PCC engineering, architectural, cartographic, and geological records accumulated in the Engineering and Construction Bureau. This schedule includes drawings, maps, plans, surveys, studies, reports, notebooks, scientific data, photographs, and other related records pertaining to the construction, operation, and maintenance of the Canal.

(See attached sheets)
ARCHITECTURAL AND ENGINEERING RECORDS


Drawings of locks, piers, buildings, equipment, and other original Panama Canal operating, administrative, and residential facilities. Bulk of the drawings encompass the period 1904-1914, but a small amount of material dates to 1899. Finding aid consists of a numerical register.

a. Hard Copy: **PERMANENT**. Microfilm in accordance with 36 CFR 1230. Transfer hard copy immediately to the National Archives upon verification of film quality.

b. Microfilm: **TEMPORARY**. Transfer to the Panama Canal Authority Archives when no longer needed for reference.

c. Finding Aid:

   1) Hard Copy: **PERMANENT**. Microfilm in accordance with 36 CFR 1230. Transfer hard copy immediately to the National Archives upon verification of film quality.

   2) Microfilm: **TEMPORARY**. Transfer to the Panama Canal Authority Archives when no longer needed for reference.


PCC and predecessor plans and drawings of buildings and equipment. Similar in character to "Parent Number" drawings (Series 3). Contains revisions to some plans after 1914. Findings aids include subject index, numerical index, and numerical register (shared with "Parent Number" series 3).

a. Hard Copy: **PERMANENT**. Microfilm in accordance with 36 CFR 1230. Transfer hard copy immediately to the National Archives upon verification of film quality.

b. Microfilm: **TEMPORARY**. Transfer to the Panama Canal Authority Archives when no longer needed for reference.

c. Finding Aids:

   1) Hard Copy: **PERMANENT**. Microfilm in accordance with 36 CFR 1230. Transfer hard copy immediately to the National Archives upon verification of film quality.

   2) Microfilm: **TEMPORARY**. Transfer to the Panama Canal Authority Archives when no longer needed for reference.
3. Architectural and Engineering (Parent Number) Drawings (1915-present). 900 cubic feet. Arranged numerically. PCC and predecessor "working" and "as built" drawings of new construction and renovation projects. "Special Item" World War II-era Project (SIP) drawings are interfiled. Covers wide range of buildings, facilities, and equipment; including administrative, residential, and work buildings; locks, docks, and piers; and miscellaneous specialized equipment. Finding aids include subject cards, numerical cards, and numerical register.

a. Drawings having historical, architectural, or technological significance (See notes at end of schedule for selection criteria):

   1) Hard Copy: PERMANENT. Cut off after completion of project and microfilm in accordance with 36 CFR 1230. Transfer hard copy immediately to the National Archives upon verification of film quality.

   2) Microfilm: TEMPORARY. Transfer to the Panama Canal Authority Archives when no longer needed for Canal operations.

b. Other Drawings: TEMPORARY. Cut off after completion of project and transfer to Panama Canal Authority Records Center. Destroy 30 years after transfer, when structure or object ceases to exist or when no longer needed for current operations, whichever is sooner.

c. Finding Aids:

   1) Hard Copy: PERMANENT. Microfilm in accordance with 36 CFR 1230. Transfer hard copy immediately to the National Archives upon verification of film quality.

   2) Microfilm: TEMPORARY. Transfer to the Panama Canal Authority Archives when no longer needed for Canal operations.


Preliminary drawings and sketches of structures and equipment designed by PCC personnel. Includes proposal drawings of built and unbuilt structures and equipment. Finding aid is a numerical register with limited subject access.

a. Drawings having historical, architectural, or technological significance (See notes at end of schedule for selection criteria):

   1) Hard Copy: PERMANENT. Cut off after completion of
project and microfilm in accordance with 36 CFR 1230. Transfer hard copy immediately to the National Archives upon verification of film quality.

2) Microfilm: TEMPORARY. Transfer to the Panama Canal Authority Archives when no longer needed for Canal operations.

b. Other Drawings: TEMPORARY. Cut off after completion of project and transfer to Panama Canal Authority Records Center. Destroy 30 years after transfer, when structure or object ceases to exist or when no longer needed for current operations, whichever is sooner.

c. Finding Aid:

1) Hard Copy: PERMANENT. Microfilm in accordance with 36 CFR 1230. Transfer hard copy immediately to the National Archives upon verification of film quality.

2) Microfilm: TEMPORARY. Transfer to the Panama Canal Authority Archives when no longer needed for Canal operations.


Contractor prepared and submitted specifications, final working drawings and "as-built" drawings of structures and equipment. Finding aids include numerical register for all drawings and subject cards for 1957 to present.

a. Drawings having historical, architectural, or technological significance (See notes at end of schedule for selection criteria):

1) Hard Copy: PERMANENT. Cut off after completion of project and microfilm in accordance with 36 CFR 1230. Transfer hard copy immediately to the National Archives upon verification of film quality.

2) Microfilm: TEMPORARY. Transfer to the Panama Canal Authority Archives when no longer needed for Canal operations.

b. Other Drawings: TEMPORARY. Cut off after completion of project and transfer to Panama Canal Authority Records Center. Destroy 30 years after transfer, when structure or object ceases to exist or when no longer needed for current operations, whichever is sooner.

c. Finding Aids:

1) Hard Copy: PERMANENT. Microfilm in accordance with
36 CFR 1230. Transfer hard copy immediately to the National Archives upon verification of film quality.

2) Microfilm: TEMPORARY. Transfer to the Panama Canal Authority Archives when no longer needed for Canal operations.


Working and "as built" drawings of floating equipment such as tugboats, dredges, cranes, launches and supporting equipment and machinery. Finding aids include an alphabetical subject card file and numerical register.

a. Drawings having historical, architectural, or technological significance (See notes at end of schedule for selection criteria):

1) Hard Copy: PERMANENT. Cut off after completion of project and microfilm in accordance with 36 CFR 1230. Transfer hard copy immediately to the National Archives upon verification of film quality.

2) Microfilm: TEMPORARY. Transfer to the Panama Canal Authority Archives when no longer needed for Canal operations.

b. Other Drawings: TEMPORARY. Cut off after completion of project and transfer to Panama Canal Authority Records Center. Destroy 30 years after transfer, when structure or object ceases to exist or when no longer needed for current operations, whichever is sooner.

c. Finding Aids:

1) Hard Copy: PERMANENT. Microfilm in accordance with 36 CFR 1230. Transfer hard copy immediately to the National Archives upon verification of film quality.

2) Microfilm: TEMPORARY. Transfer to the Panama Canal Authority Archives when no longer needed for Canal operations.


Polyester film maps of former Canal Zone areas reverted to the Republic of Panama as a result of the Panama Canal Treaty of 1977. Consists of original unsigned masters and copies of approved sheets.

PERMANENT. Transfer immediately to the National Archives upon approval of this schedule.
NOTE: Prior to transfer, make one reproducible set for the Panama Canal Authority.


Bound notebooks containing engineering formulas, mathematical computations, diagrams, sketches, graphs, and descriptions related to the planning of such structures and equipment as bridges, dams, locks, schools, machinery, and commissaries.

**TEMPORARY.** Destroy immediately upon approval of this schedule.

GEOTECHNICAL RECORDS

9. Core Boring Logs (1904-present).

Reports of geologic core borings containing analyses of material at specific depths, sketches of core samples, geographic coordinates of site, individual(s) performing the work, date of boring, etcetera. Logs are used by geologists and engineers to map subsurface features and judge the mechanical properties of the soil and subsoil in Canal construction, widening, landslide control, and dam safety projects.

**TEMPORARY.** Transfer to the Panama Canal Authority Archives when no longer needed for current operations.


Annotated and unannotated copies of PCC and predecessor agency maps showing locations of geologic borings and related information. Locations of all borings are mapped in a single set of annotated maps numbered 1-107 with several gaps. Includes several large format geologic diagrams (sections and profiles) used for illustration and presentation.

**TEMPORARY.** Transfer to the Panama Canal Authority Archives when no longer needed for current operations.


Photographs (black and white), including negatives (unannotated) and prints (annotated), of geologic features and soil conditions.

**TEMPORARY.** Transfer to the Panama Canal Authority Archives when no longer needed for current operations.

Monthly readings and investigations by Gaillard Cut sector of all surface and subsurface instrumentation such as Electronic Distance Measurement devices, traveller pipes, open wells, piezometers, inclinometers, and tilt meters, which are used to predict landslides.

**TEMPORARY.** Cut off at the end of each calendar year. Destroy when information is consolidated into the annual report.


Project files for all major designs throughout the Canal area. Contains data on site investigations such as core borings, foundation and soil studies, technical design data, calculations, graphs, stability analyses, contract specifications and drawings, contract performance data for major projects such as landslide control, dam safety, and cut widening.

a. Projects involving geotechnical analysis and design work that is not related to the slopes and banks of the Canal: **TEMPORARY.** Destroy 5 years after completion of the project.

b. Projects involving improvement or stability of the slopes and dams along the Canal: **TEMPORARY.** Destroy 20 years after completion of the project or when no longer needed for reference, whichever is later.


Bound reports documenting landslide control, dam safety, and cut widening projects. Reports are submitted to the Geotechnical Advisory Board (GAB). The GAB is comprised of professional engineers and specialists in the geotechnical field from the private and public sector.

a. Record Copy: **PERMANENT.** Cut off annually and transfer one (1) set to the National Archives when 1 foot is accumulated.

   NOTE: Retain one copy for the Panama Canal Authority.

b. Other copies: **TEMPORARY.** Destroy when no longer needed for reference.

**SURVEY RECORDS**


Bound notebooks containing information recorded by surveyors
in the field. Includes topographical survey data such as traverse, triangulation, and levelling observations and computations. Also included are azimuth, distance (EDM), elevation, water readings, seepage tests, gauge readings, topographical sketches, and weather observations or commentary of the Canal operating area and dams, instrument inventories and checks, and survey personnel lists.

**TEMPORARY.** Cut off at end of Calendar Year. Transfer to the Panama Canal Authority Archives 10 years after cutoff when the archives is established.


Bound notebooks containing location and survey data as well as computations and notes to establish horizontal control (accurate longitude and latitude positions) for Canal area survey.

**TEMPORARY.** Retain in agency space until Panama Canal Authority Archives is established, then transfer to same.


Horizontal and vertical control data used for establishing longitude and latitude positions and elevations in the Republic of Panama. Filed chronologically by date.

**TEMPORARY.** Destroy when superseded or no longer needed for Canal operations.

18. Traverse Computation Files.

Contain original field survey data and computations for all Panama Canal and Panama Railroad land.

a. Files that document the permanent traverse control points and contain computations used for mapping of construction surveys, underground utilities, and overhead electrical lines: **TEMPORARY.** Destroy when 15 years old or when no longer needed for current operations, whichever is later.

b. Files that contain computations for the metes and bounds of land licenses (leases): **TEMPORARY.** Destroy when the license (lease) is terminated or expired.


Analytic reports of seismographic activity connected with blasting activities in the Canal. Includes information such as location and time of test, quantity of explosives used, cubic yardage of material removed, seismographic charts, and copies of settlement check sheets.
TEMPORARY. Destroy when 10 years old or when data is converted into a database, whichever is later.

20. Silting Reports (1960-present).

Analytic reports of silting activity in the Canal resulting from blasting activities, rainfall, landslides and erosion of the banks of the Canal. Includes information such as location, silt volume sheets, and computations.

TEMPORARY. Destroy when 20 years old or no longer needed for reference, whichever is later.

21. Settlement Check Reports (1938-present).

Analytic reports of soil settlement over time. Includes location and date of check, measurement data, and drawings.

TEMPORARY. Destroy when no longer needed for current operations or when structure is demolished, whichever is sooner.

22. Drill Hole Location Files (1960-present).

Files documenting the location of ground water monitoring wells. Includes location, elevation, grade, and depth.

TEMPORARY. Destroy when no longer needed for current operations.

CARTOGRAPHIC RECORDS


13 cubic feet. Arranged numerically by grid system.

Detailed manuscript topographic field sheets at the scale of 1:300. These maps include spot elevations and contour lines (one foot intervals), all structures, roads, utility lines, wells, some vegetation, survey monuments and data, building numbers and other information. Finding aid is a multi-sheet index map.


1) Hard Copy: PERMANENT. Microfilm in accordance with 36 CFR 1230. Transfer hard copy, with related finding aid, immediately to the National Archives upon verification of film quality.

2) Microfilm: TEMPORARY. Transfer to the Panama Canal Authority Archives when no longer needed for reference.
b. Polyester-based records (1960's-present). Includes modifications to, and incorporates all data from the paper sheets: TEMPORARY. Transfer to the Panama Canal Authority Archives when superseded, obsolete, or no longer needed for reference.

3 cubic feet. Arranged numerically by grid system.

Detailed manuscript topographic field sheets (cardboard or paper) at the scale of 1:500. These maps include spot elevations and contour lines (two foot intervals), all structures, roads, utility lines, wells, some vegetation, survey monuments and data, building numbers, and other information. Finding aid is a multi-sheet index map.


b. Microfilm: TEMPORARY. Transfer to the Panama Canal Authority Archives when no longer needed for reference.

c. Finding Aid:

1) Hard Copy: PERMANENT. Microfilm in accordance with 36 CFR 1230. Transfer hard copy immediately to the National Archives upon verification of film quality.

2) Microfilm: TEMPORARY. Transfer to the Panama Canal Authority Archives when no longer needed for reference.

6 cubic feet. Arranged numerically by grid system.

Detailed manuscript topographic field sheets (paper and polyester) at the scale of 1:1000. These maps include spot elevations and contour lines (five foot intervals), all structures, roads, utility lines, wells, some vegetation, survey monuments and data, building numbers, and other information. Finding aid is a multi-sheet index map.


b. Microfilm: TEMPORARY. Transfer to the Panama Canal Authority Archives when no longer needed for reference.

c. Finding Aid:

1) Hard Copy: PERMANENT. Microfilm in accordance with 36 CFR 1230. Transfer hard copy immediately to the
National Archives upon verification of film quality.

2) Microfilm: **TEMPORARY.** Transfer to the Panama Canal Authority Archives when no longer needed for reference.

26. **Computer-generated Topographic Maps (1991-present).**

Computer-generated and plotted topographic survey sheets (polyester) at the scales of 1:1000 and 1:5000 and smaller of the Gaillard Cut and Madden Lake areas. These sheets were created from aerial photography and digitized data produced by the U.S. Army Corps of Engineers. Finding aid consists of a multi-sheet index map.

**TEMPORARY.** Destroy when superseded or no longer needed for reference.

27. **Topographic Sketch Maps (1989-present).**

Maps at several different scales relating to special surveys and covering a variety of subjects.

**TEMPORARY.** Destroy when 1 year old or when no longer needed for current operations, whichever is sooner.

28. **Annual Hydrographic Maps (1926-present).** 15 cubic feet.

Arranged generally by Canal area or segment, thereunder by sheet number, and thereunder chronologically.

Office compilation sheets for the annual survey of Canal hydrography. Includes spot soundings, shipping channel centerline, mileage, survey station references and related information for the purpose of dredging and otherwise maintaining an adequate Canal depth. Drawn on standard polyester film basemaps since the 1960's at a scale of 1:1000 in the Gaillard Cut and 1:3000 elsewhere; during this period about 35 sheets were produced for each annual survey.


**NOTE:** Prior to transfer, make 1 copy of the 1946-1986 sheets for the Panama Canal Authority.

b. Sheets covering all other years: **TEMPORARY.** Destroy when 30 years old or when no longer needed for current operations, whichever is later.

29. **Hydrographic Sketch Maps (1966-present).**

Maps at several different scales relating to special surveys and covering a variety of subjects.
**TEMPORARY.** Destroy when 50 years old or when no longer needed for current operations, whichever is later.

Duplicate, non-record, and General Records Schedule (GRS) items, as well as material lacking historical value, may be destroyed during archival processing.

**EXPLANATORY NOTES**

Criteria for selecting architecturally, historically, and technologically significant drawings:

- Drawings of buildings or objects that have been used or constructed by the Panama Canal Commission or its predecessors for a major activity of the agency.

- Drawings of long-lasting and important structures that are intended to endure for many years and are critical to the mission of the Panama Canal.

- Standard or typical designs used as the basis for similar buildings or objects, any significant variations on the standard design, or a representative building or object from a larger group.

- Drawings of buildings that illustrate the characteristics of either a given period or a regional architectural style.

- Drawings of buildings or objects that are unique or that were the first of their kind.

- Drawings of buildings or objects that are associated with events or persons of national significance.

- Drawings of buildings or objects designed by noted architects, engineers, or scientists.

- Drawings of buildings or objects that were involved in public controversy regarding their design, construction, or utilization.

- Drawings of structures that have been selected for preservation by national organizations.