



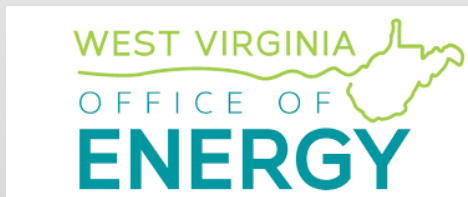
## *Mine Land Property Evaluation for Solar Farm Development*

Barrs Industries Property  
Boone County, WV  
June 2021

Prepared for:

### **WV Office Of Energy**

A Division of the West Virginia  
Development Office



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Prepared by:

### **Marshall University**

Center for Environmental, Geotechnical  
and Applied Sciences and

Marshall University's  
WV Brownfields Assistance Center



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## **Introduction / Report Background**

Marshall University's Center for Environmental, Geotechnical and Applied Sciences (CEGAS) and its West Virginia Brownfields Assistance Center was retained by the West Virginia Office of Energy, a division of the West Virginia Development Office, to complete limited property evaluation studies on select mine land properties for potential large-scale solar farm use. This specific evaluation is for Barr Industries' Robinson surface mine site, and includes information obtained from multiple sources regarding site-specific information and conditions, local area demographics, available electric utilities, and interaction with property owners. The purpose of this evaluation is to provide sufficient information on the subject property for potential redevelopment and/or reuse considerations by interested parties for solar farm use. CEGAS believes, to the best of its knowledge, that the information contained in the report is accurate at the time of compilation; however no guarantees are warranted. It is ultimately the responsibility of interested parties to perform their own due diligence in fully evaluating the subject property for potential new development.

## **Site Name and Location**

Robinson is located in the central southern part of West Virginia (WV) near the unincorporated town of Quinland and the incorporated town of Madison in Boone County. The property is located approximately 40 miles south of Charleston, WV. The property can be accessed from Co Hwy 85/07 Robinson Creek Rd. A site location map is provided as an attachment.

The entire property is comprised of approximately 8,700 acres, and is listed on the West Virginia Property Viewer ([mapwv.gov/parcel](http://mapwv.gov/parcel)) on five tracts:

District: 1 (Crook)	Map: 0007	Parcel: 0102	Book: 302	Page: 515
District: 6 (Sherman)	Map: 0017	Parcel: 0028	Book: 302	Page: 754
District: 6 (Sherman)	Map: 0037	Parcel: 0007	Book: 307	Page: 364
District: 6 (Sherman)	Map: 0038	Parcel: 0001	Book: 307	Page: 364
District: 6 (Sherman)	Map: 0043	Parcel: 0005	Book: 292	Page: 192

**Current Property Owner**

The properties are currently owned by Barrs Industries. The Barrs Industries contact for this property is:

Andy D. Barrs  
Barrs Industries  
1971 Hog Mountain Road  
Watkinsville, GA 30677  
[adbarrs@barrsindustries.com](mailto:adbarrs@barrsindustries.com)  
(478) 955-8231

**Site History and Current Status**

The property has been utilized for underground and surface coal extraction for multiple decades. The Robinson area surface mine was permitted by Black Castle Mining Company, LLC. The surface mine is currently inactive.

The location included in this evaluation is located on Tax Parcel District 1, Map 0007, Parcel 0102. The location is identified as Robinson Area, situated on approximately 210 acres. Site maps and aerial photos are included as attachments. (Note - property boundaries indicated on each site map are based on information obtained from the WV Map Viewer and may or may not be completely accurate. For more accurate data, a field survey based on actual property deeds should be conducted). Aerial videos of each location, collected in April of 2021, can be viewed using the following web link:

Robinson Surface Mine video  
<https://www.youtube.com/playlist?list=PLO4Yig1CAOAnnafPKVLEcX-P10cFUIWVk>

As seen on the aerial photos and video, the post-mine land has scrubby growth, including small trees, bushes, fields and overgrown brushy areas throughout.

**Local Area Summary**

Boone County is located within the Charleston, WV Metropolitan Statistical Area, the largest metropolitan area entirely within West Virginia. This area has an estimated total population of 257,074 (2019 est.). The local area associated with this property is within

a primarily rural setting. Boone County has a population of only 21,457 (2019 est.) in an area of 503 square miles (<43 people per square mile). The local city of Madison has a population of 2,673 (2019 est.). No residences are located within the immediate area of the property.

Boone County's history is deeply steeped in bituminous coal extraction. By the 1950s, Boone County was a top producing coal county in WV. From the 1980s through the early 2000's, Boone County was the top producing coal county in the eastern U.S. From ~2009 to 2015, coal production in Boone County declined by ~80% (ARC Study "Overview of Coal Economy in Appalachia, January 2018)).

### **Electric Utility Summary**

Electric service is provided by Appalachian Power Company, a unit of American Electric Power Company, Inc. Based on the Electricity Distribution Infrastructure Datasets created by the WVDNR from 2003 SAMB aerial photography, the distance to the closest electric transmission line to the Robinson Area is ~3.5 miles, located southwest of the area. The closest substation is ~6.5 miles west of the Robinson Area. A map depicting electric power lines in the vicinity of the Robinson Area is provided as an attachment.

### **Potential Solar Farm Use**

The Robinson Area has been evaluated using best available topographic information, including elevation Light Detection and Ranging (LIDAR) data collected in 2010 by the West Virginia Division of Environmental Protection (WVDEP). The area was evaluated using 10% and 15% maximum slope factors to determine available land potentially suitable for solar farm development. Using ESRI's ArcMap geographic information system software, slope analysis was calculated from LIDAR referenced data. A map of the area depicting slope characteristics is provided as an attachment. A summary of the area is provided on the following table:

<b>Location</b>	<b>Total Acreage</b>	<b>Less than 10% Slope Acreage (2010)</b>	<b>Less than 15% Slope Acreage (2010)</b>
Robinson Area	~210	~55	~75

While this evaluation primarily focuses on Robinson Area, a few acres to the southeast of the Robinson Area has potential for solar farm use. This area is shown at the end of the video linked above.

**Property Availability**

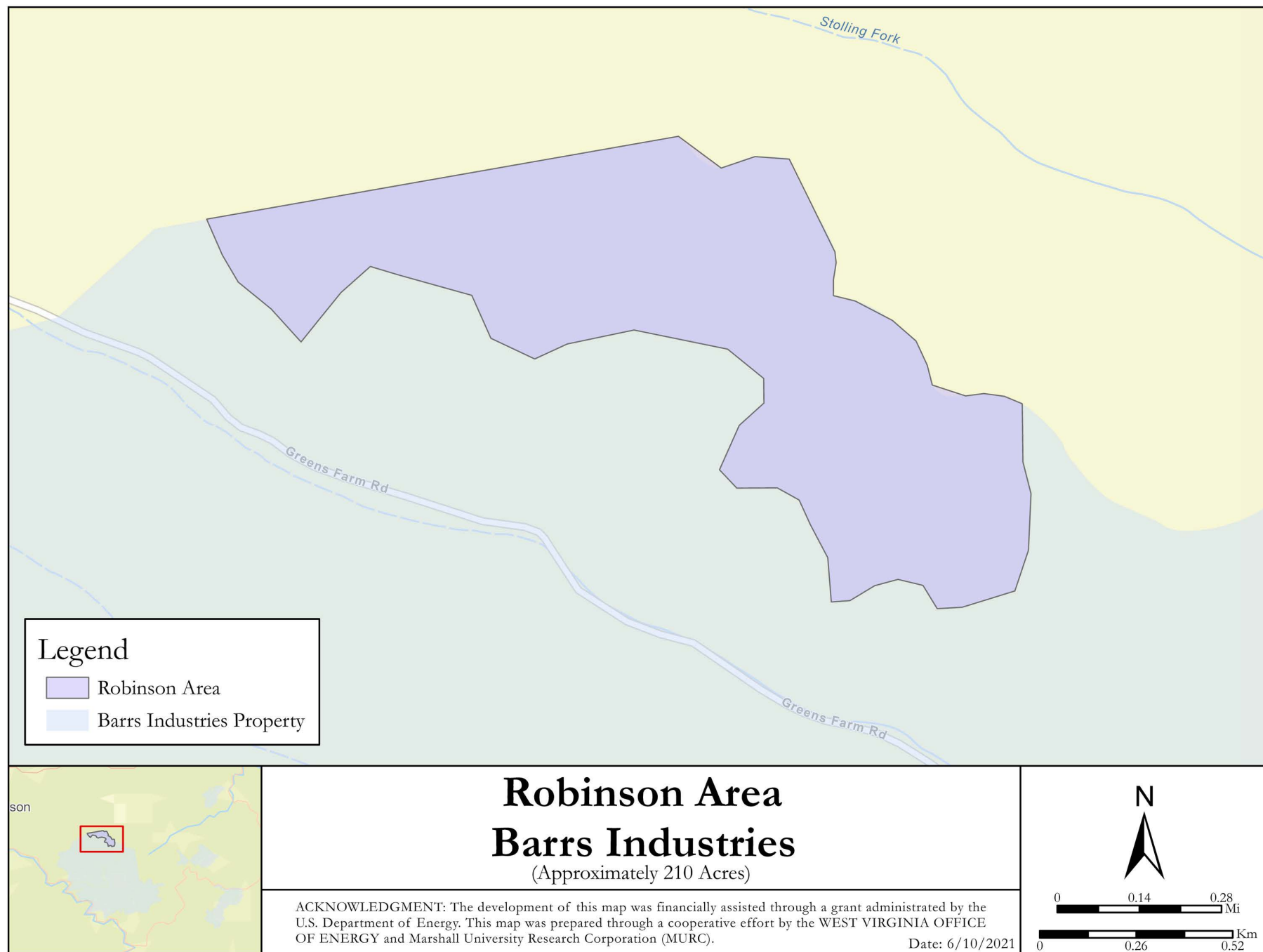
Barrs Industries is interested in lease agreements for solar farm use on suitable property. Terms for lease rates are negotiable. Barrs Industries is also receptive to selling sections of the property.

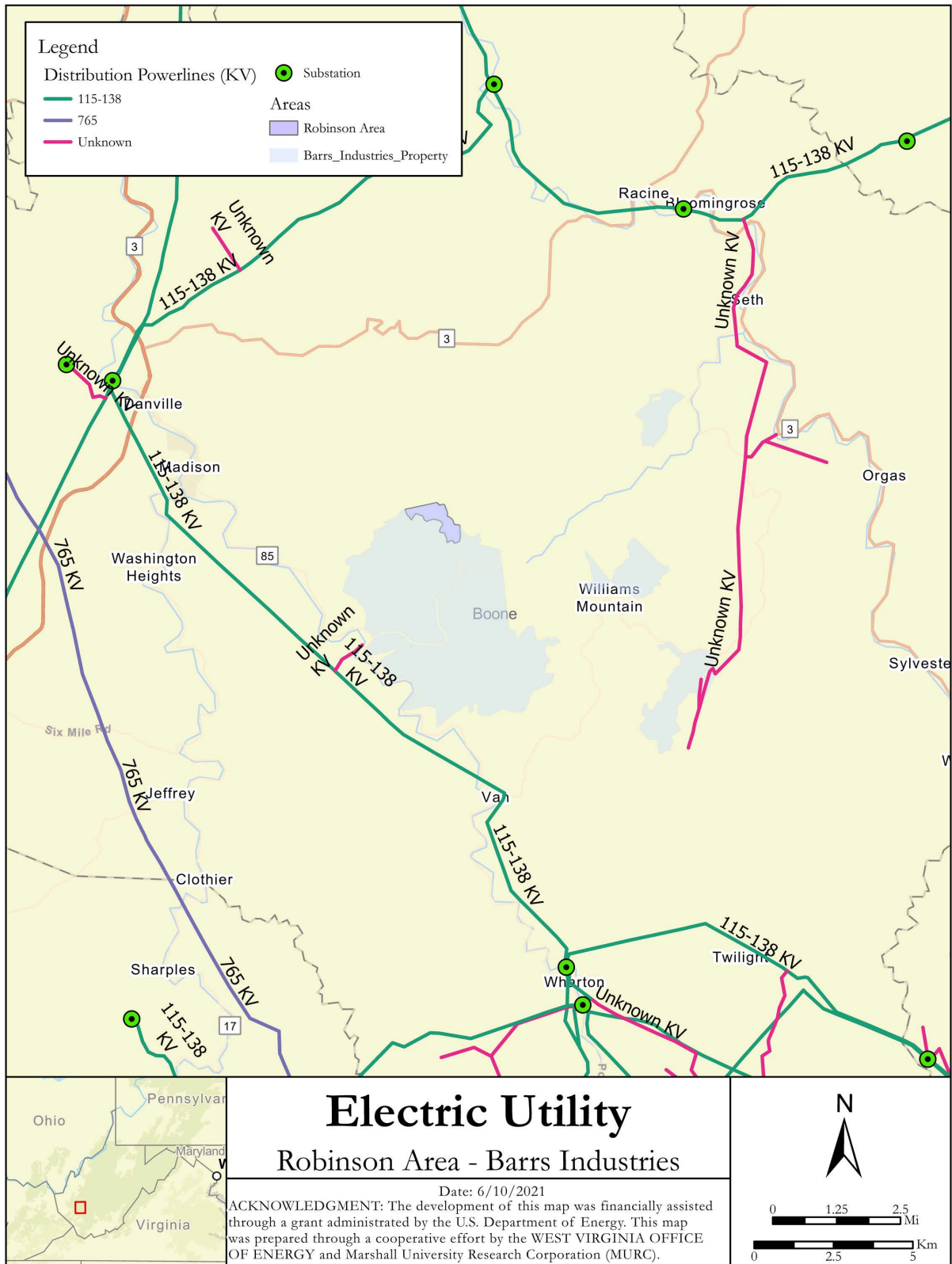
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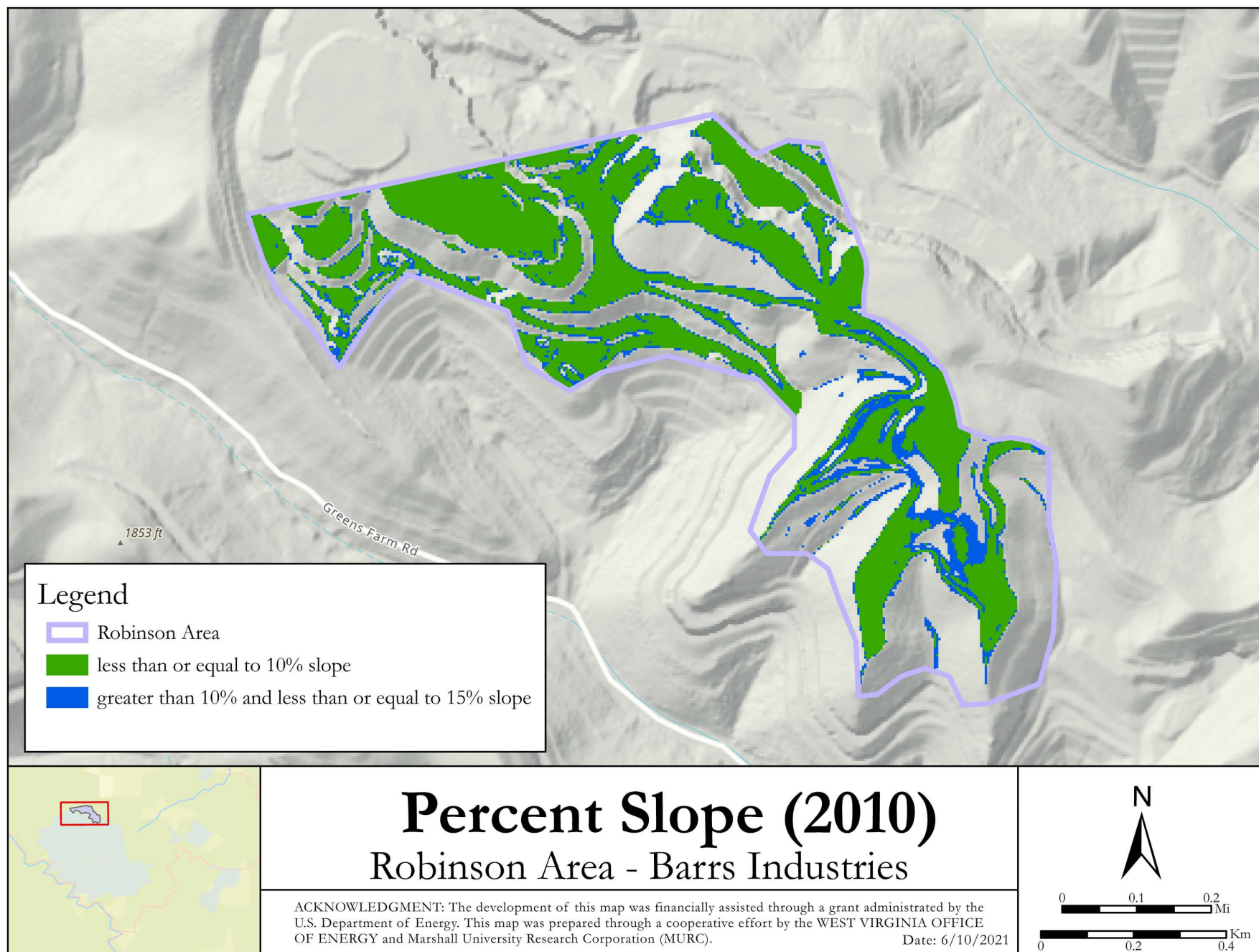


## Attachments











### Robinson Area Site Photos



Facing northwest





Facing south





Facing southeast