

Lot 2.

## COLLECTION OF RARE MANUSCRIPT SURVEYS, SURVEY TRACES, AND BLUEPRINTS FOR BOSTON, MASS.

### BACK BAY AND KENMORE SQUARE

\$6,200

One lot consisting of 20 street/lot cadastral plans from Boston, Massachusetts. These artifacts illustrate the workflow for blueprint production with frequent updates and reflects the data considered important for decision making in that era. Several items demonstrate the use of trace overlays to support the use of a single base map (the large trace) with smaller overlays to enable the simple creation of multiple copies each with a different land configuration option. Also illustrates the adoption of blueprint technology for replication of largely textual business documents.

\$6,200

Note: Lot includes an unprotected soft copy of this document.

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From the mid 1850's through 1890 Boston conducted the most ambitious land-making of the era in the U.S. by transporting and placing gravel, ashes, and sand in an area that was previously a tidal marsh of the Charles River. The landfill of Boston's Back Bay was fueled by a shortage of suitable land for new construction and the desire to remediate water pollution resulting from earlier bad decisions that placed profit ahead of citizen's health and welfare.

Over a period of 35 years more than 450 acres of new land was added to Boston by filling the Back Bay with an average of 20 feet of fill. Much of this land was purchased by well-to-do Bostonians and today the Back Bay remains one of the most prestigious locations within that city.

We have been able to obtain 20 rare late 19<sup>th</sup> century artifacts that document the last years of the 35 year project in Boston's Back Bay. These maps and plans shed light on some of the decision-making factors and design options for Boston real-estate developers. These artifacts in this lot are of three types: hand-drawn or manuscript survey maps, manuscript traces of those surveys, and blueprints. The artifacts represent a very early application and adaptation of a cutting-edge technology: blueprinting.

Surveyors captured the results of field surveys as manuscript master maps in pencil, ink or both, typically on heavy brown paper. These surveys usually are rough in their appearance, with little effort devoted to prettying up their map titles and notes. These surveys were typically not for distribution but were retained by the surveyor.

A finished, attractive client-ready map could be created from those rough master maps by tracing the map in black water-soluble ink onto an opaque cotton paper, called tracing cloth. At this stage more care was taken to make the trace an attractive product; lettering was carefully laid out, neatly executed, and any errors or imperfections were fixed. Extraneous notes were likely not to appear on these trace surveys. A surveyor's manuscript tracing was ready for prime time and could be distributed to the client. If multiple copies of the map were required the trace could be used as a reproducible artifact to create an infinite number of blueprint copies.

In the 1870's a new photographic process was invented, blueprinting, that could create an unlimited number of copies from a surveyor's trace. Blueprints were

created by overlaying the trace onto a piece of paper treated with a photo-sensitive compound. After exposure to sunlight the paper was washed and dried with the end product a blue negative copy of the trace. In order to present clients with design options the surveyor could create one master trace of an area and multiple smaller traces representing the features of the option “studied”. During exposure to sunlight the desired study was superimposed onto the master trace, resulting in a blueprint that captured the features of both the master trace the features of the option or “study”.

**SC\_BOS\_1. Fuller and Whitney, C.E. 39 Court Street, Boston. [CARTOGRAPHIC CURIOSITY] MAP OF PORTIONS OF BOSTON AND CAMBRIDGE SHOWING SOME EXISTING BRIDGES AND THE PROPOSED ROUTE FOR THE NEW BRIDGE ACROSS THE CHARLES RIVER BASIN. Feb. 17, 1885.** Surveyors' collation or index number "1228b".

Very rare cartographic curiosity, a reversed blueprint of the Charles River Basin with two location options for the Harvard Bridge (constructed 1887 – 1891). This misprinted item would have resulted when during the replication process, the survey trace was placed backwards over the blueprint paper. In its own, a very interesting artifact documenting two placement options for the Harvard Bridge, built across the Charles River at Massachusetts Avenue. Statement at lower right with data comparing the length of two placement options; the deciding factor seems to have been that the lower bridge option (At West Chester / Mass. Avenue) was more than 700 feet shorter than the upper bridge location option. 18" W x 12" H. Scale approximately 1000 feet to one inch.

**SC\_Bos\_2. Fuller & Whitney C.E. PLAN NO. 6 BACK BAY LANDS SHOWING ASSESSORS VALUATION OF VACANT LAND 1885 WITH NAMES OF OWNERS, AREAS, AND LOCATION OF ESTATES. August 1, 1888.** No collation or index number.

Blueprint cadastral street and lot plan of a portion of Boston's West Back Bay and Kenmore neighborhoods. Blueprints of this age are rare. Map is centered on Charlesgate Park (then Back Bay Park). A great record of the valuations and ownership distribution for land immediately after land-making was complete and the land platted for sale. Note the plan uses the old name of West Chester Park for what today is Massachusetts Avenue and the Harvard Bridge across the Charles River had not yet begun, in fact was still noted as "proposed". 13" W. x 15" H.

**Three artifacts illustrating the work-flow used by late 19<sup>th</sup> century surveyors/engineers (William H. Whitney) for the then high-tech reproduction process of blueprinting. MS trace survey, and blueprint are both derived from the MS master survey.**

**SC\_Bos\_3. William H. Whitney, Civil Engineer. 39 Court Street. Boston. [A PLAN OF BOSTON BACK BAY: CHARLESGATE WEST TO MASSACHUSETTS AVENUE].** Surveyor's index number in pencil "1427". January 1, 1890.

MS survey **trace** in ink with light watercolor to verso. Dotted lines suggest a proposed future route for Boylston St. through the Back Bay Fens and up Charlesgate Park. Depicts lots from Charlesgate West to West Chester Park including Newbury Street, Commonwealth Avenue, Marlborough Street and Beacon Streets. Data for each lot shows the lot address, valuation per sq. ft., lot width, lot depth, and the owner's name. 12.5" w x 14.75" h. Scale 100 feet to one inch.

**SC\_Bos\_4. William H. Whitney, Civil Engineer. 39 Court Street. Boston. [A PLAN OF BOSTON BACK BAY: CHARLESGATE WEST TO MASSACHUSETTS AVENUE.** Surveyors index number "1427". MS survey **master survey** on brown paper. Dotted lines suggest a proposed future route for Boylston St. through the Back Bay Fens and up Charlesgate Park. Depicts lots from Charlesgate West to West Chester Park including Newbury Street, Commonwealth Avenue, Marlborough Street and Beacon Streets. Data for each lot shows the lot address, valuation per sq. ft., lot width, lot depth, and the owner's name. 13" w x 15" h. Scale 100 feet to one inch.

**SC\_Bos\_5. William H. Whitney, Civil Engineer. 39 Court Street. Boston. [A PLAN OF BOSTON BACK BAY: CHARLESGATE WEST TO MASSACHUSETTS AVENUE].** Lacks surveyors collation or



**index number but [1427].** January 1, 1890.

**Blueprint** to match trace SC\_Bos\_4. Dotted lines suggest a proposed future route for Boylston St. through the Boston Back Bay Fens and up Charlesgate Park. Depicts lots from Charlesgate West to West Chester Park including Newbury Street, Commonwealth Avenue, Marlborough Street and Beacon Streets. Data for each lot shows the lot address, valuation per sq. ft., lot width, lot depth, and the owner's name. 12.5" w x 14.75" h. Scale 100 feet to one inch.

**SC\_BOS\_6. Fuller and Whitney, Civil Engineers and Surveyors. 39 Court Street, Boston. [KENMORE-SQUARE AREA TO CHARLESGATE WEST.]** Earliest date on map is 1883. Collation or index number "944" inside blue ink hand stamp.

Manuscript survey of Boston Back Bay from Charlesgate East to Kenmore Square. Numerous notes particularly concerning Mr. Whitwell. With Beacon and Commonwealth Streets prominently featured. Charlesgate West is "Kensington St." while Charlesgate East is "Jersey Street". Notes indicate a relationship between this item and # 927. 28" W x 22" H. Scale 100 feet [to an inch].

**SC\_Bos\_7. Fuller and Whitney, Civil Engineers and Surveyors. 39 Court Street, Boston. [PLAN OF STREETS AND LOTS IN LONGWOOD AND FENWAY NEIGHBORHOODS AT BACK BAY PARK].** Not dated but ca. 1888. Collation number on index "936" in ink stamp.

MS cadastral survey plan of streets and lots with house outlines in Longwood and Fenway neighborhoods. The plan shows an area near the intersection of Brookline Avenue and Longwood Avenue including much of what is now Back Bay Park. Shows contour lines for the Muddy River which had not yet been fully landscaped into the Back Bay Park as it is known today. Scale 200 feet to one inch.

**SC\_BOS\_8. W.H. Whitney. STUDIES FOR DEVELOPING LAND OF THE RIVERBANK IMPROVEMENT COMPANY IN THE CITY OF BOSTON.** September 1890. MS Surveyors' collation or index number "1685" to verso.

Large MS ink trace on tracing paper of land fronting the Charles River owned by the Riverbank Improvement Company. With two overlay traces (studies) reflecting different land configuration options developed by Whitney (#10 and #14). For each study data are provided for square footage and the wastage percentage. Streets include a long stretch of Commonwealth Avenue, Beacon Street, Bay State Road, and Brookline Avenue. Includes land that today is Kenmore Square. Significant because land-making up to Kenmore Square was only completed by 1890; these studies reflects the planning underway at that time by Whitney for building out the area to the west. 35" W x 12" H.

**SC\_BOS\_9. W. H. Whitney, Civil Engineer. 39 Court Street. Boston. SPECIFICATIONS OF LABOR TO BE PERFORMED AND MATERIAL TO BE FURNISHED IN BUILDING A SEA WALL FOR THE RIVERBANK IMPROVEMENT COMPANY. (Related to the studies in SC\_BOS\_8).** June 16, 1890. MS surveyors' index number "1645".

MS ink trace business document (no cartography) on surveyors' tracing paper with manuscript description of the work to be performed to build a sea wall 558.6 feet long opposite Commonwealth Street. Detailed description of the excavation and a request for proposals from contractors to build the wall at a fixed cost per linear foot. Shows how users quickly adopted blueprint technology for replication of business documents less than 20 years after the blueprinting process was developed. One sheet with two pages each 7" W x 13" H.

**SC\_BOS\_10. William. H. Whitney, Civil Engineer and Surveyor. 39 Court Street. Boston. [ENGINEER'S PLAN OF REQUIRED FILLING FOR A PARCEL BETWEEN COMMONWEALTH AVENUE AND THE CHARLES RIVER.]** April 18, 1890. MS surveyors' index number "1622".

Manuscript engineered plan based on survey showing the depth of fill required to reach grade 14 Boston city base for a parcel of land fronting the Charles River in the vicinity of Boston University. Reflects some of the final land-making work performed as part of the Boston Bay project. With Whitney's oval engineer's stamp in blue ink. Scale 30 feet to an inch.

**SC\_BOS\_11. William. H. Whitney, C.E. 39 Court Street. Boston. [BLUEPRINT CADASTRAL PLAN OF LAND NEAR KENMORE SQUARE. SHEET R.]**. August 1, 1888. No index number.

Scarce blueprint street and lot plan of land at the intersection of Commonwealth Avenue, Beacon Street, and Brookline Avenue. Shows the Beacon Station for the Boston and Albany Railroad. With owners' names, lot square footage, and for some lots, the valuation per square foot. Scale 80 feet to an inch. 13" W. x 15" H.

**SC\_BOS\_12. William. H. Whitney, C.E. 39 Court Street. Boston. [BLUEPRINT CADASTRAL PLAN OF LAND NEAR AUDUBON CIRCLE. SHEET T.]**. August 1, 1888. No index number.

Scarce blueprint street and lot plan of the intersection of Beacon Street and Burlington (Park) Street, or Audubon Circle. Includes portions of Aberdeen Street, St. Mary's Street, and Ivy (Buswell) Street. Today Audubon Circle is an historic residential "pocket" neighborhood in Boston's Fenway area. With owners' names, lot square footage, and for some lots, the valuation per square foot. Scale 80 feet to an inch. 13" W. x 15" H.

**SC\_BOS\_13. Fuller & Whitney, Civil Engineers and Surveyors. 39 Court Street. Boston. [MANUSCRIPT TRACE CADASTRAL PLAN OF LAND FROM KENMORE SQUARE TO CHARLESGATE PARK / BACK BAY PARK. SHEET T]**. March 19, 1886. MS index number "1806".

Decorative manuscript surveyor's trace cadastral plan of streets and lots in the Kenmore / Fenway Neighborhood on Commonwealth Avenue and West Newbury Street between Brookline and Charlesgate West (Jersey St.). The Boston and Albany Railroad is shown just north of a large empty area that would one day become the site of famed baseball stadium Fenway Park.

**SC\_BOS\_14. Fuller & Whitney, Civil Engineers and Surveyors. 39 Court Street. Boston. [TWO] STUDIES SHOWING RELATION OF ADAM'S LAND TO DIFFERENT EXTENSIONS OF COMMONWEALTH AVE. AND CHARLES RIVER EMBANKMENT.** September, 1886. MS index numbers "1403" and "1403(2)".

Two items each a MS ink trace base plan of lands near Kenmore Square. Includes 10 overlay trace plans (studies) of different lot and street configurations. For each study data are provided for the waste percentage, waste square footage, and the gain or loss of land east of line AB. These were the decision criteria used at that time. The two trace base plans and static study grouping shows the flexibility and time savings provided by the blueprint process' ability to adapt to rapid change and an increased number of users. Scale 80 feet to one inch. 25" W. x 18" H.

**SC\_Bos\_15. Fuller & Whitney Surveyors. PLAN SHOWING SUBDIVISION OF LOT 57 WITH ADDITIONS SHOWING NAMES TO DATE. August 1, 1888.** Collation or index number "938" within Fuller & Whitney ink stamp. Two manuscript cadastral street plans of a portion of Boston's Back Bay neighborhood on one sheet. One map covers between Boylston Street and Columbus Avenue. Second sheet is centered approximately on Falmouth Street and Massachusetts Avenue.

**SC\_Bos\_16. Fuller and Whitney, CE. [WEST BACK BAY AND KENMORE AREAS: THE MALBOROUGH STREET AND COMMONWEALTH STREET LANDS].** November 8, 1885. Surveyor's number index on verso in MS ink "1405".

Early version of #1524 below. MS inked survey trace on tracing cloth of portions of **Boston Back Bay** with Massachusetts Avenue as "West Chester Park". This early trace survey along with #1524 shows the changes to the Back Bay which had only recently been filled to Charlesgate East in 1882 <sup>1</sup>. Location of the Harvard Bridge was still undecided in 1885. With related portions of Beacon Street, Marlborough, Commonwealth Avenue, and Newbury Streets. Blocks fronting Beacon Street are shown divided into lots and none are noted as "SOLD". Roads lining "Beacon Entrance to Back Bay Park" are labeled "Jersey Street" and "Ipswich Street", to be changed later on #1524. 32.5" w x 13.5" h. Scale 100 ft to one inch.

**SC\_Bos\_17. William H. Whitney, Civil Engineer & Surveyor, 39 Court Street BOSTON. [WEST BACK BAY AND KENMORE AREAS: THE MALBOROUGH STREET AND COMMONWEALTH STREET LANDS].**

October 11 1888. Inked Whitney surveyor's stamp. Surveyor's number in MS pencil "1524".

MS inked survey trace on tracing cloth of portions of **Boston Back Bay** with Massachusetts Avenue as "West Chester Park". This, the 1888 version of #1405 above (1885). Shows the location of the Harvard Bridge (under construction until 1891) across the Charles River to Cambridge, likely motivated by the filling and rapid development of Back Bay lands west of Massachusetts Avenue. With related portions of Beacon Street, Marlborough, Commonwealth Avenue, and Newbury Streets. Blocks fronting Beacon Street are shown divided into lots, some sold, with some re-platting north of Beacon and Commonwealth. Roads lining the Charlesgate Park are now labeled "Charlesgate East" and "Charlesgate West". 32.5" w x 13.5" h. Scale 100 ft to one inch.

**SC\_BOS\_18. [Fuller and Whitney, Civil Engineers. 39 Court Street, Boston]. [MANUSCRIPT SURVEY DOCUMENT OF LANDS WEST OF MASSACHUSETTS AVENUE (WEST CHESTER PARK)]** December 28, 1881 and October 18, 1882. Surveyor's number stamped in blue ink "854".

Two MS surveys in ink (2) on one sheet of heavy brown paper including the land for 378 and 380 Commonwealth Avenue, the first two houses in the Boston's Back Bay built west of Massachusetts Avenue. Filling Boston's Back Bay continued from East to West and by the early 1880's land west of Massachusetts Avenue (West Chester Park) was filled, extending the residential neighborhood to Charlesgate East at the edge of Back Bay Park. Inked annotation over the lots for "Trustees Park Entrance Lands", the original owners of the lots. (Source: <https://backbayhouses.org/back-bay-development-1880-1884>) 30" w x 23.75" h. Scale 100 ft to one inch.

**SC\_Bos\_19. William H. Whitney, Civil Engineer & Surveyor. 15 Court Street. Boston. [SURVEYOR'S TRACE CENTERED ON OF MASSACHUSETTS AVENUE].** June 6, 1883. Surveyor's index number in MS ink "1074".

MS ink trace on tracing cloth with some red watercolor to verso. Original antique manuscript surveyor's cadastral ink trace on tracing cloth from June 6, 1883 providing plan detail for a portion of the Boston Back Bay neighborhood. Includes updates from June 12, 1883. Coverage extends between Boylston and Columbus Avenues on either side of Massachusetts Avenue (then West Chester Park). Some areas are highlighted in red. Detailed lot boundaries or building ground plans provided for a few features including the Children's Hospital, Chickering Station, Men's Charitable Mechanic Association, Boston Storage Warehouse Co. Right of way shown for Boston and Albany Railroad and the Boston and Providence Railroad. With oval surveyor's / engineer's stamp for William H. Whitney. Scale 100 feet to one inch. Grubby. 25" W. x 30" H.

**SC\_Bos\_20. William H. Whitney, Civil Engineer & Surveyor, 39 Court Street BOSTON. [MANUSCRIPT REQUEST FOR QUOTATION TO FILL BAY STATE ROAD, BACK STREET, DEERFIELD].** September 1, 1887. MS index number “1416”. A rare manuscript document, ink on tracing cloth, from the Back Bay land-making project. This is a two-page RFQ (on a single sheet) by William H. Whitney requesting quotations for work to fill and grade Bay State Road and 4 other nearby streets with between 20,000 and 28,000 cubic yards of gravel. With inset map of the (yet unnamed) streets to be filled in relation to Beacon Street and Jersey Street (later Charlesgate West). Reflects some of the final work conducted in the Back Bay project. Map scale 200 feet to one inch. With Whitney’s oval ink stamp dated June 2, 1887. Each page 7” W. x 13” H.

Lot includes six non-cataloged items as extra material for the buyer.

**SC\_CAM\_xx. Alex Wadsworth, Surveyor. PLAN OF W.E. DANA’S FOR SALE IN CAMBRIDGE. Boston. September 22, 1852.** Recorded Book of Plans and Platted. MS surveyors’ index or collation number “1669”. Lots for sale in the Riverside Neighborhood of Cambridge. Putnam Avenue, Kinnaird Street, and Franklin Street. In 1831 the author, Alexander Wadsworth, gained acclaim for his work on Washington Square in Lowell and Mount Auburn Cemetery in Cambridge. Collaborating with Henry A.S. Dearborn, Wadsworth and Dearborn’s picturesque plan would be the first of its kind in the United States and a model for other rural garden cemeteries. (Online: <https://tclf.org/pioneer/alexander-wadsworth>) 21” W x 17” H. Scale 50 ft. to an inch.