

# **Summary of**

## **Precipice and Ridge Line Study**

Public Presentation by

The Precipice and Ridge Line Advisory Committee

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## Review Existing Precipice and Ridge Law: Why?

- **Current prohibition.** Existing law prohibits construction:
  - on a ridge line, and
  - at the edge of a precipice.
- **Property rights and public good.** A fresh approach is needed to strike a reasonable balance between property rights and public good.

## **Research is Basis of Committee Work**

- Researched the ridge and slope laws of other mountainous communities.
- Consulted with professional experts:
  - Weston & Sampson, Village Engineer
  - Tim Miller Associates, land-use planner
  - Susan Harder, lighting expert
  - Rick Golden, Village Attorney
- Reviewed Tuxedo Park Code and past Board of Zoning Appeals decisions on precipice and ridge constructions.
- Used the latest Government Information Service (GIS) 2-foot topographical map, overlaid with property lines and existing building footprints, to identify precipices and ridges.
- Conducted field trips to a selection of precipice and ridge properties throughout Tuxedo Park to verify on-site conditions.
- Held in-person meetings to discuss research findings.

## **Key Findings: Tuxedo Park Has Fallen Behind.**

- **Tuxedo Park is behind the national curve.**

Communities across the U.S. \* have adopted ridge and slope protection laws in order to:

- **Ensure public safety (i.e., terrain stability, falling boulders/debris.)**
- **Safeguard the environment (i.e., erosion, drainage.)**
- **Protect scenic resources.**

- *For example: Chester, Cornwall, Warwick, and Woodbury in New York State; also, municipalities in California, Colorado, Georgia, New Hampshire, Nevada, North Carolina, Massachusetts, South Carolina, Tennessee, Utah, and Vermont.*

## Committee Recommendations Based on Empirical Research and Professional Expert Opinions

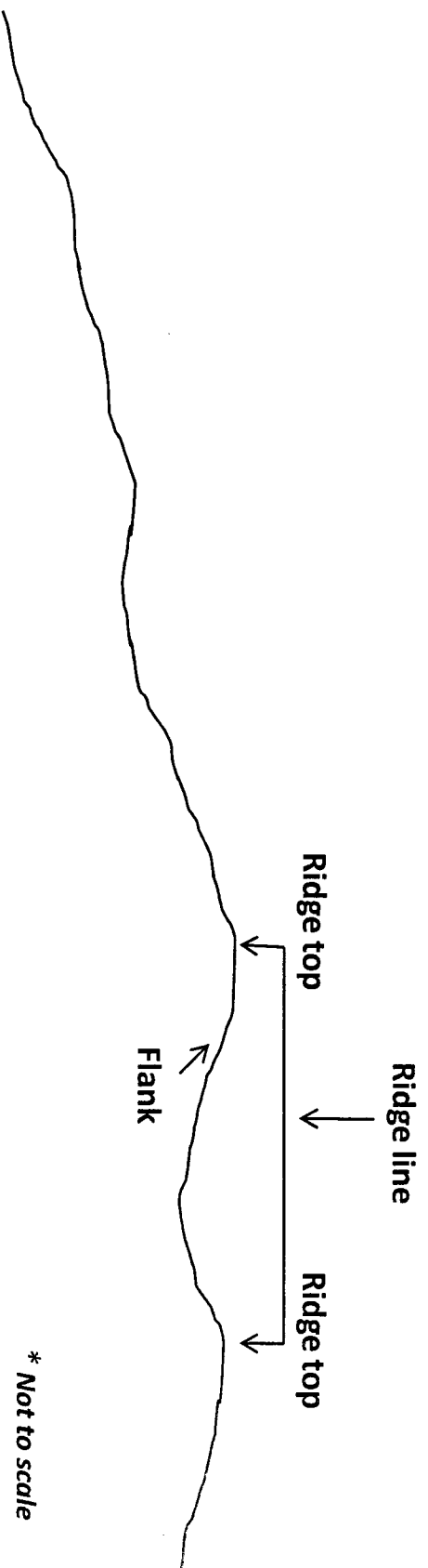
- Tuxedo Park needs to enact ridge and precipice legislation that protects public safety, the environment, and scenic resources.
- This proposed law would allow construction on ridges and near precipices, subject to additional standards and procedures. (The current law prohibits construction.)
- **RIDGE AREAS** and **PRECIPICE AREAS** were identified and mapped using reasonable criteria (outlined in following pages) derived from empirical research, and a list of Precipice and Ridge properties was compiled.
- In a building lot containing a ridge and/or a precipice area:
  - Construction **WITHIN** the ridge and/or precipice area to be subject to additional standards and processes.
  - Construction **OUTSIDE** the ridge and/or precipice area to be subject to normal Planning Board and Board of Architectural Review processes and standards.

## Criteria: What is a Ridge Line?

A **RIDGE LINE** is the horizontal line (on plan view) marking a ridge top or, following a series of ridge tops. The minimum length of a ridge line is defined as 150 feet (on plan view) and may include a maximum of 400 feet (on plan view) of a flank.

A **RIDGE TOP** is the crest of a hill or a mountain (on plan view.)

A **FLANK** is the shoulder of a ridge top.



## Criteria: What is a Precipice?

*Pictured: The edge of a precipice on Eagle Mountain, viewed from West Lake Road. Not to scale.*

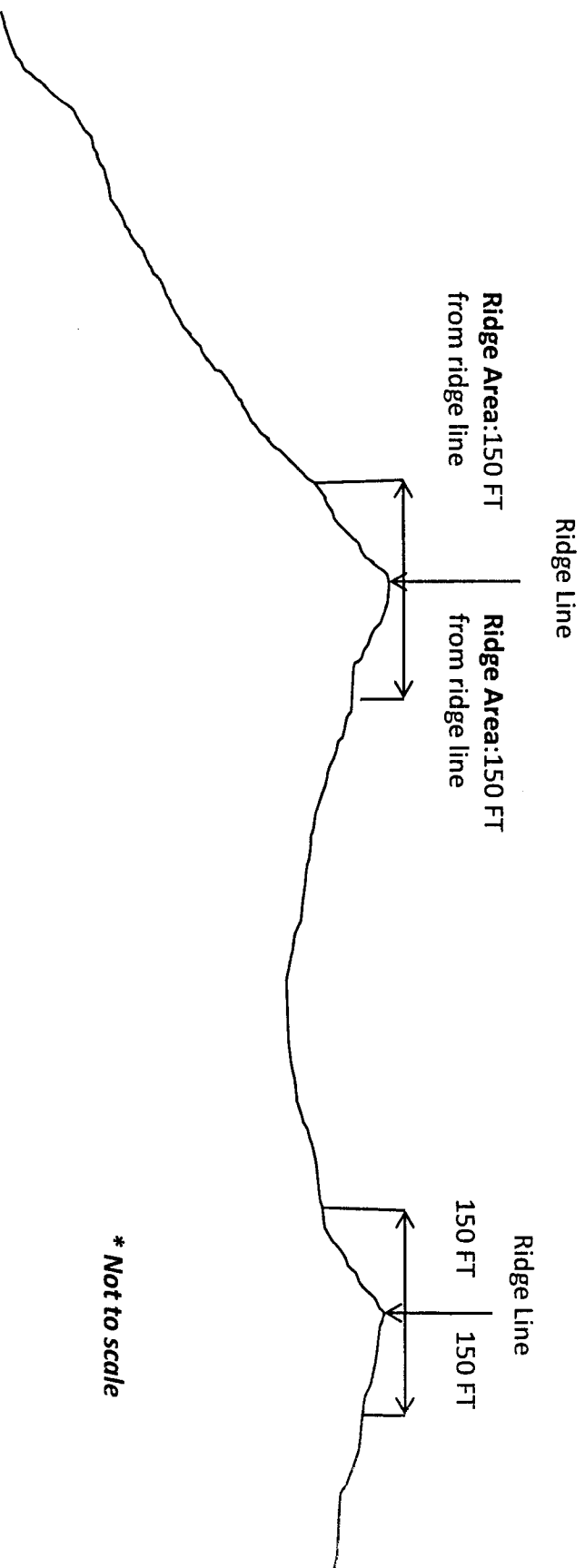


A **PRECIPICE** is created by a slope of 20 feet (or greater) in height, measuring 45% (or greater) in slope, above which there is a reduction in slope percentage to 45% (or less.)

The “**EDGE OF THE PRECIPICE**” is the point where the slope decreases. (See picture.)

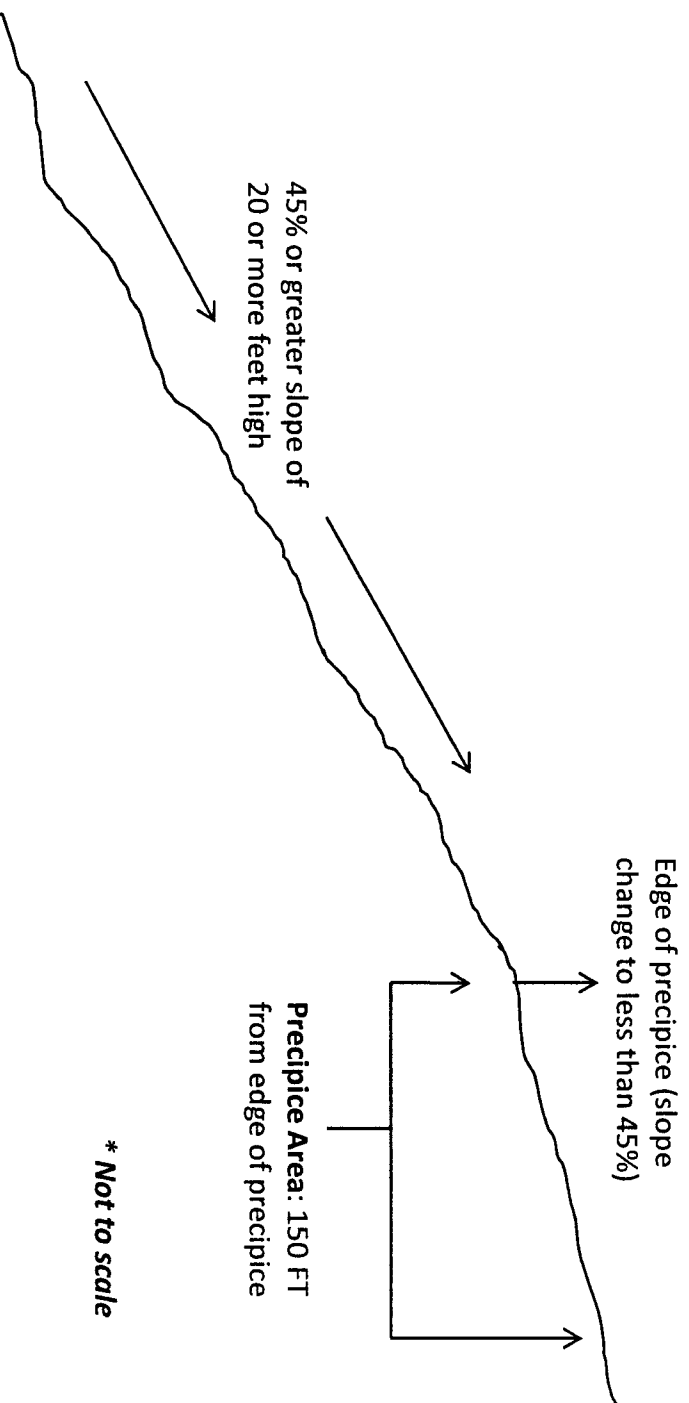
A **SLOPE** is the ratio of the elevation change to the horizontal distance (i.e., rise/run.)

# Criteria: What is a Ridge Area?



**A RIDGE AREA** is the area within a perimeter extending 150 feet (in all directions) from the ridge line.

## Criteria: What is a Precipice Area?

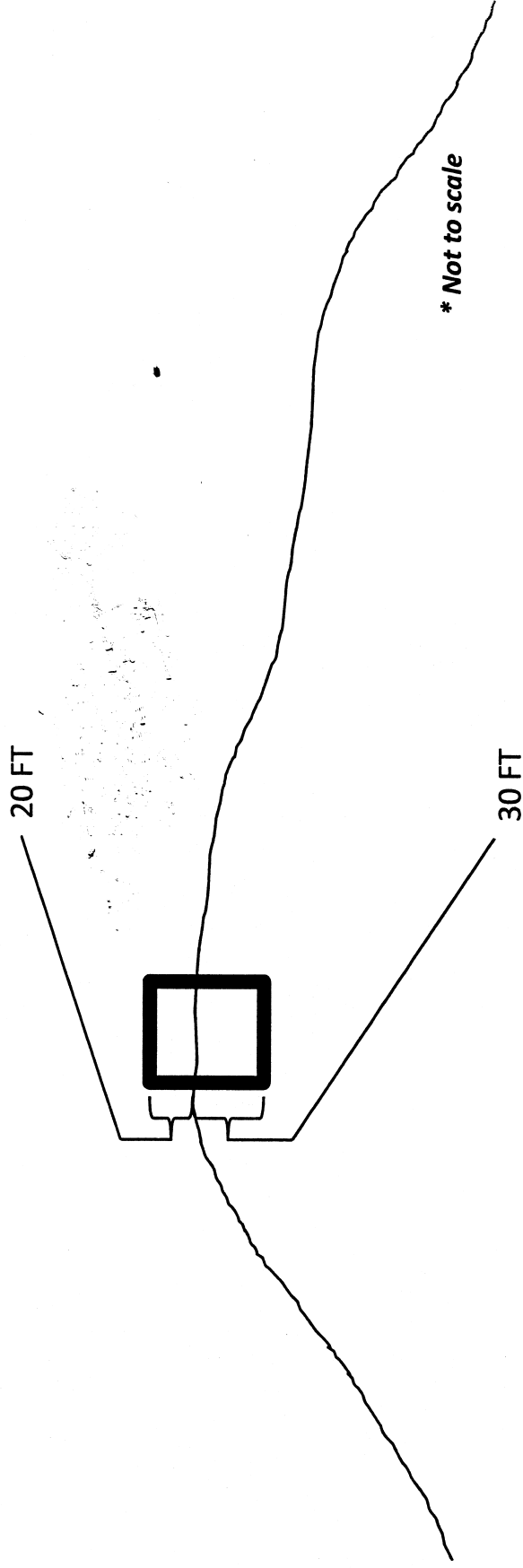


A **PRECIPICE AREA** is the area within 150 feet of the edge of a precipice (as measured horizontally on plan view) and running the full length of that precipice.

## **Additional Standards and Procedures: (A) Learning From Other Communities**

- **Tailor construction** to the natural terrain: Minimize blasting, chipping, filling, cutting, and other mechanical re-contouring of the land; take advantage of the screening potential of natural vegetation and land features.
- **Site a structure at the lowest feasible elevation**, and step it with contours of the natural terrain.
- **Use landscaping, building materials, and colors to blend** the structure with surrounding landscape and to prevent piercing the skyline.
- **Limit the maximum height** of a structure to 50 feet in total – but no more than 20 feet above the highest elevation of the natural precipice or ridge area on which the foundation sits.

## Additional Standards and Procedures: (B) Learning From Other Communities



**Maximum Height of a Structure (illustrated by a frontal view of a ridge area)**

## **Additional Standards and Procedures: (C) Learning From Other Communities**

**Preserve existing vegetation** where possible; prohibit clear-cutting or removal of mature live trees (5+ inches diameter measured 48" above ground) except by permission (or in case of emergency;) replant native species where appropriate.

**Preserve scenic features** (e.g., historic structures, natural rock outcroppings, streams, native trees and shrubs.)

**Adhere to Exterior Lighting Standards** to promote public safety, sound environment and ecology, human health and neighborly conduct. According to Susan Harder, lighting expert, our community is a Lighting Zone 1 (rural, low density residential) environment.

The key components of the standards are: Use shielded lights; limit height of installation; limit lumens level; set "curfews" for non-essential lighting.

**Submit**, where appropriate, **additional data** from soil stability analysis, visual impact analysis, and tree survey (to the Planning Board or the Board of Architectural Review.)

## **Exemptions From Additional Standards and Procedures**

- Normal repairs and maintenance.
- No requirement to alter existing property conditions.
- If there is a pre-existing main dwelling on the lot, the Board of Architectural Review may permit the new accessory building or extension to follow the style, material, and color of the pre-existing structure.

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## Conclusion: Act Now.

- Communities across the country agree that construction on ridges and near precipices needs to be regulated to protect public safety, the environment, and valuable scenic resources.
- Tuxedo Park’s Village Engineer; land-use planning consultant; lighting consultant; and members of the Precipice and Ridge Line Advisory Committee unanimously concur with establishing this principle.
- Tuxedo Park currently lags behind in legislation that offers this protection. The Board of Trustees should act now to revise the existing prohibitive precipice and ridge law.
- Available for the community’s review in the Village Office:
  - a detailed final report, including appendices of key research materials,
  - a 2-foot topographical map of the precipice and ridge areas, and
  - a complete list of precipice and ridge properties.