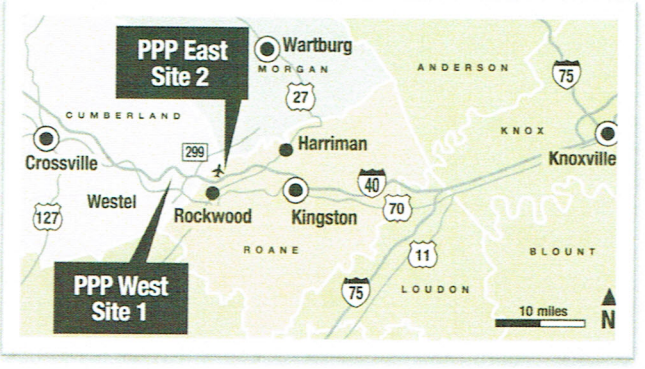
Property Information

Overall Property Boundary & Topography

The Plateau Partnership Park is located South of Interstate 40 (I-40), Exit 338, in Cumberland County, Tennessee. The West Campus is an approximate 771 acre contiguous tract with access onto the property from Westel Road (northeast corner of the site), Pig Path Road (north side of the property) and Bradshaw Lane (west end of the property). Internally, there are several unimproved roads that provide access throughout a majority of the site.



With respect to the "First 100 Acres" (i.e., Phase I consisting of approximately 132 Acres), the property generally consists of a mixture of open limited pasture, areas of dense tree and brush cover, and overgrown areas along Laurel Creek. Numerous wet weather conveyances provide natural stormwater drainage. The open pasture areas were previously covered in pine trees that were harvested in the recent past and are overgrown in weeds and brush with the ground surface obscured from view in most areas. (See **Exhibits 3.1.1 & 3.1.2**)

Topographically, the site is rolling with approximately 180 feet of relief from the topographic high located near the center of the site to the topographic low located along Laurel Creek as it exits the site at Westel Road. (See **Exhibit 3.1.3**)

Zoning; Flood Zone Restrictions

There are currently no zoning restrictions imposed for the property as a whole, nor the "First 100 Acres." Therefore, the Industrial Development Board has chosen to encourage development that is consistent with the recommended Plateau Partnership Restrictive Covenants as expounded upon below.

With respect to the Phase I area, there are no receiving streams that have been modeled as part of the Federal Flood Insurance Program. However, referencing the following Environmental, it has been determined that both jurisdictional streams and wetlands exist within this Phase.

In consideration of this, buffer zones have been incorporated into the Phase I Master Planning efforts which meet, and in most cases exceed, Tennessee Department of Environment and Conservation (TDEC) requirements.

Restrictive Covenants

Referencing **Exhibit 3.2.1**, The "Green Development Concept Plan" as developed for the Plateau Partnership Park shall be applicable to Phase I. Corresponding "Restrictive Covenants" are being developed for

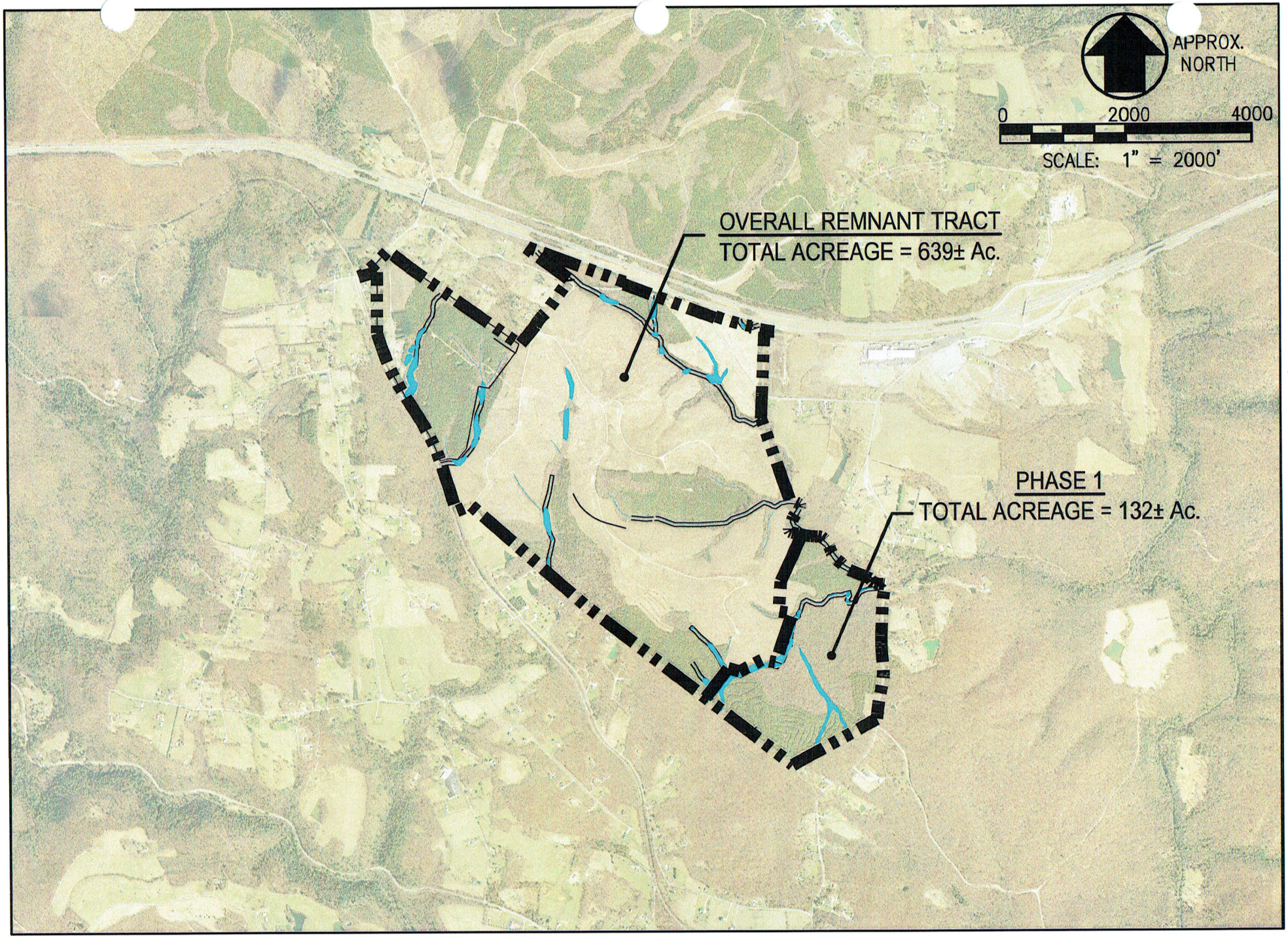


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Exhibit 3.1.1

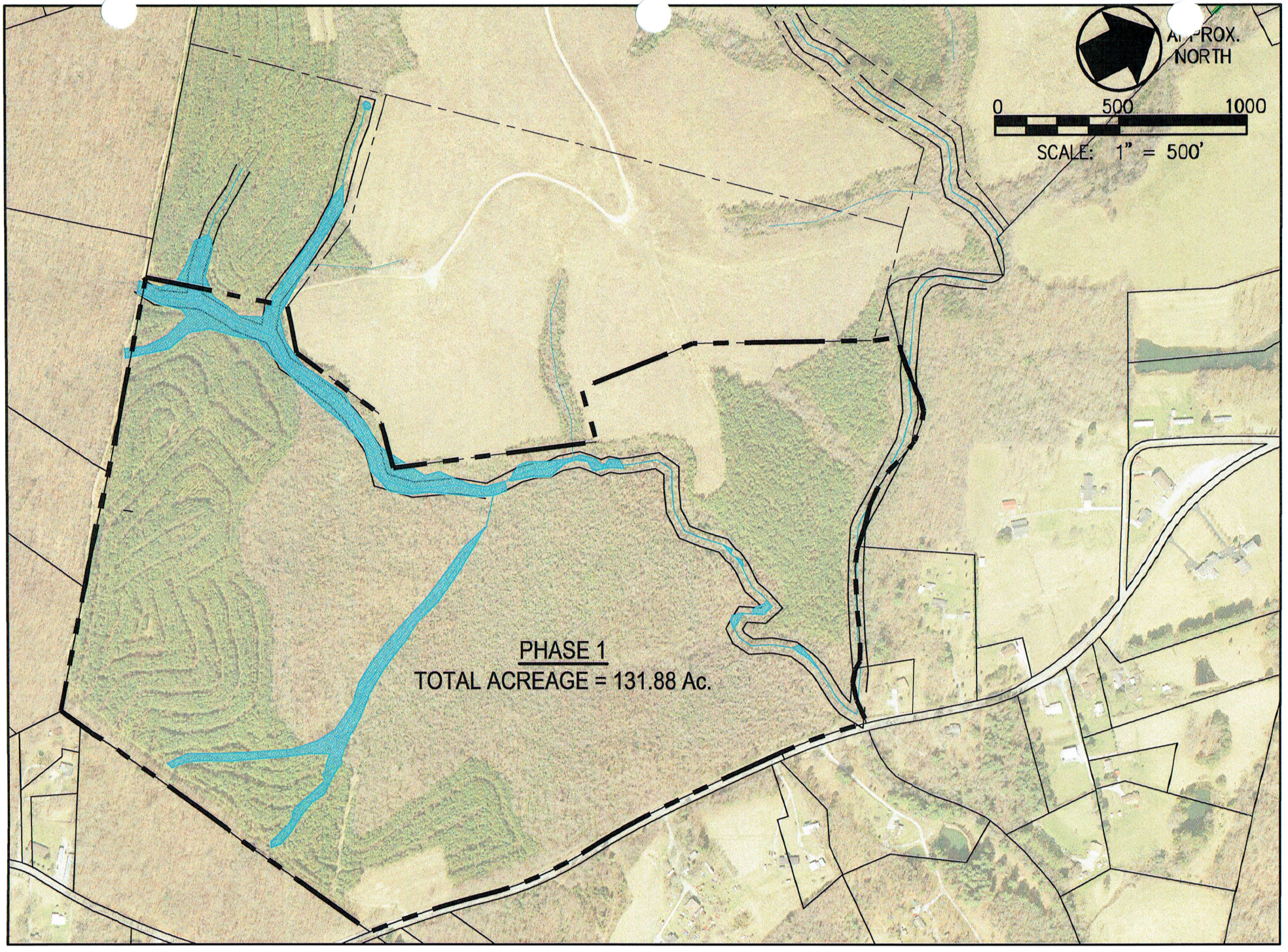

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Exhibit 3.1.2

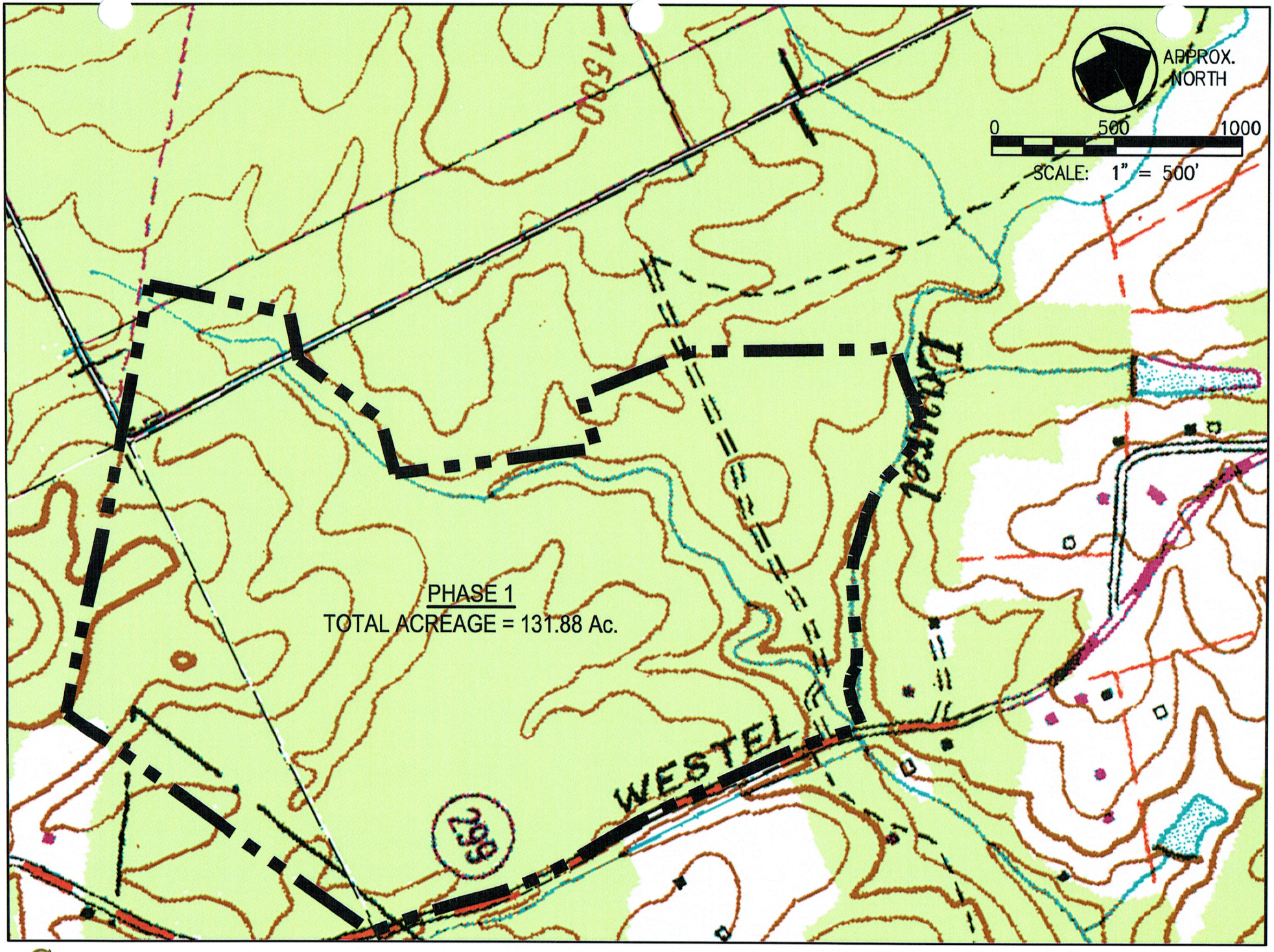

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Exhibit 3.1.3

Exhibit 3.2.1
Plateau Partnership Park
Green Development Concept Plan

The purpose of the plan is to indicate the general location and type of low impact development practices available for installation at the 771 acre industrial park site located along I-40 E at the Westel Rd. exit. This Green Development Plan is intended to minimize the environmental impacts of the development of the property by the maximum amount practical therefore limiting degradation of the ambient air and water quality.

The process used to develop this plan is based on the principles and practices provided in the TVA Conservation Design Guidebook. This Guidebook can be accessed at the TVA website with the address being www.tva.gov.

The following practices detailed in the guidebook are proposed for the development. The locations are shown on the concept plan mentioned previously. The sizes are not to scale but presented as shown for clarity.

- Placement of natural areas in open space or along property lot lines to be protected by side lot set back requirements.
- Providing 100 ft. natural riparian buffer zones on each side of streams and drains.
- Utilization of vegetative channels and broad swales to collect storm water runoff and convey to treatment areas.
- Utilization of infiltration basins and wet ponds to treat storm water runoff to the maximum extent practical.
- Conversion of erosion and sedimentation basins to extended detention wet ponds once the site has been stabilized. This will provide additional treatment plus reduce volume discharge and velocities to downstream areas.
- Minimization of impervious surfaces by reducing road and cul-de-sac widths, limiting sidewalks, promoting joint access drives, requiring wide swales with riprap check dams rather than trapezoidal concrete channels in drainage ways. Consider replacing conventional curbs, gutters, storm water inlets and storm sewers with ribbon curbs, channel flumes and vegetative channels.
- Within covenants and restrictions identify requirements for on lot storm water management practices including biofilters, infiltration trenches and rain gardens to treat roof and parking lot discharges prior to conveyance into major drainage facilities. These features should be incorporated into landscaped areas where practical.
- Fugitive light control by requiring downcase lighting on buildings and parking lots.
- Building materials specifications for roofs and side panels to limit zinc migration to ground water in the area.
- Onsite treatment of wastewater and potential re-use as non-potable water for industrial processing and irrigation of rights of roadway, open space areas and other designation application sites.

consideration by the Industrial Development Board once this Planning Study is submitted for their review, comments and approval.

Evaluation & Criteria: "The First 100 Acres"

The 771 acres of property comprising the Plateau Partnership Park are a direct reflection of the valuable natural resources that have made Cumberland Plateau one of the most environmentally diverse regions of the State. The Industrial Development Board soon realized that the development of the Park as a whole would not be feasible due to both environmental and economic considerations; therefore, the Board elected to identify a smaller tract to be considered as Phase I of the Plateau Partnership Park.

The selection of Phase I ...the "First Hundred Acres" was complicated in that (a) the Industrial Development Board was committed to their stewardship role in overseeing these natural resources; (b) any future development must maintain this commitment to stewardship; and (c) the need to be appealing to industrial prospects while also being fiscally responsible to the citizens of the Three County Vision when foundational infrastructure costs were considered.

Two tracts of land were; therefore, initially identified as potential candidates for the Phase I development. Tract A consists of approximately 150 acres in the southwest quadrant of the project and is located adjacent to Westel Road. Tract B consists of approximately 132 acres, has Interstate 40 frontage, and is accessible from Pig Path Road.

The two tracts were evaluated with respect to topography, the grading required to create marketable lots, accessibility, and utility availability:

Tract A:

Tract A is accessed via Westel Road. There is up to 80 feet of topographic relief on the tract and cuts and fills of up to 40 feet will be required to create roads and marketable infrastructure. Two tributaries of Laurel Branch are located on the tract, and water and electric utilities are available on Westel Road.

Tract B:

Tract B is the most visible of the two lots and is relatively level. Pig Path Road will require upgrades and re-alignment for industrial traffic to access the Tract B. Existing utilities along Pig Path are either undersized or non-existent and will require significant upgrading/construction to serve the tract.

After a detailed review of the two tracts, the access and utility upgrades required to develop Tract B were considered to be greater hurdles than the grading and natural resource issues associated with Tract A. It was determined that Tract A's unnamed tributaries and associated buffers could be utilized as potential lot lines and could also encourage "green development." Therefore, Tract A was selected as the initial Phase I development for the Plateau Partnership Park.

Phase I in the Master Plan development will consist of approximately 132 acres located in the southeast quadrant of the Campus. Phase I proposes to divide this acreage into eight (8) lots, ranging in size from

approximately 7 acres to 21 acres in size. Based on feedback from the Select Tennessee Site Selection Consultant, at least one lot within the Phase I development will consist of greater than 20 contiguous acres with no natural resource encumbrances.

Environmental

Environmental Site Assessment (Phase I)

BDY Environmental (BDY) recently completed an updated Phase I Environmental Site Assessment (ESA) of the 130-acre Phase I parcel. The objective of the Phase I ESA is to provide a preliminary evaluation of the potential presence, use, or release on the subject property of hazardous substances or petroleum products as defined by EPA Standards as recognized environmental conditions. Below is a summary of the ESA findings.

- BDY observed no obvious indication of the disposal of hazardous substances or petroleum products on the site.
- Review of environmental agency records did not identify any environmental liabilities associated with the site or adjacent properties.
- Based on conclusions from a review of the previously performed Phase I ESA for the 771 acre Plateau Partnership Park by S&ME, Inc., dated March 30, 2007, identified recognized environmental conditions within the larger parcel will not affect Phase I parcel.
- Recent and historical uses of the site will not be environmental concerns relative to the site.
- A review of historical documents did not indicate the presence of structures previously located on the site.
- A review of interviews conducted as part of the S&ME report did not indicate the presence of environmental concerns or underground storage tanks.
- Existing debris and refuse located on the site are not considered as recognized environmental conditions.
- Substance containers, oil cans, antifreeze bottles, etc. found on site are not considered as recognized environmental conditions.
- No environmental issues associated with surface water runoff were noted on the site and no environmental issues associated with the unnamed tributaries to Laurel Branch or with Laurel Branch were observed.

The Tennessee Department of Environment and Conservation, Division of Remediation has reviewed the updated Phase I ESA findings and determined that No Further Action is required at the subject property.

Hydrological/Wetland Delineation

BDY Environmental Consultants (BDY) conducted a Verification Assessment of the Plateau Partnership Park Natural Resources Evaluation as previously performed by S&ME, Inc. (S&ME) in 2008. The results of the Assessment are included in the appendices of this Study. It is noted that BDY paid particular attention to those potential features in the "First 100 Acre" area.

Since the 2008 study, it is important to note that the US Army Corps of Engineers (USACE) and the Tennessee Department of Environment and Conservation - Division of Water Pollution Control have modified the protocol for conducting jurisdictional determination on stream and/or wetland resources since the time of the 2008 study. BDY evaluated previously identified features to determine if the jurisdictional status may be affected by changes in the regulatory framework. Additional areas, not previously identified as jurisdictional resources, were also evaluated to assess how regulatory changes may affect these areas.

A review of the S&ME's Natural Resources Evaluation report indicated the presence of one (1) perennial stream (Laurel Branch), ten (10) intermittent stream features, including King Branch, and two (2) tributaries to Railroad Branch. Thirteen (13) additional drainage features were identified by S&ME as potential wet weather conveyances which may be recognized as Waters of the United States by USACE.

The BDY Assessment identified three (3) drainage features previously identified as intermittent streams that may now meet the criteria as potential wet weather conveyances. Four (4) areas previously identified as wet weather conveyances now meet the criteria to be regulated as jurisdictional wetlands. In addition to the features previously identified, BDY also identified three (3) additional potential wetland areas and one (1) additional wet weather conveyance.

A meeting to obtain USACE and TDEC concurrence with the results of the BDY delineation was conducted on March 4, 2013. During this meeting, minor modifications were made to the delineation limits and two previously identified conveyances were determined to be jurisdictional. These jurisdictional determinations and delineations were submitted to TDEC as revised on March 7, 2013 and written concurrence was received dated April 10, 2013.

The limits of the regulated features identified in this Assessment are graphically displayed on **Exhibit 3.3.1**.

Cultural Resources

An Archaeological Survey of the 771-acre Plateau Partnership Park was prepared by S&ME, Inc., dated October 16, 2008. The purpose of the survey was to review published data and perform field surveys to determine the presence or absence of significant archaeological resources. The results of the survey are:

- No previously recorded archaeological resources were identified in the project area and no sites were identified within a 0.5 miles of the project area.
- During the field survey, three archaeological sites were identified, 40CU68, 40CU 69, and 40CU 70. Of these, 40CU70 is located within the limits of the proposed Phase I area.

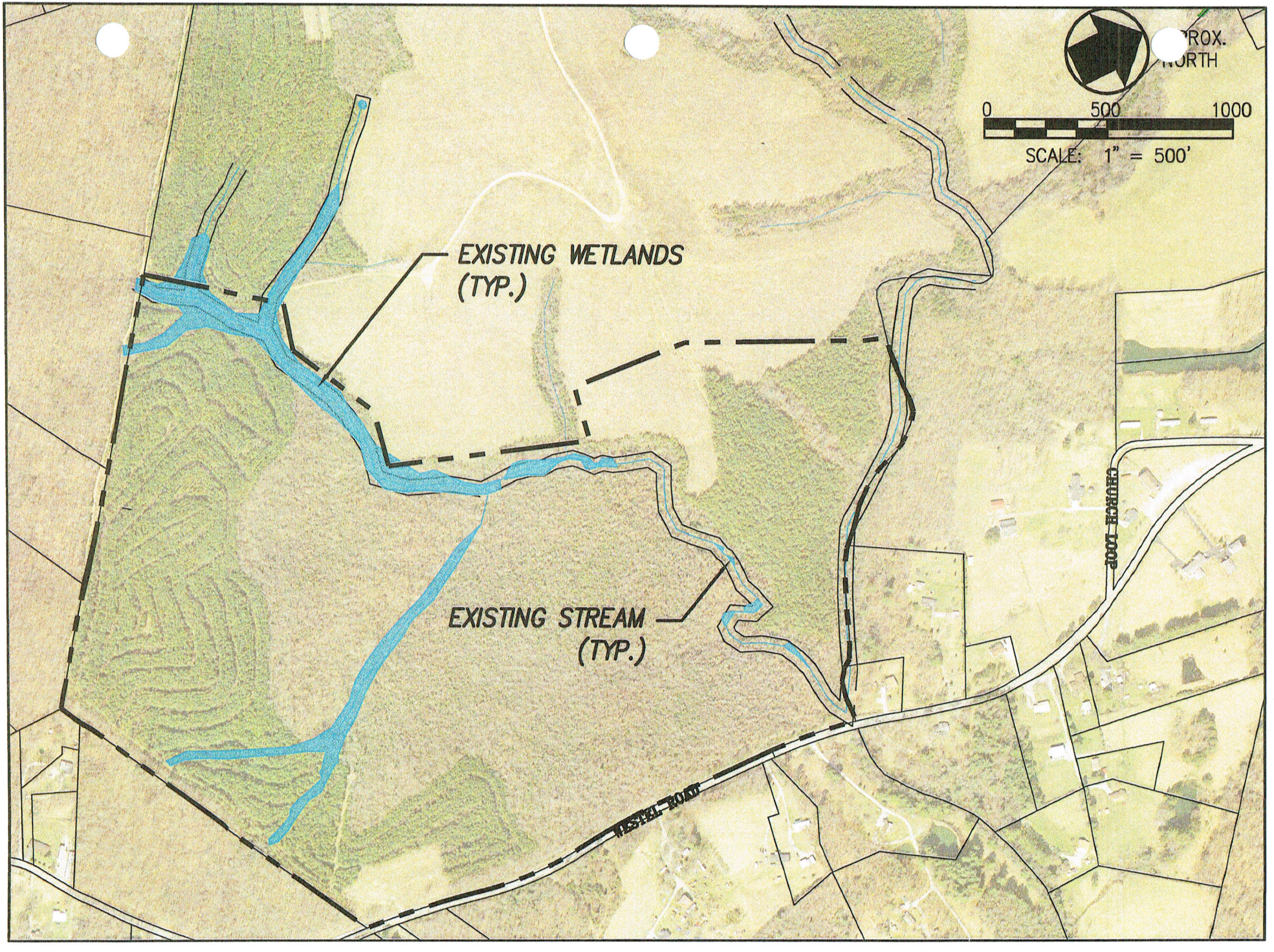

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Exhibit 3.3.1

- Site 40CU70 is a small Woodland Period site consisting of a projectile point and a single flake of lithic debris.
- Based on a review of the site, it was determined that it lacks the variety and density of contents to support further meaningful study. Accordingly, it is S&ME's opinion that none of the archeological sites identified during the field survey be listed on the National Register of Historic Places.

It was concluded that development of the Plateau Partnership Park, including the proposed 130 acre Phase I, will have no effects on significant archaeological resources.

Geotechnical & Soils Conditions

A Preliminary Geotechnical Assessment was initiated by the Industrial Development Board in 2008 for the purpose of obtaining representative samples of the geotechnical conditions, possible foundation system recommendations and evaluate site preparation requirements, including potential construction challenges related thereto. At that time, nine (9) borings, including groundwater monitoring, as well as sixteen (16) unconfined compression tests were performed by Professional Engineers, Incorporated (Project 101735). This effort was undertaken for the 771+ acre site, in its entirety.

In September 2012, additional exploration was performed by Foundation Systems Engineering, P.C. (FSE). These efforts were more confined to the "First 100 Acres" and included (a) seventeen (17) soil test borings; (b) monitoring of groundwater via piezometers; and, (c) limited Standard Penetration Tests (SPT). The following is a summary of the findings from both investigations:

- The site is located on the Cumberland Plateau Physiographic Province and is underlain by the Crooked Fork Group. The Crooked Fork Group is composed of sandstone, shale, siltstone, and conglomerate. Shale, siltstone and sandstone were typically encountered in the borings.
- The borings encountered from approximately 0 inches (no topsoil) to 18 inches of topsoil and roots at existing grade (average of approximately 5.7 inches at the 25 boring locations), with topsoil depths of 2 to 4 inches typical across the majority of the site. A relatively shallow interval of residual soil (derived from the in-place weathering of the underlying bedrock units) was encountered beneath the topsoil veneer.
- The depth of soil overburden overlying bedrock varied from approximately 0 feet (rock outcropping) to approximately 8.6 feet. The average depth to top of rock at the boring locations was approximately 3.6 feet (average of the 25 boring locations). The average depth to Hollow-Stem auger refusal was 6.8 feet (range in refusal depths at the 25 drill locations from approximately 3 feet to approximately 17 feet).
- Soils derived from the in-place weathering of the underlying bedrock unit are defined as residual or undisturbed soils. Soils weathered from siltstone and shale bedrock units typically consist of silty clays, clayey silts and clayey fine sands. Soils weathered from sandstone typically consist of silty sands and sands.

- The residual soils may generally be described as dark brown, brown, light brown, reddish tan, tannish gray, gray and reddish brown in color. The residual soils consist of silty clays, clayey silty, clayey fine sands and sands. In areas underlain by shale and siltstone, there was typical gradational/gradual weathering from soil to rock. In areas underlain by sandstone, both abrupt changes between soil and rock as well as gradational weathering were observed.
- Soil strength/consistency was measured by SPT. The results of the SPT testing are recorded on the boring logs as N values, and represent the number of drops of a 140# SPT test hammer falling 30 inches required to drive a Split Spoon sampler 12 inches into the soil. The fewer the drops or lower the N value, the softer (cohesive soil) or looser (non-cohesive soil) the material.
- SPT (N) values varied from 6 blows per foot to greater than 100 blows per foot. Cohesive soils were typically firm to very hard in consistency and cohesionless soils (sands) from loose to very dense. The hard to very hard or very dense consistencies are typical of weathered shale, siltstone and sandstone residuum.
- The transition between very hard soil and very soft rock is often subtle due to gradational weathering. Rock is often defined as material with a SPT (N) value of 100+ blows per foot, and this is typically the minimum strength necessary before core drilling commences. However, very soft rock may have an N value of less than 100 blows per foot. With regard to this Planning Study, we have typically described/reported soil overburden as material encountered above hollow-stem auger refusal depth, with less than 100 blows per foot N value. Material below auger refusal is described as rock, as well as material with an N value of greater than 100 blows per foot.
- Groundwater was typically not encountered in the overburden soil at the time of drilling. The exception is boring B-18, where groundwater was encountered within the overburden at a depth of approximately 7 feet after a period of 24 hours. Stabilized water levels indicated water levels at depths from 12 to 44 feet below existing grade. Groundwater was typically encountered at a depth below 20 feet. The shallow water level encountered may be a perched or trapped water level.
- The shale, sandstone, and siltstone bedrock units are relatively insoluble. The development of sinkholes in the on-site geology is rare and there is no expectation of sinkhole activity at this site.
- The underlying bedrock unit is described as very soft to hard in consistency, with a typical rock hardness of moderately hard. Large-sized dozers with rock rippers and light to moderate blasting are typically required for excavation of such rock. Trench rock will typically require use of pneumatic or hydraulic rammers for removal, also with possible light to moderate blasting for removal.

In anticipation that some means of subsurface disposal/irrigation may be utilized as part of the Phase I wastewater treatment processes, an assessment of the soil compatibility with a drip irrigation process was considered appropriate. David E. McKinney, a Soil Scientist, completed a review of the USDA Soils Map for the subject site and determined the following:

- Site soils consist of Gilpin, Lily, Lonewood and Ramsey soil groups.
- Groups generally consist of 2-5 feet of loamy sandy soils.

- Weathered shale and sandstone bedrock to depths of approximately 6 feet.
- Soils are generally well-draining.
- Soils are generally considered good to excellent for upland grasses and woodlands.
- Soils are considered poor for wetland and habitat growth.

These soil type characteristics, well-draining in particular, are good for sanitary drain field applications. It should be noted that the shallow bedrock will require drain fields to be sized larger (broader area) than in deeper soil conditions. Additionally, a more detailed soils assessment will be necessary for the design of any subsurface post-treatment disposal systems.

Infrastructure

Transportation

Phase I will have direct access to Westel Road - a two-lane roadway consisting of 24-feet of paved lanes with aggregate shoulders. Westel Road connects directly to the Interstate 40 Interchange, approximately 7,000 feet north of the anticipated Phase I intersection. As part of the overall Master Plan, future phases will provide connectivity to Pig Path Road.

Initial development of Phase I should not necessitate immediate improvements to Westel Road, other than at the proposed intersection itself. However, it is encouraged that this be monitored on an industry-specific basis to better plan for any phased offsite transportation infrastructure needs.

Utilities

Available potable water sources are limited. Any proposed water system will be served by an existing 6-inch waterline owned by Crab Orchard Utility District (COUD) and located adjacent to the site along Westel Road. According to discussion with COUD personnel in early 2013, there is adequate capacity to serve Phase I with domestic flows only. Fire flows must be evaluated on a case-by-case basis.

It is noted that COUD has extended waterline improvements along Airport Road immediately north of the respective Interchange. While there are currently no anticipated extensions which would bring service to the southerly portion of the Interchange, this connection may serve as a viable source for better addressing Phase I fire flow needs.

Currently, no public sanitary sewer service is available to the site. Referencing previous engineering studies, service to the overall 771 acres called for the installation of gravity sanitary sewers, lift stations station and force mains ultimately transporting sanitary sewage from the Park to an existing wastewater treatment plant (WWTP) in Rockwood, Roane County, Harriman, or Kingston.

In consideration that the Industrial Development Board has agreed that a phased implementation plan is warranted for the Park's overall development, it is the conclusion of this Planning Study that a phased

implementation of sanitary sewer improvements is necessary. It is further noted that the projected costs associated with offsite improvements necessary to receive and transport wastewater to either of these four (4) receiving entities are far beyond what can be economically justified for Phase I. Therefore, on-site options have been considered as part of the Phase I planning effort.

Natural gas service is not currently available to the site. Rockwood Utilities has confirmed that the site is within their service area and that long-range planning will include the design and construction of a line to service the site from Rockwood. Rockwood Utilities previously developed two proposed routes for natural gas service to the site. **Exhibit 3.4.1** illustrates these routes, which are further expounded upon in Section 4 of this Study.

This Study further acknowledges that there may be a second source of natural gas service other than Rockwood Utilities. While service from the Utilities has been the focus of the Study due to this being a part of their service area, the Industrial Development Board is encouraged to pursue alternate service, at least conceptually, so as to minimize overall infrastructure costs. If this source is ultimately determined to be in the best interest of the Park, coordination of this source must include approval of Rockwood Utilities.

The Plateau Partnership Park electrical needs will be served by Rockwood Electric Utility (REU). There are no electrical utility facilities currently available within the site interior that can accommodate industrial demands.

Per discussion with REU personnel, and subject to the power demands of a potential industrial client, Phase I of the site could be served by the existing 20 MVa Burke Mill Substation. Generally speaking, warehousing and light industrial uses could be served by upgrading the existing transmission service from the Burke Mill Substation to the site.

As the Park is developed, most likely by the end of the Phase I build out or sooner, the Park will need to be fed by a newly constructed substation. The substation would be fed by the adjacent 161KV transmission line north of I-40. (See **Exhibit 3.4.2**)

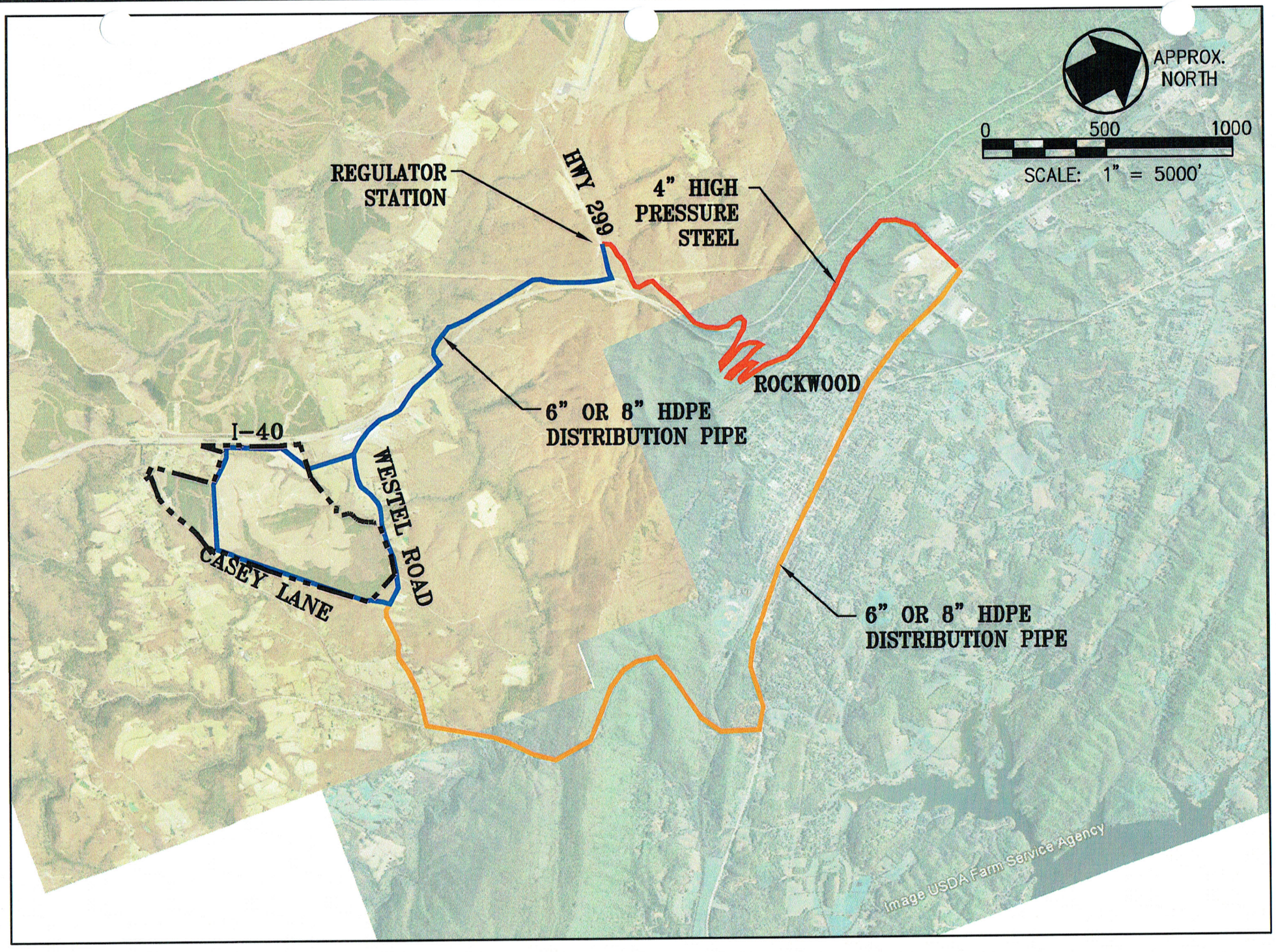

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Exhibit 3.4.1

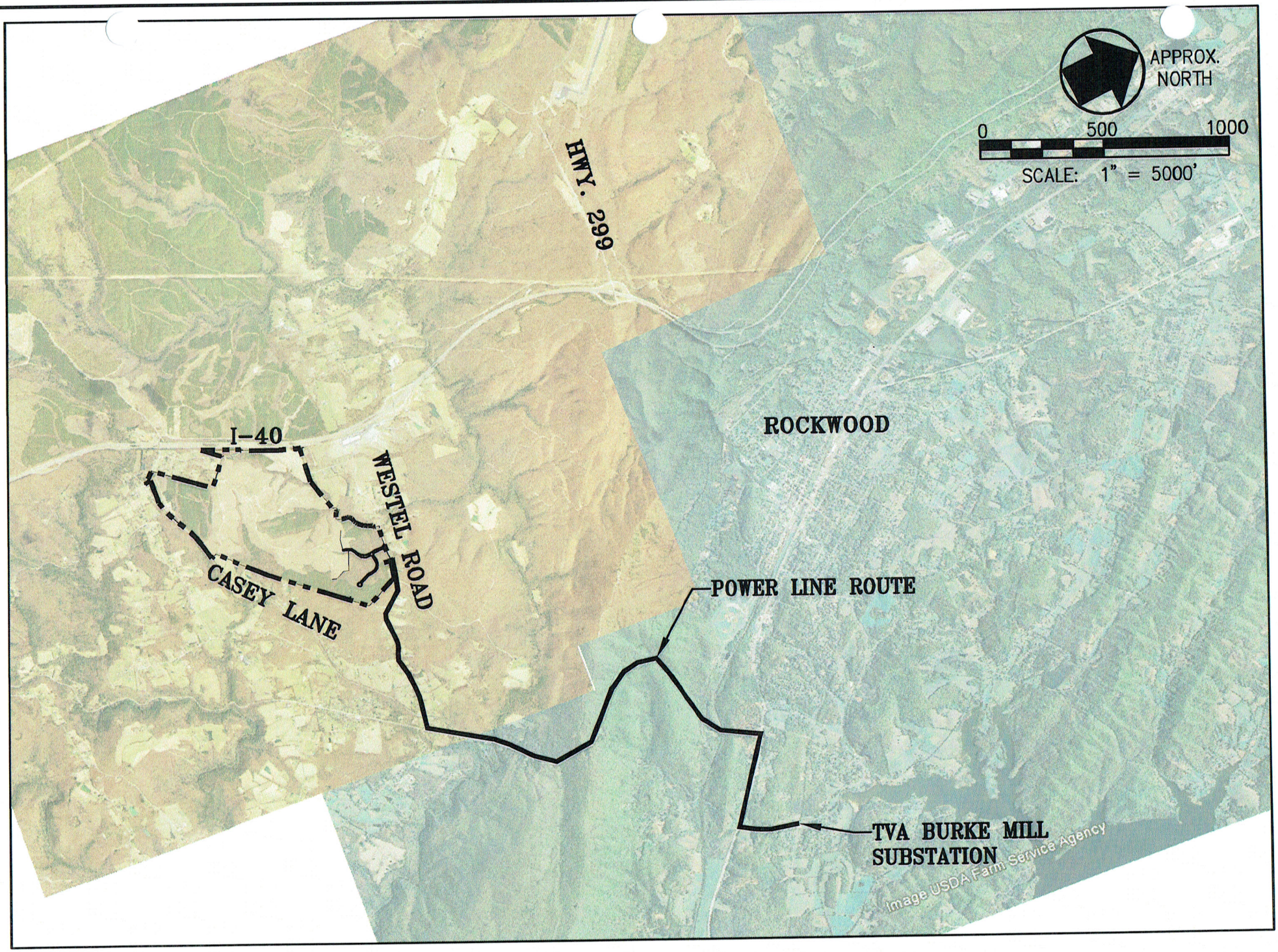

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Exhibit 3.4.2