



# CITY AND BOROUGH OF SITKA

A COAST GUARD CITY

## MEMORANDUM

**To:** Chair Windsor and Planning Commission Members

**From:** Amy Ainslie, Planning & Community Development Director *AAA*

**Date:** October 31, 2025

**Subject:** Evaluation Criteria for Phase I Housing Land Suitability & Feasibility Study

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The primary goal of the Land Suitability and Feasibility Study (“Land Study”) is to evaluate the municipal inventory of lands for housing development. The Land Study is highly focused on geotechnical and engineering parameters to determine the suitability and feasibility of land for housing development, i.e. topography, soils, waterways and drainage, hazard mitigation, vegetation/presence of wetlands, and availability of “backbone” road and utility infrastructure.

The consultant team for the study, PND Engineers, is finalizing Phase I of the Land Study, which considers the physical characteristics of the study areas and a review of road and utility infrastructure/capacity in nearby areas. The study areas will be ranked in accordance with the evaluation criteria below, further elaborated upon in the PND provided attachment.

- A. Constructability Category (60% Total Category Weight)
  - 1. General Topography and Slide Risk (15%)
  - 2. Access, Roadways (15%)
  - 3. Physical Conditions (15%)
  - 4. Proximity to Utilities (15%)
- B. Density Potential Category (40% Total Category Weight)
  - 5. Buildable Area (15%)
  - 6. Utility Capacity (15%)
  - 7. Transportation Capacity (10%)
- C. Desirables (0% Total Category Weight)
  - 8. Environmental Impact (0%)
  - 9. Proximity to Services (0%)
  - 10. Future Development Connections (0%)

The weights for each category/criterion as listed above and provided in the memo are placeholders; staff would like the Commission to review these criteria and provide feedback on **1) are any additional criteria needed**, and **2) what should the relative**

**weighting of these criteria be?**

Parcels that rank highly will be prioritized for Phase II study, which will include more intensive field work & mapping, density modeling (particularly as it relates to utility infrastructure), and early design for roads, infrastructure, and potential hazard mitigation.

After receiving your feedback on the evaluation criteria, a report on Phase I results will be completed and reviewed by both the Planning Commission and the Assembly which will include recommendations about which study areas to move into Phase II study.

Attachment: LSFS Decision Matrix Criteria Memo



ENGINEERS, INC.

## LAND SUITABILITY AND FEASIBILITY DECISION MATRIX CRITERIA AND RATINGS DESCRIPTIONS

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**PND PROJECT NO. 242091**

**DATE: October 30, 2025**

**PROJECT:** Land Suitability and Feasibility Study

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### 1. INTRODUCTION AND METHOD

This document is intended to accompany the City and Borough of Sitka Land Suitability and Feasibility Study (LSFS) Decision Matrix. The matrix employs the Multi-Criteria Decision Analysis (MCDA) method to rank the development potential of each study site. MCDA method is a structured framework used to evaluate and compare multiple options based on a range of diverse and sometimes competing criteria. Rather than relying on a single measure of performance, MCDA allows decision-makers to systematically incorporate technical, economic, environmental, and social considerations into the evaluation process. Each criterion is assigned a weight to reflect its relative importance, and each alternative is scored according to how well it meets those criteria. This structured scoring approach provides a transparent, repeatable, and defensible means of identifying the most balanced or optimal alternative among complex choices.

Within MCDA, the scoring system typically involves normalizing and weighting criteria to ensure fair and consistent comparison. Normalization converts raw scores—often expressed in different units or scales—into a common range (such as 0 to 1 or 0 to 100), preventing any single criterion from disproportionately influencing results due to its magnitude or unit of measure. Once normalized, each score is multiplied by its respective weight factor to reflect the criterion’s relative significance. The resulting weighted scores are then summed to produce a composite score for each option, allowing for clear, quantitative ranking while maintaining the ability to interpret trade-offs among competing priorities.

When completing the MCDA scoring matrix, evaluators should independently assess how well each option meets the defined criteria, assigning a score based solely on the performance of that option relative to the criterion—not in comparison to the other alternatives. This approach ensures objectivity and reduces bias that can occur when options are informally ranked against one another. Evaluators should carefully review the definitions and scoring scales provided for each criterion and apply them consistently across all options. The goal is to produce an impartial and transparent assessment of each alternative’s individual merits so that, once all scores are combined and weighted, the final results reflect a balanced and defensible comparison grounded in the established evaluation framework.

### 2. CRITERIA AND RATINGS DESCRIPTIONS

The following criteria and rating scales are applied to the LSFS Decision Matrix. Weight factors for each criterion are identified in the Decision Matrix.

**Constructability – Total Category Weight, 60%**

The items in this category relate to the constructability of the site. While cost estimates have not yet been developed, constructability items consider factors that will impact overall project cost. All criteria apply only to areas deemed buildable within the parcel, generally defined as those with slopes of 15% or less based on available LIDAR topographic data.

**1. General Topography and Slide Risk – Weight, 15%**

Is the topography of the site conducive to construction and associated infrastructure without significant land development? How close is the buildable area to locations with slide risk factors?

Ratings (1 = Best, 3 = Worst):

- 1 – Good
- 2 – Average
- 3 – Poor

**2. Access, Roadways - Weight, 15%**

As it relates to construction access, is there suitable access to the buildable areas, and how close is the nearest access point? Are buildable areas contiguous, or would multiple mobilizations be required for construction?

Ratings (1 = Best, 3 = Worst):

- 1 – Good
- 2 – Average
- 3 – Poor

**3. Physical Conditions - Weight, 15%**

Are the existing site conditions conducive to construction? Consider in situ geotechnical conditions, wetland prevalence, and the amount of clearing required within the buildable areas.

Ratings (1 = Best, 3 = Worst):

- 1 – Highly Conducive
- 2 – Neutral
- 3 – Minimally Conducive

**4. Proximity to Utilities - Weight, 15%**

How close are existing utilities (water, sewer, electrical) that could be extended to the buildable areas? Is there adequate right-of-way (ROW), easements, or city-owned property between the nearest utilities and the site, or will land procurement/easements be required? Are there clear paths, or will roadways/utility corridors need to be constructed? This criterion is not intended to consider the capacity of the closest utilities, only their existence.

Ratings (1 = Best, 3 = Worst):

- 1 – Good Access
- 2 – Neutral
- 3 – Poor Access

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**Density Potential – Total Category Weight, 40%**

The items in this category relate to the potential, or lack of potential, for high-density development.

**5. Buildable Area – Weight 15%**

Total anticipated buildable area (generally, areas with slopes of 15% or less).

Ratings (1 = Most Buildable, 5 = Least Buildable):

- 1 – More than 25 acres
- 2 – 15–25 acres
- 3 – 5–15 acres
- 4 – 2–5 acres
- 5 – Fewer than 2 acres

**6. Utility Capacity – Weight 15%**

In the context of density potential, are the existing utilities adequate to support additional development, and to what degree? If upgrades are needed, to what extent and how much work would be required to complete them?

Ratings (1 = Best, 4 = Worst):

- 1 – Adequate existing capacity to support buildout; minimal improvements needed
- 2 – Nearby utilities have capacity, but some improvements/extensions necessary
- 3 – Nearby utilities have some available capacity, but improvements/extensions required for full buildout
- 4 – Extensive improvements needed prior to any development

**7. Transportation Capacity – Weight 10%**

In the context of density potential, are existing roadways adequate to support additional traffic, and to what degree? If upgrades are needed, to what extent and how much work would be required to construct them?

Ratings (1 = Best, 4 = Worst):

- 1 – Adequate existing capacity and ROW; minimal improvements needed
- 2 – Nearby roads have capacity, but some improvements/extensions necessary; adequate ROW
- 3 – Roadway improvements/extensions needed, but adequate ROW available
- 4 – Extensive roadway improvements needed; extensive ROW procurements necessary

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**Desirables – Total Category Weight, 0%**

The items in this category are desirable considerations that may be more subjective or have less overall cost impact. However, they represent factors of public interest or community value.

**8. Environmental Impact – Weight 0%**

Environmental and cultural impacts to anticipated buildout areas. Consider potential impacts to wetlands, cultural resources, and recreational areas, as well as the level of permitting anticipated.

Ratings (1 = Best, 3 = Worst):

- 1 – Minimal impacts and permitting
- 2 – Some impacts and moderate permitting
- 3 – Significant impacts and intensive permitting

**9. Proximity to Services – Weight 0%**

How close is the site to human services such as medical care, schools, and shopping?

Ratings (1 = Best, 3 = Worst):

- 1 – Walkable to most services, downtown areas.
- 2 – Near and/or readily accessible via public transportation
- 3 – Distant and/or requires private transportation

**10. Future Development Connections – Weight 0%**

Does developing the site and associated infrastructure create access to other potentially developable areas within CBS?

Ratings (1 = Best, 2 = Worst):

- 1 – Yes
- 2 – No