# FOREST STAND DELINEATION REPORT FOR

105 West Main Street
and
Lawson Properties

CBM 0010-00-001

June 2021

PREPARED FOR:

105 West Main Street and Lawson Properties
Jabez Properties LLC
113 Main Street
New Market Maryland 21774

PREPARED BY:

**CBM Consulting, LLC** 

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#### 1.0 Introduction

The 105 West Main Street and Lawson Properties project area is a proposed 27-townhouse and two non-residential development infill site located on a ±2.75-acre parcel located at 105 and 113 West Main Street in the Town of New Market, Maryland (Appendix A, Figure 1). The property, identified on Tax Map 80179H, Grid 09, Parcel 3880 and 3887 and is shown as being owned by Jabez Properties LLC. The West Main Street and Lawson Properties site is zoned Town Commercial / Residential Mixed Use (TRC).

CBM Consulting LLC was contracted by Jabez Properties LLC to conduct Natural Resource Inventory/Forest Stand delineation (NRI/FSD) on the subject property. The NRI/FSD was conducted in accordance with the *State Forest Conservation Manual* (Maryland, Department of Natural Resources, 1997) and the Town of New Market Forest Conservation Ordinance No. 2017 - 05. Included with this NRI/FSD narrative are Appendix A, Figures, Appendix B, Forest Stand Delineation/forest summary datasheets and Appendix C, NRI/FSD Delineation Plan.

## 2.0 Site Description

The Project area lies within the piedmont geologic province of the Mid-Atlantic region and is located west of the town limits of New Market historic district. The project area is bordered by West Main Street on the south, New Market Elementary School on the east, New Market Middle school on the north and maintained grassy lawn for the New Market school on the west. Land use consists of an abandoned single family home, an arts and crafts business, the Lawson Lawn Mower facility, dilapidated trailer homes and lawn mowers/landscaping equipment. The project area lies in the Lower Monocacy River watershed (MD DNR 021403020234) which drains into Lake Linganore. Lake Linganore and its tributaries are designated by the Maryland Department of Natural Resources as Use-IV, recreational trout waters and public water supply.

One wooded area along the common property line fence line of approximate 10 to 25- foot width separates the abandoned residential home and the Wheel House-dilapidated trailer homes into two sections. With minor exceptions the wooded area is predominately vegetated by non-native and invasive woody/herbaceous plants. Vegetation consists of Norway maple (*Acer platanoides*), periwinkle (*Vinca* sp.), tatarica honeysuckle bush (*Lonicera tatarica*), garlic mustard (*Alliaria petiolata*), Tree of heaven (*Ailanthus altissima*), Black Cherry (*Prunus serotina*) and Virginia creeper (*Parthenocissus quinquefolia*). Virtually no native species were observed within the study area.

An accumulation of refuse (bricks, asphalt, woody debris, rusting 30-gallon drums, etc.) exists throughout the study area. No wetlands, streams, FEMA 100-year floodplain or other sensitive natural resources and habitats were observed. The USGS 7.5 Minute Topographic quadrangle, Walkersville Maryland (Appendix A, Figure 2) shows topography of the site is flat; the National Wetlands Inventory map (Appendix A, Figure 3) shows wetlands, and streams are absent from the project area; and the FEMA Firm Panel (Appendix A, Figure 4) shows the 100-uear floodplain is absent from the study area as well. A tributary to Cherry Run laying off-site to the northwest would not be affected by planned development improvements.

### 3.0 Methodology

The Forest Stand Delineation was conducted in accordance with the Maryland Forest Conservation Act (FCA, 1991) using the methodology described in the <u>State Forest Conservation Manual</u> (Maryland, Department of Natural Resources, 1997) and the Town of New Market Forest Conservation Ordinance No. 2017 – 05. CBM-Consulting prepared for the field work by reviewing following desktop data:

- National Wetlands Inventory (NWI); (USFWS, 2021)
- ➤ The Websoil Soil Survey for Frederick County;
- Maryland Environmental Resources Land Information Network (Merlin); and
- Aerial photographs (Google, 2021)

This desktop review supported the state and City NRI/FSD requirements, which included showing sensitive natural resources such as streams, wetlands, wetland buffers, floodplains, steep slopes, soil mapping units, erodible soils, tree lines, buildings, historic/cultural resources and property lines. The approximate boundaries and age of the forest communities were visually approximated during the field investigation.

The NRI/FSD sampling procedure utilized 1/10 acre sample plots. Data sheets were used from the *State Forest Conservation Manual* (Maryland, Department of Natural Resources, 1997). Trees with a two (2) inch diameter at breast height (DBH) and greater were measured and recorded on data sheets for each sample plot. In addition, common herbaceous, common woody and non-woody plants in the zero-to-three-foot layer and species in the 3–20-foot vegetative layer were documented.

All specimen trees located within the study area shown on Appendix C, NRI/FSD Plan. Specimen trees are defined as trees being 30 inches or greater in DBH at 4.5 feet above ground and/or trees at least 75% as large as the County Champion tree for that species. DBH was measured using a diameter tape and specimen trees/sample plots were marked with pink surveyors flagging. Specimen tree species, DBH, condition along with other comments, if applicable, were noted on field notes. Tree health was rated from poor to excellent and relate to the current health of the tree's ability to withstand impacts and increased exposure are summarized in the table below:

Condition Description Rating Excellent designations are rare and predominantly pertain to large very dominant Excellent trees that represent an archetypical representation of the species. Good trees are healthy and exhibit good structure. Good Fair trees either are hindered by a factor which may be corrected (insect Fair infestation, heavy climbing vines, etc.), or are compromised trees that may not be structurally suited for exposure as an edge or open tree. Poor trees are estimated to be on an irreversible decline, e.g., end of life (EOL), Poor rot, dieback, etc... Poor Dying trees are in irreversible decline and/or impaired such that mortality is Poor/Dying imminent. Dying trees often have widowmaker branches, may be immediately dangerous to life or health or cannot be saved

**Table I: Significant Tree Condition Ratings** 

A retention priority designation (High (1); Moderate-(2); or Low (3) was assigned for each forest stand, if applicable. Criteria for designating the forest retention priority included forest structure, the presence/absence of significant or specimen trees, the presence or absence of environmentally sensitive features (e.g., wetlands, steep slopes, erodible soils, floodplains) and presence/absence of non-native or invasive plant species and land use. The percent coverage of invasive species estimated at each sample point includes non-native invasive species as well as native species which exhibit invasive qualities.

#### 4.0 Results

Field investigations were conducted in 2020 and most recently on June 11, 2021 by CBM Consulting staff. Two sample plots were taken to characterize the existing wooded area. Results of the field study determined the wooded area lacks structure and stem density to satisfy the definition of a forest. Moreover, the site is heavily disturbed from human activities which, as mentioned previously, consist of urban related litter such as bricks, asphalt, rusting 30-gallon drums and similar forms of debris. Most of the wooded area is dominated by non-native and invasive plant species.

The forest canopy is dominated by Norway maple (*Acer platanoides*) in the six to 12 DBH size class. Co-dominant species include Black cherry (*Prunus serotina*), also in the six to 12-inch DBH size class. There are three specimen trees within the project area, 2 Norway Maples and one Mulberry tree. All specimen trees are in their end-of-life stage and/or have been affected by human activities. Evidence of health decline includes crown die back, dead limbs, and rotted areas where branches have been removed. One specimen tree's health has been affected by construction of a cabinet like structure and attached to the trunk main stem for the purpose of storing lawn mowers and equipment.

The herbaceous and shrub layer consists of Periwinkle (*Vinca* sp.), garlic mustard (*Alliaria petiolata*), Virginia creeper (*Parthenocissus quinquefolia*), tree of heaven (*Allanthus altissima*) and honeysuckle

bush (*Lonicera tatarica*). Most of these species are highly invasive and degrade an ecosystem's functional capacity. Moreover, periwinkle has formed a dense ground cover for a significant portion of the wooded site, which prevents natural vegetation from becoming established. Tree of heaven and Norway maple have extended their aerial coverage through underground rhizomes and not seed propagation, a trait inherent to allelopathic species.

The wooded area is characterized as having a low retention designation due to poor vegetative structure, dominance of non-native and invasive species, absence of sensitive natural resources, disturbance and it does not meet the definition of a forest.

#### 5.0 Environmental Features

#### 5.1 Rare, Threatened and Endanger Species

The Maryland Department of Natural Resources (MDNR) Maryland Environmental Resources and Land Information Network (MERLIN) geographic information system (GIS) data shows no Forest Interior Dwelling (FID) bird habitat or sensitive species habitat areas occur within or adjacent to the study area.

#### 5.2 Historic and Cultural Resources

The Maryland Department of Natural Resources (MDNR) Maryland Environmental Resources and Land Information Network (MERLIN) geographic information system (GIS) data shows the project lies in close near the downtown New Market National Register of Historic Places district. Appendix A, Figures 5 A and 5B show the location of the project area relative to the Maryland Historic Trust and the listed downtown New Market National Register of Historic Places.

#### **5.3** Environmental Features

#### 5.4 Streams and Wetlands

A delineation for wetlands and "other" waters of the US was conducted using the Routine Method" described in the *US Army Corps of Engineers Wetland Delineation Manual* (1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (Version 2.0). The field investigation determined streams and wetlands are absent from the project area.

#### 5.5 Floodplain

The FEMA FIRM Panel 24021C0320D shows the 100-year floodplain is absent from the project area.

#### 6.0 Summary

CBM Consulting LLC., was contracted by Jabez Properties LLC to conduct Natural Resource Inventory/Forest Stand delineation (NRI/FSD) on a ±2.75-acre parcel located at 105 West Main Street in the Town of New Market, Maryland. The NRI/FSD was conducted in accordance with

the *State Forest Conservation Manual* (Maryland, Department of Natural Resources, 1997) and the Town of New Market Forest Conservation Ordinance No. 2017-05. The results of the field study determined the on-site wooded area does not meet the FCA definition of forest. The site is predominately vegetated by non-native and invasive species, has a poor vegetative structure, has no sensitive natural resources is heavily disturbed and provides minimal ecological function. For these reasons, the wooded area was assigned a poor priority retention designation.

#### **REFERENCES**

- Eyre, F.H. 1980. <u>Forest Cover Types of the United States and Canada</u>. Society of American Foresters, Washington, D.C. 148 pp.
- Maryland Dept. of Natural Resources, 3rd ed., 1997. <u>State Forest Conservation Technical Manual.</u> Dept. of Natural Resources, Annapolis, Maryland.
- Town of New Market January 11, 2017. Ordinance No. 2017 05. Article VIII: Forest Conservation of Land Development Ordinance of the Town of New Market, Maryland.
- Maryland Dept. of Natural Resources, Maryland Natural Heritage Program. 1994. <u>Rare, Threatened and Endangered Plants of Maryland.</u> Dept. of Natural Resources, Annapolis, Maryland. 24pp.
- Natural Resources Conservation Service, 2003. <u>Soil Survey of Anne Arundel County, Maryland, USDA.</u> http://efotg.nrcs.usda.gov/.



Source: https://https://www.fws.gov/wetlands/data/mapper.html

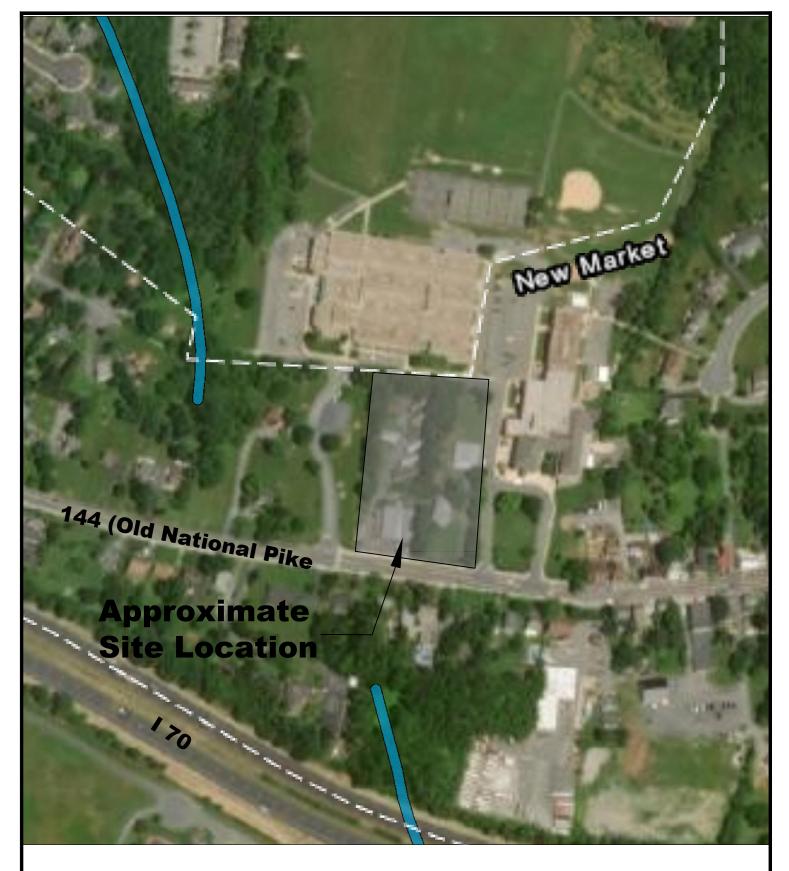
OWNER/DEVELOPER
WEST MAIN STREET PROPERTIES
JABEZ PROPERTIES LLC

113 Main Street New Market, Maryland 21774 105 WEST MAIN STREET NEW MARKET, MARYLAND

> FEMA FIRM Map FREDERICK COUNTY, MARYLAND



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Source: https://https://www.fws.gov/wetlands/data/mapper.html

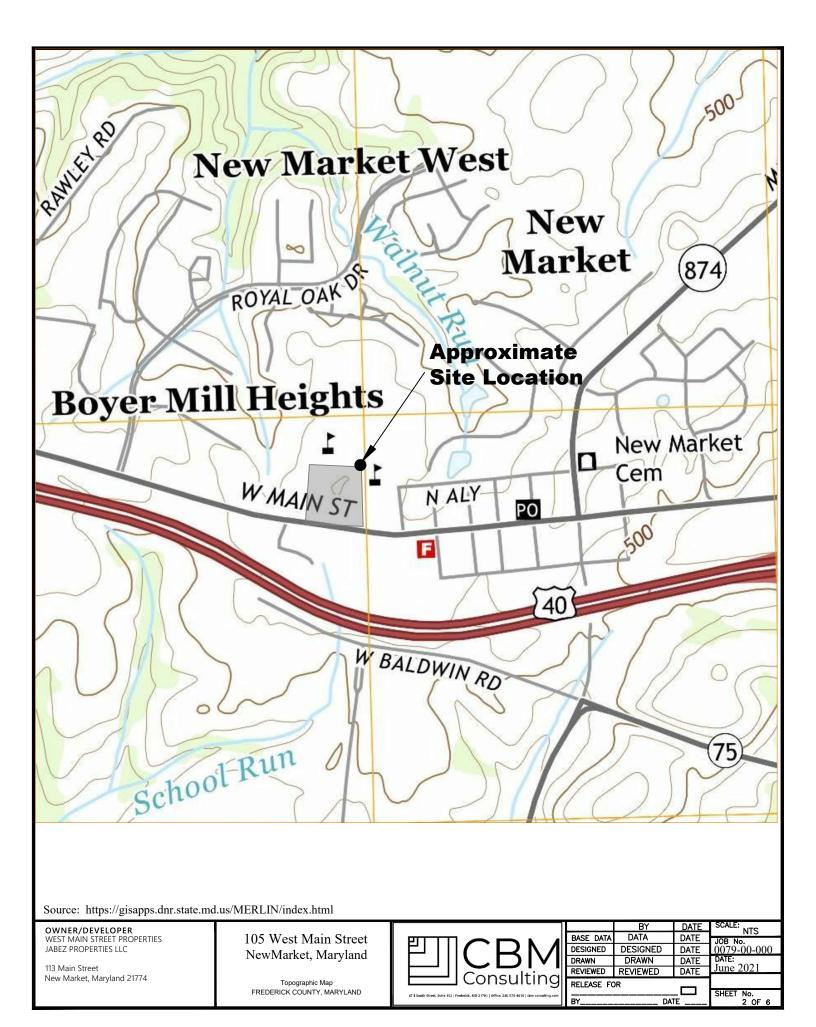
OWNER/DEVELOPER
WEST MAIN STREET PROPERTIES
JABEZ PROPERTIES LLC

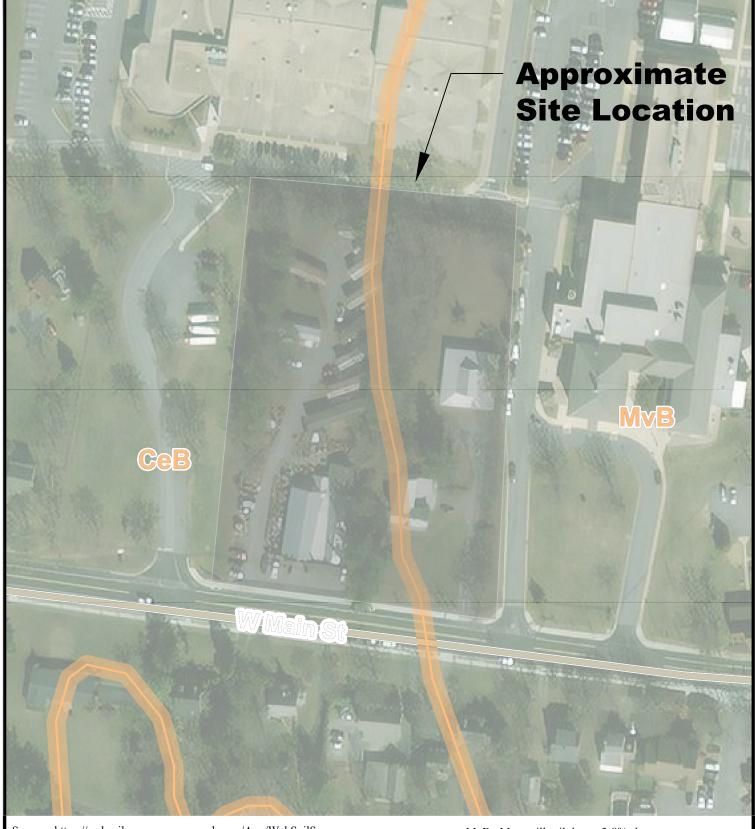
113 Main Street New Market, Maryland 21774 105 WEST MAIN STREET NEW MARKET, MARYLAND

> NWI Map FREDERICK COUNTY, MARYLAND



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Source: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

MvB: Myersville silt loam, 3-8% slope Catoctin Spoolsville complex, 3-8% slope

OWNER/DEVELOPER
WEST MAIN STREET PROPERTIES
JABEZ PROPERTIES LLC

2941 Green Valley Road Ijamsville, Maryland 21754

Tony Chmelik

105 WEST MAIN STREET NEW MARKET, MARYLAND

> Soils Map FREDERICK COUNTY, MARYLAND



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Source: https://gisapps.dnr.state.md.us/MERLIN/index.html

OWNER/DEVELOPER WEST MAIN STREET PROPERTIES JABEZ PROPERTIES LLC

113 Main Street New Market, Maryland 21774 105 WEST MAIN STREET NEW MARKET, MARYLAND

Vicinity Map FREDERICK COUNTY, MARYLAND

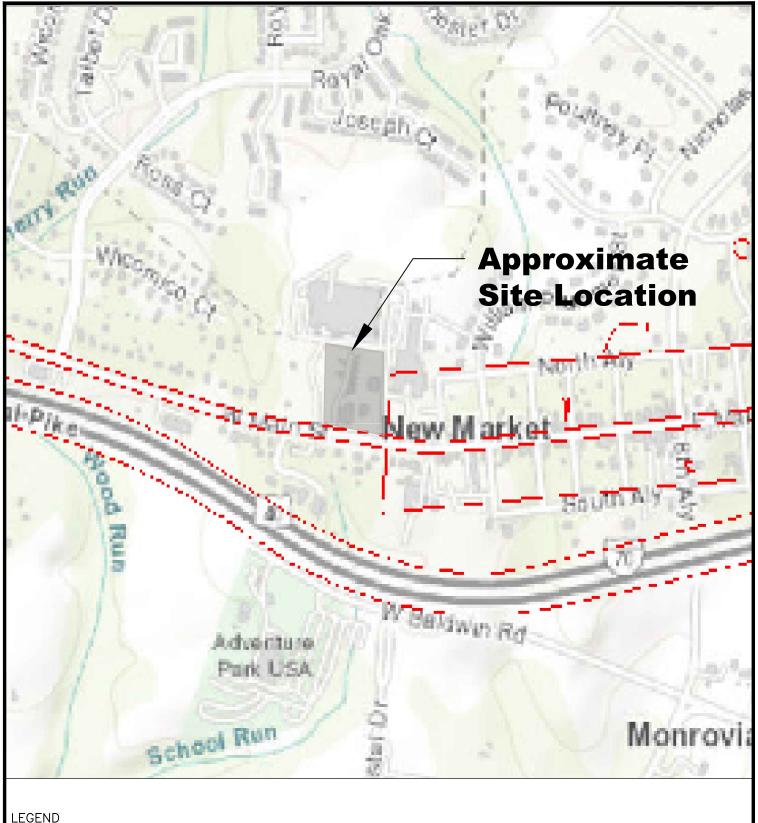


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## **APPENDIX A**

**Field Sampling Data Sheets** 



Marylan Inventory of Historic Places -

Source: https://gisapps.dnr.state.md.us/MERLIN/index.html

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WEST MAIN STREET PROPERTIES
JABEZ PROPERTIES LLC

113 Main Street New Market, Maryland 21774

105 WEST MAIN STREET NEW MARKET, MARYLAND

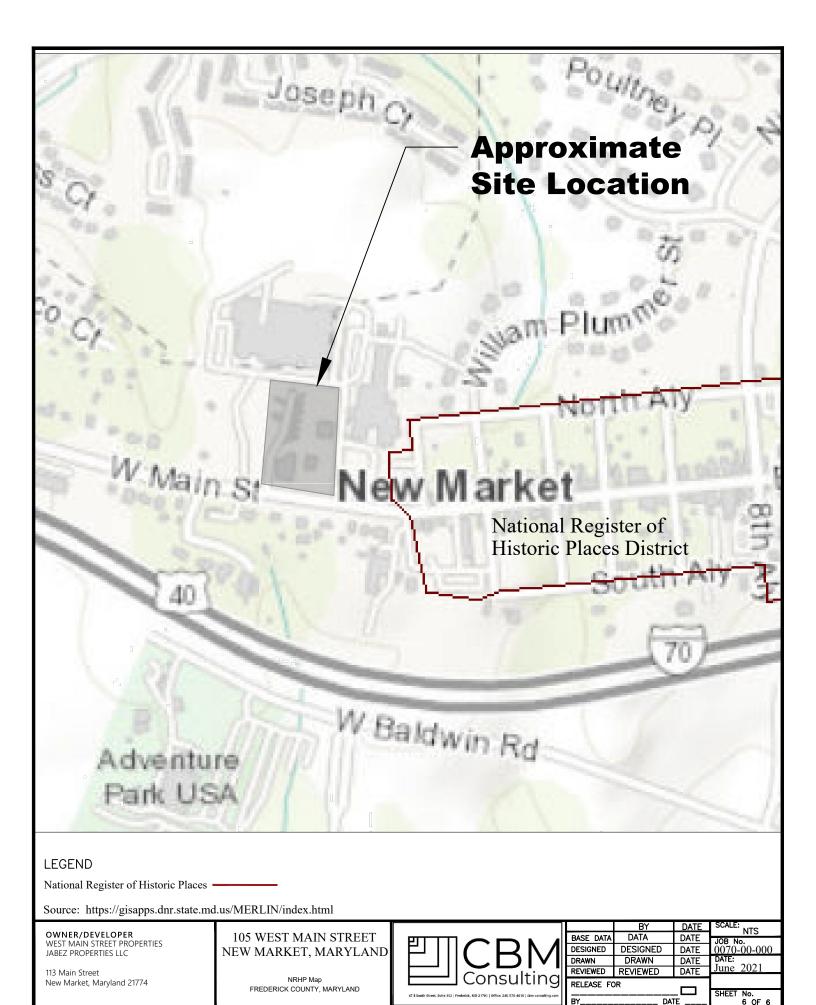
MHT Map FREDERICK COUNTY, MARYLAND



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## **APPENDIX B**

Forest Stand Summary Sheets



## **APPENDIX C**

## **MD DNR Response letter**