State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Boating and Ocean Recreation
Honolulu, Hawaii 96819

October 26, 2018

Chairperson and Members
Board of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

Land Board Members:

SUBJECT: APPROVE INSTALLATION OF TWO NEW OFFSHORE MOORINGS OUTSIDE OF A DESIGNATED OFFSHORE MOORING AREA, KAUNOLU BAY AND HUAHAWAI BAY, ISLAND OF LANAI, FOR LANAI RESORTS, LLC (dba PULAMA LANAI). CONCUR THAT THE ISSUANCE OF A REVOCABLE PERMIT FOR THIS PROJECT WILL PROBABLY HAVE MINIMAL OR NO SIGNIFICANT EFFECT ON THE ENVIRONMENT AND ACCEPT THE FINDING OF NO SIGNIFICANT IMPACT.

REQUEST

The Division of Boating and Ocean Recreation ("DOBOR") is requesting that the Board of Land and Natural Resources ("Board") approve the installation of two (2) new offshore moorings off the south shore of the Island of Lanai. One mooring is proposed to be installed within Kaunolu Bay and the other is proposed within Huawai Bay, both of which are not established offshore mooring areas as defined in HAR 13-235. As required by HAR 13-235-9, any applicant requesting to moor a vessel outside of an established offshore mooring area must obtain approval from the Board.

The applicant, Lanai Resorts, LLC dba Pulama Lanai ("Applicant") is requesting to install the two (2) new offshore moorings along the south shore of the island of Lanai for use as day-use moorings.

PERMITS AND COMPLIANCE WITH STATE AND FEDERAL LAW:

In order to comply with Federal Law (Section 10 of the Rivers and Harbors act of 1899), DOBOR is requiring that all offshore moorings under their jurisdiction obtain a permit from the U.S. Army Corps of Engineers ("ACOE"). In addition, to ensure that the mooring system is structurally sound, DOBOR is requiring that all offshore mooring permittees submit an Offshore Mooring Installation Plan, prepared by a licensed structural engineer, for approval.

The Applicant has obtained a Nationwide Permit Verification from the ACOE authorizing the installation and use of the proposed moorings. The applicant has also obtained a Section 401 Water Quality Certification from the Department of Health, Clean Water Branch, which is required for all new offshore moorings. A Mooring Installation Plan, prepared by a licensed structural engineer, has also been submitted to and approved by DOBOR Engineering Branch. The ACOE Permit and approved Mooring Installation Plan are also attached with Exhibit A.

In accordance with HAR 13-235-6, the National Marine Fisheries Service (NMFS) and DLNR,

Item J-2
Division of Aquatic Resources (DAR) must determine whether an offshore mooring is detrimental to the habitat or spawning ground of marine life. Through the ACOE permitting process, NMFS has been consulted and determined the offshore mooring has no detrimental effect to the habitat or spawning ground of marine life. DAR has also been consulted and concurred that the offshore mooring has no detrimental effect to the habitat or spawning ground of marine life.

ENVIRONMENTAL ASSESSMENT:

The Applicant has prepared a Final Environmental Assessment (FEA) and issued a Finding of No Significant Impact (FONSI) in accordance with HRS Chapter 343 and HAR Chapter 11-200. A copy of the FEA and FONSI are available on the Office Environmental Quality Control’s website at the following link:


RECOMMENDATION:

That the Board:

1. Concur that the issuance of a revocable permit for this project will probably have minimal or no significant effect on the environment and accept the finding of no significant impact.

2. Approve the installation of two (2) proposed offshore moorings located in Kaunolu Bay and Huawai Bay off the south shore of the Island of Lanai, which are located outside of an established offshore mooring area.

Respectfully Submitted,

EDWARD R. UNDERWOOD, Administrator
Division of Boating & Ocean Recreation

APPROVED FOR SUBMITTAL:

SUZANNE D. CASE, Chairperson
Board of Land and Natural Resources

Attachment:
A. Applicant’s request for approval of mooring, approved Mooring Installation Plans, Nationwide Permit Verification Letter from Army Corps of Engineers
July 31, 2018

Mr. Finn McCall
DLNR-DOBOR
4 Sand Island Access Road
Honolulu, HI 96819
By Federal Express

Re: Two Offshore Private Moorings South of the Island of Lāna‘i

Dear Finn:

This letter is our request for your submission to the Board of Land & Natural Resources (BLNR) for approval for installation of two private submerged moorings that we would like to place south of the island of Lāna‘i that are outside of a designated offshore DOBOR mooring area. The two mooring locations are near Moku Naio (referred to as ‘Coral Garden’) and near Po‘opo‘o (referred to as ‘Ridgeline’).

The following documents are included to show compliance with the applicable federal and state laws focusing on safety and impact to natural resources according to Section 10 of the Federal Rivers and Harbors Act of 1899 and Hawai‘i Administrative Rule, Section 13-231-2:

- The Environmental Assessment (EA) was completed, with DOBOR issuing a FONSI, see attached September 21, 2017 letter from Edward Underwood;
- The “Mooring Installation Plan & Underwater Photos” completed by Sea Engineering, see attached July, 2018 report;
- The U.S. Army Corps of Engineers Provisional Nationwide Permit Verification was obtained, see March 15, 2018 letter from Tunis W. McElwain;
- The Department of Health, Clean Water Branch Section 401 WQC certification, see July 12, 2018 letter from Alec Wong, which was a condition of the Army Corps verification.
- The Hawai‘i Coastal Zone Management Permit was obtained, see February 14, 2018 letter from Leo R. Asuncion; and

We are requesting a BLNR hearing with a DOBOR recommendation for approval. Would you let us know if this is possible or if you need any additional information? Mahalo!

Me ke aloha pumehana
With warm aloha,

[Signature]

Lynn P. McCrory
Senior Vice President of Government Affairs

C: Kurt Matsumoto (w/enclosures)
   Peter Young (w/enclosures)
   Ed Underwood (w/enclosures)

Enclosures (5)
September 21, 2017

Director Scott Glenn
Office of Environmental Quality Control, Department of Health
State of Hawai‘i
235 S. Beretania Street, Room 702
Honolulu, Hawai‘i 96813

Re: Final Environmental Assessment for Exclusive Permanent Moorings off Mānele Harbor and Exclusive Day Use Dive Site Moorings Lāna‘i South Shore

Dear Director Glenn:

With this letter, the Division of Boating and Ocean Recreation of the Hawai‘i Department of Land and Natural Resources (DLNR-DOBOR) hereby transmits the final environmental assessment and finding of no significant impact (FEA-FONSI) for the Exclusive Permanent Moorings off Mānele Harbor and Exclusive Day Use Dive Site Moorings Lāna‘i South Shore situated seaward of Mānele Boat Harbor and Lāna‘i South Shore, on the island of Lāna‘i for publication in the next available edition of the Environmental Notice.

The Applicant has included copies of public comments and the corresponding responses from the applicant that were received during the 30 day public comment period on the draft environmental assessment and anticipated finding of no significant impact (DEA-AFONSI).

Enclosed is a completed OEQC Publication Form, two copies of the FEA-FONSI, an Adobe Acrobat PDF file of the same, and an electronic copy of the publication form in Word format.

If there are any questions, please contact me at (808) 587-1966.

Sincerely,

Edward Underwood, Administrator

Enclosures
DEPARTMENT OF THE ARMY
HONOLULU DISTRICT, U.S. ARMY CORPS OF ENGINEERS
FORT SHAFTER, HAWAII 96855-5440

June 11, 2018

SUBJECT: Nationwide Permit Verification for Mooring Station Installations in Kaunolu Bay, Island of Lanai, Hawaii, Department of the Army File No. POH-2018-00038

Mr. Kurt Matsumoto
Lanai Resorts, LLC
733 Bishop Street, Suite 2000
Honolulu, Hawaii 96813

Dear Mr. Matsumoto:

The Honolulu District, U.S. Army Corps of Engineers (Corps) has completed its review of your Pre-Construction Notification dated January 31, 2018, requesting authorization for the proposed construction/placement of two mooring buoys of which one buoy would be placed in Kaunolu Bay (20.7362 N, 156.9675 W.) and the other would be placed in Huawai Bay (20.7348 N., 156.9154 W.). Both are located in the vicinity of Lanai, Hawaii. Please reference Department of the Army (DA) file number POH-2018-00038, in any future correspondence related to this permit.

This letter verifies your activity complies with the terms and conditions of Nationwide Permit (NWP) #9, (Structures in Fleeting and Anchorage Areas) issued on March 19, 2017 (82 FR 1860, January 6, 2017). This NWP verification letter is being issued pursuant to Section 10 of the Rivers and Harbors Act of 1899 for work or structures in, over, under or affecting navigable waters of the U.S. You are authorized to conduct the following work as described below and as depicted on the enclosed drawings (Enclosure 1):

Install two single-point mooring stations. Each designed for one (1) 41-foot mono-hull vessel and one (1) 46-foot catamaran vessel. The mooring stations will consist of a 4,000-lb pre-cast concrete anchor block attached to a 24-inch subsurface float. The mooring station at Kaunolu Bay will have a 15-foot storm pendant via 36-feet of ½-inch galvanized chain. The mooring station at Huawai Bay will have a 15-foot storm pendant via 53 feet of ½-inch galvanized chain. The subsurface floats will be located approximately 10 feet below the water surface. Mooring placement will take approximately one (1) day. Materials will be loaded onto a work vessel in Honolulu and transported to the project site.

The mooring anchors will be located at a depth of -46 feet (MLLW) and -63 feet (MLLW) at the Coral Garden and Ridgeline locations, respectively. The mooring stations will have a deadweight anchor consisting of a rectangular block of pre-cast concrete with an approximate weight of 4,000 pounds. The anchors will be 4’x4’x20” with a total footprint of 16-square feet on the
seafloor, which consists of un-colonized rocky marine substrate and sandy seafloor.

In order for this NWP authorization to be valid, you must ensure that the work is performed in accordance with the Nationwide Permit General Conditions, the Honolulu District Regional Conditions (Enclosure 2), and the following project-specific Special Conditions:

1. Pre-Construction Meeting. You must extend an invitation to the Corps to attend a pre-construction meeting to discuss the terms and conditions of this permit. The pre-construction meeting must be scheduled a minimum of 7-days prior to commencement of the authorized work. The pre-construction meeting must be attended by the following individuals, the permittee or duly authorized agent (as identified on your PCN) and your construction contractor. The Corps may attend the pre-construction meeting in person or via teleconference. The intent of the pre-construction meeting is to ensure all parties are aware of the permit terms and conditions and so the Corps may obtain verbal confirmation from the permittee and construction contractor of the ability to comply with the permit terms and conditions. Any modifications to the scope of work must be identified at this meeting so the Corps may determine if the proposed modification requires modification of your permit. To arrange this meeting, contact the reviewing project manager Mr. Tunis McElwain at 808-835-4310 or by email Tunis.W.McElwain@usace.army.mil, and copy the Regulatory Branch email CEPOH-RO@usace.army.mil. If you need additional assistance, contact this office at 808-835-4303 and request a pre-construction conference for the project’s U.S. Army Corps of Engineers permit number POH-2018-00038.

2. At least one week prior to the commencement of any work authorized by this permit, the permittee must advise the project manager, Mr. Tunis McElwain, in writing at:

   U.S. Army Corps of Engineers - Honolulu District
   Building 230, CEPOH-RO
   Attn: Mr. Tunis McElwain
   Fort Shafter, HI 96858-5440

or via email at CEPOH-RO@usace.army.mil, addressed to Mr. Tunis McElwain, of the date the authorized activity will commence and the name and telephone number of all contractors or other persons performing the work. A copy of this permit and drawings must be provided to the contractor and made available to any regulatory representative during an inspection of the project site. The subject line of the message must contain the U.S. Army Corps of Engineers permit number.
3. The permittee must comply with the attached USFWS Pac-SLOPES Activity Best Management Practices to avoid effects to threatened or endangered species (Enclosure 4).

4. Special Condition: Incidents where any individuals of Green Sea Turtle (*Chelonia mydas*), Hawksbill Turtle (*Eretmochelys imbricata*), Loggerhead Sea Turtle (*Caretta caretta*), Hawaiian Monk Seal, (*Monachus schauinslandi*) listed by NOAA Fisheries under the Endangered Species Act appear to be injured or killed as a result of structures in navigable waters of the United States authorized by this NWP shall be reported to NOAA Fisheries, Office of Protected Resources at (301) 713-1401 and the Regulatory Office of the Honolulu District of the U.S. Army Corps of Engineers at (808) 835-4303. The finder should leave the animal alone, make note of any circumstances likely causing the death or injury, note the location and number of individuals involved and, if possible take photographs. Adult animals should not be disturbed unless circumstances arise where they are obviously injured or killed discharge exposure or some unnatural cause. The finder may be asked to carry out instructions provided by NOAA Fisheries, Office of Protected Resources, to collect specimens or take other measurements to ensure that evidence intrinsic to the specimen is preserved.

5. The applicant must install the anchor only in sandy/silty areas devoid of corals, sea grass, and Halimeda algae and arrange for the prevention of the possibility of the mooring line dragging.

6. The applicant must have a plan for the long term maintenance of the mooring and buoy, including complete removal of the mooring and buoy in their entirety upon the end of the applicant's use of the mooring.

7. The applicant will provide USACE and the Division of Boating and Ocean Recreation with an as-built report, including positioning, material consistency, and photographs of the mooring station and its components.

8. The applicant must comply with the project BMP plan.

9. The Permittee and/or their designated contractor(s) must immediately stop work and notify the Corps' District Engineer at (808) 835-4303, and State Historic Preservation Division at (808) 692-8015 within 24 hours if, during the course of conducting authorized work, human burials, cultural resources, or historic properties, as identified by the National Historic Preservation Act, are discovered and may be affected by the work. Failure to stop work in the area of discovery until the Corps can comply with the provisions of 33 CFR 325 Appendix C, the National Historic Preservation Act, and other pertinent laws and regulations could result in a violation of state and federal laws. Violators are subject to civil and criminal penalties.

10. Turbidity and siltation from project-related work shall be minimized and contained to within the vicinity of the site through appropriate use of effective silt containment devices and curtailment of work during adverse tidal and weather conditions.

11. The authorized work must occur only during low tide.
Verification of your project under this NWP is valid until **March 19, 2022** unless this NWP is modified, reissued, or revoked prior to that date. It is incumbent upon you to remain informed of changes to the NWPs. If the Corps modifies, reissues, or revokes any NWP at an earlier date, we will issue a public notice announcing the changes. Failure to comply with all terms and conditions of this NWP verification invalidates this authorization and could result in a violation of the Clean Water Act and/or Rivers and Harbors Act and subsequent enforcement action. This authorization does not relieve you of the responsibility to obtain any other federal, state, and/or local authorizations required by law.

General Condition #30 requires a signed certification be submitted to this office upon completion of work. Therefore, please sign, date and return the enclosed *Compliance Certification* form (Enclosure 3) within 7 days of completion of work to the email address specified below or to the mailing address indicated on the letterhead above.

This letter of authorization does not obviate the necessity to obtain any other Federal, State, or local permits, which may be required. Prior to the initiation of any construction, projects qualifying for this NWP must receive a Section 401 Water Quality Certification (WQC) (or waiver), issued by the State of Hawaii, Department of Health, Clean Water Branch (DOH-CWB).

Thank you for your cooperation with the Honolulu District Regulatory Program. Should you have any questions related to this authorization, please contact me at (808) 835-4300 or via e-mail at Tunis.W.McElwain@usace.army.mil. You are encouraged to provide comments on your experience with the Honolulu District Regulatory Office by accessing our web-based customer survey form at [http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0](http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0).

Sincerely,

![Signature]

Tunis W. McElwain
Chief, Regulatory Branch

Enclosures

CC:
USCG (John Bannon, Jason Olney)
State of Hawaii Department of Health, Clean Water Branch (DOH-CWB)
State of Hawaii Office of Planning, Coastal Zone Management Program (Hawaii CZM Program)
Hookuleana, LLC (Peter Young, Agent)
PHREE CREATIONS, LLC.

GENERAL

A. WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE BUILDING CODE AS STATED BELOW. HOWEVER, WHERE REFERENCE IS MADE TO PERFORMANCE CONFORMING TO OTHER STANDARDS THE MORE STRINGENT SHALL APPLY.

1. COUNTY OF MAUI, AMENDED IRC, 2005

B. THE CONTRACTOR SHALL TAKE FIELD MEASUREMENTS AND VERIFY FIELD CONDITIONS AND SHALL COMPARE SUCH FIELD MEASUREMENTS AND CONDITIONS WITH THE DRAWINGS BEFORE COMMENCING WORK. REPORT IN WRITING TO THE ENGINEER ALL INCONSISTENCIES AND OMISSIONS.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR METHODS OF CONSTRUCTION, WORKMANSHIP AND JOB SAFETY.

D. DETAIL NOTES AS TYPICAL IN THE STRUCTURAL DRAWINGS SHALL APPLY IN ALL CONDITIONS UNLESS SPECIFICALLY SHOWN OR NOTED.

E. PRODUCT DATA REQUIRED BY THESE NOTES SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.

DESIGN CRITERIA

A. MINIMUM DESIGN CRITERIA FOR MOORING IN ACCORDANCE WITH UFC 4-159-03

1. TYPE III WIND-ON-WIND MOORING

B. WIND DESIGN DATA

1. BASIC WIND SPEED 40 MPH

C. CURRENT

1. MAX CURRENT 1.0 KNOTS

D. WAVES AND TIDE VARIATIONS

1. PEAK WAVE HEIGHT: 2 FEET OR LESS

E. DESIGN VESSEL

1. LENGTH: 46'-0"

2. WIDTH: 14'-0"

3. DEADWATER: 4'-0"

4. WEIGHT: 650 TON TONS

* THIS MOORING SHALL ONLY BE USED IN ACCORDANCE WITH THE HAWAII ADMINISTRATIVE RULES SET FORTH IN 18-16-2, 20.2.1.7 REV. MOORING, OF MOORING OF THE DESIGN VESSEL, WHEN WIND AND SEA CONDITIONS EXCEED THOSE SPECIFIED IN THE DESIGN CRITERIA ARE PROHIBITED. THE MOORING IS DESIGNED FOR VESSELS ONLY. ANY CHANGES IN MOORED VESSEL REQUIRE RE-ANALYSIS.

F. HARDWARE, ROPES, AND MOORING COMPONENTS

A. ALL CHAIN AND HARDWARE SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A153.

B. THimbles OR CHUTE DAMS SHALL BE USED WITH ROPES AT ALL POINTS OF CONTACT.

C. SUBMIT PRODUCT DATA OF ALL CHAIN, HARDWARE, ROPE, AND MOORING COMPONENTS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.

MOORING HARDWARE, MAINTENANCE AND INSPECTION

A. THE VESSEL OWNER SHALL BE RESPONSIBLE FOR MAINTAINING THE VESSEL’S MOORING HARDWARE. ANY FAILURE RESULTING FROM NON-MAINTAINED COMPONENTS OR UNAUTHORIZED ALTERATIONS TO THE HARDWARE AND CONDITIONS ARISING FROM NORMAL USE SHALL BE THE RESPONSIBILITY OF THE VESSEL OWNER.

B. THE VESSEL OWNER SHALL INSPECT ALL MOORING HARDWARE, ROPE, AND CHAIN FROM SEA FLOOR TO PENDANT FOR SAFETY AND SECURITY NO LESS THAN TWO TIMES PER YEAR. EXAMINATION REPORT/RECORDS SHALL BE KEPT BY VESSEL OWNER AND REPORTED TO HARBORMASTER/DEPPLM AS REQUIRED.

C. THE VESSEL OWNER IS RESPONSIBLE FOR INSTALLING AND MAINTAINING CHAINING GEAR ON ALL MOORING LINES.

ANCHOR BLOCK DETAILS

SCALE: 1/8" = 1'-0"

MOORING PLAN

NOT TO SCALE

MOORING ELEVATION

CONCRETE ANCHOR BLOCK, 5'X5'X5' DETAILED

CONCRETE ANCHOR BLOCK, 5'X5'X5' DETAILED

DESIGNER

LYNN McCORRY

373 BISHOP ST SUITE 2000
KULA, HI 96790
PHONE: (808) 237-2212

GPS COORDINATES: 21.786755, 156.817044

X" GALVANIZED BOLT ANCHOR SHACKLE WITH GALVANIZED WIRE

EYE SPICE W/TUBE

1/8" DOUBLE BRAIDED NYLON ROPE, 20' LONG

X" GALVANIZED BOLT ANCHOR SHACKLE WITH GALVANIZED WIRE

3/4" FORGED EYE-EYE SHACKLE

3/4" GALVANIZED CHAIN, 53' LONG

3/4" GALVANIZED CHAIN LOOP, HAMMER FORGED EYE-HOLE IN ANCHOR BLOCK

CONCRETE ANCHOR BLOCK, 5'X5'X5' DETAILED

SEAFLOOR

ANCHOR BLOCK CENTER OF BLOCK

3/4" PVC THROUGH CENTER OF BLOCK

3/4" PVC THROUGH CENTER OF BLOCK

4-1/2" BASE TOP AND BOTTOM

4-1/2" BASE TOP AND BOTTOM

1/2" PVC STRIPS AT 8"
GENERAL
A. WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE BLDG CODE AS STATED BELOW. HOWEVER, WHERE REFERENCE IS MADE TO PERFORMANCE CONFORMING TO OTHER STANDARDS THE MORE STRINGENT SHALL APPLY.
1. COUNTY OF MAUI AMENDED BCC 200
B. THE CONTRACTOR SHALL TAKE FIELD MEASUREMENTS AND VERIFY FIELD CONDITIONS AND SHALL COMPARE SUCH FIELD MEASUREMENTS AND CONDITIONS WITH THE DRAWINGS BEFORE COMMENCING WORK. REPORT IN WRITING TO THE ENGINEER ALL INCONSISTENCIES AND OMISSIONS.
C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR METHODS OF CONSTRUCTION, WORKMANSHIP AND JOB SAFETY.
D. DETAILS NOTED AS TYPICAL ON THE STRUCTURAL DRAWINGS SHALL APPLY IN ALL CONDITIONS UNLESS SPECIFICALLY SHOWN OR NOTED.
E. PRODUCT DATA REQUIRED BY THESE NOTES SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.

DESIGN CRITERIA
A. MINIMUM DESIGN CRITERIA FOR MOORING IN ACCORDANCE WITH UFC 4-158-05.
1. TYPE 1 MILD-WETHER MOORING
2. WIND DESIGN DATA
   1. BASIC WIND SPEED 40 MPH
   2. CURRENT
   3. MAX CURRENT: 1 Knot
   4. WAVES AND TIDE VARIATIONS
   5. PEAK WAVE HEIGHT: 2 FEET OR LESS

B. DESIGN VESSEL
   1. LENGTH: 45'-0"
   2. WIDTH: 14'-0"
   3. DRAFT: 4'-0"
   4. KEEL: 5.5 FEET TANG

   * THIS MOORING SHALL ONLY BE USED IN ACCORDANCE WITH THE MAIN ADMINISTRATIVE RULES SET FORTH IN §13-217, AND ORIENTED MOORING OR MOORING OF THE DESIGN VESSEL WHEN WIND AND SEA CONDITIONS EXCEED THOSE SPECIFIED IN THE DESIGN CRITERIA ARE NOT PERMITTED. THE MOORING IS DESIGNED FOR DESIGN VESSEL ONLY.

C. CHAIN, HARDWARE, ROPE, AND MOORING COMPONENTS
   A. ALL CHAIN AND HARDWARE SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH AWS A153.
   B. TIMBERS OR CHAIN GUARDS SHALL BE USED WITH CHAINS AT ALL POINTS OF CONTACT.
   C. SUBMIT PRODUCT DATA OF ALL CHAINS, HARDWARE, ROPE, AND MOORING COMPONENTS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.

MOORING HARDWARE, MAINTENANCE, AND INSPECTION
A. THE VESSEL OWNER SHALL BE RESPONSIBLE FOR MAINTAINING THE VESSEL'S MOORING HARDWARE, ANY FAILURE RESULTING FROM NON-MAINTAINED COMPONENTS OR UNINTENDED CHANGE OF THE MOORING RESULTING FROM NORMAL USE SHALL BE THE RESPONSIBILITY OF THE VESSEL OWNER.
B. THE VESSEL OWNER SHALL INSPECT ALL MOORING HARDWARE, ROPE, AND CHAINS FROM SEA FLOOR TO PENDANT FOR SAFETY AND SECURITY NO LESS THAN TWO TIMES PER YEAR. INSPECTION REPORT/RECORDS SHALL BE KEPT BY VESSEL OWNER AND REPORTED TO MARINER/MASTER/OWNER AS REQUIRED.
C. THE VESSEL OWNER IS RESPONSIBLE FOR INSTALLING AND MAINTAINING CHAINING CLEAT ON ALL MOORING LINES.

ANCHOR BLOCK DETAILS
SCALE: 1" = 1'-0"

MOORING ELEVATION
NOT TO SCALE