Reseaching the Caricature and Landscape Issues at Library and Archives Canada, Part 1

Larry Margetish

To replace the 1967 Centennial definitives, the British American Bank Note Co (BABN) prepared a set of stamp designs based on the theme “The People and the Land.” The Landscape definitives, consisting of five medium-value and two high-value stamps released in 1972, were based on this theme. The medium values depicted terrain across Canada, and the high values featured urban scenes. BABN prepared designs based on the same theme for the low values, but they were rejected in favour of designs showing line drawings of prime ministers and the Queen. These were the Caricature definitives issued in 1973. The Caricature and Landscape definitives were assigned Unitrade catalogue numbers 586 to 605.

These definitives boast several firsts:

- The Caricatures were the first complete set of stamps without frame lines or borders;
- For the first time, the majority of the low values depicted non-royalty;
- This series had the first multi-coloured definitives ever; and
- The higher values were the first to be split into two groups and two formats: the smaller 10¢ to 50¢ medium values and the larger $1 and $2 high values.

My almost-annual pilgrimage to the nation’s capital to research the Caricature and Landscape issues has resulted in my unearthing some of the philatelic treasures held by Library and Archives Canada. My latest research discoveries have been broken down into a three-part article: (1) pre-production; (2) tagging; and (3) production and miscellaneous steps in the manufacture of these definitives. The first part, an overview of pre-production research, is covered in this installment.

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Pre-production starts with original, source material. For example, the 8¢ Queen Elizabeth II stamp began with a photograph taken by Anthony Buckley [1] (Figure 1).

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Keywords & phrases: Caricature and Landscape issues, pre-production

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Presumably from the angle of Her Majesty’s face and her necklace, the stamp design was based on this 1965 photo [2]. The head and shoulders are cropped and enlarged in Figure 1a. The five medium values were inspired by the work of the following photographers: The 10¢ by John deVisser, the 15¢ by Harry Rowed, the 20¢ by Chris Lund, the 25¢ by Ted Grant, and the 50¢ by Fred Ruggles [1]. The high values also originated from photos. For instance, the genesis of the $2 Quebec stamp was the black-and-white image in Figure 2.

The late David Annesley (Figure 3) executed a line drawing of Queen Elizabeth II based on the Anthony Buckley photo. Annesley’s first drawing of the Queen was rejected.

The final artwork of the second submission is shown in Figure 4 (compare Figure 4 with Figure 1a). David Annesley also made the line drawings of the prime ministers that were used for the other low values. The other stamp designer in this series is Reinhard Derreth, whose recent picture appears in Figure 5. From the photos of the medium values mentioned above, Reinhard Derreth painted versions adaptable for stamps. Held by the Archives and illustrated in Figure 6 is the artist's actual painting, the prototype for the 20¢ Prairie stamp. Note that an 18¢ stamp was never issued. Perhaps an increase from 15¢ to 18¢ for international airmail was planned. It never occurred. As further evidence, handwritten minutes of a meeting with British American Bank Note Co, dated 25-2-72, listed the five accepted designs. The 50¢ “seascape” design was recorded as an 18¢ value, and the denominations were listed as “10-15-25-18-20” [3]. My search of documents has so far yielded no more information on a proposed 18¢ rate of any kind.

When the design is accepted, a mock-up of the stamp is prepared. For example, the 4¢ and 5¢ stamps were mocked up both with and without a translucent overlay, as per Figures 7 and 8. Once the design is finalized, a die is engraved for stamps printed by engraving. The engraver for the 2¢ through 7¢ stamps is recorded as being Yves Baril [1].

Next, samples are printed in trial colours to showcase the possible look of the final stamp. Figure 9 displays forty-nine essays of the 3¢ Borden, in various hues and shading. After due consideration, one representation and colour was selected and approved. On 1 July 1973, while visiting Prince Edward Island, Queen Elizabeth II approved the design with Her image [4, 5]. This was the first time royal
approval for a stamp design was given on Canadian soil. Proofs of stamps depicting the monarch are normally sent to Buckingham Palace for approval.

The approved design is transferred as many times as necessary onto the printing plate or cylinder. The method of transference depends on the printing technique: photogravure, lithography or steel engraving. All three techniques were used in this series. For engraving, the design is transferred from the die to a transfer roll. There are typically between three and six reliefs on the transfer roll, depending upon the size of the design.

For photogravure and offset lithography, a black-and-white negative of the design is prepared for each colour used to print the stamp. This is accomplished by photographing the design through coloured filters. The design is replicated through a step-and-repeat camera to produce a pane.

Figure 6. Detail from Reinhard Derreth original painting (e011087365). © Canada Post Corporation (1972).

Figure 7. Four and five cents without overlay (Detail from e011087367_s1). © Canada Post Corporation (1973). Upper Figure.

Figure 8. Four and five cents with overlay (Detail from e011087367). © Canada Post Corporation (1973). Lower Figure.

Figure 9. Three cent essays (e011087357) MIKAN 2221375. © Canada Post Corporation (1973).

Figure 10 is a photographic negative of the magenta colour for one pane of 50 subjects used by Ashton-Potter in the first printing of the $1 Vancouver by offset lithography. This negative was replicated to produce the four panes on the printing plate for the magenta. Once the plates or cylinders are produced, proofs are made, usually imperforate, so that any flaws can be identified and corrected.

Three printers were used to print the Caricature and Landscape definitives:

1. Canadian Bank Note Co (CBN) printed the Caricature sheet stamps except for the denomination serving the first class letter rate, as well as all the coils by engraving and lithography;

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2. British American Bank Note Co (BABN) printed the Caricature sheet stamps for the first-class letter rate, all the booklets, the medium-value Landscape definitives, and the second printing of the $1 Vancouver by engraving and photogravure; and
3. Ashton-Potter and British American Bank Note Co jointly produced the first printing of the $1 Vancouver and the entire printing of the $2 Quebec by a combination of lithography and engraving.

CBN printed the low values issued in sheet format by engraving on a sheet-fed rotary press. The tagging and the precancel bars on precancelled stamps were printed by offset lithography on a different press. The sheets of 600 stamps were then perforated and guillotined into panes of 100. A plate proof of 600 of the 5¢ precancel, tagged and imperforate, is shown in Figure 11. At the lower right is some cross-hatching that is normally guillotined off the issued panes, but has been seen on corner-fold varieties. Its purpose remains a mystery. In 1976 Leopold Beaudet published an article describing the low-value plate layouts [6].

The 8¢ and 10¢ coils were printed by the CBN on a web-fed press. The paper was fed through the press using a tractor feed mechanism. A plate proof of the 10¢ coil is shown in Figure 12. The sprocket holes for the tractor feed are clearly visible. No plate proofs were found of the 8¢ coils, although they probably would have had an identical layout to the 10¢. The coils were printed from two plates of 720 stamps. Each plate was bent to a semi-circular shape with 36 stamps around the curvature and 20 stamps along the axis. The 20 stamps were separated by a gutter in the middle. Each row of 36 stamps became part of a roll of 100. The 10 rows on each side of the gutter formed the 10 rolls of 100 stamps in a post office “stick”. At the lowermost edge of the illustration, left of the right corner and inverted, is the printing order number and plate number “784 No. 1”.

BABN used a Goebel web-fed press, model BRNST-500 [7], for all the sheet stamps and booklets except the $2 Quebec and the first printing of $1 Vancouver. This press
printed all the colours, both engraved and photogravure, and perforated and guillotined the web into individual panes, all in a single pass. The tagging was one of the “colours” printed by photogravure. The designs were impressed directly onto a cylindrical roll, hence the term “cylinder” rather than “plate”. The cylinder for the low values consisted of six panes of 100, three around the circumference by two along the axis. Only the panes on one side of the axis had plate inscriptions. Figure 13 shows an 8¢ plate proof of 600, with the inscriptions only on the three rightmost panes. A plate proof of the 25¢ booklet is depicted in Figure 14. A diagram of a similar cylinder layout is shown in a 1984 article by Leopold Beaudet [8]. A proof of the $1 booklet is shown in Figure 15. No plate proofs of the 50¢ booklet were found in the Archives, although it is reasonably certain that they would be similar to Figure 16. Interestingly, the second and fourth columns of 50¢ booklet panes are tête-bêche relative to the first and third columns. This layout was discovered by Andrew Chung in 1978 [9]. The cylinders for the medium values consisted of three panes of 100 around the circumference. An example is shown in Figure 17. Numbers are printed at the base of this 10¢ proof sheet: A887241, A887242, and A887243. These numbers exist on only some of the medium value plate proofs, and are security control numbers according to Robin Harris [7].

The first printing of the two high values was a collaboration of Ashton-Potter and BABN. Ashton-Potter printed the four lithographic colours using a rotary sheet-fed press. BABN then printed the engraved portion of the design also using a rotary sheet-fed press. BABN also perforated...
and guillotined the sheets into panes of 50. An Ashton-Potter plate proof of 200 is pictured in Figure 18. The annotation on this proof sheet implies that the printing was to be completed by CBN. However, the contract ultimately went to BABN. The redrawn Plate 2 printing of the $1 Vancouver was produced entirely by BABN on its Goebel Press. Figure 19 shows a Plate 2 proof of 150. The layout of Plate 2 was first suggested by Jim Watt in 1980 [10]. Equally interesting is Plate 2 of the $2 Quebec released in 1978. Canada Post continued to use Ashton-Potter and BABN as in the original arrangement for Plate 1. However, for some reason, Ashton-Potter widened the gutters between the four panes, as per Figure 20 (compare Figure 20 with Figure 18). This partial or progressive proof sheet of 200 was approved by Canada Post stamp design manager William F. Danard [11], as per the annotation written on the sheet: OK to print Wm F Danard 26.09.77. On all four panes of the proof sheet, there is the constant “airplane in sky” variety in

Figure 15. $1 booklet plate proof of 648 MIKAN 2222537. © Canada Post Corporation (1975).

Figure 16. Drawing of the probable layout of the 50 cent booklet proof, 720 subjects, with one pane in grey.

Figure 17. 10 cent Forest plate proof of 300 MIKAN 2221797. © Canada Post Corporation (1972).
position 2. Also in the Archives is a $2 Plate 2 signed final approval proof, known as an imprimatur. This proof sheet of 50 is annotated *OK to print Wm F Danard 17.1.78*. This concludes my summary of pre-production research. The items I illustrate and describe here help to delineate the process of printing of these fascinating postage stamps.

*Figure 18. Ashton-Potter $2 Quebec progressive plate proof of 200 (e011087362) MIKAN 2222996. © Canada Post Corporation (1972). (Left)*

*Figure 19. British American Bank Note Co. $1 Vancouver Plate 2 proof of 150 © Canada Post Corporation (1973).*
References

[1] Library and Archives Canada’s “Philatelic” database (Canadian Postal Archives), online: <http://www.collectionscanada.gc.ca/postal-archives/080608_e.html>


Researching the Caricature and Landscape Issues at Library and Archives Canada, Part 2

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This three-part article describes discoveries made while researching the Caricature and Landscape definitives at Library and Archives Canada in 2014. Part 1 dealt with stamp pre-production findings [12]; this part describes discoveries about tagging; and Part 3 will focus on production and miscellaneous research. All images are reproduced with the permission of Canada Post Corporation.

These definitive stamps played a pivotal role in the history of tagging. The medium-value Landscape stamps were the last definitives to be Winnipeg-tagged, and the Caricature and medium-value Landscapes were the first definitives whose entire print run was tagged.

From the mid-1960s, Canada Post used the Pitney-Bowes Mark II facer-cancellers prior to the general use of tagging. These machines were designed to respond to light reflectance, and required a contrast of 13 percent or more between the envelope and the darker stamp to trigger it. The machine detected the stamp on the envelope and then routed the envelope to a properly oriented canceller [13].

Following is a quick summary of the basics of tagging: For more background information, refer to my article on tagging [14] or the Unitrade catalogue [15]. The tagging used on stamps is nearly invisible, but it glows under ultraviolet (UV) light. Three different types of tagging were used in the Caricature and Landscape period:

1) Winnipeg Tagging, a phosphorescent ink that glows a soft white under UV, and continues to glow for a short period after the UV is removed. This tagging was used to activate the SEFACAN automatic facer-cancelling machines installed at Winnipeg in 1962 and was phased out by the end of 1972.

2) OP4 Ottawa Tagging, a fluorescent ink with a yellowish-green glow under UV that migrates or bleeds from the stamp onto any other paper with which it comes into contact.

3) OP2 Ottawa Tagging, a more stable, non-migrating, fluorescent ink, also with a yellowish-green glow under UV.

When Winnipeg Tagging was phased out, Ottawa Tagging was renamed General Tagging. The medium-value Landscape definitives were issued on 8 September 1972. My article on tagging [14] illustrated a letter from Canada Post dated 12 May 1972 [16]. This letter was the initial printing order for the 10¢ value from British American Bank Note Co (BABN). The order letter specified that the stamps were to be untagged, Winnipeg tagged, and Ottawa tagged. Since tagging was first introduced in 1962, the practice was to tag just a percentage of the total print run of definitives and Christmas stamps. Untagged stamps were issued with...
plate inscriptions for the philatelic market, but tagged stamps were issued without inscriptions. The 12 May order for the 10¢ Landscape reflected this practice. In fact, tagging was considered optional until at least 17 July 1972. Shown in Figures 21a and 21b is a two-page letter describing revisions to the PS 14, or philatelic stamp announcement [16].

![Postage Stamp Division letter (cropped) dated 7 June 1972, page 1.](image)

© Canada Post Corporation (1972) [16].

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This 7 June 1972 letter from the Postage Stamp Division reflected the practice described above for tagged stamps. The letter has corrections in red ink dated 17 July that still called for Winnipeg and Ottawa Tagged stamps to be issued without plate inscriptions in the corners. In addition, the entire print run of the 50¢ stamp was to be issued without tagging. Thus, the decision to do away with untagged stamps and to release philatelic stock.
of all five medium values with Ottawa Tagging and plate inscriptions was made between mid-July and mid-August, 1972. All the medium values except the 50¢ were also released Winnipeg Tagged, but with no plate inscriptions.

Research has revealed that Winnipeg Tagging had a key ingredient. It was called “Carbazole” (Lettalite B2), at 48 percent by weight. This phosphor glows under UV light at the wavelength of about 2537 Å (angstrom). This information comes from a document titled Schedule “D” (circa 1963), appended to the printing contracts with Canadian Bank Note Co (CBN) and BABN [17]. The remaining ingredients were No 2 Litho Varnish (27.5%), Aroplaz 1273 Varnish (20.0%), Hypothiolate concentrate (2.5%) and Castor Oil (2.0%). The quality standard for UV glow was a comparison of a “stamp, newly tagged” to the “British regular issue 3d blue stamp.” Note that even Winnipeg Tagging has a “rub-off” capability, as was documented in a letter dated 28 November 1972, from the Postage Stamp Division to a concerned individual [17].

What all this means is buyer beware when purchasing “untagged” varieties of the 10¢ to 50¢ Landscape stamps perforated 12½ x 12. Stamps having lost nearly all of the Winnipeg Tagging or the OP4 migrating tagging might, at first impression, appear under UV to be untagged. A completely dark room is strongly recommended for such testing.

General Electric manufactured the phosphor compounds used in the early OP4 and OP2 Ottawa Tagging, but apparently not the actual inks used on the tagging plates. While collectors refer to the ink or tagging as OP4, it is more properly the OP4 phosphor component, X5035-OP4, that migrated. The OP4 tagging was used in the photogravure ink on stamps that BABN printed on its Goebel web-fed press. CBN used lithography for the
tagging on the stamps it printed. The lithographic ink incorporated organic phosphor X5030-OP2, which did not migrate. See Figures 22a and 22b for specifics in a letter on “Stamp Tagging Phosphors,” from 26 August 1971 [18]. OP2 phosphor was adapted for use with photogravure by the end of October 1972, eliminating the need of the troublesome migrating tagging [13].

The original tagged ink for lithography, containing OP2, was the 50872 Phosphor Tagging Ink distributed by Canadian Fine Color Company, Limited. This was described in a 30 November 1972 letter and attachment from the Postage Stamp Division to The Toronto Star [17]. The attachment listed the components of the 50872 Phosphor Tagging Ink. Twenty percent of the ink consisted of the OP2 Organic Phosphor pigment made by General Electric. “The balance consists of a resin solution of a vinyl toluene-styrene copolymer in a high boiling point aliphatic hydrocarbon solvents together with small amounts of natural and synthetic waxes, cobalt octoate, mangenese [sic] octoate, tung oil and N-methyl 2-pyrrolidone.” About five percent was of a proprietary solvent known as NASCA Anti-Offset Compound, manufactured by NASCA Compound Inc. of Long Island, New York. Its non-toxic composition was not known to the Canadian distributor. The November 1972 letter also revealed that the new OP2 tagging for photogravure was formulated with an acrylic resin, reduced with alcohol. There was no information on the components of the tagging containing OP4.

However, the stamp tagging question was not completely settled. For example, BABN tested a material called “Lumogen” for tagging trials [17]. Interesting details about the testing appear on the printer’s invoice to Canada Post, dated January 31, 1973, reproduced in Figure 23. More facts about Lumogen will appear in Part 3, “Production and Miscellaneous Research.”

Figure 22b. Stamp Tagging Phosphors letter, page 2. © Canada Post Corporation (1971) [18] (right).
Some 10¢ Landscape stamps with the original design have been identified with OP2 tagging with a tag bar width of only 2 mm instead of the regular 3 mm. An actual block of such stamps, with the 2 mm tagging simulated in yellow-green highlighting, is displayed in Figure 24. While this might have been testing of the tag bar width, it is also possible this was an error on the tagging plate. When the medium values were redrawn or re-issued, the tag bar width on all stamps was increased from 3 mm to 4 mm.

Figure 23. Lumogen Tagging Trials invoice. © Canada Post Corporation [1973] [17] (below).

These changes occurred between December 1973 and February 1975. Starting October 1973, the low-value Caricatures and the $1 Vancouver had 4 mm tag bars. After the increase to 4 mm bars, there were no other changes to the tagging.

One can consider the tagging issues as “case closed” and decided by 28 February 1974. It was by that date that all Mark II Facers/Cancellers were converted from “reflectance testing” to “phosphor tag recognition” [19]. This conversion is recorded in the 26 February 1974 letter pictured in Figure 25. This concludes my research findings on tagging.

References


Figure 25. Reflectance Testing Conversion. © Canada Post Corporation (1974) [19].
Researching the Caricature and Landscape issues at Library and Archives Canada, Part 3

Larry Margetish

This three-part series of articles describes discoveries made while researching the Caricature and Landscape definitives at Library and Archives Canada in 2014 and 2015. Part 1 dealt with stamp pre-production findings [20] while Part 2 concentrated on tagging [21]. This final segment deals with the production and miscellaneous aspects of the Caricature and Landscape issues revealed by Post Office documents preserved by Library and Archives Canada. All images are reproduced with the permission of their respective copyright holders.

A 3 June 1975 letter from Postage Design & Development [22] reveals details about the stamp papers in use during the early printings of the Caricature and Landscape definitives. It states that until about 1973, postage stamps were printed on “several different base [paper] stocks and several different but progressively improved coatings.” By 1975, this was standardized to “three different finished papers using two different base stocks” to meet the demands of the various printing processes in use at that time (offset lithography, steel engraving, and photogravure).

The dollar values were printed using lithography and engraving. While the letter referred to above suggests that some lithographed stamps were on coated paper, the dollar values’ paper specifications were for uncoated stamp paper, as spelled out in a Post Office order letter dated 9 February 1972 to British American Bank Note (BABN) [23]. More details on the high values follows.

The June 1975 letter also reveals that a bulkier base paper with no optical brightener was used for stamps printed by steel engraving. This paper was used to print the Caricature low values, although, as is well known, the paper is found with various levels of fluorescence including high fluorescence. The same bulkier base paper with a special coating was used for stamps, such as the 10¢ to 50¢ medium values, printed by a combination of photogravure and engraving. The medium values were known for fluorescent paper variations on the face and gum sides until mid- to late-1974. These variations in fluorescence might have been due to differences in paper stock and coatings before the Post Office standardized the paper used for the various printing methods.

The following ribbed paper varieties have been recorded on the Caricature and Landscape definitives:

- Horizontal ribbing, quite visible on both the face and gum sides, on the 1¢, 2¢, 4¢, and 6¢ Caricature definitives printed by Canadian Bank Note (CBN).

Keywords & phrases: Landscape, Caricature, Canadian Bank Note Co, British American Bank Note Co, Ashton-Potter
• Horizontal ribbing, visible on both sides, on part of the printing from cylinders 1 and 2 of the 8¢ QE II stamp by BABN.

• Vertical ribbing on early printings of the 10¢–50¢ medium value definitives and also on the 1974 printings of the 10¢ and 20¢ values. The ribbing is visible only on the face side, which suggests that it is a property of the coating, not the paper itself. Very faint horizontal ribbing has also been observed on some values.

• Horizontal ribbing, visible on both sides, on part of the first printing of the $1 Vancouver. The ribbing appears to be different from that on the CBN and BABN low values.

The June 1975 Post Office letter also mentions ribbed paper, and it suggests two possible reasons for its use:

1. It is the paper manufacturer that applies gum to the stamp paper. The gum is normally applied on the “wire” side, leaving the smooth or “felt” side for the printed stamp design. The “wire” side will show ribbing, but it is masked by the gum. If the gum is accidentally applied on the “felt” side instead, this leaves the stamp printer with no choice but to print the design on the “wire” side, in which case the ribbing will be visible.

2. In a few instances in the two years before the letter was written (that is, between 1973 and 1975), substitute paper stock was used because of shortages in standard stamp paper or short notices of production schedules.

The first reason may explain some of the ribbed paper varieties that Robert Elias discovered in his exhaustive research on the 1954 Wilding definitives [24]; however, it does not explain the ribbed paper used for the Caricature and Landscape definitives. On the low values and the $1 value, the ribbing is visible on both sides of the paper, with or without gum, and on the medium values the ribbing is a property of the coating, not the paper itself. The second reason described in the letter is the more likely explanation for the ribbing found on the Caricature and Landscape definitives.

Further research has revealed what happened with the initial issue of the $1 and $2 stamps. On 20 December 1971, BABN submitted a quote to the Post Office to print the 1972 $1 Vancouver and the $2 Quebec definitives [25]. The quote was to print
10 million of each design, using four-colour lithography on one press and one-colour steel engraving on a second. Allowing for revisions and approval of the printing proofs, BABN estimated that delivery would be about 1 May 1972. The price was $2.95 per 1,000 for the $1 stamp and $2.65 per 1,000 for the $2, taxes extra [25].

However, the contract originally went to Ashton-Potter to do four colour lithography (black, blue, yellow, magenta) with the steel engraving to be completed by CBN. This is the reason why, in Part 1 of this article[20], the dollar values’ proofs had the notation “CBN production at point of cut-off.” As of 11 January 1972, the PS14 (stamp announcement) was to read “printed by CBN” [26]. On 24 and 26 January 1972, CBN made the copper plate for the pane of 50 of the $2 and $1, respectively [27]. On 31 January (for the $2) and 4 February (for the $1), the nickel printing plate of 200 was prepared. At this point, problems must have surfaced, because on 4 February 1972, BABN was asked to perform the engraving [23]. The engraved colours were slate blue for the $1 and brown for the $2 stamps.

It is remarkable that the two stamps were issued on 17 March 1972, especially considering BABN’s delivery estimate of 1 May. The Post Office and the two printers must have scrambled to meet the issue date. Only half of the litho-printed $1 stock was considered useable due to a registration problem [23]. The “short $ flaw” on the first printing of the $1 was probably due in part to the urgent need to complete the order.

When the Post Office reprinted the $1 stamp, it is likely that they switched printing methods because of the lower printing costs for photogravure (for example, on 10 March, 1972, BABN quoted 87¢ per 1,000, plus tagging, for the 10¢ Landscape definitive [28]), and the no doubt faster turnaround (one printer using a web-fed press versus two printers using two different printing methods). What about the reprint of the $2 stamp? Unfortunately, BABN could not get an acceptable essay of the $2 stamp using gravure and steel [23]. So, the Post Office continued with the existing arrangement from the first printing, i.e., Ashton-Potter printed the lithography and BABN printed the engraving.

The 50¢ Seashore had an “improved printing,” as described by Canada Post. This much darker blue coloration first appeared in blank “field stock” in August 1974 [29]. A different report has the date as March 1974 [30]. The imprimatur plate proof was signed off on 30 July 1974 [31]. This imprimatur proof is displayed in Figure 26. New plate blocks, still Plate 1, apparently became available in February 1975 [29]. Further evidence is needed to be conclusive for all of these dates.

As background to its main topic, the memo states that in 1967 the Post Office notified the stamp printers— at that time just CBN and BABN (Ashton-Potter’s first stamp was the 6¢ Group of Seven issued on 18 September 1970)—that it wanted them to abandon line perforations (what it called “random perforations”) in favour of comb perforations (what it called “registered pin-type perforations”). The memo discusses the Post Office’s motivation for the request. Referring to line perforations, the memo states: “Where the lines of perforations intersect, the pattern of holes is irregular. This distracts aesthetically from their appearance. Most countries have gradually phased out this method of perforation in favour of [registered pin-type perforation].”

The memo shown in Figure 28 clearly reveals that the adoption of comb perforations on Canadian stamps was neither accidental nor a printer innovation—it was mandated by the Post Office. It points out that, in the intervening years, BABN and Ashton-Potter (which was printing stamps when the memo was written in January 1973) had both converted to comb perforations but CBN was lagging behind.

The reason for the memo was that CBN had proposed a completely novel perforating technique, called “registered, rule-perforation.” The memo describes it this way: “The sheets are perforated in a single operation between one flat steel platen, and another platen bearing raised ridges, in the pattern which is readily visible on the sample.” Their included sample is illustrated in Figure 27.

As a pre-condition to adopting this technique, the Post Office imposed the following two requirements:

1. Such a major change and its visual impact would have to be applied to all Canadian postage stamps.
2. The Post Office would have to be assured of an overall saving and of continuing competitive sources of postage stamp supply.

Effectively these two requirements meant that the other two stamp printers, BABN and Ashton-Potter, would have to adopt the CBN technology. To this end, CBN had agreed to release information about its new technique to its competitors and to meet with their representatives to discuss the technology and its potential cost savings.
The CBN’s new technique may or may not have resulted in cost savings; however, it did eliminate the confetti produced when perforation holes were punched, and it presaged today’s modern serpentine die-cutting techniques. Whatever the merits of CBN’s proposal, the discussions with the other two printers were obviously unsuccessful. It was highly improbable that they would write off their investments in comb perforators and adopt technology that CBN had developed. In particular, BABN had purchased its Goebel web-fed press in the mid-1960s, and the platen die-perforating unit was an integral part of the press [33].

Having failed to get its technology adopted, CBN had a problem—converting from line perforations to a comb perforating technique that was acceptable to the Post Office—and it was an urgent one: the Post Office was shortly going to issue tenders for long-term stamp contracts. Again, CBN came up with an innovative solution—what philatelists refer to as the H-comb [34]—just in time to usher in the Caricature definitives.

Between September 1975 and January 1976, reprints of the five medium values appeared with the perforations changed from 12.5 × 12 to 13.3 on all sides. The change was requested by the Post Office in a letter to BABN dated 2 May 1975 [35] and shown in Figure 28. In the same letter, the Post Office asked BABN to make another, seemingly trivial, perforation change—to perforate the panes right to the edges. On the perf. 12.5 × 12 panes, the left and right selvedge were fully perforated, but the top and bottom had just one perf hole in the selvedge. An example of this perforation is shown in Figure 29. Why did the Post Office ask BABN to make these changes? The letter is silent on this point, but the most likely reason is to make it easier to separate the stamps.

The BABN had been printing the $1 by photogravure since 23 October 1973, perforating it the same way as the medium values, i.e., 12.5 × 12 with one hole in the top and bottom selvedge. Logically, one would expect BABN to apply the Post Office request to the $1 as well, since it shared the same printing characteristics as the medium values (except that it was twice the size). In July 1977, the $1 did appear with 13.3 perforations but, surprisingly, with just one hole in the top and bottom selvedge (Figure 30). In May 1978, a surprising reprint of the 50¢ Landscape made its appearance in post offices [36-38]. It had the revised perforation gauge, but only one hole in the top and bottom selvedge (Figure 31), like the $1 Vancouver (in Figure 30).
When the Caricature definitives were issued on 17 October 1973, the 1¢, 3¢, 5¢, and 6¢ were issued in precancelled format. Evidently, a precancelled version of the 4¢ was also contemplated, because a precancelled pane of 100 exists in the material at Library and Archives Canada (Figure 32). This essay has the following annotations:

- At the upper right: “stop ends of lines at perf (approx)”
- At the lower right: “Approved cancellation lines to stop at perforation [signature] 29/8/73.” There are additional initials and the datestamp AUG 31 1973.

I have found no documentation to date regarding the decision to scrap the 4¢ precancel.

The 6¢ precancel exists with the black bars and the warning messages in the selvedge doubled. The bars and message were printed using offset lithography. A letter from CBN to the Post Office and National Postal Museum dated 22 January 1980 [39] explains how the variety was produced. This letter is illustrated in Figure 33. The letter states that the doubling was caused by a “blanket transfer” that occurred when the black precancel ink was printed.

Hans Reiche suggested that the sheets were accidentally fed through the precancel press a second time [40]. As illustrated in Figure 34, there is a noticeable break in the second set of black bars at the tagging. Reiche suggested that the printing sequence was as follows:

precancelling (pass 1, no break in the bars tagging),
precancelling (pass 2, breaks in the bars at the tagging).

Leopold Beaudet [41] believes that the tagging was printed first because the precancel bars, when viewed under a UV lamp, are just as strong over the tagging as in the untagged areas. He believes that the doubling is just a kiss print as the letter from CBN suggests.
Documentation from the Archives has pinpointed the International Telephone & Telegraph (ITT) phosphor used in the first letter sorting bar-coding.

This information surfaced in a meeting held at a concerned philatelist’s home on 28 April 1976. The minutes reveal that the trade name of the phosphor used in ITT printer ribbons was “Lumogen LT-light yellow” [42]. An example of this envelope barcoding is shown in Figure 35. Though not visible in the image, the stamps have a one-bar tagging error on horizontally ribbed paper. More details on ITT and letter sorting mechanization are included in an illuminating group of articles published between 1976 and 1978 [43].

Conclusions
This concludes my survey of discoveries made at Library and Archives Canada on the interesting and complex Caricature and Landscape series. Many thanks to Mr Leopold Beaudet for providing valuable advice, suggestions, and comments. Special thanks to the staff at Library and Archives Canada and also the staff at Canada Post Corporation for their guidance and assistance.

References


[31] LAC, 50¢ Seashore, Plate 1 proof of 100, improved printing, OK to print F G Flatters 30/7 74, Box 2000843871, detail from reproduction copy number pos-4420.


[41] Personal communication with Leopold Beaudet.
