

# \$101,788,308 Government National Mortgage Association GINNIE MAE®

# Guaranteed REMIC Pass-Through Securities and MX Securities Ginnie Mae REMIC Trust 2022-188

#### The Securities

The Trust will issue the Classes of Securities listed on the front cover of this offering circular supplement.

# The Ginnie Mae Guaranty

Ginnie Mae will guarantee the timely payment of principal and interest on the securities. The Ginnie Mae Guaranty is backed by the full faith and credit of the United States of America.

# The Trust and its Assets

The Trust will own (1) Ginnie Mae Certificates and (2) certain previously issued certificates.

Class of REMIC Securities	Original Principal Balance(2)	Interest Rate	Principal Type(3)	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Security Group 1						
ES(1)	\$25,000,000	(5)	$\mathcal{N}TL(PT)$	INV/IO	38383LGX2	November 2052
<i>FA</i>	25,000,000	(5)	PT	FLT	38383LGY0	November 2052
<i>OP(1)</i>	4,545,455	0.0%	PT	PO	38383LGZ7	November 2052
Security Group 2						
$F \dots \dots \dots$	30,000,000	(5)	PT	FLT	38383LHA1	November 2052
PO(1)	5,454,546	0.0	PT	PO	38383LHB9	November 2052
SK(1)	30,000,000	(5)	$\mathcal{N}TL(PT)$	INV/IO	38383LHC7	November 2052
Security Group 3						
<i>IO</i>	94,941,403	2.5	NTL(SC/PT)	FIX/IO	38383LHD5	February 2051
Security Group 4						
SB	108,621,277	(5)	$\mathcal{N}TL(SC/PT)$	INV/IO	38383LHE3	January 2052
Security Group 5						
$IE \dots \dots$	16,712,978	4.5	NTL(SC/PT)	FIX/IO	38383LHF0	January 2050
Security Group 6						
IM	23,068,914	4.5	NTL(SC/PT)	FIX/IO	38383LHG8	June 2045
Security Group 7						
<i>LA</i>	30,000,000	5.0	SEQ	FIX	38383LHH6	April 2050
LV(1)	2,860,000	5.0	AD/SEQ	FIX	38383LHJ2	November 2033
LZ(1)	3,928,307	5.0	SEQ	FIX/Z	38383LHK9	November 2052
Residual						
R	0	0.0	$\mathcal{N}PR$	$\mathcal{N}PR$	38383LHL7	November 2052

- (1) These Securities may be exchanged for MX Securities described in Schedule I to this Supplement.
- (2) Subject to increase as described under "Increase in Size" in this Supplement. The amount shown for each Notional Class (indicated by "NTL" under Principal Type) is its original Class Notional Balance and does not represent principal that will be paid.
- (3) As defined under "Class Types" in Appendix I to the Base Offering Circular. The Class Notional Balance of each Notional Class will be reduced as shown under "Terms Sheet Notional Classes" in this Sumlement.
- (4) See "Yield, Maturity and Prepayment Considerations Final Distribution Date" in this Supplement.
- (5) See "Terms Sheet Interest Rates" in this Supplement.

The securities may not be suitable investments for you. You should consider carefully the risks of investing in them.

See "Risk Factors" beginning on page S-7 which highlights some of these risks.

The Sponsor and the Co-Sponsor will offer the securities from time to time in negotiated transactions at varying prices. We expect the closing date to be November 30, 2022.

You should read the Base Offering Circular as well as this Supplement.

The securities are exempt from registration under the Securities Act of 1933 and are "exempted securities" under the Securities Exchange Act of 1934.

# MorganStanley

Mischler Financial Group, Inc.

The date of this Offering Circular Supplement is November 23, 2022.

# **AVAILABLE INFORMATION**

You should purchase the securities only if you have read and understood the following documents:

- this Offering Circular Supplement (this "Supplement"),
- the Base Offering Circular and
- in the case of the Group 3, 4, 5 and 6 securities, each disclosure document relating to the Underlying Certificates (the "Underlying Certificate Disclosure Documents").

The Base Offering Circular and the Underlying Certificate Disclosure Documents are available on Ginnie Mae's website located at http://www.ginniemae.gov ("ginniemae.gov").

If you do not have access to the internet, call BNY Mellon, which will act as information agent for the Trust, at (800) 234-GNMA, to order copies of the Base Offering Circular. In addition, you can obtain copies of any other document listed above by contacting BNY Mellon at the telephone number listed above.

Please consult the standard abbreviations of Class Types included in the Base Offering Circular as Appendix I and the glossary included in the Base Offering Circular as Appendix II for definitions of capitalized terms.

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# **TERMS SHEET**

This terms sheet contains selected information for quick reference only. You should read this Supplement, particularly "Risk Factors," and each of the other documents listed under "Available Information."

**Sponsor:** Morgan Stanley & Co. LLC

**Co-Sponsor:** Mischler Financial Group, Inc.

Trustee: U.S. Bank National Association

**Tax Administrator:** The Trustee **Closing Date:** November 30, 2022

Distribution Date: The 20th day of each month or, if the 20th day is not a Business Day, the first

Business Day thereafter, commencing in December 2022.

#### **Trust Assets:**

Trust Asset Group	Trust Asset Type	Certificate Rate	Original Term To Maturity (in years)
1	Ginnie Mae II	5.500%	30
2	Ginnie Mae II	5.500%	30
3	Underlying Certificates	(1)	(1)
4	Underlying Certificates	(1)	(1)
5	Underlying Certificates	(1)	(1)
6	Underlying Certificates	(1)	(1)
7	Ginnie Mae II	5.000%	30

<sup>(1)</sup> Certain information regarding the Underlying Certificates is set forth in Exhibit A to this Supplement.

**Security Groups:** This series of Securities consists of multiple Security Groups (each, a "Group"), as shown on the front cover of this Supplement and on Schedule I to this Supplement. Payments on each Group will be based solely on payments on the Trust Asset Group with the same numerical designation.

# Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2 and 7 Trust Assets(1):

Principal Balance	Weighted Average Remaining Term to Maturity (in months)	Weighted Average Loan Age (in months)	Weighted Average Mortgage Rate <sup>(2)</sup>
<b>Group 1 Trust Assets</b> \$29,545,455	357	2	5.995%
<b>Group 2 Trust Assets</b> \$35,454,546	357	2	5.966%
<b>Group 7 Trust Assets</b> \$36,788,307	357	2	5.518%

<sup>(1)</sup> As of November 1, 2022.

<sup>&</sup>lt;sup>(2)</sup> The Mortgage Loans underlying the Group 1, 2 and 7 Trust Assets may bear interest at rates ranging from 0.25% to 1.50% per annum above the related Certificate Rate.

The actual remaining terms to maturity, loan ages and Mortgage Rates of many of the Mortgage Loans underlying the Group 1, 2 and 7 Trust Assets will differ from the weighted averages shown above, perhaps significantly. See "The Trust Assets — The Mortgage Loans" in this Supplement.

**Characteristics of the Group 3, 4, 5 and 6 Trust Assets:** See Exhibit A to this Supplement for certain information regarding the characteristics of the related Underlying Certificates.

**Issuance of Securities:** The Securities, other than the Residual Securities, will initially be issued in book-entry form through the book-entry system of the U.S. Federal Reserve Banks (the "Fedwire Book-Entry System"). The Residual Securities will be issued in fully registered, certificated form. *See "Description of the Securities— Form of Securities" in this Supplement.* 

**Modification and Exchange:** If you own exchangeable Securities you will be able, upon notice and payment of an exchange fee, to exchange them for a proportionate interest in the related Securities shown on Schedule I to this Supplement. See "Description of the Securities — Modification and Exchange" in this Supplement.

**Increased Minimum Denomination Classes:** Each Class that constitutes a Principal Only, Interest Only or Inverse Floating Rate Class. *See "Description of the Securities — Form of Securities" in this Supplement.* 

**Interest Rates:** The Interest Rates for the Fixed Rate Classes are shown on the front cover of this Supplement or on Schedule I to this Supplement.

The Floating Rate and Inverse Floating Rate Classes will bear interest at per annum rates based on a 30-day compounded average of the Secured Overnight Financing Rate ("SOFR") (hereinafter referred to as "Compounded SOFR") as follows:

Class	Interest Rate Formula(1)	Initial Interest Rate(2)	Minimum Rate	Maximum Rate	Delay (in days)	Compounded SOFR for Minimum Interest Rate
Security Group 1						
DS	21.44999786% - (4.12499959 X Compounded SOFR)	8.97377%	0.00%	21.44999786%	0	5.2000%
ES	5.2% - Compounded SOFR	2.17546%	0.00%	5.200000000%	0	5.2000%
FA	Compounded SOFR + 1.3%	4.32454%	1.30%	6.500000000%	0	0.0000%
SA	28.59999714% - (5.49999945 X Compounded SOFR)	11.96503%	0.00%	28.59999714%	0	5.2000%
Security Group 2						
$F\ \dots\dots\dots\dots$	Compounded SOFR + 1.26%	4.45332%	1.26%	6.500000000%	0	0.0000%
S	28.81999712% - (5.49999945 X Compounded SOFR)	11.25674%	0.00%	28.81999712%	0	5.2400%
SD	14.40999856% - (2.74999973 X Compounded SOFR)	5.62837%	0.00%	14.40999856%	0	5.2400%
SK	5.24% - Compounded SOFR	2.04668%	0.00%	5.24000000%	0	5.2400%
Security Group 4						
SB	3.8% — Compounded SOFR	0.40788%	0.00%	3.80000000%	0	3.8000%

<sup>(1)</sup> Compounded SOFR will be established as described under "Description of the Securities — Interest Distributions — Floating Rate and Inverse Floating Rate Classes" in this Supplement.

<sup>(2)</sup> The initial Interest Rate will be in effect during the first Accrual Period; the Interest Rate will adjust monthly thereafter.

**Allocation of Principal:** On each Distribution Date for a Security Group, the following distributions will be made to the related Securities:

#### **SECURITY GROUP 1**

The Group 1 Principal Distribution Amount will be allocated, concurrently, to FA and OP, pro rata, until retired

#### **SECURITY GROUP 2**

The Group 2 Principal Distribution Amount will be allocated, concurrently, to F and PO, pro rata, until retired

#### **SECURITY GROUP 7**

The Group 7 Principal Distribution Amount and the Accrual Amount will be allocated as follows:

- The Accrual Amount, sequentially, to LV and LZ, in that order, until retired
- The Group 7 Principal Distribution Amount, sequentially, to LA, LV and LZ, in that order, until retired

**Accrual Class:** Interest will accrue on the Accrual Class identified on the front cover of this Supplement at the per annum rate set forth on that page. However, no interest will be distributed to the Accrual Class as interest. Interest so accrued on the Accrual Class on each Distribution Date will constitute the Accrual Amount, which will be added to the Class Principal Balance of that Class on each Distribution Date and will be distributable as principal as set forth in this Terms Sheet under "Allocation of Principal."

**Notional Classes:** The Notional Classes will not receive distributions of principal but have Class Notional Balances for convenience in describing their entitlements to interest. The Class Notional Balance of each Notional Class represents the percentage indicated below of, and reduces to that extent with, the Class Principal Balance or the outstanding notional balance of the related Trust Asset Group indicated:

Class	Original Class Notional Balance	Represents
Security Group 1		
ES	\$ 25,000,000	100% of FA (PT Class)
Security Group 2		
SK	\$ 30,000,000	100% of F (PT Class)
Security Group 3		
IO	\$ 94,941,403	100% of the Group 3 Trust Assets
Security Group 4	φ100 (01 0 <b></b>	1000/ 6.1 0 / 75 . 4
SB	\$108,621,2//	100% of the Group 4 Trust Assets
Security Group 5	¢ 1( 712 070	1000/ -f.th - C 5 T t A t-
E	\$ 10,/12,9/8	100% of the Group 5 Trust Assets
Security Group 6 IM	\$ 23,068,914	100% of the Group 6 Trust Assets

<b>Tax Status:</b> Single REMIC Series. See "Certain United States Federal Income Tax Consequences" in this Supplement and in the Base Offering Circular.
<b>Regular and Residual Classes:</b> Class R is a Residual Class and represents the Residual Interest of the Trust REMIC. All other Classes of REMIC Securities are Regular Classes.

#### **RISK FACTORS**

You should purchase securities only if you understand and are able to bear the associated risks. The risks applicable to your investment depend on the principal and interest type of your securities. This section highlights certain of these risks.

The rate of principal payments on the underlying mortgage loans will affect the rate of principal payments on your securities. The rate at which you will receive principal payments will depend largely on the rate of principal payments, including prepayments, on the mortgage loans underlying the related trust assets. Any historical data regarding mortgage loan prepayment rates may not be indicative of the rate of future prepayments on the underlying mortgage loans, and no assurances can be given about the rates at which the underlying mortgage loans will prepay. We expect the rate of principal payments on the underlying mortgage loans to vary. Borrowers generally may prepay their mortgage loans at any time without penalty.

The terms of the mortgage loans may be modified to permit, among other things, a partial release of security, which releases a portion of the mortgaged property from the lien securing the related mortgage loan. Partial releases of security may reduce the value of the remaining security and also allow the related borrower to sell the released property and generate proceeds that may be used to prepay the related mortgage loan in whole or in part.

In addition to voluntary prepayments, mortgage loans can be prepaid as a result of governmental mortgage insurance claim payments, loss mitigation arrangements, repurchases or liquidations of defaulted mortgage loans. Although under certain circumstances Ginnie Mae issuers have the option to repurchase defaulted mortgage loans from the related pool underlying a Ginnie Mae MBS certificate, they are not obligated to do so. Defaulted mortgage loans that remain in pools backing Ginnie Mae MBS certificates may be subject to governmental mortgage insurance claim payments, loss mitigation arrangements or foreclosure, which could have the same effect as voluntary prepayments on the cash flow available to pay the securities.

A catastrophic weather event, pandemic or other natural disaster may affect the rate of principal payments, including prepayments, on the underlying mortgage loans. Any such event may damage the related mortgaged properties that secure the mortgage loans or may lead to a general economic downturn in the affected regions, including job losses and declines in real estate values. A general economic downturn may increase the rate of defaults on the mortgage loans in such areas resulting in prepayments on the related securities due to governmental mortgage insurance claim payments, loss mitigation arrangements, repurchases or liquidations of defaulted mortgage loans. Insurance payments on damaged or destroyed homes may also lead to prepayments on the underlying mortgage loans. Further, in connection with presidentially declared major disasters, Ginnie Mae may authorize optional special assistance to issuers, including expanded buyout authority which allows issuers, upon receiving written approval from Ginnie Mae, to repurchase eligible loans from the related pool underlying a Ginnie Mae MBS certificate, even if such loans are not delinquent or do not otherwise meet the standard conditions for removal or repurchase.

No assurances can be given as to the timing or frequency of any governmental mortgage insurance claim payments, issuer repurchases, loss mitigation arrangements or foreclosure proceedings with respect to defaulted mortgage loans and the resulting effect on the timing or rate of principal payments on your securities.

Rates of principal payments can reduce your yield. The yield on your securities probably will be lower than you expect if:

• you bought your securities at a premium (interest only securities, for example) and principal payments are faster than you expected, or

 you bought your securities at a discount (principal only securities, for example) and principal payments are slower than you expected.

In addition, if your securities are interest only securities or securities purchased at a significant premium, you could lose money on your investment if prepayments occur at a rapid rate.

Under certain circumstances, a Ginnie Mae issuer has the right to repurchase a defaulted mortgage loan from the related pool of mortgage loans underlying a particular Ginnie Mae MBS certificate, the effect of which would be comparable to a prepayment of such mortgage loan. At its option and without Ginnie Mae's prior consent, a Ginnie Mae issuer may repurchase any mortgage loan at an amount equal to par less any amounts previously advanced by such issuer in connection with its responsibilities as servicer of such mortgage loan to the extent that (i) in the case of a mortgage loan included in a pool of mortgage loans underlying a Ginnie Mae MBS certificate issued on or before December 1, 2002, such mortgage loan has been delinquent for four consecutive months, and at least one delinquent payment remains uncured or (ii) in the case of a mortgage loan included in a pool of mortgage loans underlying a Ginnie Mae MBS certificate issued on or after January 1, 2003, no payment has been made on such mortgage loan for three consecutive months. Any such repurchase will result in prepayment of the principal balance or reduction in the notional balance of the securities ultimately backed by such mortgage loan. No assurances can be given as to the timing or frequency of any such repurchases.

The levels of Compounded SOFR will affect the yields on the floating rate and inverse floating rate securities. If Compounded SOFR performs differently from what you expect, the yield on the floating rate and inverse floating rate securities may be lower than you expect. Lower levels of Compounded SOFR will generally reduce the yield on the floating rate securities; higher levels of Compounded SOFR will generally reduce the yield on the inverse floating rate securities. You should bear in mind that the

timing of changes in the level of Compounded SOFR may affect your yield: generally, the earlier a change, the greater the effect on your yield. It is doubtful that Compounded SOFR will remain constant.

An investment in the securities is subject to significant reinvestment risk. The rate of principal payments on your securities is uncertain. You may be unable to reinvest the payments on your securities at the same returns provided by the securities. Lower prevailing interest rates may result in an unexpected return of principal. In that interest rate climate, higher yielding reinvestment opportunities may be limited. Conversely, higher prevailing interest rates may result in slower returns of principal, and you may not be able to take advantage of higher yielding investment opportunities. The final payment on your security may occur much earlier than the final distribution date.

The rate of payments on the underlying certificates will directly affect the rate of payments on the group 3, 4, 5 and 6 securities. The underlying certificates will be sensitive in varying degrees to:

- the rate of payments of principal (including prepayments) of the related mortgage loans, and
- the priorities for the distribution of principal among the classes of the related underlying series.

As described in the related underlying certificate disclosure document, the reduction in notional balance of one of the underlying certificates included in trust asset group 5 on any payment date is calculated, directly or indirectly, on the basis of schedules; no assurance can be given that the underlying certificate will adhere to its schedules. Further, prepayments on the related mortgage loans may have occurred at rates faster or slower than those initially assumed.

This supplement contains no information as to whether the related class with which a notional underlying certificate reduces has adhered to any applicable principal balance schedules, whether any related supporting classes remain outstanding or whether the underlying certificates otherwise have performed as originally anticipated. Additional information as to the underlying certificates may be obtained by performing an analysis of current principal factors of the underlying certificates in light of applicable information contained in the related underlying certificate disclosure documents.

Up to 10% of the mortgage loans underlying the trust assets may be higher balance mortgage loans. Subject to special pooling parameters set forth in the Ginnie Mae Mortgage-Backed Securities Guide, qualifying federally-insured or guaranteed mortgage loans that exceed certain balance thresholds established by Ginnie Mae ("higher balance mortgage loans") may be included in Ginnie Mae guaranteed pools. There are no historical performance data regarding the prepayment rates for higher balance mortgage loans. If the higher balance mortgage loans prepay faster or slower than expected, the weighted average lives and yields of the related securities are likely to be affected, perhaps significantly. Furthermore, higher balance mortgage loans tend to be concentrated in certain geographic areas, which may experience relatively higher rates of defaults in the event of adverse economic conditions. No assurances can be given about the prepayment experience or performance of the higher balance mortgage loans.

An investment in the floating rate and inverse floating rate securities entails risks not associated with an investment in conventional fixed rate securities or securities linked to established market indices. The Federal Reserve Bank of New York began to

The Federal Reserve Bank of New York began to publish SOFR in April 2018 and compounded averages of SOFR in March 2020. Although the Federal Reserve Bank of New York has also published historical indicative SOFR from August 2014 to March 2018, such pre-publication data necessarily involves assumptions, estimates and approximations. You should not rely on any historical changes or trends in SOFR as an indicator of future changes in SOFR. Daily shifts in SOFR have been, and may in the future be,

greater than those in comparable market indices. Because the interest rate applicable to any accrual period for securities with an interest rate based on SOFR will be calculated by reference to the daily rates of SOFR during an approximate 30-day period commencing and ending before the related accrual period as described under "Description of the Securities — Interest Distributions — Floating Rate and Inverse Floating Rate Classes" in this supplement, the return on and value of the floating rate and inverse floating rate securities may fluctuate more than debt securities linked to less volatile indices.

SOFR is a relatively new market index, and the floating rate and inverse floating rate securities will likely have no established trading market when issued, and an established trading market may never develop or, if developed, may not be liquid. Investment in the floating rate and inverse floating rate securities carries additional pricing volatility, illiquidity and market risk, as discussed in more detail under "Description of the Securities — Interest Rate Indices — Determination of SOFR — General" in the base offering circular.

The interest rates of the floating rate and inverse floating rate securities will be based on Compounded SOFR. Ginnie Mae may, in its sole discretion and without the consent of security holders or any other party, convert the interest rates of the floating rate and inverse floating rate securities from Compounded SOFR to term SOFR. In connection with that conversion, Ginnie Mae may, in its sole discretion and without the consent of security holders or any other party, change the calculation methodology or spread, add or subtract a rate adjustment and make other conforming changes with respect to the floating rate and inverse floating rate securities, as described under "Description of the Securities - Interest Rate Indices — Replacement Rate Conforming Changes" in the base offering circular. There can be no assurance that the interest rates of the floating rate and inverse floating rate securities will ever be based on term SOFR or, if based on term SOFR in the future, that the resulting interest rates will yield the same or similar economic results over the lives of the affected securities relative to the results that would have occurred had the

interest rates remained based on Compounded SOFR or that the market value will not decrease due to the move from Compounded SOFR to term SOFR.

All aspects of the conversion will be at the sole discretion of Ginnie Mae, which could lead to volatility in the interest rates of or adversely affect the return on the floating rate and inverse floating rate securities, the trading market for such securities and the value of such securities.

You should consult your own financial and legal advisors about the risks associated with an investment in the floating rate and inverse floating rate securities and the suitability of investing in the floating rate and inverse floating rate securities in light of your particular circumstances.

Interest on the floating rate and inverse floating rate securities will be determined using a replacement rate if SOFR is no longer available, which could adversely affect the value of your investment in the floating rate and inverse floating rate securities. Because SOFR is published by the Federal Reserve Bank of New York based on data received from other sources, neither Ginnie Mae nor the trustee has any control over its determination, calculation or publication. The Federal Reserve Bank of New York has noted that it may alter the methods of calculation, publication schedule, rate revision practices or availability of SOFR at any time without notice. There can be no assurance that SOFR will not be discontinued or fundamentally altered in a manner that is materially adverse to the interests of investors in the floating rate and inverse floating rate securities.

If SOFR is no longer published or cannot be used, the amount of interest payable on the floating rate and inverse floating rate securities will be determined using a replacement rate, as described under "Description of the Securities — Interest Rate Indices — Determination of SOFR" in the base offering circular. Ginnie Mae will have the sole discretion to make conforming changes in connection with any replacement rate without the consent of security holders or any other party, as described under "Description of

the Securities — Interest Rate Indices" in the base offering circular. This could reduce the amount of interest payable on the floating rate and inverse floating rate securities, which could adversely affect the return on, value of, and market for, the floating rate and inverse floating rate securities. Furthermore, there can be no assurance that the characteristics of any replacement rate will be similar to SOFR or that any replacement rate will produce the economic equivalent of SOFR.

The securities may not be a suitable investment for you. The securities, especially the group 3, 4, 5 and 6 securities and, in particular, the interest only, principal only, inverse floating rate, accrual and residual classes, are not suitable investments for all investors.

In addition, although the sponsor intends to make a market for the purchase and sale of the securities after their initial issuance, it has no obligation to do so. There is no assurance that a secondary market will develop, that any secondary market will continue, or that the price at which you can sell an investment in any class will enable you to realize a desired yield on that investment.

You will bear the market risks of your investment. The market values of the classes are likely to fluctuate. These fluctuations may be significant and could result in significant losses to you.

The secondary markets for mortgage-related securities have experienced periods of illiquidity and can be expected to do so in the future. Illiquidity can have a severely adverse effect on the prices of classes that are especially sensitive to prepayment or interest rate risk or that have been structured to meet the investment requirements of limited categories of investors.

The residual securities may experience significant adverse tax timing consequences. Accordingly, you are urged to consult tax advisors and to consider the after-tax effect of ownership of a residual security and the suitability of the residual securities to your investment objectives. See "Certain United States Federal Income Tax Consequences" in this supplement and in the base offering circular.

You are encouraged to consult advisors regarding the financial, legal, tax and other aspects of an investment in the securities. You should not purchase the securities of any class unless you understand and are able to bear the prepayment, yield, liquidity and market risks associated with that class.

The actual characteristics of the underlying mortgage loans will affect the weighted average lives and yields of your securities. The yield and decrement tables in this supple-

ment are based on assumed characteristics which are likely to be different from the actual characteristics. As a result, the yields on your securities could be lower than you expected, even if the mortgage loans prepay at the constant prepayment rates set forth in the applicable table.

It is highly unlikely that the underlying mortgage loans will prepay at any of the prepayment rates assumed in this supplement, or at any constant prepayment rate.

#### THE TRUST ASSETS

#### General

The Sponsor intends to acquire the Trust Assets in privately negotiated transactions prior to the Closing Date and to sell them to the Trust according to the terms of a Trust Agreement between the Sponsor and the Trustee. The Sponsor will make certain representations and warranties with respect to the Trust Assets. All Trust Assets, regardless of whether the assets consist of Trust MBS or the Underlying Certificates, will evidence, directly or indirectly, Ginnie Mae Certificates.

# The Trust MBS (Groups 1, 2 and 7)

The Trust MBS are either:

- 1. Ginnie Mae II MBS Certificates guaranteed by Ginnie Mae, or
- 2. Ginnie Mae Platinum Certificates backed by Ginnie Mae II MBS Certificates and guaranteed by Ginnie Mae.

Each Mortgage Loan underlying a Ginnie Mae II MBS Certificate issued prior to July 1, 2003 bears interest at a Mortgage Rate 0.50% to 1.50% per annum greater than the related Certificate Rate. Each Mortgage Loan underlying a Ginnie Mae II MBS Certificate issued on or after July 1, 2003 bears interest at a Mortgage Rate 0.25% to 0.75% per annum greater than the related Certificate Rate. Ginnie Mae receives a fee (the "Ginnie Mae Certificate Guaranty Fee") for its guaranty of each Ginnie Mae II MBS Certificate of 0.06% per annum of the outstanding principal balance of each related Mortgage Loan. The difference between (a) the Mortgage Rate and (b) the sum of the Certificate Rate and the rate of the Ginnie Mae Certificate Guaranty Fee is used to pay the related servicers of the Mortgage Loans a monthly servicing fee.

# The Underlying Certificates (Groups 3, 4, 5 and 6)

The Group 3, 4, 5 and 6 Trust Assets are Underlying Certificates that represent beneficial ownership interests in one or more separate trusts, the assets of which evidence direct or indirect beneficial ownership interests in certain Ginnie Mae Certificates. Each Underlying Certificate constitutes all or a portion of a class of a separate Series of certificates described in the related Underlying Certificate Disclosure Document. Each Underlying Certificate Disclosure Document may be obtained from the Information Agent as described under "Available Information" in this Supplement or on ginniemae.gov. Investors are cautioned that material changes in facts and circumstances may have occurred since the date of each Underlying Certificate Disclosure Document, including changes in prepayment rates, prevailing interest rates and other economic factors, which may limit the usefulness of, and be directly contrary to the

assumptions used in preparing the information included in, the offering document. See "Underlying Certificates" in the Base Offering Circular.

Each Underlying Certificate provides for monthly distributions and is further described in the table contained in Exhibit A to this Supplement.

# The Mortgage Loans

The Mortgage Loans underlying the Group 1, 2 and 7 Trust Assets are expected to have, on a weighted average basis, the characteristics set forth in the Terms Sheet under "Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2 and 7 Trust Assets" and the general characteristics described in the Base Offering Circular. The Mortgage Loans will consist of first lien, single-family, fixed rate, residential mortgage loans that are insured or guaranteed by the Federal Housing Administration, the United States Department of Veterans Affairs, Rural Development (formerly the Rural Housing Service) or the United States Department of Housing and Urban Development ("HUD"). See "The Ginnie Mae Certificates — General" in the Base Offering Circular.

Specific information regarding the characteristics of the Mortgage Loans underlying the Trust MBS is not available. For purposes of this Supplement, certain assumptions have been made regarding the remaining terms to maturity, loan ages and Mortgage Rates of the Mortgage Loans underlying the Trust MBS. However, the actual remaining terms to maturity, loan ages and Mortgage Rates of many of the Mortgage Loans will differ from the characteristics assumed, perhaps significantly. This will be the case even if the weighted average characteristics of the Mortgage Loans are the same as the assumed characteristics. Small differences in the characteristics of the Mortgage Loans can have a significant effect on the Weighted Average Lives and yields of the Securities. See "Risk Factors" and "Yield, Maturity and Prepayment Considerations" in this Supplement.

# The Trustee Fee

The Sponsor will contribute certain Ginnie Mae Certificates in respect of the Trustee Fee. On each Distribution Date, the Trustee will retain all principal and interest distributions received on such Ginnie Mae Certificates in payment of the Trustee Fee.

#### **GINNIE MAE GUARANTY**

The Government National Mortgage Association ("Ginnie Mae"), a wholly-owned corporate instrumentality of the United States of America within HUD, guarantees the timely payment of principal and interest on the Securities. The General Counsel of HUD has provided an opinion to the effect that Ginnie Mae has the authority to guarantee multiclass securities and that Ginnie Mae guaranties will constitute general obligations of the United States, for which the full faith and credit of the United States is pledged. See "Ginnie Mae Guaranty" in the Base Offering Circular.

# **DESCRIPTION OF THE SECURITIES**

#### General

The description of the Securities contained in this Supplement is not complete and is subject to, and is qualified in its entirety by reference to, all of the provisions of the Trust Agreement. See "Description of the Securities" in the Base Offering Circular.

#### Form of Securities

Each Class of Securities other than the Residual Securities initially will be issued and maintained, and may be transferred only on the Fedwire Book-Entry System. Beneficial Owners of Book-Entry

Securities will ordinarily hold these Securities through one or more financial intermediaries, such as banks, brokerage firms and securities clearing organizations that are eligible to maintain book-entry accounts on the Fedwire Book-Entry System. By request accompanied by the payment of a transfer fee of \$25,000 per Certificated Security to be issued, a Beneficial Owner may receive a Regular Security in certificated form.

The Residual Securities will not be issued in book-entry form but will be issued in fully registered, certificated form and may be transferred or exchanged, subject to the transfer restrictions applicable to Residual Securities set forth in the Trust Agreement, at the Corporate Trust Office of the Trustee. See "Description of the Securities — Forms of Securities; Book-Entry Procedures" in the Base Offering Circular.

Each Regular and MX Class (other than the Increased Minimum Denomination Classes) will be issued in minimum dollar denominations of initial principal balance of \$1,000 and integral multiples of \$1 in excess of \$1,000. The Increased Minimum Denomination Classes will be issued in minimum denominations that equal \$100,000 in initial principal or notional balance.

#### Distributions

Distributions on the Securities will be made on each Distribution Date as specified under "Terms Sheet — Distribution Date" in this Supplement. On each Distribution Date for a Security, or in the case of the Certificated Securities, on the first Business Day after the related Distribution Date, the Distribution Amount will be distributed to the Holders of record as of the related Record Date. Beneficial Owners of Book-Entry Securities will receive distributions through credits to accounts maintained for their benefit on the books and records of the appropriate financial intermediaries. Holders of Certificated Securities will receive distributions by check or, subject to the restrictions set forth in the Base Offering Circular, by wire transfer. See "Description of the Securities — Distributions" and "— Method of Distributions" in the Base Offering Circular.

#### **Interest Distributions**

The Interest Distribution Amount will be distributed on each Distribution Date to the Holders of all Classes of Securities entitled to distributions of interest.

- Interest will be calculated on the basis of a 360-day year consisting of twelve 30-day months.
- Interest distributable (or accrued in the case of the Accrual Class) on any Class for any Distribution Date will consist of 30 days' interest on its Class Principal Balance (or Class Notional Balance) as of the related Record Date.
- Investors can calculate the amount of interest to be distributed (or accrued in the case of the Accrual Class) on each Class of Securities for any Distribution Date by using the Class Factors published in the preceding month. See "— Class Factors" below.

# Categories of Classes

For purposes of interest distributions, the Classes will be categorized as shown under "Interest Type" on the front cover of this Supplement and on Schedule I to this Supplement. The abbreviations used in this Supplement to describe the interest entitlements of the Classes are explained under "Class Types" in Appendix I to the Base Offering Circular.

#### Accrual Periods

The Accrual Period for each Regular and MX Class is set forth in the table below:

Class	Accrual Period
Fixed Rate Classes	The calendar month preceding the related Distribution Date
Floating Rate and Inverse Floating Rate Classes	From the 20th day of the month preceding the month of the related Distribution Date through the 19th day of the month of that Distribution Date

#### Fixed Rate Classes

Each Fixed Rate Class will bear interest at the per annum Interest Rate shown on the front cover of this Supplement or on Schedule I to this Supplement.

# Floating Rate and Inverse Floating Rate Classes

The Floating Rate and Inverse Floating Rate Classes will bear interest as shown under "Terms Sheet — Interest Rates" in this Supplement. The Interest Rates for the Floating Rate and Inverse Floating Rate Classes will be based initially on Compounded SOFR with a Corresponding Tenor of 30 days. The Trustee or its agent will determine Compounded SOFR as described under "Description of the Securities — Interest Rate Indices — Determination of SOFR" in the Base Offering Circular. In the case of the Group 4 Securities, the Trustee or its agent will use the same values of SOFR as are used for the related Underlying Certificates.

At any time, Ginnie Mae may, in its sole discretion and without the consent of security holders or any other party, designate Term SOFR and related positive or negative adjustments, spreads or methodology changes as a Replacement Rate for the Floating Rate and Inverse Floating Rate Classes and instruct the Trustee in writing to replace Compounded SOFR with such Replacement Rate for all purposes relating to such Classes in respect of such determination on such date and all determinations on subsequent dates. Ginnie Mae will not do so unless Ginnie Mae and the Trustee receive a Replacement Rate Tax Opinion. In connection with the implementation of Term SOFR as a Replacement Rate for SOFR Classes, Ginnie Mae will have the right to make other Conforming Changes from time to time without the consent of security holders or any other party, as described under "Description of the Securities — Interest Rate Indices" and "— Interest Rate Indices — Determination of SOFR — Conversion of Simple SOFR and Compounded SOFR Classes to Term SOFR" in the Base Offering Circular.

If SOFR ceases to be available or is no longer representative, a replacement rate will be selected, as described under "Description of the Securities — Interest Rate Indices — Determination of SOFR" in the Base Offering Circular.

The Trustee's determination of Compounded SOFR and its calculation of the Interest Rates will be final except in the case of clear error. Investors can obtain Compounded SOFR levels and Interest Rates for the current and preceding Accrual Periods on ginniemae.gov or by calling the Information Agent at (800) 234-GNMA.

# Accrual Class

Class LZ is an Accrual Class. Interest will accrue on the Accrual Class and be distributed as described under "Terms Sheet — Accrual Class" in this Supplement.

# **Principal Distributions**

The Principal Distribution Amount for each Group and the Accrual Amount will be distributed to the Holders entitled thereto as described under "Terms Sheet — Allocation of Principal" in this Supplement.

Investors can calculate the amount of principal to be distributed with respect to any Distribution Date by using the Class Factors published in the preceding and current months. See "— Class Factors" below.

# Categories of Classes

For purposes of principal distributions, the Classes will be categorized as shown under "Principal Type" on the front cover of this Supplement and on Schedule I to this Supplement. The abbreviations used in this Supplement to describe the principal entitlements of the Classes are explained under "Class Types" in Appendix I to the Base Offering Circular.

#### Notional Classes

The Notional Classes will not receive principal distributions. For convenience in describing interest distributions, the Notional Classes will have the original Class Notional Balances shown on the front cover of this Supplement. The Class Notional Balances will be reduced as shown under "Terms Sheet — Notional Classes" in this Supplement.

#### **Residual Securities**

The Residual Securities will represent the beneficial ownership of the Residual Interest in the Trust REMIC, as described in "Certain United States Federal Income Tax Consequences" in this Supplement and the Base Offering Circular. The Residual Securities have no Class Principal Balance and do not accrue interest. The Residual Securities will be entitled to receive the proceeds of the disposition of any assets remaining in the Trust REMIC after the Class Principal Balance or Class Notional Balance of each Class of Regular Securities has been reduced to zero. However, any remaining proceeds are not likely to be significant. The Residual Securities may not be transferred to a Plan Investor, a Non-U.S. Person or a Disqualified Organization.

#### **Class Factors**

The Trustee will calculate and make available for each Class of Securities, no later than the day preceding the Distribution Date, the factor (carried out to eight decimal places) that when multiplied by the Original Class Principal Balance (or original Class Notional Balance) of that Class, determines the Class Principal Balance (or Class Notional Balance) after giving effect to the distribution of principal to be made on the Securities (and any addition to the Class Principal Balance of the Accrual Class) or any reduction of Class Notional Balance on that Distribution Date (each, a "Class Factor").

- The Class Factor for any Class of Securities for each month following the issuance of the Securities will reflect its remaining Class Principal Balance (or Class Notional Balance) after giving effect to any principal distribution (or addition to principal) to be made or any reduction of Class Notional Balance on the Distribution Date occurring in that month.
- The Class Factor for each Class for the month of issuance is 1.00000000.
- The Class Factors for the MX Classes and the Classes of REMIC Securities that are exchangeable for the MX Classes will be calculated assuming that the maximum possible amount of each Class is outstanding at all times, regardless of any exchanges that may occur.
- Based on the Class Factors published in the preceding and current months (and Interest Rates), investors in any Class (other than the Accrual Class) can calculate the amount of principal and interest to be distributed to that Class and investors in the Accrual Class can calculate the total amount of principal to be distributed to (or interest to be added to the Class Principal Balance of) that Class on the Distribution Date in the current month.
- Investors may obtain current Class Factors on ginniemae.gov.

See "Description of the Securities — Distributions" in the Base Offering Circular.

#### **Termination**

The Trustee, at its option, may purchase or cause the sale of the Trust Assets and thereby terminate the Trust on any Distribution Date on which the aggregate of the Class Principal Balances of the Securities is less than 1% of the aggregate Original Class Principal Balances of the Securities. On any Distribution Date upon the Trustee's determination that the REMIC status of the Trust REMIC has been lost or that a substantial risk exists that this status will be lost for the then current taxable year, the Trustee will terminate the Trust and retire the Securities.

Upon any termination of the Trust, the Holder of any outstanding Security (other than a Residual or Notional Class Security) will be entitled to receive that Holder's allocable share of the Class Principal Balance of that Class plus any accrued and unpaid interest thereon at the applicable Interest Rate, and any Holder of any outstanding Notional Class Security will be entitled to receive that Holder's allocable share of any accrued and unpaid interest thereon at the applicable Interest Rate. The Residual Holders will be entitled to their pro rata share of any assets remaining in the Trust REMIC after payment in full of the amounts described in the foregoing sentence. However, any remaining assets are not likely to be significant.

# **Modification and Exchange**

All or a portion of the Classes of REMIC Securities specified on the front cover may be exchanged for a proportionate interest in the related MX Class shown on Schedule I to this Supplement. Similarly, all or a portion of the related MX Class may be exchanged for proportionate interests in the related Classes of REMIC Securities. This process may occur repeatedly.

Each exchange may be effected only in proportions that result in the principal and interest entitlements of the Securities received being equal to the entitlements of the Securities surrendered.

A Beneficial Owner proposing to effect an exchange must notify the Trustee through the Beneficial Owner's Book-Entry Depository participant. This notice must be received by the Trustee not later than two Business Days before the proposed exchange date. The exchange date can be any Business Day other than the last Business Day of the month. The notice must contain the outstanding principal and or notional balances of the Securities to be included in the exchange and the proposed exchange date. The notice is required to be delivered to the Trustee by email to USBGNMATeam@USBank.com or in writing at its Corporate Trust Office at U.S. Bank National Association, One Federal Street, 3rd Floor, Boston, MA 02110, Attention: Ginnie Mae REMIC Program Agency Group 2022-188. The Trustee may be contacted by telephone at (617) 603-6451 and by fax at (617) 603-6644.

A fee will be payable to the Trustee in connection with each exchange equal to  $\frac{1}{32}$  of 1% of the outstanding principal balance of the Securities surrendered for exchange (but not less than \$2,000 or more than \$25,000). The fee must be paid concurrently with the exchange.

The first distribution on a REMIC Security or an MX Security received in an exchange will be made on the Distribution Date in the month following the month of the exchange. The distribution will be made to the Holder of record as of the Record Date in the month of exchange.

See "Description of the Securities — Modification and Exchange" in the Base Offering Circular.

# YIELD, MATURITY AND PREPAYMENT CONSIDERATIONS

#### General

The prepayment experience of the Mortgage Loans will affect the Weighted Average Lives of and the yields realized by investors in the related Securities.

- The Mortgage Loans do not contain "due-on-sale" provisions, and any Mortgage Loan may be prepaid in full or in part at any time without penalty.
- The rate of payments (including prepayments and payments in respect of liquidations) on the Mortgage Loans is dependent on a variety of economic, geographic, social and other factors, including prevailing market interest rates and general economic factors.

The rate of prepayments with respect to single-family mortgage loans has fluctuated significantly in recent years. Although there is no assurance that prepayment patterns for the Mortgage Loans will conform to patterns for more traditional types of conventional fixed rate mortgage loans, generally:

- if mortgage interest rates fall materially below the Mortgage Rates on any of the Mortgage Loans (giving consideration to the cost of refinancing), the rate of prepayment of those Mortgage Loans would be expected to increase; and
- if mortgage interest rates rise materially above the Mortgage Rates on any of the Mortgage Loans, the rate of prepayment of those Mortgage Loans would be expected to decrease.

In addition, following any Mortgage Loan default and the subsequent liquidation of the underlying Mortgaged Property, the principal balance of the Mortgage Loan will be distributed through a combination of liquidation proceeds, advances from the related Ginnie Mae Issuer and, to the extent necessary, proceeds of Ginnie Mae's guaranty of the Ginnie Mae Certificates. As a result, defaults experienced on the Mortgage Loans will accelerate the distribution of principal of the Securities.

The terms of the Mortgage Loans may be modified to permit, among other things, a partial release of security, which releases a portion of the mortgaged property from the lien securing the related Mortgage Loan. Partial releases of security may allow the related borrower to sell the released property and generate proceeds that may be used to prepay the related Mortgage Loan in whole or in part.

Under certain circumstances, the Trustee has the option to purchase the Trust Assets, thereby effecting early retirement of the Securities. See "Description of the Securities — Termination" in this Supplement.

Investors in the Group 3, 4, 5 and 6 Securities are urged to review the discussion under "Risk Factors — The rate of payments on the underlying certificates will directly affect the rate of payments on the group 3, 4, 5 and 6 securities" in this Supplement.

#### **Accretion Directed Class**

Class LV is an Accretion Directed Class. The Accrual Amount will be applied to making principal distributions on Class LV as described in this Supplement.

Class LV will have principal payment stability only through the prepayment rate shown in the table below.

Class LV is entitled to principal payments in an amount equal to interest accrued on the Accrual Class. The Weighted Average Life of Class LV cannot exceed its Weighted Average Life as shown in the following table under any prepayment scenario, even a scenario where there are no prepayments.

- Moreover, based on the Modeling Assumptions, if the related Mortgage Loans prepay at any
  constant rate at or below the rate for Class LV shown in the table below, the Class Principal
  Balance of such Class would be reduced to zero on, but not before, its Final Distribution Date,
  and the Weighted Average Life of such Class would equal its maximum Weighted Average Life
  shown in the table below.
- However, the Weighted Average Life of Class LV will be reduced at prepayment speeds higher than the constant rates shown in the table below. See "Yield, Maturity and Prepayment Considerations Decrement Tables" in this Supplement.

#### **Accretion Directed Class**

Class	Average Life (in years) <sup>(1)</sup>	Final Distribution Date	Prepayment Rate at or below
LV	6.0	November 2033	231% PSA

<sup>(1)</sup> The maximum Weighted Average Life for Class LV is based on the Modeling Assumptions and the assumption that the related Mortgage Loans prepay at any constant rate at or below the rate shown in the table for such Class.

The Mortgage Loans will have characteristics that differ from those of the Modeling Assumptions. Therefore, even if the related Mortgage Loans prepay at a rate at or somewhat below the "at or below" rate shown for Class LV, the Class Principal Balance of such Class could be reduced to zero before its Final Distribution Date, and its Weighted Average Life could be shortened.

# **Assumability**

Each Mortgage Loan may be assumed, subject to HUD review and approval, upon the sale of the related Mortgaged Property. See "Yield, Maturity and Prepayment Considerations — Assumability of Government Loans" in the Base Offering Circular.

#### **Final Distribution Date**

The Final Distribution Date for each Class, which is set forth on the front cover of this Supplement or on Schedule I to this Supplement, is the latest date on which the related Class Principal Balance or Class Notional Balance will be reduced to zero.

- The actual retirement of any Class may occur earlier than its Final Distribution Date.
- According to the terms of the Ginnie Mae Guaranty, Ginnie Mae will guarantee payment in full of the Class Principal Balance of each Class of Securities no later than its Final Distribution Date.

# **Modeling Assumptions**

Unless otherwise indicated, the tables that follow have been prepared on the basis of the characteristics of the Underlying Certificates, the priorities of distributions on the Underlying Certificates and the following assumptions (the "Modeling Assumptions"), among others:

1. The Mortgage Loans underlying the Group 1, 2 and 7 Trust Assets have the assumed characteristics shown under "Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2 and 7 Trust Assets" in the Terms Sheet, except in the case of information set forth under the 0% PSA Prepayment Assumption Rate, for which each Mortgage Loan underlying a Group 1, 2 or 7 Trust Asset is

assumed to have an original and a remaining term to maturity of 360 months and a Mortgage Rate of 1.50% per annum higher than the related Certificate Rate.

- 2. The Mortgage Loans prepay at the constant percentages of PSA (described below) shown in the related table.
- 3. Distributions on the Securities are always received on the 20th day of the month, whether or not a Business Day, commencing in December 2022.
  - 4. A termination of the Trust or any Underlying Trust does not occur.
  - 5. The Closing Date for the Securities is November 30, 2022.
- 6. No expenses or fees are paid by the Trust other than the Trustee Fee, which is paid as described under "The Trust Assets The Trustee Fee" in this Supplement.
- 7. Distributions on the Underlying Certificates are made as described in the related Underlying Certificate Disclosure Documents.
  - 8. Each Class is held from the Closing Date and is not exchanged in whole or in part.

When reading the tables and the related text, investors should bear in mind that the Modeling Assumptions, like any other stated assumptions, are unlikely to be entirely consistent with actual experience.

- For example, most of the Mortgage Loans will not have the characteristics assumed, many Distribution Dates will occur on a Business Day after the 20th day of the month, and the Trustee may cause a termination of the Trust as described under "Description of the Securities Termination" in this Supplement.
- In addition, distributions on the Securities are based on Certificate Factors and Calculated Certificate Factors, as applicable, which may not reflect actual receipts on the Trust Assets.

See "Description of the Securities — Distributions" in the Base Offering Circular.

# **Decrement Tables**

Prepayments of mortgage loans are commonly measured by a prepayment standard or model. The model used in this Supplement, Prepayment Speed Assumption ("PSA"), is the standard prepayment assumption model of The Securities Industry and Financial Markets Association. PSA represents an assumed rate of prepayment each month relative to the then outstanding principal balance of the Mortgage Loans to which the model is applied. See "Yield, Maturity and Prepayment Considerations — Standard Prepayment Assumption Models" in the Base Offering Circular.

The decrement tables set forth below are based on the assumption that the Mortgage Loans prepay at the indicated percentages of PSA (the "PSA Prepayment Assumption Rates"). As used in the tables, each of the PSA Prepayment Assumption Rates reflects a percentage of the 100% PSA assumed prepayment rate. The Mortgage Loans will not prepay at any of the PSA Prepayment Assumption Rates, and the timing of changes in the rate of prepayments actually experienced on the Mortgage Loans will not follow the pattern described for the PSA assumption.

The decrement tables set forth below illustrate the percentage of the Original Class Principal Balance (or, in the case of a Notional Class, the original Class Notional Balance) that would remain outstanding following the distribution made each specified month for each Regular or MX Class, based on the assumption that the related Mortgage Loans prepay at the PSA Prepayment Assumption Rates. The percentages set forth in the following decrement tables have been rounded to the nearest whole percentage (including rounding down to zero).

The decrement tables also indicate the Weighted Average Life of each Class under each PSA Prepayment Assumption Rate. The Weighted Average Life of each Class is calculated by:

- (a) multiplying the net reduction, if any, of the Class Principal Balance (or the net reduction of the Class Notional Balance, in the case of a Notional Class) from one Distribution Date to the next Distribution Date by the number of years from the date of issuance thereof to the related Distribution Date,
- (b) summing the results, and
- (c) dividing the sum by the aggregate amount of the assumed net reductions in principal balance or notional balance, as applicable, referred to in clause (a).

The information shown for each Notional Class is for illustrative purposes only, as a Notional Class is not entitled to distributions of principal and has no Weighted Average Life. The Weighted Average Life shown for each Notional Class has been calculated on the assumption that a reduction in the Class Notional Balance thereof is a distribution of principal.

The Weighted Average Lives are likely to vary, perhaps significantly, from those set forth in the tables below due to the differences between the actual characteristics of the Mortgage Loans underlying the related Trust Assets and the Modeling Assumptions.

# Percentages of Original Class Principal (or Class Notional) Balances and Weighted Average Lives

Security Group 1 PSA Prepayment Assumption Rates

	Classes DS, ES, FA, OP and SA				
Distribution Date	0%	100%	198%	300%	400%
Initial Percent	100	100	100	100	100
November 2023	99	97	95	94	92
November 2024	98	92	86	81	76
November 2025	97	85	75	66	57
November 2026	95	79	65	53	43
November 2027	94	73	57	43	32
November 2028	93	67	49	34	24
November 2029	91	62	42	28	18
November 2030	89	57	36	22	13
November 2031	88	52	31	18	10
November 2032	86	48	27	14	7
November 2033	84	44	23	11	5
November 2034	82	40	20	9	4
November 2035	79	36	17	7	3
November 2036	77	33	14	6	2
November 2037	74	30	12	4	2
November 2038	71	27	10	3	1
November 2039	68	24	9	3	1
November 2040	65	21	7	2	1
November 2041	61	19	6	2	0
November 2042	57	16	5	1	0
November 2043	53	14	4	1	0
November 2044	49	12	3	1	0
November 2045	44	10	2	1	0
November 2046	39	8	2	0	0
November 2047	34	7	1	0	0
November 2048	28	5	1	0	0
November 2049	22	4	1	0	0
November 2050	15	2	0	0	0
November 2051	8	1	0	0	0
November 2052	0	0	0	0	0
Weighted Average Life (years)	19.9	11.2	7.5	5.6	4.4

Security Group 2 PSA Prepayment Assumption Rates

	Classes F, PO, S, SD and SK					
Distribution Date	0%	100%	206%	400%	500%	
Initial Percent	100	100	100	100	100	
November 2023	99	97	95	92	90	
November 2024	98	92	86	76	71	
November 2025	97	85	74	57	49	
November 2026	95	79	64	43	34	
November 2027	94	73	55	32	23	
November 2028	93	67	48	24	16	
November 2029	91	62	41	18	11	
November 2030	89	57	35	13	8	
November 2031	88	52	30	10	5	
November 2032	86	48	26	7	4	
November 2033	84	44	22	5	2	
November 2034	82	40	19	4	2	
November 2035	79	36	16	3 2	1	
November 2036	77	33	13		1	
November 2037	74	30	11	2	0	
November 2038	71	27	9	1	0	
November 2039	68	24	8	1	0	
November 2040	65	21	7	1	0	
November 2041	61	19	5	0	0	
November 2042	57	16	4	0	0	
November 2043	53	14	4	0	0	
November 2044	49	12	3	0	0	
November 2045	44	10	3 2 2	0	0	
November 2046	39	8	2	0	0	
November 2047	34	7	1	0	0	
November 2048	28	5 4	1	0	0	
November 2049	22		1	0	0	
November 2050	15	2	0	0	0	
November 2051	8	1	0	0	0	
November 2052	0	0	0	0	0	
Weighted Average Life (years)	19.9	11.2	7.3	4.4	3.7	
	-/-/				2.7	

Security Group 3 PSA Prepayment Assumption Rates

			Class IO		
Distribution Date	0%	100%	115%	300%	400%
Initial Percent	100	100	100	100	100
November 2023	98	92	91	81	75
November 2024	95	84	83	65	56
November 2025	93	77	75	52	41
November 2026	90	70	68	41	30
November 2027	87	64	61	33	22
November 2028	85	59	55	26	17
November 2029	82	53	50	21	12
November 2030	79	48	45	16	9
November 2031	76	44	40	13	6
November 2032	73	39	36	10	5
November 2033	70	35	32	8	5 3
November 2034	66	32	28	6	2
November 2035	63	28	25	5	2
November 2036	60	25	22	4	1
November 2037	56	22	19	3	1
November 2038	52	19	17		1
November 2039	48	17	14	2 2	0
November 2040	45	15	12	1	0
November 2041	41	13	10	1	0
November 2042	36	11	9	1	0
November 2043	32	9	7	1	0
November 2044	28	7	6	0	0
November 2045	23	6	5	0	0
November 2046	19	4	3	0	0
November 2047	14	3	2	0	0
November 2048	9	2	1	0	0
November 2049	4	1	1	0	0
November 2050	0	0	0	0	0
November 2051	Ŏ	Ö	Ŏ	Ŏ	Ŏ
Weighted Average					
Life (years)	15.7	9.3	8.7	4.4	3.3

Security Group 4
PSA Prepayment Assumption Rates

			Class SB		
Distribution Date	0%	100%	136%	300%	400%
Initial Percent	100	100	100	100	100
November 2023	98	92	90	80	74
November 2024	95	84	80	64	55
November 2025	93	77	72	51	41
November 2026	90	71	64	41	30
November 2027	88	64	57	32	22
November 2028	85	59	51	26	16
November 2029	82	53	45	20	12
November 2030	79	48	40	16	9
November 2031	76	43	35	13	6
November 2032	72	39	31	10	5
November 2033	69	35	27	8	5 3 2
November 2034	65	31	23	6	
November 2035	61	27	20	5	2
November 2036	57	24	17	4	1
November 2037	53	21	15	3	1
November 2038	49	18	12	2	1
November 2039	44	15	10	2	0
November 2040	39	13	8	1	0
November 2041	34	11	7	1	0
November 2042	29	8	5	1	0
November 2043	23	6	4	0	0
November 2044	18	5	3	0	0
November 2045	12	3	2	0	0
November 2046	6	1	1	0	0
November 2047	2	0	0	0	0
November 2048	0	0	0	0	0
November 2049	0	0	0	0	0
November 2050	0	0	0	0	0
November 2051	0	0	0	0	0
November 2052	0	0	0	0	0
Weighted Average					
Life (years)	14.7	9.0	7.7	4.3	3.3

Security Group 5 PSA Prepayment Assumption Rates

			Class IE		
Distribution Date	0%	100%	148%	300%	400%
Initial Percent	100	100	100	100	100
November 2023	96	90	87	78	72
November 2024	92	81	76	61	52
November 2025	87	72	65	47	37
November 2026	82	64	56	36	26
November 2027	78	56	48	27	18
November 2028	72	49	40	20	12
November 2029	67	42	34	15	8
November 2030	61	36	28	10	5
November 2031	55	30	22	7	4
November 2032	49	25	18	5	2
November 2033	42	20	13	4	2
November 2034	35	15	9	3	1
November 2035	28	11	7	2	1
November 2036	21	8	5 3 2	1	0
November 2037	13	5	3	1	0
November 2038	8	3 2		0	0
November 2039	5 3		1	0	0
November 2040		1	1	0	0
November 2041	2	1	0	0	0
November 2042	1	0	0	0	0
November 2043	1	0	0	0	0
November 2044	0	0	0	0	0
November 2045	0	0	0	0	0
November 2046	0	0	0	0	0
November 2047	0	0	0	0	0
November 2048	0	0	0	0	0
November 2049	0	0	0	0	0
November 2050	0	0	0	0	0
Weighted Average Life (years)	9.5	6.6	5.7	3.7	2.9

Security Group 6 PSA Prepayment Assumption Rates

			Class IM		
Distribution Date	0%	100%	148%	300%	400%
Initial Percent	100	100	100	100	100
November 2023	96	90	87	79	73
November 2024	92	81	76	62	53
November 2025	87	72	66	48	38
November 2026	83	64	57	37	28
November 2027	78	57	49	29	20
November 2028	72	50	41	22	14
November 2029	67	43	35	17	10
November 2030	61	37	29	13	7
November 2031	55	32	24	9	5
November 2032	49	26	19	9 7	5 3
November 2033	42	22	15		2
November 2034	36	17	12	5 3 2	1
November 2035	28	13	8	2	1
November 2036	21	9	6	1	0
November 2037	13	5	3	1	0
November 2038	4	2	1	0	0
November 2039	0	0	0	0	0
November 2040	0	0	0	0	0
November 2041	0	0	0	0	0
November 2042	0	0	0	0	0
November 2043	0	0	0	0	0
November 2044	0	0	0	0	0
November 2045	0	0	0	0	0
Weighted Average					
Life (years)	9.4	6.7	5.8	3.8	3.0

Security Group 7
PSA Prepayment Assumption Rates

		(	Class LA	1			(	Class LV	7			(	Class LY				(	Class LZ	:	
Distribution Date	0%	100%	212%	400%	500%	0%	100%	212%	400%	500%	0%	100%	212%	400%	500%	0%	100%	212%	400%	500%
Initial Percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
November 2023	99	96	94	90	88	93	93	93	93	93	100	100	100	100	100	105	105	105	105	105
November 2024	97	90	82	70	64	86	86	86	86	86	100	100	100	100	100	110	110	110	110	110
November 2025	96	81	68	47	37	78	78	78	78	78	100	100	100	100	100	116	116	116	116	116
November 2026	94	74	55	29	19	70	70	70	70	70	100	100	100	100	100	122	122	122	122	122
November 2027	92	66	44	16	6	61	61	61	61	61	100	100	100	100	100	128	128	128	128	128
November 2028	90	59	34	6	0	52	52	52	52	19	100	100	100	100	86	135	135	135	135	135
November 2029	88	53	26	0	0	43	43	43	31	0	100	100	100	95	59	142	142	142	142	102
November 2030	86	47	19	0	0	33	33	33	0	0	100	100	100	71	40	149	149	149	122	70
November 2031	84	41	13	0	0	22	22	22	0	0	100	100	100	52	28	157	157	157	91	48
November 2032	81	35	7	0	0	11	11	11	0	0	100	100	100	39	19	165	165	165	67	32
November 2033	79	30	3	0	0	0	0	0	0	0	100	100	100	29	13	173	173	173	50	22
November 2034	76	26	0	0	0	0	0	0	0	0	100	100	95	21	9	173	173	164	36	15
November 2035	73	21	0	0	0	0	0	0	0	0	100	100	80	15	6	173	173	138	27	10
November 2036	70	17	0	0	0	0	0	0	0	0	100	100	67	11	4	173	173	116	20	7
November 2037	66	13	0	0	0	0	0	0	0	0	100	100	56	8	3	173	173	97	14	5
November 2038	63	9	0	0	0	0	0	0	0	0	100	100	47	6	2	173	173	81	10	3
November 2039	59	6	0	0	0	0	0	0	0	0	100	100	39	4	1	173	173	67	7	2
November 2040	55	3	0	0	0	0	0	0	0	0	100	100	32	3	1	173	173	55	5	1
November 2041	50	0	0	0	0	0	0	0	0	0	100	99	26	2	1	173	171	45	4	1
November 2042	46	0	0	0	0	0	0	0	0	0	100	87	21	2	0	173	150	37	3	1
November 2043	41	0	0	0	0	0	0	0	0	0	100	75	17	1	0	173	129	30	2	0
November 2044	35	0	0	0	0	0	0	0	0	0	100	64	14	1	0	173	111	23	1	0
November 2045	30	0	0	0	0	0	0	0	0	0	100	54	11	1	0	173	93	18	1	0
November 2046	23	0	0	0	0	0	0	0	0	0	100	44	8	0	0	173	76	14	1	0
November 2047	17	0	0	0	0	0	0	0	0	0	100	35	6	0	0	173	61	10	0	0
November 2048	10	0	0	0	0	0	0	0	0	0	100	27	4	0	0	173	46	7	0	0
November 2049	3	0	0	0	0	0	0	0	0	0	100	19	3	0	0	173	33	5	0	0
November 2050	0	0	0	0	0	0	0	0	0	0	77	12	2	0	0	133	20	3	0	0
November 2051	0	0	0	0	0	0	0	0	0	0	40	5	1	0	0	69	8	1	0	0
November 2052	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weighted Average																				
Life (years)	17.5	8.2	5.0	3.1	2.6	6.0	6.0	6.0	5.2	4.6	28.7	23.7	16.8	10.1	8.2	28.7	23.7	16.8	10.7	8.9

# **Yield Considerations**

An investor seeking to maximize yield should make a decision whether to invest in any Regular or MX Class based on:

- the anticipated yield of that Class resulting from its purchase price,
- the investor's own projection of Mortgage Loan prepayment rates under a variety of scenarios,
- in the case of the Group 3, 4, 5 and 6 Securities, the investor's own projection of payment rates on the Underlying Certificates under a variety of scenarios and
- in the case of a Floating Rate or an Inverse Floating Rate Class, the investor's own projection of levels of Compounded SOFR under a variety of scenarios.

No representation is made regarding Mortgage Loan prepayment rates, Underlying Certificate payment rates, Compounded SOFR levels or the yield of any Class.

Prepayments: Effect on Yields

The yields to investors will be sensitive in varying degrees to the rate of prepayments on the related Mortgage Loans.

- In the case of Regular Securities or MX Securities purchased at a premium (especially the Interest Only Classes), faster than anticipated rates of principal payments could result in actual yields to investors that are lower than the anticipated yields.
- Investors in the Interest Only Classes should also consider the risk that rapid rates of principal payments could result in the failure of investors to recover fully their investments.

• In the case of Regular Securities or MX Securities purchased at a discount (especially the Principal Only Classes), slower than anticipated rates of principal payments could result in actual yields to investors that are lower than the anticipated yields.

See "Risk Factors — Rates of principal payments can reduce your yield" in this Supplement.

Rapid rates of prepayments on the Mortgage Loans are likely to coincide with periods of low prevailing interest rates.

During periods of low prevailing interest rates, the yields at which an investor may be able to reinvest amounts received as principal payments on the investor's Class of Securities may be lower than the yield on that Class.

Slow rates of prepayments on the Mortgage Loans are likely to coincide with periods of high prevailing interest rates.

During periods of high prevailing interest rates, the amount of principal payments available to an investor for reinvestment at those high rates may be relatively low.

The Mortgage Loans will not prepay at any constant rate until maturity, nor will all of the Mortgage Loans underlying any Trust Asset Group prepay at the same rate at any one time. The timing of changes in the rate of prepayments may affect the actual yield to an investor, even if the average rate of principal prepayments is consistent with the investor's expectation. In general, the earlier a prepayment of principal on the Mortgage Loans, the greater the effect on an investor's yield. As a result, the effect on an investor's yield of principal prepayments occurring at a rate higher (or lower) than the rate anticipated by the investor during the period immediately following the Closing Date is not likely to be offset by a later equivalent reduction (or increase) in the rate of principal prepayments.

Compounded SOFR: Effect on Yields of the Floating Rate and Inverse Floating Rate Classes

Low levels of Compounded SOFR can reduce the yield of the Floating Rate Classes. High levels of Compounded SOFR can significantly reduce the yield of the Inverse Floating Rate Classes. In addition, the Floating Rate Classes will not necessarily benefit from a higher yield at high levels of Compounded SOFR because the rate on such Classes is capped at a maximum rate described under "Terms Sheet — Interest Rates."

Payment Delay: Effect on Yields of the Fixed Rate Classes

The effective yield on any Fixed Rate will be less than the yield otherwise produced by its Interest Rate and purchase price because, on each Distribution Date, 30 days' interest will be payable on (or added to the principal amount of) that Class even though interest began to accrue approximately 50 days earlier.

#### **Yield Tables**

The following tables show the pre-tax yields to maturity on a corporate bond equivalent basis of specified Classes at various constant percentages of PSA and, in the case of the Inverse Floating Rate Classes, at various constant levels of Compounded SOFR.

The Mortgage Loans will not prepay at any constant rate until maturity, and it is unlikely that Compounded SOFR will remain constant. Moreover, it is likely that the Mortgage Loans will experience actual prepayment rates that differ from those of the Modeling Assumptions. Therefore, the actual pre-tax yield of any Class may differ from those shown in the applicable table below for that Class even if the Class is purchased at the assumed price shown.

The yields were calculated by

- 1. determining the monthly discount rates that, when applied to the applicable assumed streams of cash flows to be paid on the applicable Class, would cause the discounted present value of the assumed streams of cash flows to equal the assumed purchase price of that Class plus accrued interest (in the case of interest-bearing Classes), and
- 2. converting the monthly rates to corporate bond equivalent rates.

These calculations do not take into account variations that may occur in the interest rates at which investors may be able to reinvest funds received by them as distributions on their Securities and consequently do not purport to reflect the return on any investment in any Class when those reinvestment rates are considered.

The information set forth in the following tables was prepared on the basis of the Modeling Assumptions and the assumptions that (1) the Interest Rate applicable to each Inverse Floating Rate Class for each Accrual Period following the first Accrual Period will be based on the indicated level of Compounded SOFR and (2) the purchase price of each Class (expressed as a percentage of Original Class Principal Balance or original Class Notional Balance) plus accrued interest (in the case of interest-bearing Classes) is as indicated in the related table. **The assumed purchase price is not necessarily that at which actual sales will occur.** 

# **SECURITY GROUP 1**

# Sensitivity of Class DS to Prepayments Assumed Price 92.60938%\*

	PSA Prepayment Assumption Rate					
Compounded SOFR	100%	198%	300%	400%		
2.02454%	15.1%	15.5%	15.8%	16.2%		
3.02454%	10.5%	10.9%	11.2%	11.6%		
4.11227%	5.6%	5.9%	6.3%	6.7%		
5.20000% and above	0.8%	1.1%	1.5%	1.9%		

# Sensitivity of Class ES to Prepayments Assumed Price 3.375%\*

	PSA Prepayment Assumption Rates						
Compounded SOFR	100%	198%	300%	400%			
2.02454%	106.3%	102.1%	97.7%	93.4%			
3.02454%	67.4%	63.0%	58.3%	53.6%			
4.11227%	28.3%	23.3%	17.9%	12.7%			
5.20000% and above	**	**	**	**			

# Sensitivity of Class OP to Prepayments Assumed Price 78.6875%

PSA Prepayment Assumption Rates						
100%	198%	300%	400%			
2.3%	3.5%	4.7%	5.9%			

# Sensitivity of Class SA to Prepayments Assumed Price 97.25%\*

	PSA I	Rates		
Compounded SOFR	100%	198%	300%	400%
2.02454%	18.8%	18.9%	19.0%	19.1%
3.02454%	12.8%	13.0%	13.1%	13.2%
4.11227%	6.5%	6.7%	6.8%	7.0%
5.20000% and above	0.3%	0.5%	0.6%	0.8%

# **SECURITY GROUP 2**

# Sensitivity of Class PO to Prepayments Assumed Price 74.625%

PSA Prepayment Assumption Rates						
100%	206%	400%	500%			
2.8%	4.4%	7.4%	8.8%			

<sup>\*</sup> The price does not include accrued interest. Accrued interest has been added to the price in calculating the yields set forth in the table.

<sup>\*\*</sup> Indicates that investors will suffer a loss of virtually all of their investment.

# Sensitivity of Class S to Prepayments Assumed Price 106.25%\*

	PSA Prepayment Assumption Rates							
Compounded SOFR	100%	206%	400%	500%				
2.19332%	15.8%	15.5%	14.9%	14.7%				
3.19332%	10.4%	10.1%	9.5%	9.3%				
4.21666%	4.9%	4.6%	4.1%	3.9%				
5.24000% and above	(0.5)%	(0.7)%	(1.2)%	(1.5)%				

# Sensitivity of Class SD to Prepayments Assumed Price 90.4375%\*

	PSA Prepayment Assumption Rates						
Compounded SOFR	100%	206%	400%	500%			
2.19332%	10.2%	10.7%	11.7%	12.1%			
3.19332%	7.1%	7.7%	8.6%	9.1%			
4.21666%	4.0%	4.5%	5.5%	6.0%			
5.24000% and above	1.0%	1.5%	2.4%	2.9%			

# Sensitivity of Class SK to Prepayments Assumed Price 5.75%\*

	PSA Prepayment Assumption Rates							
Compounded SOFR	100%	206%	400%	500%				
2.19332%	52.1%	47.1%	37.7%	32.8%				
3.19332%	31.6%	26.2%	16.1%	10.8%				
4.21666%	11.0%	5.2%	(5.8)%	(11.6)%				
5.24000% and above	**	**	**	***				

# **SECURITY GROUP 3**

# Sensitivity of Class IO to Prepayments Assumed Price 12.86387%\*

	PSA Pro	epayment Assur	nption Rates	
100%	115%	247%	300%	400%
9.9%	8.9%	0.0%	(3.7)%	(10.9)%

<sup>\*</sup> The price does not include accrued interest. Accrued interest has been added to the price in calculating the yields set forth in the table.

<sup>\*\*</sup> Indicates that investors will suffer a loss of virtually all of their investment.

#### **SECURITY GROUP 4**

# Sensitivity of Class SB to Prepayments Assumed Price 1.86598%\*

	PS.	A Prepaymen	t Assumption 1	Rates
Compounded SOFR	100%	136%	300%	400%
2.39212%	73.9%	70.9%	56.5%	47.3%
3.39212%	12.6%	10.2%	(1.2)%	(8.5)%
3.59606%	(0.2)%	(2.4)%	(13.2)%	(20.2)%
3.80000% and above	**	**	***	***

#### **SECURITY GROUP 5**

# Sensitivity of Class IE to Prepayments Assumed Price 17.23522%\*

	PSA Prej	payment Assum	ption Rates	
100%	148%	278%	300%	400%
13.2%	9.8%	0.1%	(1.6)%	(9.5)%

#### **SECURITY GROUP 6**

# Sensitivity of Class IM to Prepayments Assumed Price 17.64517%\*

	PSA Prep	payment Assum	ption Rates	
100%	148%	285%	300%	400%
12.8%	9.6%	0.1%	(1.0)%	(8.3)%

<sup>\*</sup> The price does not include accrued interest. Accrued interest has been added to the price in calculating the yields set forth in the table.

# CERTAIN UNITED STATES FEDERAL INCOME TAX CONSEQUENCES

The following tax discussion, when read in conjunction with the discussion of "Certain United States Federal Income Tax Consequences" in the Base Offering Circular, describes the material United States federal income tax considerations for investors in the Securities. However, these two tax discussions do not purport to deal with all United States federal tax consequences applicable to all categories of investors, some of which may be subject to special rules.

#### **REMIC Election**

In the opinion of Cleary Gottlieb Steen & Hamilton LLP, the Trust will constitute a Single REMIC Series for United States federal income tax purposes.

# **Regular Securities**

The Regular Securities will be treated as debt instruments issued by the Trust REMIC for United States federal income tax purposes. Income on the Regular Securities must be reported under an accrual method of accounting.

<sup>\*\*</sup> Indicates that investors will suffer a loss of virtually all of their investment.

The Principal Only, Notional and Accrual Classes of Regular Securities will be issued with original issue discount ("OID"), and certain other Classes of Regular Securities may be issued with OID. See "Certain United States Federal Income Tax Consequences — Tax Treatment of Regular Securities — Original Issue Discount," "— Variable Rate Securities" and "— Interest Weighted Securities and Non-VRDI Securities" in the Base Offering Circular.

The prepayment assumption that should be used in determining the rates of accrual of OID, if any, on the Regular Securities (as described in "Yield, Maturity and Prepayment Considerations" in this Supplement) is as follows:

Group(s)	PSA PSA
1	198%
2	206%
3	115%
4	136%
5 and 6	148%
7	212%

In the case of the Floating Rate Classes, the interest rate values to be used for these determinations are the initial Interest Rates as set forth in the Terms Sheet under "Interest Rates." No representation is made, however, about the rate at which prepayments on the Mortgage Loans underlying any Group of Trust Assets actually will occur or the level of Compounded SOFR at any time after the date of this Supplement. See "Certain United States Federal Income Tax Consequences" in the Base Offering Circular.

The Regular Securities generally will be treated as "regular interests" in a REMIC for domestic building and loan associations and "real estate assets" for real estate investment trusts ("REITs") as described in "Certain United States Federal Income Tax Consequences" in the Base Offering Circular. Similarly, interest on the Regular Securities will be considered "interest on obligations secured by mortgages on real property" for REITs as described in "Certain United States Federal Income Tax Consequences" in the Base Offering Circular.

# **Residual Securities**

The Class R Securities will represent the beneficial ownership of the Residual Interest in the Trust REMIC.

The Residual Securities generally will be treated as "residual interests" in a REMIC for domestic building and loan associations and as "real estate assets" for REITs, as described in "Certain United States Federal Income Tax Consequences" in the Base Offering Circular, but will not be treated as debt for United States federal income tax purposes. Instead, the Holders of the Residual Securities will be required to report, and will be taxed on, their pro rata shares of the taxable income or loss of the Trust REMIC, and these requirements will continue until there are no Securities of any Class outstanding. Thus, Residual Holders will have taxable income attributable to the Residual Securities even though they will not receive principal or interest distributions with respect to the Residual Securities, which could result in a negative after-tax return for the Residual Holders. Even though the Holders of the Residual Securities are not entitled to any stated principal or interest payments on the Residual Securities, the Trust REMIC may have substantial taxable income in certain periods, and offsetting tax losses may not occur until much later periods. Accordingly, the Holders of the Residual Securities may experience substantial adverse tax timing consequences. Prospective investors are urged to consult their own tax

advisors and consider the after-tax effect of ownership of the Residual Securities and the suitability of the Residual Securities to their investment objectives.

Prospective Holders of Residual Securities should be aware that, at issuance, based on the expected prices of the Regular and Residual Securities and the prepayment assumption described above, the residual interests represented by the Residual Securities will be treated as "noneconomic residual interests" as that term is defined in Treasury regulations.

OID accruals on the Underlying Certificates will be computed using the same prepayment assumption as set forth under "Certain United States Federal Income Tax Consequences — Regular Securities" in this Supplement.

# **MX Securities**

For a discussion of certain United States federal income tax consequences applicable to the MX Classes, see "Certain United States Federal Income Tax Consequences — Tax Treatment of MX Securities", "— Exchanges of MX Classes and Regular Classes" and "— Taxation of Foreign Holders of REMIC Securities and MX Securities" in the Base Offering Circular.

Investors should consult their own tax advisors in determining the United States federal, state, local, foreign and any other tax consequences to them of the purchase, ownership and disposition of the Securities.

#### **ERISA MATTERS**

Ginnie Mae guarantees distributions of principal and interest with respect to the Securities. The Ginnie Mae Guaranty is supported by the full faith and credit of the United States of America. The Regular and MX Securities will qualify as "guaranteed governmental mortgage pool certificates" within the meaning of a Department of Labor regulation, the effect of which is to provide that mortgage loans and participations therein underlying a "guaranteed governmental mortgage pool certificate" will not be considered assets of an employee benefit plan subject to the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), or subject to Section 4975 of the Code (each, a "Plan"), solely by reason of the Plan's purchase and holding of that certificate.

Prospective Plan Investors should consult with their advisors to determine whether the purchase, holding or resale of a Security could give rise to a transaction that is prohibited or is not otherwise permissible under either ERISA or the Code.

Governmental plans and certain church plans, while not subject to the fiduciary responsibility provisions of ERISA or the prohibited transaction provisions of ERISA and the Code, may nevertheless be subject to local, state or other federal laws that are substantially similar to the foregoing provisions of ERISA and the Code ("Similar Law").

Fiduciaries of any such Plans or governmental or church plans subject to Similar Law should consult with their counsel before purchasing any of the Securities.

See "ERISA Considerations" in the Base Offering Circular.

The Residual Securities are not offered to, and may not be transferred to, a Plan Investor.

#### LEGAL INVESTMENT CONSIDERATIONS

Institutions whose investment activities are subject to legal investment laws and regulations or to review by certain regulatory authorities may be subject to restrictions on investment in the Securities. No representation is made about the proper characterization of any Class for legal investment or other purposes, or about the permissibility of the purchase by particular investors of any Class under applicable legal investment restrictions.

Investors should consult their own legal advisors regarding applicable investment restrictions and the effect of any restrictions on the liquidity of the Securities prior to investing in the Securities.

See "Legal Investment Considerations" in the Base Offering Circular.

#### PLAN OF DISTRIBUTION

Subject to the terms and conditions of the Sponsor Agreement, the Sponsor has agreed to purchase all of the Securities if any are sold and purchased. The Sponsor proposes to offer the Regular and MX Classes to the public from time to time for sale in negotiated transactions at varying prices to be determined at the time of sale, plus accrued interest, if any, from (1) November 1, 2022 on the Fixed Rate Classes and (2) November 20, 2022 on the Floating Rate and Inverse Floating Rate Classes. The Sponsor may effect these transactions by sales to or through certain securities dealers. These dealers may receive compensation in the form of discounts, concessions or commissions from the Sponsor and/or commissions from any purchasers for which they act as agents. Some of the Securities may be sold through dealers in relatively small sales. In the usual case, the commission charged on a relatively small sale of securities will be a higher percentage of the sales price than that charged on a large sale of securities.

#### **INCREASE IN SIZE**

Before the Closing Date, Ginnie Mae, the Trustee and the Sponsor may agree to increase the size of this offering. In that event, the Securities will have the same characteristics as described in this Supplement, except that the Original Class Principal Balance (or original Class Notional Balance) of each Class receiving principal distributions or interest distributions based upon a notional balance from the same Trust Asset Group will increase by the same proportion. The Trust Agreement, the Final Data Statement and the Supplemental Statement, if any, will reflect any increase in the size of the transaction.

#### **LEGAL MATTERS**

Certain legal matters will be passed upon for Ginnie Mae by Hunton Andrews Kurth LLP, for the Trust by Cleary Gottlieb Steen & Hamilton LLP and Marcell Solomon & Associates, P.C., and for the Trustee by Faegre Drinker Biddle & Reath LLP.

Available Combinations(1)

	REMIC Securities		MX Securities	ies					
Class		Original Class Principal Balance or Class Notional Balance	Related MX Class	Maximum Original Class Principal Balance(2)	Principal Type(3)	Interest Rate	Interest Type(3)	CUSIP Number	Final Distribution Date(4)
Security Group 1  Combination 1									
ES		\$25,000,000	SA	\$4,545,455	PT	(5)	INV	38383LHM5	38383LHM5 November 2052
OP		4,545,455							
Combination 2									
ES		\$18,750,000	DS	\$4,545,455	PT	(5)	INV	38383LHIN3	38383LHN3 November 2052
OP		4,545,455							
Security Group 2									
Combination 3									
Ю		\$ 5,454,546	S	\$5,454,546	PT	(5)	INV	38383LHP8	November 2052
SK		30,000,000							
Combination 4									
ЬО		\$ 5,454,546	SD	\$5,454,546	PT	(5)	INV	38383LHQ6	November 2052
SK		15,000,000							
Security Group 7									
Combination 5									
LV		\$ 2,860,000	LY	\$6,788,307	SEQ	5.0%	FIX	38383LHR4	38383LHR4 November 2052
ZT		3,928,307							

(1) All exchanges must comply with minimum denomination restrictions.

The amount shown for each MX Class represents the maximum Original Class Principal Balance of that Class, assuming it were to be issued on the Closing Date.

<sup>)</sup> As defined under "Class Types" in Appendix I to the Base Offering Circular.

See "Yield, Maturity and Prepayment Considerations — Final Distribution Date" in this Supplement. (4)

<sup>(5)</sup> The Interest Rate will be calculated as described under "Terms Sheet — Interest Rates" in this Supplement.

# **Underlying Certificates**

	-										2309230 II 7418624 II 0000000 II 1229674 I 0000000 II 3686707 II	2,5062599230 100,0000000000 100,0000000000 100,00000000
			•									
	br.	١	1.									29 30,522,765,632 29 30,522,765,632 60 78,098,511,97 81 12,200,888,58 66 4,512,090,27 10,754,374,05 04 2,959,817,57
	_	•	10		_	^1			15.00	15.000	100000	77 0.73512029 0 0.74784060 2 0.13253281 7 0.43736566 3 0.05218005
Original	Notional	Balance of Class	\$ 51 000 000	43,300,980	11,468,519	255,430,292	78,883,23	78,883,23,	78,883,237 104,432,030 122,240,38	78,883,23, 104,432,03( 122,240,38, 10,316,517	78,883,237 104,432,036 122,240,385 10,316,517 2,253,367,07	78,883,237 104,432,036 122,240,382 10,316,517 2,253,367,073 105,727,647
		Principal Tvne(1)	(JAJICA)	NTI(PT)	NTL(PT)	NTL(PT)	NTL(PT)	NTL(PT) NTL(PT)	NTL(PT) NTL(PT) NTL(PAC/AD)	NTL(PT) NTL(PT) NTL(PAC/AD) NTL(PT)	NTL(PT) NTL(PT) NTL(PAC/AD) NTL(PT) NTL(PT)	NTL(PT) NTL(PT) NTL(PAC/AD) NTL(PT) NTL(PT) NTL(PT) NTL(PT)
	Final	Distribution Date	October 2050	December 2050	December 2050	February 2051	December 2051	December 2051 January 2052	December 2051 January 2052 December 2043	December 2051 January 2052 December 2043 January 2050	December 2051 January 2052 December 2043 January 2050 January 2040	December 2051 January 2052 December 2043 January 2050 January 2040 March 2043
			•									INV/10 INV/10 FIX/10 FIX/10 FIX/10
		Interest	2.50%	2.50	2.50	2.50	9	ଉତ	QQ.	QQ\$\$	QQ 44.4 QQ 64.4 QQ 64.4	© 65444 067444 067444 0674
			• (4	,								38383FRZ8 38378PGF9 38378PGF9 38375AT87 38375AT87
		Issue	October 30, 2020	December 30, 2020	December 30, 2020	February 26, 2021	December 30, 2021	December 30, 2021 January 28, 2022	December 30, 2021 January 28, 2022 December 30, 2013	December 30, 2021 January 28, 2022 December 30, 2013 January 30, 2020	December 30, 2021 January 28, 2022 December 30, 2013 January 30, 2020 January 29, 2010	December 30, 2021 January 28, 2022 December 30, 2013 January 30, 2020 January 29, 2010 March 28, 2013
		Class	Þ	Z	WI	IA	SC(3)	SC(3) SC(3)	SC(3) 1Q(4)	SC(3) SG(3) IQ(4) IO	SS SS JO TO	SC(3) SG(3) IQ(4) OI(4) II
		Series	2020-162	2020-185	2020-188	2021-023	 2021-221	2021-221 2022-005	2021-221 2022-005 2013-182	2021-221 2022-005 2013-182 2020-001	2021-221 2022-005 2013-182 2020-001 2010-009	2021-221 2022-005 2013-182 2020-001 2010-009 2013-039
		Issuer	Ginnie Mae	Ginnie Mae	Ginnie Mae	Ginnie Mae	Ginnie Mae	Ginnie Mae Ginnie Mae	Ginnie Mae Ginnie Mae Ginnie Mae	Ginnie Mae Ginnie Mae Ginnie Mae Ginnie Mae	Ginnie Mae Ginnie Mae Ginnie Mae Ginnie Mae Ginnie Mae	Ginnie Mae Ginnie Mae Ginnie Mae Ginnie Mae Ginnie Mae
		Trust Asset Groun		'n	· ~	~	4	44	44 W	44 W W	44 W W O	440000

As defined under "Class Types" in Appendix I to the Base Offering Circular.

Underlying Certificate Factor is as of November 2022. 38

The Mortgage Loans underlying this Underlying Certificate may be re-performing Mortgage Loans that were previously repurchased from one or more pools of Mortgage Loans underlying one or more Ginnie Mae MBS Certificates.

MX Class.

The Interest Rate will be calculated as described under "Terms Sheet - Interest Rates" in the related Underlying Certificate Disclosure Document. <del>4</del> <del>0</del>



\$101,788,308

Government National Mortgage Association

# GINNIE MAE®

Guaranteed REMIC
Pass-Through Securities
and MX Securities
Ginnie Mae REMIC Trust 2022-188

OFFERING CIRCULAR SUPPLEMENT November 23, 2022

Morgan Stanley Mischler Financial Group, Inc.