A Report on the Rhode Island Hall Well Survey

By: Kaitlin S. Deslatte, M.A.

Prepared for the:

Joukowsky Institute for Archaeology and the Ancient World

December 2008

Introduction

During the second week of December 2008, Dr. Susan Alcock, Director of the Joukowsky Institute, requested emergency archaeological services to survey and record a well feature discovered during reconstruction of the Institute's newly acquired building at Rhode Island Hall. The well was to be filled in and covered as part of the rebuilding of RI Hall, but first the feature needed proper documentation. A one-day survey was conducted to record the well's location and dimensions within the building. Several maps and numerous photographs were resulted. Additional time was spent researching historical background information on the well to supplement its documentation. The well's origin and the subsequent land history of the property within which it is located provided valuable insight for interpreting the feature. The following sections of this report contain a review of the survey and the findings from both the fieldwork and historical research.

Field Survey

The archaeological survey of the Rhode Island Hall well was conducted on December 9, 2008. While construction crews actively moved soil around and out of the building with small construction vehicles, Kaitlin Deslatte uncovered the feature and recorded the location and dimensions of the well. Several photographs and maps were taken and drawn throughout the entire survey process (before, during, and after) for a more inclusive perspective on the well.

Upon arrival for the survey, the southeast corner of the stone-lined and capped well had already been exposed by the construction crew. The stones on top and lining the well were large and the shaft appeared to be very deep. The well is located in the northwest section within the basement level of the main sector of the building (See Figure 1). It lies approximately 160cm/63"

below a basement window and 20cm/10” east of the wall. This window is in the west wall and is the second window south of the north wall.

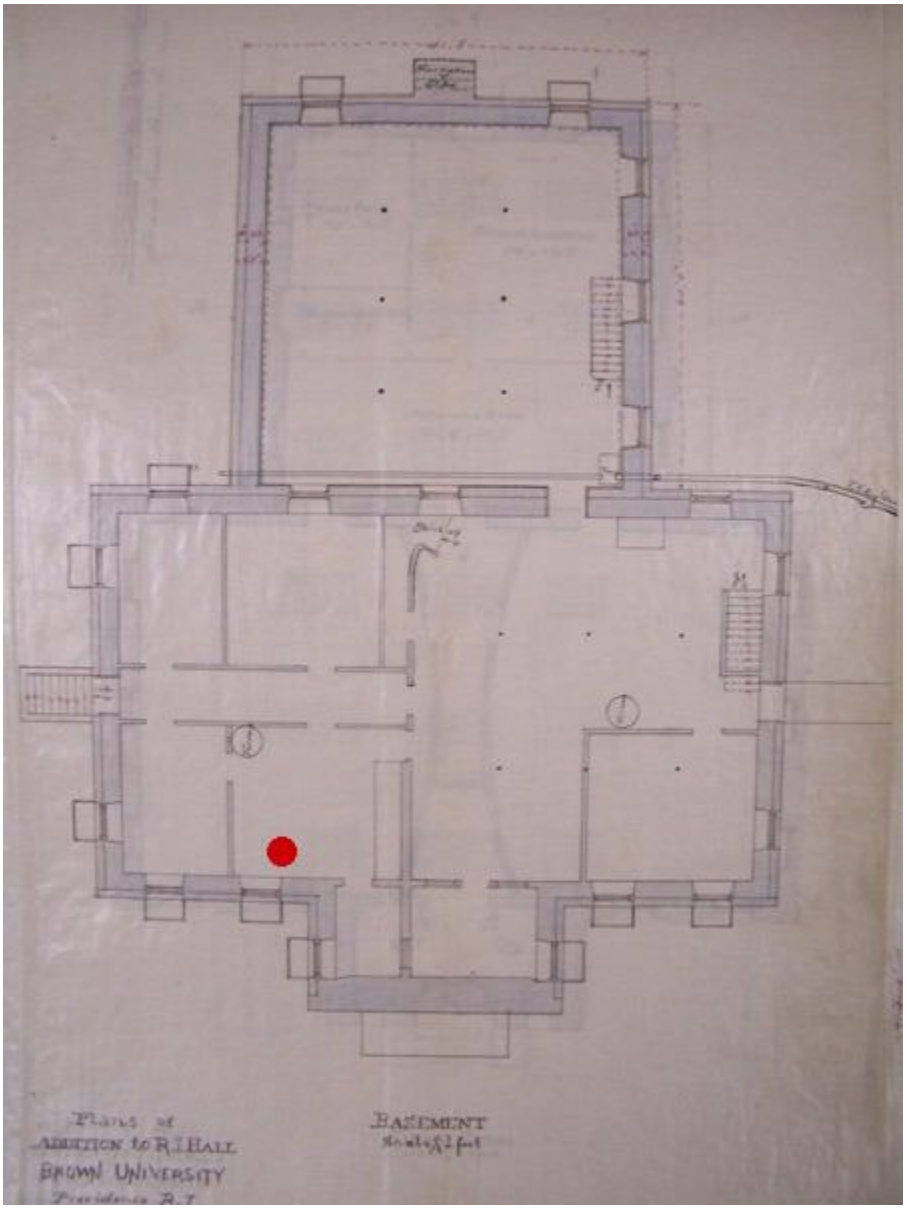

Figure 1. The 1873 basement plan of Rhode Island Hall oriented to the east. A red circle on the map marks the location of the well in the Hall’s northwestern section.

Working from the exposed southeast corner, uncovering the stone well was relatively easy. With the generous help of the construction crew and their excavation machines, the majority soil was quickly removed from around the well. Approximately 10cm of soil was left on the feature for careful hand excavation (See Figure 2). With shovel and trowel, the remaining

soil was removed from the well for full exposure. During this trowel process, approximately 5cm/2” of mortar was noted lying on top of the stone caps and can be seen in Figure 2 underneath the photographic scale bar, which is in 10cm increments.

Figure 2. North facing view of the well feature before initiating the survey.

Although no screening was involved in this operation, several artifacts were recovered during excavation. The materials included mostly iron objects, such as nails and other unidentifiable hardware, yet some brick samples were also kept; however, no diagnostic artifacts were recovered from the site. These materials were inventoried, bagged, and labeled by standard curatorial collection procedures (See Appendix II for inventory of objects). These artifacts accompany this report.

Once the soil was completely removed, the stone caps for the well appeared, in addition to a red terracotta drainage pipe system just to the east of the well. Hand drawn maps and several photographs were taken of these two features (See Figure 3 and Figure 4).

Figure 3. The exposed stone well cap (center) and terracotta drainage pipe system (right).

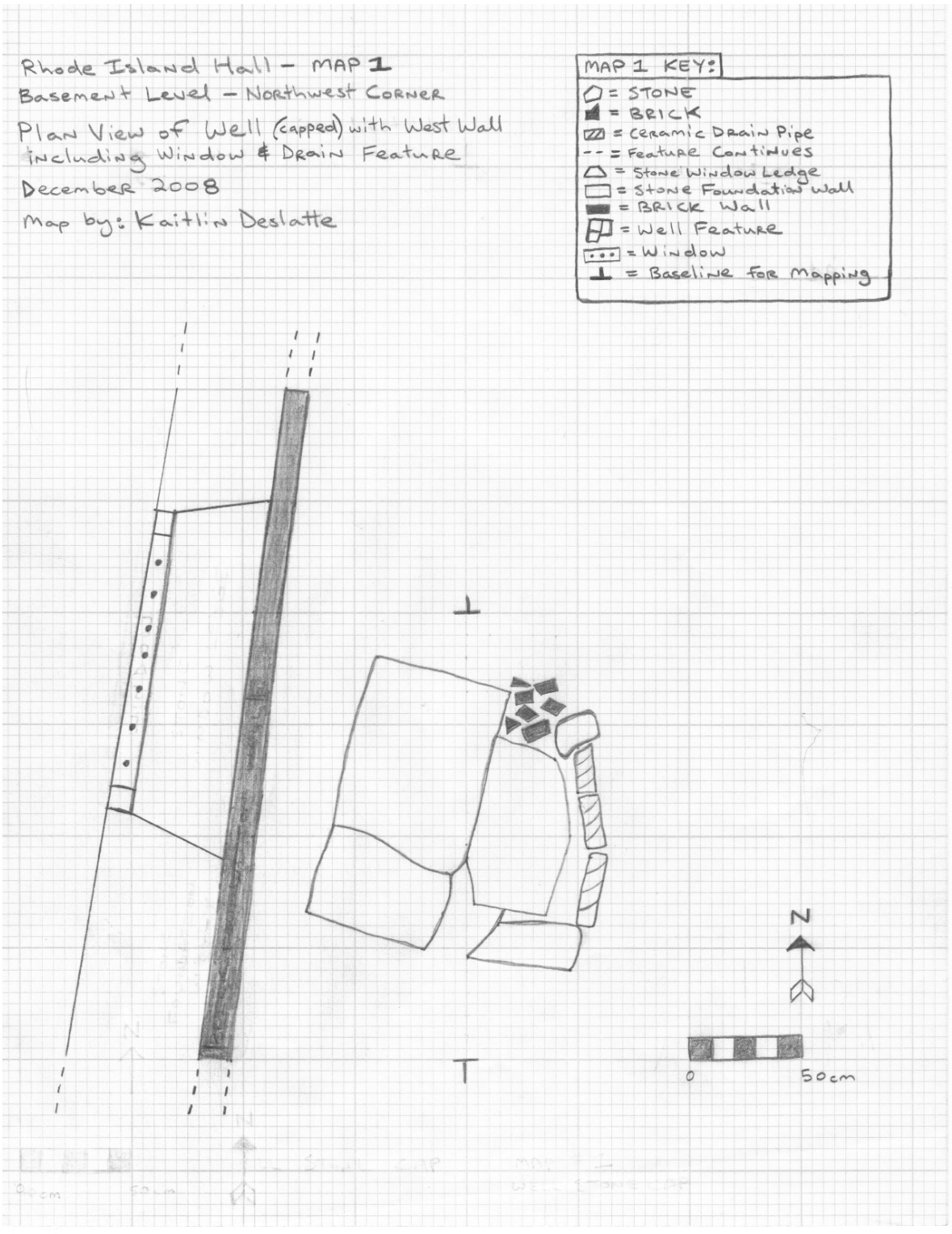

Figure 4. Survey Map 1 illustrates the plan view of the capped stone well along with the terracotta drainage pipe system and their association to the west wall of the building.

The western stone cap was once one large stone, but was found fractured in its southern 1/3 portion. As a whole, this western stone cap measured 48”long (N/S), 24” wide (E/W), and 2” thick. The eastern stone cap was smaller and irregular in size. As previously stated, the southeast section of the well cap had already been removed, making it unclear if either side of the stone caps were attached to one another. In general, the eastern portion of the well cover seemed very poor in construction by comparison to the whole stone cover on the west. This could be evidence of the well being reopened at some point or the large stone was robbed for other uses and the shoddy reconstruction of the cap was the result. The terracotta drainage feature consisted of three loosely set unattached pipes running approximately north to south (See Figure 5). The drainage pipes were supported with bricks along the sides and flat stones on top to secure their placement. This drainage was put in after the well’s construction since the pipes are located higher in the ground than the well and they additionally follow its curve. One section of pipe was kept as a sample from the previous back dirt made by the construction crew. One of the construction workers noted how they saw several tracks of this drainage system running throughout the building.

Figure 5. View of the terracotta drainage pipe system. Note the brick supports for the pipe (top center).

After the stone caps and the drainage pipes were mapped, exploration of the western edge of the well began to seek the relationship between the well feature and the west wall foundation of the building. There appeared to be three levels of construction for the foundation wall (See Figure 6 and Figure 7). The lowest level was a layer of stone rubble which seemed to be the base or underlying structure for the foundation wall. This layer appeared to be 20cm/8" deep and filled with medium size stones that were loose in the soil. The rubble level had some voids of soil between stones. Then large flat stones with mortar were placed on top of the rubble to complete the wall up to the height of the building's ceiling. The third layer was a level of brick, which served as additional wall material. The brick wall appeared to be a later addition as it also started on the stone rubble, but was built parallel to the large flat stones and created an interior ledge at its top. The brick wall's height measured to 66cm/26" and continued as an addition to the lower portion of the foundation wall throughout the entire building.

Figure 6. View of the three textures of the foundation wall: flat stones, brick, and stone rubble.

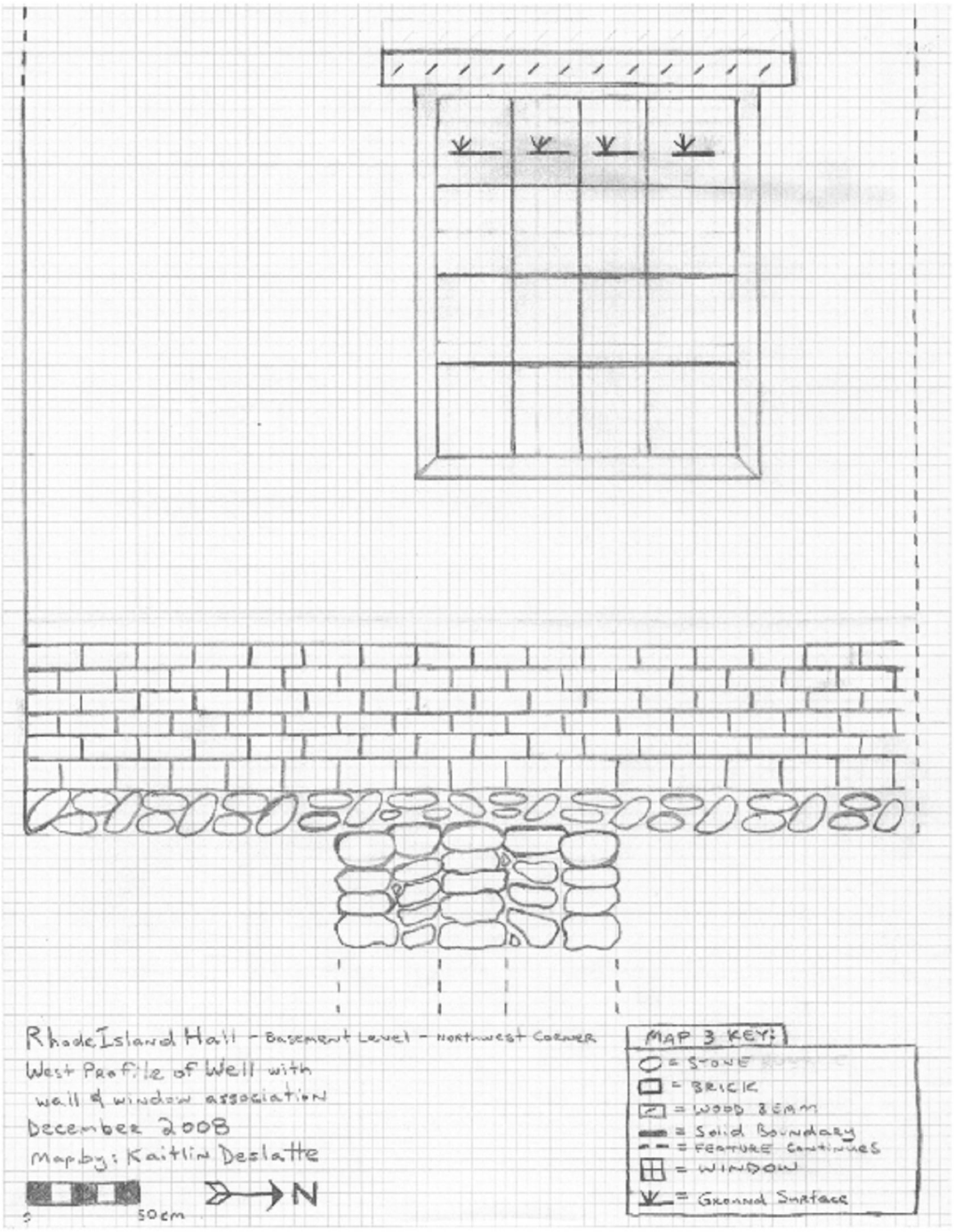

Figure 7. Survey Map 3 illustrates the west profile view of the well, foundation wall, and window. The three materials for the foundation wall are visible.

Within the stone foundation wall was an intact window which can be used as reference point and will hopefully be a guide to relocating the well feature in the future. The location of this window was already described above and several characteristics were observed during the survey. The window is approximately 115cm/45” wide and 173cm/68”in height. There is a trapezoid shaped casement or sill for the window with the widest side being along the east or interior of the foundation wall. This casement created a window ledge that is 50cm/20” deep into the stone wall. From the top of this ledge, the well is located 160cm/63” below the window sill and 20cm/10” east of the foundation wall. Above the top of the window casement are two large, charred, square, wooden beams placed parallel that serve as supports for the window opening within the wall (See Figure 8). These beams were approximately 10cm/4” thick and 127cm/50” long.

Figure 8. View of the wooden beams above the window supporting the casement in addition to a visual of the ground surface to the exterior of the building.

The well feature was lower in depth relative to bottom of the solid brick foundation wall. As the rubble stones continued downward from the brick wall, the well stones emerged as being under and apart of that rubble construction for the foundation wall (See Figure 6). With this stratigraphic relationship, there is archaeological evidence that the well was built on this property before Rhode Island Hall was erected.

After the investigation of the foundation wall association, the stone caps covering the well were removed in order to examine, record, and measure the exact dimensions of the well. The three large flat sections of stone caps already described above were lifted off and placed to the side of the well (See Figure 9).

Figure 9. View of one of the removed stone caps that covered the well.

There were no apparent traces of mortar between the caps and the well stones. The sheer weight of the stones and the 5cm/2” layer of mortar that was found on top of the caps were likely enough to hold them in place. The layer of mortar discovered on top of the stone caps could be

attributed to the convenience of covering the well during the construction of the Hall as such a large and intact feature would be difficult to remove. Some trowel work cleared the remaining soil around the well to fully expose all the stones that lined the feature (See Figure 10). One additional drainage pipe segment was discovered in this process and increased the total number of pipe sections to four (See Figure 11). All of these pipes measured 33cm/13" long, 10cm/4" wide, and 9cm/3½" in height with an oval shaped opening that was 7cm/3" by 6cm/2½" in circumference.

Figure 10. View of the uncapped and exposed well.

Figure 11. View of the further exposed terracotta drainage pipe system. Note the brick supports along pipes edges.

The circular shaft well constructed of large unmortared stones was intriguing. The stone type used for the well was undetermined. The interior shaft was 80cm/32” in diameter. From the surface stones to the bottom of the well, its depth reached an approximate 7m/24’. There was an estimated 4m/14’ of water in the well, which left around 3m/10’ of exposed stones lining the feature up to the surface (See Figure 12).

Figure 12. View of the depth of the well, its unmortared stone lining, and water filled bottom.

There were eleven stones that composed the top rim of the well, which were all similar in shape and size. Only four of these were drawn on Map 2 before the open hole had to be covered in order to comply with site safety regulations (See Figures 13 and 14). This point marked the end of the fieldwork.

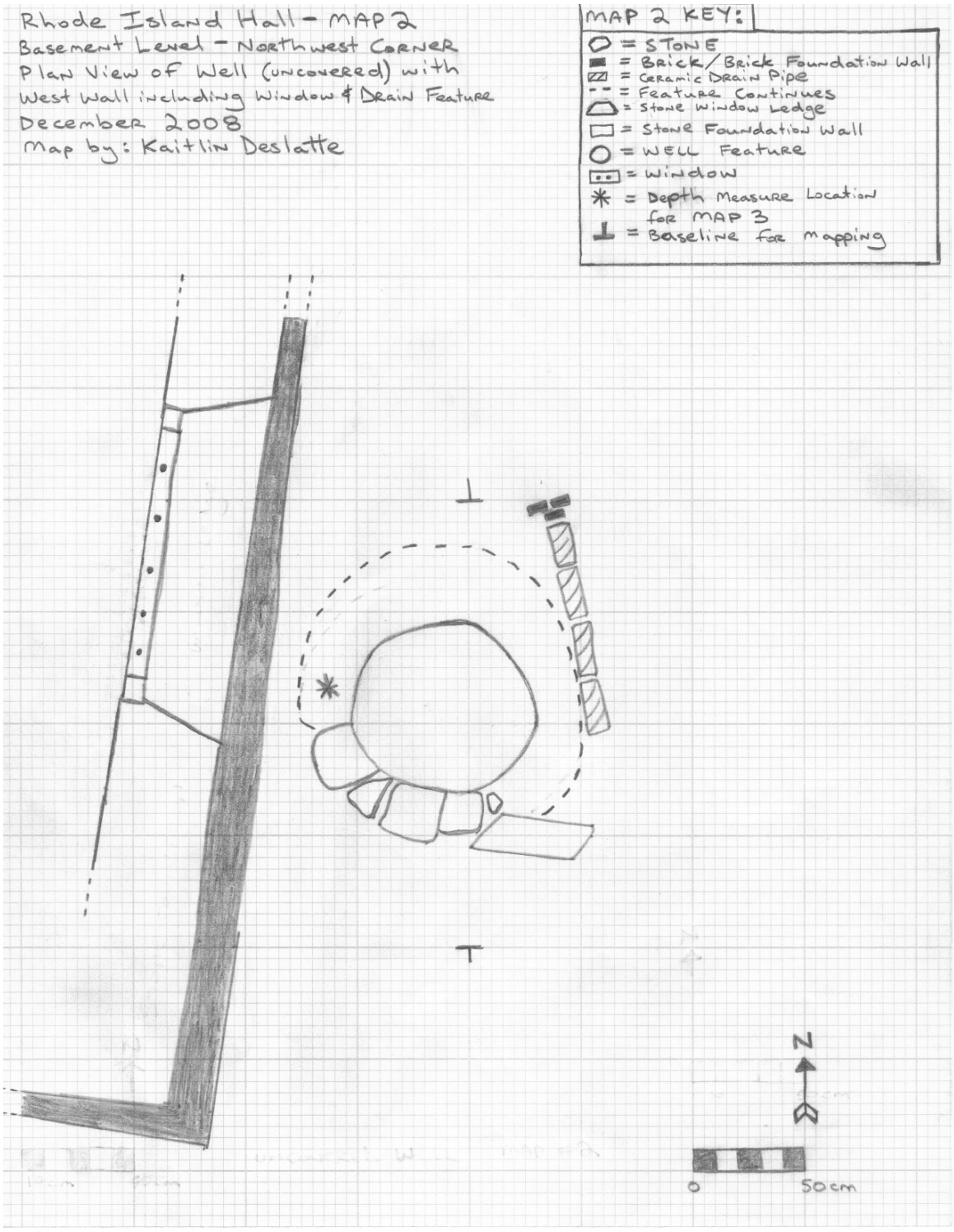

Figure 13. Survey Map 2 illustrates the plan view for some of the uncovered well stones, the terracotta drainage pipe system and west foundation wall with window.

Figure 14. Western facing view of the survey area with the well boarded over.

Historical Background

Once the fieldwork was completed, the next phrase of the survey began by conducting background research on the well. Since no diagnostic artifacts were recovered from the site, historical records and maps were crucial to identifying the feature that predated Rhode Island Hall. With a clue from Dr. Robert Emlen, Brown University Curator, the land history for this portion of the campus quickly emerged. The lot of land on which RI Hall was built had previously been occupied by a dwelling known as the Edward Dexter House, which was later moved to Waterman Street. With this information in hand, historical research on the well and the property was a swift and straightforward task. Research on documents and maps were conducted at the Rhode Island State Archives and the Providence City Hall.

The State Archives held various land transfer and historic home records that were complied by the Providence Preservation Society, and these records included a listing for the Edward Dexter House. The record begins by documenting the property owners, their occupation, and selling price of the property starting in 1791 through 1795 when Edward Dexter purchased the land and apparently built a dwelling house. Then the record continues from 1795 through 1959 to list every owner of the home, including its move to Waterman Street in 1860. From this document, it appears that the property was merely a vacant lot upon which Edward Dexter built. With this evidence, the well would initially be associated to Dexter's home on the property and any other subsequent owners/inhabitants of the house and lot.

At City Hall in the Recorder of Deeds and Archives department, resources included several land and plat maps. Unfortunately just three maps corresponded to the time period investigated in this research and only two of them referenced the property of the well feature (See Appendix I for notes on maps). The map *Owners of Lots in Providence, Rhode Island 1789* compiled by Henry Chance depicts Edward Dexter's name on a George Street lot, but provides no boundaries or structures for Dexter or any other person's property (See Figure 15). Though it is not a particularly interesting map, it does correlate with the land records for the Dexter house and verifies him as the listed owner. The *Map of Providence, RI 1857* by Henry Walling was the most informative as it depicts the property boundary and layout of the dwelling house along with additional adjacent structures. According to the Walling map, the Dexter house was one of three private lots (resting in the center, between the two other lots that also contain structures), which all resided on the University campus block. The large dwelling house abutted the lot's eastern property line and its facade faced west towards Prospect Street. By this time the lot and house was owned by Seth Adams Jr., yet it is not labeled with an owner (See Figure 16). Nevertheless,

with the detail of this 1857 map, an overlay was made onto a current map in order to approximate where the well was located within the historic landscape. Both the position of Manning and University Halls on the two maps aided the alignment. The well appears to be incorporated within the Dexter House, possibly situated in the basement (See Figure 17). This evidence additionally supports the association of the well feature to the Dexter house and lot.

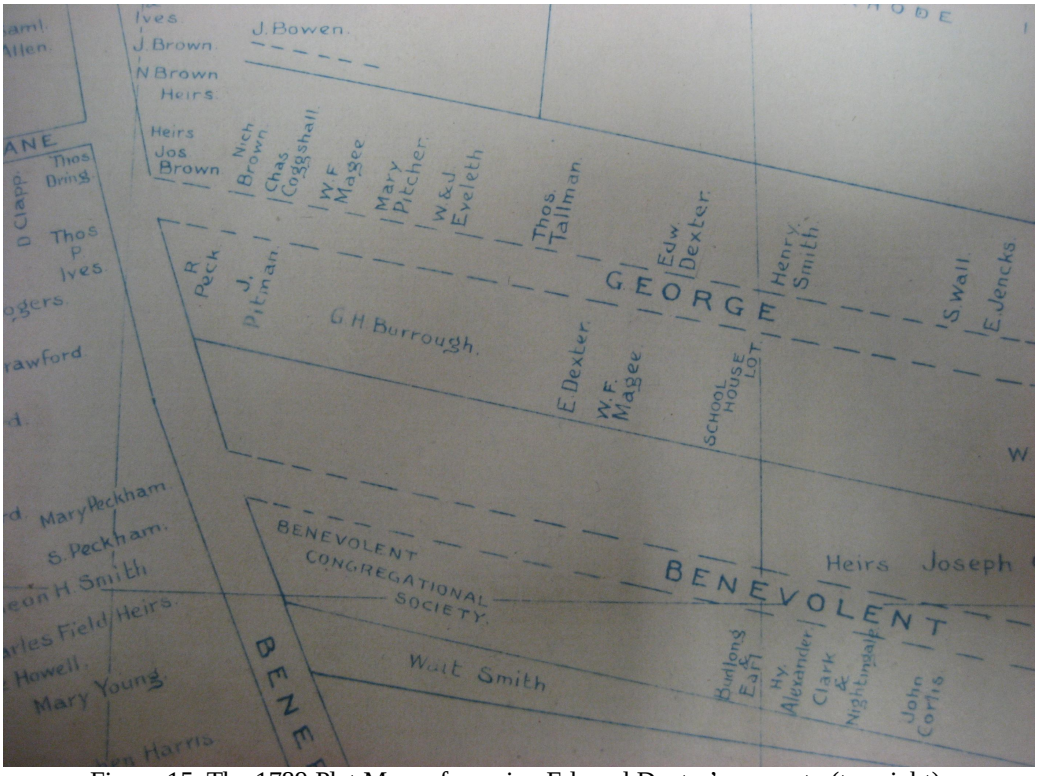

Figure 15. The 1789 Plat Map referencing Edward Dexter's property (top right).

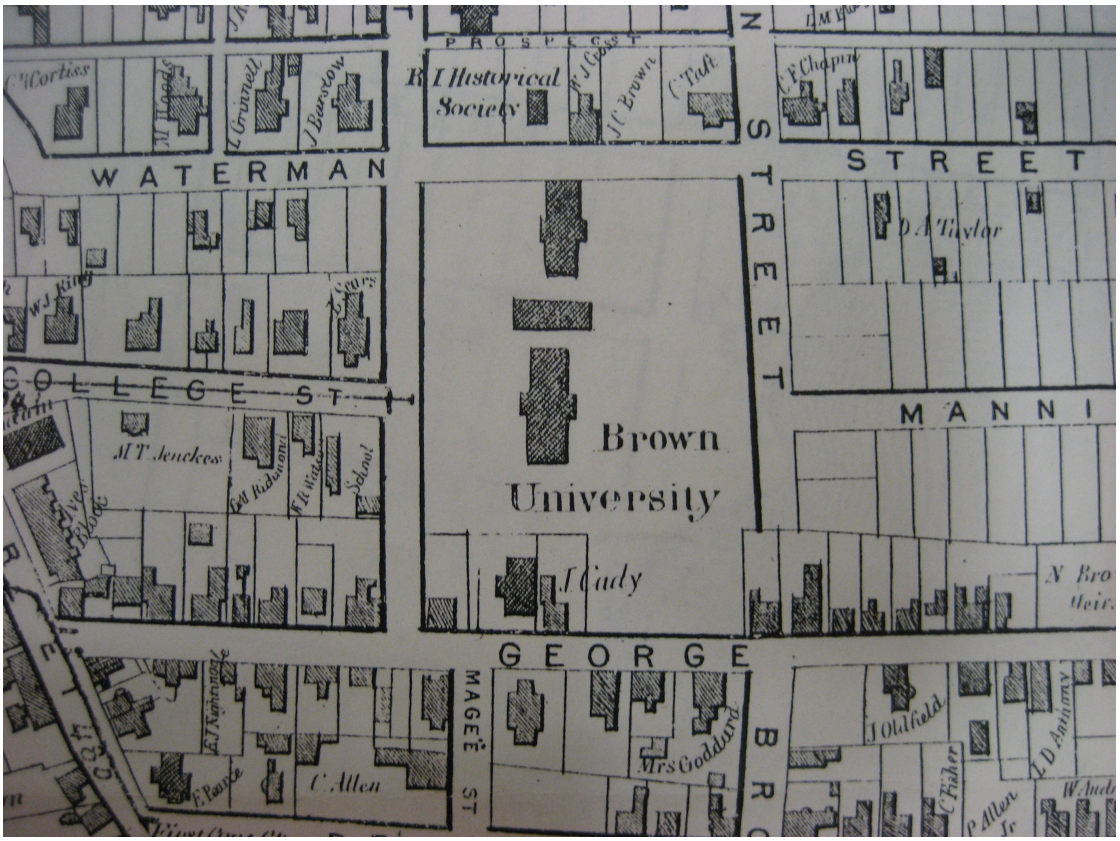

Figure 16. The 1857 Plat Map illustrating the Dexter House on the lower left corner of the university campus.

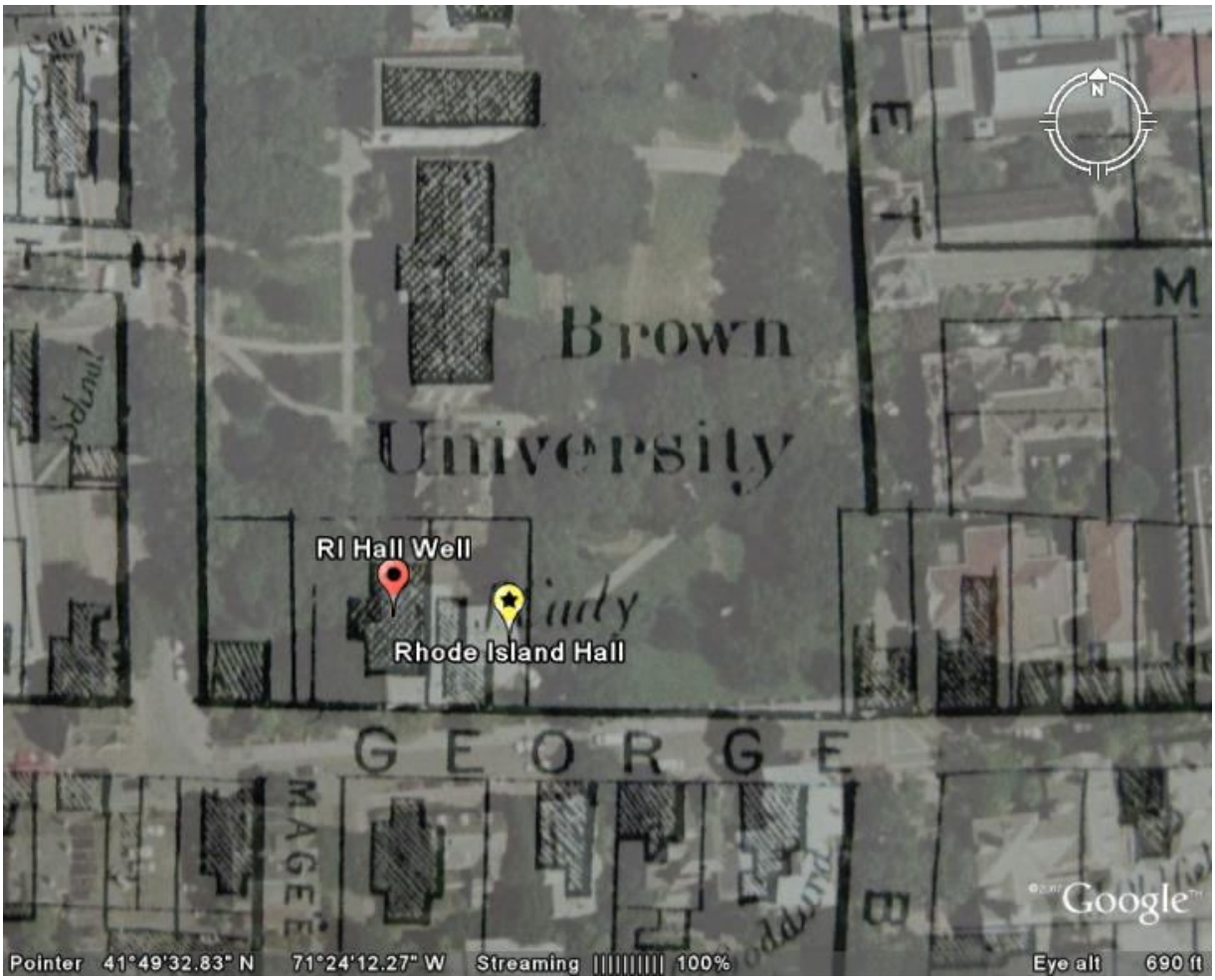

Figure 17. Two maps overlaid to approximate the location of the well in the historic landscape of 1857. From the well's documented current position in Rhode Island Hall marked by red, its associated location in the past places the well within the Dexter House.

Further historical details and information could be gathered on the well feature and its related house, but this will be left for future researchers. The only supplementary data collected during this survey was the ironic location of the Dexter House at 72 Waterman Street, which is the easterly neighbor to the current location of the Joukowsky Institute (See Figure 18).

Figure 18. View of the present location of the Dexter House at 72 Waterman Street with its yellow and white painted wooden facade. Note the Joukowsky Institute building in green to the left of the Dexter home.

Summary

The survey of the well in Rhode Island Hall successful recorded and documented the feature under the emergency circumstances. From the archaeological evidence, the well predated the construction of the Hall. Through historical records, this research was able to establish a connection of the feature to the Edward Dexter House, which formerly stood on the site from 1795 -1860 and was later moved to another lot in order to build Rhode Island Hall. The well appears to be a typical New England 18th/19th-century domestic structure necessary to sustain a household. Only a minimal amount of historical background was complied for this survey, which creates numerous opportunities for other researchers to continue work.

Appendix I

Details and Descriptions for Hand Drawn Maps

Map 1 (Figure 4) is a plan view of the stone capped well along with an additional unrelated drainage pipe system. The map is oriented toward the north, has a scale and content key. The view is within the basement level of Rhode Island Hall in the northwest section of the main sector of the building. The map includes the west foundation wall of the Hall at its interior vantage point and a window sill as a reference marker. The wall is located west of the stone capped well and is only a partial view of the wall. Due to scale size, only a portion of the wall's actual length was drawn as solid lines and dashed lines denoted its continued path. A shorter brick wall addition (denoted by a dark shade coloring) abuts the more prominent stone foundation wall (denoted by plain/no coloring). The trapezoid shaped stone window ledge can be seen built into the wall. The window is composed of wood with sixteen panes of glass. The capped well is composed of three large flat stones. To the east of the capped well lies three red ceramic terracotta drain pipes. The northern section of this drain system is covered by loose stones and bricks.

Map 2 (Figure 13) is a plan view of the uncapped stone well along with the additional unrelated drainage pipe system. The map is oriented toward the north, has a scale and content key. The view is within the basement level of Rhode Island Hall in the northwest section of the main sector of the building. Like Map 1, the foundation wall is located west of the stone well and is only a partial view of the wall. Due to scale size, only a portion of the wall's actual length was drawn as solid lines and dashed lines denoted its continued path; however, the westerly jog of the west wall at its southern point was recorded (see bottom left of map). The shorter brick wall addition (denoted by a dark shade coloring) still abuts the more prominent stone foundation wall (denoted by plain/no coloring) and follows that westerly jog around the corner. Like Map 1, the trapezoid shaped stone window ledge can be seen built into the wall and the window is composed of wood with sixteen panes of glass. The diameter for the interior of the well is clearly marked and four of its rim stones along its southwest section were drawn to scale. The remaining stones were not drawn, but their approximate boundary was marked by a dashed line. On the western edge of the well's boundary is a star which marks the measurement location for the elevation depth between the well and the window ledge. Adjacent to the eastern edge of the

well's exterior boundary are four red ceramic terracotta drain pipes. The drainage pipe system had a fifth pipe at its southern tip, but it broke during excavation and was removed. To the north of the drain pipes were three deliberated place bricks that appeared to be used for anchoring down the drainage system.

Map 3 (Figure 7) is a profile view of the stone well and foundation wall components. The map is oriented toward the west, has a scale and content key. The view is within the basement level of Rhode Island Hall in the northwest section of the main sector of the building. Due to scale size, only a portion of the well's and wall's actual length and height were drawn as solid lines and dashed lines denoted its continued path; however, the westerly jog of the west wall at its southern point was recorded (see bottom left of map). The three layers of construction material for the wall are apparent: rubble, brick, and stone. Like Map 1 and 2, the stone window ledge and wooden window frame can be seen built into the wall with its sixteen panes of glass. Through the window the exterior ground surface is visible, which helps aid the orientation of the map to the basement level. One of the large wooden beam supports is seen at the top of the window (denoted by a rectangle with diagonal lines).

The sizes of the following are all artistic renderings: window panes, bricks, rubble, and well stones. They are not to scale, but do represent the nature of the feature in which they depict.

Appendix II

Well Survey Artifact Inventory

Inventory Number RI Hall Well - #	*Object*	*Description*	*Count*
RIHW-001	Nail	Iron; complete	8
RIHW-002	Brick	Partial fragments	2
RIHW-003	Mortar/Plaster	Fragment	1
RIHW-004	Oyster Shell	Complete shell half	1
RIHW-005	Tile	Undetermined material type; partial fragment	1
RIHW-006	Drainage Pipe	Terracotta; complete	1
RIHW-007	Undetermined Wooden Object	Fragment	1
RIHW-008	Undetermined spike	Iron; complete	1
RIHW-009	Undetermined square hardware	Iron; partial fragment	1
RIHW-010	Undetermined hardware	Iron; complete	1