aug. 27, 1872	Martin Goodnow	"	1776	260	Aug. 31, 1872	
7	3822	Agree.	Jan. 31, 1906	B & M R.R.	Charles Parmenter	3231	180	May 18, 1906	
8	C.M. 256	F. War.	Apr. 3, 1872	S. Dana Hunt	Mass. Cent. R.R.	1203	441	Apr. 6, 1873	
9	2770	"	Dec. 2, 1907	Edward S. Bryant	B & M R.R.	3339	555	Dec. 3, 1907	
10	D.2-T p.4	Filed Loc.	July 31, 1872	A.B. Richardson	Mass. Cent. R.R.	Co. Eng'r Records Shelf 60			
10a	7531	Quit.	Mar. 22, 1906	Charles O. Parmenter	B & M R.R.	3127	18	Apr. 30, 1906	
11	C.M. 104	F. War.	Oct. 29, 1872	Christopher G. Cutler	Mass. Cent. R.R.	1261	470	Jan. 3, 1873	
12	C.M. 260	"	Apr. 3, 1872	S. Dana Hunt	"	1203	441	Apr. 6, 1872	
13	C.M. 255	"	Aug. 1, 1873	"	"	1277	271	Sept. 12, 1873	
14	C.28 B p.8	C. Decree	Dec. 13, 1881	Mass. Cent. R.R.	Town of Sudbury	C.C. Records		Sept. Term 1881	Case 69 Ded. to public use. Approved By R.E. Green Dec. 28, 1881
15	" 31 p.6	"		Lowell & Fram. R.R.	Mass. Cent. R.R.	"		Jan. Term 1884	Case 13
16	D.2-T p.	[illegible]	[illegible] 31, 1872	"	"	Co. Eng'r Records Shelf 60			Rt to cross at grade
16	C.M. 256	F. War.	Apr. 3, 1872	S. Dana Hunt	"	1203	441	Apr. 6, 1873	
17				"	"				No Filed record found
18	C.M. 202	F. War.	Apr. 2, [illegible]	Willard Hemenway	"	1702	364	Apr. 8, 1872	
19	2770	"	Dec. 2, 1907	Edward S. Bryant	B & M R.R.	3339	555	Dec. 3, 1907	
20	6147	C. Decree	Nov. 23, 1912	B & M R.R.	Town of Sudbury	C.C. Records		Case 121 1912	Dedicated to Highway
21	8813	Release	Mar. 17, 1939	B & M R.R.	Henry Ford et al				
22	10074-A	Indenture	Dec. 23, 1954	"	Lopez Realty Trust				
23	11103-A	Release	Sept. 27, 1961	"	Colonial Development Corp.				
24		Deed	Apr. 5, 1983	MBTA	[illegible] Mullen				



Property Line Shown thus ——— or thus ———

Graphic Scale 0 100 200

LAND IN MASSACHUSETTS
Robert W. Meserve and Benjamin H. Lacy,
Trustees of the Property of the Boston
and Maine Corporation to The
Massachusetts Bay Transportation Authority
Scale: 1"=100' Date: Dec 1, 1975

Revised To	
Physical Features	Land Lines
Jan. 1919	Mar. 1939
Sept. 1929	Jan. 1955
June 1951	Oct. 1962
	Oct. 1975

Sheet No. 16 of Ninety-eight primary sheets and one supplemental sheets of Boston and Maine R.R. Southern Division Main Line from survey station 789+20 to survey station 842+00.

Valuation Engineer.

RIGHT-OF-WAY AND TRACK MAP

BOSTON AND MAINE R.R.

Operated by the

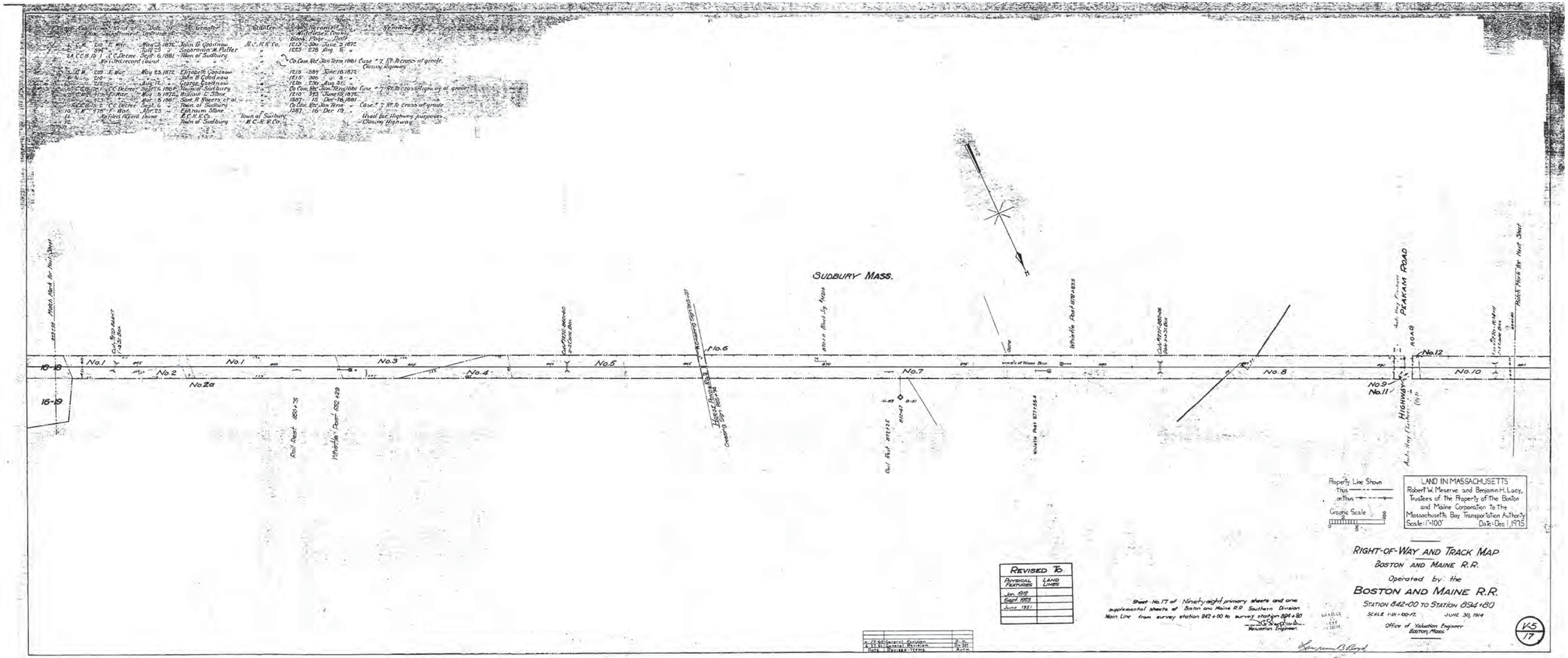
BOSTON AND MAINE R.R.

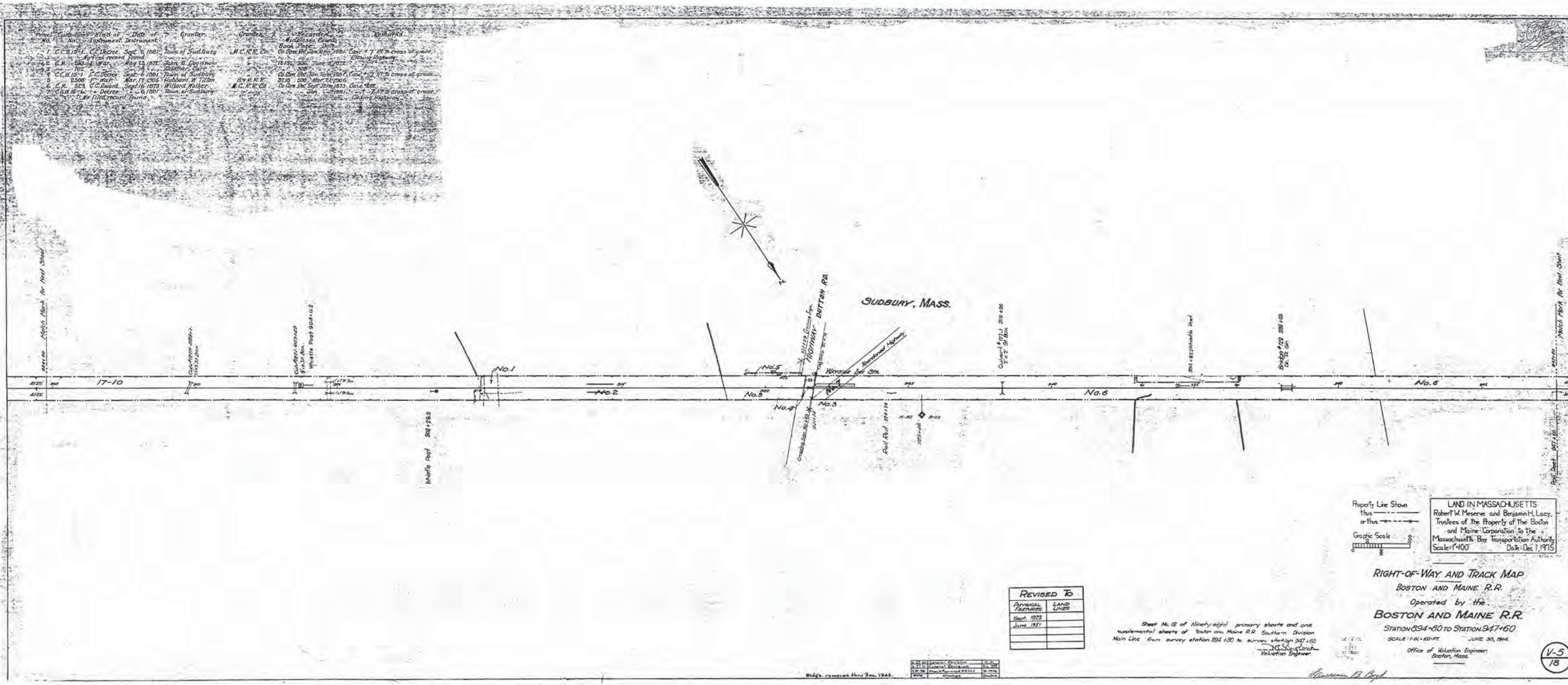
STATION 789+20 TO STATION 842+00

SCALE 1 IN. = 100 FT. JUNE 30, 1914.

Office of Valuation Engineer
Boston, Mass.

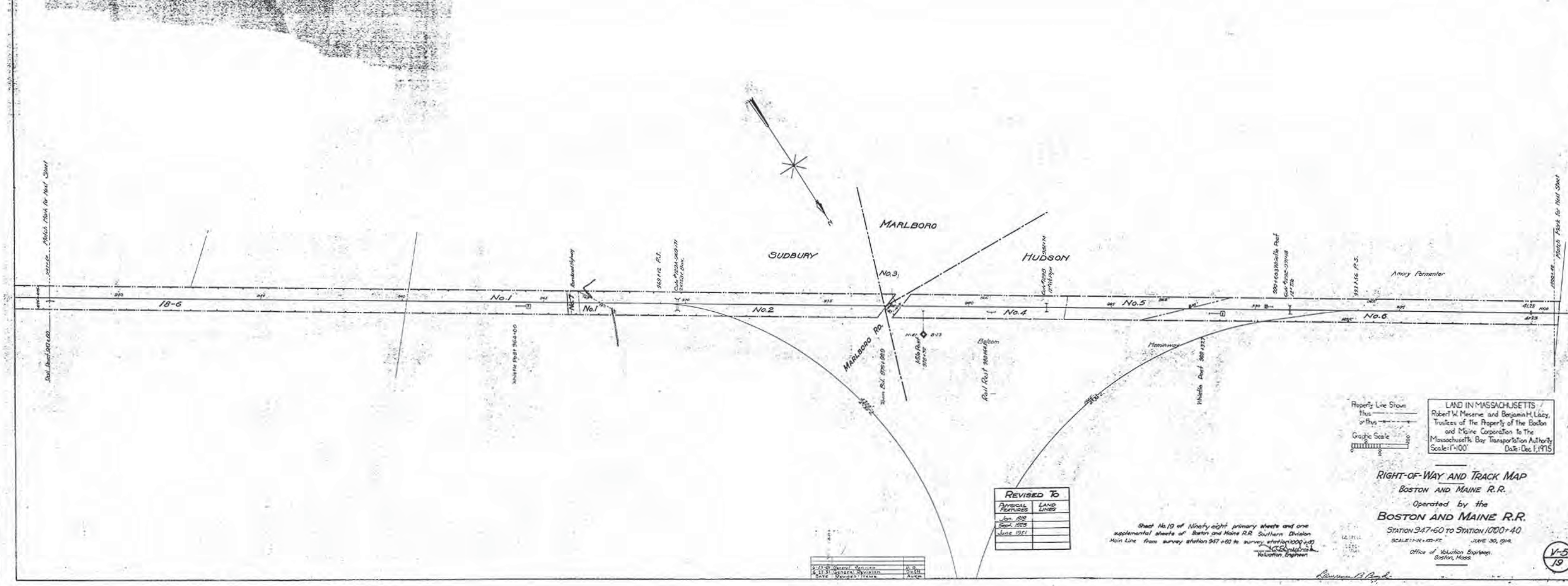
V-5
16

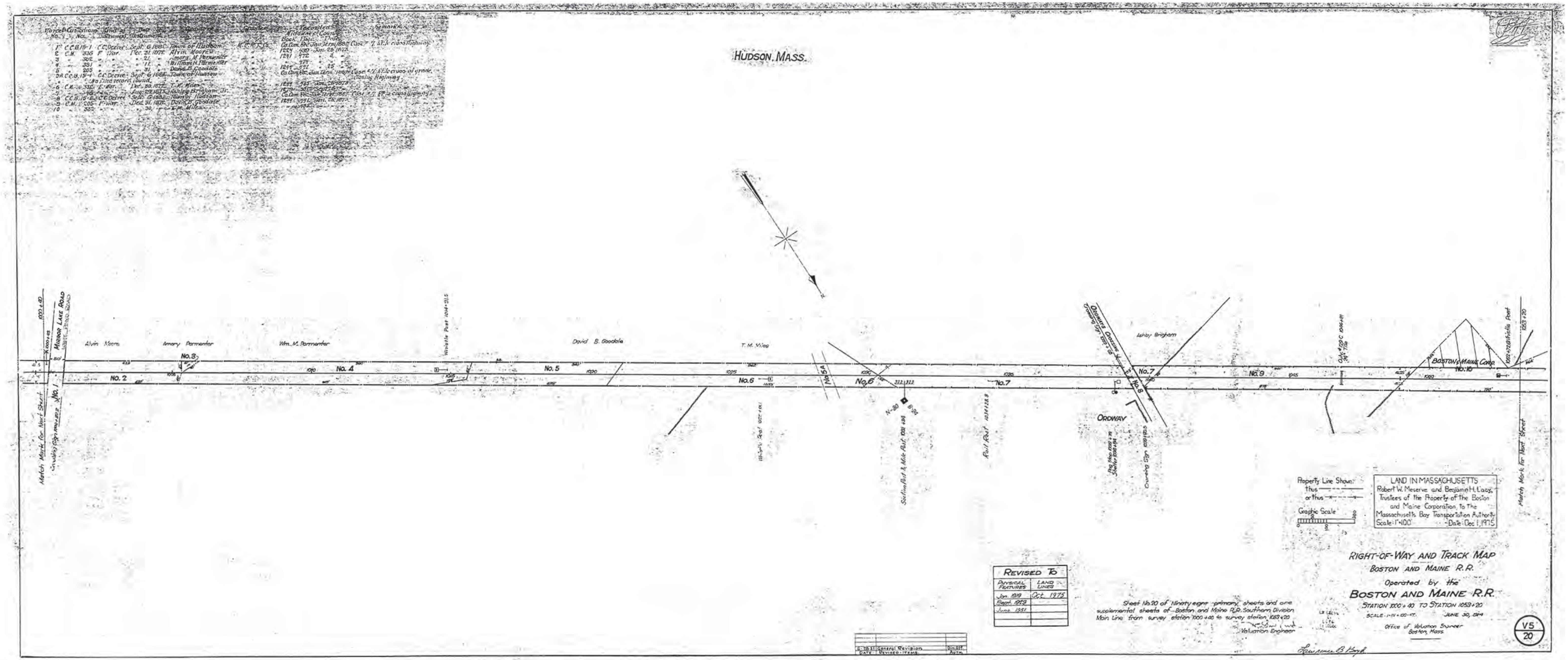

SUDBURY MASS.
PEAKAM ROAD
HIGHWAY
No.1
No.2
No.2a
No.3
No.4
No.5
No.6
No.7
No.8
No.9
No.10
No.11
No.12
16-18
16-19
Property Line Shown thus
or thus
Graphic Scale
LAND IN MASSACHUSETTS
Robert W. Meserve and Benjamin H. Lacy, Trustees of the Property of the Boston and Maine Corporation to the Massachusetts Bay Transportation Authority
Scale: 1"=100'
Date: Dec 1, 1975
RIGHT-OF-WAY AND TRACK MAP
BOSTON AND MAINE R.R.
Operated by the
BOSTON AND MAINE R.R.
STATION 842+00 TO STATION 894+80
SCALE 1-IN = 100-FT.
JUNE 30, 1914
Office of Valuation Engineer
Boston, Mass.
V-5
17
REVISED TO
PHYSICAL FEATURES
LAND LINES
Jan. 1919
Sept. 1923
June 1951
Sheet No. 17 of Ninety eight primary sheets and one supplemental sheets of Boston and Maine R.R. Southern Division Main Line from survey station 842+00 to survey station 894+80
Valuation Engineer
Laurence B. Boyd



SUDBURY, MASS.
DUTTON RD.
HIGHWAY
Wayside Inn Sta.
No.1
No.2
No.3
No.4
No.5
No.6
17-10
Whistle Post
Property Line Shown thus
or thus
Graphic Scale
LAND IN MASSACHUSETTS
Robert W. Meserve and Benjamin H. Lacy, Trustees of the Property of the Boston and Maine Corporation to the Massachusetts Bay Transportation Authority
Scale: 1"=100'
Date: Dec 1, 1975
RIGHT-OF-WAY AND TRACK MAP
BOSTON AND MAINE R.R.
Operated by the
BOSTON AND MAINE R.R.
STATION 894+60 TO STATION 947+60
SCALE: 1-IN.=100-FT.
JUNE 30, 1914.
Office of Valuation Engineer. Boston, Mass.
Sheet No. 18 of Ninety-eight primary sheets and one supplemental sheets of Boston and Maine R.R. Southern Division Main Line from survey station 894+80 to survey station 947+60
Valuation Engineer.
V-5
18
REVISED TO
PHYSICAL FEATURES
LAND LINES
Sept. 1923
June 1951

Parcel No.	Custodian's No.		Kind of Instrument	Date of Instrument	Grantor	Grantee	Recorded Middlesex County Book	Page	Date	Remarks
1	C.M.	393	F. War.	June 10 1872	Levi L. Perry, et al.	M.C.R.R.Co.	1215	586	June 18, 1872	
2	"	129	"	Apr. 24 "	Crosby Carr		1207	30	Apr. 26 "	
3	C.C.B. 15-1		C.C. Decree	Sept. 6 1881	Town of Sudbury	"	Co. Com. Rec. Jan. Term, 1881			Case # 7 Rt. to cross at grade.
4	C.M.	50	F. War.	" 26 1879	Ashael Belcom		1607	7	Dec. 16, 1880	
5	"	240	"	Dec. 31, 1872	Richard L. Hemenway		1244	440	Jan. 25, 1873	
6	"	382	"	" 21 "	Amory M. Parmenter		1241	472	" 8, 1873	
7	C.C.B. 15-1		C.C. Decree	Sept. 6, 1881	Town of Sudbury		Co. Com. Rec. Jan. Term, 1881			Case # 7 Rt. to cross at grade, Closing Highway.
	No filed record found.									




HUDSON, MASS.
Alvin Moore
Amory Parmenter
Wm. M. Parmenter
David B. Goodale
T. M. Miles
Ashley Brigham
BOSTON & MAINE CORP.
MIDDLE LAKE ROAD
ORDWAY
No. 1
No. 2
No. 3
No. 4
No. 5
No. 5A
No. 6
No. 7
No. 8
No. 9
No. 10
Match Mark for Next Sheet
Property Line Shown: thus or thus
Graphic Scale
LAND IN MASSACHUSETTS
Robert W. Meserve and Benjamin H. Lacy, Trustees of the Property of the Boston and Maine Corporation, to The Massachusetts Bay Transportation Authority
Scale: 1"=100' Date: Dec 1, 1975
REVISED TO
PHYSICAL FEATURES | LAND LINES
Jan. 1919 | Oct. 1975
Sept. 1929
June 1951
Sheet No. 20 of Ninety eight primary sheets and one supplemental sheets of Boston and Maine R.R. Southern Division Main Line from survey station 1000+40 to survey station 1053+20
Valuation Engineer
RIGHT-OF-WAY AND TRACK MAP
BOSTON AND MAINE R.R.
Operated by the
BOSTON AND MAINE R.R.
STATION 1000+40 TO STATION 1053+20
SCALE - 1 IN = 100 FT.
JUNE 30, 1914
Office of Valuation Engineer
Boston, Mass.
V5
20
General Revision
DATE
REVISED ITEMS
AUTH.

Parcel No.	Custodians No.	Kind of Instrument.	Date of Instrument.	Grantor.	Grantee.	Recorded Middlesex County Book. Page. Date.	Remarks.
1	C.M. 241	C.C. Award.	Nov. 1875	Town of Hudson.	M.C.R.R. Co.	Co. Com. Sec. Sept. Term, 1875 Case #183	
2	C.C.B. 15-1	" Decree	Sept. 6 1881	" " "	"	" " " Jan. " 1881 " "	7. Rt. to cross Highway.
3	C.M. 335	F. War.	July 3 1872	Amory Maynard	"	1226 261 Aug. 31, 1872	
4	" 49	" "	June 17, 1881	Lewis Bemis	"	1572 331 June 27, 1881	
5	" 47	" "	Jan. 3 1873	Francis Brigham,	"	1244 438 Jan. 25, 1873	
6	D-101-260	Location	July 31, 1872	Lorenzo Stratton.	"	1 292 Co. Com. Rec. No. 93.	
7	C.M. 335	F. War.	" 3 "	Amory Maynard.	"	1226 261 Aug. 31, 1872	

HUDSON, MASS.

Property Line Shown
thus
or thus
Graphic Scale

LAND IN MASSACHUSETTS
Robert W. Meserve and Benjamin H. Lacy, Trustees of the Property of the Boston and Maine Corporation to The Massachusetts Bay Transportation Authority
Scale: 1"=100'   Date: Dec 1, 1975

REVISED TO	
PHYSICAL FEATURES	LAND LINES
Sept. 1929	Oct. 1975
June 1951	

Sheet No. 21 of Ninety eight primary sheets and one supplemental sheets of Boston and Maine R.R. Southern Divisi Main Line ... survey station 1053+20 to survey station 1106+...

Valuation Engineer.

RIGHT-OF-WAY AND TRACK MAP
BOSTON AND MAINE R.R.
Operated by the
BOSTON AND MAINE R.R.
STATION 1053+20 TO STATION 1106+00
SCALE: 1 IN. = 100 FT.   JUNE 30, 1914.
Office of Valuation Engineer
Boston, Mass.

V-5
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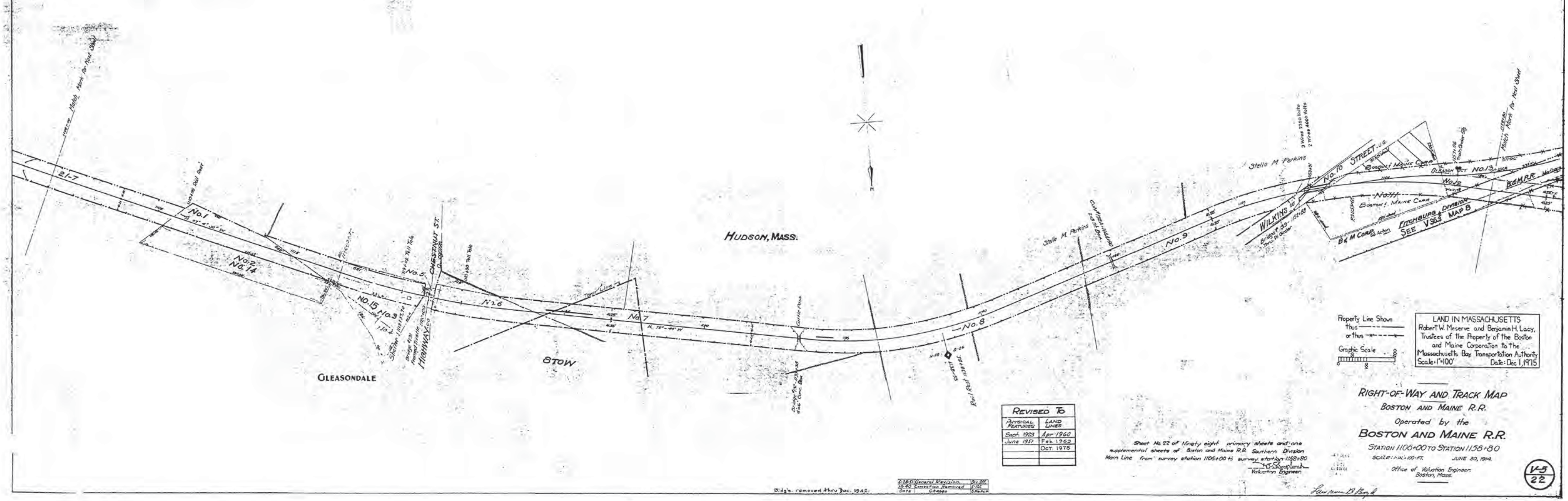
Parcel No.	Custodians No.	Kind of Instrument	Date of Instrument	Grantor	Grantee	Recorded Middlesex County Book	Page	Date	Remarks
1	C.M. 16	F. War.	Aug. 13, 1872	Benjamin H.A. Atkinson	M.C.R.R. Co.	1251	602	Mar. 28, 1873	
2	1101	" "	Jan. 18, 1898	Lewis D. Apsley	B.&M.R.R.	2630	192	Jan. 27, 1898	
3	C.M. 334	" "	Aug. 19, 1872	Albert G. Moulton	M.C.R.R. Co.	1226	268	Aug. 31, 1872	
4	" 243	" "	Nov. 3, 1885	Abraham G.R. Hale	C.M.R.R. Co.	1777	469	Dec. 11, 1886	
5	C.C.B. 15-1	C.C. Decree	Sept. 6, 1881	Town of Hudson	M.C.R.R. Co.	Co. Com. Rec. Jan. Term, 1881			Case # 7 Rt. to cross Highway
"	6078	" "	Jan. 18, 1921	" "	B.&M.R.R.	" "	"	" 1921	" " rebuild Bridge No. 131
6	C.M. 15	F. War.	Aug. 16, 1872	George Atkinson, et ux	M.C.R.R. Co.	1226	266	Aug. 31, 1872	
7	" 334	" "	" 19 "	Albert G. Moulton	"	"	268		
8	D-101-252	Location	Jan. 1	Mrs. T. Wilkins	"	1	137	Clk. of Co. Rec'r 91	
9	C.C.B. H-21	C.C. Award	Oct. 7, 1873	Joseph Dakin	"	Clk. of Co. Rec. Sept. Term 1873			Case # 346
10	" 15-1	" Decree	Sept. 6, 1881	Town of Hudson	"	Co. Com. Rec. Jan. Term, 1881			" 7 Rt. to cross Highway
11	C.M. 465	F. War.	May 24, 1873	Wm. H. Stone, et ux.	"	1267	293	July 2, 1873	
12	" 279	" "	Apr. 6	James T. Joslin	"	1256	688	Apr. 25, 1873	
13	" 1860		" 30, 1902	Clinton M. Chandler	B.&M.R.R.	2961	473	" 30, 1902	
14	10603-A	Release	Jun. 30, 1959	B.&M.R.R.	Alden H. & Roger K. Kane				
15	12105-A		Dec. 21, 1969	B.&M. Corp.	et al.				



Property Line Shown thus ---- or thus

Graphic Scale 0 100 200

LAND IN MASSACHUSETTS
Robert W. Meserve and Benjamin H. Lacy, Trustees of the Property of the Boston and Maine Corporation to The Massachusetts Bay Transportation Authority
Scale: 1"=100' Date: Dec 1, 1975

RIGHT-OF-WAY AND TRACK MAP
BOSTON AND MAINE R.R.
Operated by the
BOSTON AND MAINE R.R.
STATION 1106+00 TO STATION 1158+80
SCALE: 1 IN. = 100 FT. JUNE 30, 1914.
Office of Valuation Engineer, Boston, Mass.

REVISED TO	
PHYSICAL FEATURES	LAND LINES
Sept. 1923	Apr. 1960
June 1951	Feb. 1963
	Oct. 1975

Sheet No. 22 of Ninety eight primary sheets and one supplemental sheets of Boston and Maine R.R. Southern Division Main Line from survey station 1106+00 to survey station 1158+80

Valuation Engineer.

Bldg's. removed thru Dec. 1942.

V-5
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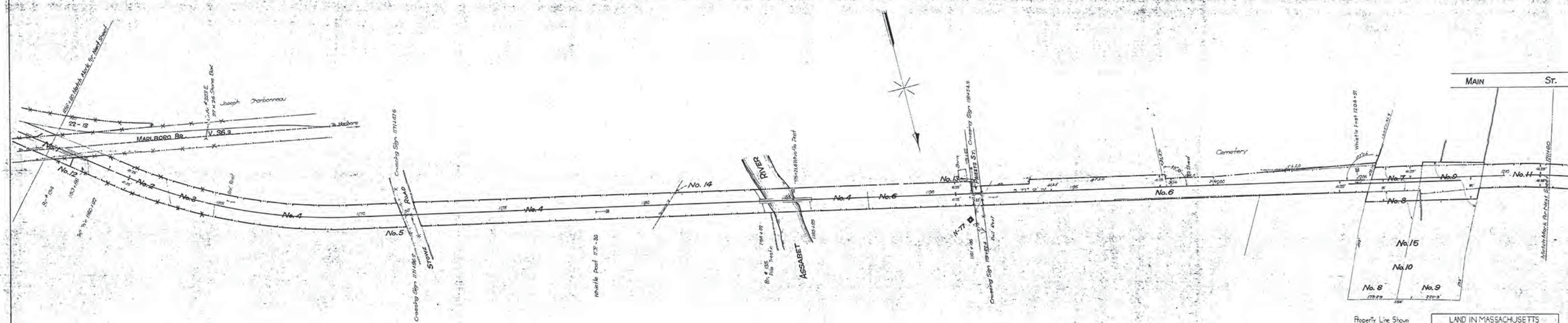
Parcel No.	Custodian's No.	Kind of Instrument	Date of Instrument	Grantor	Grantee	Recorded Middlesex County Book	Page	Date	Remarks
1	D-101-C52	Location	Jan. 1, 1872	Fitchburg R.R. Co.	M.C.R.R. Co.	1	137	Clk. of Co's Rec. #91	Eight Rods Location.
2	C.C.B.11-C1	C.C. Award	Oct. 7, 1873	Joseph Dolin	"	Co. Com. Rec. Sept. Term, 1873			Case #346
3	C.M. 279	E. War.	Apr. 5 "	James T. Joslin	"	1256	656	Apr. 25 "	
4	" 321	" "	July 14 "	Joel Wilkins	"	1270	207	July 23 "	
"	" 698	" "	Dec. 8, 1881	Mary Wilkins	N.C. Munson	1586	189	Dec. 12, 1881	
"	" 544	Quit.	Mar. 22, 1884	N.C. Munson	M.C.R.R. Co.	1714	191	July 28, 1886	
5	" 393	Release	May 17, 1881	Harriet E. Kennedy, et al	"	1587	19	Dec. 15, 1881	
"	C.C.B.15-1	C.C. Decree	Sept. 6 "	Town of Hudson	"	Co. Com. Rec. Jan. Term "			Case # 7, Rt. to cross Highway.
6	C.M. 167	E. War.	July 1, 1872	Levi P. Ellithrop, et al	"	1231	652	Oct. 10, 1872	
7	" 387	" "	" 21, 1873	John Merrigan	"	1270	205	July 23, 1873	
8	" 580	S. War.	Nov. 1, 1890	James Moore	C.M.R.R. Co.	2010	484	Nov. 17, 1890	
9	" 362	E. War.	Mar. 1, 1873	Patrick O'Neil	M.C.R.R. Co.	1251	603	Mar. 25, 1873	
10	2814	Quit.	Apr. 18, 1906	B.& M.R.R.	Jeremiah O'Neil	3249	2	Aug. 2, 1906	
11	C.C.B.12-K	C.C. Award	Jan. 6, 1874	Marshall Wood	M.C.R.R. Co.	Co. Com. Rec. Jan. Term 1874			Case #417
12	D-101-C52	Location	" 1, 1872	A.B. Moulton	"	1	137	Clk. of Co's Rec. #91	
13	C.C.B.15-1	C.C. Decree	Sept. 6, 1881	Town of Hudson	"	Co. Com. Rec. Jan. Term 1881			Case # 7, Rt. to cross Highway.
14	C.M. 638	Taking	June 28, 1904	B.& M.R.R. et al	Town of Hudson	3107	194	June 28, 1904	
15	2514-A	Con. Deed	Dec. 13, 1961	" "	Elizabeth McQuillan et als				

HUDSON, MASS.



Property Line Shown thus ---- or thus -x---x-

Graphic Scale 0 100 200

LAND IN MASSACHUSETTS
Robert W. Meserve and Benjamin H. Lacy, Trustees of the Property of the Boston and Maine Corporation to The Massachusetts Bay Transportation Authority
Scale: 1"=100' Date: Dec. 1, 1975

Revised To	
Physical Features	Land Lines
Jan. 1919	
Sept. 1923	

Sheet No. 23 of Ninety eight primary sheets and one supplemental sheets of Boston and Maine R.R. Southern Division Main Line from survey station 1158+80 to survey station 1211+60

Valuation Engineer

RIGHT-OF-WAY AND TRACK MAP
BOSTON AND MAINE R.R.
Operated by the
BOSTON AND MAINE R.R.
STATION 1158+80 TO STATION 1211+60

SCALE: 1-IN.=100-FT. JUNE 30, 1914.

Office of Valuation Engineer
Boston, Mass.

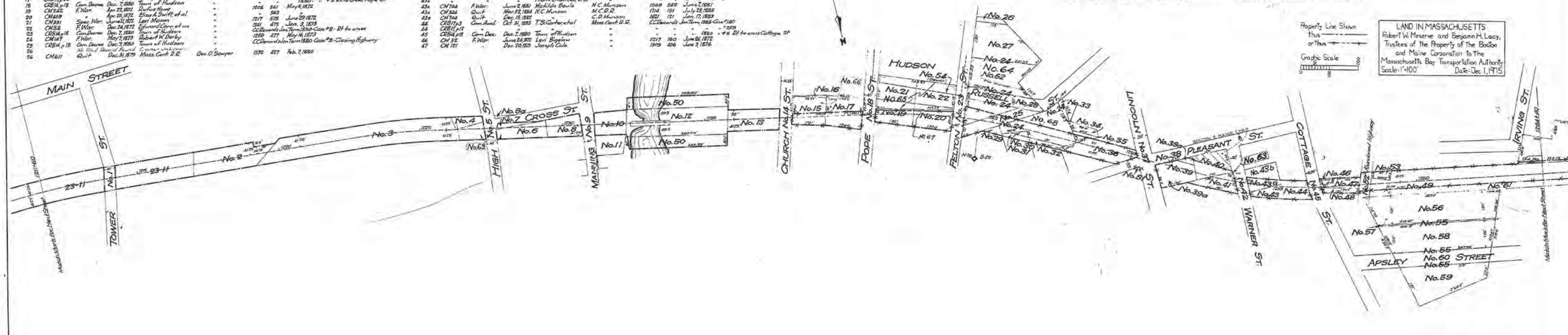
V5
23

HUDSON, MASS.

Parcel No.	Custodians No.	Kind of Instrument	Date of Instrument	Grantor	Grantee	Recorded Middlesex County Book	Page	Date	Remarks
1	CRB32,p16	Com. Dec.	Sept 26,1906	Mass. Cent. R.R.	Town of Hudson	CC Records 1906 Case #36			Dedicated to Public Use
2	CM 45	F. War.	Dec. 31, 1872	Lyman M. Bigelow	Mass. Cent. R.R.	1244	437	Jan. 25, 1873	
3	CRB15,p3	Com. Award	Jan. 6, 1874	Eliza Munson, et al	"	CC Records Jan Term 1874 Case #401			
3	CM 333	F. War.	Dec. 25, 1880	Eliza C. Munson, et al		1587	12	Dec. 19, 1881	
4	CM 618	"	Nov. 21, 1885	Edmund M. Stowe, et al	Cent. Mass. R.R.	1779	382	Dec. 27, 1886	
4	CRB17,p15	Com. Award	Dec. 7, 1885	E.M. Stowe, et al	"	CC Records Jan Term 1885 Case #299			
5	CRB14,p18	Com. Decree	Dec. 7, 1880	"	Mass. Central R.R.	"	"	1880	- #8 Rt. to cross under Hwy.
6	CM 241	Com. Award	June 9, 1882	Town of Hudson	"	"	"	1875	- #183
7	CRB14,p18	Com. Decree	Dec. 7, 1880	"	"	"	"	1880	- #8 Land gained by change of Hwy.
8	CRB12,p4	Com. Award	Jan. 6, 1874	Marshall Wood, et al	"	"	"	1874	- #417
8	CRB17,p14	"	Dec. 15, 1885	"	"	"	"	1885	- #279
8A	D101-252	Filed Loc.	Jan. 1, 1872	Wm. Houghton	"	"	Vol. 1, p 137		
8A	CRB14,p18	Com. Decree	Dec. 7, 1880	Mass. Cent. R.R.	Town of Hudson	"	Jan Term 1880 Case #8		Dedicated to Pub. Use.
9	CRB14,p18	"	"	Town of Hudson	Mass. Cent. R.R.	"	"	"	- Rt. to cross Maple St.
10	CM 466	F. War.	Mar. 28, 1873	Cornelius Sullivan	"	1259	479	May 16, 1873	
10	CRB17,p3	Com. Award	Oct. 15, 1885	Joseph P. Balcom	"	CC Records Jan Term 1885 Case #177			
11	CM 692	Par. Rel.	Dec. 12, 1873	Mass. Cent. R.R.	J. Lowde, et al	1302	514	Apr. 20, 1874	
11	CM 692	F. War.	"	"	Francis Brigham	"	512	"	
12	CM 416	"	Oct. 22, 1885	James C. Robertson, et al	Cent. Mass. R.R.	1777	474	Dec. 11, 1886	
13	CM 48	"	Apr. 1, 1881	Francis D. Brigham	Mass. Cent. R.R.	1564	63	Apr. 6, 1881	
13	CRB13,p16	Com. Award	Nov. 9, 1875	" et al	"	CC Records Sept Term 1875 Case #206			
14	CRB14,p18	Com. Decree	Dec. 7, 1880	"	"	"	" Jan	1880	- 8 - Rt. to cross Church St.
15	CM 520	F. War.	Apr. 28, 1873	Henry Whitcomb et ux	"	1259	481	May 16, 1873	
16	CM 613	"	Dec. 10, 1881	Mass. Cent. R.R.	Annie C. Joslin	1587	259	Dec. 31, 1881	
16	CM 614	"	June 8, 1882	"	"	1602	201	June 9, 1882	
17	CM 44	"	May 12, 1873	Charles L. Brigham	Mass. Cent. R.R.	1259	475	May 16, 1873	
17	CRB17,p2	Com. Award	Nov. 20, 1885	Elmira B. Howe, et al	"	CC Records Jan Term 1885 Case #176			
17	CRB17,p26	"	Jan. 14, 1886	Bacey Hurlburt	"	"	"	1886	- #74
18	CRB14,p18	Com. Decree	Dec. 7, 1880	Town of Hudson	"	"	"	1880	- #8 Rt. to cross Pope St.
19	CM 242	F. War.	Apr. 22, 1872	Rufus Howe	"	1208	561	May 6, 1872	
20	CM 469	"	Apr. 26, 1872	Eliza A. Swift, et al	"	"	583	"	
21	CM 331	Spec. War.	June 21, 1872	Levi Mason	"	1217	578	June 29, 1872	
22	CM 88	F. War.	Dec. 24, 1872	Edward Carr, et ux	"	1241	475	Jan. 3, 1873	
23	CRB14,p18	Com. Decree	Dec. 7, 1880	Town of Hudson	"	CC Records Jan Term 1880 Case #8			- Rt. to cross
24	CM 147	F. War.	May 7, 1873	Robert W. Derby	"	1259	477	May 16, 1873	
25	CRB14,p18	Com. Decree	Dec. 7, 1880	Town of Hudson	"	CC Records Jan Term 1880 Case #8			- Closing Highway
26		No Filed Record Found		Owner Unknown	"				
26	CM 611	Quit	Dec. 31, 1879	Mass. Cent. R.R.	Geo. O. Sawyer	1532	427	Feb. 7, 1880	

Parcel No.	Custodians No.	Kind of Instrument	Date of Instrument	Grantor	Grantee	Recorded Middlesex County Book	Page	Date	Remarks
27	CM 693	F. War.	June 8, 1882	Mass. Cent. R.R.	Inhab. Town of Hudson	1602	204	June 9, 1882	
28	CRB14,p18	Com. Decree	Dec. 7, 1880	"	Town of Hudson	CC Records Jan Term 1880 Case #8			- Land dedicated
29	CM 5A	Quit	Jan. 20, 1886	Robert Tulloch	S.N. Aldrich, et al	1777	456	Dec. 11, 1886	
29	CRB17,p25	Com. Award		"	M.C.R.R.	CC Records Jan Term 1886 Case #82			
29	2050	Quit	Jan. 19, 1904	S.N. Aldrich, et al, Trs.	B.&M.R.R.	3080	157	Jan. 25, 1904	
30	CRB13,p17	Com. Award	Nov. 9, 1875	Benjamin Hastings	M.C.R.R.	CC Records Sept Term 1875 Case #207			
31	736	F. War.	Nov. 15, 1894	"	B.&M.R.R.	2321	406	Nov. 19, 1894	
31	CM 560	Quit	Mar. 26, 1896	B.&M.R.R.	Cent. Mass. R.R.	2449	455	Mar. 31, 1896	
32	736	F. War.	Nov. 14, 1894	Deleena M. Cochran	B.&M.R.R.	2321	408	Nov. 19, 1894	
32	CM 560	Quit	Mar. 26, 1896	B.&M.R.R.	Cent. Mass. R.R.	2449	455	Mar. 31, 1896	
33	CM 694	F. War.	June 18, 1873	Mass. Cent. R.R.	Chas. T. Frost	1267	292	July 2, 1873	
34	1498	"	Dec. 20, 1899	Ella M. Frost, et al	B.&M.R.R.	2786	241	Dec. 20, 1899	
35	CM 188	"	June 18, 1873	Charles T. Frost	Mass. Cent. R.R.	1267	291	July 2, 1873	
36	CM 5A	Quit	Jan. 18, 1886	Geo. A. Tripp, et al	S.N. Aldrich, et al, Trs.	1777	455	Dec. 11, 1886	
36	2050	"	Jan. 19, 1904	S.N. Aldrich, et al, Trs.	B.&M.R.R.	3080	157	Jan. 25, 1904	
37	CRB14,p18	Com. Decree	Dec. 7, 1880	Town of Hudson	Mass. Cent. R.R.	CC Records Jan Term 1880 Case #8			- Right to cross
38	"	"	"	"	"	"	"	"	"
39	CRB13,p16	Com. Award	Nov. 7, 1875	William Jeffreys	"	"	Sept Term 1875 Case #206		
39	CM 697	F. War.	Aug. 24, 1881	"	N.O. Munson	1577	198	Aug. 24, 1881	
39	CM 544	Quit	Mar. 22, 1884	N.O. Munson	M.C.R.R.	1714	191	July 28, 1885	
39A	CM 696	"	Dec. 23, 1882	"	J.T. Joslin	1619	159	Dec. 28, 1882	
39A	"	"	Apr. 23, 1887	James T. Joslin	C.S. Mellen	1796	78	Apr. 29, 1887	
39A	CM 577	"	Mar. 6, 1889	Charles S. Mellen	Cent. Mass. R.R.	1901	374	Apr. 6, 1889	
40	CM 417	F. War.	July 21, 1873	Elizabeth R. Randall	Mass. Cent. R.R.	1270	209	July 28, 1873	
41	CM 468	"	Mar. 20, 1886	Susan J. Smith, et al	S.N. Aldrich, et al, Trs.	1777	457	Dec. 11, 1886	
41	2050	Quit	Jan. 19, 1904	S.N. Aldrich, et al, Trs.	B.&M.R.R.	3080	157	Jan. 25, 1904	
42	CRB14,p17	Com. Decree	Dec. 7, 1880	Town of Hudson	Mass. Cent. R.R.	CC Rec. Jan Term 1880 Case #8			- Rt. to cross Warner St.
43	CRB13,p18	Com. Award	Nov. 7, 1875	Peter Sharon	"	"	Sept	1875	- #210
43A	"	"	"	Frank Chamberlain, et al	"	"	"	"	"
43A	CM 706	F. War.	June 2, 1881	Matilda Bowle	N.C. Munson	1569	549	June 7, 1881	
43A	CM 544	Quit	Mar. 22, 1884	N.C. Munson	M.C.R.R.	1714	191	July 25, 1885	
43B	CM 706	Quit	Dec. 15, 1882	"	C.D. Munson	1621	121	Jan. 17, 1883	
44	CRB17,p3	Com. Awd.	Oct. 31, 1885	T.S. Carter, et al	Mass. Cent. R.R.	CC Records Jan Term 1886 Case #180			
44	CRB17,p12	"	"	"	"	"	"	"	- #259
45	CRB14,p18	Com. Dec.	Dec. 7, 1880	Town of Hudson	"	"	"	1880	- #8 Rt. to cross Cottage St.
46	CM 52	F. War.	June 24, 1872	Levi Bigelow	"	1217	160	June 26, 1872	
47	CM 121	"	Dec. 20, 1873	Joseph Cole	"	1309	406	June 3, 1874	

Parcel No.	Custodians No.	Kind of Instrument	Date of Instrument	Grantor	Grantee	Recorded Middlesex County Book	Page	Date	Remarks
48	CM 89	F. War.	Apr. 1, 1873	Howard M. Campbell	Mass. Cent. R.R.	1259	476	May 16, 1873	
49	CRB12,p4	Com. Award	Jan. 6, 1874	Benjamin Hastings	"	Files CC Jan Term 1874, case #417			
49	CRB13,p18	"	May 18, 1875	" et al	"	"	"	1875	- #225
49	CRB14,p4	"	Oct. 1, 1878	"	"	"	"	1878	- #30
50	3628	F. War.	Apr. 17, 1914	James C. Robertson, et al	B.&M.R.R.	3873	438	Apr. 21, 1914	
51	CM 187	"	Feb. 8, 1886	Henry T. French	S.N. Aldrich, et al, Trs.	1777	460	Dec. 11, 1886	
51	2050	Quit	Jan. 19, 1904	S.N. Aldrich, et al, Trs.	B.&M.R.R.	3080	157	Jan. 25, 1904	
51	CRB17,p23	Com. Award	Feb. 10, 1886	Henry T. French	M.C.R.R.	Files CC Jan Term 1886 Case #69			
52	CRB14,p18	Com. Decree	Dec. 7, 1880	Town of Hudson	Mass. Cent. R.R.	"	"	1880	- #8 Rt. to cross Highway
52		No Filed Record Found		"	"				Closing Highway
53	CRB17,p12	Com. Award	Nov. 24, 1885	John A. Taylor	"	Files CC Jan Term 1885 Case #257			
54	CM 651	Taking	Apr. 24, 1905	C.M.R.R. et al	Town of Hudson	3156	472	Apr. 25, 1905	Sewer Rights
55	CM 695A	F. War.	Apr. 15, 1887	Benj. Hastings	C.S. Mellen	1797	273	May 17, 1887	
55	CM 635	Quit	Mar. 6, 1889	Charles S. Mellen	B.&L.R.R.	2438	398	Feb. 19, 1896	
56	2560	"	Sept. 21, 1906	B.&L.R.R.	Apsley Rubber Co.	3261	311	Oct. 20, 1906	
57	1594	"	June 13, 1900	" et al	"	2828	264	June 27, 1900	
58	1501	"	Dec. 23, 1899	"	"	2794	518	Jan. 20, 1900	
59	1489	"	Nov. 29, 1899	"	Lewis S. Apsley	"	511	"	
60		No Filed Record Found		"	Town of Hudson				Land used for Apsley St.
61	6829	Indenture	Oct. 23, 1925	B.&M.R.R.	Firestone-Apsley Rubber Co.				
61	"	"	"	Firestone-Apsley Rubber Co.	B.&M.R.R.				Rel. drng. esmt. future E.G.C.
62	7026	"	Nov. 23, 1926	B.&M.R.R.	Thomas F. Killeen				Slope easement reserved
62	"	"	"	Thomas F. Killeen	B.M.R.R.				Rel. drng. esmt. future E.G.C.
63	7511	Quit	Sept. 11, 1928	James P. McNiff		5274	322	Sept. 13, 1928	
64	[illegible]	Release	[illegible]	[illegible] R.R.	[illegible] Killeen				[illegible]
65	10736-C	"	Dec. 4, 1959	"	Colonial Development Corp.				
66	11538		Apr. 10, 1962		Town of Hudson				
67	11868-A		Mar. 30, 1966	B. Ent. Corp.	John Paul Ahearn				
68									
69	12460-I-1	Deed	Sept. 25/1975		Comm. of Mass. D.P.W.	12878	133	Oct 16/1975	



Property Line Shown thus ——— or thus ———

Graphic Scale

LAND IN MASSACHUSETTS
Robert W. Meserve and Benjamin H. Lacy, Trustees of the Property of the Boston and Maine Corporation to the Massachusetts Bay Transportation Authority
Scale: 1"=100' Date: Dec. 1, 1975

Revised To	
Physical Features	Land Lines
	Oct. 1925
	Nov. 1926
	Sept. 1928
	[illegible] 1934
	Nov. 1957
	Aug. 1960
	Nov. 1963
	May 1966
	Oct. 1975

Sheet No. S.L.24 of Ninety-eight primary sheets and one supplemental sheets of Boston and Maine R.R. Southern Division Main Line from survey station 1211+60 to survey station 1264+40

Valuation Engineer

STATION MAP - LANDS

BOSTON AND MAINE R.R.

Operated by the

BOSTON AND MAINE R.R.

STATION 1211+60 TO STATION 1264+40

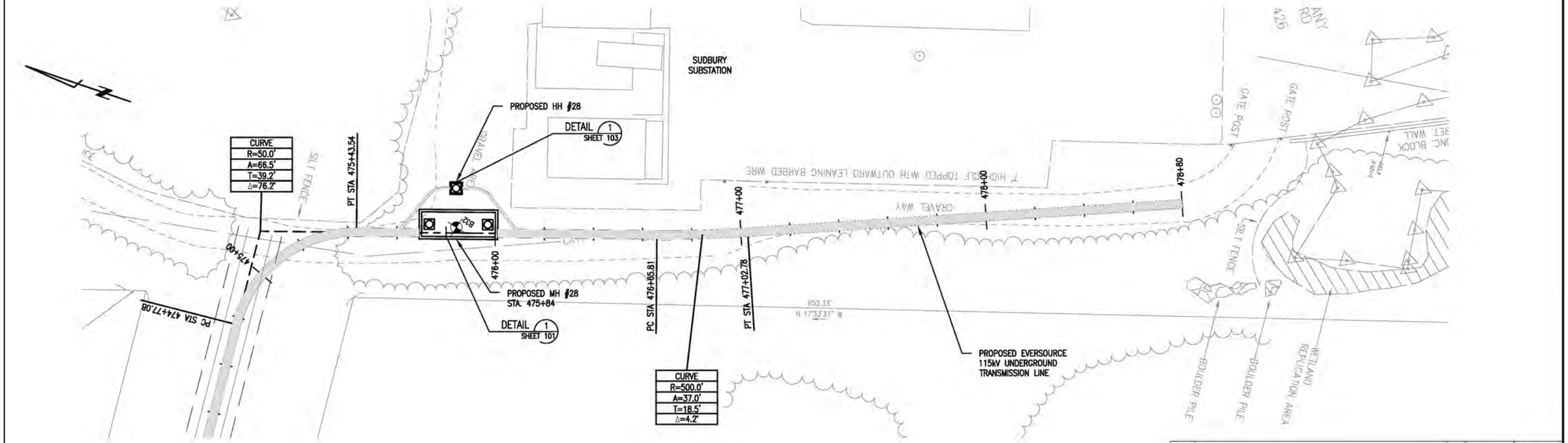
SCALE: 1 IN. = 100 FT. JUNE 30, 1914.

Office of Valuation Engineer, Boston, Mass.

V5 SL24

APPENDIX II

PROJECT ARCHAEOLOGICAL SENSITIVITY PLANS



THREE BUSINESS DAYS BEFORE YOU DIG CALL
MASSACHUSETTS 811
TOLL FREE
811 or 1-888-344-7233

POWER ENGINEERS
www.powereng.com

NOTES:
1. THE UTILITIES SHOWN HEREON ARE BASED ON FIELD SURVEYS, AERIAL PHOTOGRAPHY AND RECORD DOCUMENTS. OTHER FACILITIES MAY EXIST NOT DISCOVERED THROUGH THE RECORD CHECK. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, BOTH HORIZONTAL AND VERTICAL, OF ALL UTILITIES THROUGH THE APPROPRIATE UTILITY COMPANIES. CALL BEFORE YOU DIG – 1-888-344-7233.
2. ALL VERTICAL CURVES ARE 500' UNLESS OTHERWISE NOTED.
3. SIZE AND DEPTH OF ALL TELEPHONE, GAS, AND UNDERGROUND ELECTRICAL UTILITIES ARE ASSUMED.
4. DEPTH OF ALL WATER UTILITIES ARE ASSUMED.

Archaeological Sensitivity
- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

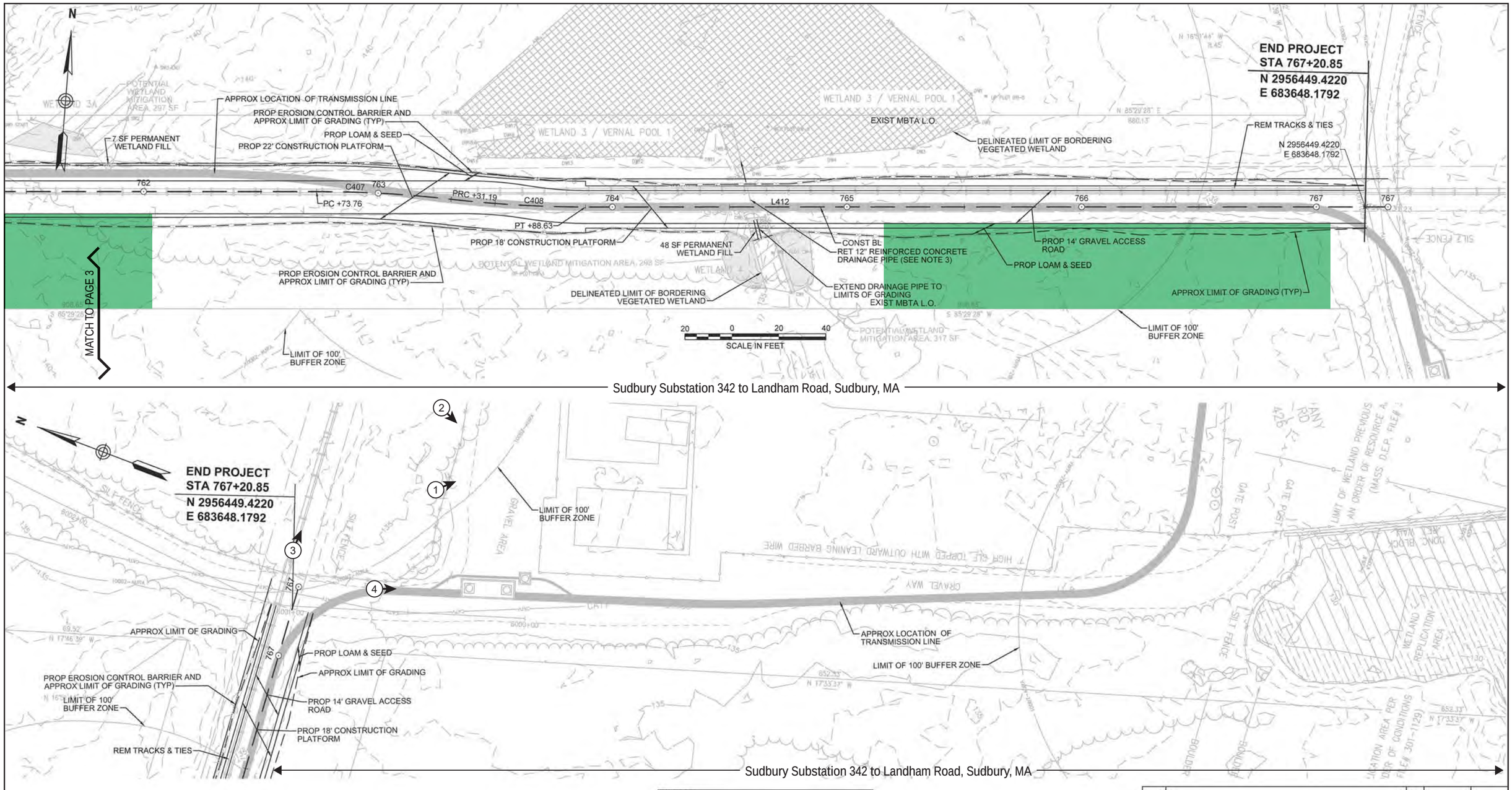
NO.	DESCRIPTION	BY	DATE	APPR.
B	PER VHB REVISED RR ROW DUCT LOCATION	DRC	10/20/17	TSG
A	ISSUED FOR REVIEW – REVISED 25% PLAN SET	DRC	10/13/17	TSG

REVISION

EVERSOURCE ENERGY

PLAN AND PROFILE STA 475+00 TO END
SUDBURY TO HUDSON
115kV UNDERGROUND TRANSMISSION LINE
SUDBURY – HUDSON, MASSACHUSETTS

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	REV.
H: 1"=20' V: 1"=5'	10/13/17	DRC		TSG	98 OF 103	B



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
2. WETLAND BOUNDARIES SHOWN HEREIN ARE THE SAME AS THOSE SHOWN ON HUDSON AND SUDBURY ANRAD PLANS (2017).
3. TRANSMISSION LINE TO RUN UNDERNEATH DRAINAGE PIPE.

vhb Vanasse Hangen Brustlin, Inc.
101 Walnut St., PO Box 9151
Watertown, MA 02472
617.924.1770 FAX 617.924.2286

NO.	DESCRIPTION	BY	DATE	APPR

REVISION

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS

PLAN 67 OF 223

SCALE: unless noted	DATE	DRAWN	CH'KD.	APP'R.	DRAWING NO.	REV
1"=20'	2–14–2018	MS	SK	MS	.	.

N

DRAINAGE SUB-BASIN BOUNDARY

LANDHAM ROAD

APPROX LIMIT OF GRADING (TYP)

PROP LOAM & SEED

BRIDGE S-31-002

PROP 22' CONSTRUCTION PLATFORM

BEGIN SWALE +25

PROP CHECK DAM

MATCH TO PAGE 4

MATCH TO PAGE 2

WETLAND 3A

7 SF PERMANENT WETLAND FILL

ZONE

Landham Road to Boston Post Road/Route 20, Sudbury, MA

Sudbury Substation 342 to Landham Road, Sudbury, MA

20 0 20 40

SCALE IN FEET

Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

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	REVISION			

EVERSOURCE

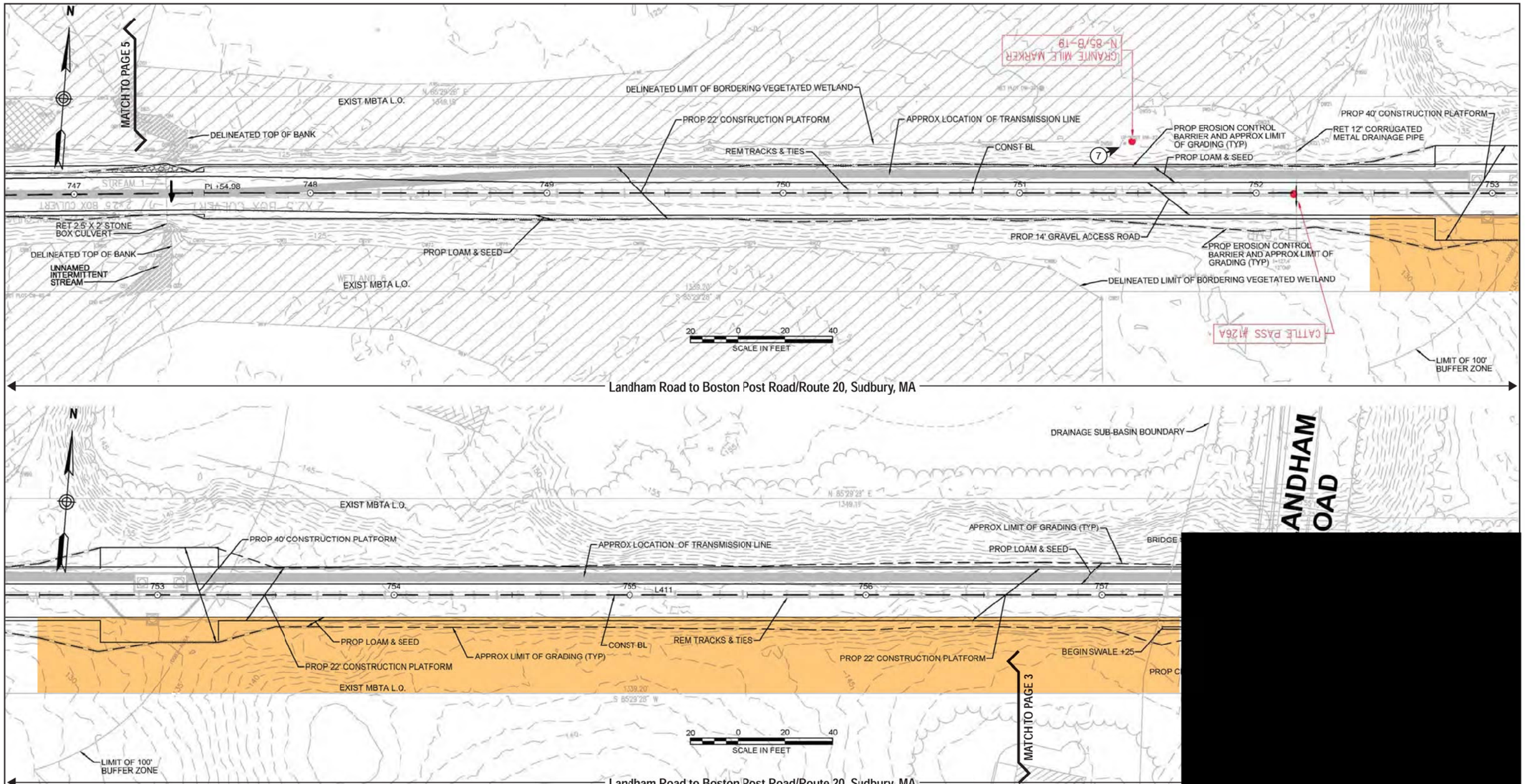
SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT

HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS

CONSTRUCTION PLANS

PLAN 66 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	RE
1"=20'	2–14–2018	MS	SK	MS	.	.



Archaeological Sensitivity

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(1) Plate # and orientation

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EVERSOURCE

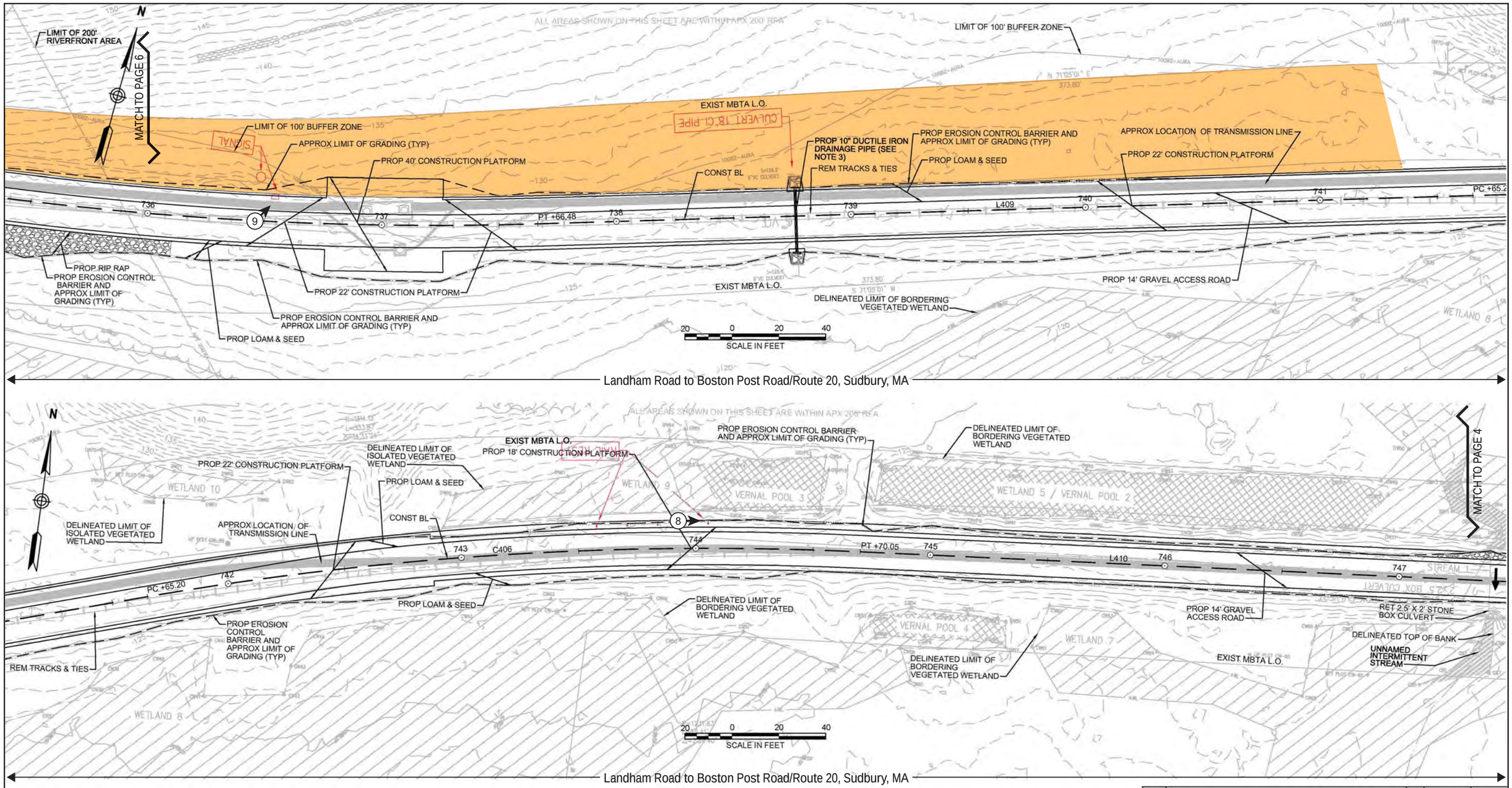
SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT

HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS

CONSTRUCTION PLANS

PLAN 65 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APP R.	DRAWING NO.	RE
1"=20'	2-14-2018	MS	SK	MS	.	.



Archaeological Sensitivity

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(1) Plate # and orientation

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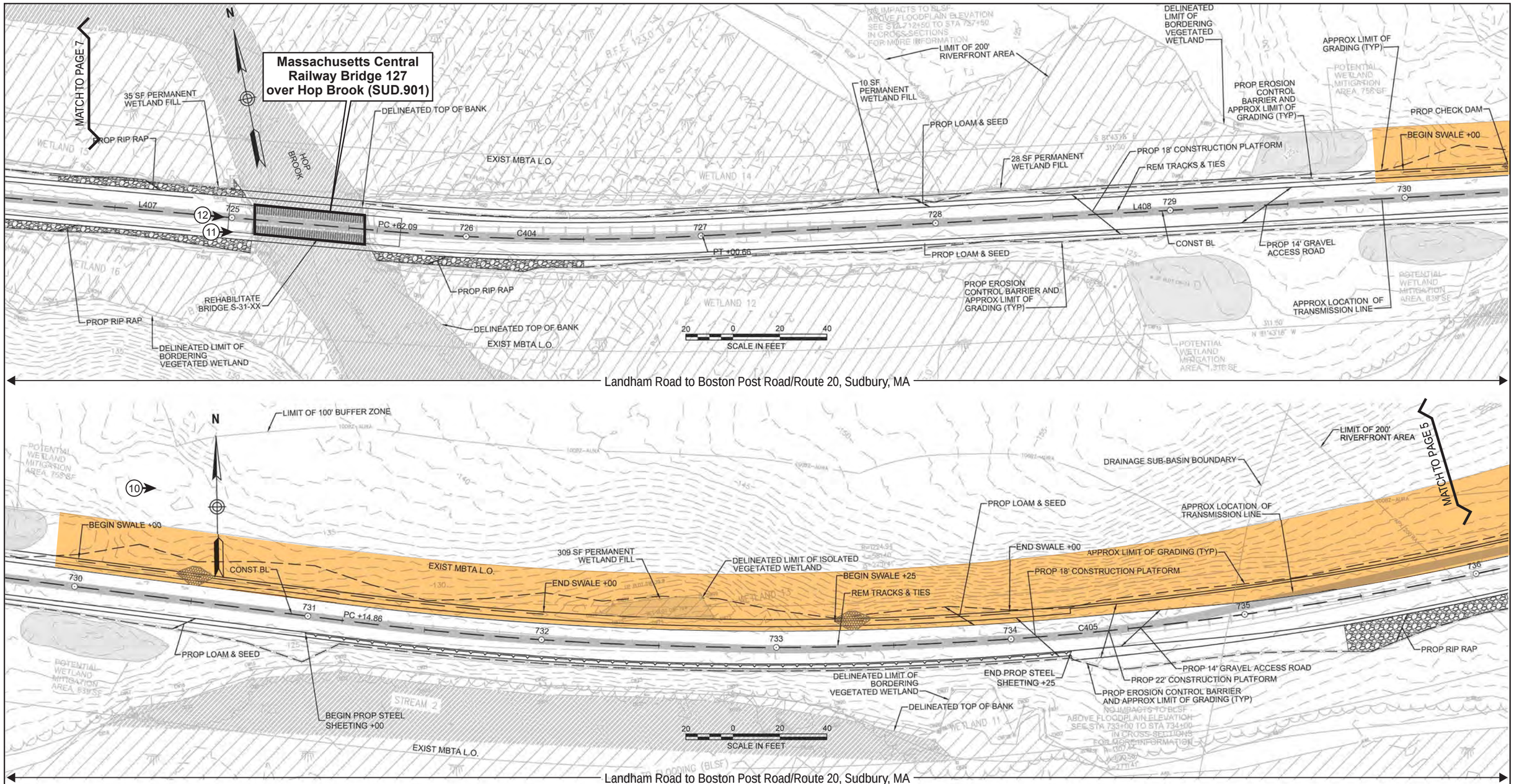
NO.	DESCRIPTION	BY	DATE	APPR
	REVISION			

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 64 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	REV
1"=20'	2–14–2018	MS	SK	MS	.	.



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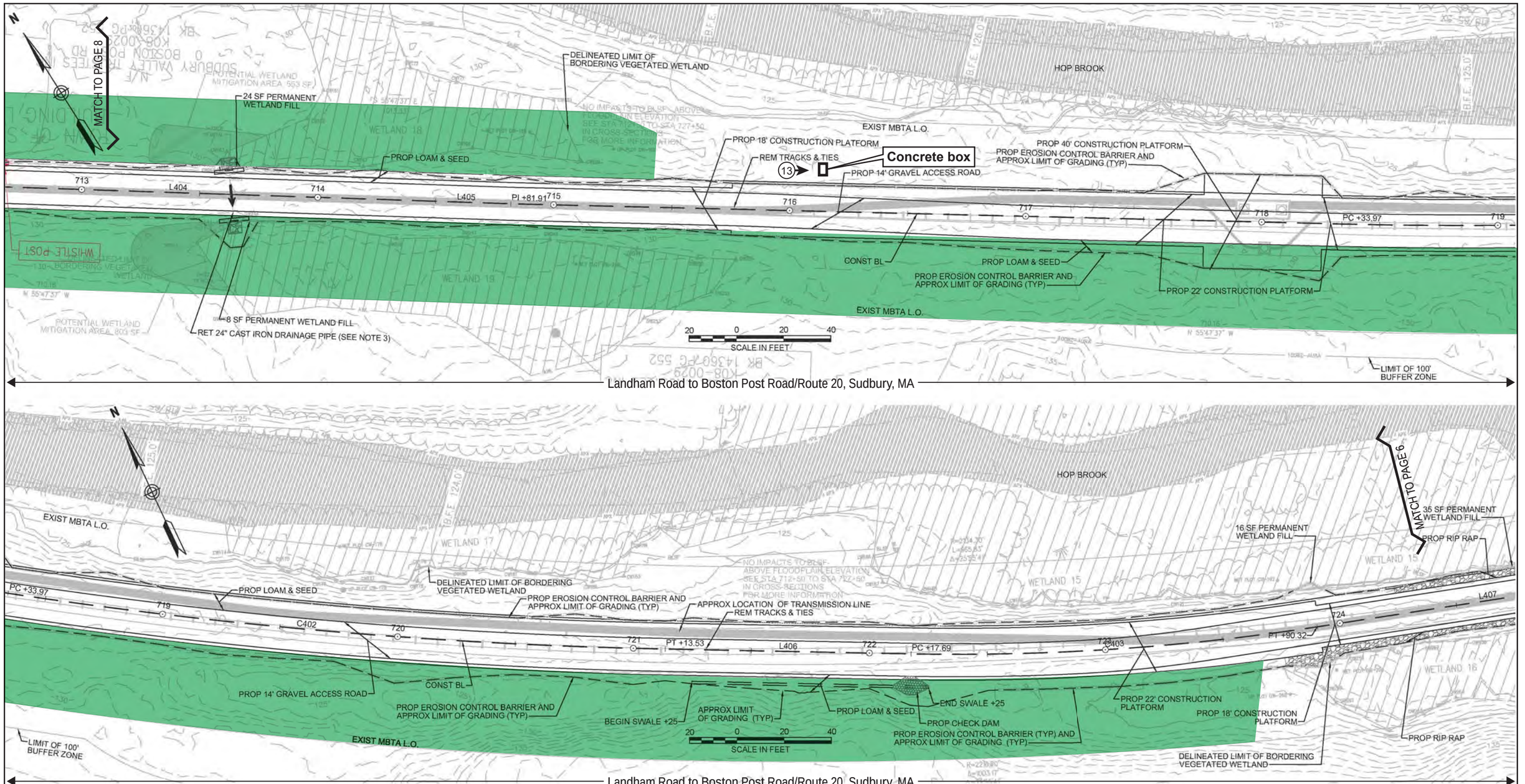
NO.	DESCRIPTION REVISION	BY	DATE	APPR

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 63 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	REV
1"=20'	2–14–2018	MS	SK	MS	.	.



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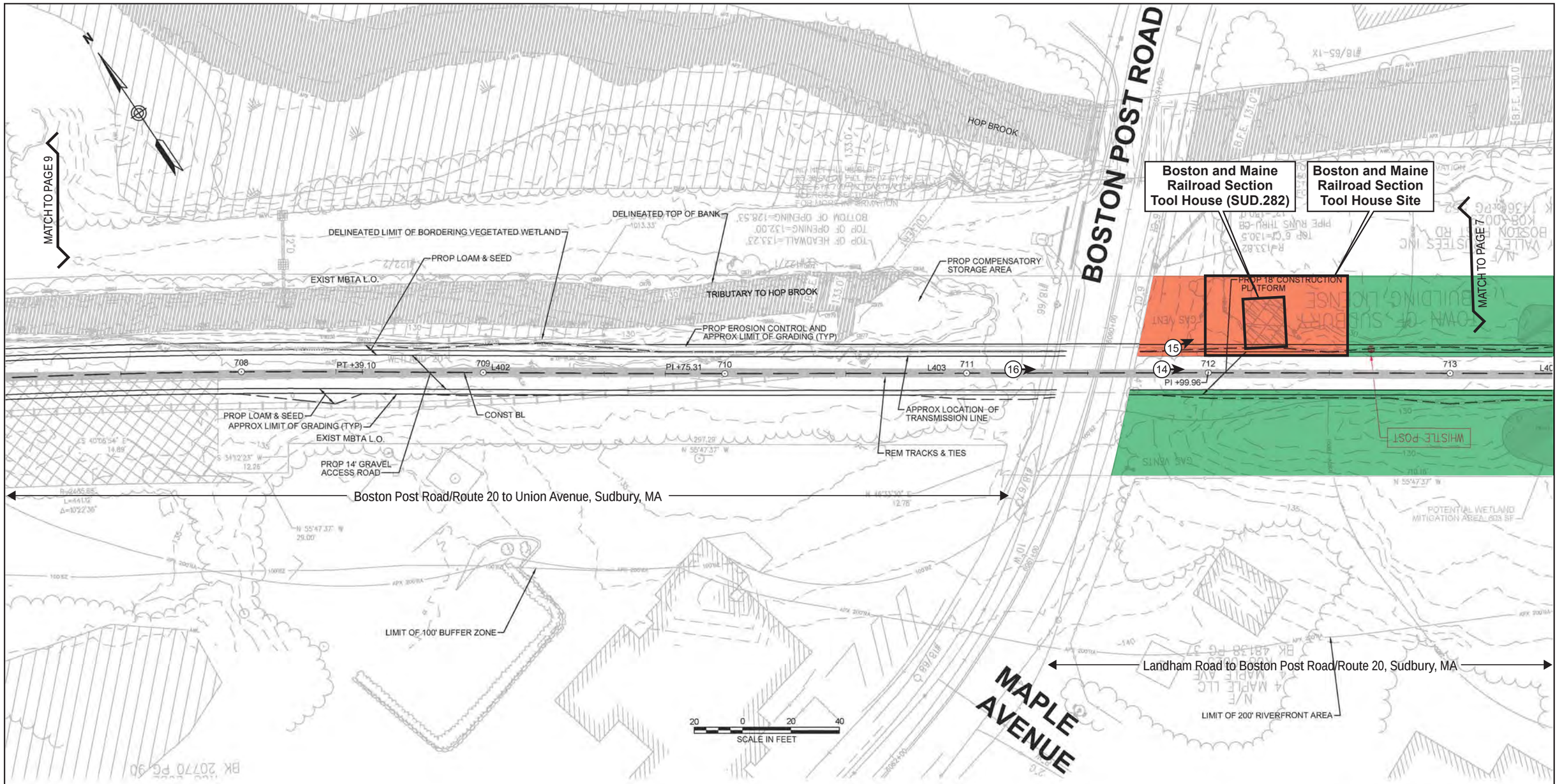
NO.	DESCRIPTION	BY	DATE	APPR

REVISION

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 62 OF 223

SCALE: unless noted	DATE	DRAWN	CH'KD.	APP'R.	DRAWING NO.	REV
1"=20'	2-14-2018	MS	SK	MS	.	.



Archaeological Sensitivity

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(1) Plate # and orientation

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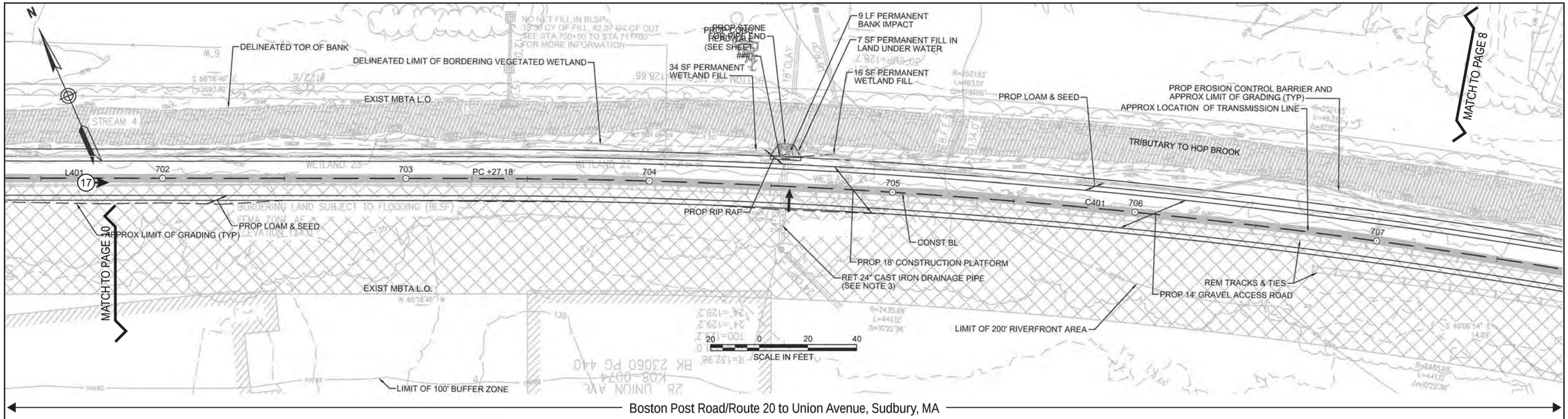
NO.	DESCRIPTION REVISION	BY	DATE	APPR

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 61 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	RE
1"=20'	2–14–2018	MS	SK	MS	.	.



Archaeological Sensitivity

- High
- Medium-High
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- Medium-Low

◀(1) Plate # and orientation

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NO.	DESCRIPTION	BY	DATE	APPR

REVISION

EVERSOURCE

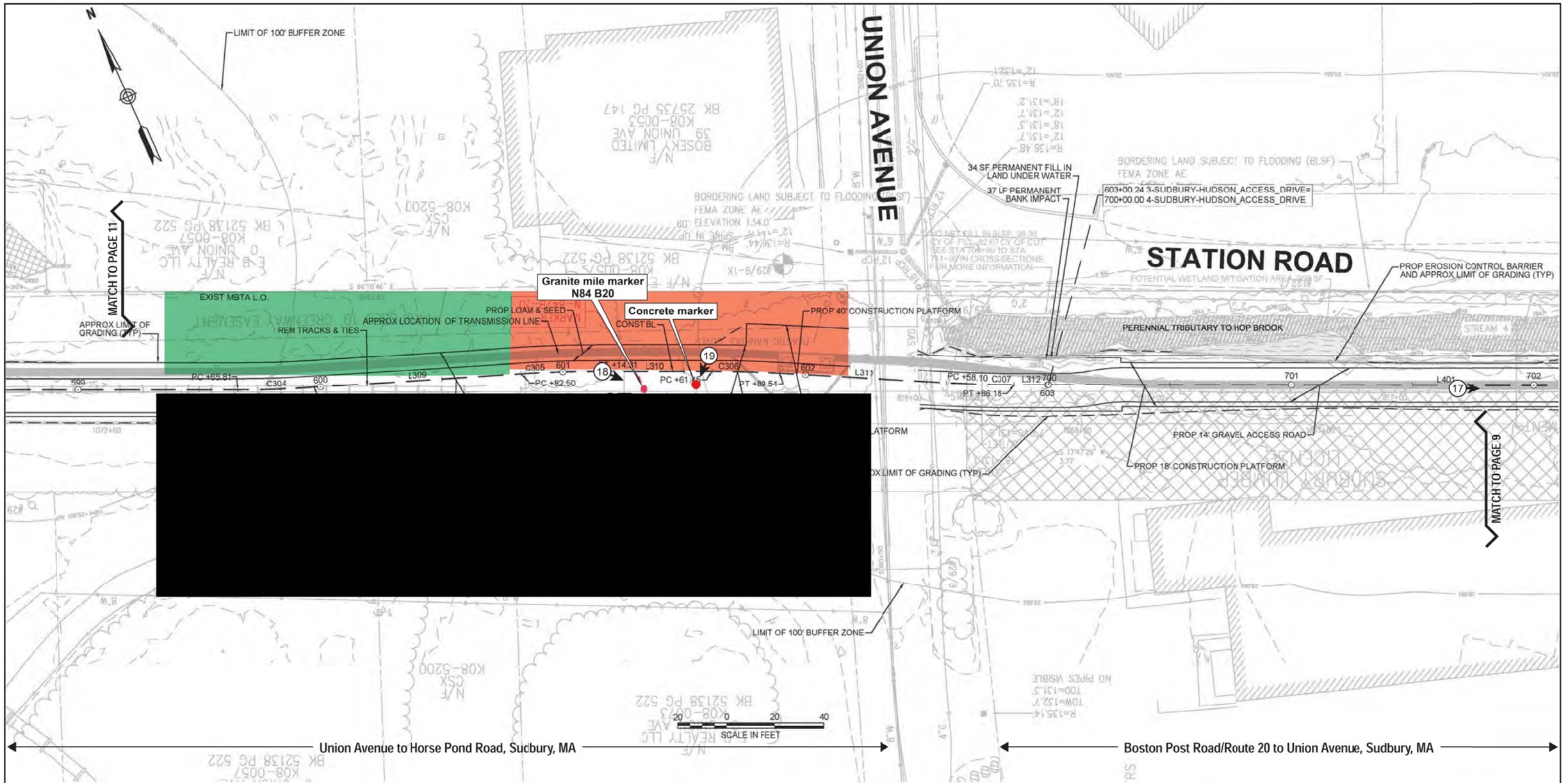
SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT

HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS

CONSTRUCTION PLANS

PLAN 60 OF 223

SCALE: unless noted	DATE	DRAWN	CH'KD.	APPR.	DRAWING NO.	RE
1"=20'	2–14–2018	MS	SK	MS	.	.



Archaeological Sensitivity

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- Medium
- Medium-Low

(1) Plate # and orientation

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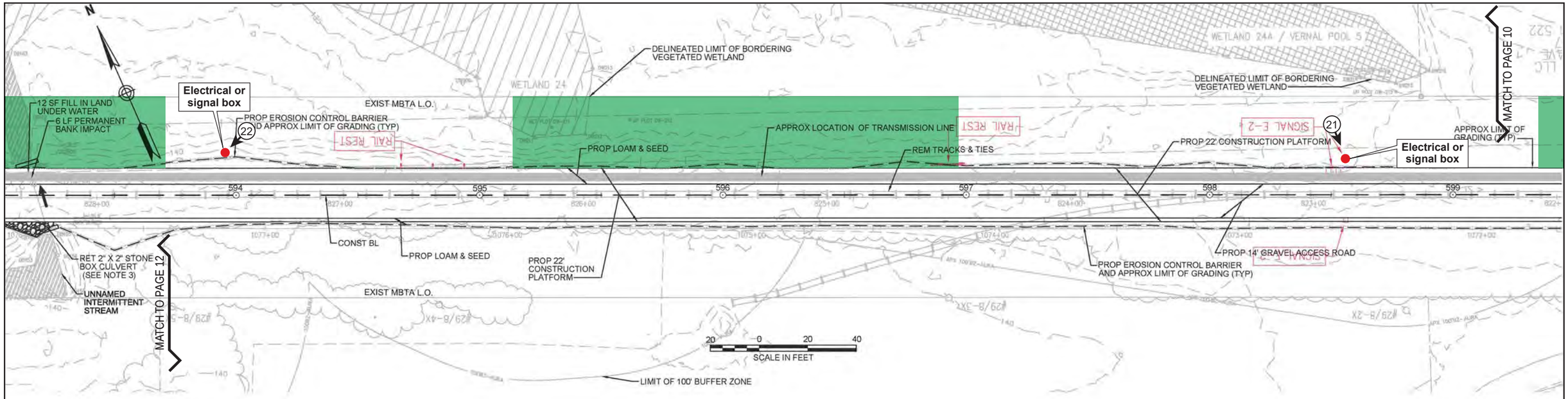
NO.	DESCRIPTION	BY	DATE	APPR
	REVISION			

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 59 OF 223

SCALE: unless noted	DATE	DRAWN	CHK'D.	APPR.	DRAWING NO.	REV
1"=20'	2-14-2018	MS	SK	MS	.	.



Archaeological Sensitivity

- High
- Medium-High
- Medium
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◄(1) Plate # and orientation

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NOTE:

1. REM AND REPLACE STONE BOX CULVERT AT TRANSMISSION LINE CROSSING. WORK TO BE DONE IN DRY SEASON WITH NO BYPASS.

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Watertown, MA 02472
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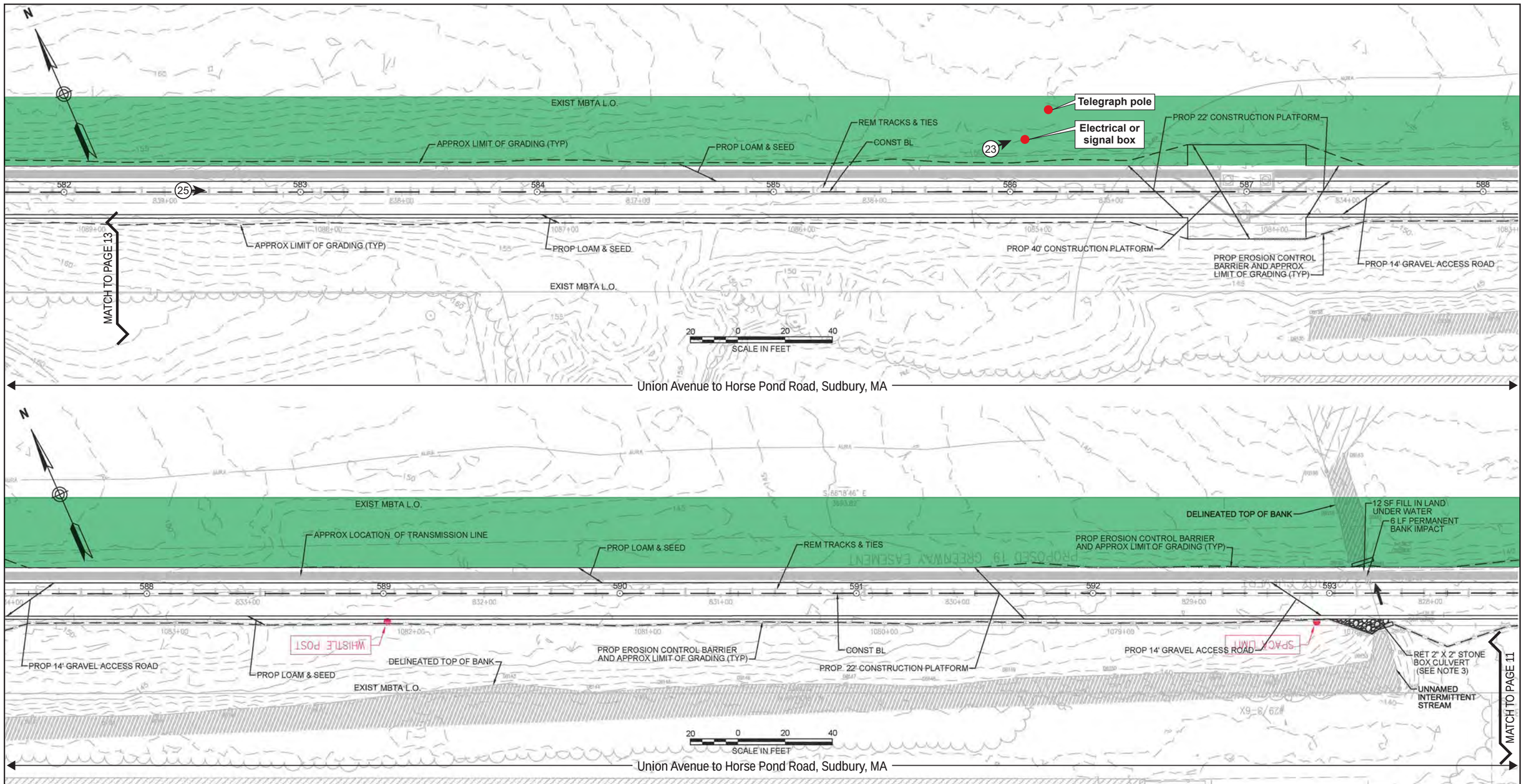
NO.	DESCRIPTION	BY	DATE	APPR
	REVISION			

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 58 OF 223

SCALE: unless noted	DATE	DRAWN	CH'KD.	APPR.	DRAWING NO.	REV
1"=20'	2–14–2018	MS	SK	MS	.	.



Archaeological Sensitivity

- High
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(1) Plate # and orientation

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NO.	DESCRIPTION	BY	DATE	APPR
	REVISION			

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS

PLAN 57 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	RE
1"=20'	2–14–2018	MS	SK	MS	.	.

PROP 40' CONSTRUCTION PLATFORM
EXIST MBTA L.O.
BEGIN SWALE +50
APPROX LOCATION OF TRANSMISSION LINE
PROP LOAM & SEED
PROP CHECK DAM
APPROX LIMIT OF GRADING (TYP)
END SWALE +75
571
572
573
574
575
576
PROP LOAM & SEED
REM TRACKS & TIES
CONST BL
PROP 14' GRAVEL ACCESS ROAD
PROP EROSION CONTROL BARRIER AND APPROX LIMIT OF GRADING (TYP)
PROP 22' CONSTRUCTION PLATFORM
APPROX LIMIT OF GRADING (TYP)
EXIST MBTA L.O.
LIMIT OF 100' BUFFER ZONE
DRAINAGE SUB-BASIN BOUNDARY
MATCH TO PAGE 14
20 0 20 40
SCALE IN FEET

Union Avenue to Horse Pond Road, Sudbury, MA

LIMIT OF 100' BUFFER ZONE
EXIST MBTA L.O.
WETLAND 25
DELINEATED LIMIT OF BORDERING VEGETATED WETLAND
PROP EROSION CONTROL BARRIER AND APPROX LIMIT OF GRADING (TYP)
RET 1' X 2' STONE BOX CULVERT
END SWALE +75
PROP LOAM & SEED
APPROX LIMIT OF GRADING (TYP)
PROP 22' CONSTRUCTION PLATFORM
APPROX LOCATION OF TRANSMISSION LINE
577
578
579
580
581
582
REM TRACKS & TIES
CONST BL
PROP 14' GRAVEL ACCESS ROAD
PROP EROSION CONTROL BARRIER AND APPROX LIMIT OF GRADING (TYP)
PROP RIP RAP
WETLAND 26
PROP LOAM & SEED
DRAINAGE SUB-BASIN BOUNDARY
EXIST MBTA L.O.
DELINEATED LIMIT OF BORDERING VEGETATED WETLAND
MATCH TO PAGE 12
20 0 20 40
SCALE IN FEET

Union Avenue to Horse Pond Road, Sudbury, MA

Archaeological Sensitivity
- High
- Medium-High
- Medium
- Medium-Low

1 Plate # and orientation

NOTES:
1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
2. WETLAND BOUNDARIES SHOWN HEREIN ARE THE SAME AS THOSE SHOWN ON HUDSON AND SUDBURY ANRAD PLANS (2017).

vhb Vanasse Hangen Brustlin, Inc.
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Watertown, MA 02472
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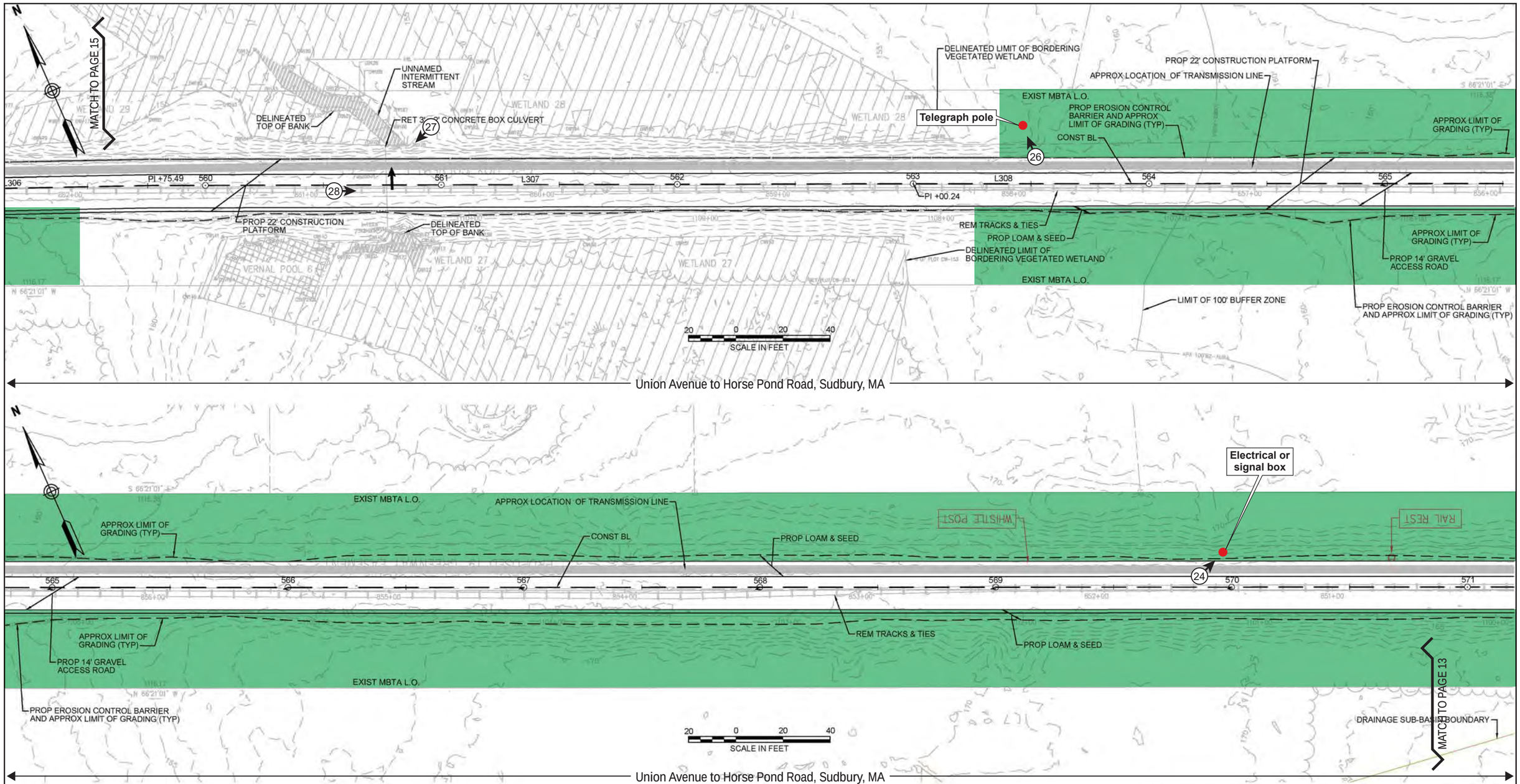
NO.	DESCRIPTION	BY	DATE	APPR

REVISION

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 56 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APP R.	DRAWING NO.	REV
1"=20'	2–14–2018	MS	SK	MS	.	.



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
2. WETLAND BOUNDARIES SHOWN HEREIN ARE THE SAME AS THOSE SHOWN ON HUDSON AND SUDBURY ANRAD PLANS (2017).

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NO.	DESCRIPTION	BY	DATE	APPR
	REVISION			

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 55 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	REV
1"=20'	2–14–2018	MS	SK	MS	.	.

HORSE POND ROAD

MATCH TO PAGE 16

EXIST MBTA L.O.

PROP 40' CONSTRUCTION PLATFORM

PROP 22' CONSTRUCTION PLATFORM

EXIST MBTA L.O.

CROSSING SIGN

554 555 556 557 558 559

PI +60.90

L306

PI +75.45

APPROX LIMIT OF GRADING (TYP)

PROP EROSION CONTROL BARRIER AND APPROX LIMIT OF GRADING (TYP)

PROP LOAM & SEED

APPROX LOCATION OF TRANSMISSION LINE

CONST BL

APPROX LIMIT OF GRADING (TYP)

REM TRACKS & TIES

PROP LOAM & SEED

PROP 14' GRAVEL ACCESS ROAD

LIMIT OF 100' BUFFER ZONE

PROP EROSION CONTROL BARRIER AND APPROX LIMIT OF GRADING (TYP)

DELINEATED LIMIT OF BORDERING VEGETATED WETLAND

MATCH TO PAGE 14

Horse Pond Road to Peakham Road, Sudbury, MA

Union Avenue to Horse Pond Road, Sudbury, MA

20 0 20 40
SCALE IN FEET

Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
2. WETLAND BOUNDARIES SHOWN HEREIN ARE THE SAME AS THOSE SHOWN ON HUDSON AND SUDBURY ANRAD PLANS (2017).

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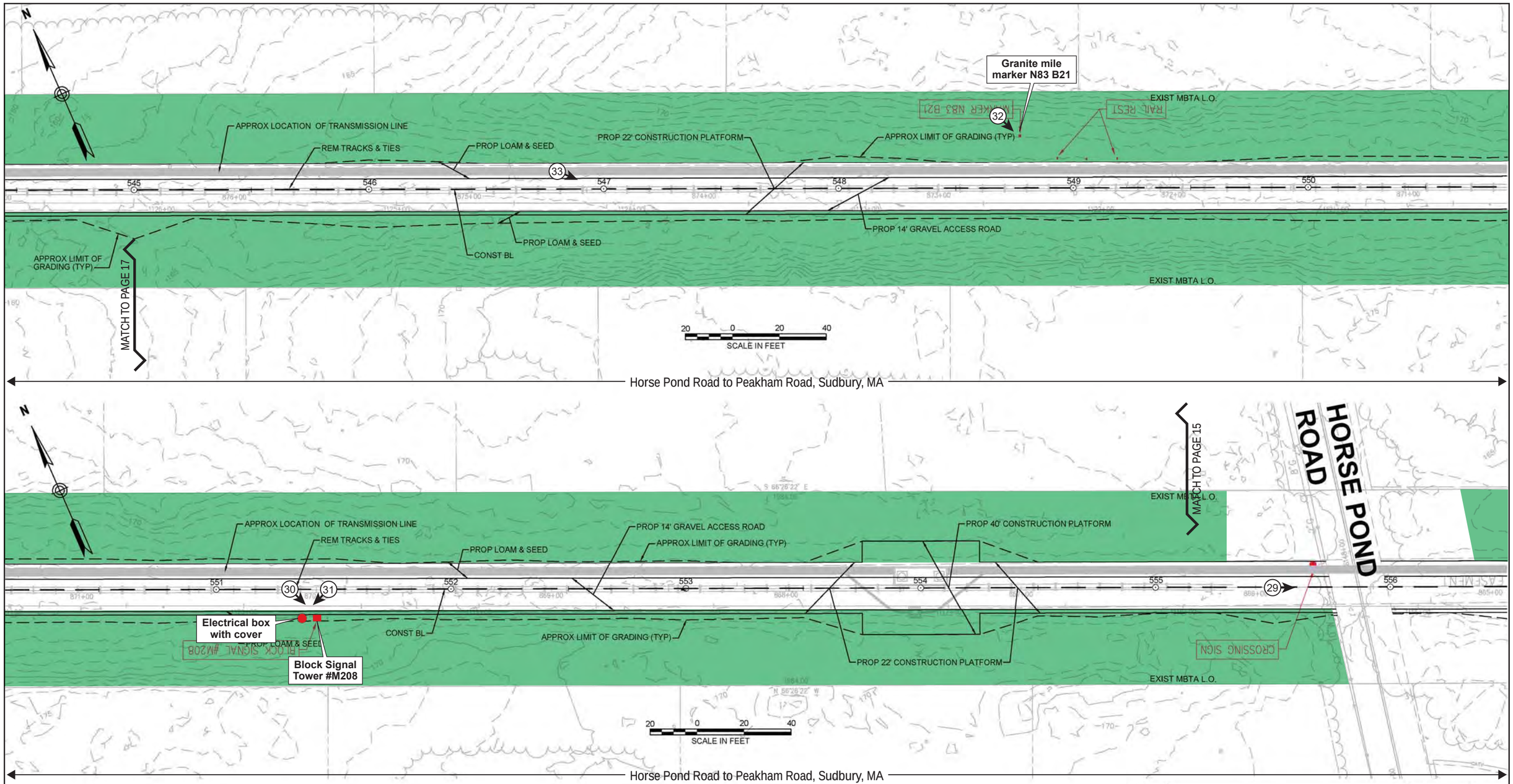
NO.	DESCRIPTION	BY	DATE	APPR
	REVISION			

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 54 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	REV
1"=20'	2–14–2018	MS	SK	MS	-	-



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
2. WETLAND BOUNDARIES SHOWN HEREIN ARE THE SAME AS THOSE SHOWN ON HUDSON AND SUDBURY ANRAD PLANS (2017).

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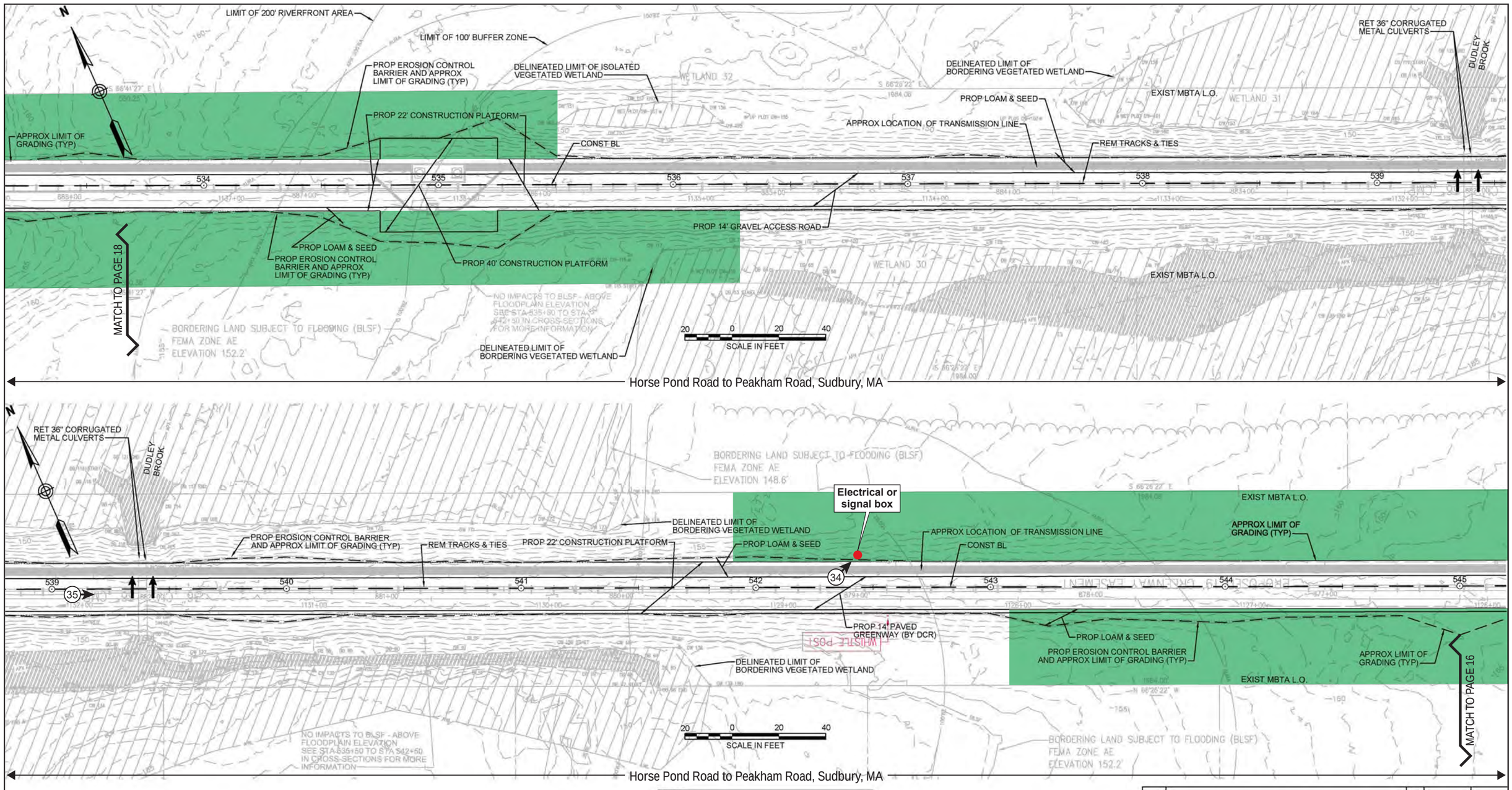
NO.	DESCRIPTION REVISION	BY	DATE	APPR

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 53 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APP'R.	DRAWING NO.	REV
1"=20'	2–14–2018	MS	SK	MS	-	-



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
2. WETLAND BOUNDARIES SHOWN HEREIN ARE THE SAME AS THOSE SHOWN ON HUDSON AND SUDBURY ANRAD PLANS (2017).

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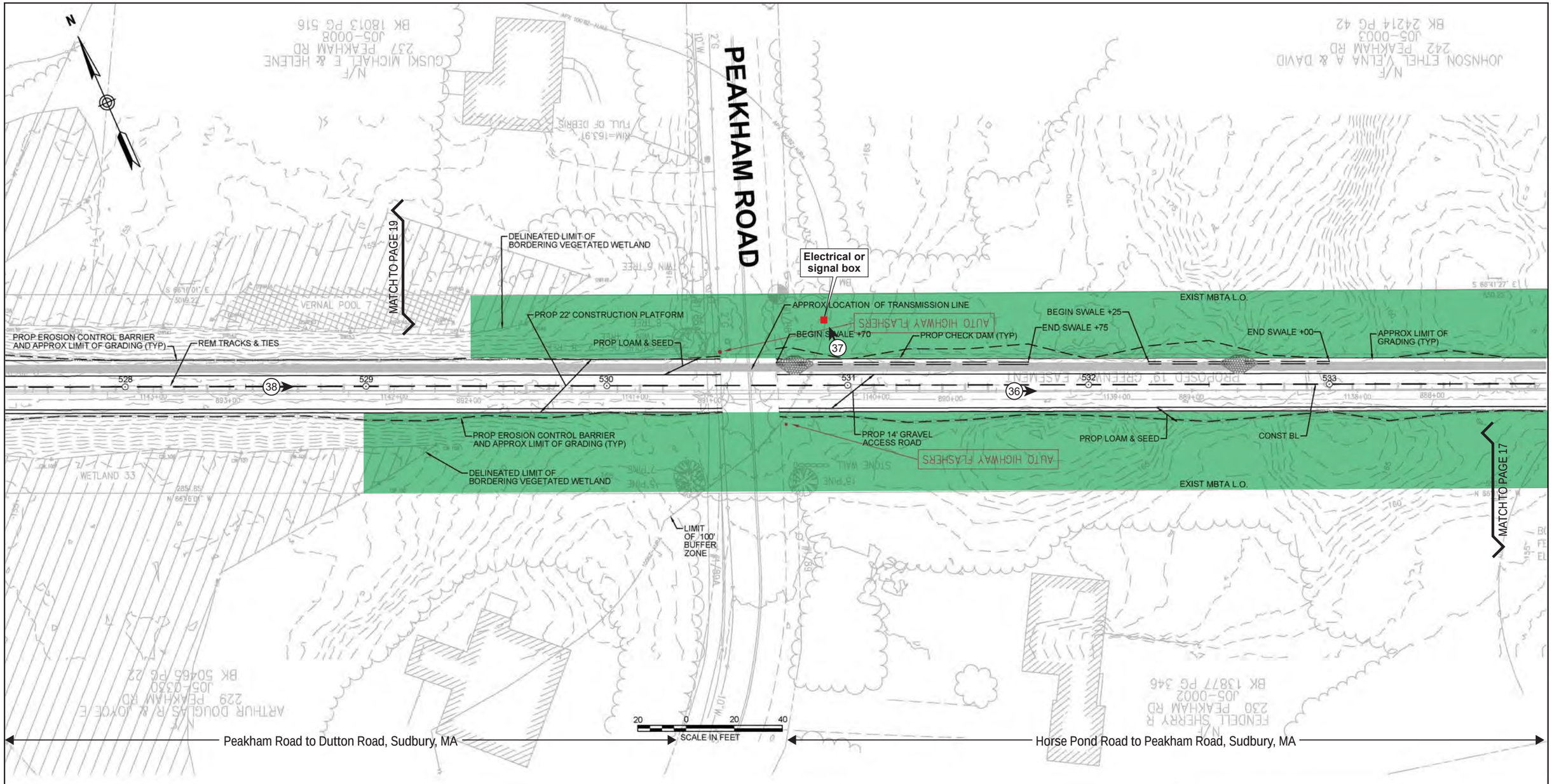
NO.	DESCRIPTION	BY	DATE	APPR

REVISION

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 52 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APP R.	DRAWING NO.	RE
1"=20'	2-14-2018	MS	SK	MS	.	.



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
2. WETLAND BOUNDARIES SHOWN HEREIN ARE THE SAME AS THOSE SHOWN ON HUDSON AND SUDBURY ANRAD PLANS (2017).

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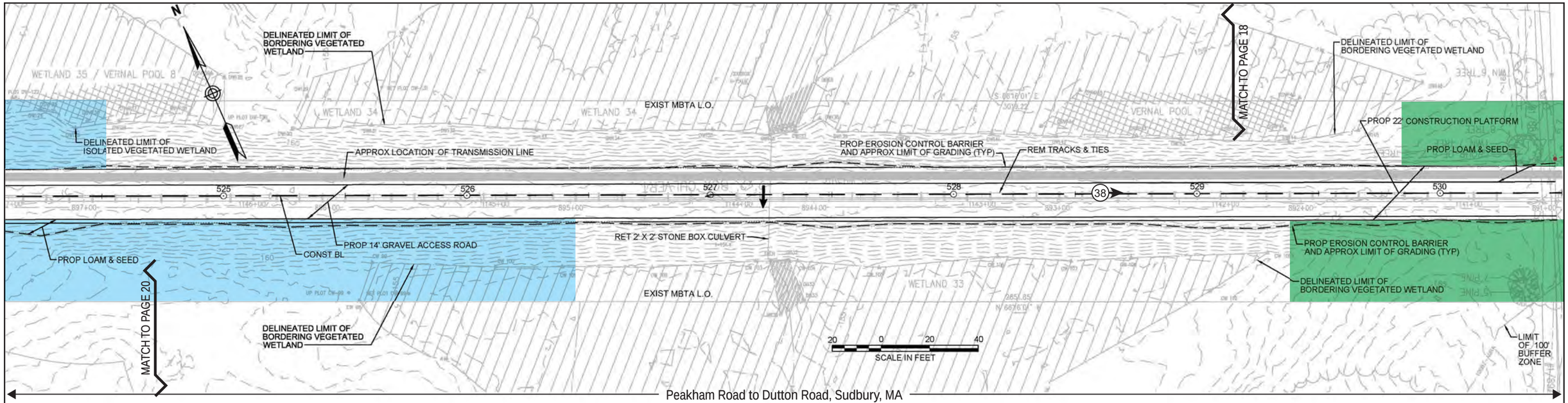
NO.	DESCRIPTION	BY	DATE	APPR
	REVISION			

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 51 OF 223

SCALE: unless noted	DATE	DRAWN	CH'KD.	APPR.	DRAWING NO.	REV
1"=20'	2–14–2018	MS	SK	MS	-	-



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

◄(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
2. WETLAND BOUNDARIES SHOWN HEREIN ARE THE SAME AS THOSE SHOWN ON HUDSON AND SUDBURY ANRAD PLANS (2017).

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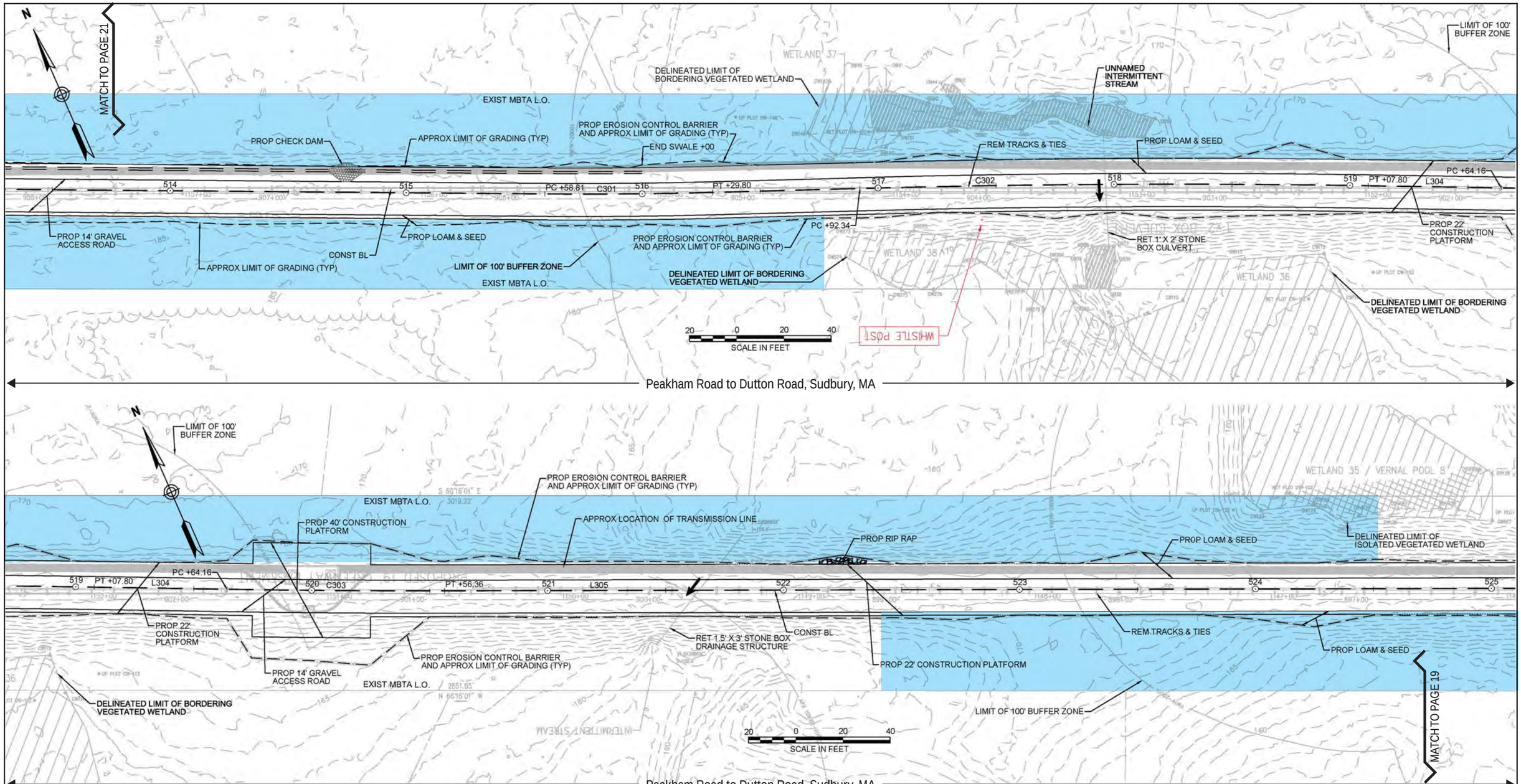
NO.	DESCRIPTION	BY	DATE	APPR

REVISION

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 50 OF 223

SCALE: unless noted	DATE	DRAWN	CH'KD.	APPR.	DRAWING NO.	REV
1"=20'	2–14–2018	MS	SK	MS	.	.



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
2. WETLAND BOUNDARIES SHOWN HEREIN ARE THE SAME AS THOSE SHOWN ON HUDSON AND SUDBURY ANRAD PLANS (2017).

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NO.	DESCRIPTION	BY	DATE	APPR

REVISION

EVERSOURCE

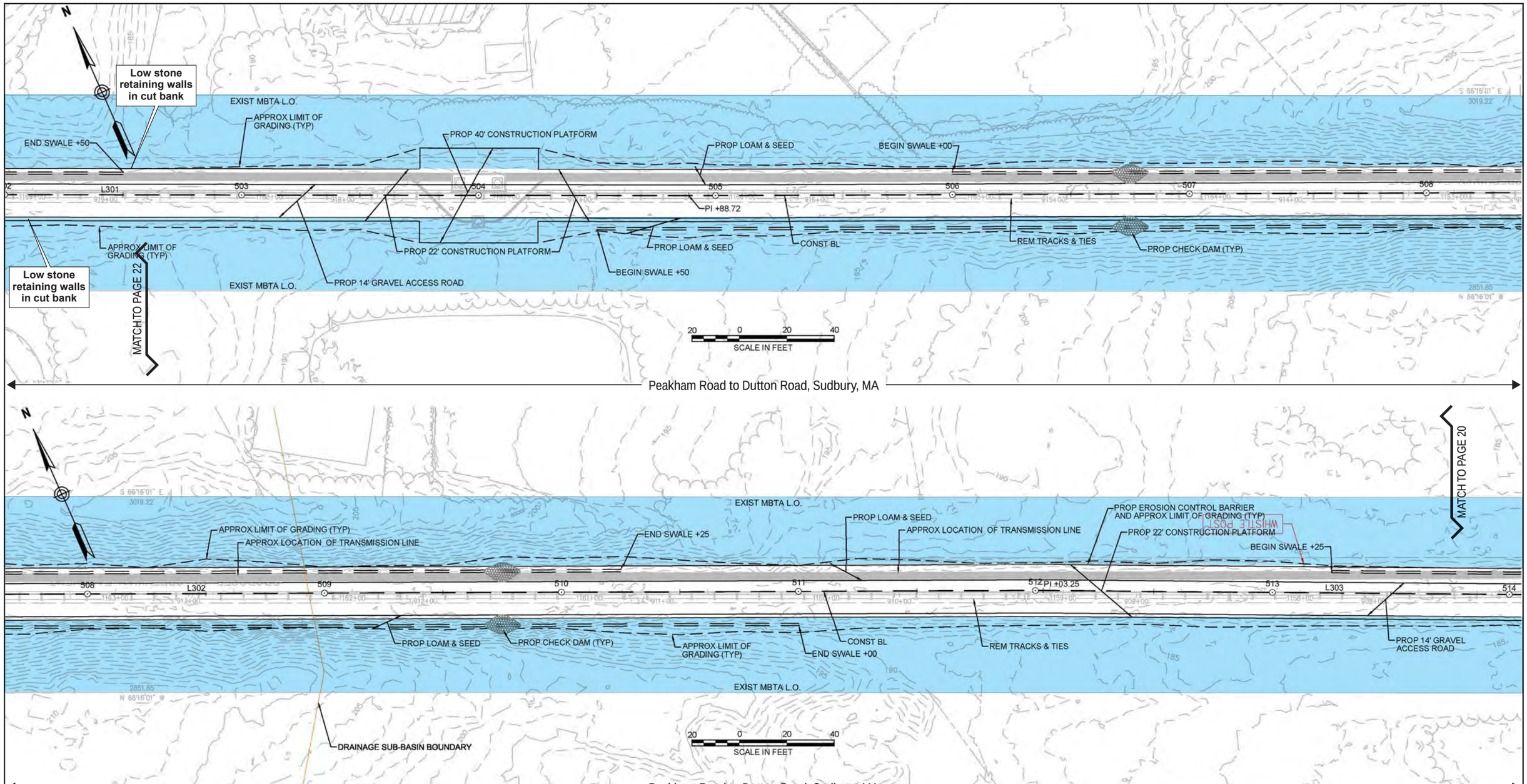
SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT

HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS

CONSTRUCTION PLANS

PLAN 49 OF 223

SCALE: unless noted	DATE	DRAWN	CH'KD.	APP'R.	DRAWING NO.	REV
1"=20'	2–14–2018	MS	SK	MS	.	.



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
2. WETLAND BOUNDARIES SHOWN HEREIN ARE THE SAME AS THOSE SHOWN ON HUDSON AND SUDBURY ANRAD PLANS (2017).

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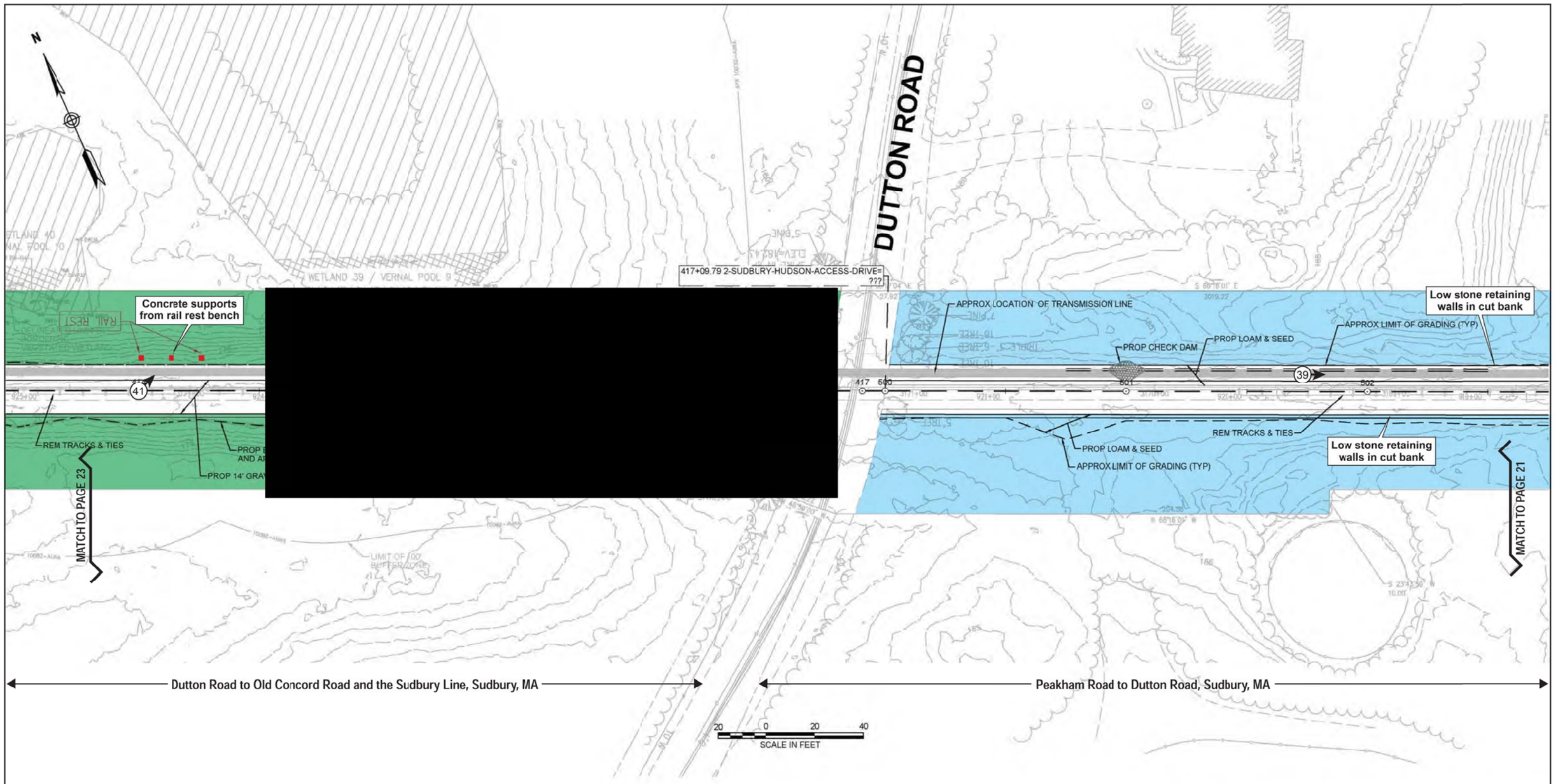
NO.	DESCRIPTION	BY	DATE	APPR
	REVISION			

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 48 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APP'R.	DRAWING NO.	REV
1"=20'	2–14–2018	MS	SK	MS	-	-



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
2. WETLAND BOUNDARIES SHOWN HEREIN ARE THE SAME AS THOSE SHOWN ON HUDSON AND SUDBURY ANRAD PLANS (2017).

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NO.	DESCRIPTION	BY	DATE	APPR

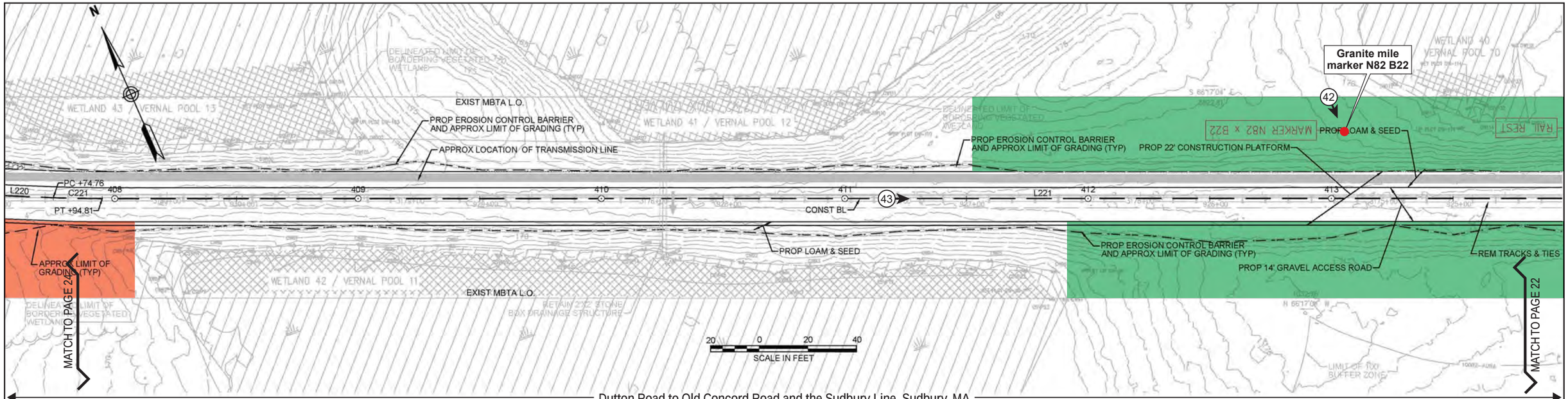
REVISION

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS

PLAN 47 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APP'R.	DRAWING NO.	REV
1"=20'	2-14-2018	MS	SK	MS	.	.



Dutton Road to Old Concord Road and the Sudbury Line, Sudbury, MA

Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
2. WETLAND BOUNDARIES SHOWN HEREIN ARE THE SAME AS THOSE SHOWN ON HUDSON AND SUDBURY ANRAD PLANS (2017).

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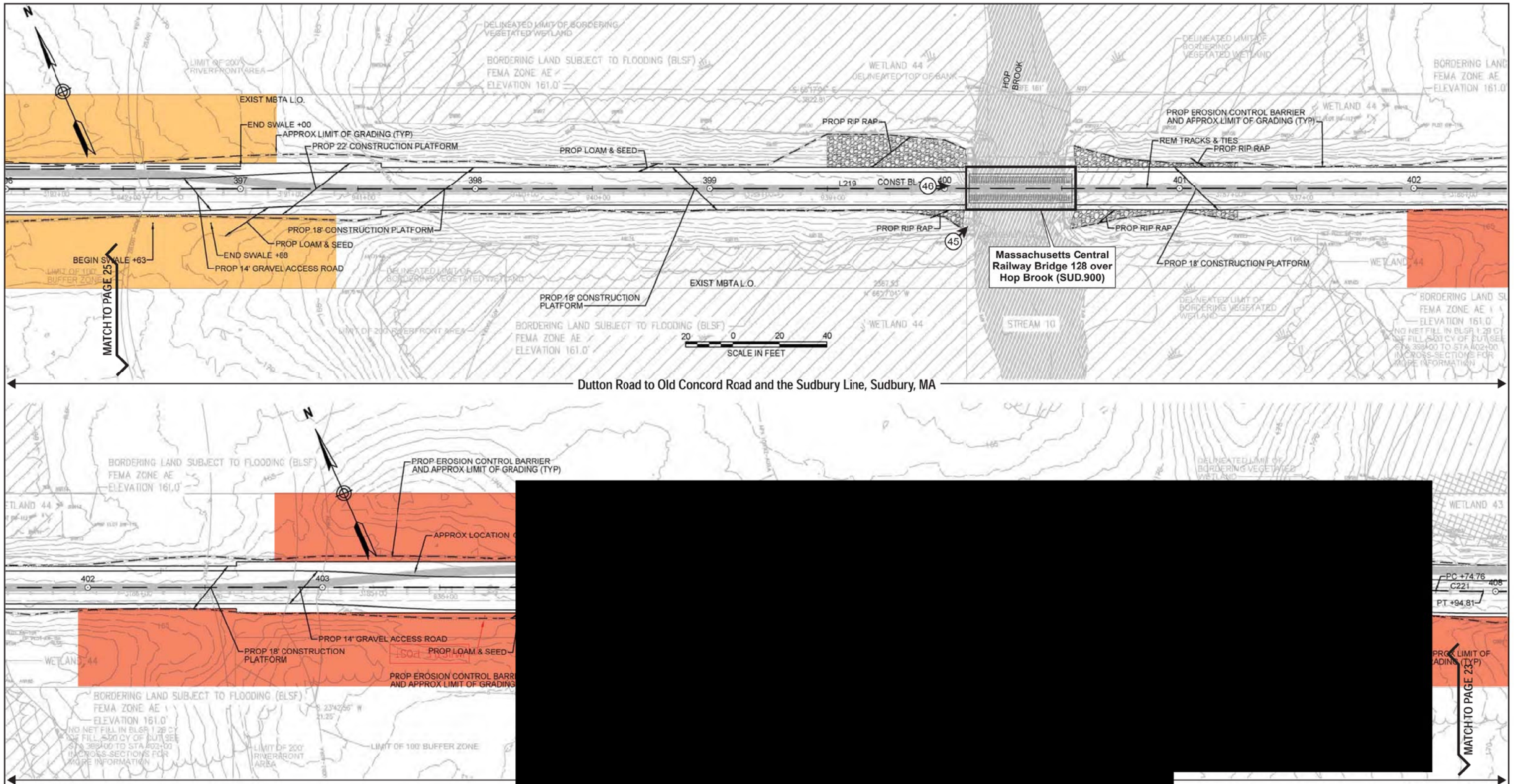
NO.	DESCRIPTION	BY	DATE	APPR
	REVISION			

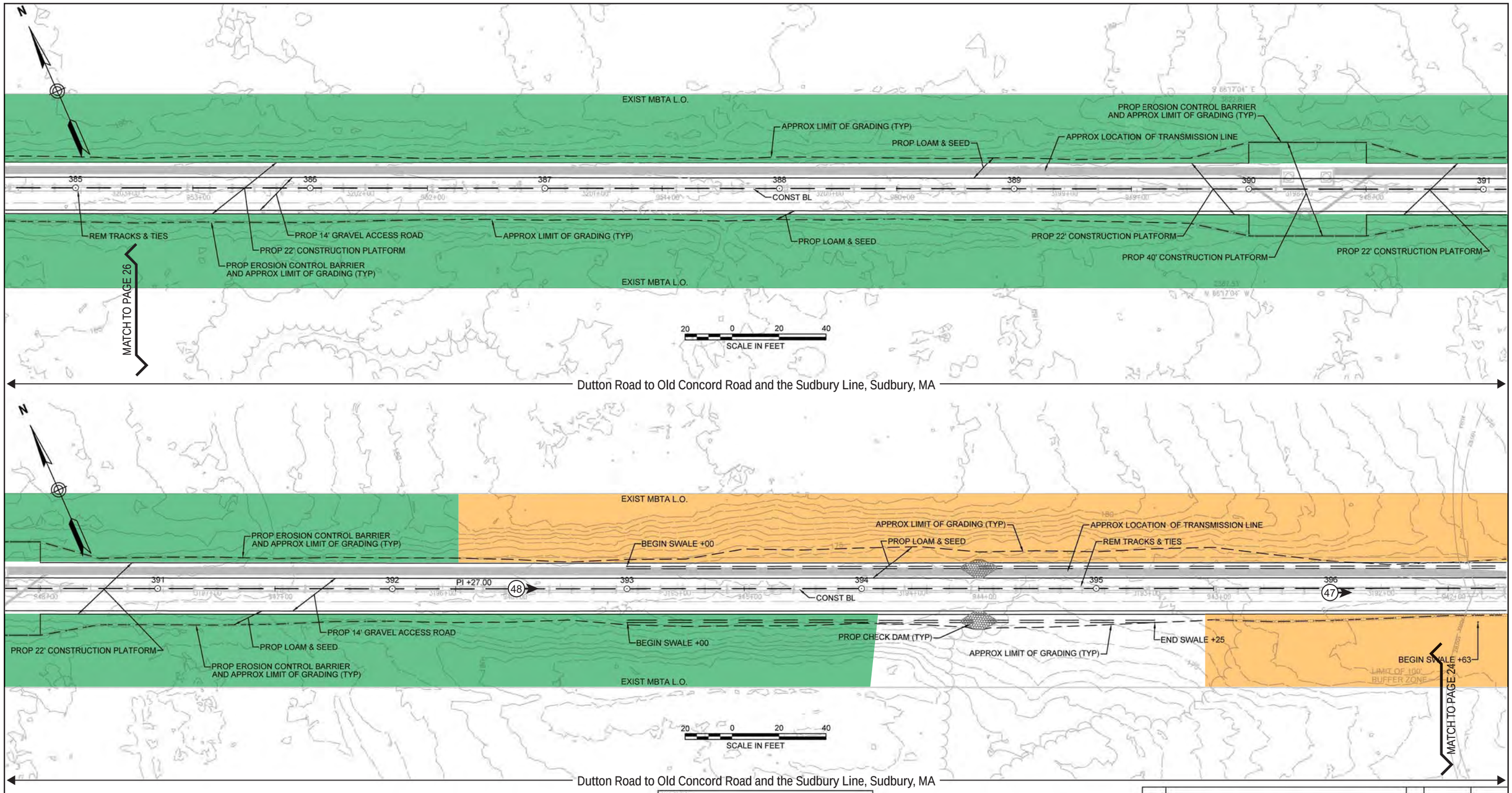
EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS

PLAN 46 OF 223

SCALE: unless noted	DATE	DRAWN	CH'KD.	APPR.	DRAWING NO.	REV
1"=20'	2–14–2018	MS	SK	MS	.	.


EXIST MBTA L.O.
END SWALE +00
APPROX LIMIT OF GRADING (TYP)
PROP 22' CONSTRUCTION PLATFORM
PROP LOAM & SEED
PROP RIP RAP
PROP EROSION CONTROL BARRIER AND APPROX LIMIT OF GRADING (TYP)
REM TRACKS & TIES
PROP RIP RAP
PROP 18' CONSTRUCTION PLATFORM
PROP LOAM & SEED
END SWALE +88
BEGIN SWALE +63
PROP 14' GRAVEL ACCESS ROAD
PROP 18' CONSTRUCTION PLATFORM
EXIST MBTA L.O.
PROP RIP RAP
PROP RIP RAP
PROP 18' CONSTRUCTION PLATFORM
Massachusetts Central Railway Bridge 128 over Hop Brook (SUD.900)
MATCH TO PAGE 25
MATCH TO PAGE 23
DELINEATED LIMIT OF BORDERING VEGETATED WETLAND
BORDERING LAND SUBJECT TO FLOODING (BLSF)
FEMA ZONE AE
ELEVATION 161.0'
LIMIT OF 200' RIVERFRONT AREA
LIMIT OF 100' BUFFER ZONE
WETLAND 44
HOP BROOK
STREAM 10
WETLAND 43
NO NET FILL IN BLSF 1.29 CY OF FILL 5.00 CY OF CUT SEE STA 398+00 TO STA 402+00 IN CROSS-SECTIONS FOR MORE INFORMATION
397
398
399
400
401
402
403
PC +74.76
C221
PT +94.81
408
L219
CONST BL
46
45
20 0 20 40
SCALE IN FEET
Dutton Road to Old Concord Road and the Sudbury Line, Sudbury, MA
Archaeological Sensitivity
High
Medium-High
Medium
Medium-Low
1 Plate # and orientation
DESCRIPTION
REVISION
BY
DATE
APPR
EVERSOURCE
SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 45 OF 223
SCALE: unless noted 1"=20'
DATE 2-14-2018
DRAWN MS
CHK'D. SK
APPR. MS
DRAWING NO.



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
2. WETLAND BOUNDARIES SHOWN HEREIN ARE THE SAME AS THOSE SHOWN ON HUDSON AND SUDBURY ANRAD PLANS (2017).

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NO.	DESCRIPTION	BY	DATE	APPR

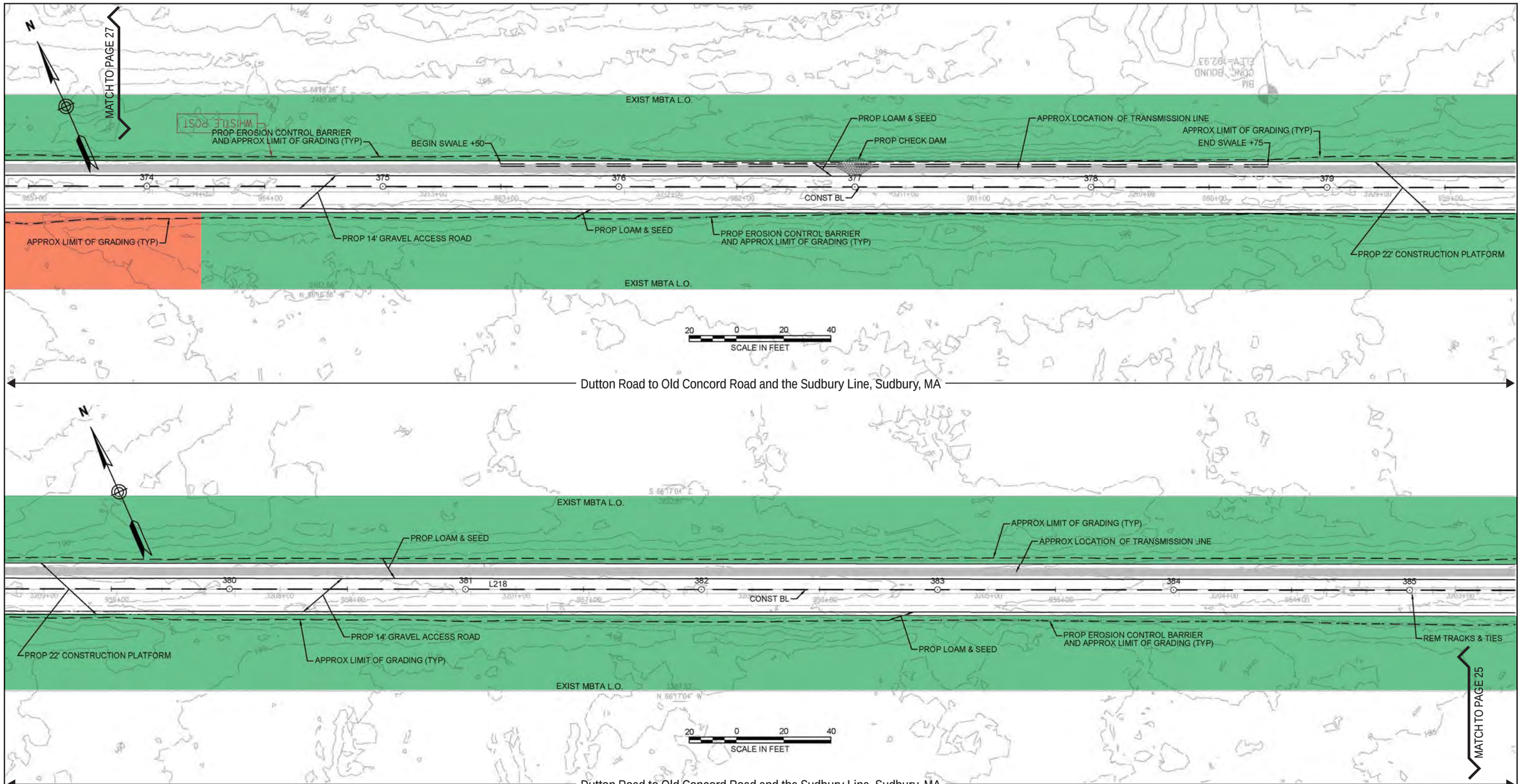
REVISION

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS

PLAN 44 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APP R.	DRAWING NO.	RE
1"=20'	2-14-2018	MS	SK	MS	.	.



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

1 Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
2. WETLAND BOUNDARIES SHOWN HEREIN ARE THE SAME AS THOSE SHOWN ON HUDSON AND SUDBURY ANRAD PLANS (2017).

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NO.	DESCRIPTION	BY	DATE	APPR

REVISION

EVERSOURCE

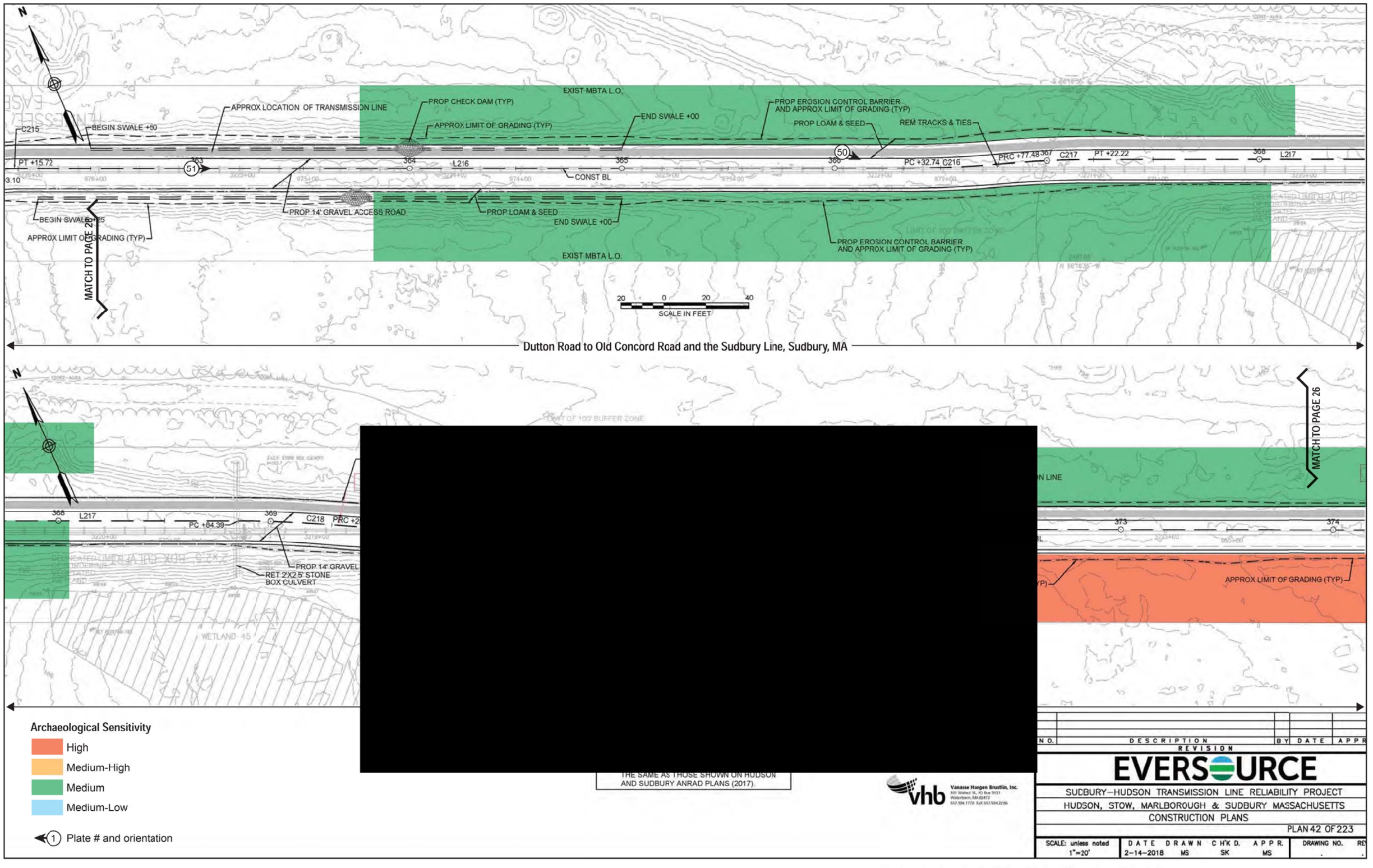
SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT

HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS

CONSTRUCTION PLANS

PLAN 43 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APP R.	DRAWING NO.	REV
1"=20'	2–14–2018	MS	SK	MS	.	.


N
EXIST MBTA L.O.
APPROX LOCATION OF TRANSMISSION LINE
PROP CHECK DAM (TYP)
APPROX LIMIT OF GRADING (TYP)
END SWALE +00
PROP EROSION CONTROL BARRIER AND APPROX LIMIT OF GRADING (TYP)
PROP LOAM & SEED
REM TRACKS & TIES
C215
BEGIN SWALE +80
PT +15.72
363
364
L216
365
366
PC +32.74 C216
PRC +77.48
367
C217
PT +22.22
368
L217
CONST BL
3.10
BEGIN SWALE +25
APPROX LIMIT OF GRADING (TYP)
PROP 14' GRAVEL ACCESS ROAD
PROP LOAM & SEED
END SWALE +00
PROP EROSION CONTROL BARRIER AND APPROX LIMIT OF GRADING (TYP)
EXIST MBTA L.O.
MATCH TO PAGE 26
20 0 20 40
SCALE IN FEET
Dutton Road to Old Concord Road and the Sudbury Line, Sudbury, MA
N
LIMIT OF 100' BUFFER ZONE
368
L217
PC +84.39
369
C218
PROP 14' GRAVEL
RET 2'X2.5' STONE BOX CULVERT
WETLAND 45
MATCH TO PAGE 26
373
374
APPROX LIMIT OF GRADING (TYP)
Archaeological Sensitivity
High
Medium-High
Medium
Medium-Low
1 Plate # and orientation
THE SAME AS THOSE SHOWN ON HUDSON AND SUDBURY ANRAD PLANS (2017).
vhb
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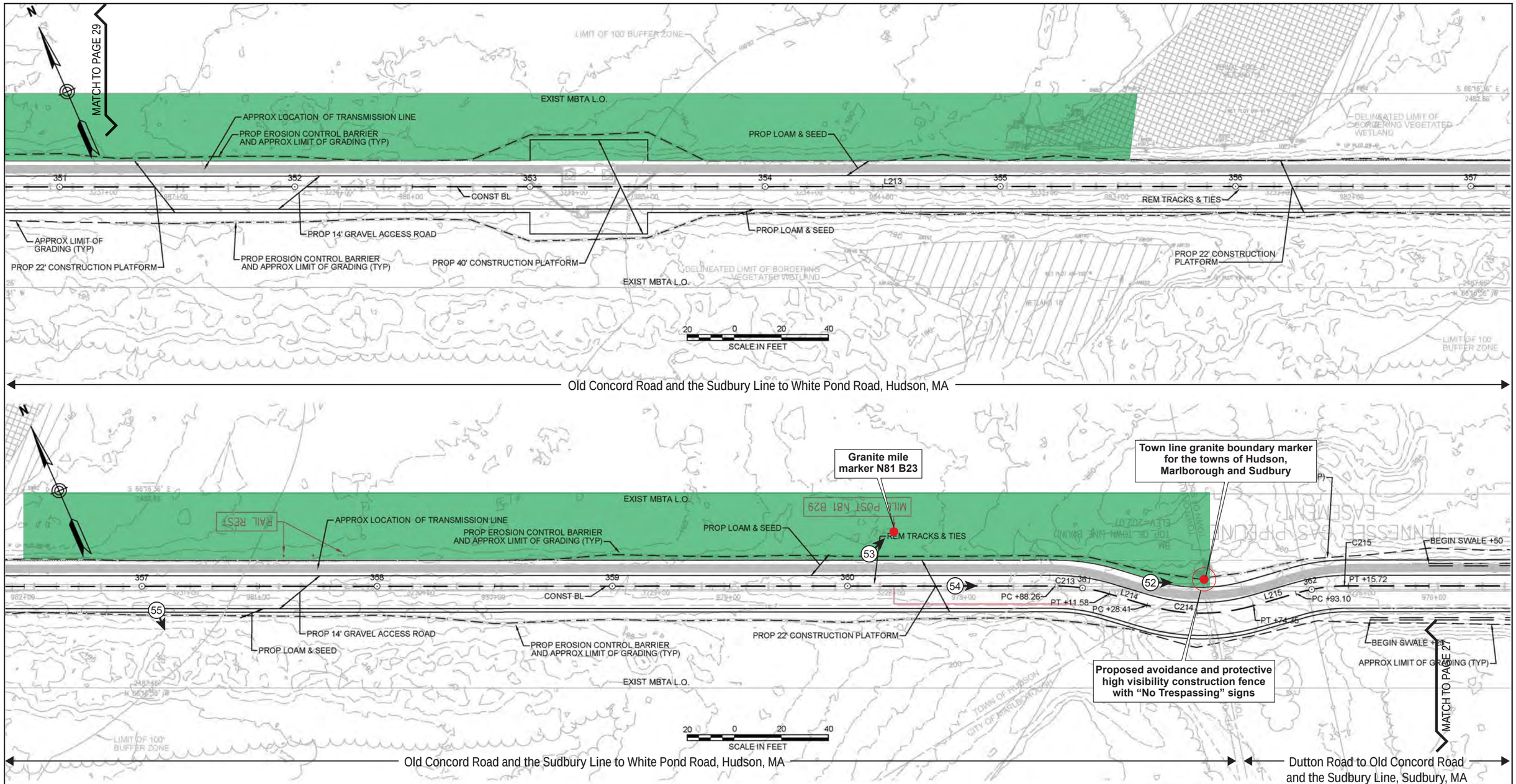
Watertown, MA 02472
617.924.1770 FAX 617.924.2286
NO. DESCRIPTION BY DATE APPR
REVISION
EVERSOURCE
SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 42 OF 223
SCALE: unless noted 1"=20'
DATE 2-14-2018
DRAWN MS
CH'K D. SK
APP R. MS
DRAWING NO.


N
MATCH TO PAGE 29
EXIST MBTA L.O.
APPROX LOCATION OF TRANSMISSION LINE
PROP EROSION CONTROL BARRIER AND APPROX LIMIT OF GRADING (TYP)
PROP LOAM & SEED
351
352
353
354
L213
355
356
357
CONST BL
REM TRACKS & TIES
APPROX LIMIT OF GRADING (TYP)
PROP 22' CONSTRUCTION PLATFORM
PROP 14' GRAVEL ACCESS ROAD
PROP EROSION CONTROL BARRIER AND APPROX LIMIT OF GRADING (TYP)
PROP 40' CONSTRUCTION PLATFORM
EXIST MBTA L.O.
PROP LOAM & SEED
PROP 22' CONSTRUCTION PLATFORM
LIMIT OF 100' BUFFER ZONE
DELINEATED LIMIT OF BORDERING VEGETATED WETLAND
20 0 20 40
SCALE IN FEET
Old Concord Road and the Sudbury Line to White Pond Road, Hudson, MA
N
Granite mile marker N81 B23
Town line granite boundary marker for the towns of Hudson, Marlborough and Sudbury
EXIST MBTA L.O.
APPROX LOCATION OF TRANSMISSION LINE
PROP EROSION CONTROL BARRIER AND APPROX LIMIT OF GRADING (TYP)
PROP LOAM & SEED
REM TRACKS & TIES
53
54
52
55
357
358
359
360
361
362
C213
C214
C215
L214
L215
PC +88.26
PT +11.58
PC +28.41
PT +74.45
PC +93.10
PT +15.72
BEGIN SWALE +50
CONST BL
PROP 14' GRAVEL ACCESS ROAD
PROP LOAM & SEED
PROP EROSION CONTROL BARRIER AND APPROX LIMIT OF GRADING (TYP)
PROP 22' CONSTRUCTION PLATFORM
EXIST MBTA L.O.
Proposed avoidance and protective high visibility construction fence with "No Trespassing" signs
APPROX LIMIT OF GRADING (TYP)
MATCH TO PAGE 27
LIMIT OF 100' BUFFER ZONE
20 0 20 40
SCALE IN FEET
Old Concord Road and the Sudbury Line to White Pond Road, Hudson, MA
Dutton Road to Old Concord Road and the Sudbury Line, Sudbury, MA
Archaeological Sensitivity
High
Medium-High
Medium
Medium-Low
1 Plate # and orientation
NOTES:
1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
2. WETLAND BOUNDARIES SHOWN HEREIN ARE THE SAME AS THOSE SHOWN ON HUDSON AND SUDBURY ANRAD PLANS (2017).
vhb
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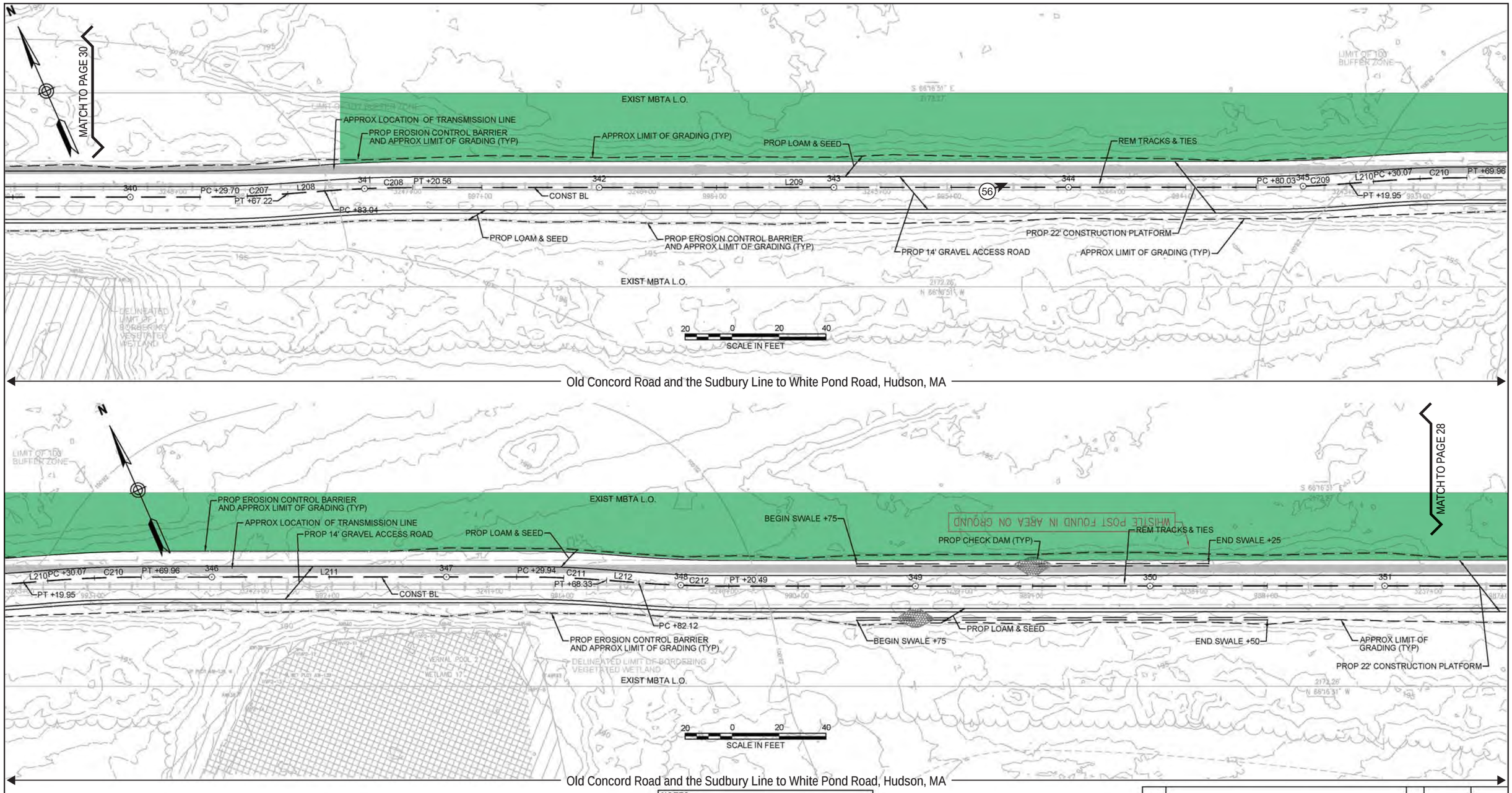
101 Walnut St., PO Box 9151
Watertown, MA 02472
617.924.1770 FAX 617.924.2286
NO. DESCRIPTION BY DATE APPR
REVISION
EVERSOURCE
SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 41 OF 223
SCALE: unless noted 1"=20'
DATE 2-14-2018
DRAWN MS
CH'K D. SK
APP'R. MS
DRAWING NO. .
REV .



NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
2. WETLAND BOUNDARIES SHOWN HEREIN ARE THE SAME AS THOSE SHOWN ON HUDSON AND SUDBURY ANRAD PLANS (2017).

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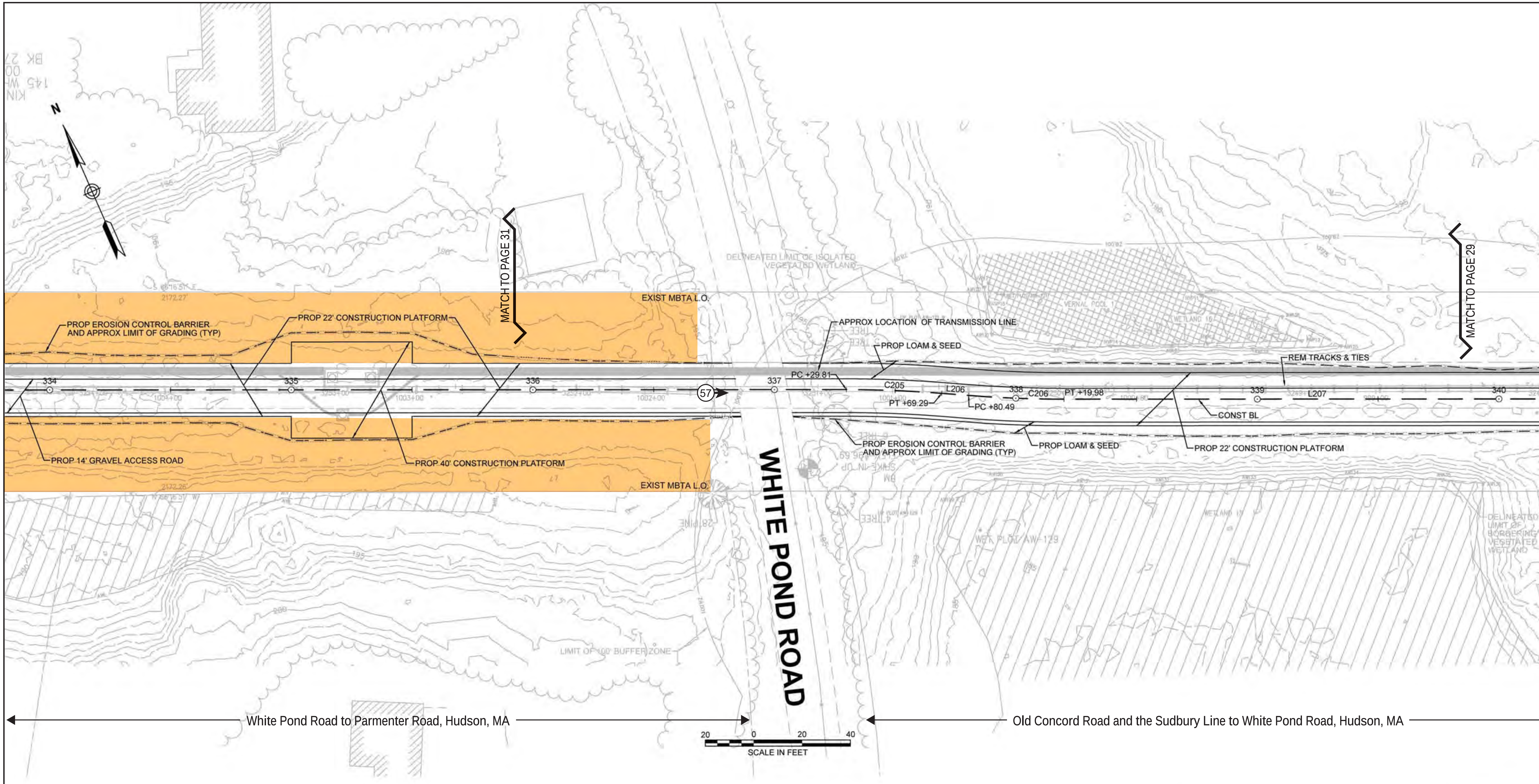
NO.	DESCRIPTION	BY	DATE	APPR

REVISION

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 40 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APP R.	DRAWING NO.	REV
1"=20'	2–14–2018	MS	SK	MS	.	.



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:
1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
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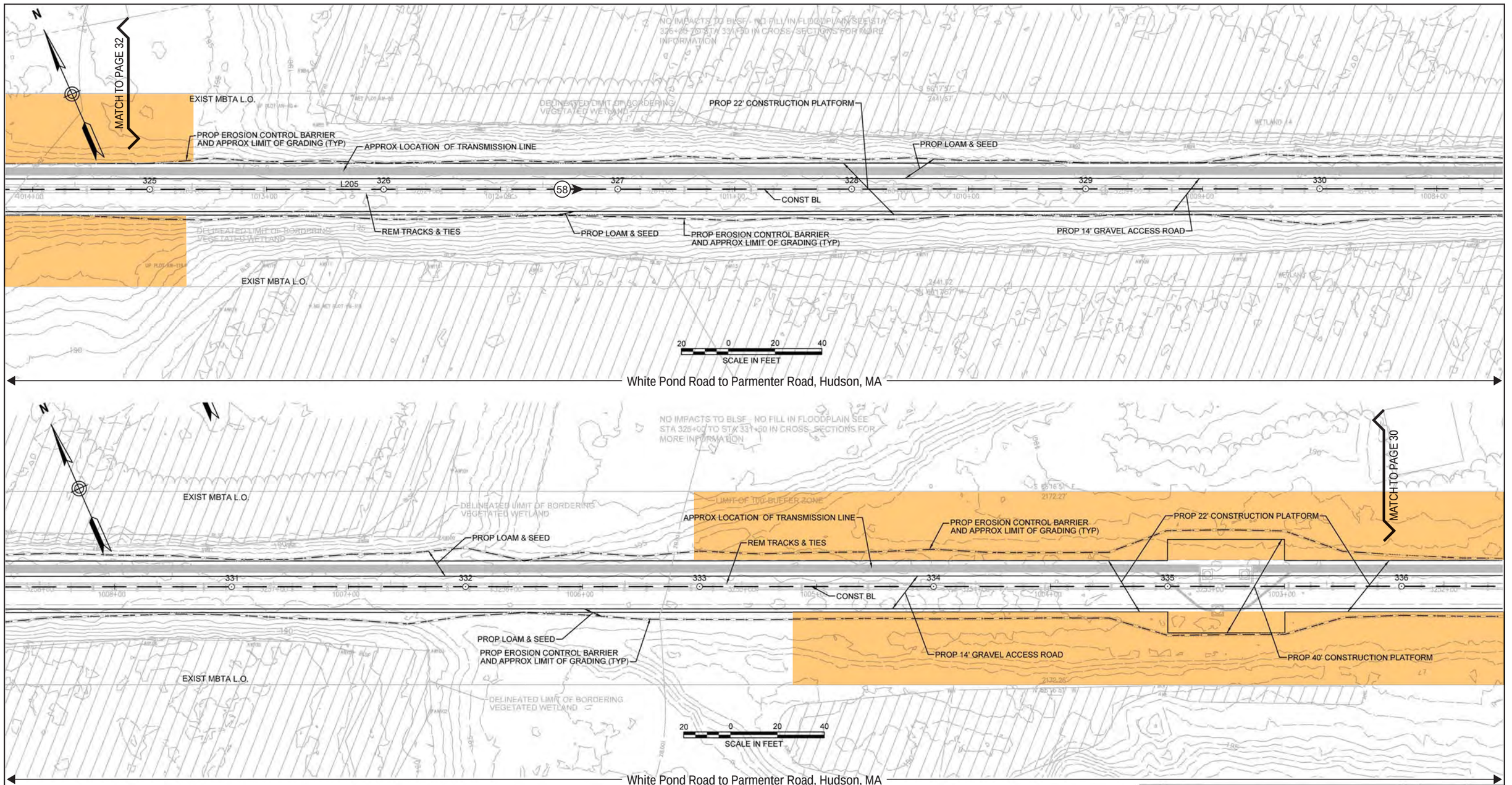
EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS

PLAN 39 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.
1"=20'	2-14-2018	MS	SK	MS	



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
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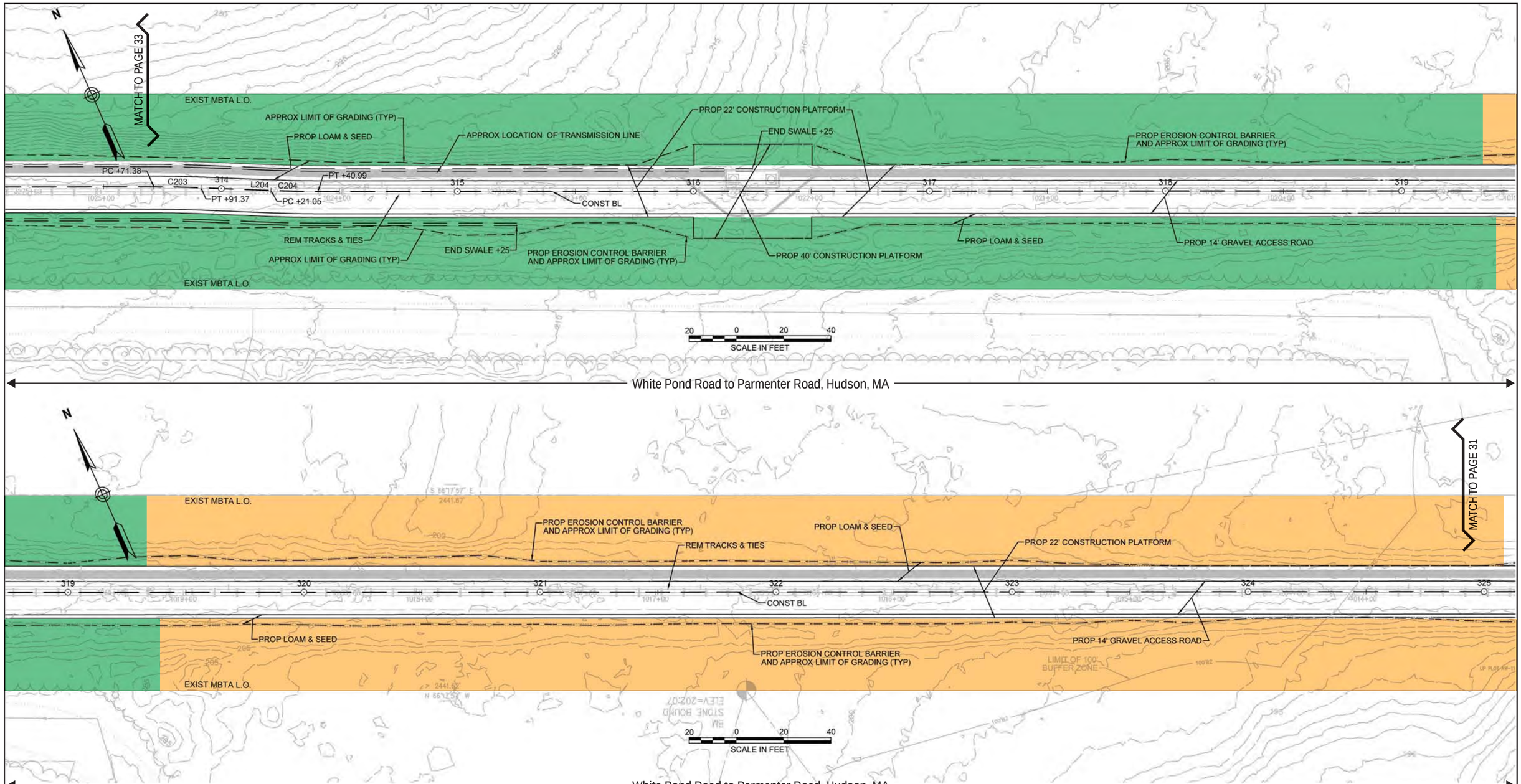
NO.	DESCRIPTION REVISION	BY	DATE	APPR

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 38 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	RE
1"=20'	2–14–2018	MS	SK	MS	.	.



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
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NO.	DESCRIPTION	BY	DATE	APPR

REVISION

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS

PLAN 37 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APP'R.	DRAWING NO.	REV
1"=20'	2–14–2018	MS	SK	MS	.	.

N

MATCH TO PAGE 34

EXIST MBTA L.O.

RAIL REST

PROP EROSION CONTROL BARRIER AND APPROX LIMIT OF GRADING (TYP)

APPROX LOCATION OF TRANSMISSION LINE

REM TRACKS & TIES

CONST BL

BEGIN SWALE +50

PROP LOAM & SEED

APPROX LIMIT OF GRADING (TYP)

PT +90.19

PT +41.37

Granite mile marker N80 B24

MILE POST N80 B24

WHISTLE POST

60

61

302 L201 303 304 305 PC +69.94 306 L202 C202 PC +21.38 307 308

PROP LOAM & SEED

PROP EROSION CONTROL BARRIER AND APPROX LIMIT OF GRADING (TYP)

C201 BEGIN SWALE +00

PROP 14' GRAVEL ACCESS ROAD

PROP 22' CONSTRUCTION PLATFORM

APPROX LIMIT OF GRADING (TYP)

EXIST MBTA L.O.

20 0 20 40

SCALE IN FEET

White Pond Road to Parmenter Road, Hudson, MA

N

EXIST MBTA L.O.

WHISTLE POST

PROP CHECK DAM (TYP)

APPROX LOCATION OF TRANSMISSION LINE

APPROX LIMIT OF GRADING (TYP)

REM TRACKS & TIES

CONST BL

PROP LOAM & SEED

PROP 14' GRAVEL ACCESS ROAD

308 309 59 310 L203 311 312 313 PC +71.38

APPROX LIMIT OF GRADING (TYP)

PROP LOAM & SEED

PROP 22' CONSTRUCTION PLATFORM

EXIST MBTA L.O.

MATCH TO PAGE 32

20 0 20 40

SCALE IN FEET

White Pond Road to Parmenter Road, Hudson, MA

Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
2. WETLAND BOUNDARIES SHOWN HEREIN ARE THE SAME AS THOSE SHOWN ON HUDSON AND SUDBURY ANRAD PLANS (2017).

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NO.	DESCRIPTION	BY	DATE	APPR

REVISION

EVERSOURCE

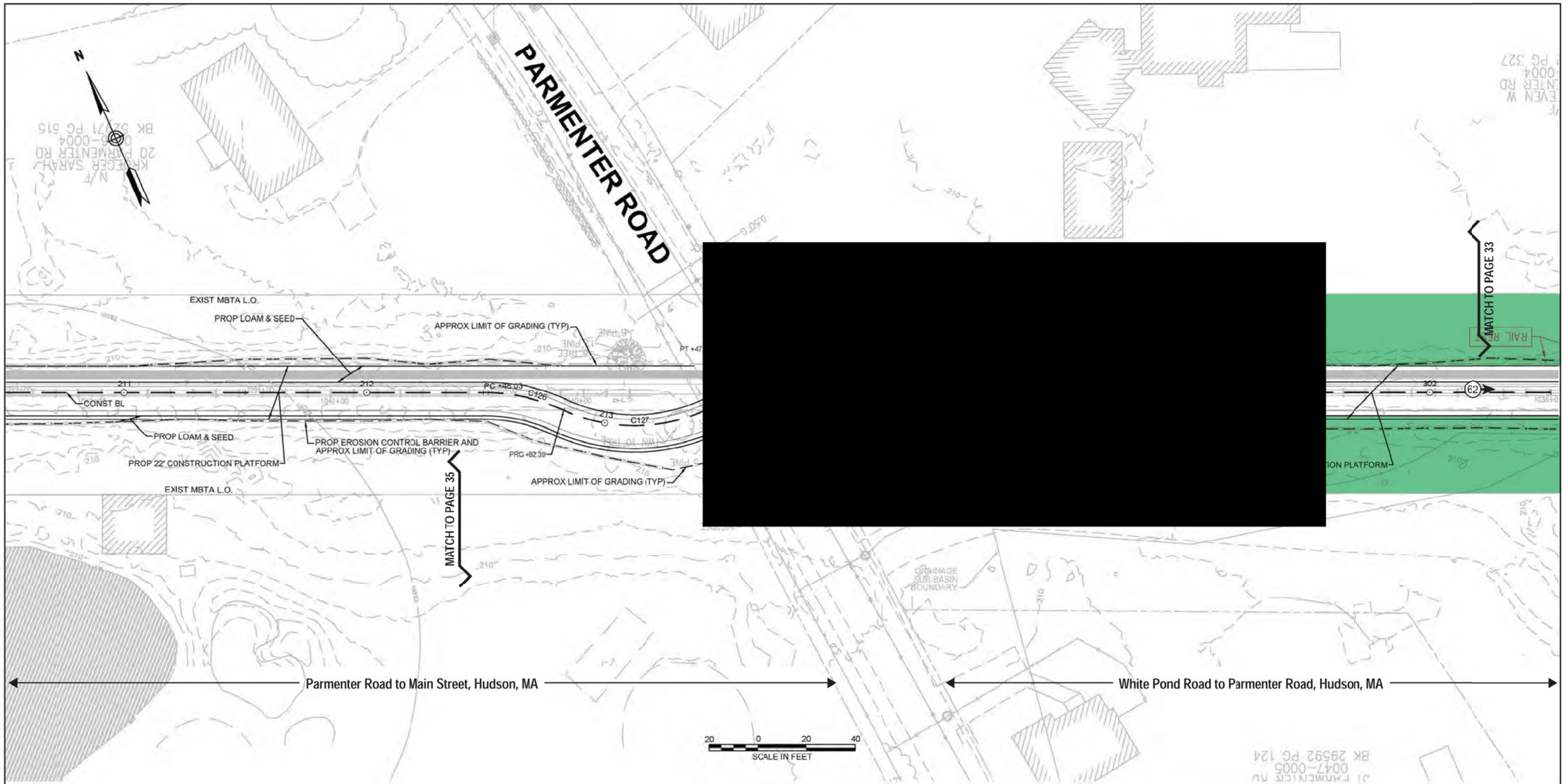
SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT

HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS

CONSTRUCTION PLANS

PLAN 36 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APP R.	DRAWING NO.	RE
1"=20'	2–14–2018	MS	SK	MS	.	.



[redacted]

Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
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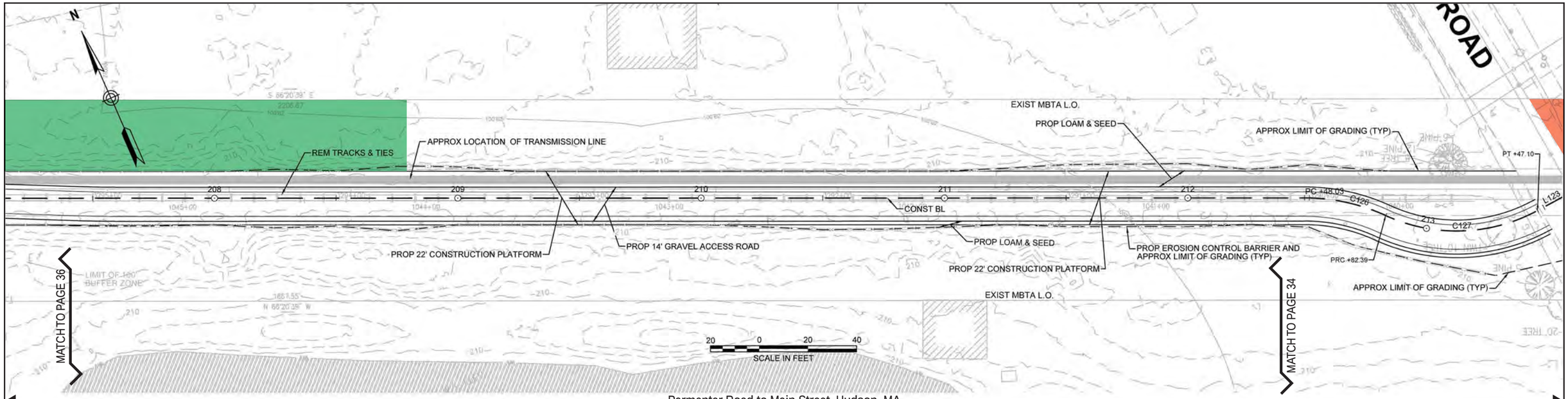
NO.	DESCRIPTION	BY	DATE	APPR
	REVISION			

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 35 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APP'R.	DRAWING NO.	REV
1"=20'	2–14–2018	MS	SK	MS	.	.



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
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NO.	DESCRIPTION	BY	DATE	APPR

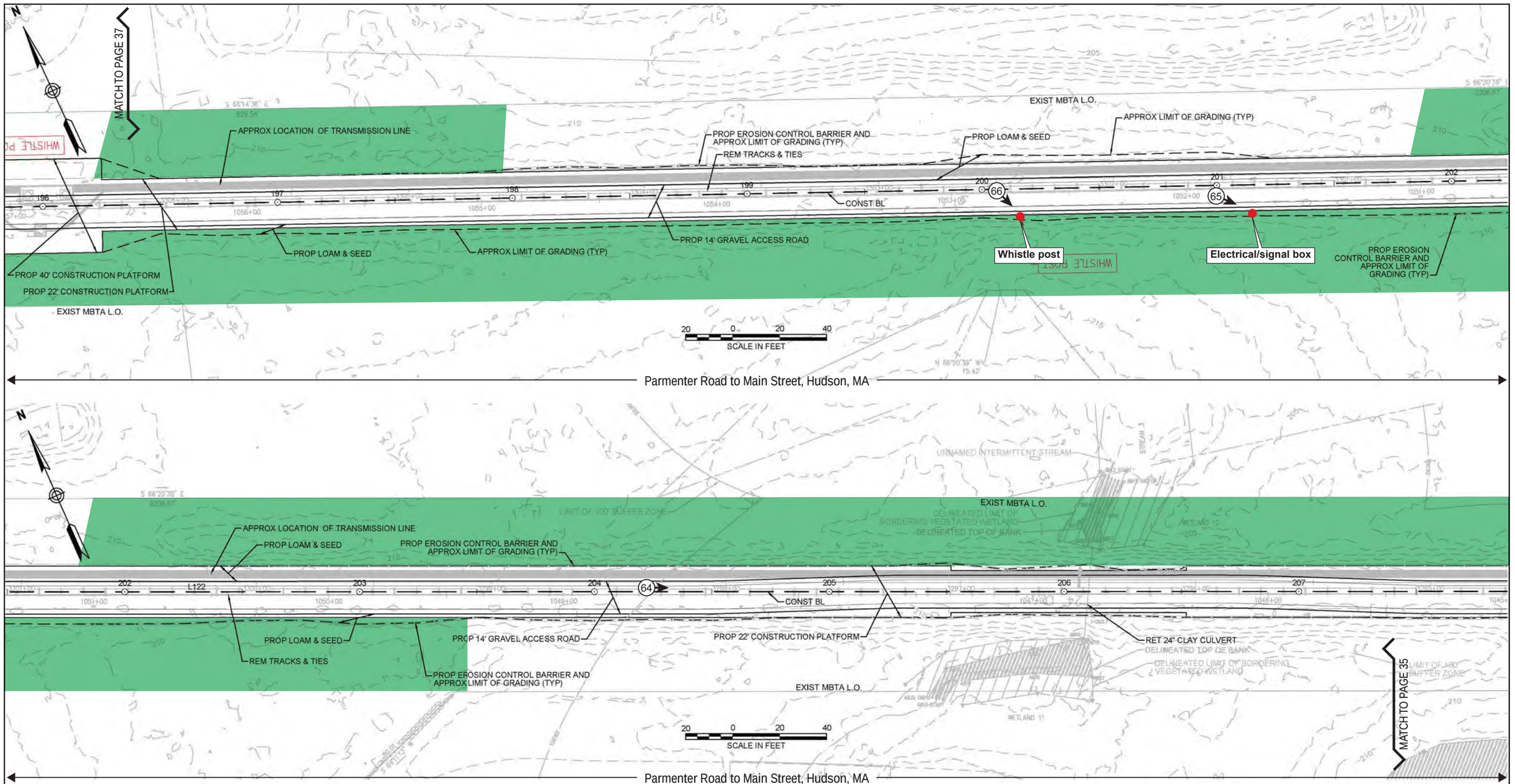
REVISION

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS

PLAN 34 OF 223

SCALE: unless noted	DATE	DRAWN	CH'KD.	APPR.	DRAWING NO.	RE
1"=20'	2–14–2018	MS	SK	MS	.	.



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
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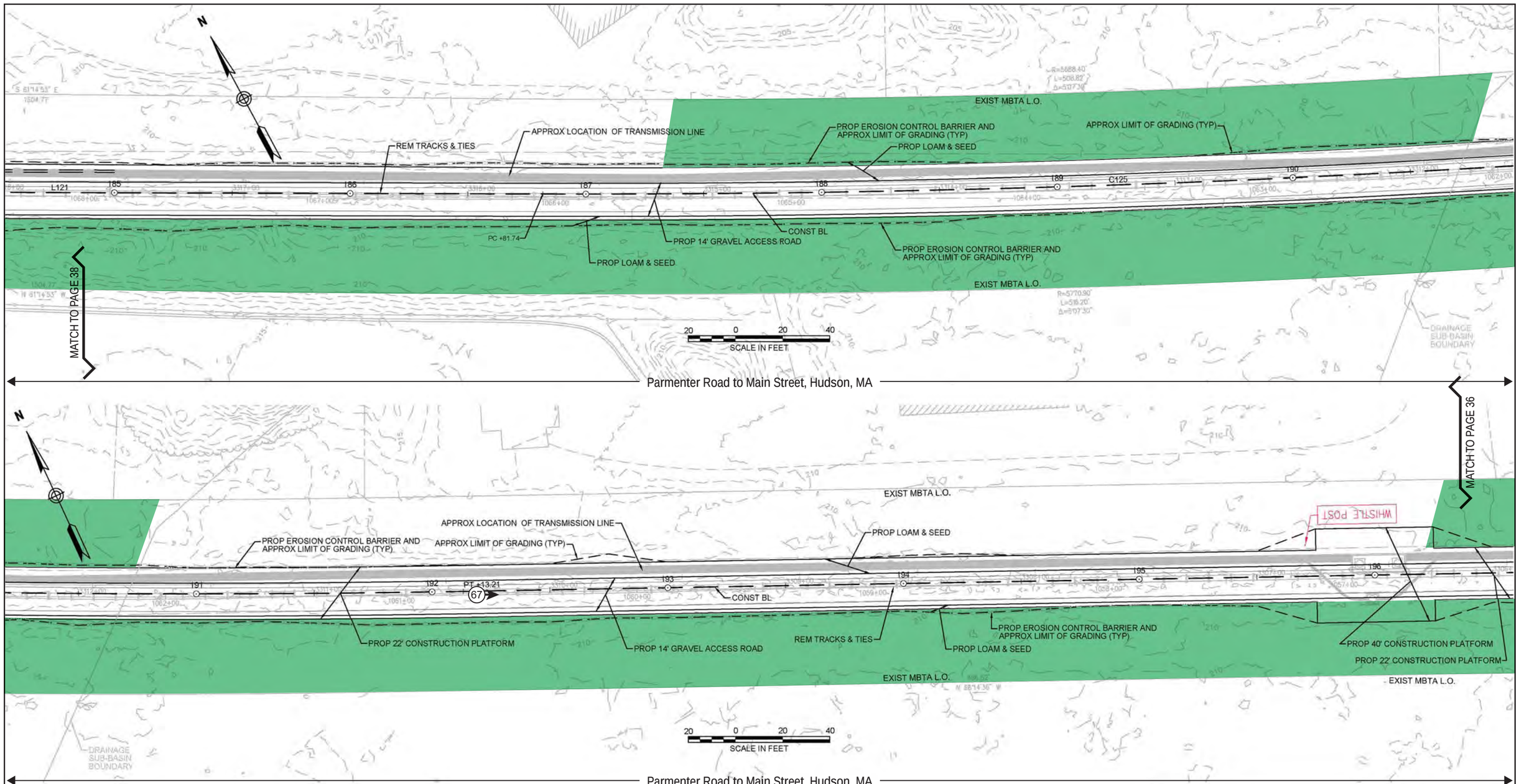
REVISION

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS

PLAN 33 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APP R.	DRAWING NO.	REV
1"=20'	2-14-2018	MS	SK	MS	.	.



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
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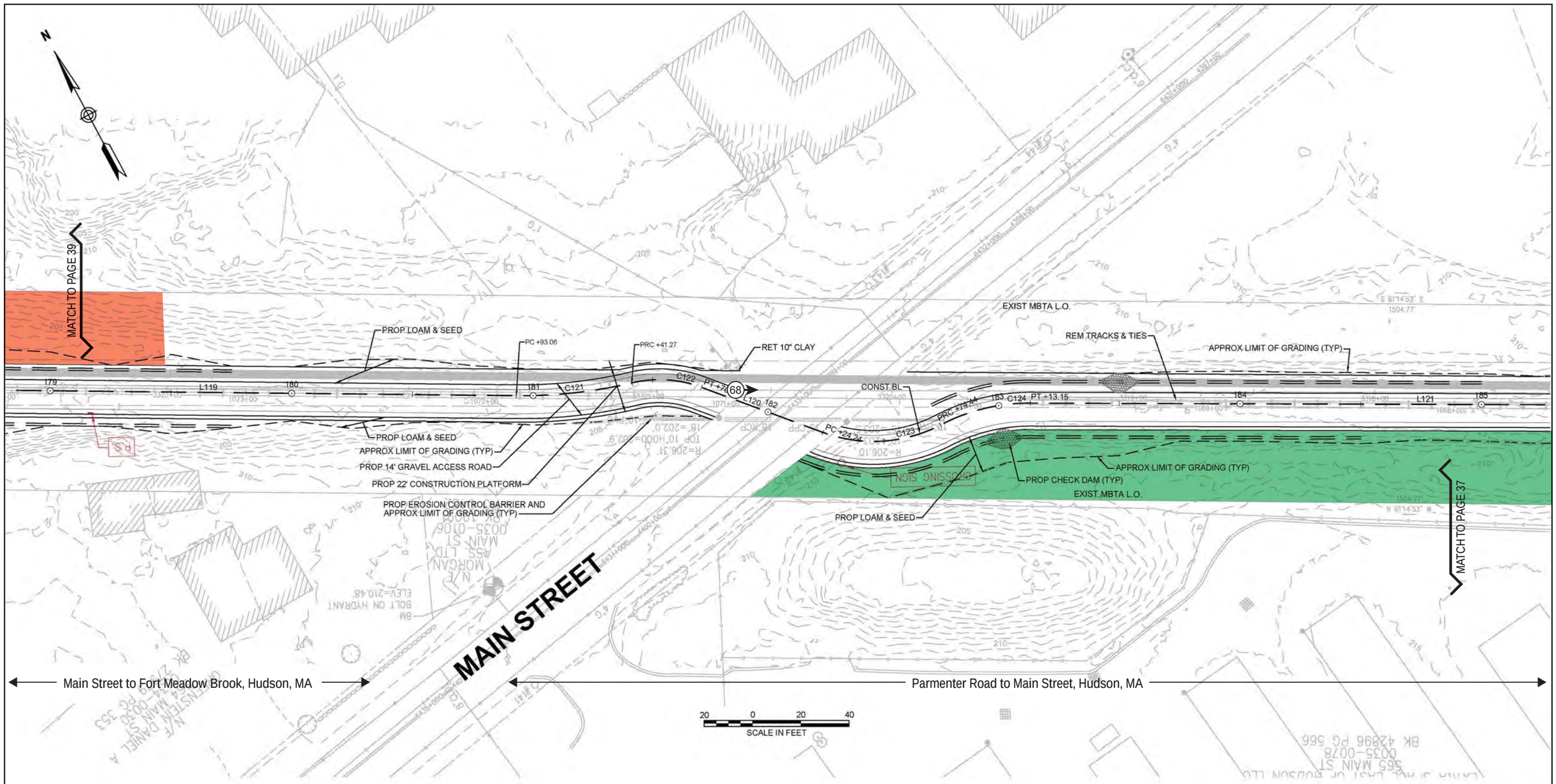
NO.	DESCRIPTION	BY	DATE	APPR
	REVISION			

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 32 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APP'R.	DRAWING NO.	REV
1"=20'	2–14–2018	MS	SK	MS	.	.



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
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NO.	DESCRIPTION	BY	DATE	APPR

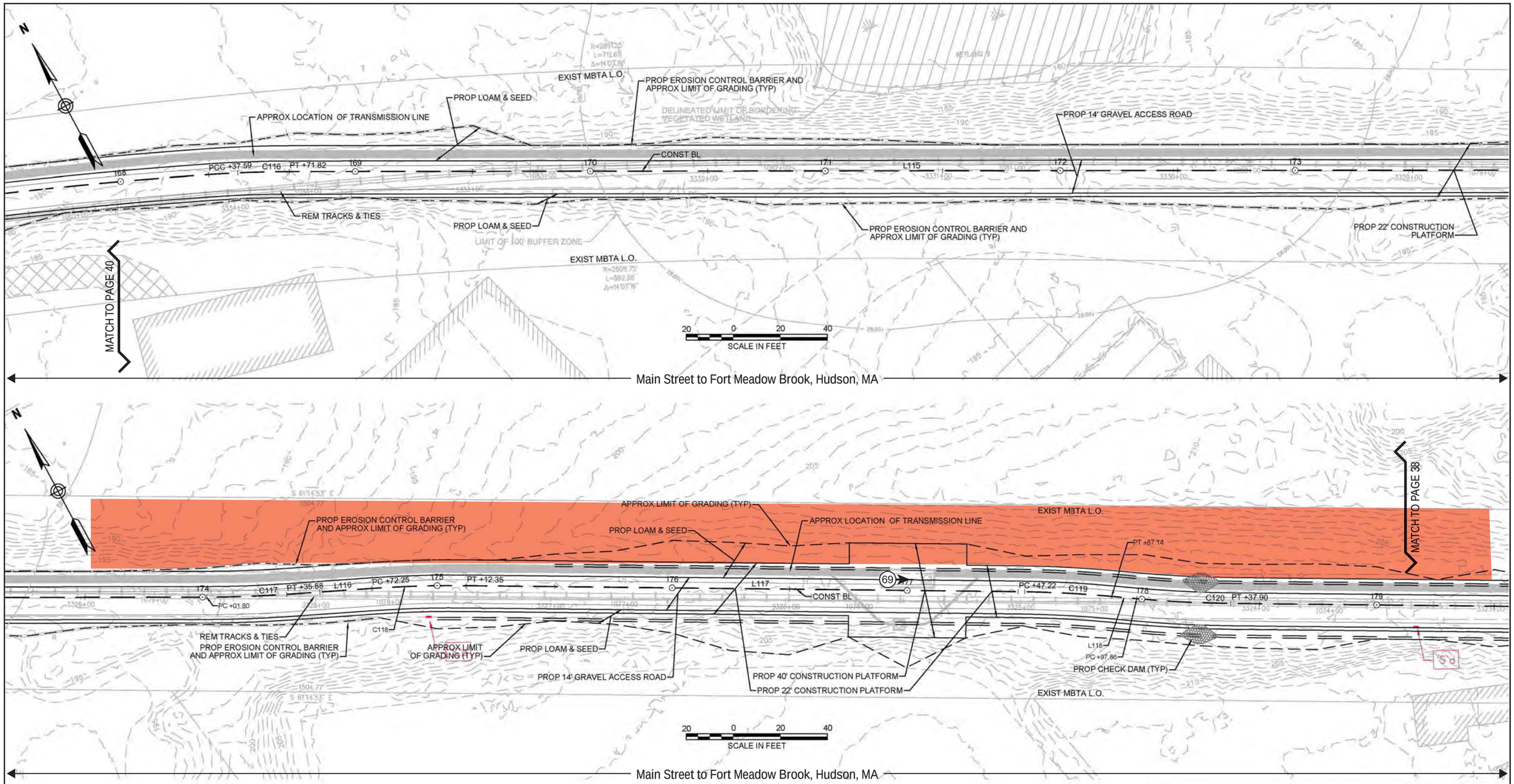
REVISION

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS

PLAN 31 OF 223

SCALE: unless noted	DATE	DRAWN	CH'KD.	APPR.	DRAWING NO.	REV
1"=20'	2-14-2018	MS	SK	MS	.	.



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
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NO.	DESCRIPTION	BY	DATE	APPR

REVISION

EVERSOURCE

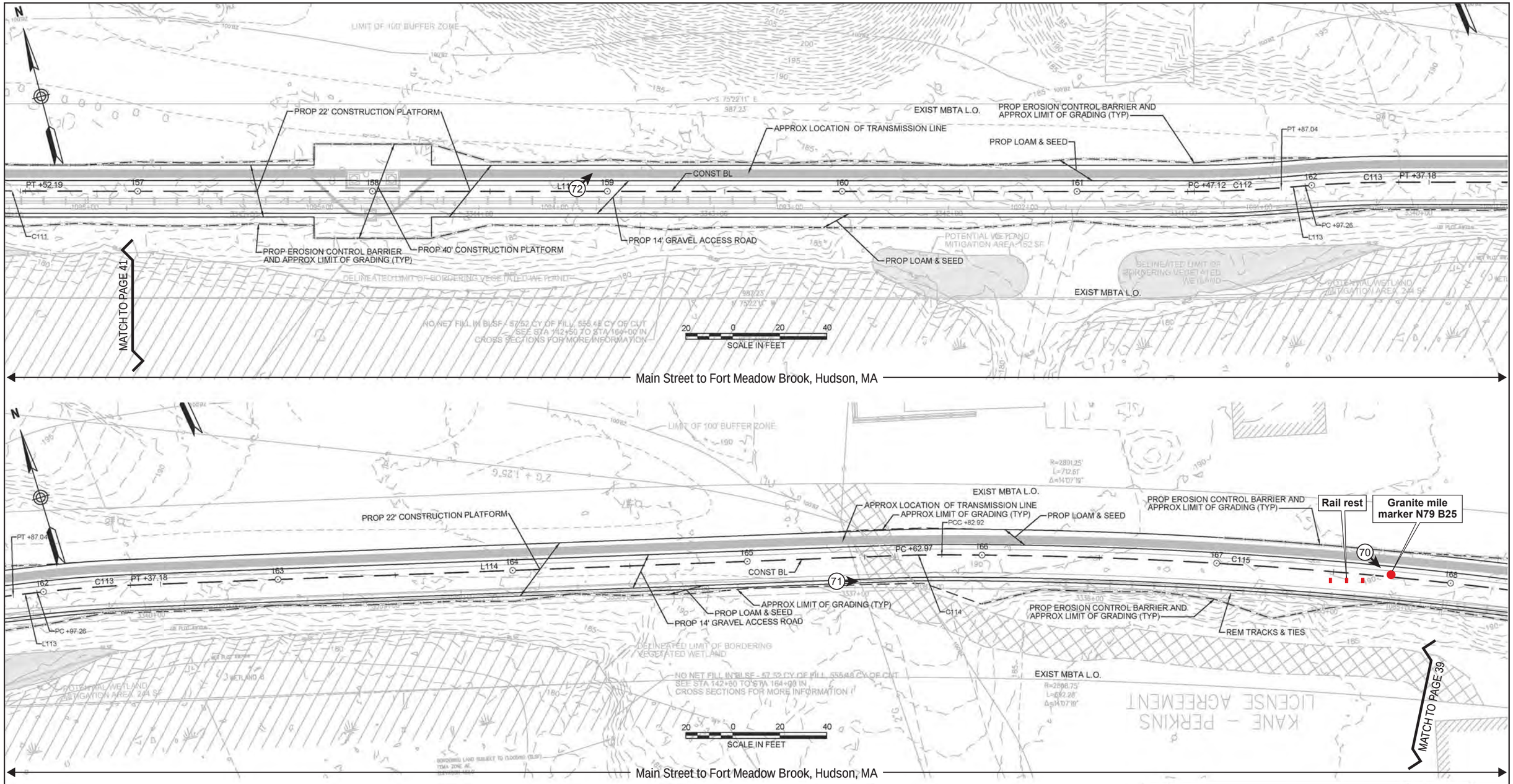
SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT

HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS

CONSTRUCTION PLANS

PLAN 30 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	RE
1"=20'	2–14–2018	MS	SK	MS	.	.



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
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NO.	DESCRIPTION	BY	DATE	APPR

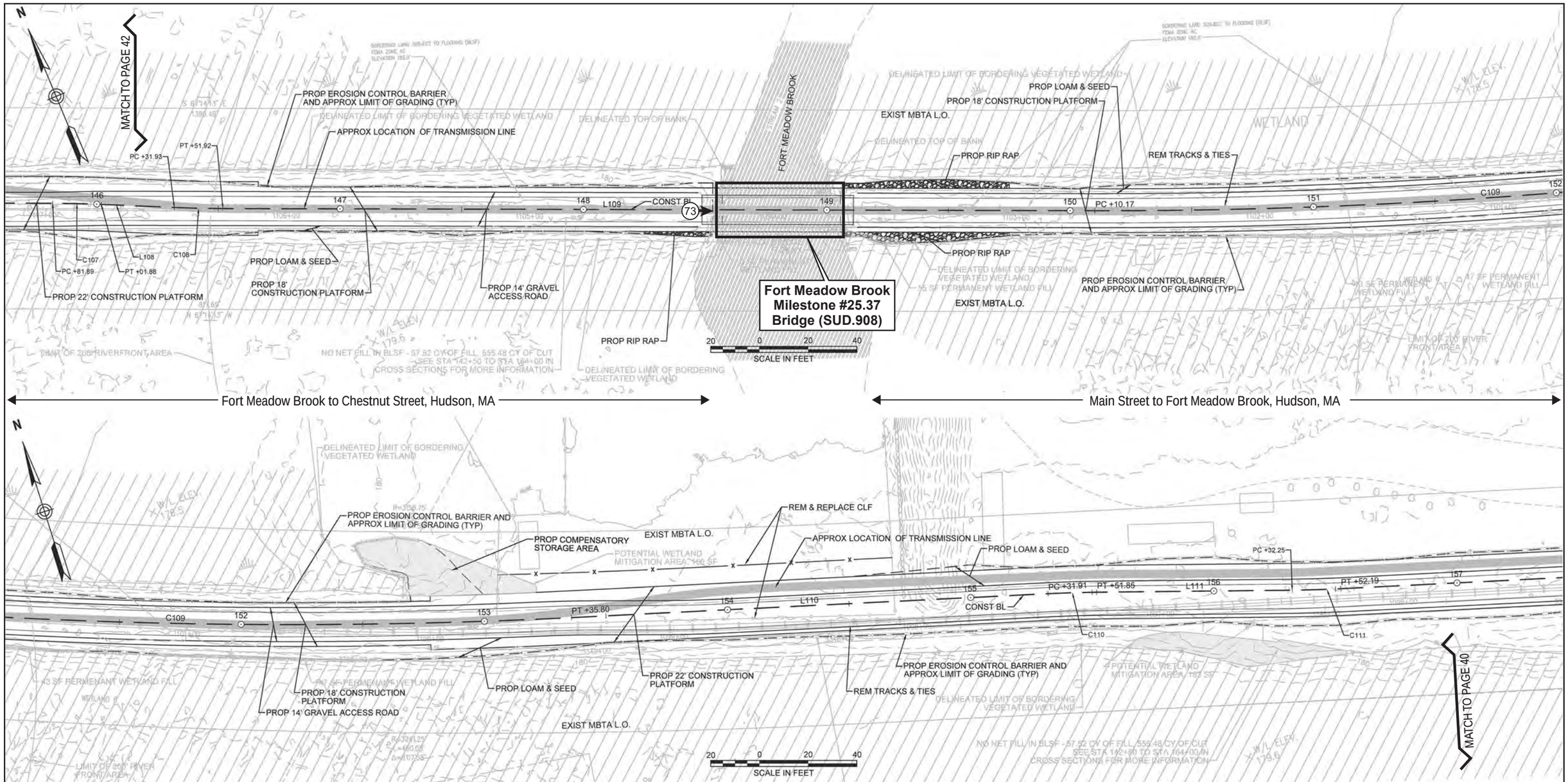
REVISION

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS

PLAN 29 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APP R.	DRAWING NO.	RE
1"=20'	2–14–2018	MS	SK	MS	.	.



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

◀1 Plate # and orientation

NOTES:

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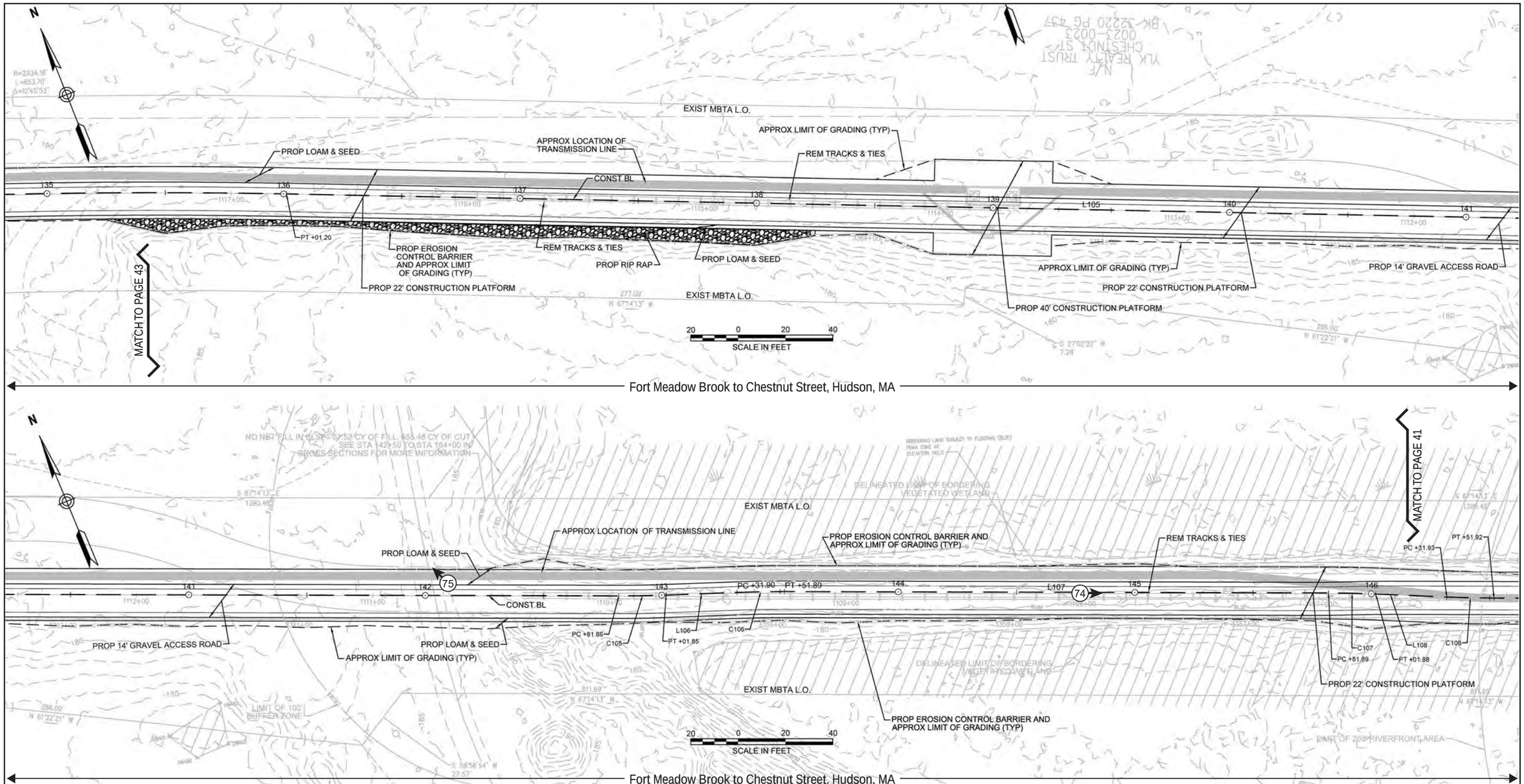
NO.	DESCRIPTION (REVISION)	BY	DATE	APPR

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 28 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	RE
1"=20'	2–14–2018	MS	SK	MS	.	.



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

1 Plate # and orientation

NOTES:

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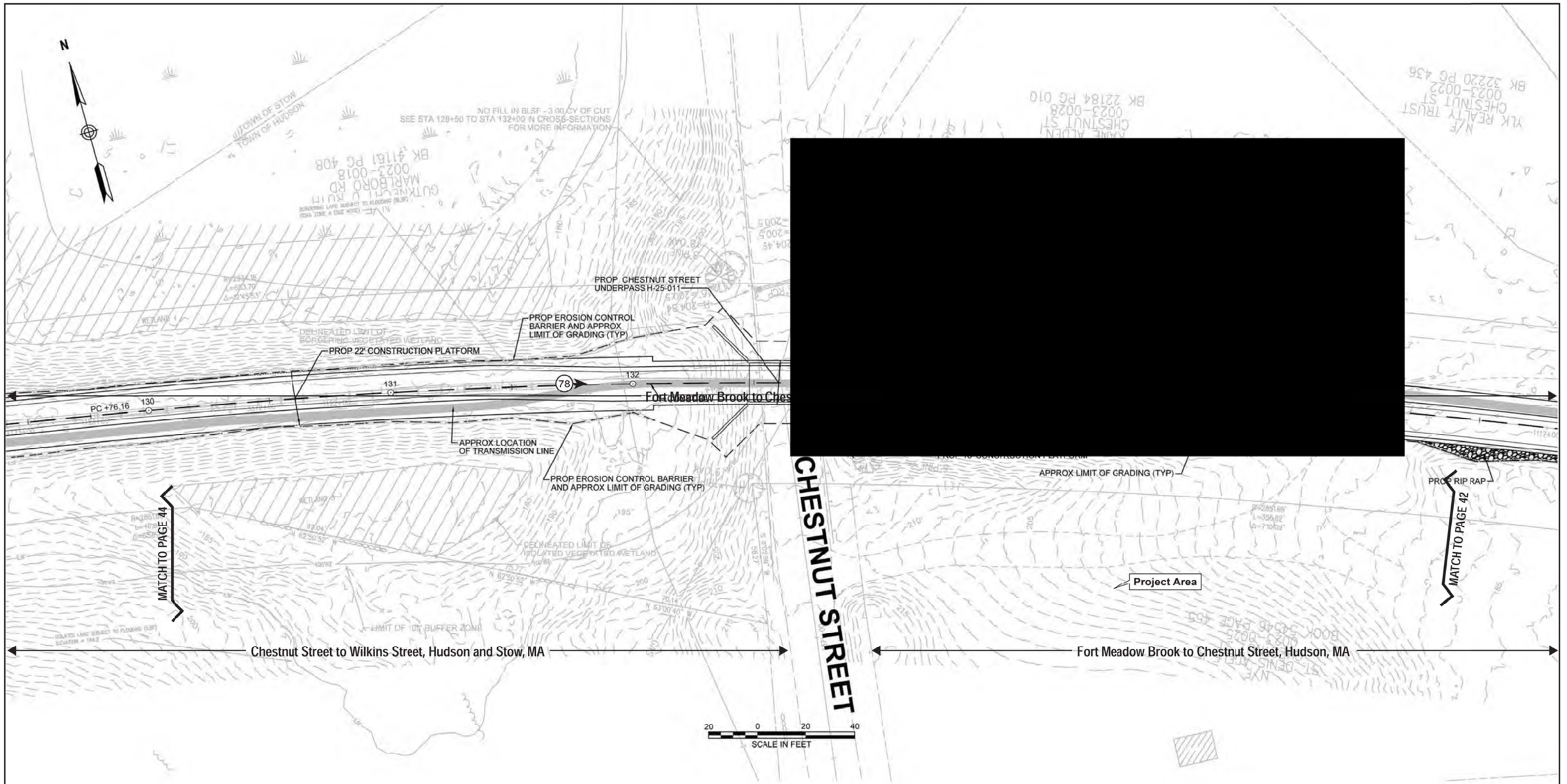
NO.	DESCRIPTION	BY	DATE	APPR
	REVISION			

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 27 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	RE
1"=20'	2–14–2018	MS	SK	MS	.	.



[redacted]

Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
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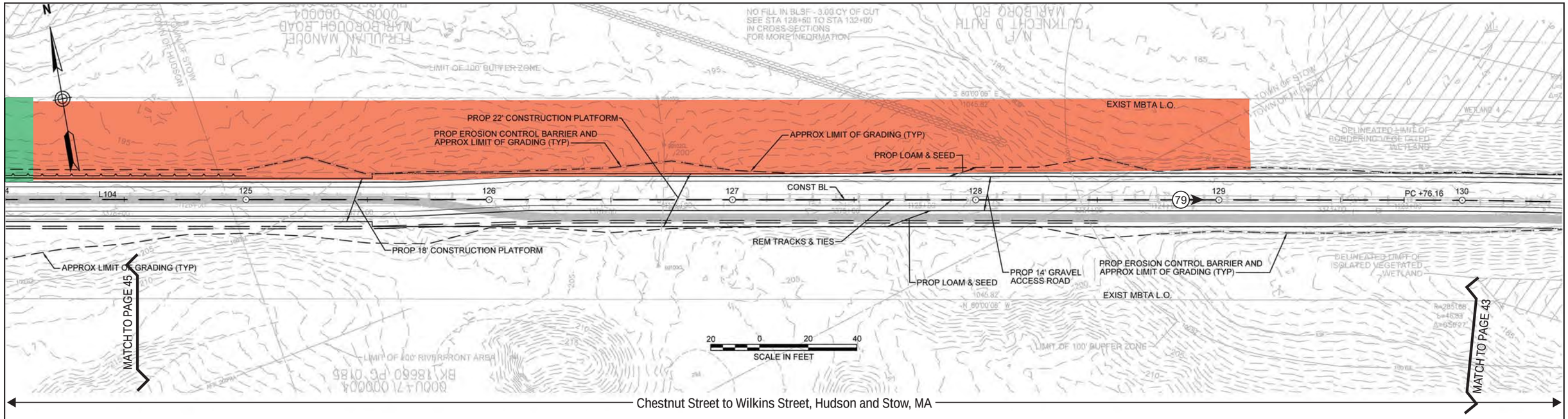
NO.	DESCRIPTION	BY	DATE	APPR
	REVISION			

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 26 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APP R.	DRAWING NO.	REV
1"=20'	2-14-2018	MS	SK	MS	.	.



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
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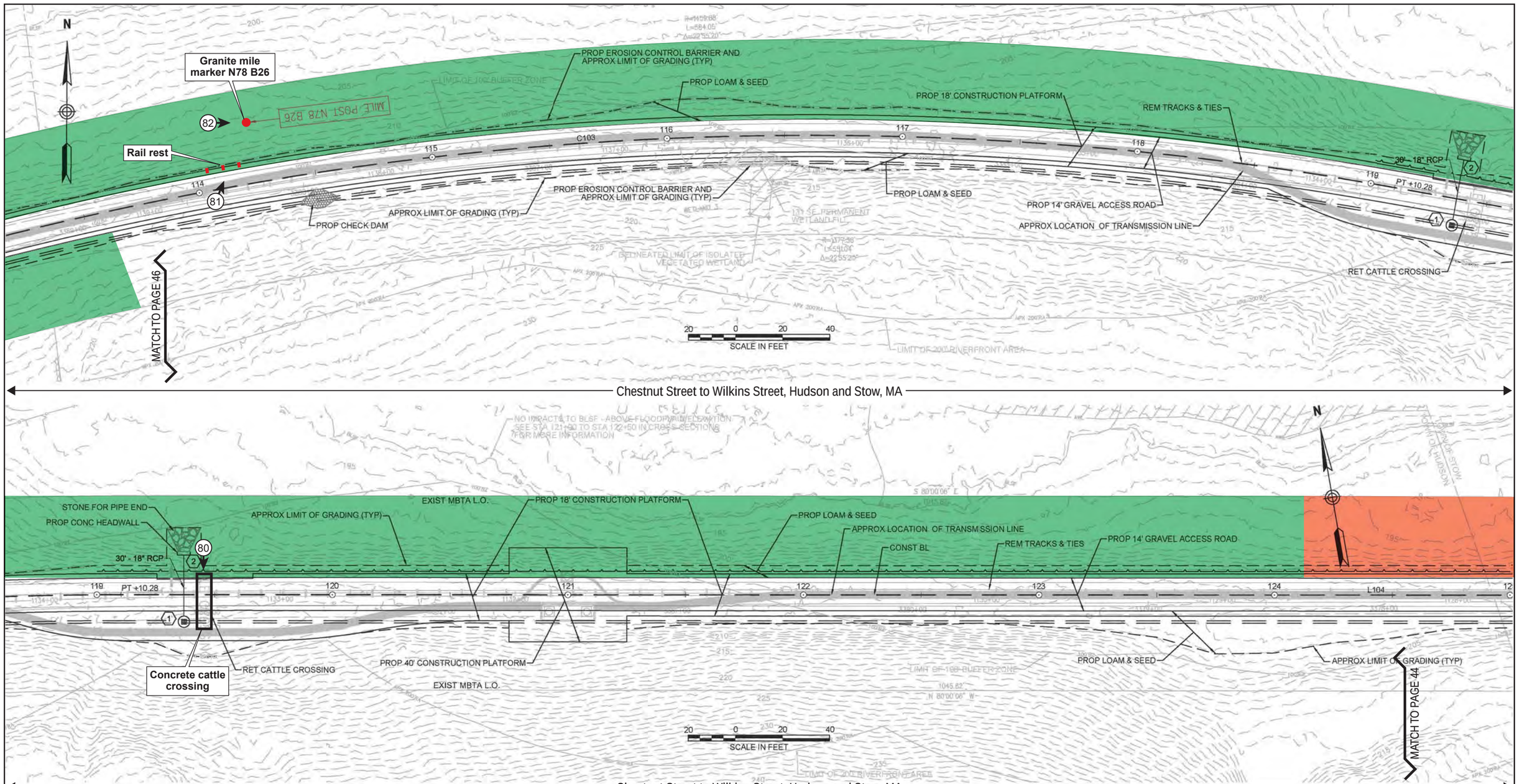
NO.	DESCRIPTION	BY	DATE	APPR
	REVISION			

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS

PLAN 25 OF 223

SCALE: unless noted	DATE	DRAWN	CH'KD.	APPR.	DRAWING NO.	RE
1"=20'	2–14–2018	SB	SK	MS	.	.



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:
1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
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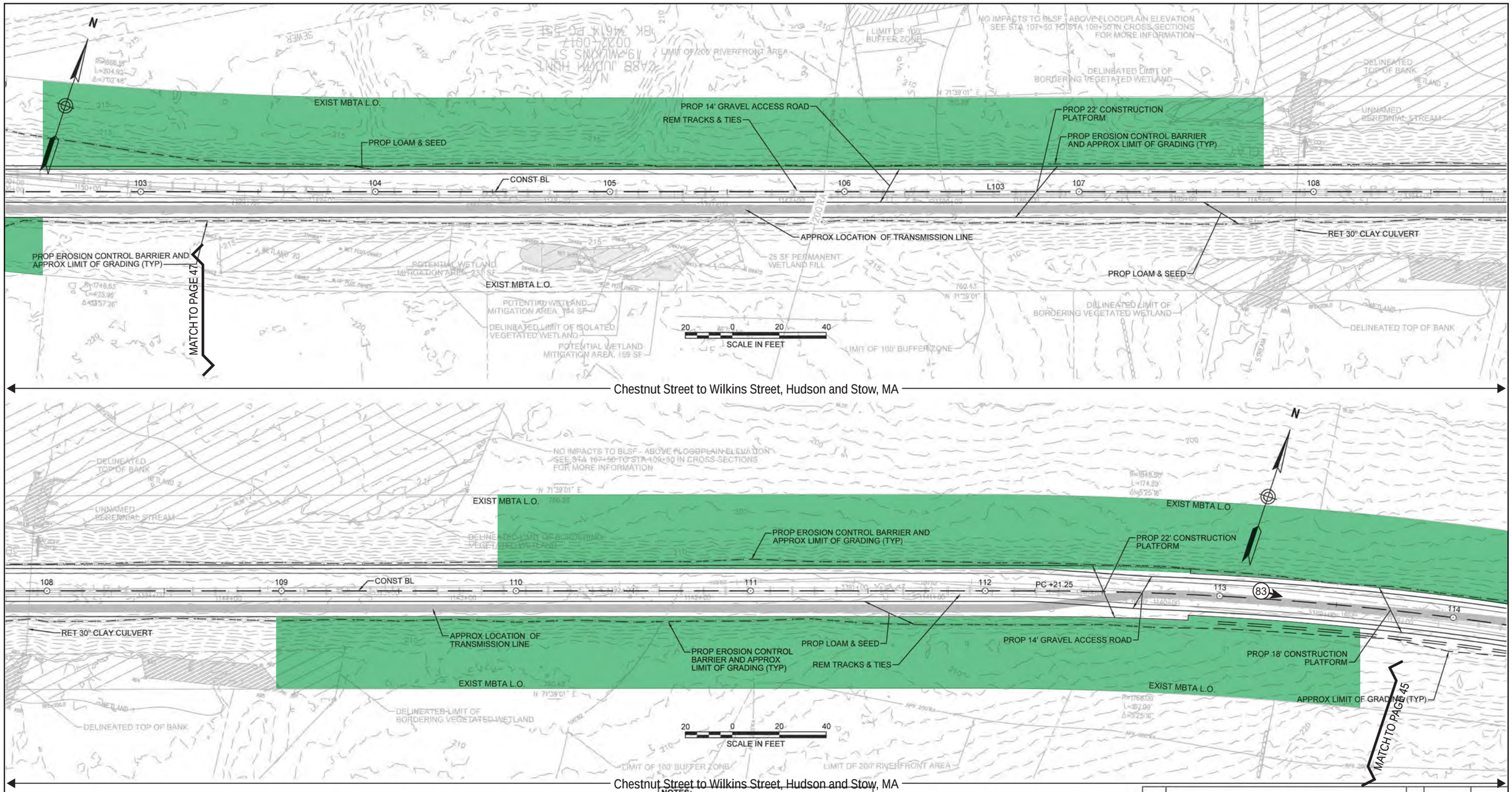
NO.	DESCRIPTION	BY	DATE	APPR
	REVISION			

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 24 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	RE
1"=20'	2–14–2018	SB	SK	MS	.	.



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
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617.924.1770 FAX 617.924.2286

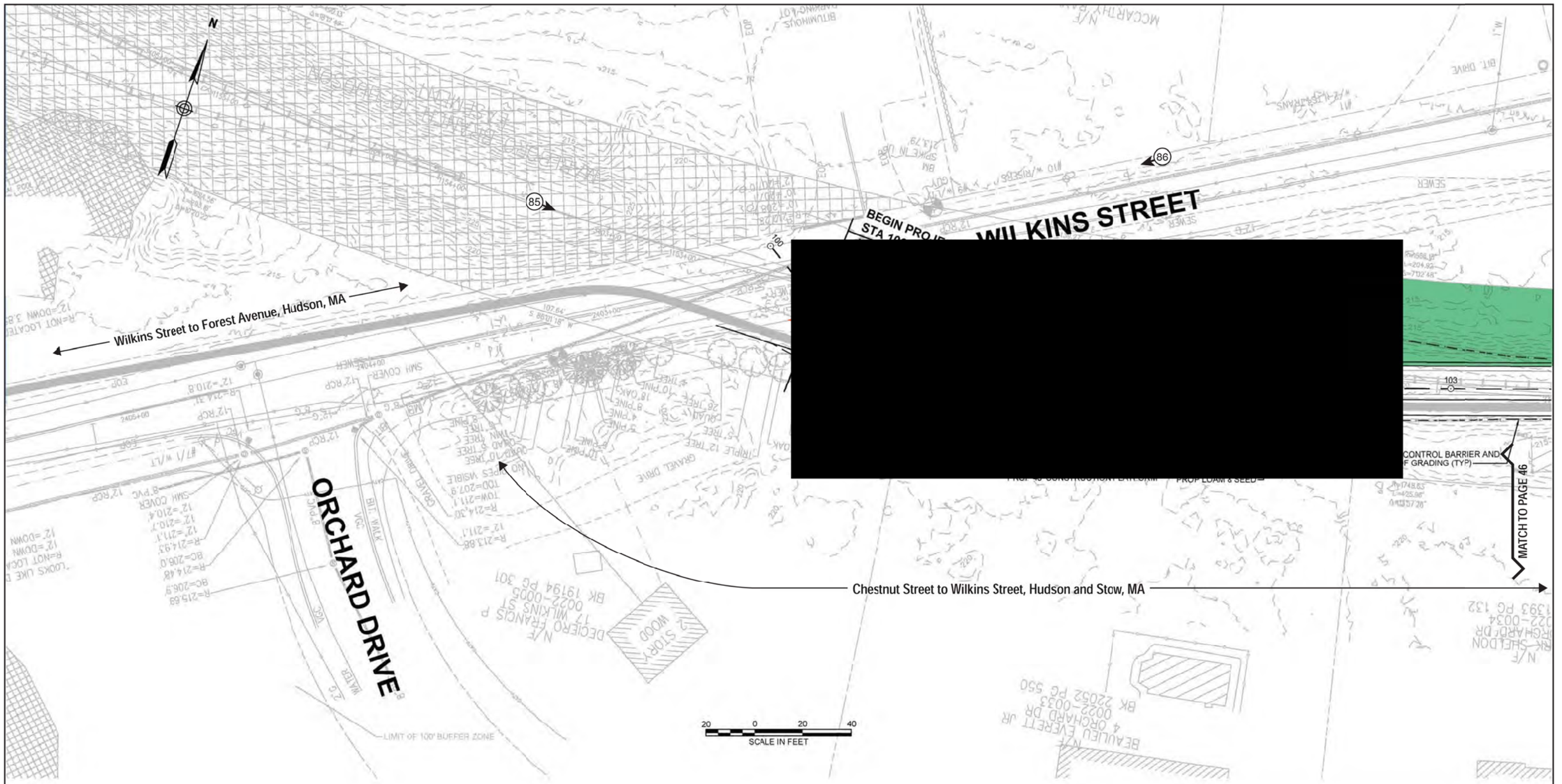
NO.	DESCRIPTION	BY	DATE	APPR

REVISION

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 23 OF 223

SCALE: unless noted	DATE	DRAWN	CH'KD.	APP'R.	DRAWING NO.	REV
1"=20'	2–14–2018	SB	SK	MS	.	.



Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NOTES:

1. CONTRACTOR SHALL REMOVE RAILROAD TIES LOCATED ON THE SURFACE OF THE GROUND OUTSIDE OF THE LIMIT OF GRADING, AS DIRECTED BY THE RESIDENT ENGINEER.
2. WETLAND BOUNDARIES SHOWN HEREIN ARE THE SAME AS THOSE SHOWN ON HUDSON AND SUDBURY ANRAD PLANS (2017).

vhb Vanasse Hangen Brustlin, Inc.
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Watertown, MA 02472
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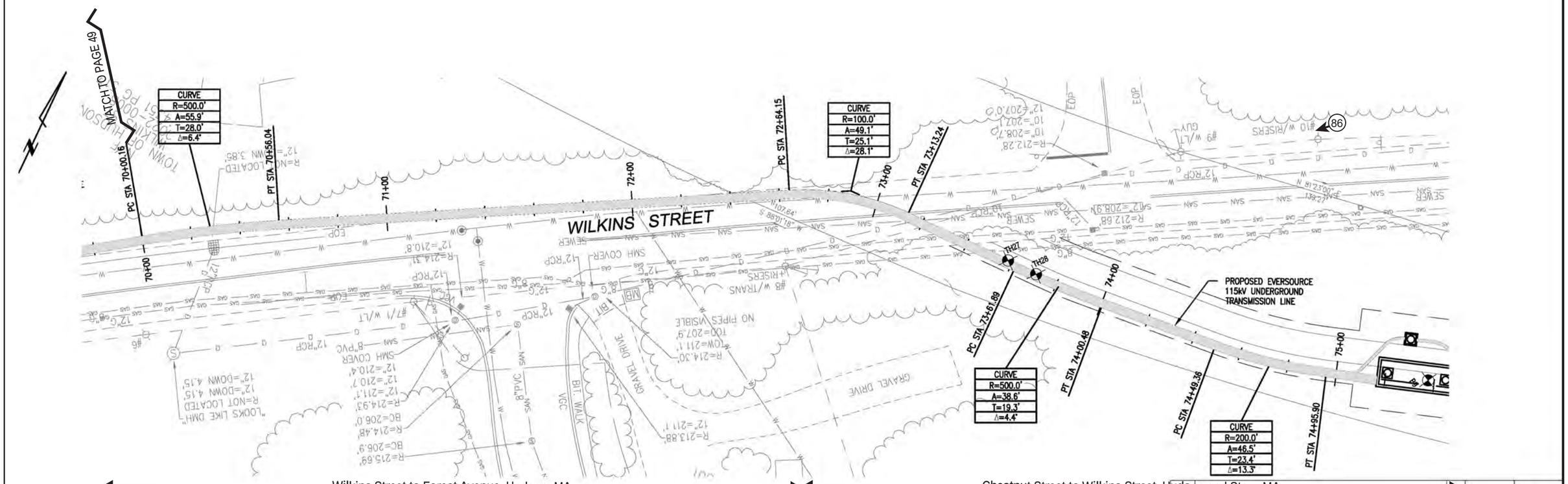
NO.	DESCRIPTION REVISION	BY	DATE	APPR

EVERSOURCE

SUDBURY–HUDSON TRANSMISSION LINE RELIABILITY PROJECT
HUDSON, STOW, MARLBOROUGH & SUDBURY MASSACHUSETTS
CONSTRUCTION PLANS
PLAN 22 OF 223

SCALE: unless noted	DATE	DRAWN	CH'K D.	APP R.	DRAWING NO.	RE
1"=20'	2–14–2018	MS	SK	MS	.	.



Wilkins Street to Forest Avenue, Hudson, MA

Chestnut Street to Wilkins Street, Hudson and Stow, MA

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NOTES:

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2. ALL VERTICAL CURVES ARE 500' UNLESS OTHERWISE NOTED.
3. SIZE AND DEPTH OF ALL TELEPHONE, GAS, AND UNDERGROUND ELECTRICAL UTILITIES ARE ASSUMED.
4. DEPTH OF ALL WATER UTILITIES ARE ASSUMED.

Archaeological Sensitivity

- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

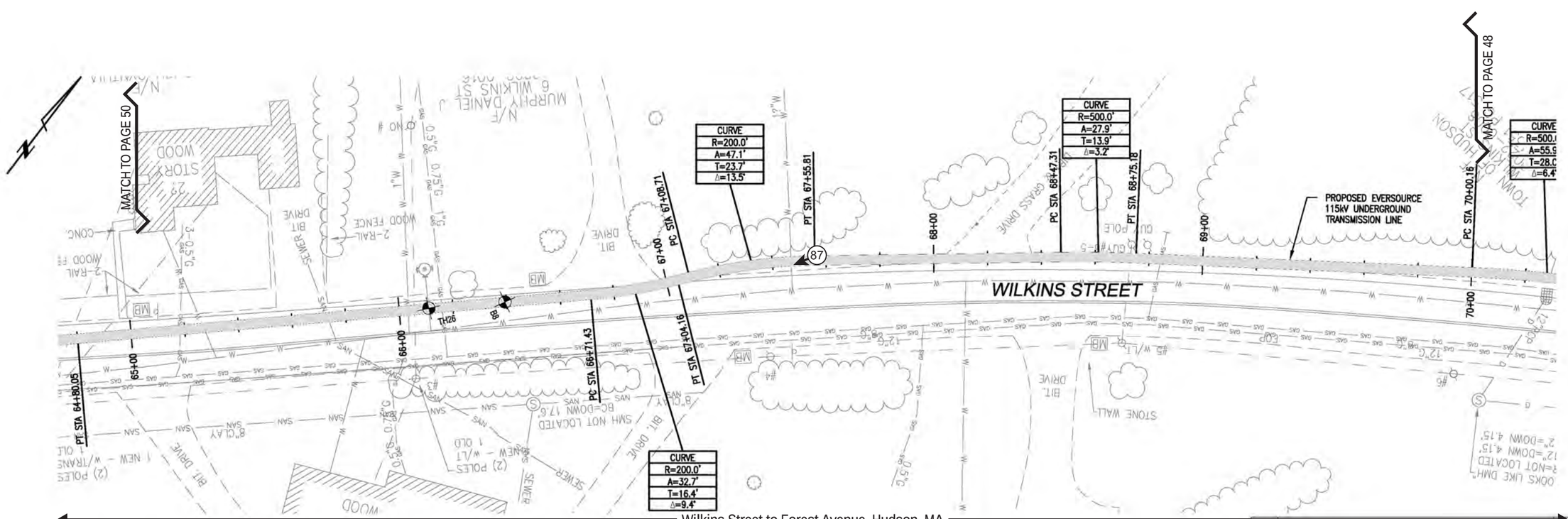
NO.	DESCRIPTION	BY	DATE	APPR.
B	PER VHB REVISED RR ROW DUCT LOCATION	DRC	10/20/17	TSG
A	ISSUED FOR REVIEW – REVISED 25% PLAN SET	DRC	10/13/17	TSG

REVISION

EVERSOURCE ENERGY

PLAN AND PROFILE STA 70+00 TO 75+00
SUDBURY TO HUDSON
115kV UNDERGROUND TRANSMISSION LINE
SUDBURY – HUDSON, MASSACHUSETTS

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	REV.
H: 1"=20' V: 1"=5'	10/13/17	DRC	TSG		17 OF 103	B



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4. DEPTH OF ALL WATER UTILITIES ARE ASSUMED.

Archaeological Sensitivity
- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

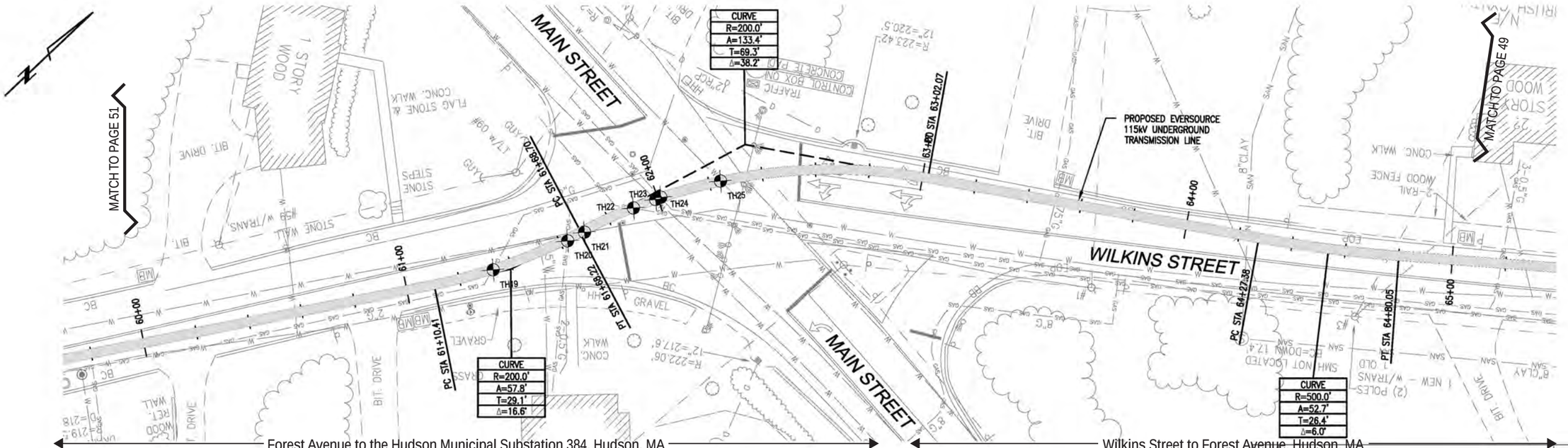
NO.	DESCRIPTION	BY	DATE	APPR.
B	PER VHB REVISED RR ROW DUCT LOCATION	DRC	10/20/17	TSG
A	ISSUED FOR REVIEW – REVISED 25% PLAN SET	DRC	10/13/17	TSG

REVISION

EVERSOURCE ENERGY

PLAN AND PROFILE STA 65+00 TO 70+00
SUDBURY TO HUDSON
115kV UNDERGROUND TRANSMISSION LINE
SUDBURY – HUDSON, MASSACHUSETTS

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	REV.
H: 1"=20' V: 1"=5'	10/13/17	DRC		TSG	16 OF 103	B



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4. DEPTH OF ALL WATER UTILITIES ARE ASSUMED.

Archaeological Sensitivity
- High
- Medium-High
- Medium
- Medium-Low

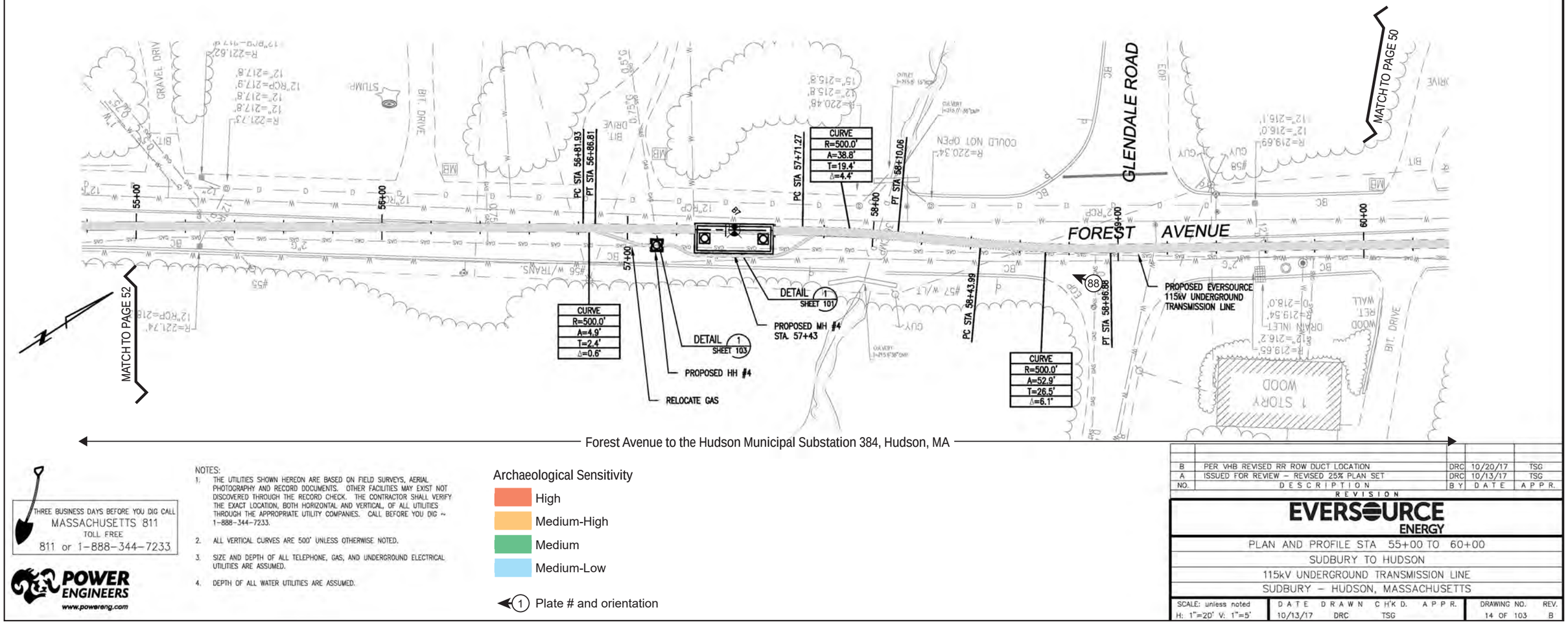
(1) Plate # and orientation

NO.	DESCRIPTION	BY	DATE	APPR.
	REVISION			
B	PER VHB REVISED RR ROW DUCT LOCATION	DRC	10/20/17	TSG
A	ISSUED FOR REVIEW – REVISED 25% PLAN SET	DRC	10/13/17	TSG

EVERSOURCE ENERGY

PLAN AND PROFILE STA 60+00 TO 65+00
SUDBURY TO HUDSON
115kV UNDERGROUND TRANSMISSION LINE
SUDBURY – HUDSON, MASSACHUSETTS

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	REV.
H: 1"=20' V: 1"=5'	10/13/17	DRC	TSG		15 OF 103	B



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4. DEPTH OF ALL WATER UTILITIES ARE ASSUMED.

Archaeological Sensitivity
- High
- Medium-High
- Medium
- Medium-Low

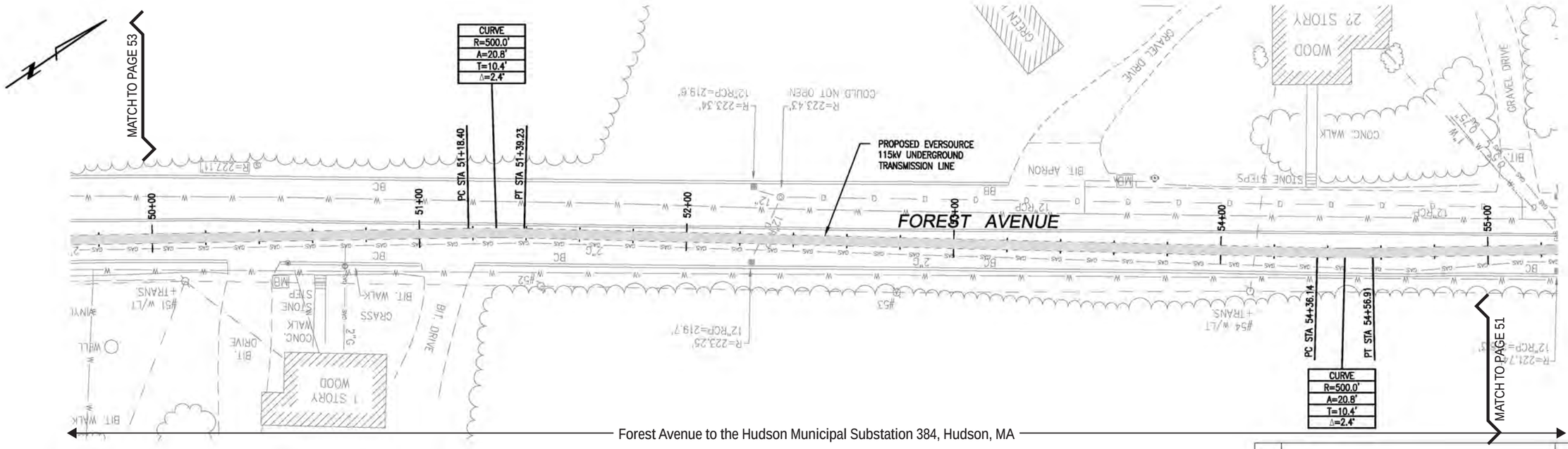
(1) Plate # and orientation

NO.	DESCRIPTION	BY	DATE	APPR.
	REVISION			
B	PER VHB REVISED RR ROW DUCT LOCATION	DRC	10/20/17	TSG
A	ISSUED FOR REVIEW – REVISED 25% PLAN SET	DRC	10/13/17	TSG

EVERSOURCE ENERGY

PLAN AND PROFILE STA 55+00 TO 60+00
SUDBURY TO HUDSON
115kV UNDERGROUND TRANSMISSION LINE
SUDBURY – HUDSON, MASSACHUSETTS

SCALE: unless noted	DATE	DRAWN	CH'KD.	APPR.	DRAWING NO.	REV.
H: 1"=20' V: 1"=5'	10/13/17	DRC	TSG		14 OF 103	B



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4. DEPTH OF ALL WATER UTILITIES ARE ASSUMED.

Archaeological Sensitivity
- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

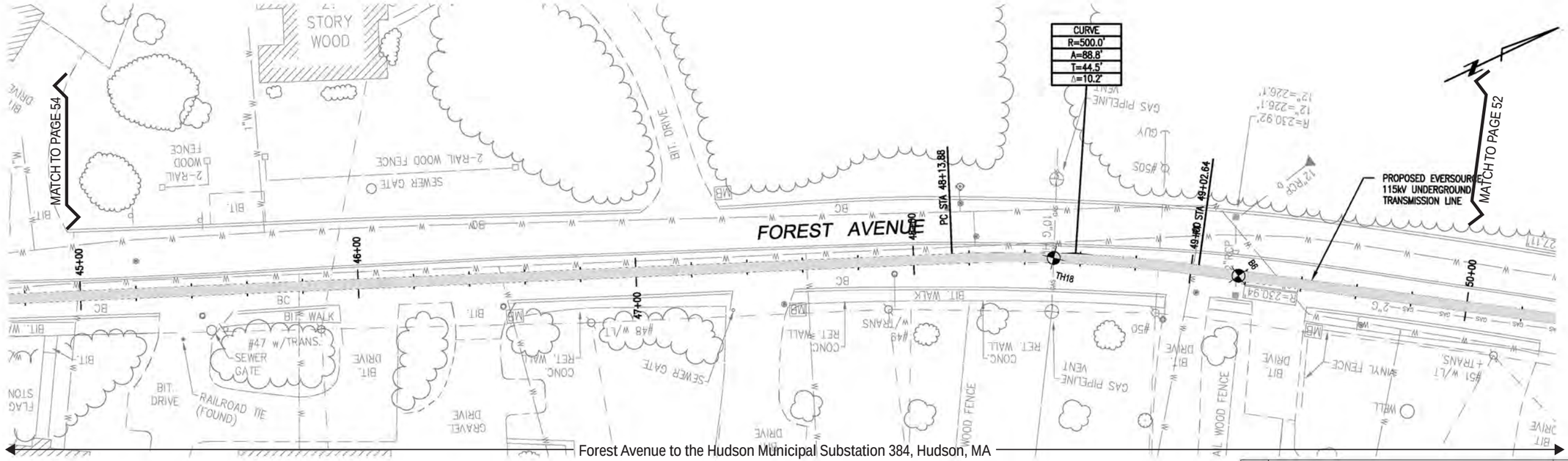
NO.	DESCRIPTION	BY	DATE	APPR.
B	PER VHB REVISED RR ROW DUCT LOCATION	DRC	10/20/17	TSG
A	ISSUED FOR REVIEW – REVISED 25% PLAN SET	DRC	10/13/17	TSG

REVISION

EVERSOURCE ENERGY

PLAN AND PROFILE STA 50+00 TO 55+00
SUDBURY TO HUDSON
115kV UNDERGROUND TRANSMISSION LINE
SUDBURY – HUDSON, MASSACHUSETTS

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	REV.
H: 1"=20' V: 1"=5'	10/13/17	DRC	TSG		13 OF 103	B



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4. DEPTH OF ALL WATER UTILITIES ARE ASSUMED.

Archaeological Sensitivity
- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

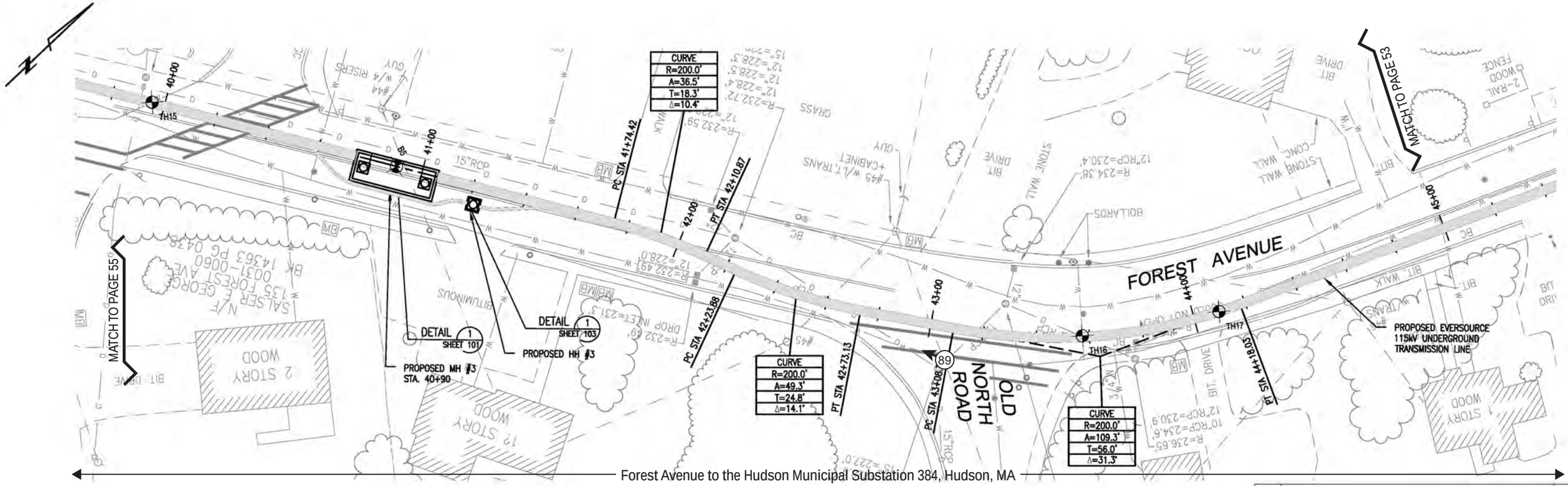
NO.	DESCRIPTION	BY	DATE	APPR.
B	PER VHB REVISED RR ROW DUCT LOCATION	DRC	10/20/17	TSG
A	ISSUED FOR REVIEW – REVISED 25% PLAN SET	DRC	10/13/17	TSG

REVISION

EVERSOURCE ENERGY

PLAN AND PROFILE STA 45+00 TO 50+00
SUDBURY TO HUDSON
115kV UNDERGROUND TRANSMISSION LINE
SUDBURY – HUDSON, MASSACHUSETTS

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	REV.
H: 1"=20' V: 1"=5'	10/13/17	DRC	TSG		12 OF 103	B



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4. DEPTH OF ALL WATER UTILITIES ARE ASSUMED.

Archaeological Sensitivity
- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

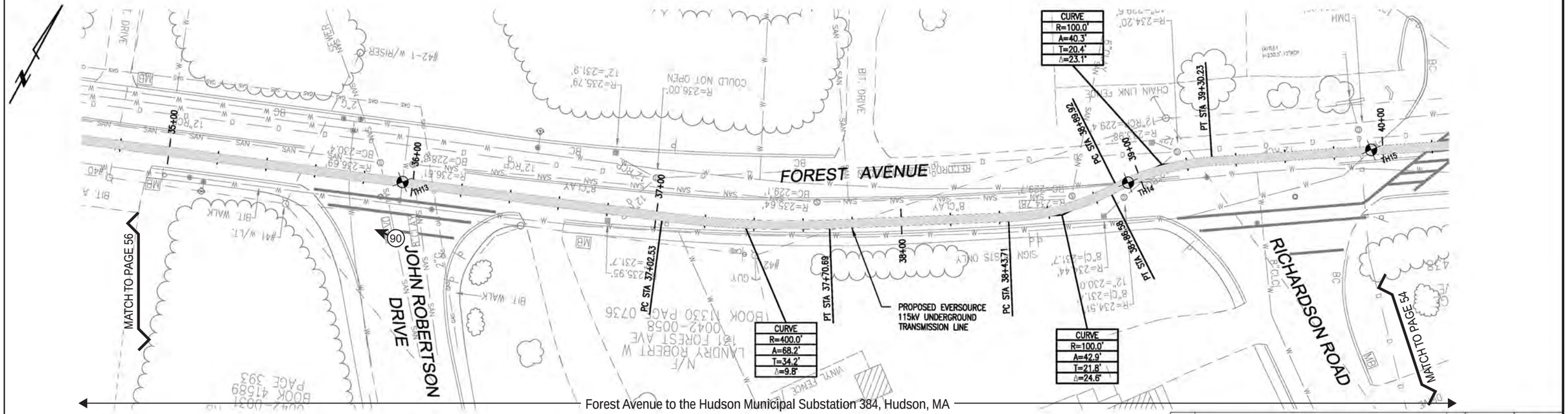
NO.	DESCRIPTION	BY	DATE	APPR.
B	PER VHB REVISED RR ROW DUCT LOCATION	DRC	10/20/17	TSG
A	ISSUED FOR REVIEW – REVISED 25% PLAN SET	DRC	10/13/17	TSG

REVISION

EVERSOURCE ENERGY

PLAN AND PROFILE STA 40+00 TO 45+00
SUDBURY TO HUDSON
115kV UNDERGROUND TRANSMISSION LINE
SUDBURY – HUDSON, MASSACHUSETTS

SCALE: unless noted	DATE	DRAWN	CH'K'D.	APPR.	DRAWING NO.	REV.
H: 1"=20' V: 1"=5'	10/13/17	DRC		TSG	11 OF 103	B



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4. DEPTH OF ALL WATER UTILITIES ARE ASSUMED.

Archaeological Sensitivity
- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

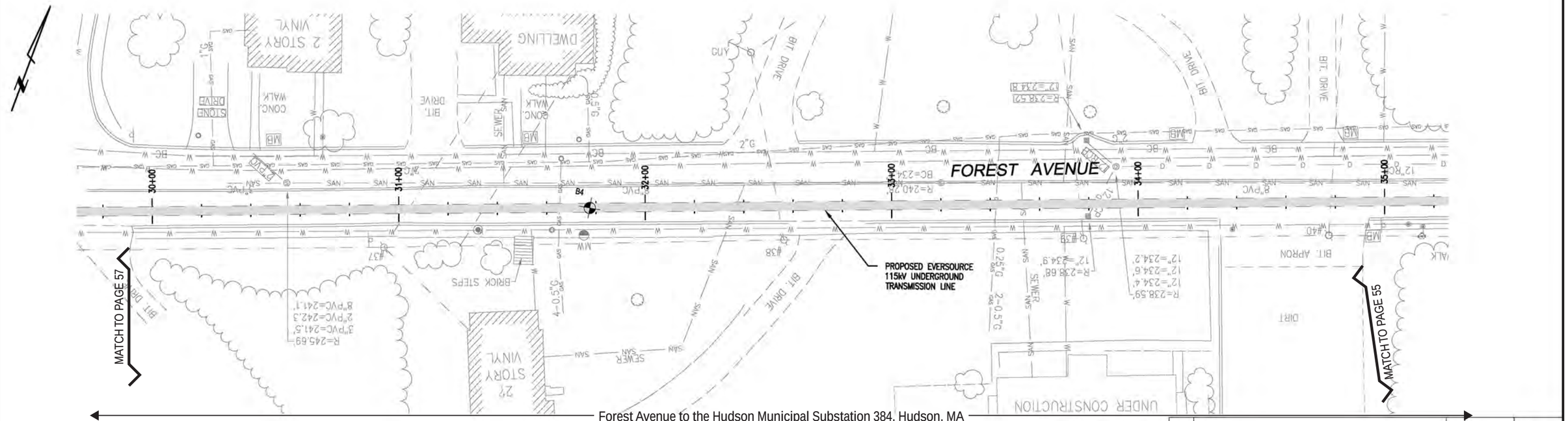
NO.	DESCRIPTION	BY	DATE	APPR.
B	PER VHB REVISED RR ROW DUCT LOCATION	DRC	10/20/17	TSG
A	ISSUED FOR REVIEW – REVISED 25% PLAN SET	DRC	10/13/17	TSG

REVISION

EVERSOURCE ENERGY

PLAN AND PROFILE STA 35+00 TO 40+00
SUDBURY TO HUDSON
115kV UNDERGROUND TRANSMISSION LINE
SUDBURY – HUDSON, MASSACHUSETTS

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	REV.
H: 1"=20' V: 1"=5'	10/13/17	DRC		TSG	10 OF 103	B



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Archaeological Sensitivity
- High
- Medium-High
- Medium
- Medium-Low

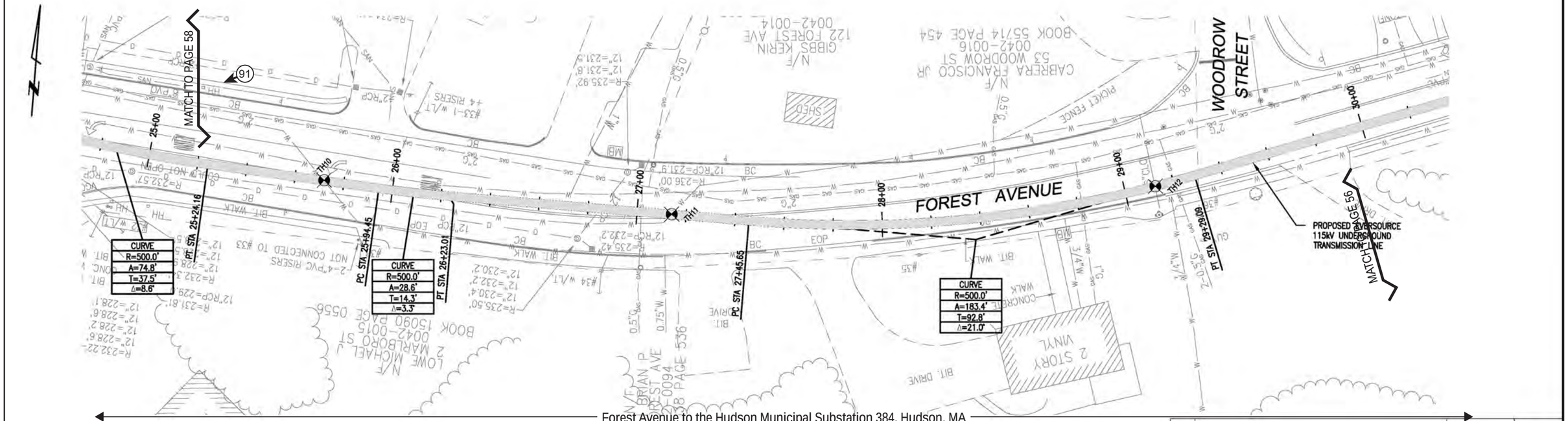
(1) Plate # and orientation

NO.	DESCRIPTION	BY	DATE	APPR.
	REVISION			
B	PER VHB REVISED RR ROW DUCT LOCATION	DRC	10/20/17	TSG
A	ISSUED FOR REVIEW – REVISED 25% PLAN SET	DRC	10/13/17	TSG

EVERSOURCE ENERGY

PLAN AND PROFILE STA 30+00 TO 35+00
SUDBURY TO HUDSON
115kV UNDERGROUND TRANSMISSION LINE
SUDBURY – HUDSON, MASSACHUSETTS

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	REV.
H: 1"=20' V: 1"=5'	10/13/17	DRC	TSG		9 OF 103	B



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4. DEPTH OF ALL WATER UTILITIES ARE ASSUMED.

Archaeological Sensitivity
- High
- Medium-High
- Medium
- Medium-Low

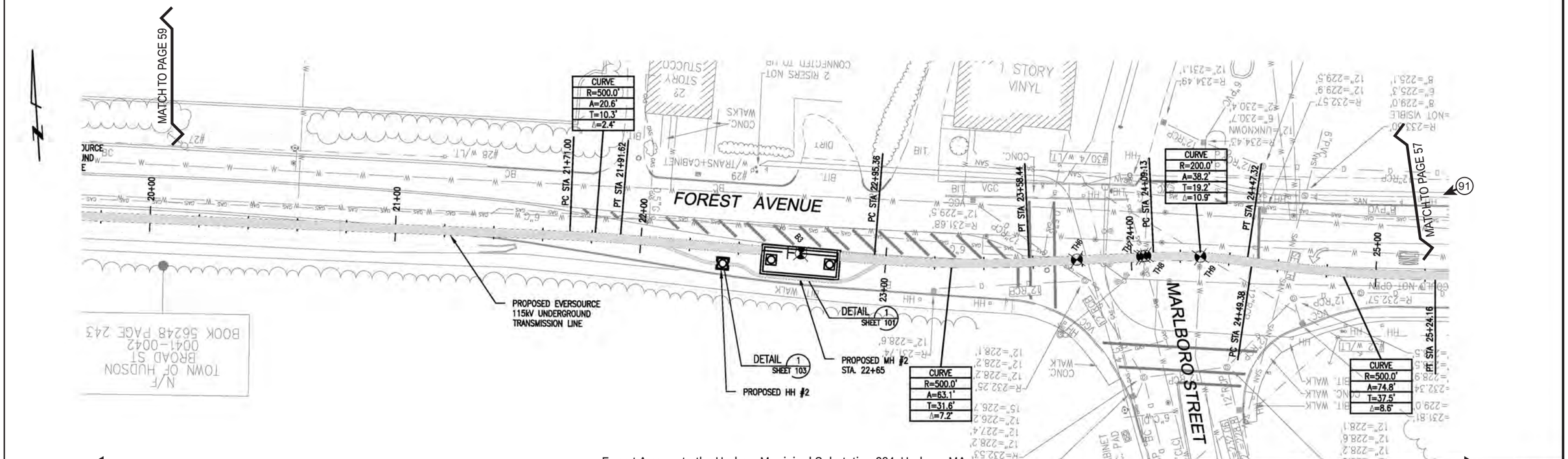
(1) Plate # and orientation

NO.	DESCRIPTION	BY	DATE	APPR.
	REVISION			
B	PER VHB REVISED RR ROW DUCT LOCATION	DRC	10/20/17	TSG
A	ISSUED FOR REVIEW – REVISED 25% PLAN SET	DRC	10/13/17	TSG

EVERSOURCE ENERGY

PLAN AND PROFILE STA 25+00 TO 30+00
SUDBURY TO HUDSON
115kV UNDERGROUND TRANSMISSION LINE
SUDBURY – HUDSON, MASSACHUSETTS

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	REV.
H: 1"=20' V: 1"=5'	10/13/17	DRC	TSG		8 OF 103	B



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4. DEPTH OF ALL WATER UTILITIES ARE ASSUMED.

Archaeological Sensitivity
- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

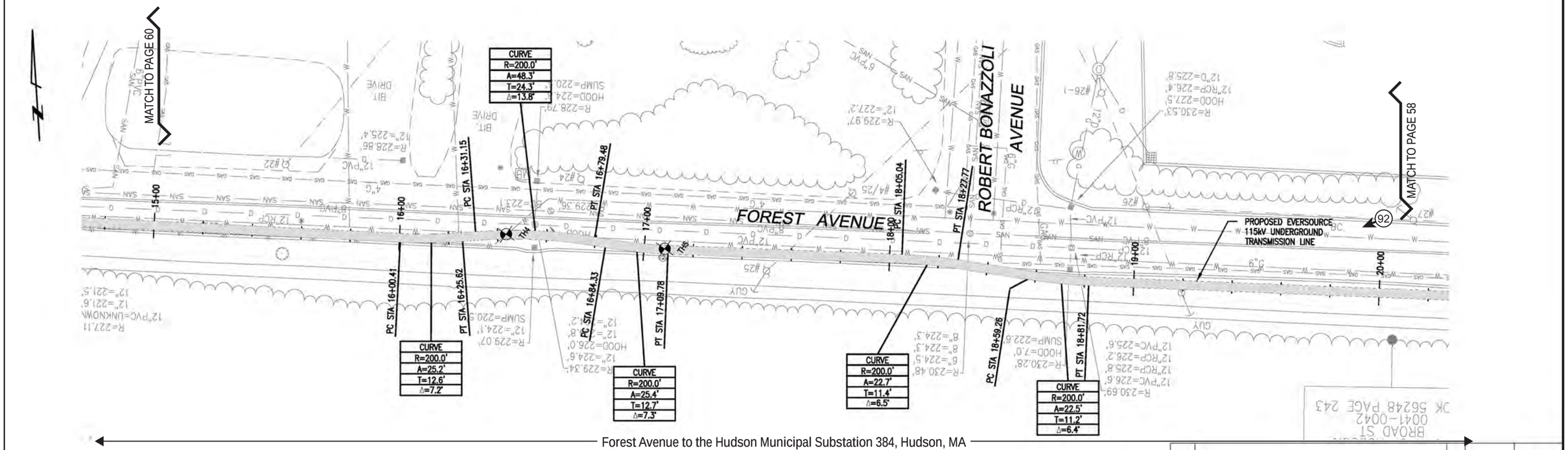
NO.	DESCRIPTION	BY	DATE	APPR.
B	PER VHB REVISED RR ROW DUCT LOCATION	DRC	10/20/17	TSG
A	ISSUED FOR REVIEW – REVISED 25% PLAN SET	DRC	10/13/17	TSG

REVISION

EVERSOURCE ENERGY

PLAN AND PROFILE STA 20+00 TO 25+00
SUDBURY TO HUDSON
115kV UNDERGROUND TRANSMISSION LINE
SUDBURY – HUDSON, MASSACHUSETTS

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	REV.
H: 1"=20' V: 1"=5'	10/13/17	DRC		TSG	7 OF 103	B



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Archaeological Sensitivity
- High
- Medium-High
- Medium
- Medium-Low

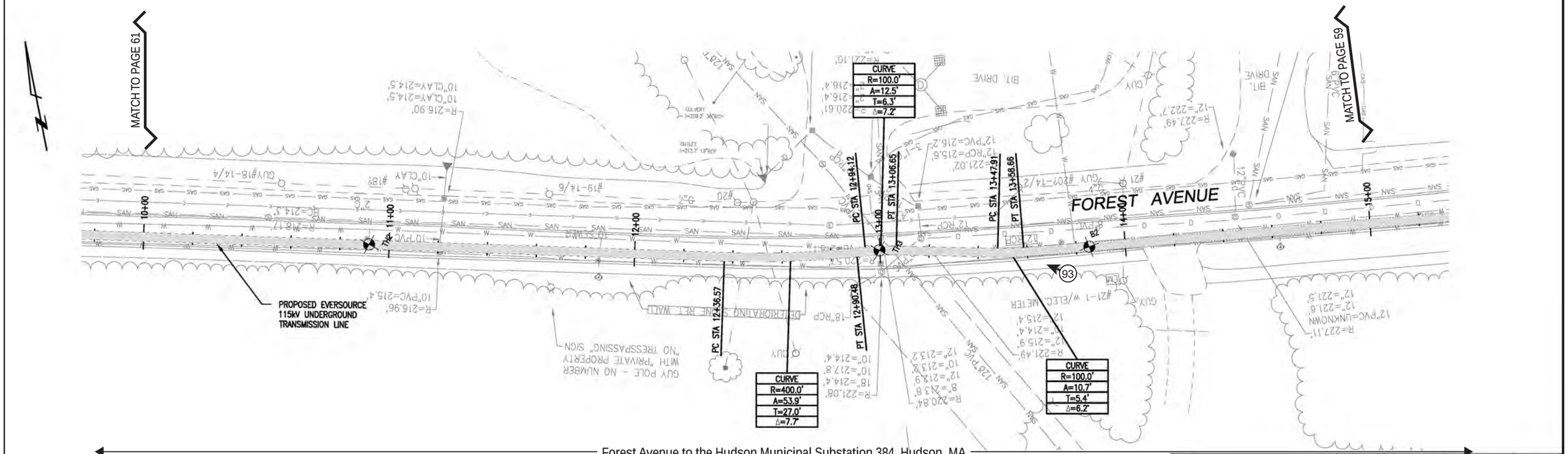
(1) Plate # and orientation

NO.	DESCRIPTION	BY	DATE	APPR.
	REVISION			
B	PER VHB REVISED RR ROW DUCT LOCATION	DRC	10/20/17	TSG
A	ISSUED FOR REVIEW – REVISED 25% PLAN SET	DRC	10/13/17	TSG

EVERSOURCE ENERGY

PLAN AND PROFILE STA 15+00 TO 20+00
SUDBURY TO HUDSON
115kV UNDERGROUND TRANSMISSION LINE
SUDBURY – HUDSON, MASSACHUSETTS

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	REV.
H: 1"=20' V: 1"=5'	10/13/17	DRC		TSG	6 OF 103	B



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2. ALL VERTICAL CURVES ARE 500' UNLESS OTHERWISE NOTED.
3. SIZE AND DEPTH OF ALL TELEPHONE, GAS, AND UNDERGROUND ELECTRICAL UTILITIES ARE ASSUMED.
4. DEPTH OF ALL WATER UTILITIES ARE ASSUMED.

Archaeological Sensitivity
- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

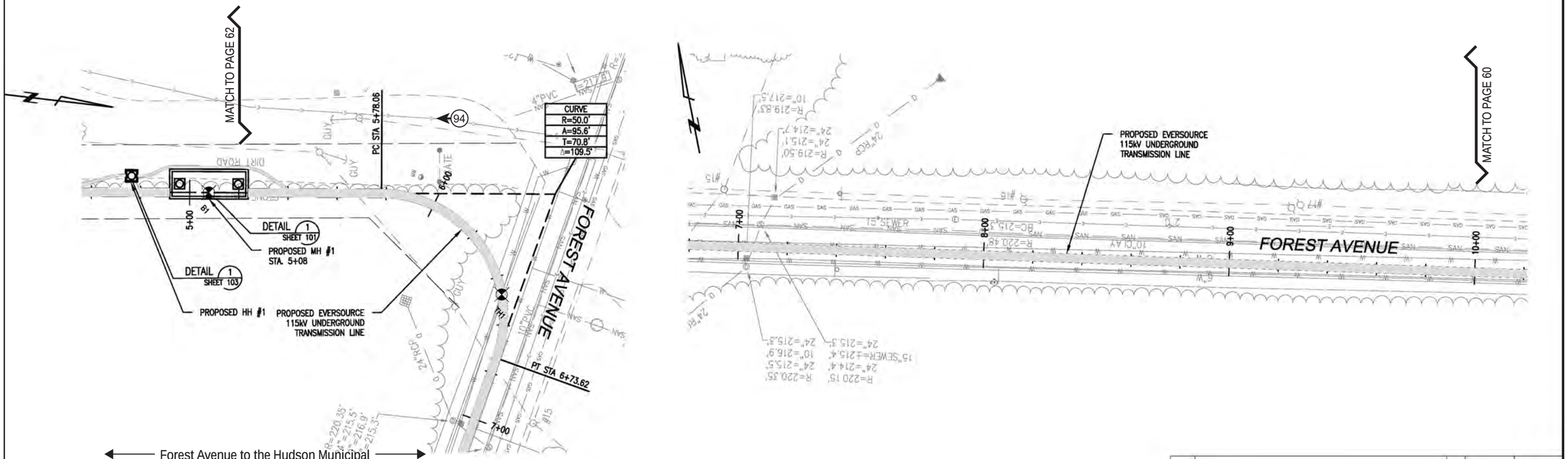
NO.	DESCRIPTION	BY	DATE	APPR.
B	PER VHB REVISED RR ROW DUCT LOCATION	DRC	10/20/17	TSG
A	ISSUED FOR REVIEW – REVISED 25% PLAN SET	DRC	10/13/17	TSG

REVISION

EVERSOURCE ENERGY

PLAN AND PROFILE STA 10+00 TO 15+00
SUDBURY TO HUDSON
115kV UNDERGROUND TRANSMISSION LINE
SUDBURY – HUDSON, MASSACHUSETTS

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	REV.
H: 1"=20' V: 1"=5'	10/13/17	DRC	TSG		5 OF 103	B



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Archaeological Sensitivity
- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

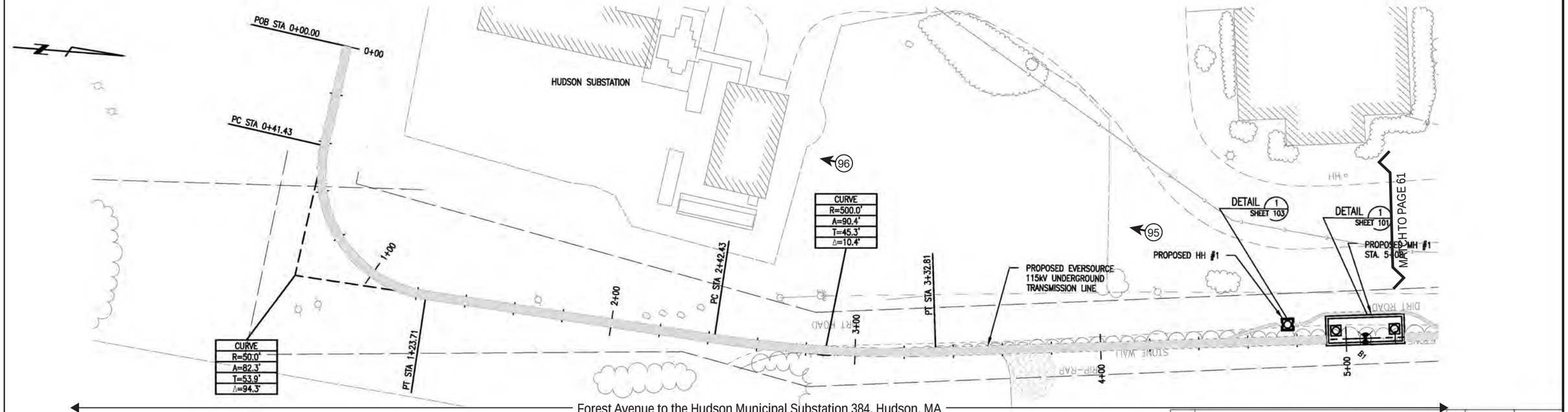
NO.	DESCRIPTION	BY	DATE	APPR.
B	PER VHB REVISED RR ROW DUCT LOCATION	DRC	10/20/17	TSG
A	ISSUED FOR REVIEW – REVISED 25% PLAN SET	DRC	10/13/17	TSG

REVISION

EVERSOURCE ENERGY

PLAN AND PROFILE STA 5+00 TO 10+00
SUDBURY TO HUDSON
115kV UNDERGROUND TRANSMISSION LINE
SUDBURY – HUDSON, MASSACHUSETTS

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	REV.
H: 1"=20' V: 1"=5'	10/13/17	DRC	TSG		4 OF 103	B



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Archaeological Sensitivity
- High
- Medium-High
- Medium
- Medium-Low

(1) Plate # and orientation

NO.	DESCRIPTION	BY	DATE	APPR.
	REVISION			
B	PER VHB REVISED RR ROW DUCT LOCATION	DRC	10/20/17	TSG
A	ISSUED FOR REVIEW – REVISED 25% PLAN SET	DRC	10/13/17	TSG

EVERSOURCE ENERGY

PLAN AND PROFILE STA 0+00 TO 5+00
SUDBURY TO HUDSON
115kV UNDERGROUND TRANSMISSION LINE
SUDBURY – HUDSON, MASSACHUSETTS

SCALE: unless noted	DATE	DRAWN	CH'K D.	APPR.	DRAWING NO.	REV.
H: 1"=20' V: 1"=5'	10/13/17	DRC	TSG		3 OF 103	B

APPENDIX III

Avoidance and Protection Plan for the Granite Town Marker at the Sudbury-Hudson-Marlborough Boundary near Old Concord Road

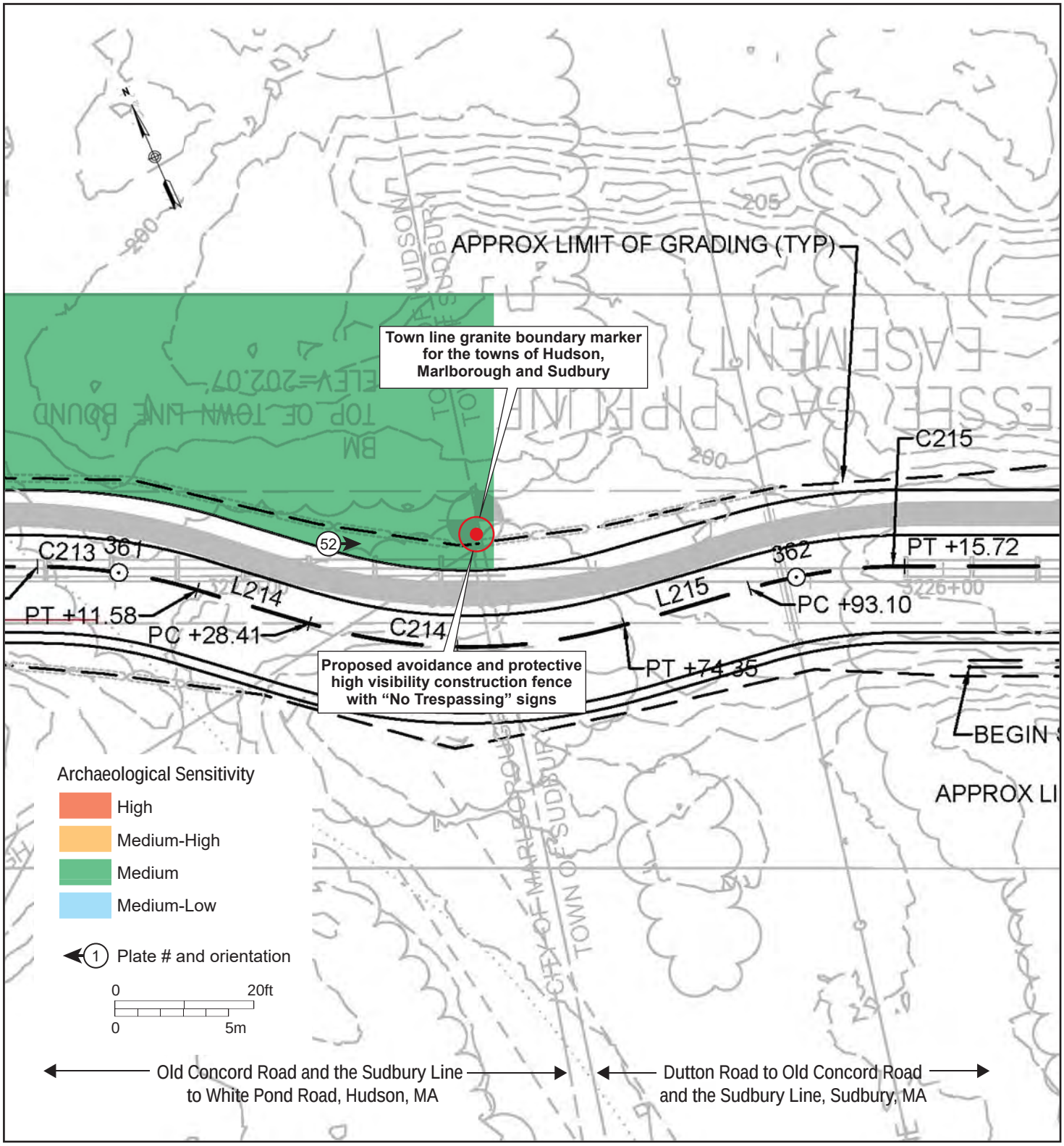

Figure 1. Detail of Project Archaeological Sensitivity Plans Page 28 of 62, showing avoidance and protection of the 1993 Hudson-Marlborough-Sudbury granite town boundary marker.

Plate 1. West side of the 1993 Hudson-Marlborough-Sudbury granite town boundary marker, view east.

Plate 2. North/Hudson side of the 1993 Hudson-Marlborough-Sudbury granite town boundary marker, view south.

Plate 3. East/Sudbury side of the 1993 Hudson-Marlborough-Sudbury granite town boundary marker, view west.

Plate 4. South/Marlborough side of the 1993 Hudson-Marlborough-Sudbury granite town boundary marker, view north.