

QUINTANA THERMAL BATHS  
East side of Highway 503  
Barrio Portugues  
Ponce  
Puerto Rico

HABS No. PR-137

HABS  
PR-137

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey  
National Park Service  
Department of the Interior  
Southeast Region  
Atlanta, Georgia 30303

HISTORIC AMERICAN BUILDINGS SURVEY

QUINTANA THERMAL BATHS

HABS No. PR-137

Location: East side of Highway 503, .1 mile east of  
intersection with Highway 504.  
Barrio Portugues, Ponce  
Puerto Rico

U.S.G.S. Ponce Quadrangle (7.5')  
Universal Transverse Mercator Coordinates:  
19.752851.1996197  
19.752956.1996110  
19.753008.1995999  
19.752776.1996024  
19.752800.1996138

Present Owner: Department of Natural Resources  
Commonwealth of Puerto Rico

Present Occupant: Eduardo Santiago Hernandez

Present Use: Abandoned. To be removed for the Portugues and  
Bucana Rivers Flood Control Project.

Statement of  
Significance: The Quintana Thermal Baths are historically signifi-  
cant as an example of the transmittal of European  
cultural and technological prototypes to the New  
World. Architecturally, the complex illustrates the  
capabilities of progressive mid-nineteenth century  
engineering combined with the use of traditional  
building materials and motifs.

PART I. HISTORICAL INFORMATION

A. Physical History

1. Date of erection: Not known. The earliest reference to the property as a spa appears in an 1846 report made by the Mayor of Ponce. The existence of a dedicated bath house is not noted until 1851, when a map of Puerto Rico published in Madrid in 1851 shows the presence of construction in the approximate location of the the existing bath house and water storage tanks. An 1874 map of the Ponce aqueduct system shows buildings in the location of the present bath house and pavilion, the possible presence of water storage tanks, and a road and allee entering the site from its east flank. The presence of sixteen baths is mentioned in an 1875 property deed, and the succeeding property description describes the bath house and four adjoining reservoirs as being of one-story masonry construction. An article published in 1876 in the Ponce newspaper La Cronica refers to the presence of 10 baths and four reservoirs, as well as the pavilion.
2. Architect: Not known. The sophistication and quality of the design and construction of the bath house complex and warm water storage system suggest these buildings might be the work of designers and contractors associated with the Ponce municipal water system. Although considerably larger and more ambitious in scale and scope, extant portions of the nineteenth century brick and stone aqueduct that brings water to Ponce from the surrounding mountains are remarkably similar in detail and materials to the water delivery and storage system at the Quintana Thermal Baths.
3. Original and subsequent owners: References to the Chain of Title to the land upon which the structures stand from 1875 to the present are in the Registro de la Propiedad in the Ponce Municipal Archives, Ponce, Puerto Rico. Information on land-ownership from 1819 to 1875 can be found in the Padrones de Tierra on file in the Archivo General de Puerto Rico, San Juan, Puerto Rico.
  - 1819 Padrones de Tierra, Barrio Portugues, Ponce. List of landowners in Barrio Portugues. Jose Maria Quintana, owner.
  - 1855 Padrones de Tierra, Barrio Portugues. List of landowners in Barrio Portugues. The heirs of Jose Maria Quintana: Juan Nepomuceno Castro Quintana, Etelinda Castro Quintana, Emilia Castro Quintana, Julia Castro Quintana.

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- 1875 Deed, 1875, recorded in Tom 30, Folio 156. Juan Nepomuceno Castro Quintana and Josefa Maria Quintana de Castro to Basilio Ortiz Diaz.
- 1895 Deed, 1895, recorded in Tom 85, Folio 114. The heirs of Basilio Ortiz Diaz: Jose Basilio, Roman, Francisca, Rosa Maria Terran Ortiz, and Ramon Terran Ortiz.
- 1941 Deed, June 7, 1941, recorded in Tom 392, Folio 180. Division of inheritance among Rafael Tomas Quintiliano Armstrong Ortiz, Fernando Edmundo Armstrong Ortiz to Juan Ramon Armstrong Ortiz.

4. Builder, contractor, suppliers: Not known.
5. Original plans and construction: Not available.
6. Alterations and additions: For the purposes of this discussion, individual bathing chambers (hereafter referred to as "chambers") are assigned identification numbers 1 through 12, beginning at the most northerly chamber. These designations are identical to the small metal numbers which are affixed to most of the chamber doors. The adjacent water storage tanks (hereafter referred to as "tanks") are assigned identification letters A through D, also beginning at the most northerly tank.

The term "bath" appears to have been given a specific connotation throughout the descriptive literature concerned with this site. In general, a "bath" is a tub, rather than the room in which the tub is located.

Of all the existing buildings or structures in the vicinity of the bath house complex, Tank B is unique in that it is the only object built on a non-rectilinear plan. Although it has been incorporated into the overall massing of the three adjacent tanks, its elliptical form is still apparent, both externally and internally. In contrast to all the other tanks, it gives evidence of having been built as a free-standing structure and, hence, represents the earliest phase of tank construction.

Directly behind Tank B, Chambers 4 and 5 represent two of the largest spaces in the bath house. These chambers are large enough to permit the use of two tubs within each room. References to the presence of free-standing tubs suitable for such as arrangement occur in nineteenth and twentieth century narrative descriptions of the Quintana Baths. The center line of the partition wall which divides these chambers coincides closely with the centerline of Tank B, implying that the tank

and chambers were probably built simultaneously and, therefore, represent the nucleus of the present complex. The presence of a half circular form on the rear of the bath house on the site map of 1874 may be a reflection of this stage of construction.

Tank A was probably the next structure to be built, in conjunction with Chambers 1 through 3. This gave a total of seven baths. Of the existing tanks, it is the only one which matches the width of Tank B, implying an attempt by the builder(s) to visually and/or structurally integrate the two units. The internal design of Tank A relies on a longitudinal bearing wall which, along with its side walls, allows it to carry the brick vaults that form its roof. The linear nature of such construction, however, was ill-suited to the elliptical plan of Tank B, which originally may have been covered by a hipped wood roof. As a result, concrete beams were installed along the side walls of Tank B, enabling its internal structure to benefit from the more durable design of Tank A.

The relatively small size of Chambers 1 through 3 might be attributed to the need for private bathing facilities to supplement the more public atmosphere implicit in the larger spaces in Chambers 4 and 5. With the symmetrical addition of Chambers 6 through 8 and the corresponding construction of Tank C, the total bath count reached ten, as recorded in the Arroyo Report to the Mayor of Ponce in 1873.

The 1875 deed description for the first time mentions the presence of sixteen baths, but also notes the presence of four "reservoirs." The change from ten to sixteen baths can be explained by the logical construction of Tank D and Chambers 9 through 12. Although only four additional chambers were built, the large areas of Chambers 10 and 12 enabled them to accommodate two baths each, thereby increasing the total count by six.

The final stage of construction is probably represented by the reinforcement of the water tanks through the construction of battered brick buttresses along their northeast walls, and the installation of a transverse wall within the interior of Tank D. These measures were most likely taken to stabilize the tank system which shows signs of failure originating in mortar washouts and side wall deformation resulting from hydrostatic pressure. Since some of these buttresses overlap joints that occur as a result of phased tank construction, it is reasonable to conclude that these buttresses are more recent than the tanks.

Along with evidence of an ongoing series of repairs to its wood structural members, it appears that the entire bath house was refurbished with new interior finishes after completion of Chambers 9 through 12. This work probably occurred simultaneously with the construction of the toilets, as finishes in both buildings are identical, although exterior detailing of the toilets is representative of later decorative tendencies, such as the use of recessed exterior wall panels, than comparable features appearing at the bath house. This final period of work also contains millwork representative of late nineteenth and early twentieth century American building practice. These manufactured materials were most likely brought to Puerto Rico from the United States mainland.

Evidence of alterations are also present on the northeast exterior wall near the center of the building. Deteriorated stucco reveals the presence of brickwork infill composed of units which are considerably larger than any of these present in the remainder of the wall.

Alterations to interior finishes and furnishings within the bathing chambers are primarily related to installation of shallow concrete bathing tubs directly onto earlier ceramic tile floors. Ceramic tile is used to surface these tubs, and differs from that used on the floors of the bathing chambers.

#### B. Historical Context:

Ponce is situated on the southern coast of Puerto Rico between the Caribbean Sea and the Central Mountains. Colonization of the area began in the late seventeenth century. At that time, the isolation of the area made it relatively immune to interference from the Spanish government located on the north coast of the island in San Juan. Income was derived from a limited agricultural economy and trade with the British and Dutch who took pork and beef in return for manufactured goods and slaves. The difficulties of land transportation assured the continued isolation of Ponce from all but surrounding southern coastal cities.

By the third quarter of the nineteenth century, the growth of Ponce was sufficient to permit its assumption of the title Ciudad (City). This growth, almost entirely a result of the development of the local sugar industry, was partially financed by a succession of wealthy immigrants fleeing revolutionary conflicts in Spain and South America. The presence of this cosmopolitan community, with its cultural ties to Europe and the Americas, resulted in a "golden age" for the establishment of theaters, newspapers, social clubs, and political parties. The simultaneous expansion of wealth and population created an environment in which the existence of leisure

time, and a demand for activities to fill it, permitted the creation of institutions such as the Quintana Thermal Baths.

Although therapeutic qualities have been ascribed to certain springs and rivers since prehistoric times, the scientific development and economic regulation of spas in Europe began in earnest during the eighteenth century. Frequently patterned after existing or partially demolished Roman prototypes, new facilities were designed and constructed to deliver the purported benefits of drinking or bathing in specific waters. In Spain, the cultural pacesetter for Puerto Rico, these facilities, known as balnearios, were inspected and regulated by the royal government. The development of the thermal bathing establishment near Ponce in conjunction with the simultaneous development of similar facilities at Coamo and San Lorenzo reflects the close cultural ties between Europe and her colonies.

The Quintana Baths are apparently named after Don Jose Maria Quintana, the earliest recorded owner of the property. The property is located in the Barrio Portugues, an outlying rural area to the northeast of Ponce. The holding is listed in the Padrones de Tierra in 1819. The Quintana family appears to have been primarily involved with economic pursuits, and no record of their cultural or political activities in Ponce has been located. An 1846 report prepared by the Mayor of Ponce places Don Jose's house on the site, and notes that the Baths were in use at that time.

An 1851 map associates the Quintana family with two buildings on the site. The first is the Quintana residence, and the second is a building located in the approximate area of the existing bath house or near the warm spring source. The quality of the map makes precise determination of the latter questionable. Construction details of the buildings are not presented on the map.

When Don Jose died in 1855, his estate was divided among several heirs. Title to the land on which the Baths were built passed to Juan Nepomuceno Castro Quintana. Don Juan planned to enlarge the Baths and create a sophisticated spa for public use as witnessed by a long descriptive advertisement published in El Fenix, a local newspaper, in 1857. In the notice, a testimonial to the healing powers of the waters appeared along with a description of renovations to the site including landscaping and construction of three new baths.

An 1874 property map indicates the Baños de Quintana, but does not identify the property owner. Although similar to the 1851 map, the property is shown as containing a bath house as well as a second building in the location of the existing pavilion. An allee borders

the site entrance road, and the presence of some of the existing water storage tanks may also be shown.

Despite Don Juan's plans for the Baths, an 1873 report to the Mayor of Ponce stated that the waters at Quintana had not yet been analyzed and, as a result, the establishment could not be officially designated as a mineral bath, nor could an assessment of the curative powers of the waters be made. The report also mentions the difficulty of travel to the site, and the lack of a hotel or infirmary for guests. The number of baths is listed as ten.

In 1875, the property was sold to Don Basilio Ortiz Diaz, a neighbor and relative. The deed description gives the property size as approximately nine acres, and lists a wood-frame house and a masonry building which contains sixteen baths. An 1884 map of the roads around Ponce shows the site to be similar in most respects to its appearance on the 1874 map. An undated map, believed to be of the late nineteenth century, identifies the Baños de Quintana but does not list a property owner. This map, which gives the most complete picture of the number and position of buildings on the site, shows the bath house and an adjacent perpendicular building (the pavilion), as well as an irregularly shaped mass in the northwestern area of the property which may represent the warm spring and pool complex. In 1895, Don Basilio died and administration of the Baths was continued by his heirs.

Puerto Rico was annexed by the United States in 1898, but descriptions of the property remain fairly consistent through the early twentieth century, indicating little in the way of physical change had occurred at the property. Despite this, references to the continued popularity and high social standing of the Baths continues, and several projects for regular transportation service to the site are discussed.

In 1928, Don Juan Armstrong Ortiz, the grandson of Don Basilio, inherited and administered the Baths for a few years. By the 1940s, and after a series of non-family related concessionaires, the Baths had become more of a brothel than a spa. The social prominence formerly attached to the establishment vanished during this period, and the physical decline of the property was accelerated in 1972 when the flow and temperature of the warm spring were disrupted as part of the work performed at the site by the Puerto Rico Aqueduct and Sewer Authority.

PART II. ARCHITECTURAL INFORMATION

A. General Statement:

The Quintana Thermal Baths are composed of a group of single-story buildings located approximately in the center of an 8.5 acre rural farm site. These buildings include a twelve chamber bath house and adjoining water storage tanks, a two chamber toilet building, and several other small buildings and agricultural structures. The warm spring which supplied water to the bath house complex is also on site.

1. Architectural character: These buildings illustrate the use of vernacular architectural imagery within the context of a complex engineering program. The potentially institutional quality of the bath house is modified through the use of residential scale and detail to create a quasi-urban streetscape, while unadorned service elements are relegated to the rear of the complex.
2. Condition of fabric: Exterior stucco on the bath house and toilet rooms is in fair condition, underlying brick and stone masonry is in good condition. Ribbed sheet metal roofing, roof framing members and sheathing are in fair condition, although a louvered wood clerestory structure above the toilets is severely racked. Wood doors and shutters are in fair condition. Interiors are in good condition, except in some chambers where cast-in-place concrete tubs have been demolished or altered.

The exterior cement facing on the water storage tanks is in fair condition. Underlying brick masonry is in good condition with some mortar washout. Severe soil erosion is present at the northeast and southeast foundation walls.

B. Description of Exterior:

1. Overall dimensions: The 12-bay, single-story, rectangular bath house structure is 127'-4" x 11'-6".

The single-story, water storage tank structure is 121'-4" long, varies in width from 12'-3" to 14'-2", and is constructed in four rectangular segments.

The 2-bay, single-story, rectangular toilet structure is 14'-10" x 8'-5".

2. Foundations: The configuration of the foundations at the bath house and toilets is unknown since basements or crawlspaces are not present. At the water storage tanks, the presence of brick foundation walls on limestone rubble footings was observed in

archeological excavation units located adjacent to the northeast walls of the tanks. The extent of these foundations could not be observed.

Brick on limestone rubble at water storage tanks, dimensions unknown.

3. Walls: Two types of exterior wall construction are present at the bath house: solid brick and composite brick-limestone. At solid brick walls, coursing is random, with most bricks laid as headers except for the inner wythe which is mainly composed of stretchers. Bricks vary in size from thin 10-1/2" x 5-1/4" x 1" units used at the edges of door and window openings to thicker 9" x 5" x 2-1/4" units used in running wall construction. Joint width is typically 1/2". At composite brick-limestone walls, stone is laid as uncoursed rubble with occasional brick leveling courses. The stone used was probably obtained on site. Both wall types are surfaced on the exterior with painted stucco and with painted plaster on the interior. Solid brick walls are present at all facades; composite walls are present at the southwest and southeast facades only. Wall thickness is 1'-3" at the northwest, southwest and southeast facades; and 1'-0" at the northeast facade. A cast-in-place concrete structure which was part of a bathing chamber shower system is also present on the northeast wall. Full-height transverse partition walls are constructed of two wythes of solid brick surfaced with plaster on either side. On the exterior, a 4' high painted aqua wainscot and 6" wide aqua stripe frame the doorways and contrast with the white color of the front wall. A 6" wide painted white stripe surrounds window openings on the rear elevation, contrasting with the tan stucco of the surrounding wall. Side walls are white.

Wall construction at the toilets is 1'-0" thick. Underlying solid brick construction, as well as exterior and interior surfacing, is similar to the bath house. Shallow, decorative recessed panels are present on the exterior stucco at the southwest elevation. Exterior walls are white.

Wall construction at the water storage tanks varies in thickness from 1'-6" to 1'-9". Underlying solid brick construction is similar to that of the bath house. Exteriors are surfaced with grey cement. Interiors are both untreated and surfaced with cement.

4. Structural system, framing: Exterior walls at the bath house and toilets are load bearing brick, or brick and stone composite. Roof rafters are full 2 x 6s, approximately 24" on center, notched into a full 6 x 6 resting on a full 1 x 8 plate.

Pinned scarf joints are used at the ridge in lieu of a ridge pole. Roof sheathing is 1" thick tongue-and-groove beaded board. On the southwest elevation, overhanging eaves are supported on a continuous, nominal 2 x 4 beam which is, in turn, supported by full 2 x 4 kick rafters scabbed to the roof rafters, and by braces let into the masonry walls.

Exterior walls at the water storage tanks are load bearing brick. Roof construction consists of brick decks supported on semicircular brick vaults running longitudinally within the tanks. Stuccoed brick buttresses are present at irregular intervals on the northeast and southeast sides of the tanks. The presence of brick trench drains was found at two locations on the northeast elevation. The area between the northeast wall of the bath house and the southwest wall of the water storage tanks contains a sloped concrete pad with shallow concave profile. This device appears to function as a low wall buttress for the tanks and as a roof drainage gutter for both buildings.

A traditional washing facility known as a pila is located between the end wall buttresses at the southeast end of the water storage tank group. This device consists a deep concrete-surfaced brick basin which contains an inclined washing surface and a through-wall connection to the tanks intended to provide water to the basin. The basin has been filled with earth and is used as a cooking area.

5. Walkways: A continuous protected walkway is formed beneath the eaves of the bath house and toilet rooms. A 6' wide scored, cast-in-place concrete footpath/gutter system unites the bath house and toilets along their west elevations. This gutter system is designed to catch rainwater run-off from the extended eaves that cover the walkway. A projecting semi-circle occurs in the walkway in front of an unpaved vacant area between the bath house and the toilets. This bulge is located at the intersection formed where the two legs of the site entrance road meet in the forecourt adjacent to the buildings. Based on the continuity and design of the walkway, its relationship to the site entrance road, and the location of the washing facility at the water storage tanks, it is probable that the existing void contained a structure that functioned as a fee collecting and towel dispensing facility for the complex. The presence of four concrete posthole surrounds at the corners of this area implies that the building was of wood construction.
6. Openings:
  - a. Doorways and doors: A single exterior doorway with fixed, pierced, wood transom screen (known as a solas truncos) and

in-swinging, seven-panel wood door is present at the entrance to each chamber of the bath house and toilets. Lintels and sills are cast-in-place concrete. Openings are stuccoed with rounded exterior jambs that change to square profile approximately 6' above the exterior walkway. Wood door frames are built into the interior wythe of the surrounding brick masonry. Wood transom bars are nominal 4" square, and are painted white. Door hardware typically includes one reversible lever upright rim knob lock with round porcelain knobs, and a pair of semi-mortised stamped ferrous metal "T" hinges.

Openings at the water storage tanks contain operable cast concrete hatch covers set into shallow brick and concrete curbs on the roof deck.

- b. Windows: A single opening with fixed, pierced, wood transom screen and pair of in-swinging, casement wood blinds is present on the rear wall of each chamber of the bath house. Glazing is not present. Lintels are cast-in-place concrete. Sills are single-piece wood members set into the inner wythe of the underlying brick wall. Openings are stuccoed and square in profile. Wood frames are built into the interior wythe of the surrounding brick masonry. Wood transom bars are nominal 4" square. All woodwork is painted, and colors vary by room ranging from white through violet. Window hardware typically includes a pair of fully-mortised ferrous metal butt hinges.

8. Roofs:

- a. Shape, covering: The gable roof at the bath house is covered with unpainted, 8'-0" x 2'-2" corrugated, galvanized, sheet metal panels nailed to tongue-and-groove beaded board sheathing. Panel corrugations are 3-1/4" on center, 3/4" deep.

A wood-framed louvered clerestory with open, slotted, end gables is present at the toilets. Roofing and sheathing are similar to the bath house.

Roofs at the water storage tanks are gabled, with the exception of the northernmost tank, which has a gambrel profile with a flat center section. Pitched roof surfaces are created with stepped layers of brick supported on brick vaults. Roofs are surfaced with a thin cement wash.

- b. Eaves: Kick rafters supported on diagonal wood braces frame into a continuous beam supporting an overhanging eave

sheltering a concrete walkway below on the west elevation of the bath house and toilets. Some of the braces display a beaded profile along their edges. An intermittent beaded board fascia conceals the intersection of the kick rafters, beam, and braces. Replacement of some wood members and sheathing is evident.

C. Description of Interior:

1. Floor plan: The typical bath chamber consists of a single room with ceramic tile floor. The chambers have two size modes. The eight small chambers measure approximately 8'-0" wide. The four large ones vary in width somewhat, but average approximately 12'-6" wide. A cast-in-place concrete tub, faced with glazed ceramic tile, is located at the intersection of the southeast and northeast walls. Entrance is on the southwest wall. Finished floor level is two risers below the adjacent exterior walkway. Remnants of a piping installation are present beneath the window opening on the northeast wall. A central floor drain is present. Remnants of a second piping installation are present within the concrete tub.

Layout of the toilets is similar to the bath house, with the exception of the installation of partial height wood partition screens and a water closet in the northwest chamber, and the installation of a shower facility in the southeast chamber.

The interior of a typical water storage tank consists of a pair of semicircular longitudinal brick vaults running the length of each tank. These vaults span between the exterior walls of the tank and a central longitudinal brick wall containing a series of small segmental arches. Overflow openings are present at the walls between each tank, and evidence of previously removed water distribution piping is visible at various locations within each tank. Rainwater and groundwater were present in some of the tanks.

2. Stairways: Entrance steps within the bath house chambers and toilets consist of a single riser and tread faced with a random, swirl pattern, matte finish ceramic tile in light tan and brown.
3. Flooring: Within the bath house and toilets, matte finish ceramic tile flooring consists of a central field of small black and white tiles, set in a checkerboard pattern, surrounded by a black-and-white, greek fret motif border of larger tiles. The entire black and white tile installation is surrounded by mottled dark brown tile edging of varying dimensions.

4. Wall and ceiling finish: A profiled, painted wood moulding strip defining the top of a painted wainscot runs around the bath house and toilets. Walls are surfaced with smooth painted plaster below the moulding, and painted plaster with a heavier texture is present above this strip. Painted beaded board roof sheathing and roof rafters are visible from within each chamber. Colors vary within each chamber, and are generally dark green and maroon on walls and wainscots, with lighter pinks and tans on roof sheathing.

Within the water storage tanks, brick surfaces above the spring line of the longitudinal vaults are exposed. Vertical surfaces have been coated with a hard cement wash below the spring lines of the vaults. This may have been done as a means of stabilizing the interior brickwork, which displays signs of deterioration and mortar washout. Floors are concrete.

8. Mechanical equipment:

- a. Plumbing: Evidence of previously removed plumbing control devices and piping is visible within each chamber of the bath house. Non-functioning central floor and individual tub drains are present.

Several water control valves are present at the base of the northeast wall of the water storage tanks. Each of the four segments of the tanks is served by one valve placed within a low brick enclosure. The design of the valve installation suggests that when these valves were used to empty the tanks, water runoff was permitted to flow freely onto the ground where it eventually drained into a dry creek bed located several yards to the northeast of the tanks. This arrangement implies that drainage of the tanks took place infrequently.

D. Site:

1. General setting and orientation: The bath house, water storage tanks, and toilets are located in the center of a roughly triangular 8.5 acre site defined by the Portugues River along the northeast edge, Highways 503 and 504 along the northwest edge, and a wire fence at the property line on the southern edge. The ground slopes gently toward the Portugues River. Most of the area is covered by dense tropical vegetation. An access road from Highway 503 enters the site near the south end of its western border and continues across the property to the southeast, past the bath house and toilets, and to the river. Land south of this road is used mostly as pasture. Two underground springs surface in the northwest sector of the site, one

of which is a warm spring whose temperature remains constant throughout the year at approximately 90° F.

2. Historic landscape design: The only surviving visible landscaping feature is a single allee of trees that borders the site access road. These trees emphasized the entrance sequence, which began at the turn-off from Highway 503, continued down the tree-lined drive, and culminated in a triangular forecourt defined by the southeast facade of the kitchen and dining pavilion, the southwest facade of the fee collection/towel dispensing facility located between the west facades of the bath house and toilets, and the tree-edged pasture to the south.
3. Outbuildings: Adjacent to the point at which the warm spring surfaces are a large pool fed by the spring and a group of brick and stone subsurface ruins. These structures are believed to be part of an earlier bathing complex, and have been partially excavated. A series of concrete spring boxes and drainage controls has been installed adjacent to and over the ruins.

A V-shaped brick structure is located adjacent to the point at which the cold spring surfaces, and is infilled with earth and covered with low vegetation. The area west of the structure is marshy and overgrown. The spring flows through a breach in the retaining wall, passes under a bridge crossed by the site access road, and continues beyond the southern site boundary.

Other buildings on the site include a single-story, wood-framed kitchen and pavilion located adjacent and perpendicular to the bath house; a group of small, single-story, wood-framed houses along the river bank; a small, single-story, wood-framed farm house with fenced yard and livestock pens located between the ruins and the bath house complex; and a 3-bay, single-story cabin located southeast of the toilet rooms.

A concrete-surfaced, brick irrigation tank is located in the pasture, west of the allee. A small concrete-surfaced livestock watering trough is located north of the allee, between the cabin structure and the toilets.

4. Hydrology: The system that carries water to the vicinity of the bath house begins at a point in the northwest area of the site where a warm spring surfaces. A group of concrete and red brick spring boxes enclose the source of this spring which supplies warm water to a series of three in-ground tubs located slightly south of the source. The tubs are approximately 6'-0" x 2'-6", and are about 2'-0" deep. Generally rectilinear in shape, they are built in pairs of coursed brick and have rounded interior

corners and apsidal end walls. Within some of the tubs, remnants of ochre cement plaster parging and marble tile flooring is present. Heavy stone walls separate each pair of tubs.

Water was carried to the tubs within a 2'-0" wide brick conduit whose top surface is flush with the ground. Warm water was discharged into the tubs through small metal pipes which appear to be inserted into the conduit and enter the tubs near the top of their northeast walls. A second opening, located close to the bottom of the same walls, leads to another brick conduit that functions as a drain. The tubs have been constructed with their bottoms approximately 1'-5" below the point at which the warm spring surfaces. This arrangement ensures that a continuous flow of warm water enters through the top opening and drains through the bottom opening, thus replenishing and cleansing each tub. A 6" diameter terra cotta pipe, housed in the brick conduit, was apparently intended to carry water to the bath house complex located downhill from the warm spring.

A deep pool contained in the center of an area bordered by a large, C-shaped, partially-buried, brick-surfaced masonry retaining wall, is located slightly downhill from the source. Two transverse walls, constructed within the perimeter of the retaining wall, divide the enclosed space into three areas of somewhat differing sizes. The central pool continues to be fed directly by the warm spring, and drains onto the ground through a breach in the east side of the retaining wall. Concrete spring boxes and auxiliary drainage devices have also been installed in this area.

The upper brick conduit currently contains a 6" diameter ceramic pipe which was intended to convey the water to the standing bath houses. It continues downhill, passes across the rear yard of the farm house and under the building, and re-emerges aligned with the northwest corner of the first water storage tank. Although the conduit does not presently convey water to the tanks, evidence of a previous connection to the conduit exists inside the first tank at the bottom of the north wall. The current site occupant states that the temperature and flow of the warm spring were adversely affected after the brick conduit was cut as part of work involved in re-routing the local municipal water service through the site.

The floors of the water storage tanks are approximately 3'-4" lower than the elevation at which the warm spring surfaces. The designer of the system was able to convey warm water from the spring to the interior of the bath house without the need for

pumps, store it until needed, and continuously replenish the stored water with a fresh supply by establishing a lower elevation for the massive storage tank envelope below this point. Approximately 6" above the floor, a small opening is present on each of the transverse walls that separate the water storage tanks. These openings permit simultaneous filling of the tanks, and were approximately 6" in diameter before they were infilled with concrete and 1-1/2" diameter metal pipe. Relief openings located approximately 6'-1" above the floor provide a means of controlling water flow within the tanks should the floor water transfer openings become clogged. Since water within the storage tank system can rise no higher than the elevation at which the warm spring surfaces, the tanks always remain full and do not overflow as long as the transfer and relief openings are clear, and a system drain is provided at the final tank. Floor elevation within the bathing chambers is approximately 1'-0" below the floor level of the water storage tanks, assuring positive transfer of water from the storage tanks into the bathing chambers.

Cleaning or repair of the water storage system could require removal of water from a single tank or from all four. Drainage for the large volume of water contained within the storage tanks could be accomplished in at least two ways. Individual tanks could be emptied via floor drains located within each bathing chamber. These drains connect to a common line that runs beneath the bath house and adjacent to the east wall of the toilets. The line ends at a shallow gully that slopes down to the river bank. Siting for the toilets, which were constructed after the bath house, appears to have been chosen to take advantage of the presence of the line. Drainage could also be accomplished through a series of metal valves located along the east elevation of the storage tanks. However, these valves appear to have been installed relatively late in the history of the complex, perhaps as a result of a breakdown of the floor drain system.

### PART III. SOURCES OF INFORMATION

#### A. Bibliography

##### 1. Primary and unpublished sources:

Bauza, Ramon E. Los Baños de Quintana, n.d. Manuscript on file with author.

Catastro de Terrenos, 1885-1895. Ponce Municipal Archives.  
Ponce, Puerto Rico.

JPA. "Los Baños de Quintana en Ponce," 1977. Manuscript on file  
at the Ponce Municipal Archives. Ponce, Puerto Rico.

Registro de la Propiedad, 1879-1941. Ponce Municipal  
Archives. Ponce, Puerto Rico.

Padrones de Tierra, 1819-1865. Ponce Municipal Archives.  
Ponce, Puerto Rico.

2. Secondary and published sources:

Anonymous. Plano General de Ponce. Trazado de la Línea  
Principal y Ramales y Incluso los Baños de Quintana y a la  
Costa. n.d. Map on file at Ponce Municipal Archives.

\_\_\_\_\_. Planos Acueducto Alfondros: Plano General. 1874. Map  
on file at Ponce Municipal Archives.

\_\_\_\_\_. Croquis de los Varios Caminos y Trazados de Ponce a  
Adjuntas. 1884. Map on file at Ponce Municipal Archives.

Arroyo, Isadoro. Información Estadístico de los  
Establecimientos de Baños y Agua Minerales en el Distrito.  
Report to the Mayor of Ponce. Ponce, 1873.

Coello, Francisco. Posesiones de America. Isla de Puerto Rico.  
Madrid, 1851. Map on file in the Geography and Map Room,  
Library of Congress, Washington, D.C.

Dewell, James D. Down in Puerto Rico with a Kodak. New  
Haven: The Record Publishing Company, 1898.

El Fenix. Ponce: January 31, 1857. Newspaper on file in the  
Puerto Rican Collection, Library of Puerto Rico, Ponce.

Fortunato Janerio, Luis. Album Historico de Ponce: 1692-1963:  
Contentivo de los mas Importantes Datos Historicos y de una  
Exposicion Grafica de su Cultura y Progreso. Ponce: Impreta  
de Fortuno, 1963.

\_\_\_\_\_. Album Historico de Ponce, Seleccionades y Recopilados,  
1692-1963. Ponce: Impreta de Fortuno, 1965.

Gotay, Modesto. Recuerdos de Antaño, Recopilacion de Cronicas,  
Hechos Relatos. Barcelona: Ediciones Rumbos, 1963.

Halstead, Murat. Pictorial History of America's Newest Possessions. Chicago: The Dominion Company, 1899.

Liga Progresista de Ponce. Album-Guia de Ponce. Ponce: Liga Progresista de Ponce: Tip. "La Defensa," 1913.

Marín, Ramon. La Villa de Ponce Considerada en Tres Destintas Epocas: Estudio Historico, Descriptivo y Estadístico, Hasta Fines del Año 1876. Editoriales Publicados en el Periodico La Cronica, Ponce. Ponce: Tipographica "El Vapor," 1877.

Neumann Gandía, Eduardo. Verdadera y Autentica Historia de la Cuidad de Ponce desde sus Primitivos Hasta la Epoca Contemporanea. San Juan, 1913.

Ubeda y Delgado, Manuel. Estudio Historico, Geographico y Estadístico. Puerto Rico, 1878.

Vidal Armstrong, Mariano. Ponce: Notas para su Historia. San Juan: El Comite de los Pueblos y la Oficina Estatal de Preservation Historica de la Forteleza, 1984.

Vidal Armstrong, Mariano. Estampas, Tradiciones y Leyendas de Ponce. San Juan: Instituto de Cultura Puertorriqueña, 1986.

#### PART IV. PROJECT INFORMATION

This project is a mitigative recording as stipulated in a Memorandum of Agreement between the Historic Preservation Office, Office of Cultural Affairs, Office of the Governor, San Juan, Puerto Rico; the Advisory Council on Historic Preservation, Washington, D.C.; and the Department of the Army, Jacksonville District, Corps of Engineers, Jacksonville, Florida. Documentation was completed by John Milner Associates, Inc., 309 North Matlack Street, West Chester, PA 19380, and reviewed by the National Park Service, Southeast Region, 75 Spring Street, Suite 1150, Atlanta GA 30303. Records were prepared from January through March, 1987.

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