## SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

# FORM 8-A

# FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

## BIMINI MORTGAGE MANAGEMENT, INC.

(Exact Name of Registrant as Specified in Its Charter)

Maryland

(State of Incorporation or Organization)

72-1571637

(I.R.S. Employer Identification Number)

3305 Flaming Drive, Suite 100 Vero Beach, Florida

(Address of Principal Executive Offices)

**32963** (Zip Code)

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A. (c), check the following box.

If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A. (d), check the following box. o

Securities Act registration statement file number to which this form relates: 333-113715

Securities to be registered pursuant to Section 12(b) of the Act:

Title of Each Class to be so Registered

Name of Each Exchange on Which Each Class is to be Registered

Class A Common Stock, par value \$.001 per share

The New York Stock Exchange

Securities to be registered pursuant to Section 12(g) of the Act:

None

#### INFORMATION REQUIRED IN REGISTRATION STATEMENT

#### ITEM 1. DESCRIPTION OF REGISTRANT'S SECURITIES TO BE REGISTERED.

Incorporated by reference herein is the section entitled "Description of Capital Stock" contained in the Registrant's registration statement on Form S-11 filed with the Securities and Exchange Commission on March 18, 2004 (file no. 333-113715), as amended (the "Registration Statement"), including any form of the prospectus contained therein filed by the Registrant pursuant to Rule 424 under the Securities Act of 1933, as amended. In addition, incorporated by reference herein is information relating to the Registrant's Class A common stock, par value \$0.001 per share, under the caption "Certain Provisions of Maryland Law and of Our Charter and Bylaws" in the Registration Statement.

#### ITEM 2 EXHIBITS.

Not applicable.

## **SIGNATURES**

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the Registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereto duly authorized.

BIMINI MORTGAGE MANAGEMENT, INC.

Date May 7, 2004

By: /s/ JEFFREY J. ZIMMER

Jeffrey J. Zimmer

Chairman and Chief Executive Officer

3

## QuickLinks

Securities to be registered pursuant to Section 12(b) of the Act Securities to be registered pursuant to Section 12(g) of the Act: None INFORMATION REQUIRED IN REGISTRATION STATEMENT SIGNATURES