## JOINT FILING AGREEMENT MFA FINANCIAL, INC.

In accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, the undersigned hereby confirm the agreement by and among them to the joint filing on behalf of them of the Statement on Schedule 13D and any and all further amendments thereto, with respect to the securities of the above referenced issuer, and that this Agreement be included as an Exhibit to such filing. This Agreement may be executed in any number of counterparts each of which shall be deemed to be an original and all of which together shall be deemed to constitute one and the same Agreement.

IN WITNESS WHEREOF, the undersigned hereby execute this Agreement as of July 6, 2020.

ATHENE ANNUITY AND LIFE COMPANY

By: Apollo Insurance Solutions Group LP,

its investment adviser
By: AISG GP Ltd.,
its general partner

By: /s/ Matthew S. O'Mara

Matthew S. O'Mara Authorized Signatory

ATHENE ANNUITY & LIFE ASSURANCE COMPANY

By: Apollo Insurance Solutions Group LP,

its investment adviser
By: AISG GP Ltd.,
its general partner

By: /s/ Matthew S. O'Mara

Matthew S. O'Mara Authorized Signatory

ATHENE USA CORPORATION

By: Apollo Insurance Solutions Group LP,

its investment adviser
By: AISG GP Ltd.,
its general partner

By: /s/ Matthew S. O'Mara

Matthew S. O'Mara Authorized Signatory ATHENE LIFE RE LTD.

By: Apollo Insurance Solutions Group LP,

its investment adviser
By: AISG GP Ltd.,
its general partner

y: /s/ Matthew S. O'Mara

Matthew S. O'Mara Authorized Signatory

ATHENE HOLDING LTD.

By: Apollo Insurance Solutions Group LP,

its investment adviser By: AISG GP Ltd.,

its general partner

By: /s/ Matthew S. O'Mara

Matthew S. O'Mara Authorized Signatory

APOLLO INSURANCE SOLUTIONS GROUP LP

By: AISG GP Ltd.,

its general partner

By: /s/ Matthew S. O'Mara

Matthew S. O'Mara Authorized Signatory

AISG GP LTD.

By: /s/ Matthew S. O'Mara

Matthew S. O'Mara

Authorized Signatory

APOLLO LIFE ASSET, L.P.

By: Apollo Life Asset GP, LLC,

its general partner

By: /s/ William B. Kuesel

William B. Kuesel Vice President APOLLO LIFE ASSET GP, LLC

By: /s/ William B. Kuesel

William B. Kuesel

Vice President

APOLLO CAPITAL MANAGEMENT, L.P.

By: Apollo Capital Management GP, LLC,

its general partner

By: /s/ William B. Kuesel

William B. Kuesel

Vice President

APOLLO CAPITAL MANAGEMENT GP, LLC

y: /s/ William B. Kuesel

William B. Kuesel

Vice President

APOLLO MANAGEMENT HOLDINGS, L.P.

By: Apollo Management Holdings GP, LLC,

its general partner

By: /s/ William B. Kuesel

William B. Kuesel

Vice President

 $A POLLO\,MANAGEMENT\,HOLDINGS\,GP, LLC$ 

By: /s/ William B. Kuesel

William B. Kuesel

Vice President

OMAHA EQUITY AGGREGATOR, L.P.

By: AP Omaha Advisors, LLC,

its general partner

By: Apollo Hybrid Value Advisors, L.P.,

its sole member

By: Apollo Hybrid Value Capital Management, LLC,

its general partner

By: /s/ Joseph D. Glatt

Joseph D. Glatt Vice President AP OMAHA ADVISORS, LLC

By: Apollo Hybrid Value Advisors, L.P.,

its sole member

By: Apollo Hybrid Value Capital Management, LLC,

its general partner

By: /s/ Joseph D. Glatt

Joseph D. Glatt Vice President

APOLLO HYBRID VALUE ADVISORS, L.P.

y: Apollo Hybrid Value Capital Management, LLC,

its general partner

/s/ Joseph D. Glatt

Joseph D. Glatt Vice President

APOLLO HYBRID VALUE CAPITAL MANAGEMENT, LLC

By: /s/ Joseph D. Glatt

Joseph D. Glatt Vice President

APH HOLDINGS, L.P.

By: Apollo Principal Holdings III GP, Ltd.,

its general partner

By: /s/ William B. Kuesel

William B. Kuesel

Vice President

APOLLO PRINCIPAL HOLDINGS III GP, LTD.

/s/ William B. Kuesel William B. Kuesel

Vice President