IT IS AGREED BETWEEN YOU AND J.P. Morgan Securities LLC ("JPMS") THAT:

1. It is agreed between you and us that this transaction, as described on the face hereof, is subject to the following terms and conditions. This confirmation shall inure to our benefit including successors and assigns and shall be conclusive if not objected to promptly to in writing.

2. If required payment or delivery of securities or money is not made by settlement date, positions may be closed out and appropriate charges, including interest, may be made to your account.

3. Until fully paid for, securities in a cash account, as defined by Regulation T, are or may be periodically, without prior notice, hypothecated or rehypothecated, under circumstances which will permit the commingling of instruments carried for the accounts of other customers for any amount, whether under general loans or otherwise, or may be loaned out or delivered on contracts for other customers without having in our possession and control all like amount of similar instruments.

4. On written request, we will furnish the time of execution, name of the other party, if applicable, and details of the remuneration received from other persons when we act as agent for such persons.

5. With respect to transactions involving an offering of securities, the underwriters may over-allot or effect transactions which stabilize or maintain the market price of such securities at a level above that which might otherwise prevail in the open market. Such stabilizing, if commenced, may be discontinued at any time.

6. The terms, form and all other transactions with us have been entered into in consideration of each other. In the event that (i) you shall default in respect of this or any other transaction with us, (ii) you apply for, consent to, or are the subject of an application or petition for the appointment of or the taking of possession by a receiver, custodian trustee, liquidator, or similar person of yourself or of all or a substantial part of your property, (iii) you admit your inability or become generally unable to pay your debts as such debts become due or shall have a negative net worth, (iv) you make a general assignment for the benefit of your creditors, (v) you file, or have filed or entered against you, a petition or order for relief under Title 11 of the United States Code, as amended, or any similar law of any jurisdiction regarding reorganization, liquidation, dissolution, insolvency or relief of debtors, (vi) you have filed against you an application for a protective decree under Section 5 of the Securities Investor Protection Act of 1970, as amended, (vii) we believe that we may not be able to apply without delay property we are holding or expect to receive from you against your obligation, or (viii) we believe that an event or circumstances has occurred which in our judgment materially impairs your creditworthiness or ability to perform your obligations, we may (a) cancel or otherwise liquidate this and any other transaction without prior notice to you, and you will be liable to us for any resulting loss, cost and expense, including cost of collection and attorney's fees), (b) set off any obligation to you against any of your obligations to us, or our affiliates, (c) realize upon property securing any obligations to us or our affiliates, and (d) take any other action necessary or appropriate to protect and enforce our rights under this or any other agreement between you and us or our affiliates, and to reduce any risk to us of loss or delay. Any grace or notice period required by agreement or custom prior to exercise of such remedies may be shortened or eliminated by us if, in our discretion, it is reasonable to do so under the circumstances. In order to secure any obligations to us or our affiliates under this or any other transaction you hereby grant to us a security interest in all securities moneys or other property heretofore or hereafter held by or for us or our affiliates. In the event of a breach or default hereunder, we shall have all rights and remedies available to a secured creditor under the Uniform Commercial Code as then in effect in New York in addition to rights and remedies provided herein or otherwise by law.

7. Any repudiation, breach or default hereunder shall constitute at JPMS's election a default under all other agreements or confirmations between us. Upon any repudiation, breach or default JPMS shall be entitled, without limiting other rights or remedies it may have, to liquidate, hedge or offset your obligation by sale of property in your account(s), purchase of property, cancellation of transactions, and/or offset against other accounts you may have at JPMS or obligations of JPMS to you. Purchases or sales may be public or private, and may be made without notice and in such manner as JPMS may in its discretion determine. You shall remain liable for any balance due and any loss incurred by JPMS in acting pursuant hereto.

8. If this transaction is a sale by you of an instrument not held in your account with us and it is not marked short, you represent that you own such instrument and it is agreed that you will promptly deliver such instrument to us.

9. No waiver, notice, demand or forbearance on the part of JPMS shall be deemed continuing. If any provisions herein are or become inconsistent with any law, rule or regulation, such provision shall be deemed to be rescinded or modified accordingly and in all other respects this confirmation shall not be affected.

10. Monthly Account Statements shall be considered accepted and approved by you absent written notice of objection within ten days after receipt.

11. If any part of this Agreement is held to be void or unenforceable or inconsistent with any other agreement to which this confirmation relates, this shall not affect the validity or enforceability of the remaining parts of the confirmation. If the transaction involves securities, the parties acknowledge that it is a "securities contract" under 11 U.S.C. Section 741(7), as amended. You agree we may rely on all instructions we believe to be genuine.

12. This confirmation and all transaction hereunder are subject to: the constitution, by-laws, customs, and interpretations of the exchange or marketplace where executed, all applicable federal laws and regulations; and shall be governed by and construed in accordance with the law of the state of New York without regard to its conflict of laws provision.

13. American style short option positions are liable for assignment at any time; European style short options are subject to assignment only at expiration.

14. The "Fee" collected is intended to offset fees charged by various regulatory bodies. The amount collected may be more or less than the amount ultimately paid to the various regulatory bodies. In the event of the former, no reimbursement will be distributed back to you and, in the event of the latter, there will be no additional charge made to you.

15. The actual yield of an asset-backed security (securities which represent an interest in or are secured by a pool or receivables or other financial assets that are subject to continuous prepayment) may vary according to the rate at which the underlying assets are prepaid. Additional information concerning the factors that affect yield will be furnished upon written request.

16. JPMS or an affiliate may act as Primary Market Maker or Competitive Market Maker in option trades executed on an options exchange, and may have a position (long or short) in such securities and may be on the opposite side of public orders executed in such securities.

17. Settlement of all transactions is computed for payment in New York on settlement date. If payment is made at a later date, additional interest to date of payment may be charged.

18. We confirm and our communications with you made in connection with the transactions referred to herein contain(ed) **(i)** information obtained from multiple direct, indirect, affiliated, unaffiliated, public and proprietary data sources (including, but not limited to, pending information, market data, calculated data, reference data, valuations, ratings, coupon and dividend rates and other fundamental data), and (ii) information which is calculated based upon such information (including, but not limited to, market values, Estimated Yield and Estimated annual income). Although JPMS believes these sources are reliable, it does not independently review or verify such information and neither JPMS nor any such source will have any duty or obligation to verify, correct, complete or update any such information. Such information is being provided to you with all faults for use entirely at your own risk, without any warranty whatsoever by JPMS or any such source. Neither JPMS nor any such source shall have any liability whatsoever relating to any inaccuracy or lack of timeliness or completeness of such information or any use thereof or for omissions therefrom nor for any lost profits, indirect, special or consequential damages. Moreover, such sources retain exclusive proprietary rights in such information. You shall use such information only for your own use and purposes and not for use (other than in connection with the transaction for which the information is provided) or retransmission without prior written approval of the source, or for any unlawful or unauthorized purpose.

19. The "Options Fee" reflected is intended to offset fees assessed to your broker by the various Options Exchanges. The amount collected may be more or less than the amount ultimately paid to the various regulatory bodies. In the event of the former, no reimbursement will be distributed back to you and, in the event of the latter, there will be no additional charge made to you.

20. This confirmation incorporates, and the transactions confirmed are hereby subject to, any written agreement between you and us. The terms of this confirmation govern in the event of any inconsistency with the term of any other agreements.

21. Zero Coupon issues pay no periodic interest, may be called below maturity value, and if called, may be called below maturity value without notice to you unless registered.

22. Instruments sold, offered or recommended are not deposits or FDIC insured unless we disclose otherwise.

23. Your capacity was for your own account unless you expressly specified otherwise to us in writing and gave sufficient information in writing prior to the transaction for us to rely upon the credit of another party or your credit in another capacity.

24. For Treasury inflation protection securities (TIPS) and Corporate Inflation Protection Bonds (IPBs) yield to maturity may vary due to inflation adjustments.

25. If a deferred commission or other charge is to be imposed upon redemption or as a condition of payment of principal or interest, the customer may be required to make such a payment. Information concerning such deferred compensation or other charge will be furnished upon written request.

26. Purchasers of Fannie Mae or Freddie Mac Securities can obtain additional pool information by telephoning Fannie Mae at 1-800-237-8627 or Freddie Mac at 1-800-336-3672 or emailing Freddie Mac at Investor_Inquiry@FreddieMac.com.

27. If this confirmation indicates that this is a transaction in aftermarket or when-distributed securities, the terms and conditions set forth in the applicable proxy, disclosure document and/or bankruptcy plan shall apply. Upon determination of the settlement date, you will receive a final confirmation showing the settlement date and the total proceeds or cost credited or debited to your account on that date. Such transactions shall be settled or cancelled at such time and place and in such manner as the exchange or market to whose requirements the transaction is subject may determine. When issued positions will be marked-to-market at the close of each trading day and if the market price falls below the contract price by an amount that exceeds the cash deposit in the account, interest may be charged on such excess.

28. Unless you have elected a different closing methodology, as noted on the front, or identified a specific tax lot in the trade description, all trades are closed out under the "FIFO" (First In First Out) methodology.

29. For Registered Investment Companies or Dividend Reinvestment Plan sales, for which the average price method has been chosen, positions are closed out on a FIFO basis.

LEGEND FOR SECURITIES TRANSACTIONS*

Legend – Your transaction was executed on one or more markets – details upon request.

C – Capacity:

1, 2, 3, 4, 5, 6 and 9. Your Broker, as indicated on the front of this Confirmation, acted as Agent for your account unless otherwise indicated.**

8. Your Broker, as indicated on the front of this Confirmation, acted as Agent for both buyer and seller, charging a commission or a commission equivalent to both parties. The source and any remuneration charged in the transaction will be furnished upon written request.

7. Your Broker, as indicated on the front of this Confirmation, acted as Principal.

A. This trade was executed by your broker, with us acting as your prime broker. Contact your executing broker for trade details.

M. "Mixed" Capacity. Your Broker, as indicated on the front of this Confirmation, acted in a multiple capacity which can be: i. Principal and Agent, ii. Principal, Agent, and Agent for both buyer and seller, iii. Principal and Agent for both buyer and seller, or iv. Agent and Agent for both buyer and seller. Details available upon request. Please call 1-800-834-1428 or 347-843-9963.

Q – J.P. Morgan Securities LLC acted as agent for both you and its affiliate, J.P. Morgan Securities plc, which paid us compensation for acting as its agent. Details available upon request.

R – The notes are general obligations of the issuer. In the event of an insolvency in respect of the issuer, claims for repayment of the notes are not customer claims under the Securities Investor Protection Act and are not protected by Securities Investor Protection Corporation insurance.

S – The transaction described on this confirmation is subject to the U.S. Treasury or Agency Debt and Agency MBS fails charge trading practice published by TMPG and SIFMA at https://www.sifma.org/wp-content/uploads/2017/087/fails-charge-trading-practice-2018-07-13.pdf and www.sifma.org/resources/general/fails-charge-trading-practices/

T – Your introducing broker receives compensation for directing customer orders for equity securities. The source and nature of such compensation received on this transaction, if any, will be furnished to you upon written request.

U – You may be eligible for breakpoint discounts based on the size of your purchase, current holdings or future purchases. The sales charge you paid may differ slightly from the Prospectus disclosed rate due to rounding calculations. Please refer to the Prospectus, Statement of Additional Information or contact us at the number provided on the front of this page.

V – A paper copy of the offering document relating to this transaction is available, upon request, by calling 1-866-903-9204 during normal business hours.

W – These securities have not been registered under the US Securities Act of 1933, and may only be offered and sold pursuant to registration under the 1933 Act or an available exemption therefrom or in accordance with Regulation S.

X – These securities have not been registered under the US Securities Act of 1933, and were issued pursuant to the exemption provided by Section 3(c)(7) of the Investment Company Act of 1940. The securities may only be offered and sold (i) pursuant to registration under the 1933 Act or an exemption therefrom and (ii) in compliance with the provisions of Section 3(c)(7).

Y – To obtain a paper copy of the official statement, please call 877-430-3544 for domestic accounts or 347-643-6233 for international accounts.

Z – A JPMS affiliate is a market maker in the security. As a market maker, the JPMS affiliate may have acted as principal, may have had a long or short position in the security, and may have profited or lost in connection with the transaction.

IF CALLABLE MUNICIPAL OR OTHER CALLABLE DEBT SECURITY TRANSACTION

With regard to any debt security subject to redemption before maturity, such debt security may be redeemed or called in whole or in part before maturity, and such a redemption could affect yield (represented). Additional information available upon request.

NOTICE FOR JPMS CUSTOMERS – PAYMENT FOR ORDER FLOW

JPMS may pay from time to time for certain order flow in the form of discounts, rebates, reductions of fees or credits. As a result of sending orders to certain trading centers, JPMS receives payment for order flow in the form of discounts, rebates, reductions of fees or credits. Under some circumstances, the amount of such remuneration may exceed the amount that JPMS is charged by such trading centers. This does not alter JPMS' policy to route customer orders to the trading center where it believes clients will receive the best execution, taking into account price, reliability, market depth, quality of service, speed, and efficiency. Additional details are available upon request.

FINRA and MSRB fixed income price transparency rules

The mark-up/mark-down was calculated based on the Firm's calculation methodology, which may take into account the Firm's contemporaneous cost and/or the market price obtained from a third-party vendor. "N/A" indicates a negative mark-up/mark-down (i.e., the client purchased at a price lower than, or sold at a price higher than, the prevailing market price).

For more information about this security (including trade and price history), and for municipal securities the official statement, visit the web page shown in the trade details on the front of the confirm.

*In the event that the meaning of a code described above conflicts with other wording on the front of this confirmation, the wording on the front of this confirmation shall control.

** Other than trades executed for JPM-affiliated investment advisers, trades depicted as Agent may include trades for which your broker acted, in whole or in part, as Agent for both buyer and seller. To confirm the capacity shown on this Confirmation, please call 1-800-834-1428 or 347-843-9963. Your order was executed in either (1) one execution at the confirmed price or (2) more than one execution, in which case the confirmed price is an average price and details regarding the actual prices are available on request.