



CITY AND BOROUGH OF SITKA

A COAST GUARD CITY

MEMORANDUM

To: Chair Windsor and Planning Commission Members

From: Amy Ainslie, Planning & Community Development Director

Date: July 31, 2025

Subject: Update on Land Suitability & Feasibility Study

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.

Thus far, the project has identified nine sites listed in the table below. Our consultant team for the Land Study, PND Engineers, Inc., completed this work through a site visit performed in December, review of all available CBS resources for the sites (plats and surveys, previous plans/projects/studies, water and sewer master plans, etc.), LiDAR analysis for topography/slope, and other federally available sources for wetlands and floodplain mapping.

[Note, though there is significant acreage in the “No Name Mountain” area, it has been excluded from the study to this point given the recency of the master plan for this area (2020) and the high cost of development estimates it indicated. Following the next phase of the land study, No Name Mountain development cost estimates may be refreshed to provide an “apples to apples” comparison to this site relative others included in the study.]

In the table below, “potential developable acres” is a preliminary estimate based solely on the slope grade of each site. It does not take into account presence of floodplains (which largely affects the Indian River site), protection of natural drainage courses/anadromous streams, or potential wetland reserves. It also does not account for acreage that will be needed for roads, utility and drainage infrastructure, or buffers/open space.

Number	Name	Potential Developable Acres	Presence of Wetlands	Topography	Proximate Infrastructure
1	Gavan Hill	63	Yes	Significant slope on majority of area, but sizable lower grade % land	Major roads & utilities present in proximate area
2	Gavan Hill SHS Property	7	Yes	Largely level terrain	Developed roads and utilities available to site – potential access via Charles street or thru site #1
3	Gavan Hill Extended	14	Yes	2 areas with relatively level terrain	Challenging – site lacks direct access to right-of-way and utility infrastructure. Potential connections at higher elevations.
4	The Benchlands	62	Yes	Significant slopes above developable areas	Accessible via platted rights-of-way. Utility extensions would be needed.
5	Harbor Mountain Road	29	Yes	Relatively flat terrain on north and south ends	Roadway accessible, water and (limited) electric infrastructure available
6	Indian River	57	Yes	Relatively flat, however, significant floodplain	Major road and utility infrastructure in proximate area
7	Green Lake Road	32	Yes	Two discrete “level” areas along roadway	Major road, electric infrastructure only
8	Herring Cove Peninsula	32	No	Two discrete “level” areas along roadway and along Beaver Lake trailhead	Major road, electric infrastructure only
9	Osprey Street	1	No	Relatively flat – known deep soils	Road access and utilities available via HPR & Osprey Street

Next Steps:

1. Wetland Delineation

At this time, staff recommends moving forward with wetlands delineation on Gavan Hill, Gavan Hill SHS Property, and Harbor Mountain Road. Wetland delineations are required for US Army Corp of Engineers (USACE) permitting; USACE generally accepts wetland delineations that have been performed within two years, and permits are valid for five years. Therefore, it is financially prudent to only move forward with wetland delineations of lands that, at this stage, appear to have the highest development potential. The size of these parcels, ready access to roads and existing utility infrastructure, and slope grades indicate that these parcels are the most prime candidates for development and therefore wetland delineations.

2. The Benchlands

PND and staff recommend that the next stage of study for The Benchlands should include a “desktop exercise” (i.e. computer modeled rather than physical investigation which would likely include the need for helicopter support) to evaluate landslide mitigation strategies such as berms, ditches, debris retaining/restraining devices, etc. This will inform the effectiveness of various strategies and associated development costs.

3. Indian River

Given that the majority of CBS owned land in this area is burdened by the Indian River floodplain, staff recommends limiting study of this area to its potential use for a roadway to connect Indian River Road and utility infrastructure to US Forest Service and State of Alaska owned lands in Indian River valley.

4. Utilities

For all sites, the next step in the study includes a more comprehensive review of existing utility infrastructure and its capacity to serve as a “backbone” for development in the study areas. Additionally, this phase of the study will identify “choke points” i.e., where utility infrastructure is undersized or in a condition such that development past a certain density level would require upgrades/expansions, and potential solutions.

To aid in this analysis, staff would like to provide our consultants with “density scenarios” to test. Our preliminary list of scenarios includes:

Density Scenario	Dwelling Unit per Area	Area (SF)
Single-family zoning ¹	1	6,000
R-1 zoning - Mixed ¹	1.5	6,000
R-1 zoning - Max ¹	2	6,000
R-2 zoning ¹	24	43,560 ²
High density single family	1	4,000
Manufactured homes ¹	1	3,000

¹ Zoning code compliant densities

² SGC specifies 24 dwelling units per acre

Recommendation

1. Provide staff with feedback/questions regarding the next steps of the Land Study
2. Review initial density scenarios and make recommendations on any additional density scenarios that should be added

MEMORANDUM

PROJECT NO. 242091

DATE: July 29, 2025

PROJECT: City and Borough of Sitka, Land Suitability and Feasibility Study

TO: Tyler Bradshaw, PND Engineers, Inc.

CC:

FROM: Danielle Schultz, PND Engineers, Inc.

SUBJECT: CBS Land Suitability and Feasibility Study Overview of Required Permits

This memorandum contains a summary of permits, regulations, and environmental factors relevant to the various sites included in the City and Borough of Sitka (CBS) Land Suitability and Feasibility Study. This evaluation is based on the selected parcels provided in the table below, and is subject to change as the concept evolves or new information is received. A list of permitting acronyms is also attached.

Primary permitting authority for projects in wetlands and waters of the U.S. (WOTUS) is primarily controlled by funding sources and the U.S. Army Corps of Engineers (USACE) regulatory process. USACE has jurisdiction over all structures within navigable waters and all projects impacting wetlands and WOTUS. However, if project funding comes from another Federal agency, the National Environmental Policy Act (NEPA) requires that agency to conduct an environmental review.

These processes are frequently coordinated between the participating federal agencies; however, an agency may delegate some of its responsibilities to the project owner or an owner's designated appointee. As a result, these timelines are heavily dependent on project details and funding sources. Additionally, the project's purpose and intended use can influence the permitting requirements.

Table 1: Project Parcel Options

Project Parcel Name	CBS Parcel Number	CBS Zoning Code
1. Gavin Hill	3-0280-000, 1-8600-000, 1-8650-000	P: Public lands
2. Gavin Hill SHS Property	1-7931-000	P: Public lands
3. Gavin Hill Extended	N/A	R1: Single-family and duplex manufactured home district
4. The Benchlands	N/A	R-1 PUD: Single-family and duplex residential planned unit development
5. Harbor Mountain Road	2-4940-000	R1: Single-family and duplex manufactured home district

Project Parcel Name	CBS Parcel Number	CBS Zoning Code
6. Indian River	1-8580-000, 3-0260-000, 3-0270-000	C1: General commercial and general commercial mobile home districts P: Public lands R2: Multi-family district
7. Green Lake Road	N/A	P: Public lands
8. Green Lake Road – Herring Cove Peninsula	N/A	P: Public lands
9. Osprey Street	1-5410-000	P: Public lands

1. NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

If federal funding is sought for project development, the funding agency would be responsible for completion of the mandatory NEPA evaluation for all federal actions. Often, the responsibility for developing the associated documentation is delegated to the funding recipient. Because the specific project site has yet to be selected, the scope or magnitude of NEPA assessment could vary based on the final selected location.

If federal funding is not utilized, NEPA assessment would be required for any other federal action associated with the project. Most likely, this would be triggered by the issuance of the USACE permits and would therefore be incorporated into that process.

2. WETLANDS AND WOTUS

Due to the project location, there is a potential for impact to coastal wetlands and WOTUS at seven of the nine parcels. Preliminary mapping identifies “freshwater forested/shrub wetland,” “riverine,” “freshwater emergent,” and “estuarine and marine” wetlands that may overlap with many of the project elements, depending on the final selected location. If the project were to proceed with a floating home structure for parcels 7 or 8, this would then overlap with “estuarine and marine deepwater” waters. *Early project work should include mapping and wetland delineation of any potentially affected areas to identify potential avoidance and minimization measures that could be incorporated into the project design.*

Development of onshore areas may require an assessment of wetland impacts. As described above, impacts to wetlands and WOTUS require authorization by USACE. Impacts to wetlands that cannot be avoided could require the payment of compensatory mitigation, according to pertinent USACE regulations and policies.

2.1 WETLANDS BY PARCEL

Due to the presence of wetlands on seven of the parcels, according to the National Wetlands Inventory (NWI), wetland delineations are suggested for parcels 1 through 7 where development may occur. Parcel 8, Green Lake Road – Herring Cove Peninsula, does not have wetlands within the boundaries, however, if the project proponent proceeds with a floating structure, that will be located above an Estuarine and

Marine Deepwater habitat, and additional compliance with the Clean Water Act will be required. Parcel 9 is fully inland and the NWI does not show any wetlands on the parcel.

Please note that the NWI mapper is not exact, and is suggested to be used only as a preliminary study tool. NWI maps are created using aerial imagery and limited field verification, and the NWI mapper does not constitute an official delineation of regulatory boundaries; wetland delineations will be required to identify specific wetland boundaries and types. Often, actual wetland areas determined under USACE's wetland criteria are significantly smaller than NWI mapped wetlands.

Some wetlands identified by the NWI mapper are in areas with steep slopes or that may otherwise be undevelopable (e.g. Green Lake Road). If CBS does not intend to develop land in the vicinity of specific mapped wetlands, delineation would not be needed at those locations. It is PND's recommendation that CBS conduct field delineations only in areas that may be developed.

For more information on wetlands by parcel, see **Table 2** below, and the breakdown of wetlands by parcel in the Appendix.

Table 2: Wetland Presence by Parcel

Parcel	Wetlands Present?	Type of Wetlands (with Cowardin Classification Code)	Notes
Gavin Hill	Yes	Riverine (R5UBH), Freshwater Forested/Shrub Wetland (PFO4B, PSS1/EM1B, PSS1/FO4B), Freshwater Emergent Wetland (PEM1/SS1B)	
Gavin Hill SHS Property	Yes	Freshwater Forested / Shrub Wetland (PFO4B and PSS1/FO4B)	
Gavin Hill Extended	Yes	Freshwater Forested/ Shrub Wetland (PFO4B)	
The Benchlands	Yes	Freshwater Forested/ Shrub Wetland (PFO4B)	
Harbor Mountain Road	Yes	Freshwater Forested/ Shrub Wetland (PFO4B and PSS1/EM1C)	
Indian River	Yes	Freshwater Forested/ Shrub Wetland (PFO4B, PSS1/EM1B), Riverine (R3UBH, R3USA, R5UBH), Freshwater Emergent Wetland (PEM1F)	
Green Lake Road	Yes	Freshwater Forested/ Shrub Wetland (PFO4B, PSS4/1B, PSS4/EM1B, PSS1B, PFO4B/SS4B), Freshwater Pond (PUBH), Estuarine and Marine Wetland (E2USN), Riverine (R5UBH, R4SBA), Estuarine and Marine Deepwater (E1UBL)	Large area, potential to be able to avoid wetlands due to large size of parcel, may still require delineation to determine best locations.

Parcel	Wetlands Present?	Type of Wetlands (with Cowardin Classification Code)	Notes
Green Lake Road – Herring Cove Peninsula	No	-	No wetlands on parcel; waterfront site (estuarine and marine deepwater)
Osprey Street	No	-	

Note that everything in the above table is based on the National Wetlands Inventory Mapper which is not exact. If NWI indicates that wetlands may be present on, or close to, developable areas of a parcel, a wetland delineation is encouraged to determine specific boundaries.

2.2 COMPENSATORY MITIGATION BANKING

Projects with unavoidable effects to wetlands and WOTUS are required to offset those effects through the purchase of mitigation credits or, in the absence of available credits, the performance of permittee-responsible mitigation under USACE's supervision.

When available, the purchase of credits from a mitigation bank is the preferred mitigation pathway from USACE. After conducting a search through USACE's RIBITS (Regulatory In-lieu Fee and Bank Information Tracking System), there are two mitigation banks serving the greater Sitka area, covering all project parcels that may overlap with wetlands: Natzuhini Bay Mitigation Bank and Trillium Mitigation Bank. The lead applicant must request quotes from the mitigation bank to fully understand the amount of credits needed to offset any project impact, and the associated costs.

Wetland areas determined under USACE's wetland criteria are often significantly smaller than NWI mapped wetlands, and the costs of a field delineation are typically offset and exceeded by reduced mitigation costs.

3. PROTECTED SPECIES CONSIDERATIONS

In addition to the process described above and depending on the selected parcel for the project, the project may require reviews under the Endangered Species Act (ESA), regarding Essential Fish Habitat (EFH), and for potential Marine Mammal Protection Act (MMPA) impacts.

For the proposed action, impacts to protected species in the vicinity could largely be mitigated through avoidance and minimization measures, including work during low tide. However, consultation may be required with the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS). If impacts cannot be avoided or rise above the "not likely to adversely affect" threshold for protected species, the project could require additional permits that would significantly increase the permitting timeline. Impacts that could reach this threshold include underwater pile driving in the presence of marine mammals or potential contaminated dredged or excavated materials.

Table 3 presents the protected marine species found at/near the associated project parcel. Project parcels #1, 2, 3, 5 and 6 do not have ESA or MMPA-protected species in the project areas, and would not require the associated consultations. Additional listed species have ranges overlapping the project area and may require consultation but aren't likely to be present during project construction. Management of marine mammals falls under the jurisdiction of NMFS and USFWS, depending on the species affected.

Table 3. Protected species within range of project construction.

Species	Scientific Name	Site	Listing Status	Managing Agency
Humpback whale	<i>Megaptera novaeangliae</i>	7. Green Lake Road* 8. Green Lake Road – Herring Cove*	ESA endangered	NMFS
Steller sea lion (Western DPS)	<i>Eumetopias jubatus</i>	7. Green Lake Road* 8. Green Lake Road – Herring Cove*	ESA endangered	NMFS
Sunflower sea star	<i>Pycnopodia helianthoides</i>	7. Green Lake Road* 8. Green Lake Road – Herring Cove*	ESA proposed threatened	NMFS
Gray whale	<i>Eschrichtius robustus</i>	7. Green Lake Road* 8. Green Lake Road – Herring Cove*	MMPA protected	NMFS
Killer whale	<i>Orcinus orca</i>	7. Green Lake Road* 8. Green Lake Road – Herring Cove*	MMPA protected	NMFS
Pacific white-sided dolphin	<i>Lagenorhynchus obliquidens</i>	7. Green Lake Road* 8. Green Lake Road – Herring Cove*	MMPA protected	NMFS
Harbor porpoise	<i>Phocoena phocoena</i>	7. Green Lake Road* 8. Green Lake Road – Herring Cove*	MMPA protected	NMFS
Steller sea lion (Eastern DPS)	<i>Eumetopias jubatus</i>	7. Green Lake Road* 8. Green Lake Road – Herring Cove*	MMPA protected	NMFS
California sea lion	<i>Zalophus californianus</i>	7. Green Lake Road* 8. Green Lake Road – Herring Cove*	MMPA protected	NMFS
Northern fur seal	<i>Callorhinus ursinus</i>	7. Green Lake Road* 8. Green Lake Road – Herring Cove*	MMPA protected	NMFS
Harbor seal	<i>Phoca vitulina richardii</i>	7. Green Lake Road* 8. Green Lake Road – Herring Cove*	MMPA protected	NMFS
*Consultation for the associated species at this site will only be necessary if the project proceeds with the floating home structures, as this will require in-water-work. If the project proceeds at this site on land, consultation may not be necessary (it will be dependent on the full scope and potential impacts).				

Project parcels 1 and 4 have documented bald eagle nests within the parcel bounds in 1997 (parcel #1) and 1985, 2000, and 2011 (parcel #4). As eagles are widespread throughout Southeast Alaska, an eagle

nest survey is suggested for any of the selected parcels to prevent incidental take of bald eagles; destruction of active bird nests, eggs, or nestlings from vegetation clearing and construction activities would be a violation of the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA). Additionally, following the land clearing timing guidance can further prevent incidental take of eagles. For Southeast Alaska, it is recommended to avoid vegetation clearing from April 15 through July 15 for forest or woodland areas, and May 1 through July 15 for shrub or open areas (USFWS 2009)¹.

Salmon and other anadromous fish are protected as a resource by the State of Alaska and other fisheries are protected under the relevant Fishery Management Plan (FMP) by NOAA Fisheries. Any project occurring in fish habitat is required to receive review by the Alaska Department of Fish & Game (ADF&G) and NOAA Fisheries. Required mitigation for sensitive fish populations during in-water construction typically includes efforts to reduce noise levels, adjusting project timing of work around important fish runs, and potential use of silt curtains to contain turbidity. Fish species at various life stages within the Gulf of Alaska Groundfish and Salmon FMPs are present in Herring Cove within the project area of parcels 7 and 8 (if the floating house structure were to be selected), and within anadromous streams in the project areas of parcels 1 (Gavin Hill), 6, (Indian River), and 7 (Green Lake); an EFH assessment report may be required to determine the impact of the project on these species and the associated EFH.

4. FLOODPLAINS

As a coastal community, sections of the Borough lie within floodplains; the Alaska State Legislature has delegated the authority of floodplain management to the respective communities. In the Borough, restrictions on development within specific floodplain zones are only applicable to those within the Flood Hazard District. The Flood Hazard District includes all areas within CBS subject to one percent or greater chance of flooding in any given year as delineated in the FEMA Flood Insurance Rate Map (FIRM). None of the nine project parcels fall into this category; they are all categorized under “X” (area of minimal flood hazard), or “D” (area of undetermined flood hazard). In “X” areas, additional, floodplain-specific construction regulations and permits would not be applicable. In “D” areas the Floodplain Manager may require additional hydrologic studies to determine flood plain boundaries. The Parcels 1 and 2, were identified by the CBS floodplain manager as areas where additional study may be warranted.

5. WASTEWATER AND STORMWATER

Public water and wastewater systems require plan reviews and Approval to Construct and Approval to Operate authorizations from the Alaska Department of Environmental Conservation (ADEC). Following design of any proposed toilets and domestic facilities, they should be assessed for potential requirements under (ADEC) policies and plans review procedures under Alaska Administrative Code (AAC) Title 18 – Environmental Conservation.

If the project impact site exceeds 1 acre, a stormwater pollution prevention plan (SWPPP) will be required. Stormwater systems require a Plan Review and Letter of Non-Objection by ADEC prior to construction.

¹ USFWS. 2009. LAND CLEARING TIMING GUIDANCE FOR ALASKA. U.S. DEPARTMENT OF THE INTERIOR, FISH & WILDLIFE SERVICE.

6. CBS CODES

Appropriate permits must be obtained from CBS prior to construction commencement. A foundation permit will be required to ensure the designed structure meets seismic standards. The project will also require a building and grading permit. While these are two separate permits, they utilize the same application, available on the CBS website under the building department page. The grading permit application will need to be supported with documentation that includes written explanation of fill and excavation quantities. Site plans showing underground utilities, structures within 15 feet, section view(s), and limits of proposed cuts and fills will also be required. A disposal site for excavated materials must be determined at the time of permit application.

The building permit will also require supporting documentation including a written statement of the project's intended purpose, floor plans of the proposed facility, and elevation views. Electrical, lighting, mechanical, and plumbing plans must be included with the building permit application. The building permit package should include any additional construction details not previously submitted with the grading/foundation permit application.

In addition to the permits addressed above, a CBS utilities connection permit will be required to establish utility connections to the new building. All fire systems are to include fire alarms, sprinklers, and fire suppression; they are subject to state law. The State of Alaska Fire Marshal has deferred fire, public safety, and occupancy approvals to the CBS building department. Finally, as a residential property, the building must adhere to residential-specific codes and standards, outlined on their website.

7. LAND JURISDICTION

Permitting processes are also heavily influenced by the land jurisdictions occurring within the project site. Submerged tidelands within Alaska are generally under State jurisdiction unless otherwise leased or ceded. If an existing agreement is not already in place for the area to be developed, a tidelands lease or conveyance would be required for the project. (Tidelands cannot be conveyed to private entities, corporations, or villages, but can be conveyed to a cooperating municipality or borough). Early consultation with the Alaska Department of Natural Resources (ADNR) regarding tidelands use is recommended.

An active tidelands lease (ADL 106345) exists in the waters off parcel #8, which is being considered as a site for both land construction and floating home structures. These tidelands may have to be conveyed in order to construct floating structures in that location.

Additionally, permitting for construction in the tidelands requires the cooperation and approval of the adjacent uplands' landowner(s). Clear titles would need to be established for any uplands development planned in conjunction with the project construction.

8. SUMMARY

A preliminary list of potential permits and approvals for the project is shown in the table below. Permitting timelines assume completion to a design level necessary to thoroughly assess potential environmental impacts (typically at least 35% unless additional specific details are required).

Potential challenges in the permitting process may arise due to a few factors: the funding source, work in wetlands or WOTUS, and effects to protected species. If the project is to be funded by any federal agency, the project must go through the NEPA process. This can require significant time and effort.

In the event a parcel is selected that may have wetlands or WOTUS within or adjacent to the project area, this will likely trigger the need for a USACE permit and could potentially require a wetland delineation. Depending on the final scope, and other necessary permits, the USACE permit review process could take anywhere from approximately three to nine months.

Finally, the construction of the floating home structures in either parcels 7 or 8 has more potential to impact protected species than the proposed upland housing structures. In-water work within Herring Cove will likely require consultations with NMFS under the ESA, Magnuson–Stevens Fishery Conservation and Management Act (MSA), and MMPA. These consultations, depending on the full project scope and anticipated impacts, can take anywhere from 3 to 18 months.

Finally, if constructing the float homes is to occur within parcel 8, a tidelands lease or conveyance from ADNR will be required. This can take approximately 18 to 24 months.

For a streamlined process with a comparatively shorter review process, and will require less labor in preparing the necessary permitting materials, we recommend selecting a parcel and scope that avoids in-water work, work in or near wetlands, and planning for upland housing structures (as opposed to the floating homes structure).

The parcels that will require the least amount of permitting are parcels 4 (the Benchlands), 5 (Harbor Mountain Road), and 9 (Osprey Street). All three will require the three local CBS permits discussed above (as will all of the parcel options) and may require an ADEC 401 permit and a SWPPP, depending on the final scope. Project construction may also require a NEPA process, if there is federal involvement.

Once 35% design is completed, we recommend holding a pre-permitting consultation with the relevant permitting agencies. It is often beneficial to gather these representatives together to facilitate coordination and cooperation as well as increase early buy-in to the project. Major permitting milestones are expected to require at least two years from notice to proceed with site investigation and design services. Descriptions of each of the likely permits anticipated follow in Table 4.

Table 4. Permits and authorizations anticipated for this project.

Agency	Code	Permit/Authorization	Timeline	Applicable Parcels
Lead Federal Agency	National Environmental Policy Act (NEPA)	NEPA assessment is the responsibility of the lead Federal agency. If multiple agencies contribute significant project funds or have other substantial authority, cooperative assessment may be warranted. If Federal funds are utilized to construct a project, the funding agency would lead the NEPA assessment, although this is often delegated to tribal authorities in the case of tribal grant-funded projects.	NEPA process timing varies widely depending on the type (i.e., Federal funds or permit), scope, or size of the triggering action. Typical timeline for: <ul style="list-style-type: none"> · Categorical Exclusion (if available) is 4 – 8 months · Environmental Assessment is 6 – 18 months · Environmental Impact Statement is 1 – 3 years 	All parcels, if working with a federal agency.

Agency	Code	Permit/Authorization	Timeline	Applicable Parcels
		When triggered by USACE permitting action, NEPA assessment is usually performed by USACE in conjunction with the DAP.		
USACE	Department of the Army Permit (DAP)			
	Clean Water Act (CWA)	Regulates discharge of dredged or fill material into waters of the United States, including wetlands. · Section 404; Permits for Dredged or Fill Material	<ul style="list-style-type: none"> · 3 weeks – 9 months for a DAP (Typically this is constrained by ESA or MMPA requirements. Most USACE permits from USACE are completed within 2 weeks of these consultations). · If an IHA or LOA is required, the DAP would be issued following approval of the permit. 	Parcels #1-8, if wetland delineation finds wetlands. Parcels #7 and #8 if building over-water structures.
NMFS	Endangered Species Act (ESA)	Requires consultation with the protected species management divisions of both USFWS and NMFS for potential effects to ESA-listed species.	<ul style="list-style-type: none"> · 3 – 9 months for informal consultation (assuming no site studies are required and that shutdown can mitigate effects of pile-driving). · 9 – 12 months from initiation typical for formal consultation (pile-driving) 	Parcels #7 and #8 if building over-water structures.
	Magnuson–Stevens Fishery Conservation and Management Act (MSA)	Requires consultation with NMFS regarding Essential Fish Habitat (EFH), if project activities affect marine waters or habitat important to fish rearing.	Consultation would likely be included with ESA and NEPA considerations.	Parcels #7 and #8 if building over-water structures.
	Marine Mammal Protection Act (MMPA)	Requires consultation with NMFS regarding the issuance of an IHA or LOA if effects on marine mammals are anticipated (pile-driving).	<ul style="list-style-type: none"> · 9 – 12 months from application typical for an IHA · 12 – 18 months from application for an LOA 	Parcels #7 and #8 if building over-water structures.
USFWS	Endangered Species Act (ESA)	Requires consultation with the protected species management divisions of both USFWS and NMFS	· 3 – 9 months (assuming no site studies are required).	
	Migratory Bird Treaty Act (MBTA)	Requires consideration of potential impacts to migratory birds.	Consultation would likely be included with ESA and NEPA considerations.	Parcels #1 and #4, suggest to conduct Bald Eagle survey for all parcels.

Agency	Code	Permit/Authorization	Timeline	Applicable Parcels
ADEC	Clean Water Act (CWA)	Section 401 [Water Quality] Certification. Regulates State certification of Federal CWA permits.	Consultation is typically completed within Section 404 permit timeline.	Design dependent for each parcel.
	18 AAC 83 Alaska Pollution Discharge Elimination System Program, Construction General Permit	Alaska Pollution Discharge Elimination System (APDES) permit program implementing CWA Section 402 requirements. Permit type depends on area of ground to be disturbed. Affected projects require Stormwater Pollution Prevention Plan (SWPPP) and Notice of Intent filed with ADEC.	Notice of Intent required for project footprints exceeding one acre.	Design dependent for each parcel.
	18 AAC 70 Water Quality	Antidegradation Analysis (with CWA permit application or APDES permit)	Analysis is integrated with the CWA Section 401 process.	Design dependent for each parcel.
ADF&G	AS 16.05.871-.901 Protection of fish and game (Anadromous Fish Act)	Permit required for actions that alter or affect "the natural flow or bed" of a specified waterbody or fish stream.	For projects with typical fish habitat and conditions, permit review requires 3 – 6 weeks on average. For marine projects, anadromous fish impacts are assessed via consultation with USACE. Process is typically complete within DAP permitting. This may require stipulations for project timing to protect fish runs.	Design dependent, potential requirement for Parcels #1, #6, #7
	AS 16.05.841 Fishway required	Permit required for activities within or across a stream used by fish if it is determined such uses could represent an impediment to efficient passage of resident or anadromous fish.		Design dependent, potential requirement for Parcels #1, #6, #7
ADNR DMLW	11 AAC 96.010 Uses requiring a permit	Permits, leases, and easements for use of State lands, including submerged lands or tidelands.	<ul style="list-style-type: none"> Temporary Land Use permits generally require 4 - 8 weeks. Tideland lease requires several months to a year for initial processing and survey. Finalization of a State lands lease follows construction & as-built survey and typically takes several years. 	Potentially for Parcel #8 if proceeding with floating structure.

Agency	Code	Permit/Authorization	Timeline	Applicable Parcels
	AS 38.05.825 Conveyance of tide & submerged land to municipalities	Tidelands conveyance of state lands to municipalities or boroughs	Tidelands conveyance required for municipality to obtain the land if it is under state ownership. Public process can require 18 – 24 months.	Potentially for Parcel #8 if proceeding with floating structure.
	11 AAC 93.035 (a)(b) and 11 AAC 93.220	Temporary Water Use Authorization for water withdrawals, including diversions, impoundments, and in source uses.		Potentially for Parcels #1, #6, and #7, depending on design.
City and Borough of Sitka (CBS)	CBS Building Code	Foundation Permit	Available on CBS website under the Building Department section.	All parcels.
		Building and Grading Permit		All parcels.
		Utilities Connection Permit		All parcels.

Table 5. Acronyms and abbreviations used in this document.

Acronym	Text
AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
ADF&G	Alaska Department of Fish & Game
ADNR	Alaska Department of Natural Resources
APDES	Alaska Pollutant Discharge Elimination System
AS	Alaska Statute
BGEPA	Bald and Golden Eagle Protection Act
CBS	City and Borough of Sitka
CWA	Clean Water Act
DAP	Department of the Army Permit
DMLW	Division of Mining Land & Water
DPS	Distinct population segment
EFH	Essential Fish Habitat
ESA	Endangered Species Act

Acronym	Text
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FMP	Fishery Management Plan
IHA	Incidental Harassment Authorization (MMPA)
LOA	Letter of Agreement
MBTA	Migratory Bird Treaty Act
MMPA	Marine Mammal Protection Act
MSA	Magnuson–Stevens Fishery Conservation and Management Act
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
PND	PND Engineers, Inc.
RIBITS	Regulatory In-lieu Fee and Bank Information Tracking System
SWPPP	Stormwater Pollution Prevention Plan
USACE	U.S. Army Corps of Engineers
USC	United States Code
USFWS	U.S. Fish & Wildlife Service
WOTUS	Waters of the United States

Appendix A. Wetlands by Parcel



City & Borough of Sitka, AK

3-0280-000



Layers



Site 1: Gavin Hill

Freshwater Emergent
Wetland
PEM1/SS1B

Freshwater
Forested/ Shrub
Wetland
PSS1/EM1B

Riverine
R5UBH

Freshwater
Forested/ Shrub
Wetland
PFO4B

Freshwater
Forested/ Shrub
Wetland
PFO4B

Freshwater
Forested/ Shrub
Wetland
PSS1/FO4B

3-0280-000
NHN Gavin Hill
City & Borough of Sitka

0

500ft

x:-135.346861, y:57.071136



Site 2: Gavin Hill, SHS

Freshwater
Forested/Shrub Wetland
PFO4B

Freshwater
Forested/Shrub Wetland
PSS1/FO4B



City & Borough of Sitka, AK

1-7931-000



Layers

Site 3: Gavin Hill Extended

Freshwater
Forested/ Shrub
Wetland
PFO4B

Freshwater
Forested/ Shrub
Wetland
PFO4B

0 500 ft

x:-135.373918, y:57.076354

CAI AxisGIS

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Site 4: The Benchlands

Freshwater Forested/
Shrub Wetland
PFO4B





City & Borough of Sitka, AK

2-4940-000



Layers



Site 5: Harbor Mountain Road

Freshwater
forested/ shrub
wetland
PFO4B

Freshwater
forested/ shrub
wetland
PFO4B

Freshwater
forested/ shrub
wetland
PSS1/EM1C



x:-135.427093, y:57.091801





Site 6: Indian Hill

Freshwater forested/ shrub wetland PFO4B

Freshwater emergent wetland PEM1F

Freshwater forested/ shrub wetland PFO4B

Riverine R3UBH

Freshwater forested/ shrub wetland PSS1/EM1B

Freshwater forested/ shrub wetland PSS1/EM1B

Freshwater forested/ shrub wetland PFO4B

Riverine R5UBH

Riverine R3USA

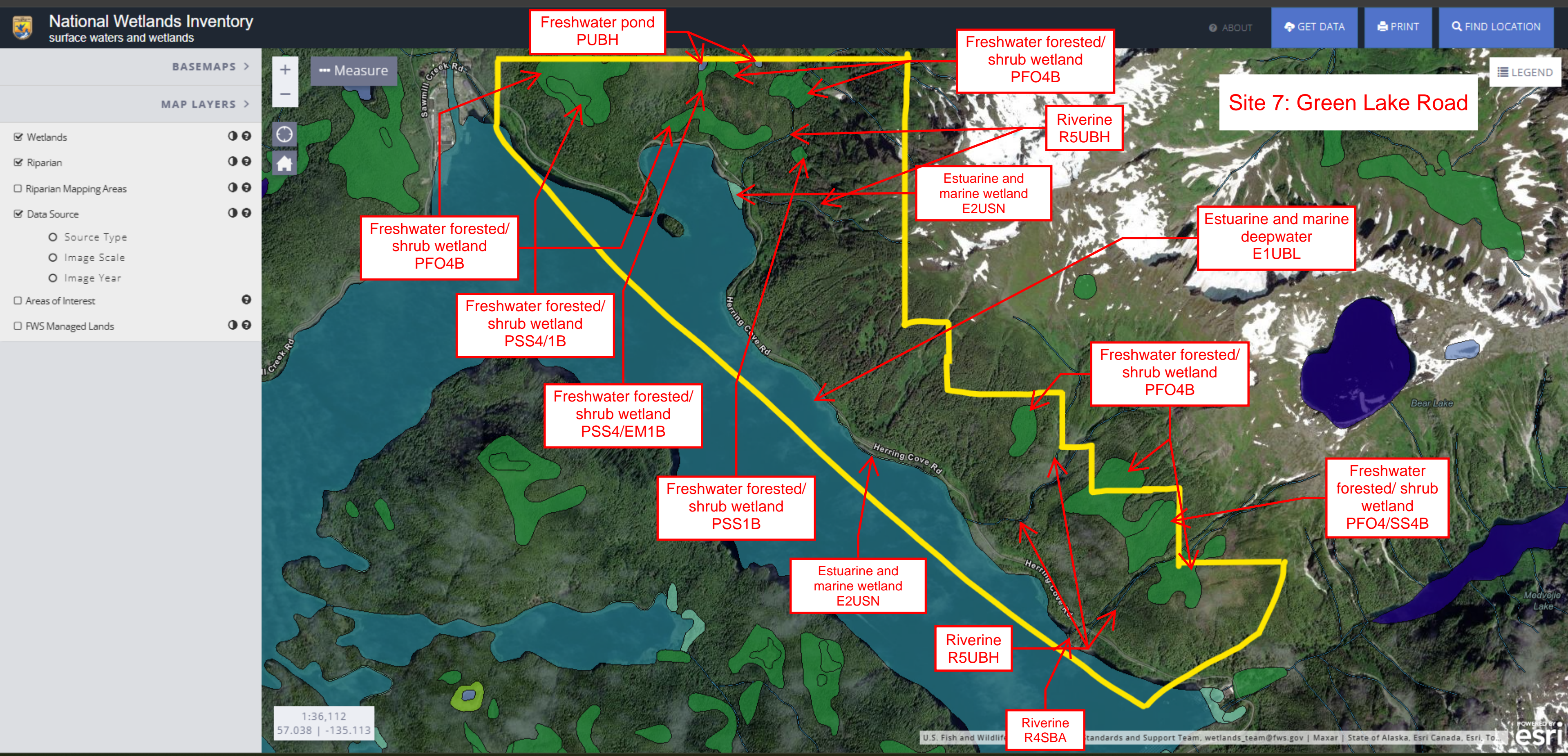
Freshwater forested/ shrub wetland PSS1/EM1B

Riverine R3UBH

Riverine R3USA

Riverine R5UBH

Freshwater forested/ shrub wetland PFO4B





City & Borough of Sitka, AK

3-0270-000

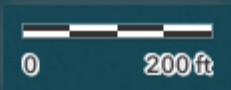


Layers

Site 8: Green Lake Road
- Herring Cove

Sawmill Creek Road

Estuarine and Marine
Deepwater
E1UBL



x:-135.210268, y:57.045995



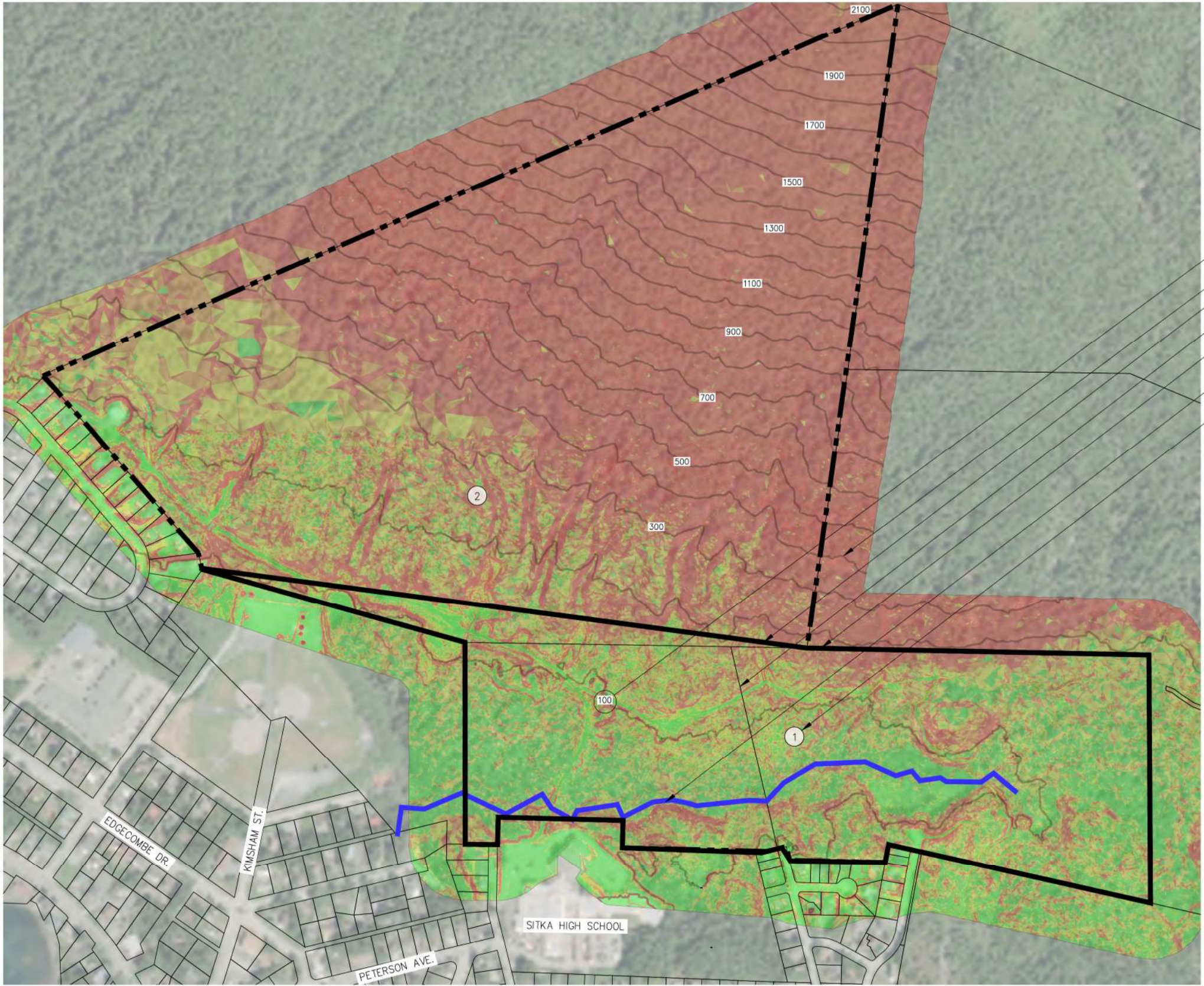
Site 9: Osprey Street

No wetlands on site

Estuarine and
marine deepwater
E1UBL

BLATCHLEY
MIDDLE
SCHOOL

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- CONTOUR LABEL, TYP.
- CONTOURS, TYP.
- SITE BOUNDARY, TYP.
- PROPERTY LINE, TYP.
- GAVAN HILL SUBJECT AREA BOUNDARY
- PETERSON CREEK (ANADROMOUS)
- SITE LABEL, TYP.

GRADE TABLES		
COLOR	MINIMUM GRADE (%)	MAXIMUM GRADE (%)
Green	0%	15%
Yellow	15%	30%
Orange	30%	45%
Red	45%	—

DEVELOPMENT POTENTIAL		
SITE	AREA (ACRES)	NOTES
1	63.17	POTENTIAL FOR DEVELOPMENT
2	143.51	LOW DEVELOPMENT POTENTIAL

GAVAN HILL
TOTAL SUBJECT AREA: 206.68 ACRES



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SCALE: SCALE IN FEET
0 250 500 FT.

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CBS PROJECT #XXXX

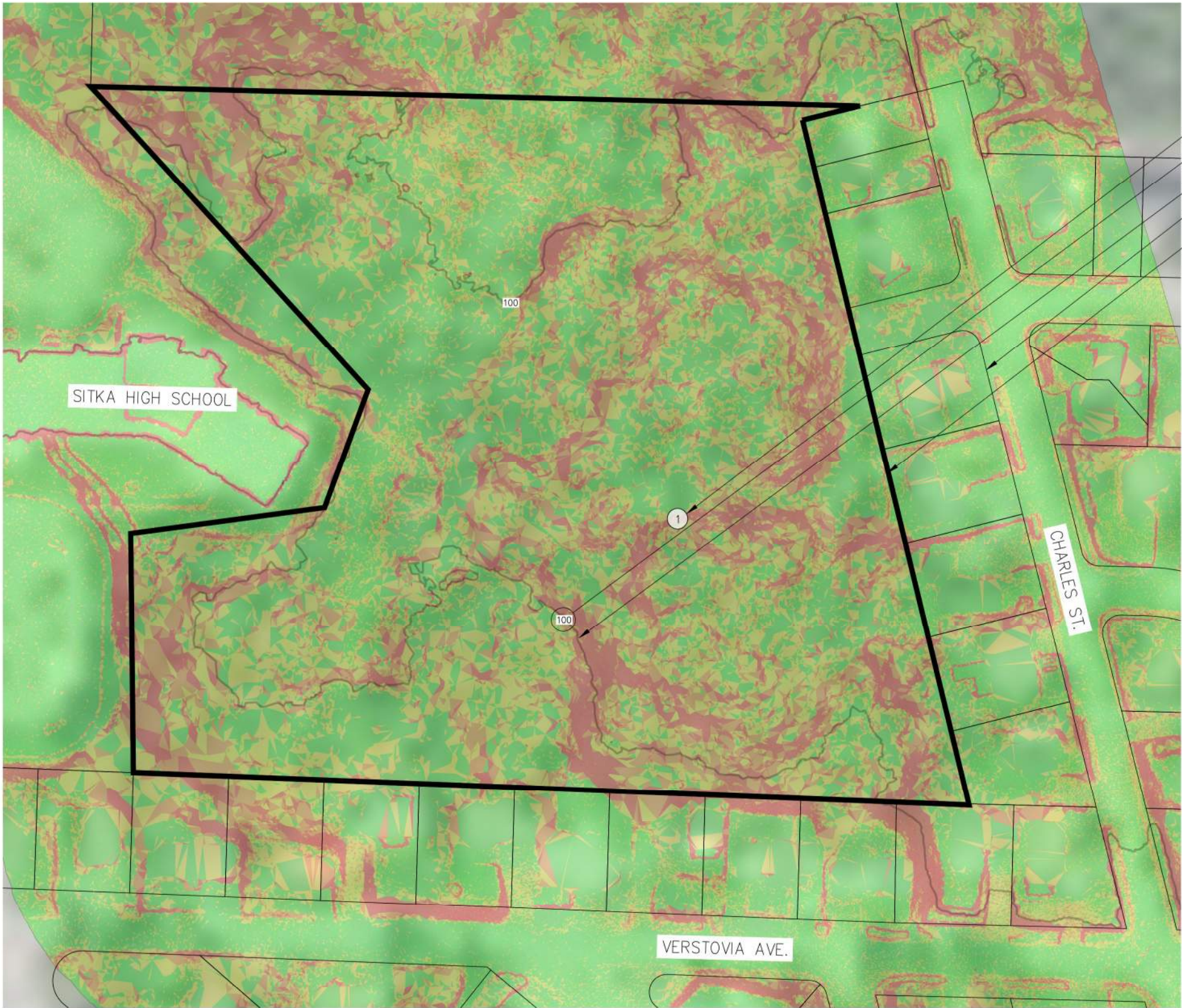
SHEET TITLE:
GAVAN HILL

PND PROJECT #: 242091 C.A.N. NO.: AECC250

1

DATE: 7/24/2025

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- SITE LABEL, TYP.
- CONTOUR LABEL, TYP.
- CONTOURS, TYP.
- PROPERTY LINE, TYP.
- GAVAN HILL-SHS SUBJECT AREA BOUNDARY

GRADE TABLES		
COLOR	MINIMUM GRADE (%)	MAXIMUM GRADE (%)
■	0%	15%
■	15%	30%
■	30%	45%
■	45%	—

DEVELOPMENT POTENTIAL		
SITE	AREA (ACRES)	NOTES
1	7.26	POTENTIAL FOR DEVELOPMENT

GAVAN HILL - SITKA HIGH SCHOOL
TOTAL SUBJECT AREA: 7.26 ACRES



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SCALE: SCALE IN FEET

0

50

100 FT.

DATE: 7/24/2025

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CBS PROJECT #XXXX

SHEET TITLE:
GAVAN HILL - SHS

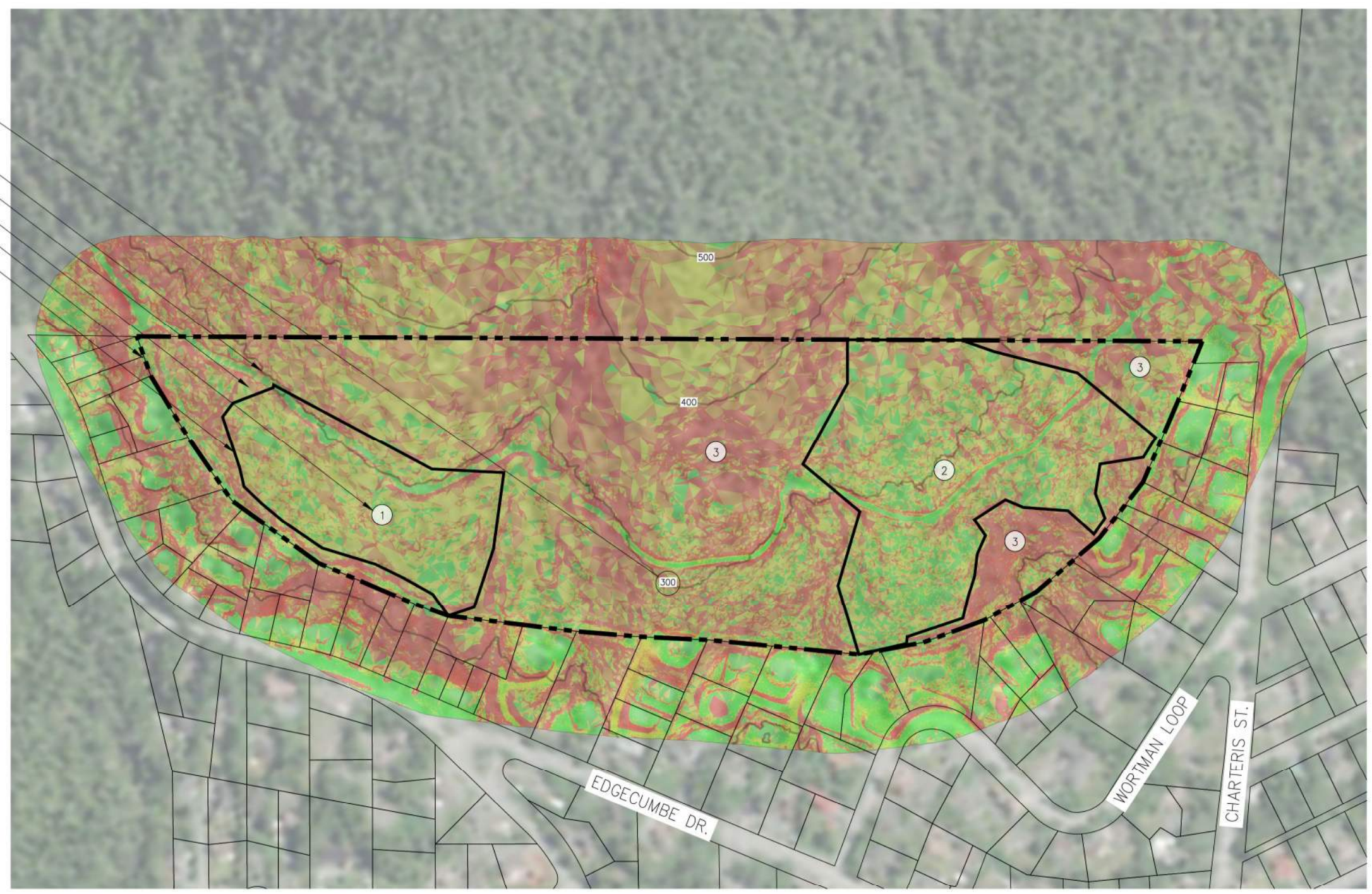
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- CONTOUR LABEL, TYP.
- CONTOURS, TYP.
- GAVAN HILL EXTENDED SUBJECT AREA BOUNDARY
- SITE LABEL, TYP.
- PROPERTY LINE, TYP.
- SITE BOUNDARY, TYP.



GAVAN HILL EXTENDED
TOTAL SUBJECT AREA: 36.16 ACRES

GRADE TABLES		
COLOR	MINIMUM GRADE (%)	MAXIMUM GRADE (%)
Green	0%	15%
Yellow	15%	30%
Orange	30%	45%
Red	45%	-

DEVELOPMENT POTENTIAL		
SITE	AREA (ACRES)	NOTES
1	4.39	POTENTIAL FOR DEVELOPMENT
2	9.26	POTENTIAL FOR DEVELOPMENT
3	22.51	LOW DEVELOPMENT POTENTIAL



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SCALE: SCALE IN FEET
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DATE: 7/24/2025

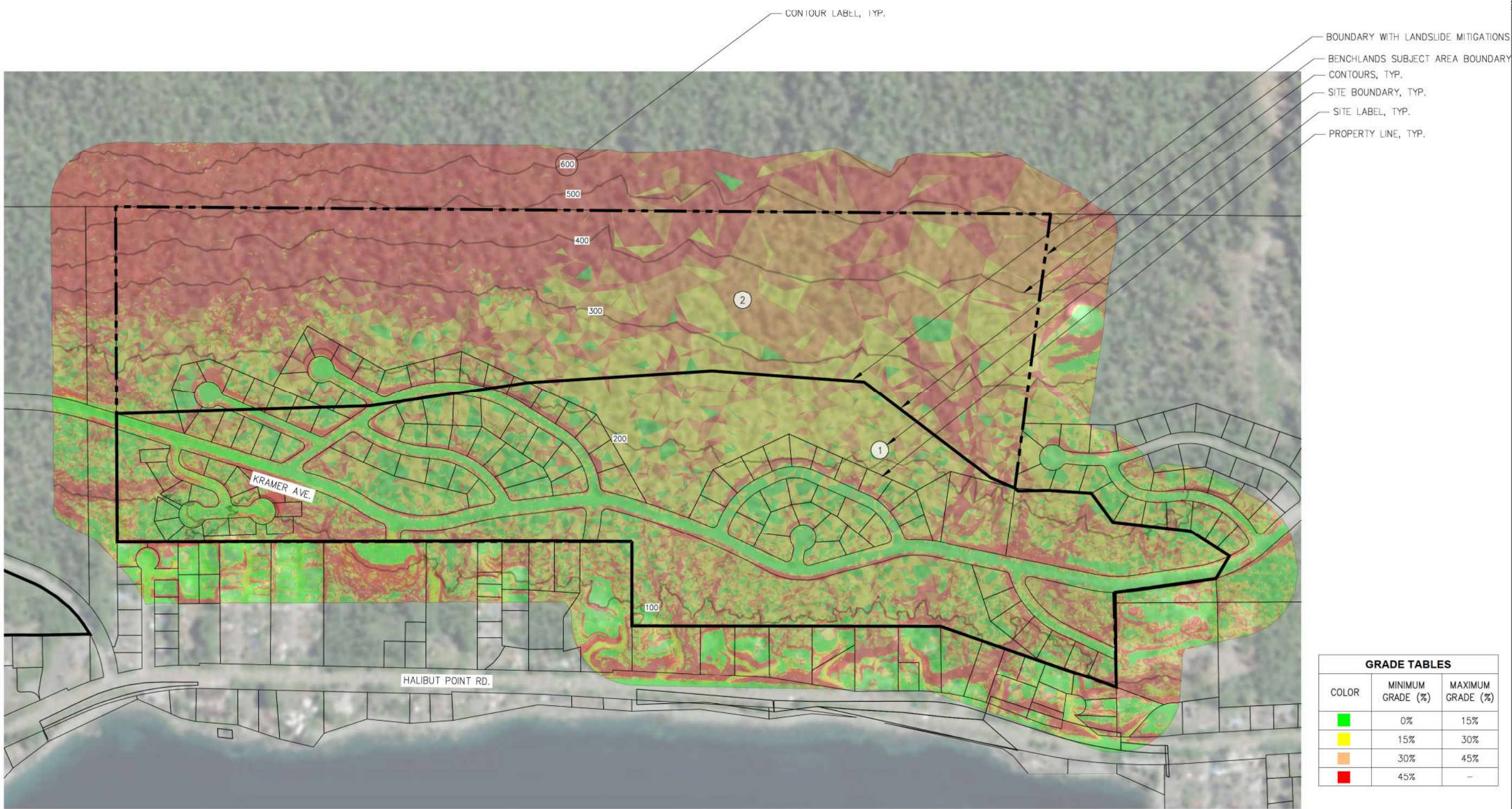
CITY AND BOROUGH OF SITKA, ALASKA
LAND SUITABILITY AND FEASIBILITY STUDY
CBS PROJECT #XXXX

SHEET TITLE:
GAVAN HILL EXTENDED

PND PROJECT #: 242091 C.A.N. NO.: AECC250

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BENCHLANDS
TOTAL SUBJECT AREA: 121.75 ACRES

DEVELOPMENT POTENTIAL		
SITE	AREA (ACRES)	NOTES
1	62.33	POTENTIAL FOR DEVELOPMENT
2	59.42	LOW DEVELOPMENT POTENTIAL



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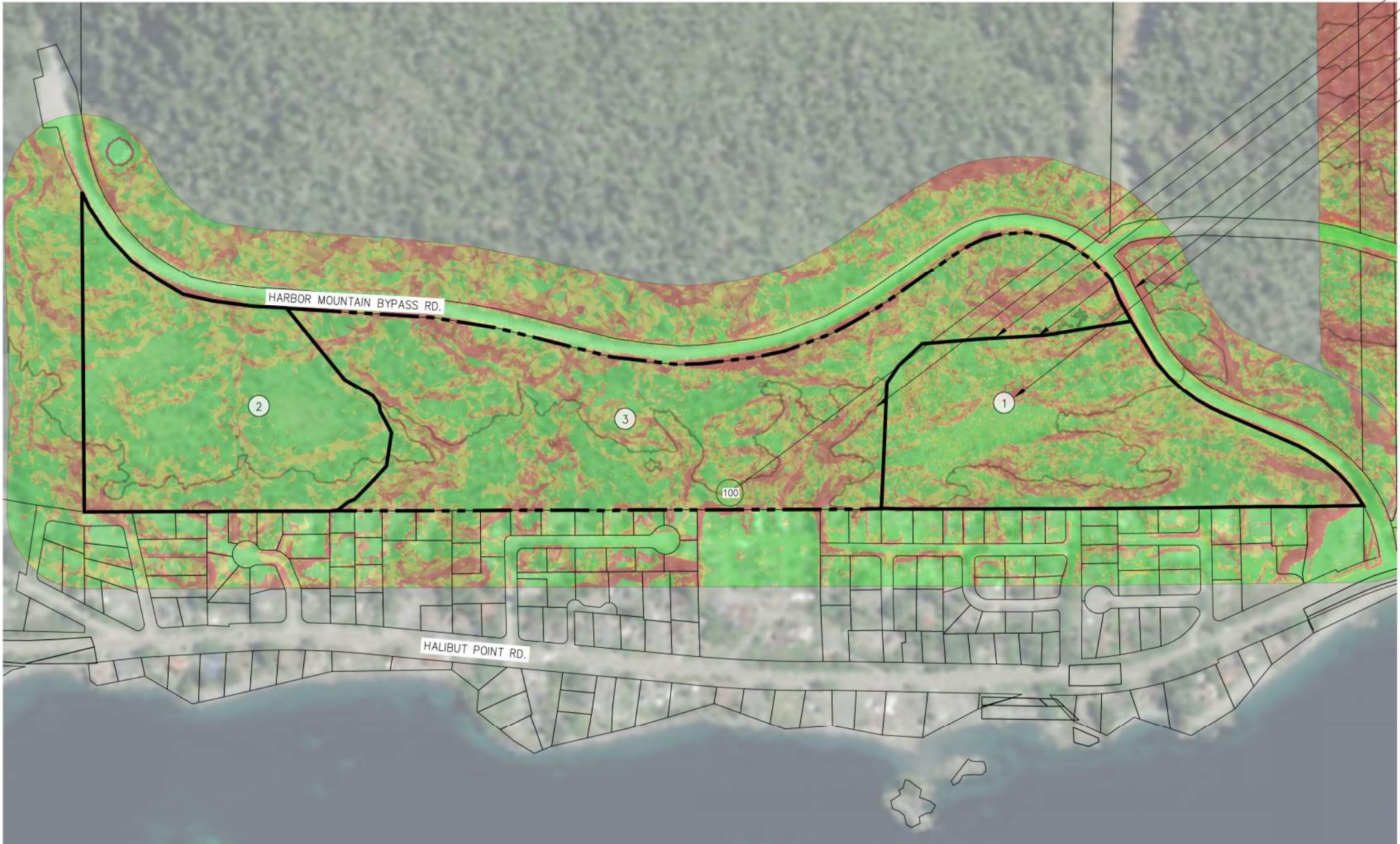
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SHEET TITLE:
BENCHLANDS

PND PROJECT #: 242091 C.A.N. NO.: AECC250

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- CONTOUR LABEL, TYP.
- CONTOURS, TYP.
- HARBOR MOUNTAIN SUBJECT AREA BOUNDARY
- SITE BOUNDARY, TYP.
- PROPERTY LINE, TYP.
- SITE LABEL, TYP.

GRADE TABLES		
COLOR	MINIMUM GRADE (%)	MAXIMUM GRADE (%)
	0%	15%
	15%	30%
	30%	45%
	45%	—

HARBOR MOUNTAIN ROAD
TOTAL SUBJECT AREA: 55.69 ACRES

DEVELOPMENT POTENTIAL		
SITE	AREA (ACRES)	NOTES
1	14.76	POTENTIAL FOR DEVELOPMENT
2	14.57	POTENTIAL FOR DEVELOPMENT
3	26.36	LOW DEVELOPMENT POTENTIAL



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SCALE: SCALE IN FEET
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DATE: 7/24/2025

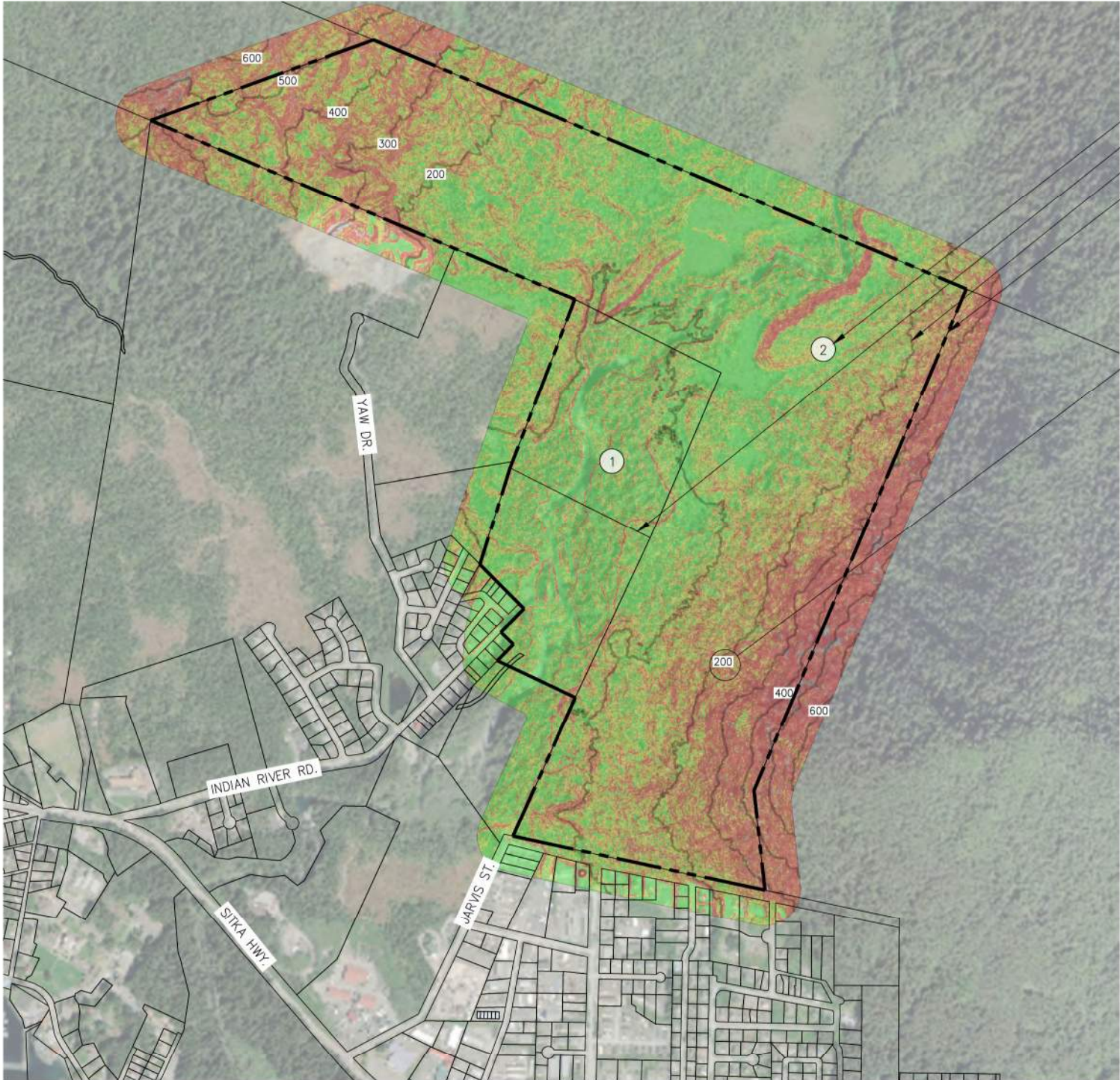
**CITY AND BOROUGH OF SITKA, ALASKA
LAND SUITABILITY AND FEASIBILITY STUDY
CBS PROJECT #XXXX**

SHEET TITLE:
HARBOR MOUNTAIN ROAD

PND PROJECT #: 242091 C.A.N. NO.: AECC250

5

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- SITE LABEL, TYP.
- PROPERTY LINE, TYP.
- CONTOURS, TYP.
- INDIAN RIVER SUBJECT AREA BOUNDARY
- CONTOUR LABEL, TYP.

GRADE TABLES		
COLOR	MINIMUM GRADE (%)	MAXIMUM GRADE (%)
■	0%	15%
■	15%	30%
■	30%	45%
■	45%	—

DEVELOPMENT POTENTIAL		
SITE	AREA (ACRES)	NOTES
1	56.81	CBS PARCEL
2	244.22	DNR PARCEL

INDIAN RIVER
TOTAL SUBJECT AREA: 301.03 ACRES



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LAND SUITABILITY AND FEASIBILITY STUDY
CBS PROJECT #XXXX

SHEET TITLE:
INDIAN RIVER

6

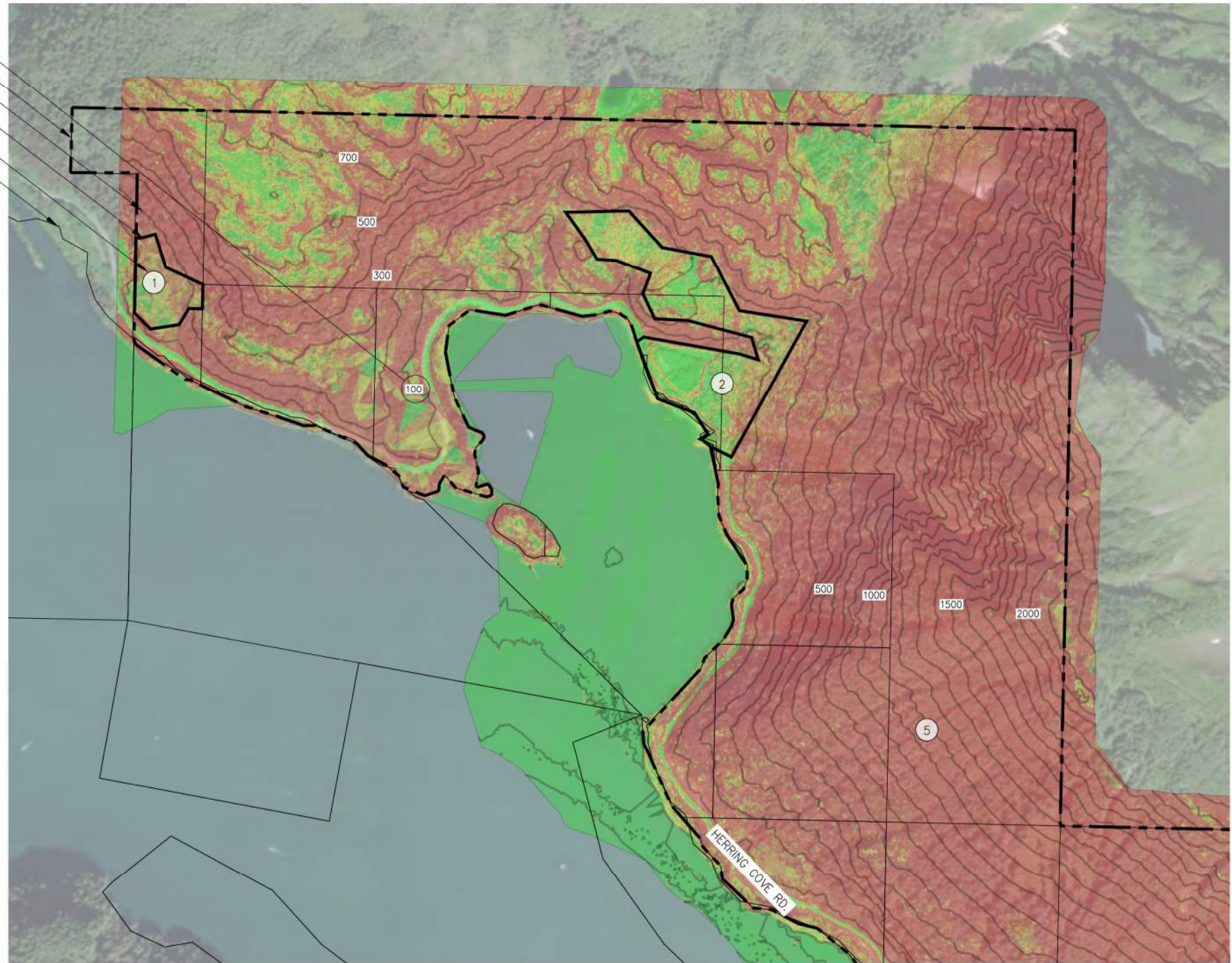
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C.A.N. NO.: AECC250

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- CONTOUR LABEL, TYP.
- GREEN LAKE ROAD SUBJECT AREA BOUNDARY
- CONTOURS, TYP.
- SITE BOUNDARY, TYP.
- SITE LABEL, TYP.
- PROPERTY LINE, TYP.



GREEN LAKE ROAD - PART 1
TOTAL SUBJECT AREA: 1157.60 ACRES

GRADE TABLES		
COLOR	MINIMUM GRADE (%)	MAXIMUM GRADE (%)
■	0%	15%
■	15%	30%
■	30%	45%
■	45%	—

DEVELOPMENT POTENTIAL		
SITE	AREA (ACRES)	NOTES
1	5.35	POTENTIAL FOR DEVELOPMENT
2	27.00	POTENTIAL FOR DEVELOPMENT
3	10.77	POTENTIAL FOR DEVELOPMENT
4	34.17	POTENTIAL FOR DEVELOPMENT
5	1080.31	LOW DEVELOPMENT POTENTIAL



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DATE: 7/24/2025

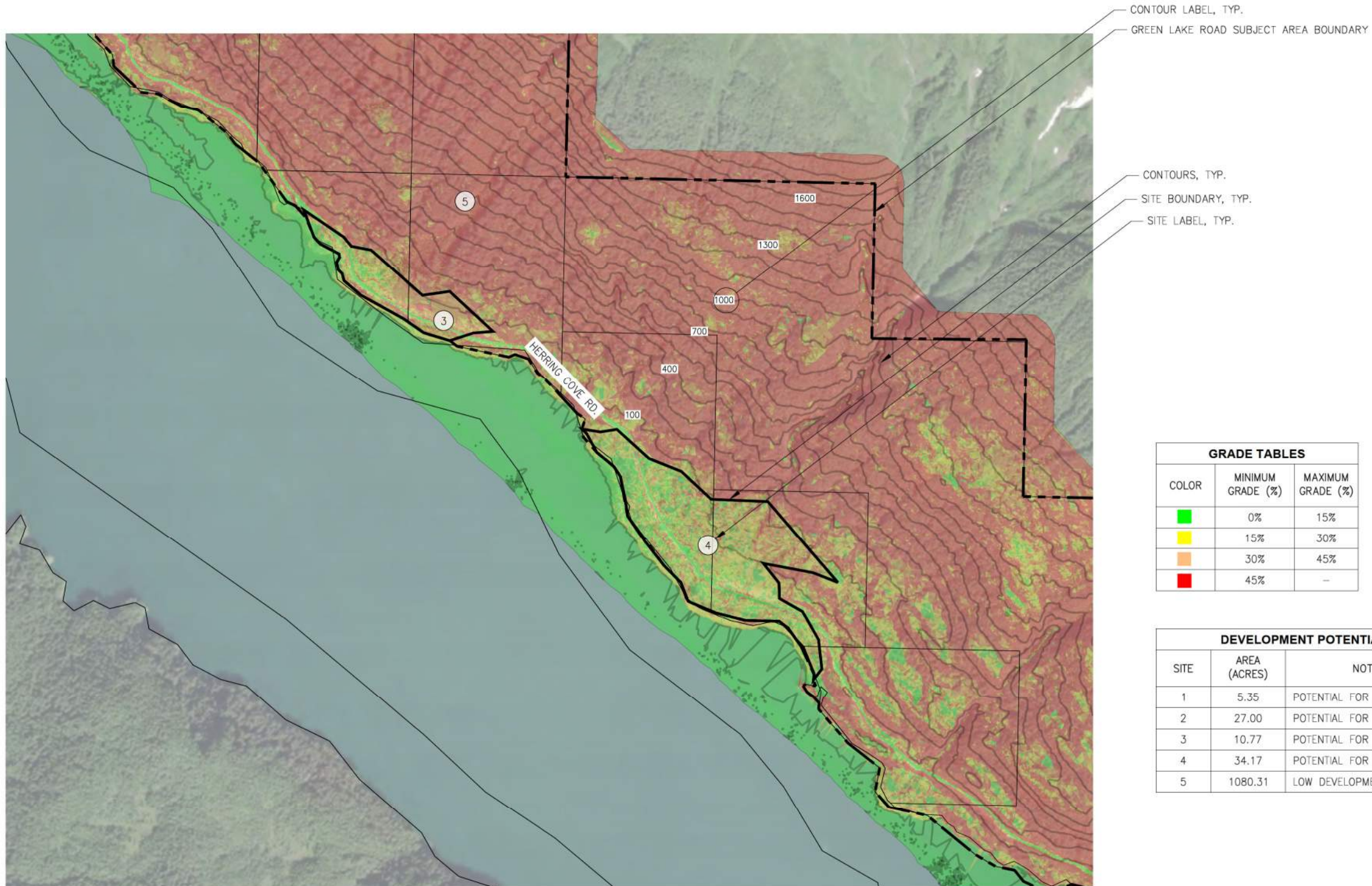
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CBS PROJECT #XXXX**

SHEET TITLE:

GREEN LAKE ROAD - 1

PND PROJECT #: 242091 C.A.N. NO.: AECC250

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GREEN LAKE - PART 2
TOTAL SUBJECT AREA: 1157.60 ACRES

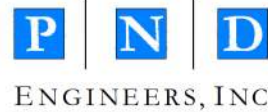


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SHEET TITLE:

GREEN LAKE ROAD - 2

PND PROJECT #: 242091 C.A.N. NO.: AECC250

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SITE BOUNDARY, TYP.
SITE LABEL, TYP.
OSPREY STREET SUBJECT AREA BOUNDARY
PROPERTY LINE, TYP.



OSPREY STREET
TOTAL SUBJECT AREA: 8.12 ACRES

GRADE TABLES		
COLOR	MINIMUM GRADE (%)	MAXIMUM GRADE (%)
■	0%	15%
■	15%	30%
■	30%	45%
■	45%	—

DEVELOPMENT POTENTIAL		
SITE	AREA (ACRES)	NOTES
1	1.04	POTENTIAL FOR DEVELOPMENT
2	1.42	LOW DEVELOPMENT POTENTIAL



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CBS PROJECT #XXXX

SHEET TITLE:
OSPREY STREET

PND PROJECT #: 242091 C.A.N. NO.: AECC250

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