STATE OF CALIFORNIA — FISH AND GAME COMMISSION
APPLICATION FOR LEASE OF STATE WATER BOTTOMS FOR AQUACULTURE

Item	Applicant information
Applicant name	**Santa Barbara Community Kelp Farm (SBCKF)**
Form of ownership	Joint application of two corporations: Santa Barbara Mariculture and Kelp Ark
Authorized officers	Bernard Friedman, President — Santa Barbara Mariculture Sergey Nuzhdin, President — Kelp Ark
Project contact (Kelp Ark)	Kevin Gaines
Addresses	Santa Barbara Mariculture: [redacted] Santa Barbara, CA 93111 Kelp Ark: 2451 Signal St., San Pedro, CA 90731
Phone	Santa Barbara Mariculture: (805) 886-1283 Kelp Ark: (424) 382-7644
Lease term requested	15 years
Lease area	Approximately 20.0 acres, Santa Barbara County (see Exhibits A and B)

Registration / permit	Number	Expiration *(all renewed annually)*
Aquaculture Registration — Santa Barbara Mariculture	[redacted]	December 31, 2026
Aquaculture Registration — Kelp Ark	[redacted]	December 31, 2026
Broodstock Collection Permit — Kelp Ark	[redacted]	March 18, 2027
Kelp Harvesting License — Kelp Ark	[redacted]	December 31, 2026

Species to be cultured

- Golden kombu (*Laminaria farlowii*)
- Giant kelp (*Macrocystis pyrifera*)
- Southern sea palm (*Eisenia arborea*)

All three species are native to the Santa Barbara Channel. Applicant also requests approval to harvest native seaweeds that settle naturally on the growlines, which may include up to a dozen local species. No non-native species will be cultured.

Application is hereby made to the Fish and Game Commission of the State of California for a lease of State water bottoms in the area described in the attached exhibit entitled “Exhibit A – Legal Description,” and as shown on the map attached hereto marked “Exhibit B.” Each exhibit bears the name of this applicant. Such lease will be for the purpose of aquaculture involving the species designated above. In support of this application, the applicant hereby submits the following explanation of the type of operation and cultural practices to be employed (Sections A–D, attached).

Signatures
Signed by the duly authorized corporate officer of each applicant organization.

Signature: Date: November 3, 2026
Print Name: Bernard Friedman Title: President, Santa Barbara Mariculture

Signature: Date: November 3, 2026
Print Name: Sergey Nuzhdin Title: President, Kelp Ark

Filing fee of $500.00 enclosed by check or money order payable to the State of California. Submitted in duplicate.

Attachment — Explanation of Operation (Sections A–D)

Applicant: Santa Barbara Community Kelp Farm (SBCKF)

A. Purpose of Operation

The lease will be used primarily for commercial production of native kelp, with research and development and education as secondary purposes. SBCKF intends to pioneer offshore seaweed farming for Southern California by:

- **Production:** Growing golden kombu, giant kelp and southern sea palm for human food and non-food markets (e.g., animal feed, biostimulants and other non-consumable products). Projected output at full build-out is approximately 45,000 lb wet weight per year.
- **Research and development:** Refining cultivation methods for Southern California conditions (depth, seeding density, species-specific growline configuration). Kelp Ark, a kelp seedbank and research nonprofit, will serve as research partner and seedstock supplier.
- **Education and training:** Hosting workshops and trainings for aspiring seaweed farmers and the public. The ancillary research lines will also be used for educational access.

B. Plan of Development and 5-Year Production Schedule

The farm will be installed in the fall and seeded in the winter after all permits are issued. Kelp is planted in winter and harvested in late spring to early summer each year. Estimated installation cost is $60,000; estimated annual operating cost is $50,000. Production figures are estimates of wet weight and will be refined with experience.

Year	Development activities	Growline in use	Est. harvest (lb wet)
Year 1	Install catenary structure, anchors and boundary buoys; seed Module 1 (10 × 400-ft growlines); first harvest; baseline monitoring of the site and seafloor.	4,000 ft	~15,000
Year 2	Install and seed Module 2; begin ancillary research lines; begin species-specific trials (e.g., weighted lines for giant kelp, deeper lines for golden kombu).	8,000 ft + research lines	~30,000
Year 3	Full production on both modules; up to five ancillary lines on each side of the modules for research and education; first training workshops.	8,000 ft + up to 10 ancillary lines	~45,000
Year 4	Sustain full production; optimize seeding density and harvest timing; expand market channels.	Same as Year 3	~45,000
Year 5	Sustain full production; evaluate additional use of the 20-acre footprint based on results; report findings to the Department.	Same as Year 3	~45,000

C. Type of Cultural Method — Submerged Catenary Longline

- **Site:** Sand bottom in approximately 70 ft of water (mapped as Terrace habitat over Qms marine nearshore and shelf deposits), about 1 mile offshore of Santa Barbara and about 1.5 miles from the Santa Barbara Harbor entrance. The site lies outside the City of Santa Barbara's permitted mooring area and avoids mapped hard-bottom habitat and the outfall pipeline (see Attachments 1 and 2).

- **Structure:** A submerged catenary longline structure spans the lease area. It is held in place by multiple 200-lb steel plow-type anchors and 1-inch co-polymer rope, and floated with plastic buoys. All anchors and their mooring scope will be placed entirely within the lease boundary.
- **Growlines:** Two modules, each of ten 400-ft growlines, give 8,000 ft of growline. The modules occupy about 2 acres of the 20-acre lease. Up to five ancillary single longlines on each side of the modules will be used for research, experimentation and educational access, separate from the commercial modules.
- **Depth:** Growlines are held about 15–20 ft below the surface during normal operation and brought to the surface only for seeding and harvest. Giant kelp lines may need added weight as biomass and buoyancy increase. Golden kombu grows well at depth and may be grown on separate lines.
- **Marking and navigation:** Surface buoys will mark the lease and structure boundaries. Lighting and marking will be installed as required by the U.S. Coast Guard. The layout will keep clear of the adjacent harbor mooring area to the north and the halibut trawling grounds to the south.
- **Seedstock:** Seeded lines will come from Kelp Ark, grown at its culture facility in San Pedro from genetically diverse local stocks collected under Broodstock Collection Permit MAB-113. Each seed batch will use at least 50 male and 50 female gametophytes sampled within 50 km of the farm. This genetic standard was adopted in Alaska about ten years ago and has been informally adopted in Washington and Oregon.
- **Vessels:** Small work boats (20–40 ft) will tend the farm, transiting from Santa Barbara Harbor up to twice daily.
- **Inputs:** No feed, fertilizer or chemicals will be used.

D. Growing Water Classification

The site is prohibited for shellfish harvesting under California Department of Public Health (CDPH, formerly Department of Health Services) sewage-spill notices for the area, and is unclassified for edible seaweed.

The Santa Barbara sewage outfall lies about 0.5 mile south of the site. Before any sale for human consumption, harvested kelp will be tested for heavy metals (including inorganic arsenic, cadmium, lead and mercury), iodine and microbial contaminants by an accredited laboratory, and will meet all applicable CDPH food-safety requirements. Product that does not meet food standards will go only to non-consumable markets.

EXHIBIT A — LEGAL DESCRIPTION

Legal description of the proposed State water bottom lease for the cultivation of golden kombu (*Laminaria farlowii*), giant kelp (*Macrocystis pyrifera*) and southern sea palm (*Eisenia arborea*) by **Santa Barbara Community Kelp Farm (SBCKF)**.

LOCATION

All that area of State water bottoms lying offshore of the City of Santa Barbara, Santa Barbara County, State of California, described as follows:

Beginning at Santa Barbara Light (U.S. Coast Guard Light List No. 195), located at 34°23'47.004" North latitude, 119°43'21.539" West longitude, as shown on U.S. Department of Commerce, National Oceanic and Atmospheric Administration Nautical Chart No. 18725; thence North 83°18'59" East, 18,353 feet (3.48 miles) to the TRUE POINT OF BEGINNING (Pin 1), located at 34°24'08.08" North latitude, 119°39'44.00" West longitude;

thence North 85°31'08" East, 1,074 feet to Pin 2, located at 34°24'08.91" N, 119°39'31.22" W;

thence South 09°05'51" East, 811 feet to Pin 4, located at 34°24'00.99" N, 119°39'29.69" W;

thence South 85°37'45" West, 1,088 feet to Pin 3, located at 34°24'00.17" N, 119°39'42.63" W;

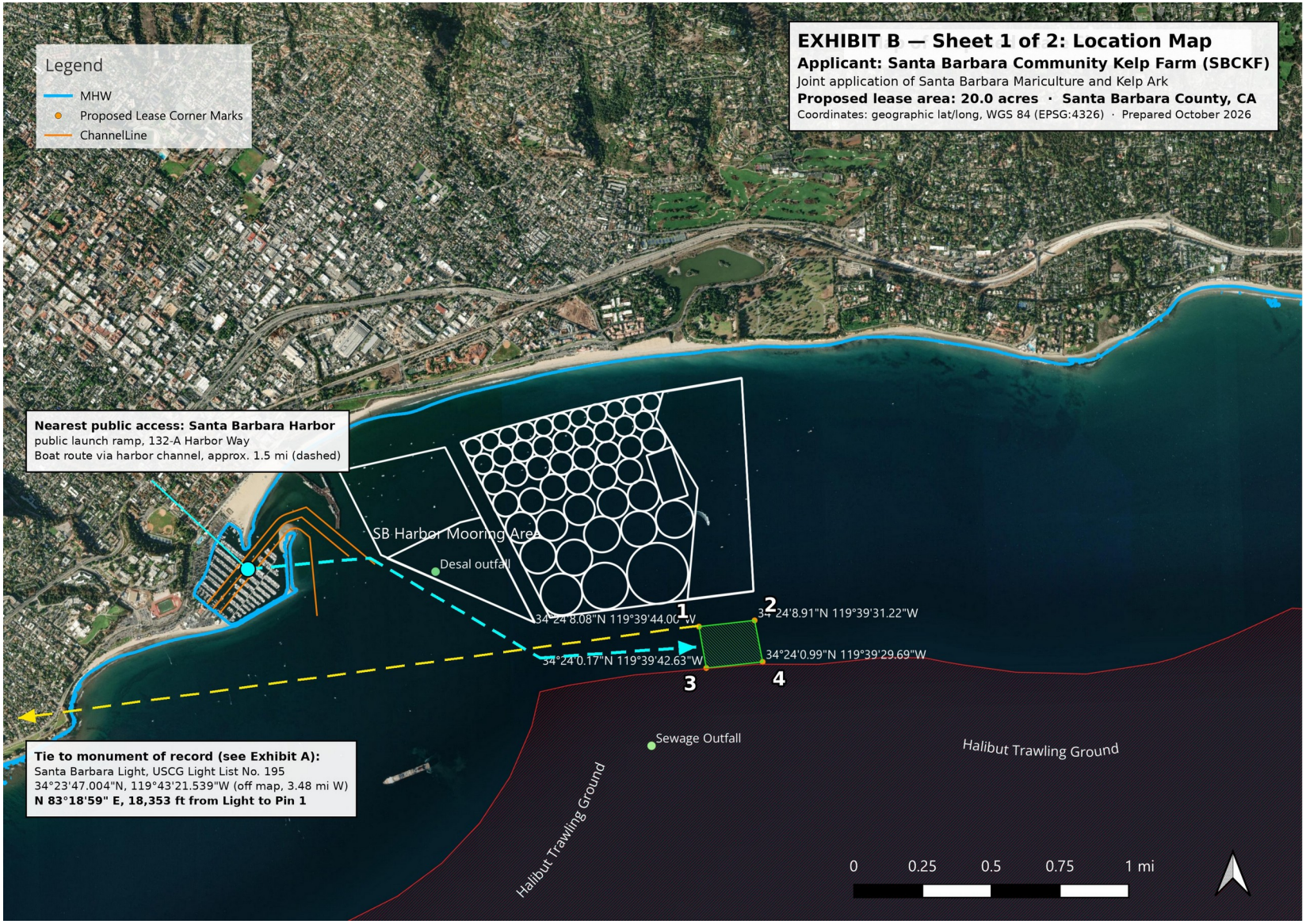
thence North 08°10'10" West, 808 feet to the TRUE POINT OF BEGINNING.

Area: 20.0 acres (approximately 872,400 square feet), more or less.

Corner	Latitude (N)	Longitude (W)
Pin 1	34°24'08.08"	119°39'44.00"
Pin 2	34°24'08.91"	119°39'31.22"
Pin 4	34°24'00.99"	119°39'29.69"
Pin 3	34°24'00.17"	119°39'42.63"

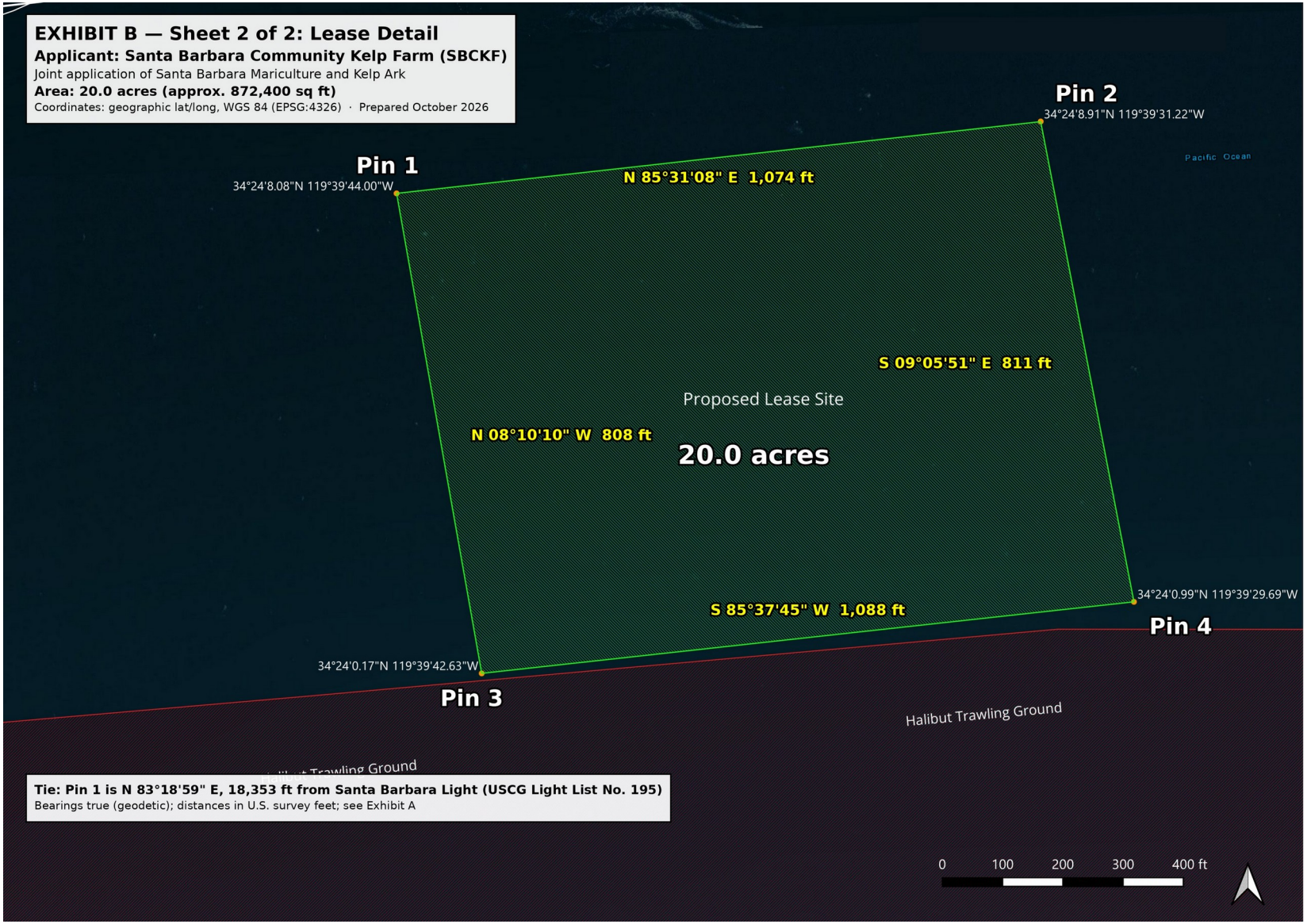
Basis of description: Corner coordinates are geographic latitude/longitude on WGS 84 (EPSG:4326). Bearings are true (geodetic) bearings and distances are in U.S. survey feet, computed on the WGS 84 ellipsoid from the coordinates above. The monument position is from the U.S. Coast Guard Light List, Volume VI (2025).

EXHIBIT B — MAP OF PROPOSED LEASE (Sheet 1 of 2): Location Applicant: Santa Barbara Community Kelp Farm (SBCKF) · 20.0 acres · Santa Barbara County



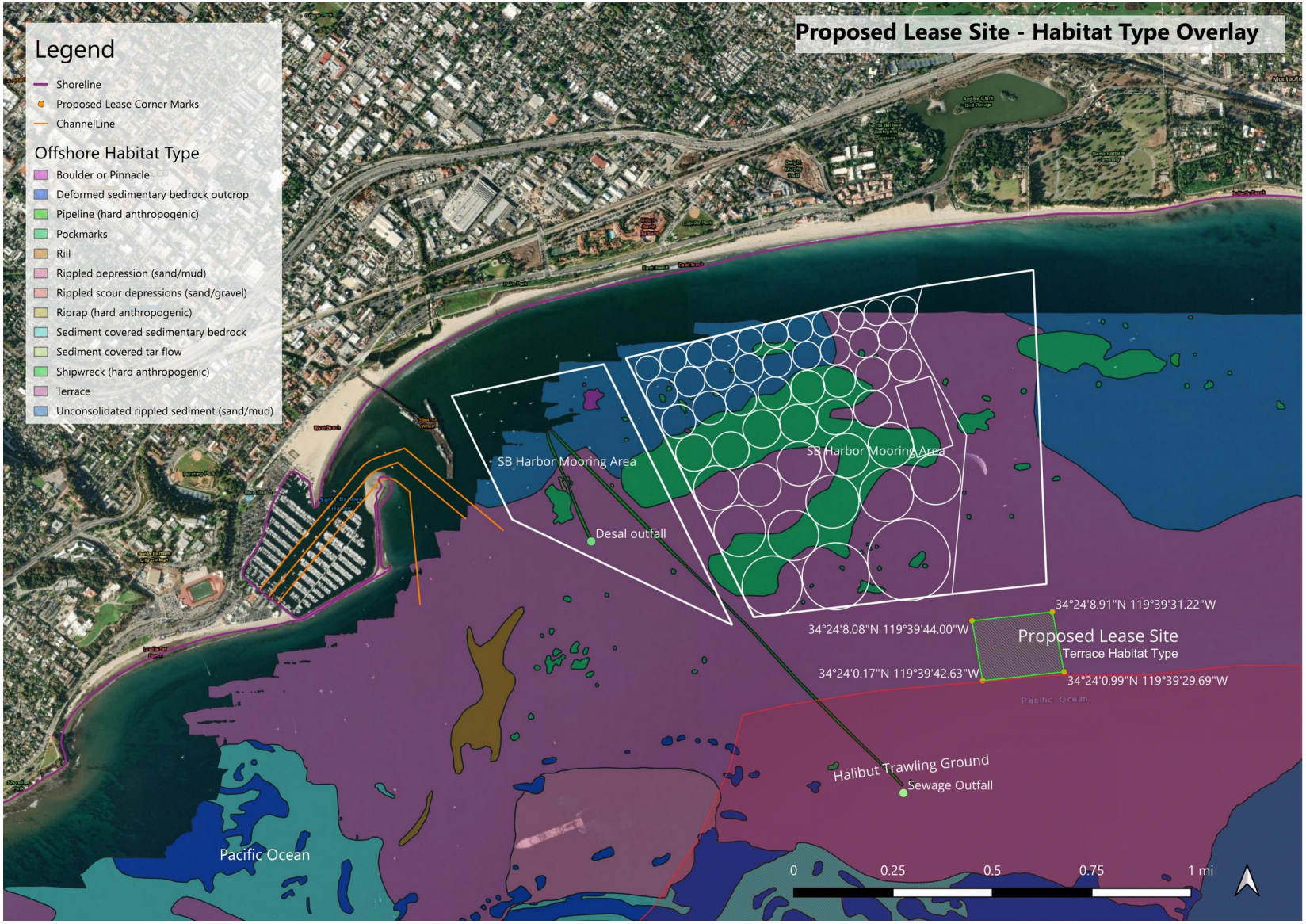
Nearest public access: Santa Barbara Harbor public launch ramp; access to the site is by boat via the harbor channel, approximately 1.5 miles. Shoreline shown is Mean High Water (MHW).

EXHIBIT B — MAP OF PROPOSED LEASE (Sheet 2 of 2): Lease Detail Applicant: Santa Barbara Community Kelp Farm (SBCKF) · 20.0 acres



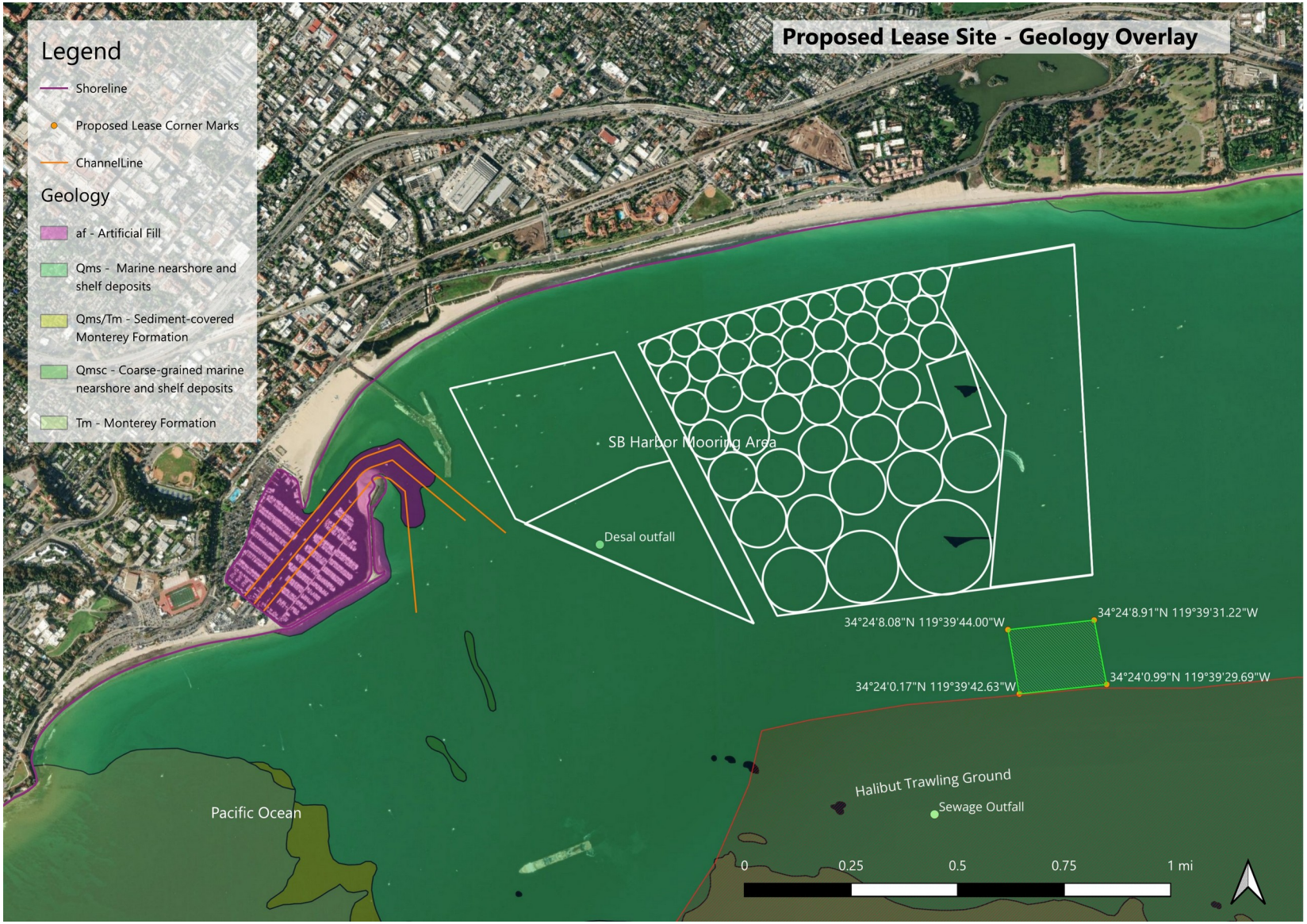
Bearings and distances match Exhibit A. Scale and north arrow as shown.

ATTACHMENT 1 — Offshore Habitat Type at Proposed Lease Site (supporting Section C)



The lease site lies entirely within the Terrace habitat type, away from mapped hard-bottom habitat and the outfall pipeline. Habitat layer: "Habitat, Offshore of Santa Barbara map area." Source: U.S. Geological Survey, California State Waters Map Series—Offshore of Santa Barbara, California (Johnson and others, 2013, Scientific Investigations Map 3281, https://doi.org/10.3133/sim3281); data from USGS Data Series 781, https://pubs.usgs.gov/ds/781/OffshoreSantaBarbara/data_catalog_OffshoreSantaBarbara.html.

ATTACHMENT 2 — Offshore Geology at Proposed Lease Site (supporting Section C)



The lease site lies entirely within Qms (marine nearshore and shelf deposits), a soft-sediment seafloor suited to plow-type anchors. Geology layer: "Offshore Geology and Geomorphology, Offshore of Santa Barbara map area." Source: U.S. Geological Survey, California State Waters Map Series—Offshore of Santa Barbara, California (Johnson and others, 2013, Scientific Investigations Map 3281, https://doi.org/10.3133/sim3281); data from USGS Data Series 781, https://pubs.usgs.gov/ds/781/OffshoreSantaBarbara/data_catalog_OffshoreSantaBarbara.html.