



December 20, 2024

**RE: Feasibility Analysis
Iron Mountain Road in Cherokee County, GA**

Land Alternatives was retained by Olmstead Properties (the "Owner") to perform a feasibility analysis of the buildable area for a proposed single family residential home on the ±6.18 acre parcel (APN 003N18) identified as Mitchell Farms Lot 82 located adjacent to 315 Iron Mountain Road in Canton, GA. Below is a summary of qualifications and an executive summary of the findings. Refer to attached Exhibit.

QUALIFICATIONS

Land Alternatives was founded in 2020 by Craig Duerr to provide civil engineering consulting services to builders, investors, real estate brokers, and property owners related to land development. Mr. Duerr is a Professional Engineer licensed in North Carolina with over 30 years of project management, site/civil design, entitlements, feasibility analysis, and due diligence experience. Mr. Duerr graduated with a B.S. in Civil Engineering from Virginia Tech in 1992, received a M.S. in Civil Engineering from NJIT in 1999, and became a LEED Accredited Professional in 2009.

FINDINGS

- The subject property would comply with minimum lot dimensions for the current R-40 zoning including allowance of single family residential according to Cherokee County Zoning Ordinance.
- Sufficient suitable soils exist on-site for an approx. 50' x 125' conventional septic system to serve approx. 5 bedrooms with additional bedrooms possible subject to design by a qualified professional.
- Flood hazard areas, a dam failure inundation zone, and multiple stream features with required buffers and setbacks exist on-site that limit buildable area.
- Repairs to the Bob Mitchell Lake Dam which encumbers the NW portion of the site have been satisfactorily completed and are subject to an Inspection, Maintenance and Access Easement Agreement with the owners of 2 adjacent parcels (03N18 074 and 03N18 104).
- After taking into consideration the above constraints and applicable setbacks, a reasonable buildable area would be approx. 60' x 100' for principal structure and an additional 30' x 90' for accessory structures excluding a driveway recommended along the 20' access easement.
- It should be noted that encroachments are allowed for minor projections into required yards with administrative review and structures may be possible within flood hazards areas subject additional engineering studies and building design as set forth in Cherokee County's Floodplain Ordinance.

If you have any questions, please feel free to contact me.

Sincerely,

LAND ALTERNATIVES, PLLC

A handwritten signature in black ink, appearing to read "Craig Duerr", is written over a horizontal line.

Craig Duerr, PE and LEED AP

FEASIBILITY ANALYSIS

Iron Mountain Road Lot 82 – Cherokee County, GA



Property Description

- Size: ±6.18 Acres (APN 003N18) identified as Mitchell Farms Lot 82 recorded in PB 30, PG 97
- Location: Adjacent to 315 Iron Mountain Road in Canton, GA (Zip Code 30115).
- Current Use: Undeveloped woodlands with ±150 LF of waterfront along Bob Mitchell Lake

Zoning / Land Use Information

- Zoning: R-40 in Cherokee County's planning jurisdiction, 3rd District, 2nd Section
- Primary Allowable Uses: Single Family For Sale or Rent, Retirement Housing, Bed and Breakfast
- Lot Dimensions (Article 7 District Uses and Regulations)
 - Min. 40,000 SF Lot Area with Min. 100' Lot Width
 - Min. 50' Arterial / Collector, 35' Local, 15' Side, and 30' Rear building setbacks
 - Max. 1.089 DU/AC Density and Max. 30% Lot Coverage
- Open Space / Buffers: N/A

Infrastructure Analysis

- Water (Cherokee County): Available according to Land Appraisal Report dated 6/16/20
- Sewer (None): On-site septic only
- Street Network: Iron Mountain Road is an existing Local Street (Public) with 20' EOP-EOP which is not located along platted centerline of the variable width R/W

Physical Site Constraints

- Topography: Moderate slopes from Elev 1070 to 1050 across the buildable area
- Soils: According to Level 3 Soil Report dated 6/24/14 by Mill Creek Environmental Services, Hayesville soils at 15-30% should have ability to function as a suitable absorption field. Hayesville (wet) soils at 15-25% within buildable areas may require an aerobic treatment unit.
- Wetlands: Small area to NW outside buildable area according to State water determination
- Streams: Cherokee County completed a State water determination in September 2023 and identified four (4) features subject to 25' State water buffer, 50' undisturbed County/City water buffers, and 75' Impervious setback bisecting the property and draining to 2 - 60" CMP culverts
- Pond: Bob Mitchell Lake Dam identified on the USACE Inventory of Dams
 - Dam Failure Analysis dated 9/29/23 by Carter Engineering defined the inundation zone following the Georgia Safe Dams Program Engineering Guidelines in the event of a breach and concluded no structures would be inundated or deemed hazards

- Approx. inundation zone elevations range from 1052.40' to 1051.65'
- As-built Plan for Dam Repairs dated 4/9/24 by Carter Engineering certified abandonment of the existing spillway, installation of the new siphon system installation, and installation of the new auxiliary spillway were completed in compliance with the approved plans
- Inspection, Maintenance and Access Easement Agreement with owners of parcels 03N18 074 (Gregory Hill) and 03N18 104 (Jon Brauer) stipulates that County has NO obligation to maintain or repair the dam, defines a 20' access, and sets forth standards for routine operation of syphon system and periodic maintenance of embankment and spillways
- Floodplains: Letter of Map Amendment (LOMA) approved 9/3/21 to remove flood hazard areas depicted on FEMA Flood Insurance Rate Map #13057C0280E dated 6/7/19 above Elev 1052.80.

Development Alternatives

- Buildable Area
 - Approx. 60' x 100' for principal structure and an additional 30' x 90' for accessory structures
 - Approx. 250 LF driveway along 20' access easement with restrictions on off-street parking within any required yard and impervious within 75' from any stream feature
 - Approx. 50' x 125' conventional septic/repair area for 5 bedrooms with drain lines at 7' on center subject to design and applicable setbacks (i.e., 5' to property line, 10' from building)
- Encroachments
 - Ordinary projections such as sills, chimneys, and cornices may extend 24" into required yard
 - Covered/uncovered balconies, decks, and pergolas shall meet principal structure setbacks
 - Patios not covered by a roof or canopy may extend 6' into side or rear yard setbacks
 - Cherokee County Floodplain Ordinance 2019-O-009 allows new construction within flood hazard areas subject to engineering studies to verify development does not change flood elevations and structures incorporate construction methods that are resistant to flooding, minimize flood damage, and utilize anchoring. Any fully enclosed lower area to be 3' above base flood elevation or 1' above future conditions flood elevation, whichever is higher. Additional requirements for foundations to be no more than 30" below the inundation zone.
 - Docks may be allowed subject to local ordinances and possible USACE Nationwide Permit.
- Budget Considerations
 - Approx. \$3,500 annual maintenance for mowing and minor repairs.
 - Approx. \$2,500 engineering dam inspection recommended every 2 years, but not required
 - Approx. \$50K additional for alternative septic system for marginal soils
 - Approx. \$10K for engineering studies for any portion of structure in flood hazard areas
 - Approx. \$25K for specialized architectural / structural engineering design

