MIFID II PRODUCT GOVERNANCE / TARGET MARKET - Solely for the purposes of each manufacturer’s product approval process, the target market assessment in respect of the Notes has led to the conclusion that: (i) the target market for the Notes is eligible counterparties and professional clients only, each as defined in Directive 2014/65/EU (as amended, “MiFID II”); and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Notes (a “distributor”) should take into consideration the manufacturers’ target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the manufacturers’ target market assessment) and determining appropriate distribution channels.

PRIIPS REGULATION PROHIBITION OF SALES TO EEA RETAIL INVESTORS - The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area (“EEA”). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, “MiFID II”); (ii) a customer within the meaning of Directive (EU) 2016/97 (as amended”), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or (iii) not a qualified investor as defined in Directive 2003/71/EC (as amended or superseded). Consequently no key information document required by Regulation (EU) No 1286/2014 (the “PRIIPS Regulation”) for offering or selling the Notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPS Regulation.

THE NOTES ARE 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 ROYAL BANK OF CANADA OR ANY OF ITS AFFILIATES UNDER SUBSECTION 39.2(2.3) OF THE CANADA DEPOSIT INSURANCE CORPORATION ACT (CANADA) (“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 NOTES.
Final Terms dated 20 September 2019

ROYAL BANK OF CANADA
(a Canadian chartered bank)

Issue of USD 50,000,000 Callable Zero Coupon Notes due 2049 under the Programme for the Issuance of Securities

Any person making or intending to make an offer of the Notes may only do so:

in circumstances in which no obligation arises for the Issuer or any Dealer to publish a prospectus pursuant to Article 3 of the Prospectus Directive, in each case, in relation to such offer.

Neither the Issuer nor any Dealer has authorised, nor do they authorise, the making of any offer of Notes in any other circumstances.

PART A– CONTRACTUAL TERMS

Terms used herein shall be deemed to be defined as such for the purposes of the Conditions (the “Conditions”) set forth in the Structured Securities Base Prospectus dated 26 June 2019 as supplemented by the Supplemental Prospectus dated 4 September 2019 (together the "Base Prospectus"). This document constitutes the Final Terms of the Notes described herein for the purposes of Article 5.4 of the Prospectus Directive and must be read in conjunction with the Base Prospectus. Full information on the Issuer and the offer of the Notes is only available on the basis of the combination of these Final Terms and the Base Prospectus. A summary of the Notes (which comprises the summary in the Base Prospectus as completed to reflect the provisions of these Final Terms) is annexed to these Final Terms. The Base Prospectus has been published on the website of the Irish Stock Exchange (www.ise.ie), the Central Bank of Ireland (http://www.centralbank.ie) and the Issuer (rbccm.com/privatebanksolutions) and copies may be obtained from the offices of the Issuer, Royal Bank Plaza, 200 Bay Street, 8th Floor, South Tower, Toronto, Ontario, Canada and the offices of the Issuing and Paying Agent, One Canada Square, London E14 5AL, England.

1. Issuer: Royal Bank of Canada
Branch of Account / Branch: London Branch
2. (i) Series Number: 49195  
   (ii) Tranche Number: 1  
3. Specified Currency or Currencies: U.S. Dollar ("USD")  
   (Condition 1.12)  
4. Aggregate Principal Amount:  
   (i) Series: USD 50,000,000  
   (ii) Tranche: USD 50,000,000  
5. Issue Price: 100 per cent of the Aggregate Principal Amount  
6. (a) Specified Denominations: USD 1,000,000  
   (Condition 1.10, 1.11 or 1.11a)  
   (b) Calculation Amount: USD 1,000,000  
   (c) Minimum Trading Size: Not Applicable  
7. (i) Issue Date: 20 September 2019  
   (ii) Interest Commencement Date: Not Applicable  
8. Maturity Date: 20 September 2049, subject to early redemption  
9. Interest Basis: Zero Coupon  
10. Redemption Basis: Subject to any purchase and cancellation or early redemption, the Notes will be redeemed on the Maturity Date at their Final Redemption Amount specified below under item 26.  
11. Change of Interest Basis: Not Applicable  
12. Put Option/ Call Option/ Trigger Early Redemption: Call Option (further details specified below under item 20)  
13. Date Board approval for issuance of Notes obtained: Not Applicable  
14. Bail-inable Securities: Yes  
15. Method of distribution: Non-syndicated  

**PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE**  
16. Fixed Rate Note Provisions  
   (Condition 4.02/4.02a) Not Applicable
17. **Floating Rate Note Provisions**  
(Condition 4.03)  
Not Applicable

18. **Zero Coupon Note Provisions**  
Applicable

- (i) Accrual Yield: 3.70 per cent per annum
- (ii) Reference Price: 100 per cent. per Calculation Amount
- (iii) Day Count Fraction: 30/360, Unadjusted
- (iv) Determination Dates: Not Applicable
- (v) Early Redemption Amount: Zero Coupon Early Redemption Amount 1
- (vi) Business Day Convention: Following

19. **Reference Item Linked Interest Notes**  
Not Applicable

**PROVISIONS RELATING TO REDEMPTION**

20. **Call Option**  
(Condition 5.03)  
Applicable, but Issuer Call on any Optional Redemption Date is only exerciseable in whole and not in part.

- (i) Optional Redemption Date(s):  
  - 20 September 2021
  - 20 September 2022
  - 20 September 2023
  - 20 September 2024
  - 20 September 2025
  - 20 September 2026
  - 20 September 2027
  - 20 September 2028
  - 20 September 2029
  - 20 September 2030
  - 20 September 2031
  - 20 September 2032
  - 20 September 2033
  - 20 September 2034
  - 20 September 2035
  - 20 September 2036
(ii) Optional Redemption Amount(s) of each Note:

The Optional Redemption Amount per Calculation Amount is specified below for each Optional Redemption Date:

- 20 September 2021
  USD 1,075,369.00

- 20 September 2022
  USD 1,115,157.65

- 20 September 2023
  USD 1,156,418.49

- 20 September 2024
  USD 1,199,205.97

- 20 September 2025
  USD 1,243,576.59

- 20 September 2026
  USD 1,289,588.92

- 20 September 2027
  USD 1,337,303.72

- 20 September 2028
  USD 1,386,783.95

- 20 September 2029

20 September 2037
20 September 2038
20 September 2039
20 September 2040
20 September 2041
20 September 2042
20 September 2043
20 September 2044
20 September 2045
20 September 2046
20 September 2047
20 September 2048
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<td>20 September 2044</td>
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<td>20 September 2045</td>
<td>2,480,098.39</td>
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<tr>
<td>20 September 2046</td>
<td>2,571,862.03</td>
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</tbody>
</table>
Redeemable in part: Not Applicable

If redeemable in part:

(a) Minimum Redemption Amount: Not Applicable

(b) Maximum Redemption Amount: Not Applicable

(iv) Notice period
Maximum period: Not Applicable

21. **Put Option**
(Condition 5.06)
Not Applicable

22. **Notice periods for Early Redemption for Taxation Reasons:**
(i) Minimum period: 30 days
(ii) Maximum period: 60 days

23. **TLAC Disqualificaiton Events:**
Not Applicable

24. **Notice periods for Redemption for Illegality:**
(i) Minimum period: 10 days
(ii) Maximum period: 30 days

25. **Trigger Early Redemption**
(Condition 5.08 and Condition 30.02)
Not Applicable

26. **Final Redemption Amount**
If not redeemed earlier the Final Redemption Amount payable per Calculation Amount on the Maturity Date shall be USD 2,974,148.79

27. **Early Redemption Amount**
(i) Early Redemption Amount(s) payable on redemption for taxation As per Condition 5.09
reasons, illegality or on event of default or other early redemption (including, in the case of Index Linked Notes, following an Index Adjustment Event in accordance with Condition 7, or in the case of Equity Linked Notes, following a Potential Adjustment Event and/or De-listing and/or Merger Event and/or Nationalisation and/or Insolvency and/or Tender Offer in accordance with Condition 8, or in the case of Equity Linked Notes, Index Linked Notes or Fund Linked Notes (involving ETFs), following an Additional Disruption Event (if applicable) (if required):

(ii) Early Redemption Amount includes amount in respect of accrued interest: Yes: no additional amount in respect of accrued interest to be paid

PROVISIONS RELATING TO REFERENCE ITEM LINKED NOTES

28. Settlement Method
   Whether redemption of the Notes will be by (a) Cash Settlement or (b) Physical Delivery: Cash Settlement

29. Final Redemption Amount for Reference Item Linked Notes Not Applicable

30. Multi-Reference Item Linked Notes Not Applicable
31. Currency Linked Note Provisions Not Applicable
32. Commodity Linked Note Provisions Not Applicable
33. Index Linked Note Provisions (Equity Indices only) Not Applicable
34. Equity Linked Note Provisions Not Applicable
35. Fund Linked Note Provisions (ETF) Not Applicable
36. Non-Exempt Physical Delivery Notes Not Applicable

GENERAL PROVISIONS APPLICABLE TO THE NOTES

37. (i) New Global Note: Yes
    (ii) Form of Notes: Temporary Global Note exchangeable for a Permanent Global Note which is exchangeable for Definitive Notes in the limited circumstances specified in
38. Financial Centre(s), TARGET or other special provisions relating to payment dates:  
   Taipei, London and New York

39. Relevant Renminbi Settlement Centre  
   Not Applicable

40. Talons for future Coupons to be attached to Definitive Notes:  
   No

41. Name and address of Calculation Agent:  
   Royal Bank of Canada, London Branch  
   c/o Royal Bank of Canada, Toronto Branch  
   RBC Centre, 8th Floor  
   155 Wellington Street West  
   Toronto, Ontario  
   Canada  
   M5V 3H1

42. Name and address of RMB Rate Calculation Agent:  
   Not Applicable

43. Issuer access to the register of creditors (Sw. skuldboken) in respect of Swedish Notes:  
   Not Applicable

44. Exchange Date:  
   Not earlier than 40 calendar days after the Issue Date

45. The Aggregate Principal Amount of the Notes issued has been translated into U.S. dollars at the rate of U.S.$1.00 = [●], producing a sum of:  
   Not Applicable

46. Governing law of Notes (if other than the laws of the Province of Ontario and the federal laws of Canada applicable therein):  
   Laws of the Province of Ontario and the federal laws of Canada applicable therein.  
   Each Holder or beneficial owner of any Bail-inable Securities is deemed to attorn to the jurisdiction of the courts in the Province of Ontario with respect to the operation of the CDIC Act and the above laws.

47. Alternative Payment Currency:  
   Not Applicable
RESPONSIBILITY

The Issuer accepts responsibility for the information contained in these Final Terms.

Signed on behalf of the Issuer:

By: ...................................................
    Duly authorised

By: ...................................................
    Duly authorised
PART B – OTHER INFORMATION

1. LISTING AND ADMISSION TO TRADING

(i) Listing/Admission to trading:
Application has been made by the Issuer for the Notes to be admitted to trading on the Regulated Market of Euronext Dublin and listing on the official list of Euronext Dublin with effect from 20 September 2019.

(ii) Estimate of total expenses related to admission to trading:
EUR 1,000

2. Ratings

Ratings: Not Applicable

3. INTERESTS OF NATURAL AND LEGAL PERSONS INVOLVED IN THE ISSUE

Save as discussed in “Subscription and Sale”, so far as the Issuer is aware, no person involved in the offer of the Notes has an interest material to the offer.

4. OPERATIONAL INFORMATION

(i) ISIN: XS1991341329

(ii) Common Code: 199134132

(iii) CFI: See the website of the Association of National Numbering Agencies (ANNA) or alternatively sourced from the responsible National Numbering Agency that assigned the ISIN

(iv) FISN: See the website of the Association of National Numbering Agencies (ANNA) or alternatively sourced from the responsible National Numbering Agency that assigned the ISIN

(v) Any clearing system(s) other than Euroclear and Clearstream, Luxembourg, their addresses and the relevant identification number(s):
Not Applicable

(vi) Any clearing system(s) other than Euroclear and Clearstream, Luxembourg, their addresses and the relevant identification number(s):
Not Applicable
(vii) Delivery: Delivery against payment

(viii) Name(s) and address(es) of Initial Paying Agents, Registrar and Transfer Agents:
The Bank of New York Mellon, London Branch
One Canada Square
London E14 5AL

(ix) Names and addresses of additional Paying Agent(s), Registrar and Transfer Agents (if any):
Not Applicable

(x) Intended to be held in a manner which would allow Eurosystem eligibility:
Yes.
Note that the designation "yes" simply means that the Notes are intended upon issue to be deposited with one of the ICSDs as common safe-keeper and does not necessarily mean that the Notes will be recognised as eligible collateral for Eurosystem monetary policy and intra day credit operations by the Eurosystem either upon issue or at any or all times during their life. Such recognition will depend upon the ECB being satisfied that Eurosystem eligibility criteria have been met.

5. DISTRIBUTION

(a) If syndicated, of Managers: Not Applicable

(b) If non-syndicated, name and address of Dealer:
RBC Europe Limited
Riverbank House
2 Swan Lane
London EC4R 3BF

(c) U.S. Selling Restrictions:
Regulation S compliance Category 2; TEFRA D rules apply