



Final Terms and Conditions for Floating Rate Bail-inable Yankee Certificate of Deposit (the CD)

Issuer:	Bank of Nova Scotia, Houston Branch (the “Branch”)
Security Description:	Floating Rate Bail-inable Yankee CD (“CD”) CDs will be direct unsecured liabilities of The Bank of Nova Scotia ranking pari passu with all other unsecured and unsubordinated debt of the Bank
Issuer Ratings¹:	Moody’s: A2 (Stable) S&P: A+ (Stable)
Expected Issue Ratings¹:	Moody’s: A2 S&P: A-
Principal Amount (USD):	\$50,000,000
Trade Date:	October 31, 2022
Issue Date:	November 3, 2022; T+3
Maturity Date:	November 3, 2025
Interest Rate:	The interest rate on the Notes for each Interest Period will be equal to Compounded SOFR (as defined herein) plus the Margin and will in no event be less than 0.00%.
Compounded SOFR:	<p>A compounded average of daily Secured Overnight Financing Rate (“SOFR”) determined by reference to the SOFR Index for each quarterly Interest Period in accordance with the following formula:</p> $\left(\frac{SOFR\ Index_{End}}{SOFR\ Index_{Start}} - 1 \right) \times \frac{360}{d}$ <p>“SOFR Index_{Start}” = For periods other than the initial Interest Period, the SOFR Index value on the preceding Interest Payment Determination Date, and, for the initial Interest Period, February 7, 2022;</p> <p>“SOFR Index_{End}” = The SOFR Index value on the Interest Payment Determination Date relating to the applicable Interest Payment Date (or in the final interest period, relating to the maturity date); and</p> <p>“d” is the number of calendar days in the relevant Observation Period</p> <p>For purposes of determining Compounded SOFR, “SOFR Index” means, with respect to any U.S. Government Securities Business Day:</p> <p>(1) the SOFR Index value as published by the SOFR Administrator as such index appears on the SOFR Administrator’s Website at 3:00p.m.</p>

¹ Ratings are not a recommendation to buy, sell or hold CDs and each rating should be evaluated independently of each other. In addition, ratings are subject to change at any time without notice from the Issuer.

(New York time) on such U.S. Government Securities Business Day (the “SOFR Determination Time”); provided that:

(2) if a SOFR Index value does not so appear as specified in (1) above at the SOFR Determination Time, then:

(i) if a Benchmark Transition Event and its related Benchmark Replacement Date have not occurred with respect to SOFR, then Compounded SOFR shall be the rate determined pursuant to the “*SOFR Index Unavailable*” provisions in Annex B; or

(ii) if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to SOFR, then Compounded SOFR shall be the rate determined pursuant to the “*Effect of a Benchmark Transition Event*” provisions in Annex B.

Margin:	SOFR+125 bps
Observation Period:	In respect of each interest period, the period from, and including, the date two U.S. Government Securities Business Days preceding the first date in such interest period to, but excluding, the date two U.S. Government Securities Business Days preceding the Interest Payment Date for such interest period (or in the final interest period, preceding the maturity date)
Interest Payment Dates:	Quarterly, on February 3, May 3, August 3, and November 3 of each year, beginning on February 3, 2023 and ending on the Maturity Date.
Interest Payment Determination Date:	The date two U.S. Government Securities Business Days before each Interest Payment Date
Interest Period:	Period commencing on any Interest Payment Date (or, in the case of the first Interest Period only, commencing on (February 9, 2022) to, but excluding, the next succeeding Interest Payment Date, and in the case of the last Interest Period, from and including the Interest Payment Date immediately preceding the maturity date to but excluding such maturity date
Interest Calculation:	The amount of interest accrued and payable on the notes for each interest period will be calculated by the Issuer and will be equal to the product of (i) the outstanding principal amount of the CDs multiplied by (ii) the product of (a) the interest rate for the relevant Interest Period multiplied by (b) the quotient of the actual number of calendar days in such Observation Period divided by 360
Business Days:	Any weekday that is a U.S. Government Securities Business Day and is not a legal holiday in New York or Toronto and is not a date on which banking institutions in those cities are authorized or required by law or regulation to be closed
Convention:	Actual/360 based on Observation Period; Modified Following, Adjusted
Issue Price:	100.00%

Issuer DTC#: 1542

Underwriter: Wells Fargo Securities, LLC

CUSIP: 06417MK38

Denominations: The CDs will be issued in denominations of U.S.\$250,000 and integral multiples of U.S.\$ 1,000 in excess thereof.

Canadian Bail-in Consent: By its acquisition of an interest in any CD, each holder or beneficial owner of that CD is deemed to (i) agree to be bound, in respect of the CD, by the Canada Deposit Insurance Corporation Act (*Canada*) (the “*CDIC Act*”), including the conversion of the CD, in whole or in part – by means of a transaction or series of transactions and in one or more steps – into common shares of The Bank of Nova Scotia (the “*Bank*”) or any of its affiliates under subsection 39.2(2.3) of the CDIC Act and the variation or extinguishment of the CD in consequence, and by the application of the laws of the Province of Ontario and the federal laws of Canada applicable therein in respect of the operation of the CDIC Act with respect to the CDs; (ii) attorn and submit to the jurisdiction of the courts in the Province of Ontario with respect to the CDIC Act and those laws; (iii) have represented and warranted that the Bank has not directly or indirectly provided financing to the holder or beneficial owner of the CD for the express purpose of investing in the CDs; and (iv) acknowledge and agree that the terms referred to in clauses (i) and (ii) above, are binding on that holder or beneficial owner despite any terms of this CD, any other law that governs the CDs and any other agreement, arrangement or understanding between that holder or beneficial owner and the Bank with respect to the CDs.

For additional terms of the CDs relating to the Canadian bail-in regime, including additional consents holders and beneficial owners are deemed to give by acquiring an interest in any CD, see “*Special Terms for Bail-inable CDs—Canadian Bail-in Consent*” in Annex A, which is incorporated herein by reference.

Waiver of Certain Priority Rights under U.S. Banking Laws: By its acquisition of an interest in any CD, each holder or beneficial owner of that CD is deemed to irrevocably waive its rights, at any time when any of the events described in clause (i) under “*Events of Default*” has occurred and is continuing, and the Commissioner of the Texas Department of Banking, or a person appointed by the competent court as receiver (the “*Department*”) or the Comptroller of the Currency, or a person appointed by the Comptroller as a receiver (the “*OCC*”), as the case may be, takes possession, or is in possession, of the business, property and/or assets of the Branch, (i) to establish an accepted claim for purposes of Section 204.120 of the Texas Finance Code and/or an allowed or proved claim for purposes of Section 4(j) of the International Banking Act of 1978, as amended (the “*International Banking Act*”), and (ii) to any preference to which it may become entitled under Section 204.120 of the Texas Finance Code, under Section 4(j) of the International Banking Act or under any other similar law to the extent necessary so that the CDs are not legally or

economically senior to the Bank's depositors and/or other general creditors.

For additional terms of the CDs relating to this waiver, including additional consents and waivers holders and beneficial owners are deemed to agree to by acquiring an interest in any CD, see "*Special Terms for Bail-inable CDs—Waiver of Certain Priority Rights under U.S. Banking Laws*" in Annex A, which is incorporated herein by reference.

Waiver of Set-Off and Netting Rights:

No holder or beneficial owner of a CD may exercise, or direct the exercise of, claim or plead any right of set-off, netting, compensation or retention in respect of any amount owed to it by the Bank arising under, or in connection with, that CD, and each holder or beneficial owner of a CD, by its acquisition of an interest in the CD, is deemed to irrevocably and unconditionally waive all such rights of set-off, netting, compensation or retention.

For additional terms of the CDs relating to this waiver, including additional consents and waivers holders and beneficial owners are deemed to agree to by acquiring an interest in any CD, see "*Special Terms for Bail-inable CDs—Waiver of Set-Off and Netting Rights*" in Annex A, which is incorporated herein by reference.

Events of Default:

For the CDs, acceleration will occur automatically (i) if the Bank becomes insolvent or bankrupt or subject to the provisions of the Winding-up and Restructuring Act (*Canada*), or any statute hereafter enacted in substitution therefor, as such Act, or substituted Act, may be amended from time to time, or if the Bank goes into liquidation, either voluntary or under an order of a court of competent jurisdiction, passes a resolution for the winding-up, liquidation or dissolution of the Bank, is ordered wound-up or otherwise acknowledges its insolvency, (ii) if the Bank commences a voluntary case or proceeding to liquidate, wind up or dissolve the Branch under applicable U.S. Federal or state law, or (iii) the Department or the OCC, as the case may be, takes possession, or is in possession, of the business, property and/or assets of the Branch, or a receiver is appointed with respect to the Branch, under Sections 36.004 and 204.120 of the Texas Finance Code or Section 4(j) of the International Banking Act, as applicable (each such event, an "*Event of Default*"). There will be no other Events of Default, and holders and beneficial owners of CDs will have no other rights to accelerate the CDs.

Acceleration will occur only if an Event of Default has occurred and an order has not been made pursuant to subsection 39.13(1) of the CDIC Act in respect of the Bank. Notwithstanding the occurrence of an Event of Default and the acceleration of the CDs, the CDs will continue to be subject to bail-in conversion until repaid in full. For additional terms of the CDs relating to the acceleration of the CDs, see "*Special Terms for Bail-inable CDs—Events of Default*" in Annex A, which is incorporated herein by reference.

Investors:

The Branch offers and sells the CDs only to institutional investors that are accredited investors as defined in Rule 501 (a)(1), (2), (3) or (7) under the U.S. Securities Act of 1933, as amended (each, an "*Accredited Investor*"), and by its acquisition of an interest in any CD, each holder or beneficial owner of that CD is deemed to have represented and agreed that it is an Accredited Investor.

Redemption or Purchase:	Any redemption (for any reason) or purchase of any CD by the Bank, acting through the Branch (in the case of a redemption) or through any office (in the case of a purchase), will be subject to the prior approval of the Superintendent of Financial Institutions (Canada) (the “Superintendent (Canada)”), if such redemption or purchase would lead to a breach of the Bank’s total loss absorbing capacity (“TLAC”) requirements.
Modification and Waiver:	Where an amendment, modification or other variance that can be made to this CD would affect the recognition of this CD by the Superintendent (Canada) as TLAC, that amendment, modification or variance will require the prior approval of the Superintendent (Canada).
TLAC Disqualification Event Redemption:	<p>The Bank, acting through the Branch, may, at its option, with the prior approval of the Superintendent (<i>Canada</i>), on not less than 10 days’ and not more than 60 days’ prior notice to the holders of the CDs, redeem all but not less than all of the CDs prior to their stated maturity date on, or within 90 days after, the occurrence of a TLAC Disqualification Event, at a redemption price equal to 100% of the principal amount thereof, plus any accrued and unpaid interest to, but excluding, the date fixed for redemption.</p> <p>A “<i>TLAC Disqualification Event</i>” means the Office of the Superintendent of Financial Institutions (<i>Canada</i>) (“<i>OSFI</i>”) has advised the Bank in writing that the CDs will no longer be eligible to be recognized in full as TLAC under the TLAC Guideline as interpreted by the Superintendent (<i>Canada</i>) because the CDs do not satisfy the applicable eligibility criteria set forth therein, provided that a TLAC Disqualification Event will not occur where the exclusion of the CDs from the Bank’s TLAC requirements is due to the remaining maturity of the CDs being less than any period prescribed by any relevant eligibility criteria applicable as of the issue date of the CDs.</p>
Optional Redemption:	Not Applicable.
Early Redemption for Early Termination:	Not Applicable
Redemption at Less than Par:	Not Applicable
Annex A to the Term Sheet:	Please refer to Annex A to this Term Sheet, which is incorporated herein by reference, for important additional terms for the CD subject to the Canadian bail-in regime
Annex B to the Term Sheet:	Please refer to Annex B to this Term Sheet, which is incorporated herein by reference, for important additional terms for SOFR fallback language

ANNEX A

SPECIAL TERMS FOR BAIL-INABLE CDs

The CDs will be subject to conversion in whole or in part – by means of a transaction or series of transactions and in one or more steps – into common shares of the Bank or any of its affiliates under subsection 39.2(2.3) of the CDIC Act and to variation or extinguishment in consequence, and subject to the application of the laws of the Province of Ontario and the federal laws of Canada applicable therein in respect of the operation of the CDIC Act with respect to the CDs.

The CDs include waivers of the branch-creditor provisions (which are sometimes referred to as “marshalling” or “ring fencing” provisions) of the U.S. banking laws applicable in the case of certain bankruptcy, insolvency, liquidation, winding-up or dissolution events involving the Bank.

This Annex A includes important additional terms of your bail-inable CDs and is incorporated by reference into the accompanying final term sheet. Capitalized terms used but not defined in this Annex A have the meanings ascribed to them in the accompanying term sheet.

Canadian Bail-in Consent

By its acquisition of an interest in any CD, each holder or beneficial owner of that CD is deemed to (i) agree to be bound, in respect of the CD, by the CDIC Act, including the conversion of the CD, in whole or in part – by means of a transaction or series of transactions and in one or more steps – into common shares of the Bank or any of its affiliates under subsection 39.2(2.3) of the CDIC Act and the variation or extinguishment of the CD in consequence, and by the application of the laws of the Province of Ontario and the federal laws of Canada applicable therein in respect of the operation of the CDIC Act with respect to the CDs; (ii) attorn and submit to the jurisdiction of the courts in the Province of Ontario with respect to the CDIC Act and those laws; (iii) have represented and warranted that the Bank has not directly or indirectly provided financing to the holder or beneficial owner of the CD for the express purpose of investing in the CDs; and (iv) acknowledge and agree that the terms referred to in clauses (i) and (ii) above, are binding on that holder or beneficial owner despite any terms of this CD, any other law that governs the CDs and any other agreement, arrangement or understanding between that holder or beneficial owner and the Bank with respect to the CDs.

Holders and beneficial owners of CDs will have no further rights in respect of their CDs to the extent those CDs are converted in a bail-in conversion under the bail-in regime (as defined below) other than those provided under the bail-in regime, and by its acquisition of an interest in any CD, each holder or beneficial owner of that CD is deemed to irrevocably consent to the converted portion of the principal amount of that CD and any accrued and unpaid interest thereon being deemed paid in full by the issuance of common shares of the Bank (or, if applicable, any of its affiliates) upon the occurrence of a bail-in conversion, which bail-in conversion will occur without any further action on the part of that holder or beneficial owner; *provided* that, for the avoidance of doubt, this consent will not limit or otherwise affect any rights that holders or beneficial owners may have under the bail-in regime.

By its acquisition of an interest in any CD, each holder or beneficial owner of that CD is deemed to have authorized, directed and requested The Depository Trust Company (“DTC”) and any direct participant in DTC or other intermediary through which it holds such interest in such CD to take any and all necessary action, if required, to implement the bail-in conversion or any other action pursuant to the bail-in regime with respect to the CD, as may be imposed on it, without any further action or direction on the part of that holder or beneficial owner or any paying agent for the CD.

For purposes of the accompanying final term sheet and this Annex A, “*bail-in regime*” means the provisions of, and regulations under, the Bank Act (*Canada*), the CDIC Act and certain other Canadian federal statutes pertaining to banks, providing for a bank recapitalization regime for banks designated by the Superintendent (*Canada*) as domestic systemically important banks, including subsection 39.2(2.3) of the CDIC Act, the Bank Recapitalization (Bail-in) Conversion Regulations (*Canada*), the Bank Recapitalization (Bail-in) Issuance

Regulations (*Canada*) and the Compensation Regulations (*Canada*), and in each case any successor statute or regulation thereto, as amended from time to time.

For important information about the bail-in regime and this consent, see the “*Special Notice for Investors of Bail-inable Yankee CDs*” on the Bank’s website at <https://www.scotiabank.com/content/dam/scotiabank/canada/en/documents/about/investors-shareholders/Website-Disclosure-for-Bail-Inable-CDs.pdf>, which information is herein incorporated by reference.

Waiver of Certain Priority Rights under U.S. Banking Laws

By its acquisition of an interest in any CD, each holder or beneficial owner of that CD is deemed to irrevocably waive its rights, at any time when any of the events described in clause (i) under “*Events of Default*” has occurred and is continuing, and the Department or OCC, as the case may be, takes possession, or is in possession, of the business, property and/or assets of the Branch:

- to establish an accepted claim for purposes of Section 204.120 of the Texas Finance Code and/or an allowed or proved claim for purposes of Section 4(j) of the International Banking Act, and
- to any preference to which it may become entitled under Section 204.120 of the Texas Finance Code, under Section 4(j) of the International Banking Act or under any other similar law to the extent necessary so that the CDs are not legally or economically senior to the Bank’s depositors and/or other general creditors.

In order to implement this waiver, by its acquisition of an interest in any CD, each holder or beneficial owner of that CD is deemed to have agreed that the Department or the OCC, as the case may be, at any time when any of the events described in clause (i) under “*Events of Default*” has occurred and is continuing, and the Department or OCC, as the case may be, takes possession of the business, property and/or assets of the Branch, will apply any amounts that would be due to the holders of CDs in the absence of this waiver in the following order:

- first, to the payment in full of all deposit liabilities and all other liabilities of the Bank, acting through the Branch and, if the OCC takes possession, through all the other branches and agencies of the Bank in the United States (other than the CDs and any other liabilities of the Bank, acting through the Branch or through any of its other U.S. branches and agencies, that have also waived the benefit of the separate proceedings under Section 204.120 of the Texas Finance Code, Section 4(j) of the International Banking Act or under any other similar law) and to any other claim accorded priority under any U.S. Federal or Texas State law that is then due and payable, the priorities to be ascribed among those claims to be determined in accordance with those laws;
- second, if applicable, to pay any amount remaining to any liquidator of other offices of the Bank in the United States in accordance with Section 204.120(e) of the Texas Finance Code; and
- thereafter, to pay any amount remaining to the Bank in accordance with Section 204.120(e) of the Texas Finance Code, which may entail payment of the remaining amounts to a liquidator, receiver, or similar official appointed with respect to the Bank or its assets for application (i) first, to the payment, equally and ratably, of amounts due and owing on any and all obligations of the Bank ranking senior in right of payment to the CDs, whether by priority accorded under law or otherwise, (ii) second, to the payment, equally and ratably, of amounts due and owing on the CDs and all obligations of the Bank ranking *pari passu* in right of payment with the CDs, and (iii) thereafter, to the payment of all obligations of the Bank ranking junior in right of payment to the CDs.

Moreover, if any of the events described in clause (i) under “*Events of Default*” occurs and is continuing after the Department or the OCC, as the case may be, has taken possession, or is in possession, of the business, property and/or assets of the Branch and prior to the repayment of the CDs, then any funds from the assets of the Bank in the State of Texas or the United States (including the assets of the Branch and any other U.S. branches and agencies of the Bank) available for repayment of the CD shall be paid in accordance with the immediately preceding paragraph.

In addition, by its acquisition of an interest in any CD, each holder or beneficial owner of that CD is also deemed to have agreed that, if that holder or beneficial owner receives or recovers, with respect to that CD, any payment or distribution of the assets of the Branch (or the other U.S. branches and agencies of the Bank), or any other assets of the Bank available to satisfy the claims of creditors of the Branch (or the other U.S. branches and agencies of the Bank) in the United States by reason of the operation or application of Section 204.120 of the Texas Finance Code, Section 4(j) of the International Banking Act or any other similar law, of any kind or character, and whether that payment or distribution is in cash, property or securities and which may be payable or deliverable (including by way of set-off by operation of law or otherwise), at any time when any of the events described in clause (i) under “*Events of Default*” has occurred and is continuing, then that holder or beneficial owner will promptly pay over or deliver to the Bank (or as may be otherwise directed by any liquidator, receiver, or similar official who is acting in connection with the exercise of the bank resolution powers in respect of the Bank under the CDIC Act) the payment or distribution or an amount equal to the payment or distribution.

Waiver of Set-Off and Netting Rights

No holder or beneficial owner of a CD may exercise, or direct the exercise of, claim or plead any right of set-off, netting, compensation or retention in respect of any amount owed to it by the Bank arising under, or in connection with, that CD, and each holder or beneficial owner of a CD, by its acquisition of an interest in the CD, is deemed to irrevocably and unconditionally waive all such rights of set-off, netting, compensation or retention. Notwithstanding the foregoing, if any amounts due and payable to any holder or beneficial owner of any CD by the Bank in respect of, or arising under, the CD are purportedly discharged by set-off, netting, compensation or retention, without limitation to any other rights and remedies of the Bank under applicable law, such holder or beneficial owner shall promptly pay to the Bank an amount equal to the amount of such discharge and, accordingly, any such discharge shall be deemed not to have taken place and such set-off, netting, compensation or retention shall be ineffective.

Events of Default

The occurrence of any of the following events will constitute an “Event of Default”:

- (i) the Bank becomes insolvent or bankrupt or subject to the provisions of the Winding-up and Restructuring Act (*Canada*), or any statute hereafter enacted in substitution therefor, as such Act, or substituted Act, may be amended from time to time, or if the Bank goes into liquidation, either voluntary or under an order of a court of competent jurisdiction, passes a resolution for the winding-up, liquidation or dissolution of the Bank, is ordered wound-up or otherwise acknowledges its insolvency;
- (ii) the Bank commences a voluntary case or proceeding to liquidate, wind-up or dissolve the Branch under applicable U.S. Federal or state law, or
- (iii) the Department or the OCC, as the case may be, takes possession, or is in possession, of the business, property and/or assets of the Branch, or a receiver is appointed with respect to the Branch, under Sections 36.004 and 204.120 of the Texas Finance Code or Section 4(j) of the International Banking Act, as applicable.

If an Event of Default occurs and is continuing with respect to the CDs, the entire principal amount of and any accrued and unpaid interest on all of the CDs will become immediately due and payable without any declaration or other act on the part of the holders of the CDs.

Acceleration will occur only if an Event of Default has occurred and an order has not been made pursuant to subsection 39.13(1) of the CDIC Act in respect of the Bank. Notwithstanding the occurrence of an Event of Default in respect of the CDs and the acceleration of the CDs, the CDs will continue to be subject to bail-in conversion until repaid in full. If less than all of the CDs are converted in a bail-in conversion, the portion of the CDs that is not converted will remain outstanding in accordance with their terms.

Voluntary Branch Liquidation

So long as any CD remains outstanding, the Bank will not, without the prior approval of the Superintendent (*Canada*), commence a voluntary case or proceeding to liquidate, wind-up or dissolve the Branch if such liquidation, winding-up or dissolution would lead to a breach of the Bank's TLAC requirements as a result of the repayment of that CD and any other debt instruments then outstanding (including certificates of deposit) that are obligations of the Branch.

Subsequent Holders' Agreement

Each holder or beneficial owner of a CD that acquires the CD in the secondary market and any successors, assigns, heirs, executors, administrators, trustees in bankruptcy and legal representatives of any holder or beneficial owner will be deemed to acknowledge, accept, agree to be bound by and consent to the same provisions specified herein to the same extent as the holders or beneficial owners that acquired an interest in the CD upon its initial issuance, including, without limitation, with respect to the acknowledgement and agreement to be bound by and consent to the terms of the CD related to the bail-in regime and the waiver of the separate proceedings under Section 204.120 of the Texas Finance Code or Section 4(j) of the International Banking Act, as applicable.

Governing Law; Submission to Jurisdiction

The CDs are governed by and construed in accordance with the laws of the State of New York, except that (i) the provisions relating to the contractual consent to bail-in by holders and beneficial owners of CDs in the first paragraph under "*Canadian Bail-in Consent*" above are governed by and construed in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable therein, and (ii) the provisions relating to the waiver of the priority rights under Section 204.120 of the Texas Finance Code described under "*Waiver of Certain Priority Rights under U.S. Banking Laws*" above are governed by and construed in accordance with the laws of the State of Texas. By its acquisition of an interest in any CD, each holder or beneficial owner of that CD is deemed to attorn and submit to the jurisdiction of the courts in the Province of Ontario with respect to actions, suits and proceedings arising out of or relating to the operation of the CDIC Act and the laws of the Province of Ontario and the federal laws of Canada applicable therein in respect of the CD.

ANNEX B

Capitalized terms used but not defined in this Annex B have the meanings ascribed to them in the accompanying final term sheet and Annex A.

SOFR Index Unavailable:

If a SOFR *Index_{Start}* or SOFR *Index_{End}* is not published on the associated Interest Payment Determination Date and a Benchmark Transition Event and its related Benchmark Replacement Date have not occurred with respect to SOFR, “Compounded SOFR” means, for the applicable Interest Period for which such index is not available, the rate of return on a daily compounded interest investment calculated in accordance with the formula for SOFR Averages, and definitions required for such formula, published on the SOFR Administrator’s Website at <https://www.newyorkfed.org/markets/treasury-repo-reference-rates-information>. For the purposes of this provision, references in the SOFR Averages compounding formula and related definitions to “calculation period” shall be replaced with “Observation Period” and the words “that is, 30-, 90-, or 180- calendar days” shall be removed. If the daily SOFR (“SOFR_i”) does not so appear for any day, “i” in the Observation Period, SOFR_i for such day “i” shall be SOFR published in respect of the first preceding U.S. Government Securities Business Day for which SOFR was published on the SOFR Administrator's Website.”

Effect of Benchmark Transition Event

(a) *Benchmark Replacement.* If the Issuer determines that a Benchmark Transition Event and its related Benchmark Replacement Date have occurred prior to the Reference Time (as defined herein) in respect of any determination of the Benchmark on any date, the Benchmark Replacement will replace the then-current Benchmark for all purposes relating to the CDs in respect of such determination on such date and all determinations on all subsequent dates.

(b) *Benchmark Replacement Conforming Changes.* In connection with the implementation of a Benchmark Replacement, the Issuer will have the right to make Benchmark Replacement Conforming Changes from time to time.

(c) *Decisions and Determinations.* Any determination, decision or election that may be made by the Issuer, pursuant to the benchmark replacement provisions described herein, including any determination with respect to tenor, rate or adjustment or of the occurrence or non-occurrence of an event, circumstance or date and any decision to take or refrain from taking any action or any selection:

- will be conclusive and binding absent manifest error, may be made in the Issuer’s sole discretion, and, notwithstanding anything to the contrary in the accompanying final term sheet relating to the CDs;
- will be made in the Issuer’s sole discretion;
- shall become effective without consent from any other party.

Any determination, decision or election pursuant to the benchmark replacement provisions will be made by the Issuer on the basis as described above. Nevertheless, the Issuer shall have no liability for not making any such determination, decision or election. In addition, the Issuer may designate an entity (which may be its affiliate) to make any determination, decision or election that the Issuer has the right to make in connection with the benchmark replacement provisions set forth in this Annex B.

Certain Defined Terms. As used herein:

“*Benchmark*” means, initially, Compounded SOFR, as such term is defined in the accompanying final term sheet; provided that if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to Compounded SOFR (or the published SOFR Index used in the calculation thereof) or the then-current Benchmark, then “*Benchmark*” means the applicable Benchmark Replacement.

“*Benchmark Replacement*” means the first alternative set forth in the order below that can be determined by the Issuer as of the Benchmark Replacement Date:

- (1) the sum of: (a) an alternate rate of interest that has been selected or recommended by the Relevant Governmental Body as the replacement for the then-current Benchmark for the applicable Corresponding Tenor and (b) the Benchmark Replacement Adjustment;
- (2) the sum of: (a) the ISDA Fallback Rate and (b) the Benchmark Replacement Adjustment; and
- (3) provided that if (i) the Benchmark Replacement cannot be determined in accordance with clause (1) or (2) above as of the Benchmark Replacement Date or (ii) the Issuer shall have determined that the ISDA Fallback Rate determined in accordance with clause (2) above is not an industry accepted rate of interest as a replacement for the then-current Benchmark for U.S. dollar-denominated floating rate notes at such time, then the Benchmark Replacement shall be the sum of: (a) the alternate rate of interest that has been selected by the Issuer as the replacement for the then-current Benchmark for the applicable Corresponding Tenor giving due consideration to any industry-accepted rate of interest as a replacement for the then-current Benchmark for U.S. dollar denominated floating rate notes at such time and (b) the Benchmark Replacement Adjustment.

“*Benchmark Replacement Adjustment*” means the first alternative set forth in the order below that can be determined by the Issuer as of the Benchmark Replacement Date:

- (1) the spread adjustment (which may be a positive or negative value or zero), or method for calculating or determining such spread adjustment that has been selected or recommended by the Relevant Governmental Body for the applicable Unadjusted Benchmark Replacement;
- (2) if the applicable Unadjusted Benchmark Replacement is equivalent to the ISDA Fallback Rate, then the ISDA Fallback Adjustment; and
- (3) the spread adjustment (which may be a positive or negative value or zero) that has been selected by the Issuer giving due consideration to any industry-accepted spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of the then-current Benchmark with the applicable Unadjusted Benchmark Replacement for U.S. dollar denominated floating rate notes at such time.

“*Benchmark Replacement Conforming Changes*” means, with respect to any Benchmark Replacement, any technical, administrative or operational changes (including changes to the definitions or interpretations of interest period, the timing and frequency of determining rates and making payments of interest, the rounding of amounts or tenors, and other administrative matters) that the Issuer decides may be appropriate to reflect the adoption of such Benchmark Replacement in a manner substantially consistent with market practice (or, if the Issuer decides that adoption of any portion of such market practice is not administratively feasible or if the Issuer determines that no market practice for use of the Benchmark Replacement exists, in such other manner as the Issuer determines is reasonably practicable).

“*Benchmark Replacement Date*” means the earliest to occur of the following events with respect to the then-current Benchmark:

- (1) in the case of clause (1) or (2) of the definition of “Benchmark Transition Event,” the later of (a) the date of the public statement or publication of information referenced therein and (b) the date on which the administrator of the Benchmark permanently or indefinitely ceases to provide the Benchmark; or
- (2) in the case of clause (3) of the definition of “Benchmark Transition Event,” the date of the public statement or publication of information referenced therein.

For the avoidance of doubt, if the event giving rise to the Benchmark Replacement Date occurs on the same day as, but earlier than, the Reference Time in respect of any determination, the Benchmark Replacement Date will be deemed to have occurred prior to the Reference Time for such determination.

For the avoidance of doubt, for purposes of the definitions of Benchmark Replacement Date and Benchmark Transition Event, references to Benchmark also include any reference rate underlying such Benchmark.

“*Benchmark Transition Event*” means the occurrence of one or more of the following events with respect to the then-current Benchmark:

- (1) a public statement or publication of information by or on behalf of the administrator of the Benchmark announcing that such administrator has ceased or will cease to provide the Benchmark, permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Benchmark;
- (2) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark, the central bank for the currency of the Benchmark, an insolvency official with jurisdiction over the administrator for the Benchmark, a resolution authority with jurisdiction over the administrator for the Benchmark or a court or an entity with similar insolvency or resolution authority over the administrator for the Benchmark, which states that the administrator of the Benchmark has ceased or will cease to provide the Benchmark permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Benchmark; or
- (3) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark announcing that the Benchmark is no longer representative.

“*U.S. Government Securities Business Day*” means any day except for a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

“*Corresponding Tenor*” with respect to a Benchmark Replacement means a tenor (including overnight) having approximately the same length (disregarding business day adjustment) as the applicable tenor for the then-current Benchmark.

“*Federal Reserve Bank of New York’s Website*” means the website of the *Federal Reserve Bank of New York*, currently at <http://www.newyorkfed.org>, or any successor source.

“*ISDA Definitions*” means the 2006 ISDA Definitions published by the International Swaps and Derivatives Association, Inc. or any successor thereto, as amended or supplemented from time to time, or any successor definitional booklet for interest rate derivatives published from time to time.

“*ISDA Fallback Adjustment*” means the spread adjustment (which may be a positive or negative value or zero) that would apply for derivatives transactions referencing the ISDA Definitions to be determined upon the occurrence of an index cessation event with respect to the Benchmark for the applicable tenor.

“*ISDA Fallback Rate*” means the rate that would apply for derivatives transactions referencing the ISDA Definitions to be effective upon the occurrence of an index cessation date with respect to the Benchmark for the applicable tenor excluding the applicable ISDA Fallback Adjustment.

“*Reference Time*” with respect to any determination of the Benchmark means (1) if the Benchmark is Compounded SOFR, the SOFR Index Determination Time, as such time is defined above, and (2) if the Benchmark is not Compounded SOFR, the time determined by the Issuer in accordance with the Benchmark Replacement Conforming Changes.

“*Relevant Governmental Body*” means the Federal Reserve Board and/or the Federal Reserve Bank of New York, or a committee officially endorsed or convened by the Federal Reserve Board and/or the Federal Reserve Bank of New York or any successor thereto.

“*Unadjusted Benchmark Replacement*” means the Benchmark Replacement excluding the Benchmark Replacement Adjustment.