

ENTERPRISE FINANCIAL SERVICES GROUP, INC. PROXY
Solicited by the Board of Directors of the Company
for use at the Annual Meeting of Shareholders
to be held on January 25, 2024

The undersigned shareholder of Enterprise Financial Services Group, Inc. (the "Company") hereby appoints Raymond R. Ford and Brad Ryniawec as the nominees of the undersigned, with power of substitution in each, to attend the Annual Meeting of Shareholders of Enterprise Financial Services Group, Inc. to be held on January 25, 2024 at 11:30 a.m. at offices of Enterprise Financial Services Group, Inc., 4091 Mount Royal Boulevard, Allison Park, Pennsylvania 15101-2917, and any adjournment thereof, and to vote thereat all of the shares of the undersigned as the undersigned has indicated below and to otherwise act on behalf of and represent the undersigned thereat with respect to all shares of Common Stock of the Company held of record by the undersigned as fully as the undersigned could do if personally present.

1. To elect three directors to Class Three of the Board of Directors, for a three year term.

Nominees: Larry G. Lockard, Dr. Timothy A. DeBiasse and Melissa A. Hart

FOR all nominees listed
(except as marked to the contrary)

WITHHOLD AUTHORITY to
vote for the following nominees:

2. To transact such other business as may properly come before the meeting or any adjournment thereof.

FOR **AGAINST** **ABSTAIN**

Signature of Shareholder

Print Name

Signature (if held jointly)

Print Name

Date

Please indicate if you will be attending the meeting.

Yes

No

This proxy must be signed by the shareholder exactly as his or her shares are registered on the books of the Company. If signed in a representative capacity, the title or other capacity of the person signing should be indicated. If this proxy is not dated in the above space, it will be deemed to bear the date on which it was mailed indicated by the postmark or otherwise delivered to the Company.

The shares represented by this proxy will be voted as specified by the shareholder, but if no specification is made they will be voted FOR the election of the nominees whose names are listed above, and in the discretion of the proxies on such other matters as may come before the meeting.