

WILDBLUE MPD

ADMINISTRATIVE AMENDMENT REQUEST STATEMENT

Lake Bank Stabilization/Protection Revision – WildBlue Recreation Lakes

Prior Approvals: ADD2019-00071 | ADD2018-10053 | ADD2017-00180 | Z-15-021

I. PURPOSE OF REQUEST

This Administrative Amendment seeks approval to authorize a rip rap armor and marine mattress shoreline stabilization system option as an alternate stabilization technique for all existing WildBlue recreational lakes (WildBlue Lake North, WildBlue Lake South, and Blue Lake) (as shown in Exhibit A) within the WildBlue Master Planned Development (MPD).

Currently, the rip rap armor and marine mattress system is proposed for implementation along portions of WildBlue Lake North and the north portion of Blue Lake to reestablish shoreline retaining wall destroyed by Hurricane Ian. However, approval is also requested for its use MPD-wide to provide this option of shoreline protection for future shoreline stabilization needs, consistent with prior approvals that authorize other stabilization techniques on a system-wide basis. The proposed amendment allows for the use of an alternate stabilization technique consisting of a marine mattress system with rock aprons and rock-armored slope, in place of previously approved methods in order provide a higher level of lake shoreline protection from future extreme weather events.

II. BACKGROUND & JUSTIFICATION

A. Prior Approvals

The WildBlue MPD shoreline stabilization framework has evolved through a series of administrative amendments:

- ADD2017-00180: Approved riprapped breakwater with littoral shelf stabilization.
- ADD2018-10053: Authorized a retaining wall as an alternate stabilization technique.
- ADD2019-00071: Approved rock backfills (riprap revetment) in conjunction with retaining walls, specifically applied to WildBlue Lake South, with doubled littoral planting requirements.

B. Existing Conditions

Consistent with approvals all retaining walls, associated rock backfills, and littoral planting along WildBlue recreation lakes have been installed. Shoreline conditions have

been severely impacted by Hurricanes Ian, Helene, and Milton, resulting in significant damage to the lake banks and littoral shelves.

C. Need for Alternate Stabilization

As a result of recent hurricane activities, the WildBlue community desires a higher level of protection to withstand potential future extreme weather events. To provide an increased level of shoreline protection, integrity, safety, and erosion control, the applicant proposes to remove the previously existing damaged retaining wall in affected locations and replace it with a marine mattress and rock armor stabilization system as described below.

III. PROPOSED ALTERNATIVE

A. The proposed shoreline armor method includes the following components:

- Removal of existing retaining walls in the affected sections of shoreline. Note in some cases the retaining wall remnants may remain in place below the proposed rock armor.
- Installation of a marine mattress (constructed with geotextile filter fabric and rock).
- Placement of armor stone (riprap revetment) material over the marine mattress.
- Application of a rock apron over the system to match the adjacent finished grades and slopes.

This technique is similar to the previously approved riprap and breakwater stabilization methods, and is engineered to dissipate wave energy, prevent shoreline scour, and increase structural integrity of the recreation lakes shoreline to withstand wind, wave, and water forces to a higher degree.

B. Construction Notes:

- All materials above the lake bank from the prior method will be carefully removed and replaced as necessary to accommodate the new system.
- The marine mattress and rock components will be installed flush with the existing post Hurricane Ian shoreline.
- Geotextile filter fabric will be placed under the apron to ensure stabilization and proper drainage.
- Finished grades will blend with existing shoreline conditions to ensure continuity of form and function.
- Existing littoral plants that are disturbed from the construction and installation of the marine mattress system shall be annotated and relocated to either locations along the recreation lake or in the stormwater management

pretreatment systems wet and dry detention areas. This action is to ensure that required littoral and compensatory quantities of littorals are maintained based on all pre-Hurricane Ian approved development orders.

- This water management system is unique in that the recreation lakes provide stormwater runoff attenuation only. The recreation lakes are not intended to provide water quality treatment and stabilization is provided by the rip rap armor and marine mattress. All water quality treatment is provided in separate stormwater management system areas prior to discharge to the recreational lakes. Therefore, it is more appropriate and beneficial to provide littoral plantings in pretreatment water management area.

IV. MPD-WIDE AUTHORIZATION

- A. This amendment seeks approval for the marine mattress system as a recognized alternate stabilization technique for all WildBlue recreation lakes, including WildBlue Lake North and Blue Lake, should conditions in those areas require future installation.
- B. In conjunction with this proposed amendment, two limited development orders are being requested for two specific shoreline segments that are currently exposed and vulnerable to further erosion. These areas will be stabilized and reestablished using a more resilient shoreline protection system, where the marine mattress is a viable solution. Detailed locations, cross sections, and littoral management will be provided accordingly.
- C. ADD2019-00071
 - This amendment was approved for WildBlue Lake South only. This shoreline stabilization technique provided a combination of a retaining wall and double littorals and remains valid.
 - This proposed amendment supplements—not replaces—prior approvals by adding the marine mattress as an additional option in the future.
 - WildBlue Lake South is considerable smaller in size compared to WildBlue Lake North and Blue Lake and therefore may not require the same level of shoreline stabilization at the time of this proposed amendment. The existing retaining wall and double littoral plantings remains stable and is not under review for portions of its lake stabilization techniques used at this time.

V. MASTER CONCEPT PLAN (MCP)

- A. Attached in this proposed amendment are new and additional exhibit sheets that will identify the locations and types of lake bank stabilization techniques in current use, and the proposed areas (Exhibit A).
- B. Cross section designs for the proposed optional marine mattress system (Exhibit B).

- C. Further details of littoral and compensatory littoral planting requirements due to the marine mattress installation will be provided on the appropriate development orders plans.

VI. CODE CONSISTENCY STATEMENT

This amendment does not propose changes to:

- Density or intensity
- Open space calculations
- Natural preserve areas
- Required buffers
- Building height
- Public infrastructure
- Littoral and compensatory planting quantities
 - Overall littoral planting obligations established for the MPD and in ADD2019-00071 specifically for WildBlue Lake South remain unchanged.
 - Littoral planting shelves areas disturbed by construction will be restored or replanted as needed and will be represented in appropriate development orders.
 - A table of the approved WildBlue MPD recreation lakes required littorals and compensatory littoral plantings per development orders are below:

Name of Lake	Shoreline Linear Feet	Littorals Required (per §10-418)	Compensatory Littorals Required (per §10-418)
WildBlue Lake North	35,964	44,955	89,910
WildBlue Lake South	10,859	13,574	27,148
Blue Lake	18,150	22,688	45,375

As such, the request remains consistent with LDC §34-380 pertaining to administrative zoning approvals. The proposed increased shoreline protection supports the continued implementation of the approved Master Concept Plan while addressing site-specific conditions and an increase level of security (protection) of the larger lake shoreline and enhancing public health, safety, and welfare.

VII. LAKE MANAGEMENT PLAN UPDATE

The 2018 Lake Management Plan will be updated to:

- Incorporate the marine mattress system as a recognized stabilization option.
- Add maintenance and inspection protocols specific to the mattress system.

- Confirm continued HOA/CDD responsibility for littoral plant survivability and storm-related repair.

VIII. CONCLUSION

The proposed rip rap armor and marine mattress stabilization method in this amendment:

- Expands the shoreline stabilization toolbox for WildBlue MPD, ensuring flexibility to respond to changing conditions.
- Addresses immediate needs at WildBlue Lake North and Blue Lake while providing future authorization for WildBlue Lake South and the remaining portions of WildBlue Lake North and Blue Lake.
- Maintains consistency with the prior approved resolution and amendments.
- Enhances long-term resiliency of the WildBlue recreation lakes, protecting residents, infrastructure, and natural systems.
- Complies with all applicable development regulations and LDC criteria.

Approval of this amendment will allow for increased shoreline protection within the WildBlue MPD, while ensuring the environmental integrity and long-term resilience of WildBlue recreation lakes.