TOWN HALL GARDEN WATER FEATURES

Town of Arlington, Massachusetts

Pre-Design Report: Garden History & Rehabilitation Recommendations

Image courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS

February 2018

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This project was funded by:

The Town of Arlington

friends of the ROBBINS Town Gardens

Contents

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Project Intent

To restore the water features to the historic intent of the design created by the Olmsted Brothers in 1939.

Project Goals

- Rebuilding main reflecting pool
- Repair the upper basin, mid basin, and ripple spillway
- Install new mechanical system and upgrade the underground vault
- Develop a maintenance and operations plan for restored water features

Historical Significance

According to the project Request for Qualifications: The Garden has demonstrated historical significance on several dimensions. In 1974, the Garden was listed on the State Register of Historic Places. Forming the heart of Arlington's Civic Block, the garden is located within the Arlington Center Historic District, which is designated on the National Register of Historic Places. The Massachusetts Historical Commission holds a permanent Preservation Restriction on the garden and grounds.

Character-defining features

Character-defining features are those features of a historic site that without which the landscape would cease to maintain its significance.

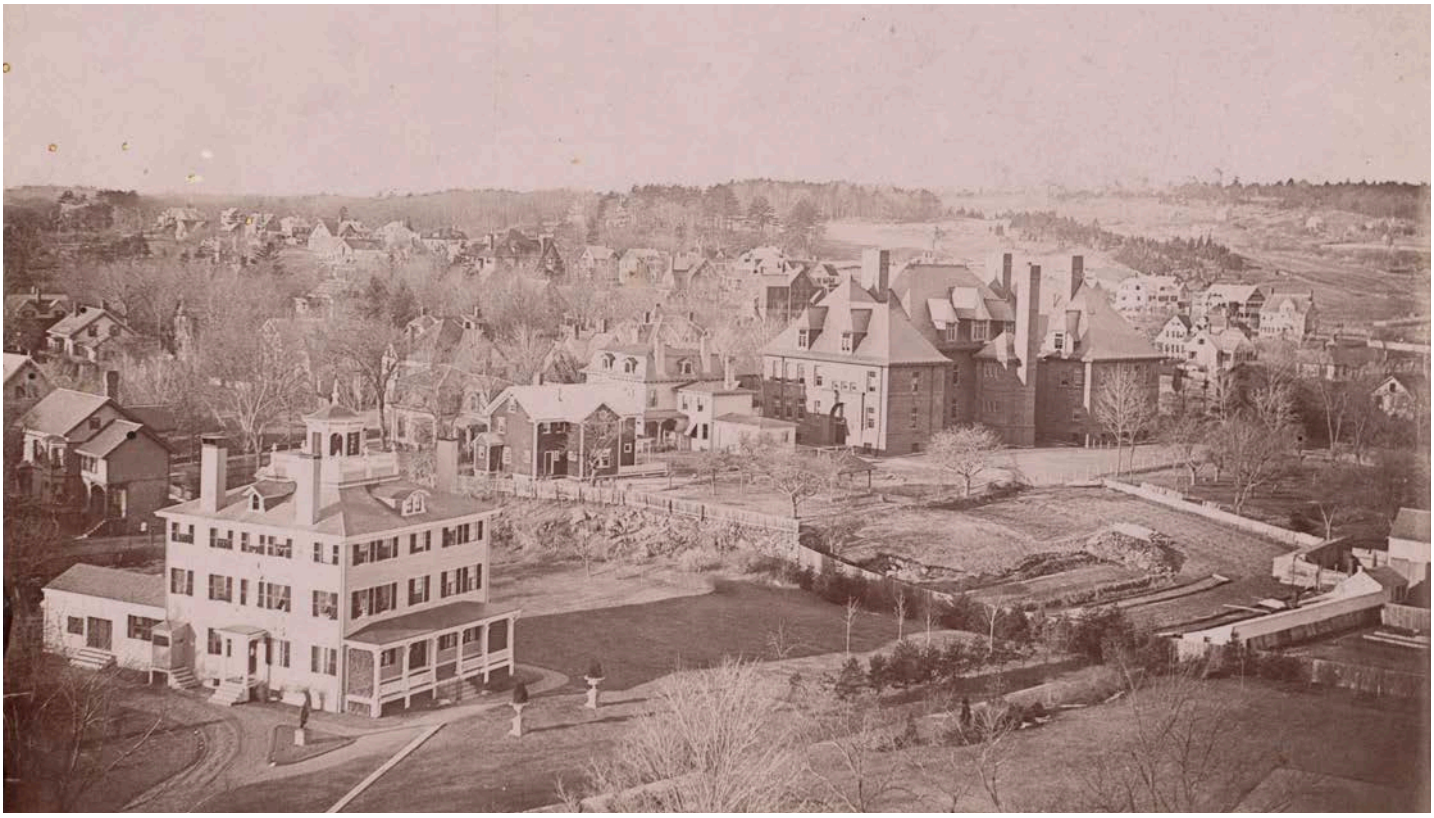
(Terminology for the landscape features reflects that used by R. Clipston Sturgis.)

a. Menotomy Indian Hunter sculpture and base (Cyrus Dallin)
b. "Spring" (uppermost basin) with stone spillway (Olmsted Brothers)
c. Upper pool (R. Clipston Sturgis)
d. Ripple spillway with stepping stones (R. Clipston Sturgis)
e. Lower pool with bluestone coping (R. Clipston Sturgis)
f. Brick walkways (R. Clipston Sturgis & Olmsted Brothers)
g. Brick forecourt (Olmsted Brothers)
h. Circular cobble walkway (Olmsted Brothers)
i. Woodland planting behind sculpture Olmsted Brothers)
j. Planting within walk around sculpture (Olmsted Brothers)
k. Border planting outside brick walkways (Olmsted Brothers)
l. Planting along lower basin (Olmsted Brothers)
m. Spillway planting (Olmsted Brothers)
n. View up to sculpture (Olmsted Brothers)
o. View from sculpture down towards lawn and street (Olmsted Brothers)

Design Evolution

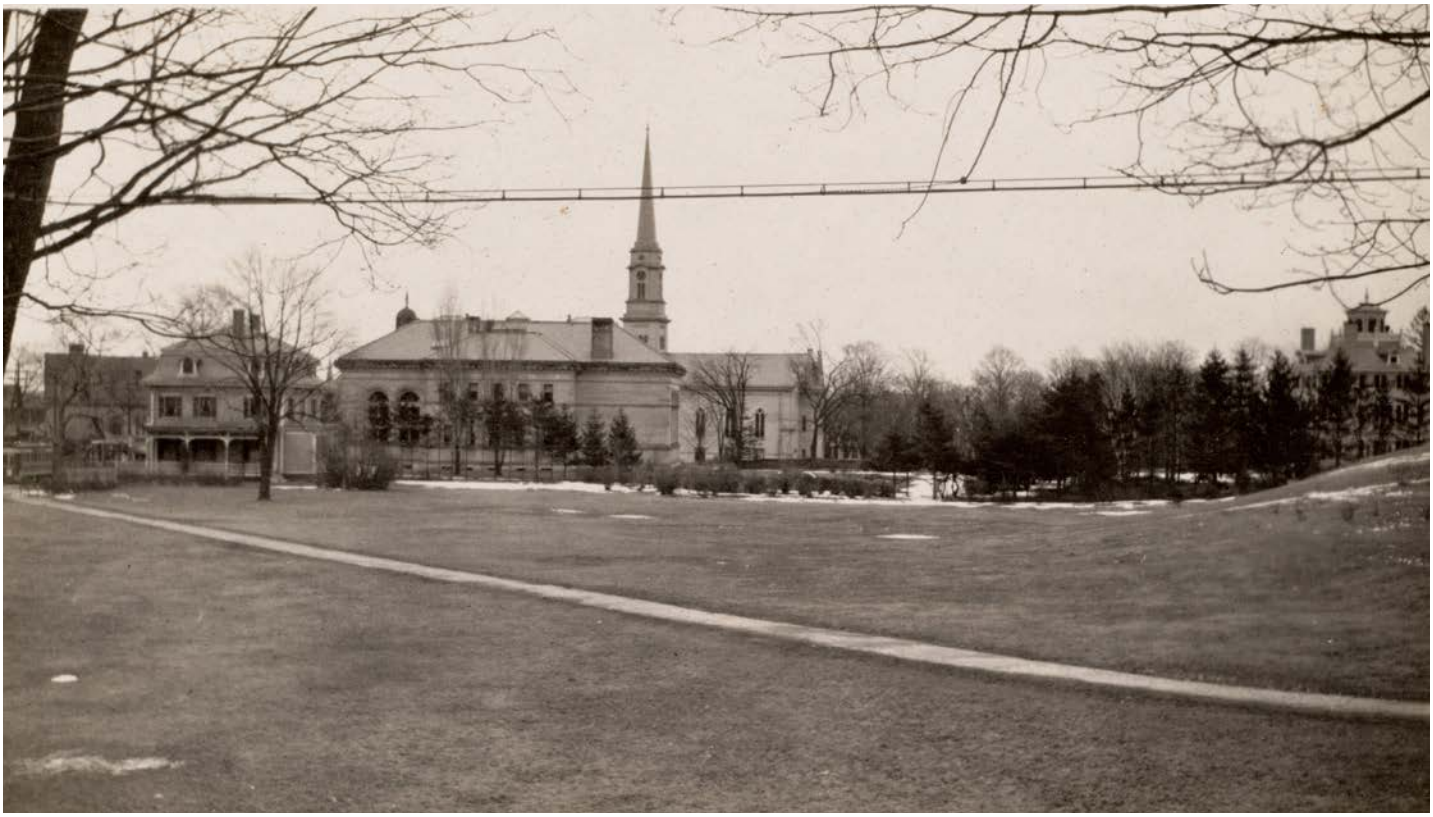
According to the Arlington Civic Block Master Plan from 1998, the land for the new Town Hall and associated gardens was purchased by the Town in 1910.

A photograph (below) taken in 1897 from the Town archives shows the site with the relocated Whittemore-Robbins House (foreground left) and the Central School (background right). The slope seen to the right of the rocky outcrop in the middle ground, right of the Whittemore-Robbins house, is the approximate location of the sculpture, the spring (pool), the upper pool, and the ripple. Very little vegetation is seen in the area of the water feature in the 1913 photograph in comparison to the wooded area that Sturgis implemented.



"Arlington Center" prior to the construction of Sturgis' town hall, 1897; Image courtesy of Digital Commonwealth

"Town hall site 1911 Arlington High School" prior to the construction of Sturgis' town hall; Image courtesy of Digital Commonwealth



"Town hall site, 1911 view from C.H. Gannetts, Academy St." prior to the construction of the town hall; Image courtesy of Digital Commonwealth

Cyrus Dallin

Cyrus Dallin (1861-1944) was a significant American sculptor best known for his bronze sculptures of Native Americans, including the *Appeal to the Great Spirit* (1909) located outside Boston's Museum of Fine Arts. He was also the sculptor of the *Equestrian Statue of Paul Revere* (1899) in Boston's North End. Dallin was a resident of Arlington from 1900 until his death.

In 1911, Dallin was commissioned by the Robbins family to create the *Menotomy Indian Hunter*.

R. Clipston Sturgis

The architect R. Clipston Sturgis (1860-1951) was commissioned in 1912 by the Robbins sisters, Ida and Caira, to design the Amos Robbins Memorial Town Hall and the Memorial Town Garden.

All of the elements of the water features that exist today, including the spring (pool), the upper pool, the ripple, and lower pool, were designed by Sturgis. (These are the terms Sturgis used in his plans, while the Olmsted terminology varied, and therefore the Sturgis terminology is used throughout the report.)

Few plans remain of the Sturgis design, but two record plans were located in the Town of Arlington's vault and three sketches were included in his sketchbooks archived at the Boston Athenæum. The sketches are in sketchbook No. 49, dated from June 7 to November 4, 1911; the sketches have no date associated with them but are labeled "Arlington Town Hall." The first sketch is an enlargement of the spring and upper pool with dimensions and elevations. It notes that the concrete curbs are 12 inches wide with the exception of the curb on either side of the spring, which is 8 inches wide. The second sketch shows the water feature from behind the sculpture to the brick at the north of the lower pool. Here too, elevations and dimensions are included and appear to be consistent with the final plan on record. Planting notes include the mention of a silver birch behind the sculpture and "Flowers—informal with rocks and ferns." Adjacent to the lower pool is noted "1'-0" curb. 1'-6" of grass. 6'-0" tall hedge." The final sketch is of the intersecting brick walkway which was removed by the Olmsted Brothers work.

The two full-size plans from Sturgis were located in the Town Archives. One is a plan entitled "Plan of Memorial Town Garden/in Connection with the Arlington Town Hall," with a revision date April 17, 1912. The plan shows the entire grounds from Town Hall to a gravel court adjacent to the Robbins Library. It shows all of the water feature and the brick walks, lawn, and gardens around them. All the components were constructed of concrete and were formal in nature. The sculpture sits on a concrete plinth that is 2 feet 10 inches wide by 2 feet 9 inches deep and is situated at elevation 64.25. (All dimensions and elevations are as noted on the 1912 "Plan of Memorial Town Garden/in Connection with the Arlington Town Hall.") The spring is 6 feet wide by 5 feet deep at elevation 62.75. The concrete walls are all 12 inches thick. The upper pool is an oval that is 24 feet wide by 10 feet deep, including the 12 inch concrete walls. It is recorded at an elevation of 59.75. The ripple is 8 feet wide at the top and widens to 11 feet where it meets the lower pool. The lower pool is 50 feet long by 17 feet wide. Where the ripple meets the lower pool is elevation 57.875, with the bottom of the lower pool at elevation 56, the top of the coping stones at elevation 58.25, and the walkway elevation at elevation 58, making the lower basin a depth of 2 feet 3 inches—much deeper than today's pool. The top of the Sturgis ripple is crossed by an arched concrete bridge. Details included on this plan show a cross-section of the ripple, an elevation of the bridge, a cross-section of the upper pool and ripple, and a cross-section of the lower pool showing ripple and overflow.

This plan depicts a heavily planted area behind the sculpture with a 30-inch gravel walk surrounding it. While no legend is included for the plantings, the labels “H”, “CB”, “WP”, “RP”, “NS”, and “WB” presumably relate to hemlock, cherry birch (unconfirmed), white pine, red pine, Norway spruce, and white birch, respectively. One shrub border is labeled along the west side of the planting and is labeled as “18 *Pinus mugo*”. Immediately behind the sculpture are four hemlock and four white birches. The other woody plantings identified include hedges of *Ligustrum ibotum* (now *L. ibota*), Japanese privet and *Ligustrum regelianum* (now *L. obtusifolium var. regelianum*), Regal’s border privet. The planting bed between the brick walks and the ripple shows a selection of perennials planted among boulders: Japanese iris, Siberian iris, yellow flag iris, and daylilies. The planting bed between the walks and lower pool is labeled as grass.

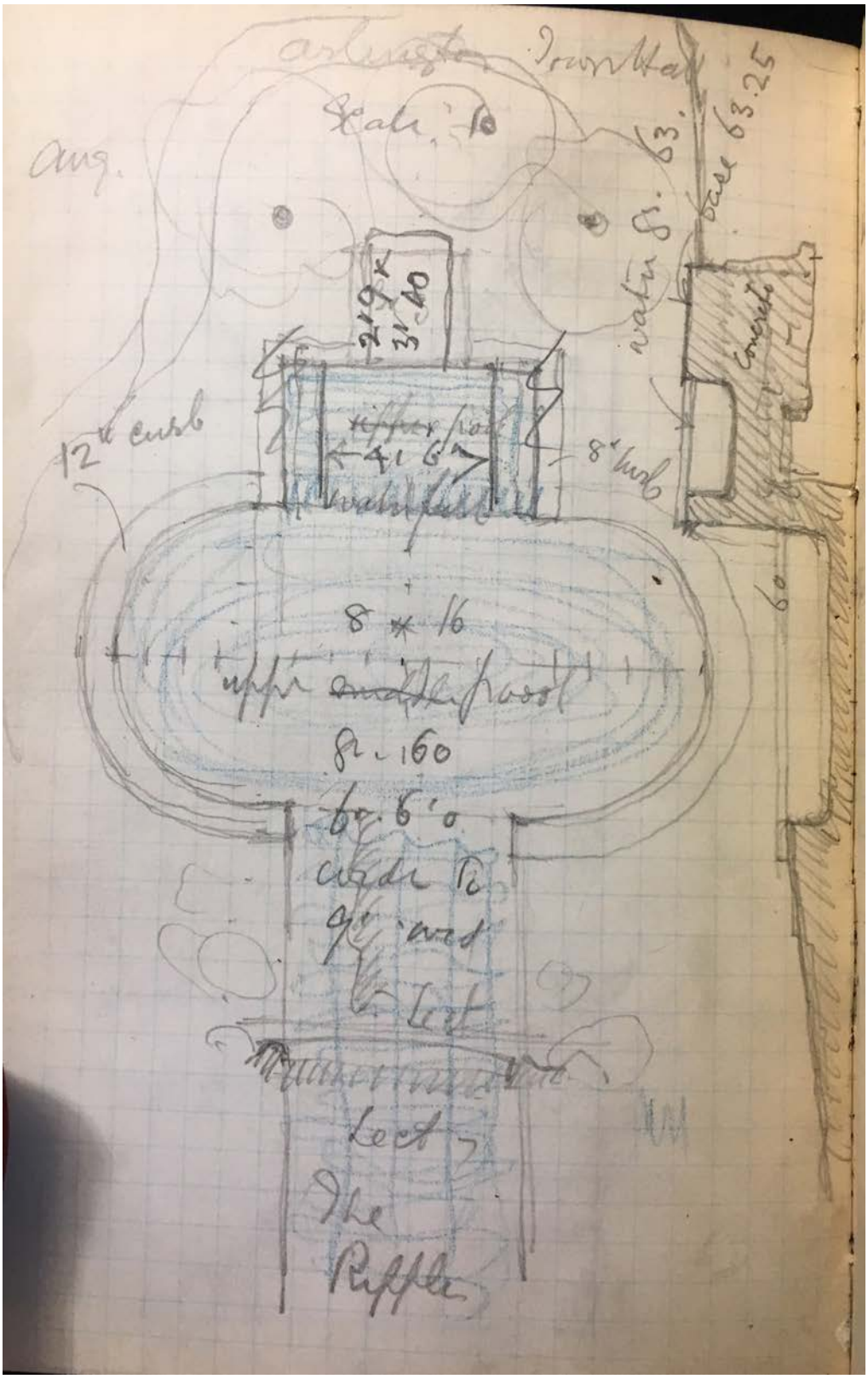
The second plan is titled “The Arlington Town Hall,” dated 1911. It shows a smaller version of the 1912 plan from Academy Street to the edge of the Robbins Library property bounds, and from Massachusetts Avenue to the Central School property bounds. Additional information locates ledge around the Town Hall and a dry well detail to accommodate the subsurface drainage. A cross-section of the brick walkway is also included. The remainder of the sheet has a cross-section of the ripple. An enlargement of the water features is also included which shows the concrete work that comprises all of the features. The features include footings (no dimensions), the thicknesses of the curbs (consistently 12 inches) and base concrete (6 inches for the ripple and the lower pool, 4 inches for the upper pool and spring).

The second plan only references vegetation by noting where to excavate for the plants, including the hedges along the brick walkways and “15 birch trees and 50 spruce” around and behind the sculpture.

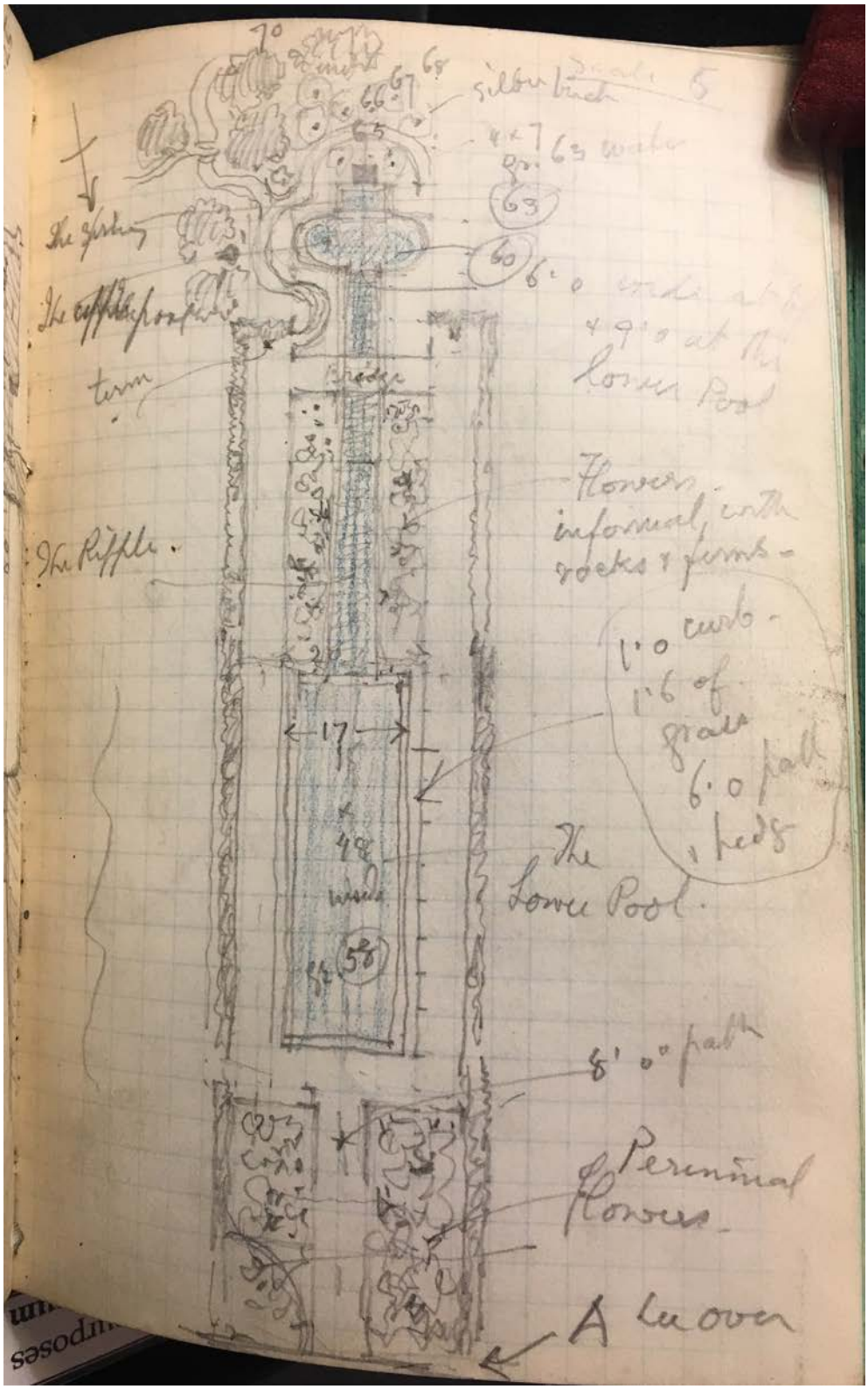
Dallin’s sculpture was the focal point of the gardens. The Sturgis Italianate design was a manicured and formal landscape. Photographs included in the Olmsted firm archives document the garden in 1938, the year they were first engaged to redesign the landscape. Many of the photographs look at the broader landscape, as the firm was hired to rehabilitate the grounds of Town Hall and the Massachusetts Avenue sidewalk, as well as the water features. From the spring, water flows like a sheet down the concrete face into the upper pool. Some of the historic images appear to show the pool with a dark tone to the base.

The plantings behind the sculpture are sparse on the ground plan. It appears like a meadow with several birch, pine, and black walnut trees flanking the sculpture. The entire water feature is lined with a privet hedge and a brick walkway that runs from Massachusetts Avenue directly toward the sculpture, reinforcing the formality of Sturgis design.

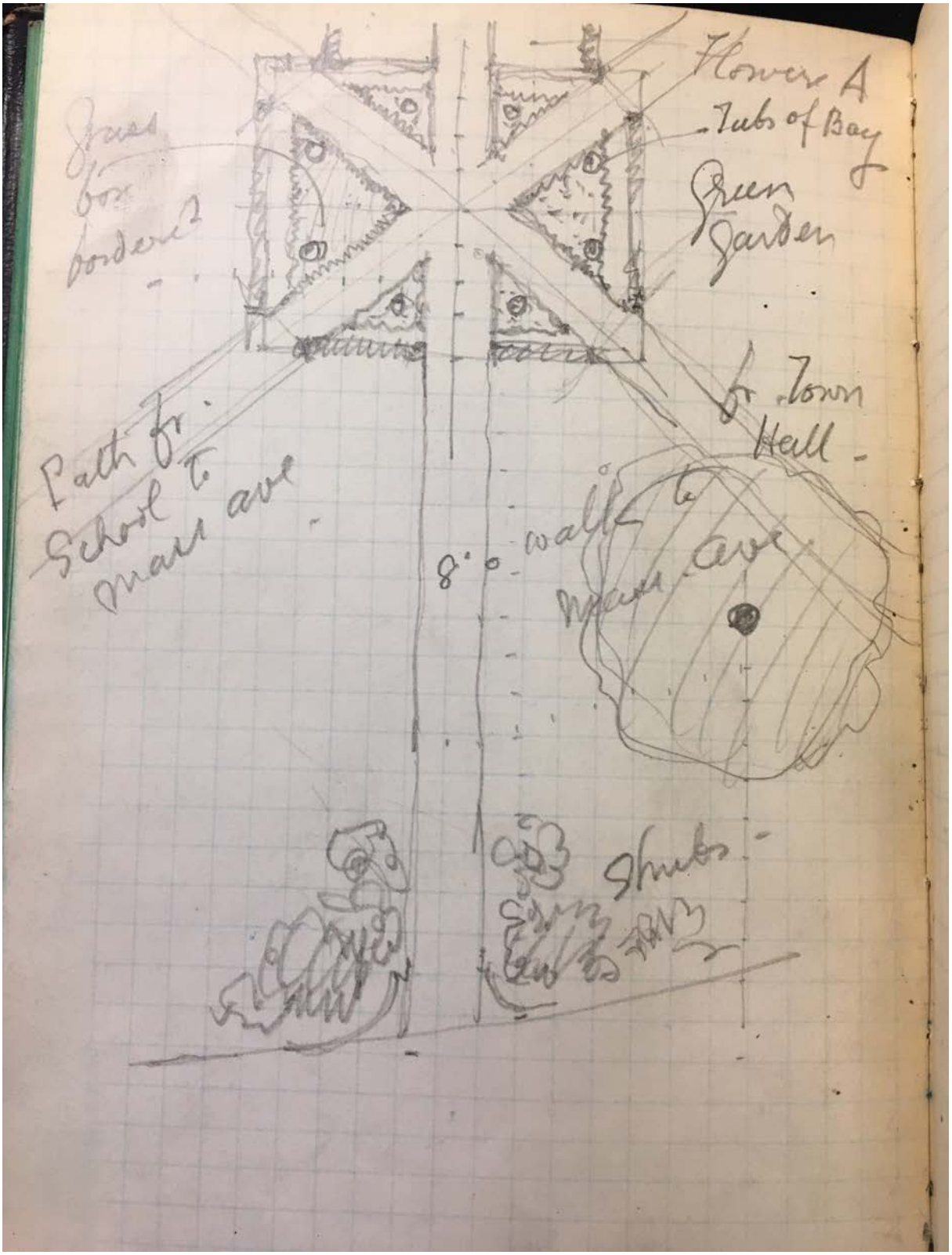
The sculpture and the Sturgis-designed Memorial Town Garden were dedicated on June 25th, 1913.



Sketches of Memorial Town Garden in R. Clipston Sturgis Sketchbook No. 49, dated from June 7, 1911 to November 4, 1911; Image courtesy of the Boston Athenæum



Sketches of Memorial Town Garden in R. Clipston Sturgis' Sketchbook No. 49, dated from June 7, 1911 to November 4, 1911; Image courtesy of the Boston Athenæum



Sketches of Memorial Town Garden in R. Clipston Sturgis Sketchbook No. 49, dated June 7, 1911 to November 4, 1911; Image courtesy of the Boston Athenæum

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PLAN OF MEMORIAL TOWN GARDEN

IN CONNECTION WITH THE ARLINGTON TOWN HALL

SCALE OF PLAN 1/8" = 1'-0". DETAILS, 1/2" = 1'-0". R. CLIPSTON STURGIS, ARCHITECT.

REVISED TO APRIL 17, 1912

EXISTING GRAVEL COURT

EXISTING TREES.
Two grave trees & Southend of the Row to be saved.
Row Elm, Ash Trees, and Maple and Cedar trees to be destroyed.

6'-0" GRAVEL PATH

SECTION OF STEP

GREEN GARDEN

BRICK WALK 5/90

GRASS PLOTS WITH BOX BORDERS

4'-0" HEDGE

8'-0" BRICK WALK

EXISTING CATALPA

66 Ligustrum Regelianum.

6'-0" BRICK WALK

ON BOULDERS in Irregular Tall Clumps
20 Feather Rose
18 Evergreen Peonies

RED IRIS PLANTED AMONG SMOOTH ROCKS

LOWER POOL, CONCRETE BOTTOM & SIDES

RIPPLE CONCRETE

BRIDGE

CONCRETE

BLUE UPPER ROCK

BASIN TO RECEIVE SPRAY

Between Borders: Oil on Iris Mahonia
Oil on Shechtia
Oil on Viburnum
Oil on Honeysuckle Vines

4'-0" HEDGE

66 Lig.m Reg.m

4'-0" HEDGE

5'-0" SIDEWALK

6'-0" GRAVEL PATH

6'-0" GRAVEL PATH

4'-0" GRAVEL PATH

4'-0" BRICK WALK

TOWN HALL

PLAN SHOWING BEDS IN FRONT OF HALL
Scale 1/8" = 1'-0"

TOWN HALL

NOTES.
SEE DRAWING #1 FOR
(1) 1/2" SECTION OF BRICK WALKS.
(2) F.S. " " RIPPLE
(3) LONG'L & CROSS SECTIONS OF MEMORIAL
GRADES SHOWN ARE FINISHED GRADES.
SEE PLANTING PLAN FOR BEDS

CENTRES FOR BRICK OVAL IN GREEN GARDEN

SECTION OF RIPPLE AND ELEVATIONS OF BRIDGE

UPPER SIDE OF BRIDGE

LOWER SIDE OF BRIDGE

CEMENT JOINT

SECTION OF UPPER POOL AND RIPPLE

SECTION OF LOWER POOL SHOWING RIPPLE AND OVERFLOW

"Plan of Memorial Town Garden in Connection with the Arlington Town Hall", dated Revised April 17, 1912; Courtesy of the Town of Arlington

"The Arlington Town Hall", dated 1911; Courtesy of the Town of Arlington

“Arlington Center - Massachusetts Avenue” showing Sturgis path system, no date; Courtesy of Digital Commonwealth

"Public Garden, Arlington, Mass.", no date (circa 1913); Courtesy of Digital Commonwealth

"Menotomy Indian Fountain, Arlington, Mass." no date (circa 1920); Courtesy of Digital Commonwealth

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"Public Garden, Arlington, Mass.", no date (circa 1913); Courtesy of Digital Commonwealth

"The Fountain, Robbins Memorial Garden, Arlington, Mass." no date (circa 1913); Courtesy of Digital Commonwealth

"Winfield Robbins Memorial Town Garden", no date; Courtesy of Digital Commonwealth

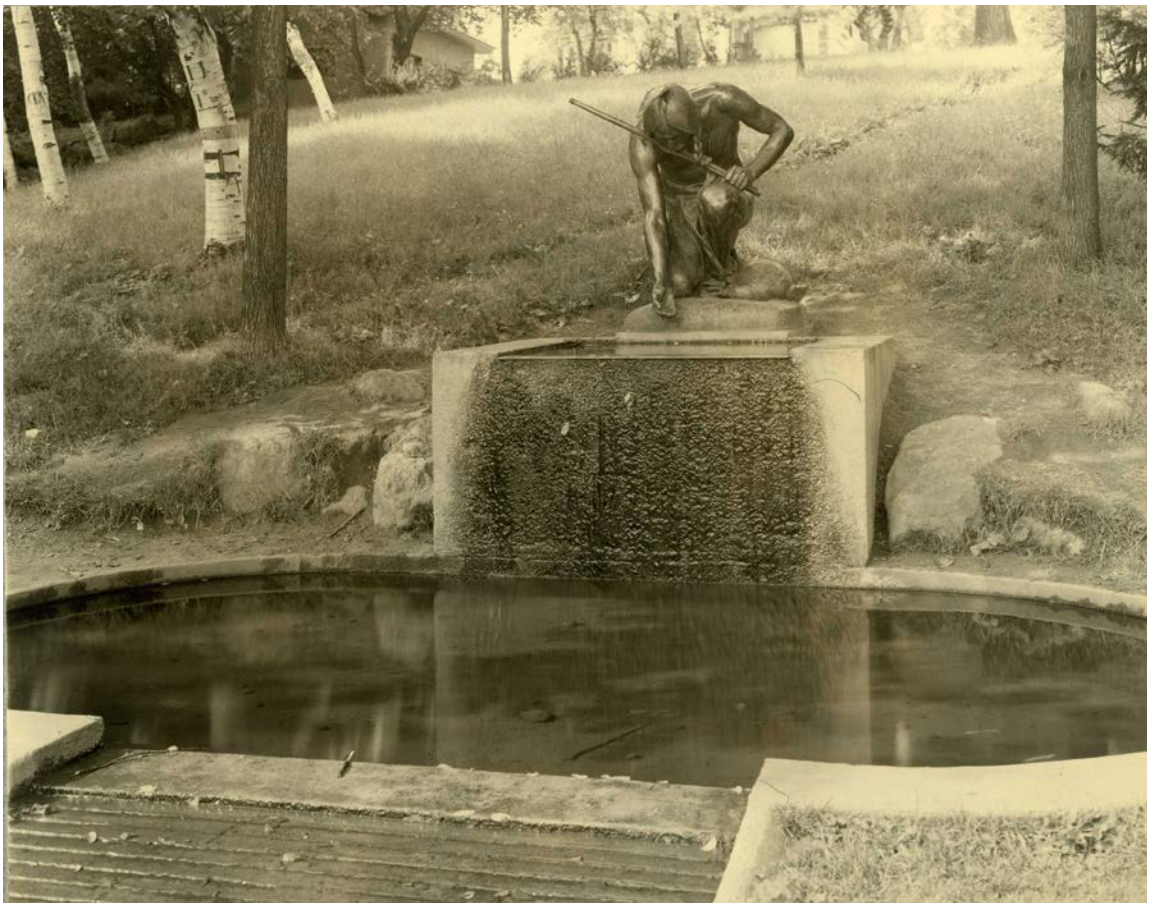


Image 2252-59, dated July 1938; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS

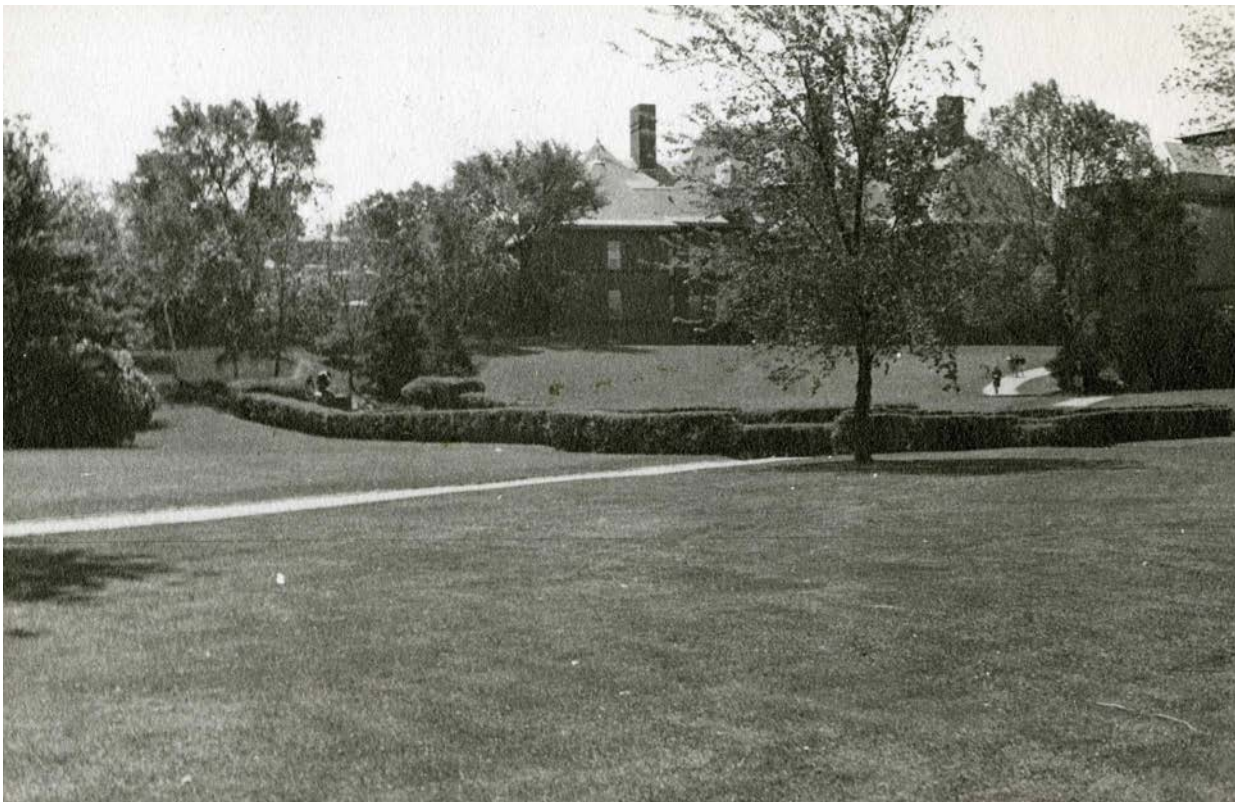
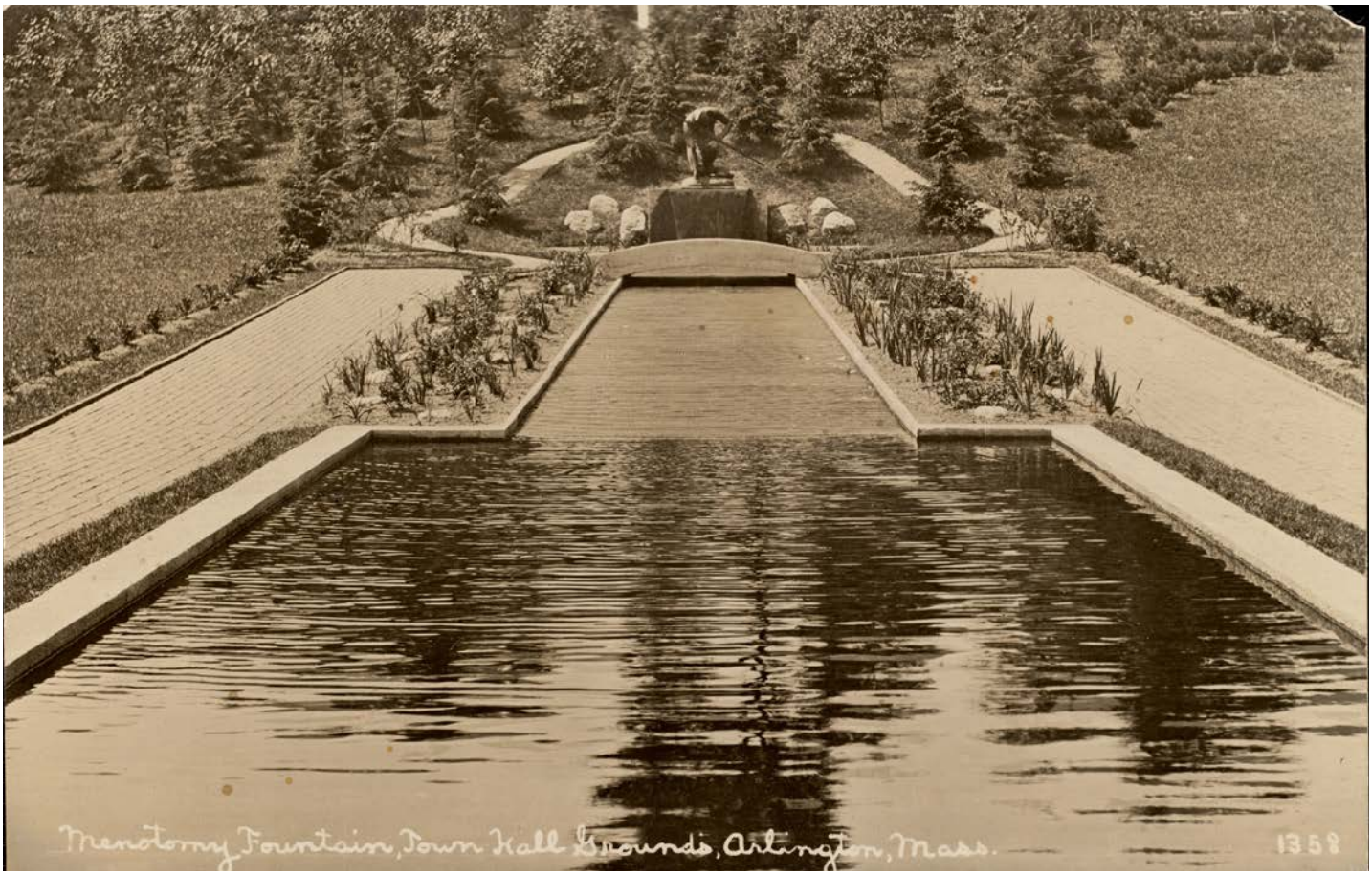
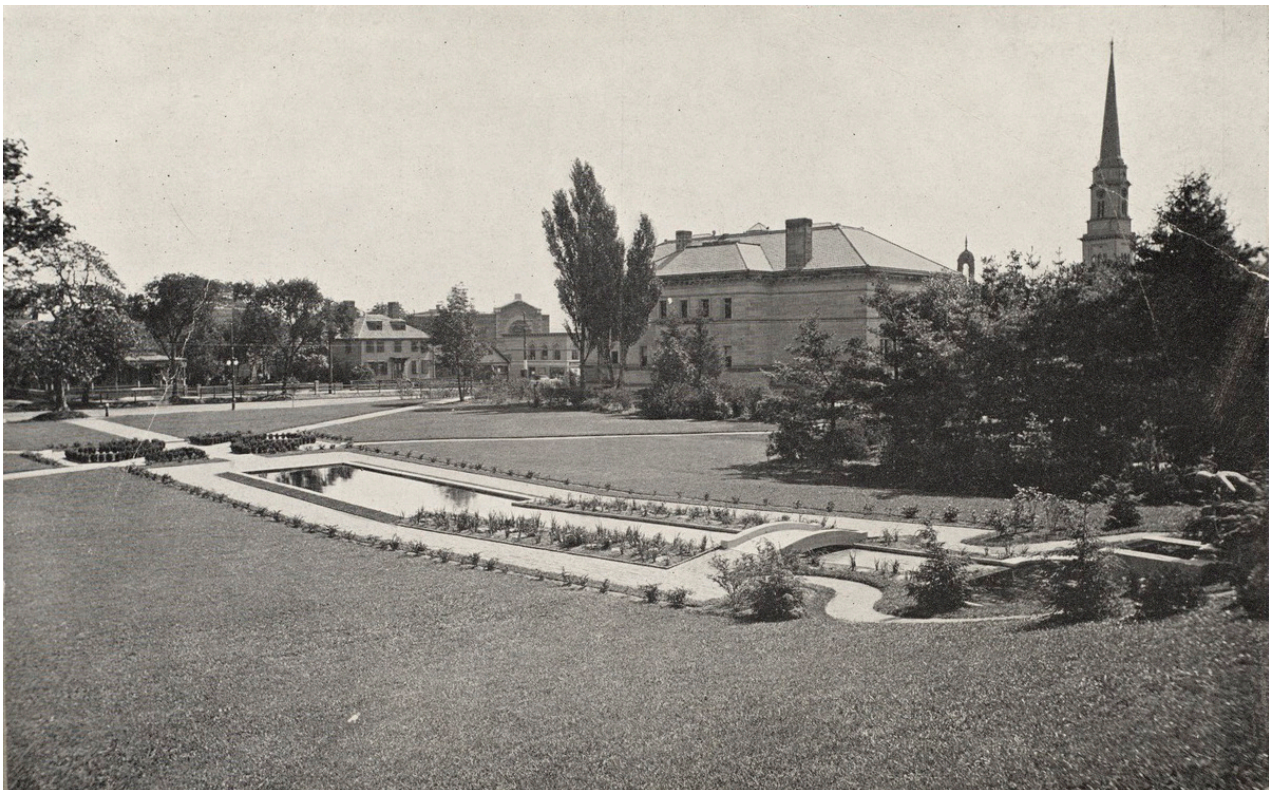


Image 2252-4, no date; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS



"Menotomy fountain, Town Hall Grounds, Arlington, Mass.", no date (circa 1913); Courtesy of Digital Commonwealth



"Winfield Robbins Memorial Garden.", circa 1911; Courtesy of Digital Commonwealth

“Indian Hunter, Robbins Memorial Garden” no date (circa 1913); Courtesy of Digital Commonwealth

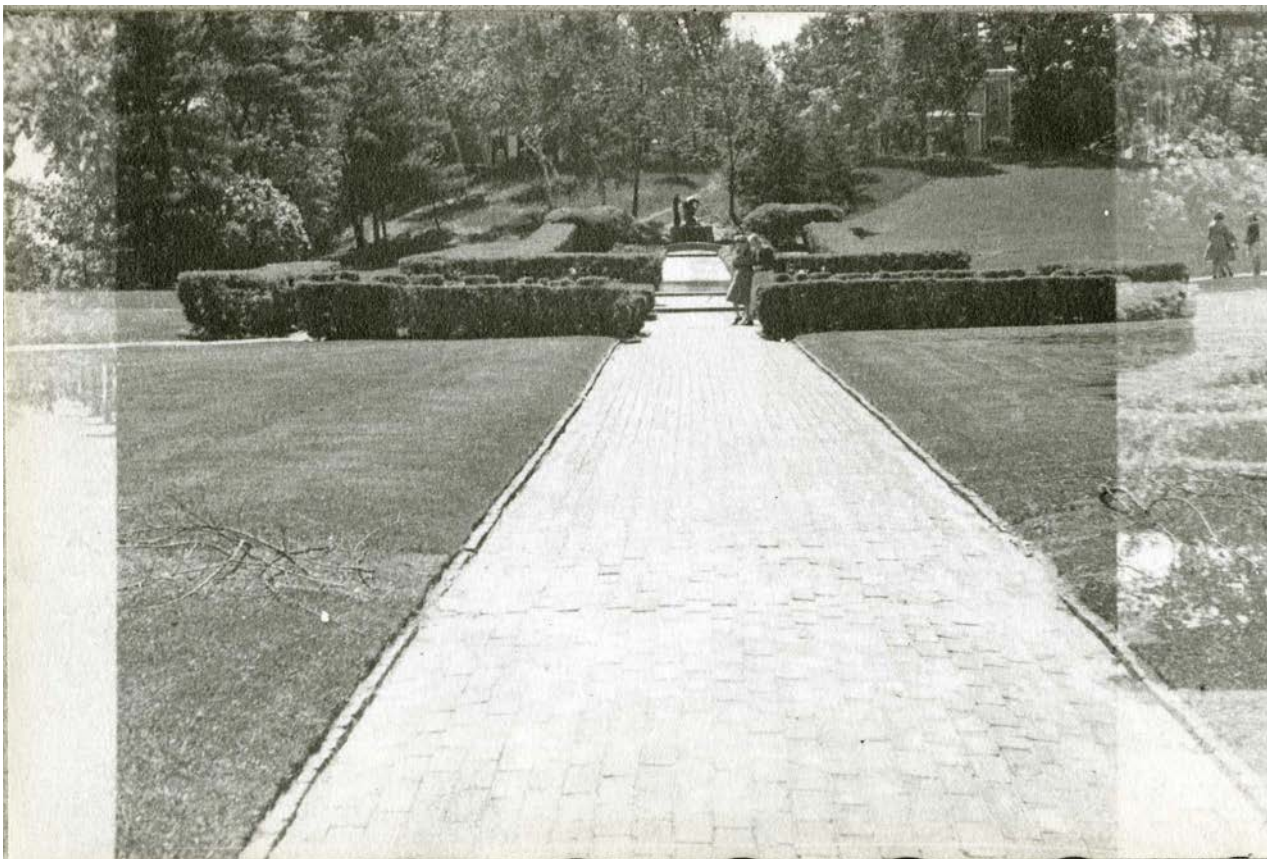
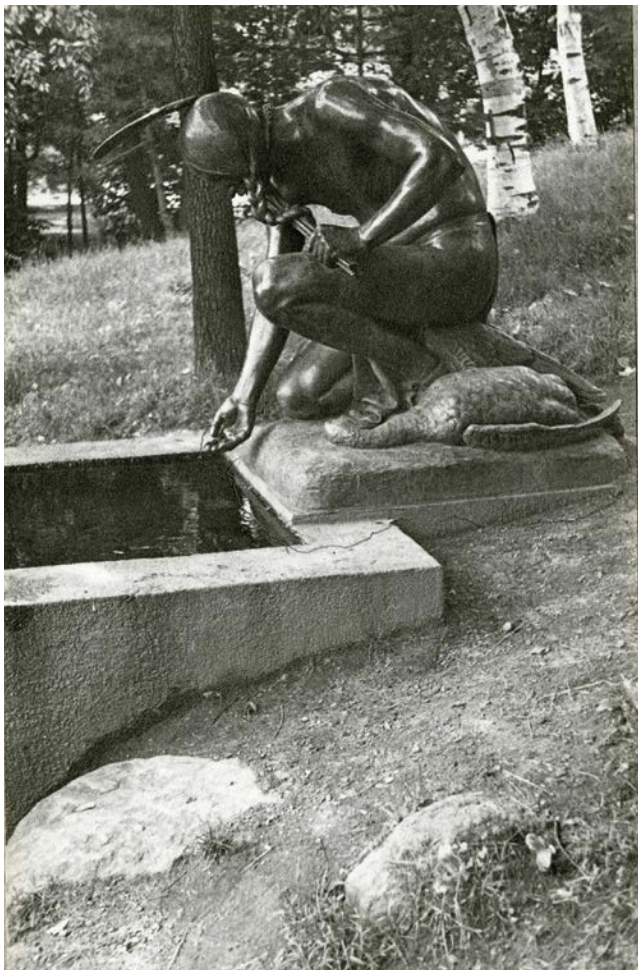


Image 2252-7, no date; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS

Image 2252-13, dated May 1938; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS



Images 2252-39 and 2252-44, dated July 1938; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS

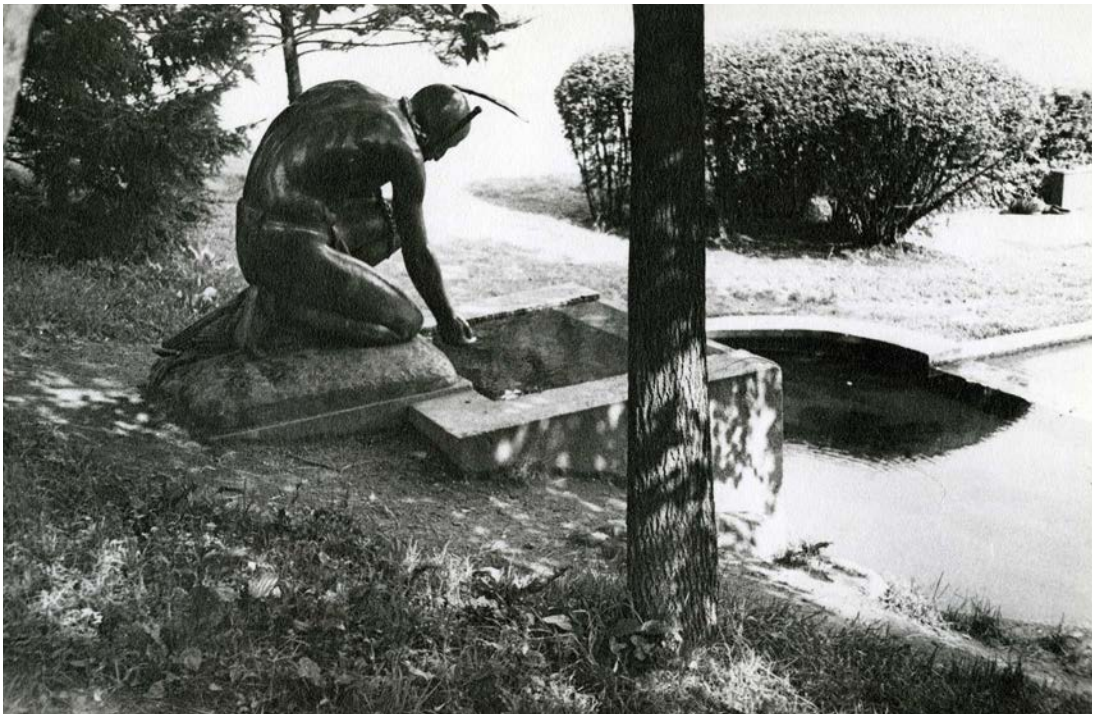


Image 2252-42, dated July 1938; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS

Image 2252-43, dated July 1938; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS

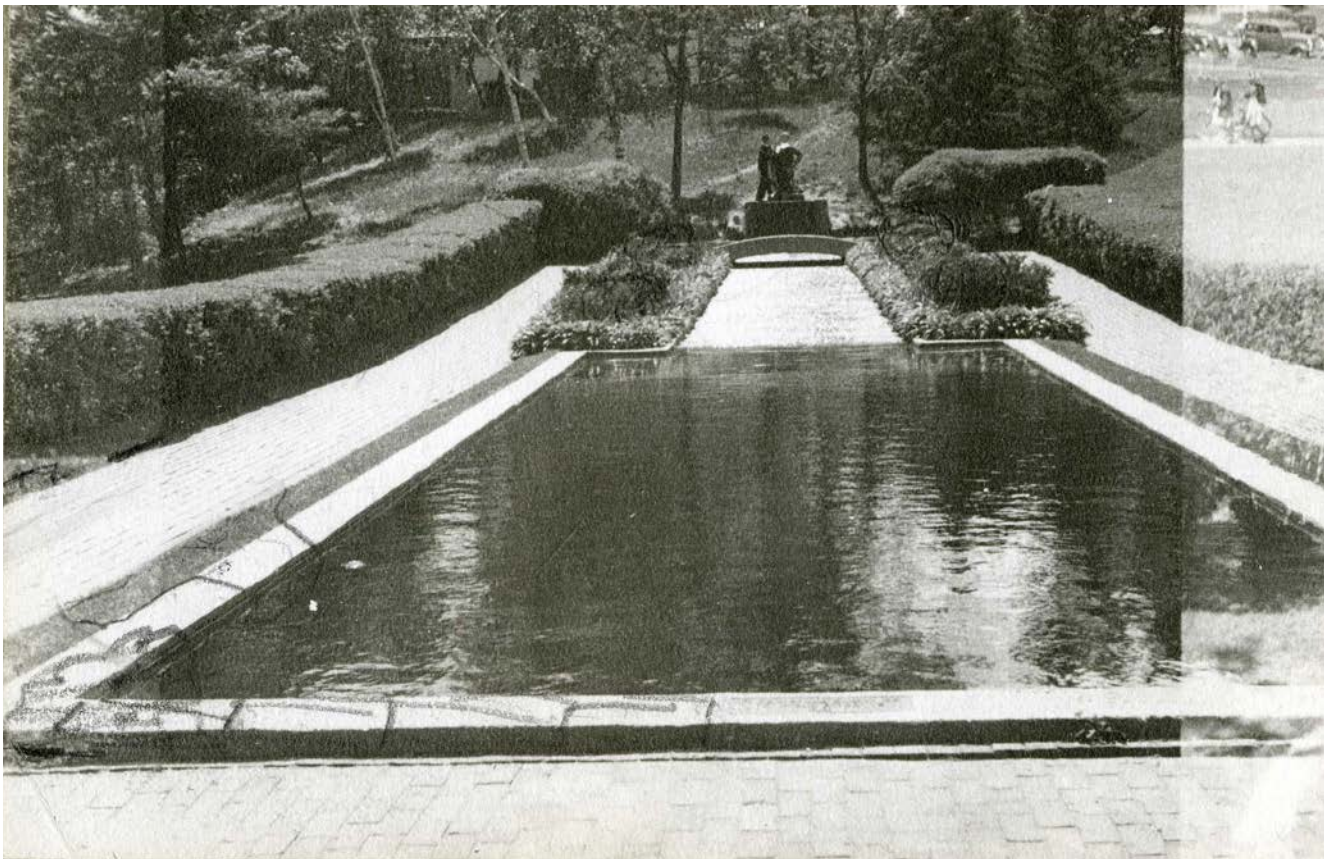


Image 2252-12, dated May 1938; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS

Image 2252-49,dated July 1938; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS

Image 2252-50, dated July 1938; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS

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Olmsted Brothers

In 1938, the Robbins sisters hired the renowned landscape architecture firm, Olmsted Brothers of Brookline, Massachusetts, to redesign the gardens in a more picturesque style. James ("Fred") F. Dawson worked for the Olmsted Brothers firm from 1896-1941. (The firm was named Olmsted, Olmsted, and Eliot when he started as an apprentice.) Dawson was the first associate partner to John Charles and Frederick Law Olmsted, Jr. He was the lead designer for the Winfield Robbins Memorial Gardens in Arlington; Leon Zach was also a partner with the firm and was included on much of the correspondence from the firm, especially when Dawson was traveling for other projects.

The Olmsted Brothers designs for the Town Hall gardens kept the key water features intact. In fact, a letter found in the Olmsted archives, Dawson to Henry Hornblower of Plymouth (a representative for the Robbins sisters) dated June 16,1938 states: "[...] we naturally hesitate to destroy or tear down existing features. Therefore, in making our recommendations we have tried to incorporate as many of the present features as seem consistent with the suggestions now being made." This letter continues to describe the plans for the renovation of the site, which are very consistent with the final plans and ultimate construction.

The ripple, the lower pool, and the brick walks flanking them remain unchanged. The sculpture's concrete base, the spring, and upper pool were rusticated with large boulders, and renovations included the addition of a rock spillway from the spring to the upper pool. The arched concrete bridge designed by Sturgis was replaced with bluestone stepping stones that cross the ripple and connect the brick walks. (The stepping stones are 12 inches by 24 inches bluestone.) The design also added the circular cobblestone walkway and boulder terrace behind the sculpture. Many of the Sturgis plantings were retained in the Olmsted Brothers design and created the backbone of the woodland planting palette.

An ensuing letter, dated July 14, 1938, from the firm to Hornblower added to the description of the improvements: "It would be nice to create a naturalistic setting for the 'Indian'; and instead of having him kneel on a flat concrete slab, have him kneel on a large natural boulder...". The idea of removing the concrete base was one of the few that was adamantly rejected by the Robbins sisters. (The rationale why this change to the base was rejected is unstated and the rejection doesn't appear in the records until a letter from Ida Robbins to the Olmsted Brothers on February 13, 1939.)

There are a number of plans from the Olmsted firm archives that are useful for understanding the design intent and development of the water features and surrounding gardens. These include:

- Plan No. 6 is entitled "Suggestions for Improving the Grounds", originally dated June 14, 1938; revised July 15, 1938. This is the first plan which shows design intent for the entire site. While some of the details changed prior to installation, the overall concept remains essentially unchanged. The plan shows a broad oval lawn adjacent to Massachusetts Avenue, and a brick forecourt to the north of the existing water feature. The water feature remains with slight changes, some of which were not implemented. The planting concept is similar to the final planting which includes "white pines, cedars, etc." to the south and "dogwoods and birches and rhododendrons" behind the sculpture. The border planting lining the brick walks, lower pool, and spillway are in their final form and labeled as "dogwoods, azaleas, etc."

- Plan No. 8-A is entitled “Suggested Treatment for Natural Setting of Bronze Indian”, dated July 19, 1938. The sketch shows the sculpture in the upper pool with the rustication of the concrete pools with boulders, including the stone spillway from upper to lower pool. The vegetation frames the sculpture with mid-level shrubs surrounding the pools. To the rear of the sculpture is the boulder wall, which contains the circular walk where the drawings suggest birch trees and some shrubs.
- Plan No. 8-B has the same title and date as Plan No. 8-A but shows a different view, from the northwest of the sculpture. The planting and rustication are the same, with the one significant change being the addition of a (presumably) wrought iron fence behind the sculpture.
- Plan No. 16-A is entitled “Planting Plan”, dated May 18, 1939 with a final revision date of September 15, 1939. This is the final planting plan for the project, and as such, the landscape elements reflect the final design intent. The plan includes the bluestone stepping stones, the circular walkway, the rusticated upper pools, and the benches.
- Plan No. 16-B is entitled “Planting Plan – Vicinity of Indian”, dated May 26, 1939 with a final revision date of July 19, 1939. This is an enlargement of the areas within the circular walkway.
- Plan No. 19 is entitled “Grading Plan”, dated November 1, 1938 with a final revision date July 19, 1939. The grading plan reveals that the “brick platform”—referred to herein as the brick forecourt—is new construction. Some bricks were re-laid and half of it is a new surface with new bricks. This plan also shows a fence behind the sculpture.
- Plan No. 21 is entitled “Detail of the Boulder Work around Indian”, dated November 7, 1938. This shows the rustic intent of the upper and middle pools that is created by overlaying the existing concrete pools with fieldstone. Some of the detail shown on this plan was not implemented. The plan suggests replacing the sculpture’s concrete plinth with a large boulder and shifting the sculpture close to the “spring”; this was not undertaken, nor was a fence installed behind the sculpture.
- Plan No. 25 is entitled “Details for the Wall near Pool and Pool Coping”, dated December 7, 1938. Section A-B on this plan shows the detail of the lower pool coping. It shows a 13 1/2-inch wide bluestone coping and notes only a 3/4-inch overhang on both sides. (This is consistent with the 12-inch wide concrete walls in the Sturgis plans.) The plan on this sheet also notes a plaque: “Remove bronze plaque from existing concrete and reset on this piece of bluestone coping.” This plaque is not on site today, but it does appear in a photo from 1938.
- Plan No. 33 is entitled “Study Showing Stone Sizes near Indian”, dated February 27, 1938. This plan shows the intended layout of the boulders covering the concrete pools. It also shows that the Sturgis “spring” was eliminated and replaced with the larger upper pool that was also constructed of concrete. Dimensions are not included, but it is approximately three-quarters the size of the middle pool. The plan shows the bluestone stepping stones.
- Plan No. 45 is entitled “Layout Plan for Floodlights”, dated December 13, 1939. The plan shows the layout for the underground cable, winding through what appears to be existing shrubs to both sides of the upper pool. The conduit comes from Town Hall through yews, hemlocks, blueberry bushes, and mountain laurel.
- Plan No. 49 sheets 1 and 2 are updates of the planting plan labeled “Notes by J.F.D. and G.W. during visit July 26, 1940”. These plans are updates to the original installation work, and note plants that had died and needed to be replaced.

- Plan No. 50 is entitled “Plan Showing Location of Fence (Rear of Indian)”, dated July 30, 1940. This sketch makes recommendations for a wicket fence to be placed along the “existing Belgium block walk” which is backed with a “prickly hedge” presumably to keep people away from the sculpture. Another addition includes a “proposed Belgium block walk which extends from the circular walk to the rear of the sculpture. It extends to two feet away from the sculpture and includes the same wicket fence (detailed in Plan No. 51). The side of the plan includes two sections with studies of two fence types: one appears to be similar to the fence shown in Plan No. 8-B and is labeled “wrought iron rail”, the second is a chain link fence.
- Plan No. 53 is a copy of enlargement Plan No. 16-B, with notes dated September 19, 1941. It includes revisions to the area within the circular walkway which adds “flat natural stones for path; adjust planting here”. The path extends from the benches to the middle pool. To the rear of the sculpture, the notes state: “leave wicket fence here on each side; pave with flat natural stones (not flag); put in 2 or 3 taxus (dwarf nana) each side and adjust other planting”.

Plans continued to be developed through 1940 and 1941 showing proposed changes around the sculpture. It is clear that visitors have always wanted to be in proximity to the sculpture and not to just view it from afar. The Olmsted firm proposed fencing for the rear of the sculpture, an overlook from the cobblestone circular walk, wicket fencing along the circular walk, “keep out” signs for the planting areas, and even prickly shrub plantings to keep visitors out of the areas immediately adjacent to the sculpture. It is also worth noting that the 1938 photographs show desire lines and compacted earth with little or no vegetation immediately around the sculpture. This has clearly been a persistent issue.

The firm also made repeated visits to the site in September and October 1939, July 1940, and, May and September 1941, to review plant materials that had died and/or needed to be replaced.

The Olmsted Associates Records archived by the Library of Congress (the firm’s archived records from its inception by Frederick Law Olmsted, Sr, in 1863 until its closure in 1971) contains correspondence that helps to fill in the intent behind some of the design changes. Key findings pertinent to this project from these letters include the following excerpts:

- July 14, 1938, letter from Mr. Dawson to Mr. Hornblower:
  “I think it would be advisable to separate the school property above from this property by the introduction of a wire fence (mostly hidden by plantings of trees, shrubs and vines).”
- October 13, 1938, report of visit by Mr. Zach:
  Records approval of the proposed plans by the Town of Arlington Selectmen and authorization to proceed with “the necessary plans to carry out the work, survey, construction, grading and planting plans”.
- January 13, 1939, letter from Mr. Dawson to Miss Robbins:
  Relaying that the firm has reviewed the plan revisions with Dallin and he has given his approval for the change in setting.

- Revised Specifications to Accompany Plans for Improvements, January 1939:
"Section 13. Bluestone Pool Coping. A split-faced bluestone coping two (2) inches thick shall be installed on the concrete wall of the lower rectangular pool, in accordance with detail drawings. The top of the concrete wall shall first be cut down approximately four inches as directed by the Landscape Architects." The cutting of the pool wall reduces the depth from 2 feet 3 inches to 1 foot 11 inches plus the 2-inch coping stone.
- February 23, 1939, letter from Mr. Dawson to Miss Robbins:
"The reason that we showed the fence was because the town authorities stated that they were having much trouble with boys running through there and trying to disturb the statue. In fact, I saw one boy standing on the hand of the Indian, trying to break it off. The end of the bow has been broken twice, and it now has to be replaced again."
- April 12, 1939, report of visit by Mr. Marquis of the Olmsted Brothers:
"Top has been taken off of large rectangular pool walls. McLeod says Hamilton [contractor] will not order bluestone for this coping until he finds whether the pool walls are to be straightened up in any way. I wonder whether we should not consider covering the base and sides of this pool with gunite to make it water tight and correct the lines..."
Mr. Francis Hamilton appears to be the project manager or superintendent for the contractor, James Driscoll & Son, Inc. of Brookline, MA. On April 20th, a proposal was submitted to Mr. Hamilton from the National Gunite Contracting Co. to line the bottom, face, and top of the wall. Further follow-up on this proposal was not uncovered in the records.
- June 12, 1939 letter from Mr. Woodberry to Mr. Hamilton:
This letter requests an order for bluestone for the project. The twelve stepping stones were included at "4 inches thick, 13 inches wide and 24 inches long". These dimensions differ from today's stepping stones, which are only 2 inches thick. It was noted that a piece 1-1/2 inches thick, 16 inches wide and 5 feet 11 inches long was "to be set at the head of the ripple cascade where it joins the lower pool just below the Indian". This piece was installed and appears in image 2252-78 from the Olmsted Associates Records. It is likely that it was broken as it is thin and long would easily succumb to flexural stresses.
- September 26, 1939, letter from Mr. Dawson to Mr. Hornblower:
This letter describes the site visit on September 22nd by Dawson and Dallin to review the project work. Dallin was concerned that the sculpture had been lowered as the height of the water was closer to the hand of the sculpture. In actuality, the water level had been elevated by recreating the spring, in part, to cover the joint where the bronze sculpture meets the concrete base. Dallin was "quite relieved".
- October 25, 1939, letter from Mr. Dawson to Mr. Hornblower:
A follow-up site visit with Dallin and Dawson after the firm had a stone cutter work on the stone and concrete so that the water level was reduced 3/4 of an inch and lowered the water in the lower pool by 2-1/2 inches. "...Mr. Dallin stated that it looked much better and as far as he was concerned, he was satisfied".

- June 13, 1940, letter from Mr. Dawson to Mr. Hornblower:
  The letter makes mention that the pool was repaired and repainted (the letter does not make clear which pool), that flood lights were installed around the sculpture, and that certain plants needed to be replaced, including one of the hemlocks flanking the sculpture. The continuing problem with visitors trampling plants around the sculpture trying to get closer, was also mentioned. Apparently, low, spreading junipers planted to the rear of the sculpture had been broken, and Dawson was proposing the installation of a fence behind the sculpture (again).
- July 29, 1940, letter from Mr. Dawson to Mr. Hornblower:
  Dawson expands the recommendation to install a 4-foot fence to the rear of the sculpture, as well as a spur from the cobblestone pathway that extends 6 to 8 feet wide just behind the sculpture. This revision was shown in Plan No. 50 which was provided in a follow-up letter between the same parties on September 13, 1940.
- October 22, 1940, letter from Wendell Mick to Mr. Dawson:
  Mick reports that Miss Robbins did not approve of the fence behind the Indian, stating it was "inartistic and not in keeping with the rustic setting". However, on November 20, 1940, a letter from Mr. Hamilton states that they have ordered 100 wickets and are beginning to remove the plants in the area for the installation of the cobblestones.
- September 23, 1941, letter from Mr. Marquis to Mr. Mick:
  The wickets and cobblestone installed in the spring of 1941 were not been successful in keeping visitors from trampling the plants. The final proposal recommends removing the wicket fence and cobblestones and replacing them with "flat-topped field stones". It also recommends moving the flood lights and plantings away from the upper pool so that visitors can walk around the sculpture; the same flat-topped fieldstone that was used in the stepping stone walkway from the benches and extending up around the pool; and, removing one of the walnut trees that was crowding a birch tree.

The annual Town Report from 1939 declared the rehabilitated Winfield Robbins Memorial Gardens to be an "informal, woodsy and rocky environment and a naturalistic planting as a backdrop to the Indian."

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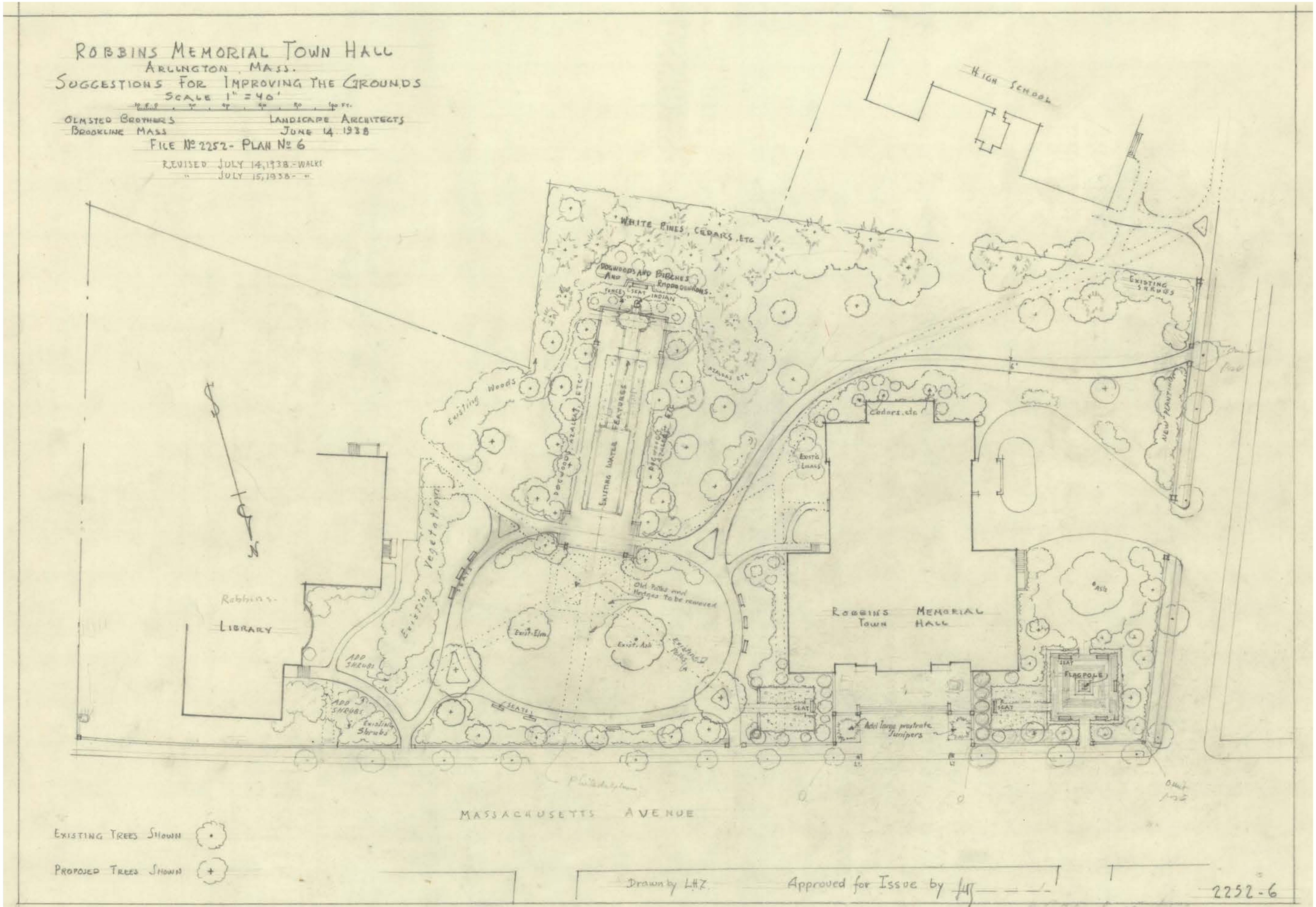
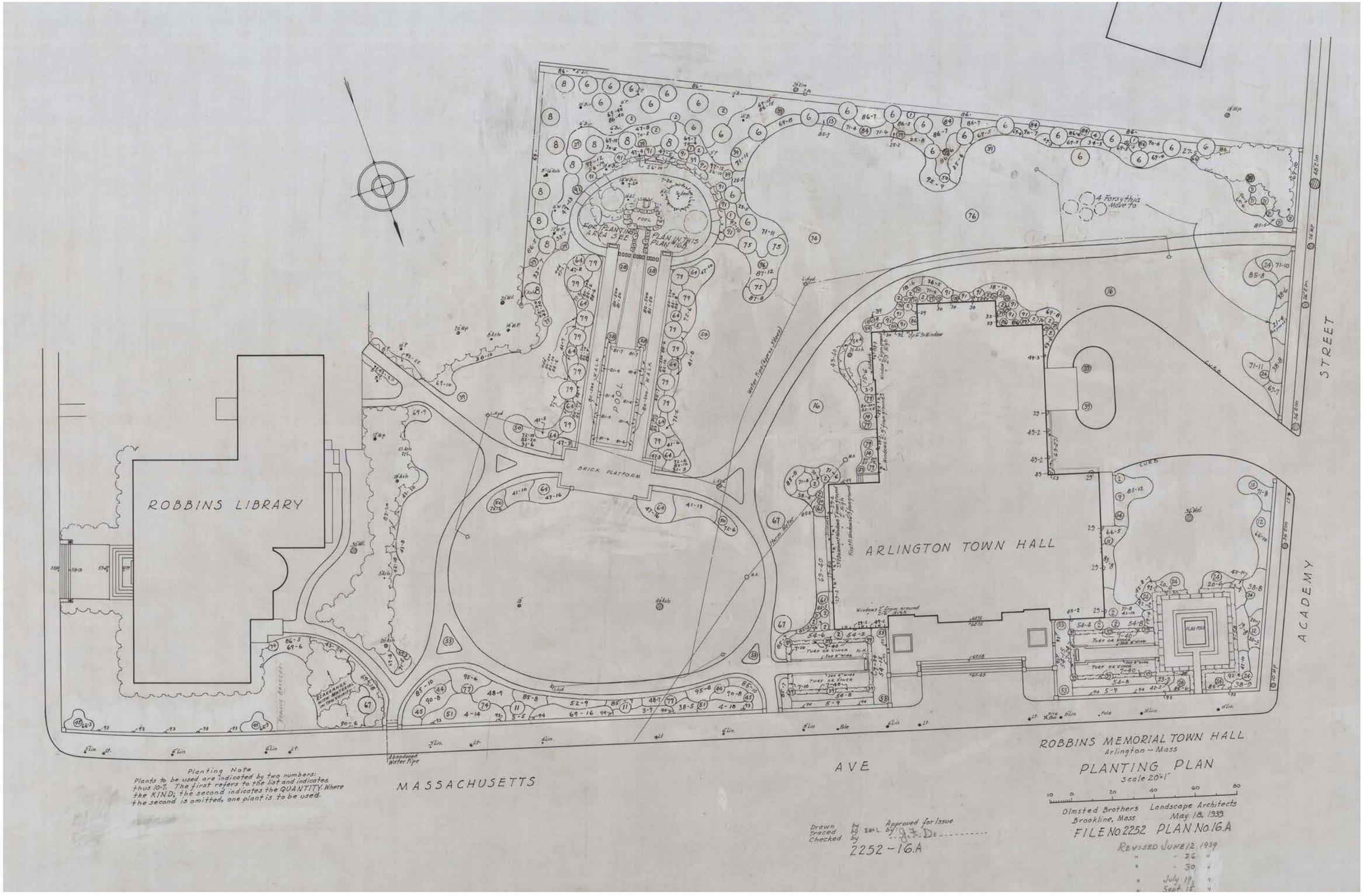


ROBBINS MEMORIAL TOWN HALL
ARLINGTON, MASS.
SUGGESTIONS FOR IMPROVING THE GROUNDS
SCALE 1" = 40'
OLMSTED BROTHERS
BROOKLINE MASS
LANDSCAPE ARCHITECTS
JUNE 14. 1938
FILE Nº 2252 - PLAN Nº 6
REVISED JULY 14, 1938. - WALKS
" JULY 15, 1938 - "
HIGH SCHOOL
WHITE PINES, CEDARS, ETC
EXISTING SHRUBS
NEW PLANTING
Existing Woods
Existing Vegetation
EXISTING WATER FEATURES
Cedars, etc
ROBBINS MEMORIAL TOWN HALL
FLAGPOLE
Robbins LIBRARY
Old Paths and Hedges to be removed
Exist. Elm
Exist. Ash
ADD SHRUBS
Existing Shrubs
Add large prostrate Junipers
SEAT
MASSACHUSETTS AVENUE
EXISTING TREES SHOWN
PROPOSED TREES SHOWN
Drawn by LHZ
Approved for Issue by
2252-6

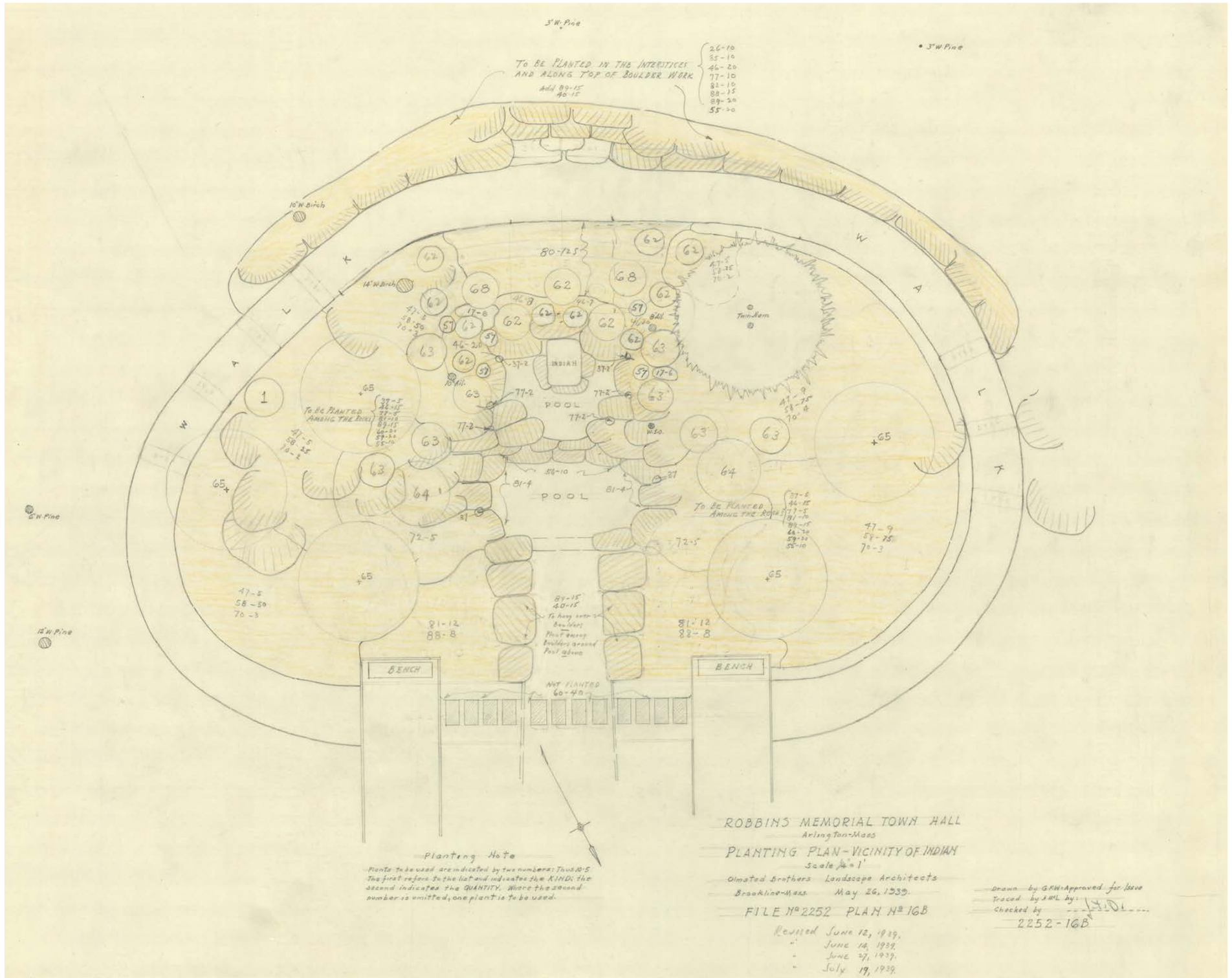
Olmsted Plan No. 6, "Suggestions for Improving the Grounds", originally dated June 14, 1938; revised July 15, 1938; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS

Olmsted Plan No. 8-A, "Suggested Treatment for Natural Setting of Bronze Indian", dated July 19, 1938; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS

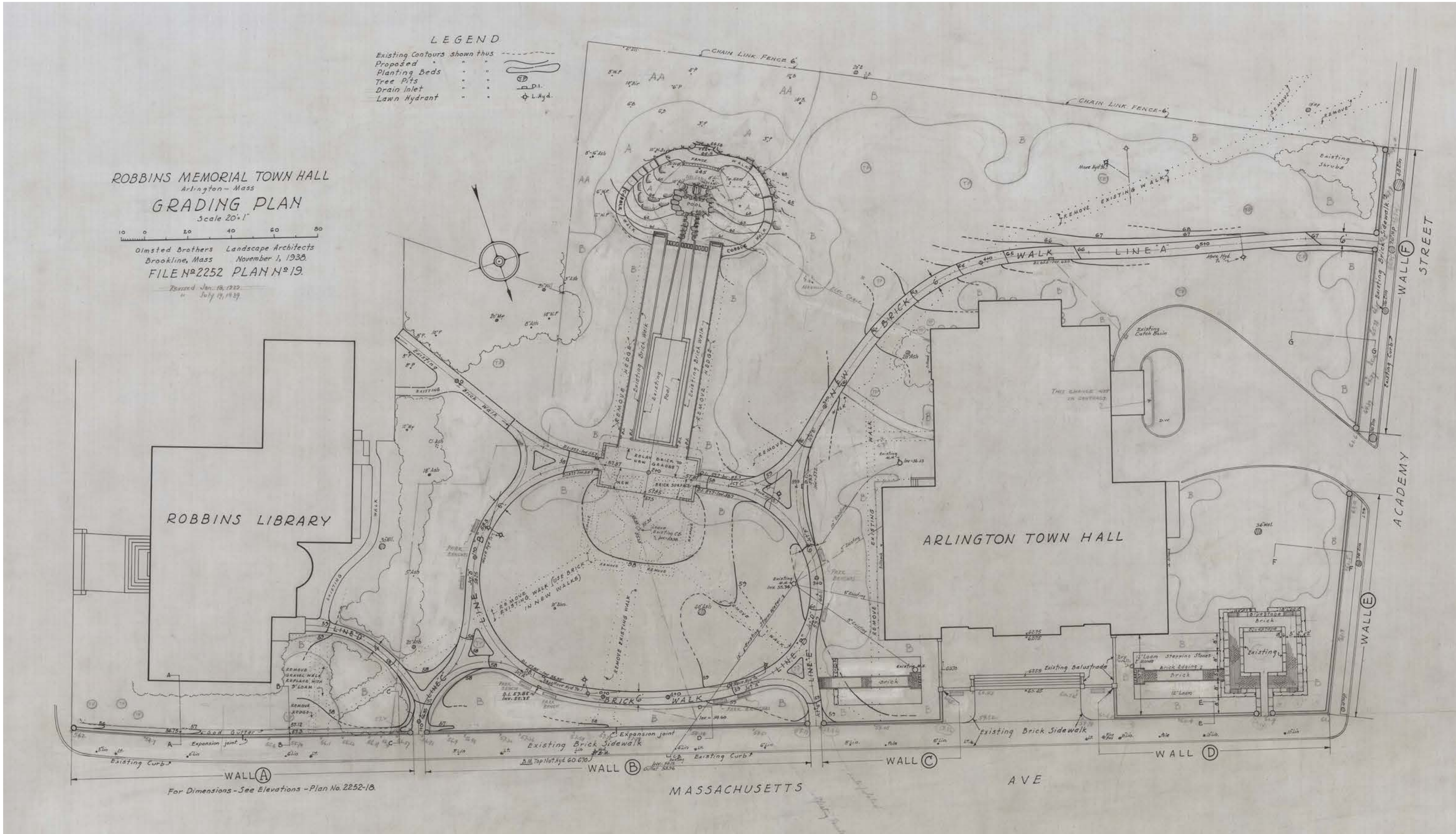
Olmsted Plan No. 8-B, "Suggested Treatment for Natural Setting of Bronze Indian", dated July 19, 1938; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS



Olmsted Plan No. 16-A, "Planting Plan", dated May 18, 1938, revised September 15, 1939; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS

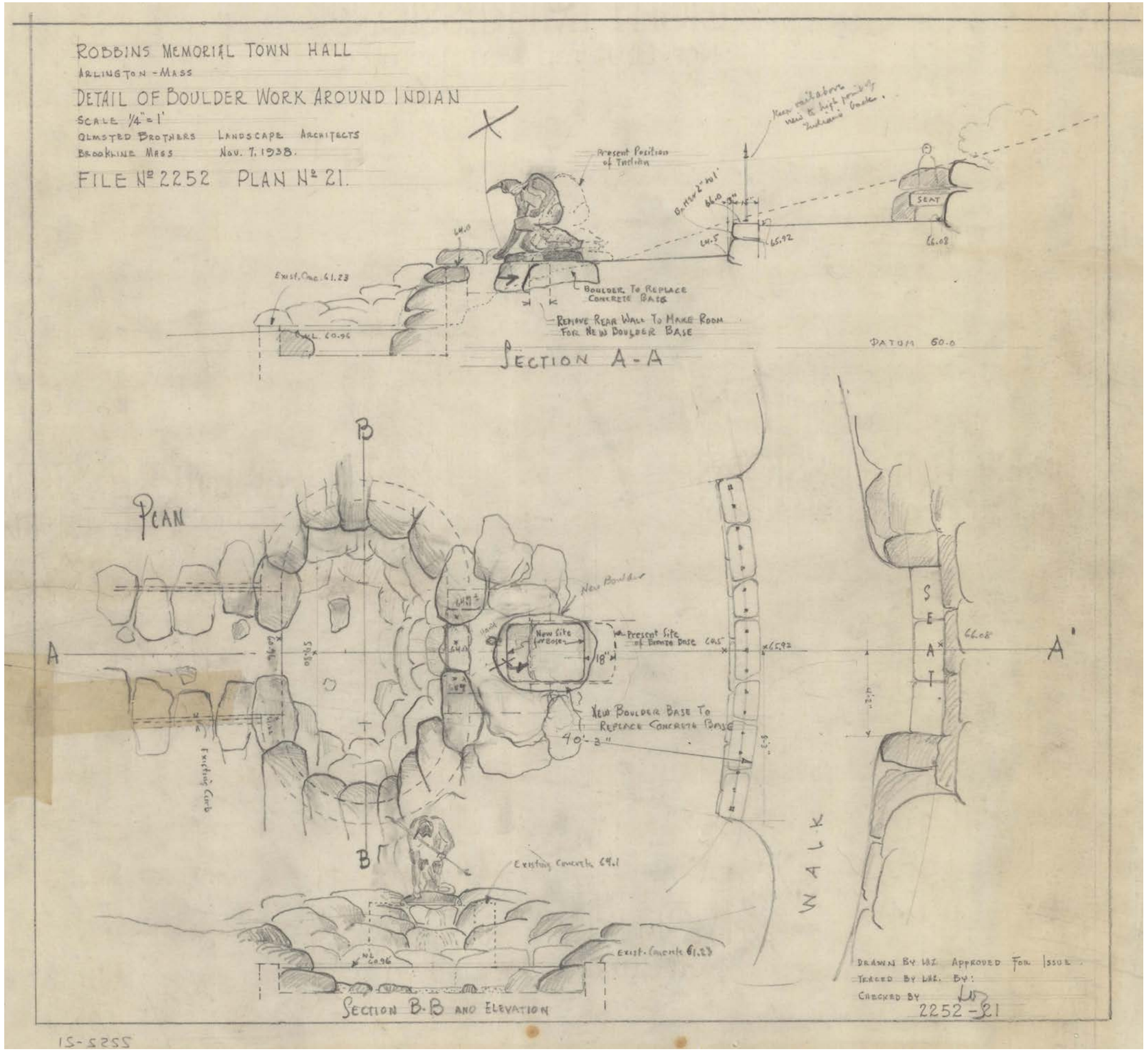


Olmsted Plan No. 16-B, "Planting Plan—Vicinity of Indian", dated May 26, 1939, revised July 19, 1939; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS

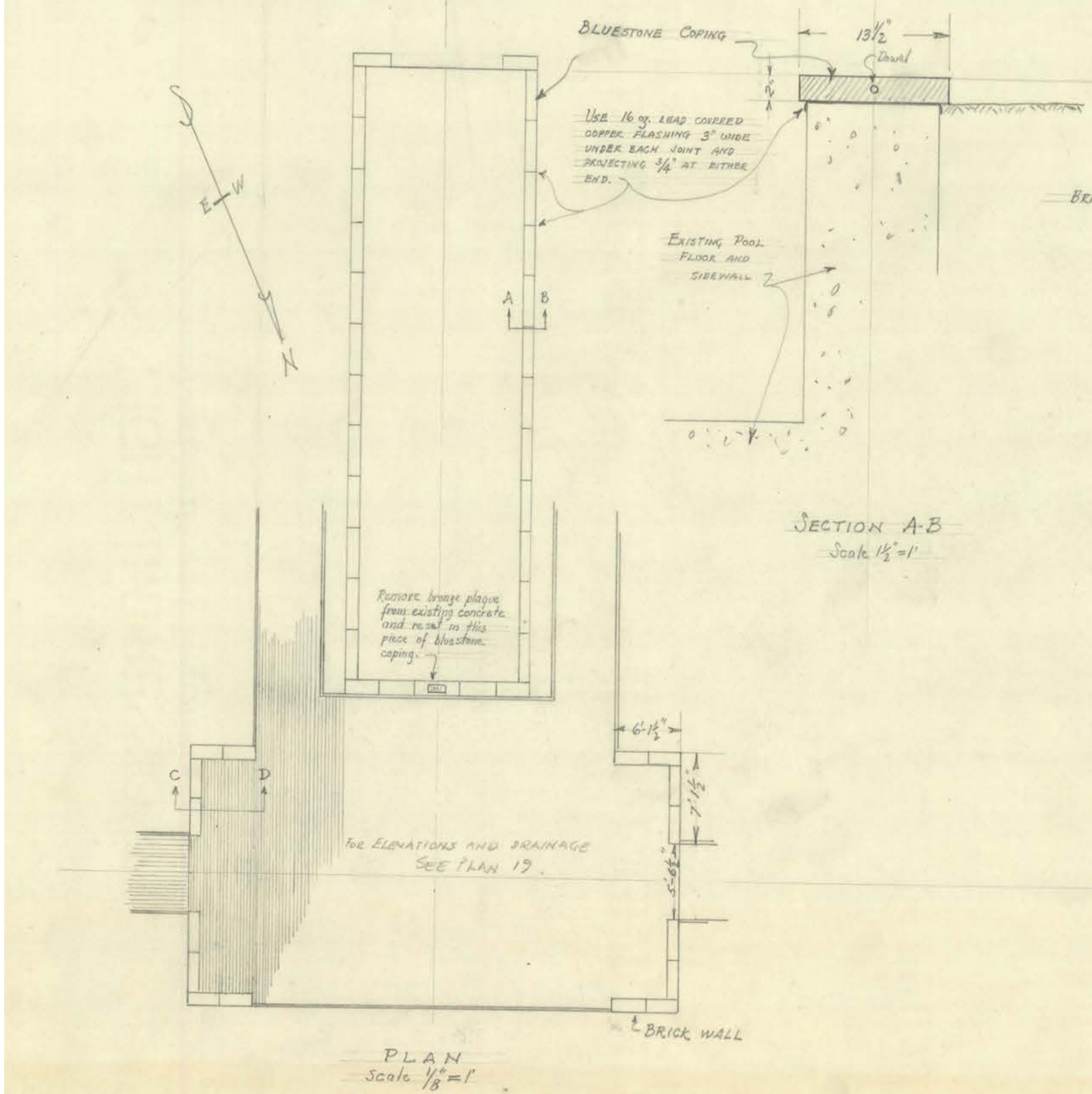


LEGEND
Existing Contours shown thus
Proposed
Planting Beds
Tree Pits
Drain Inlet
Lawn Hydrant
ROBBINS MEMORIAL TOWN HALL
Arlington - Mass
GRADING PLAN
Scale 20=1"
10 0 20 40 60 80
Olmsted Brothers Landscape Architects
Brookline, Mass November 1, 1938
FILE No 2252 PLAN No 19
CHAIN LINK FENCE 6'
ROBBINS LIBRARY
ARLINGTON TOWN HALL
BRICK WALK
LINE A
LINE B
LINE C
LINE D
LINE E
Existing Brick Sidewalk
Existing Curb
WALL A
WALL B
WALL C
WALL D
WALL E
WALL F
ACADEMY STREET
MASSACHUSETTS AVE
For Dimensions - See Elevations - Plan No. 2252-18.

Olmsted Plan No. 19, "Grading Plan", dated November 1, 1938 with a final revision date July 19, 1938; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS

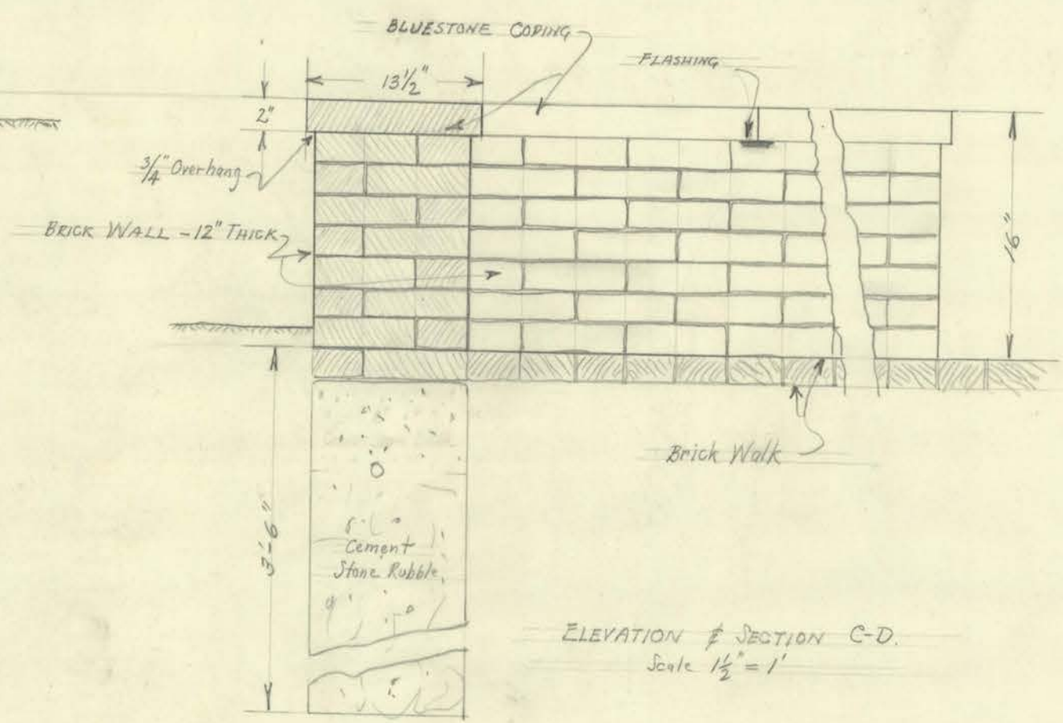


Olmsted Plan No. 21, "Detail of the Boulder Work around Indian", dated November 7, 1938; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS



SECTION A-B
Scale 1½"=1'

PLAN
Scale ⅛"=1'



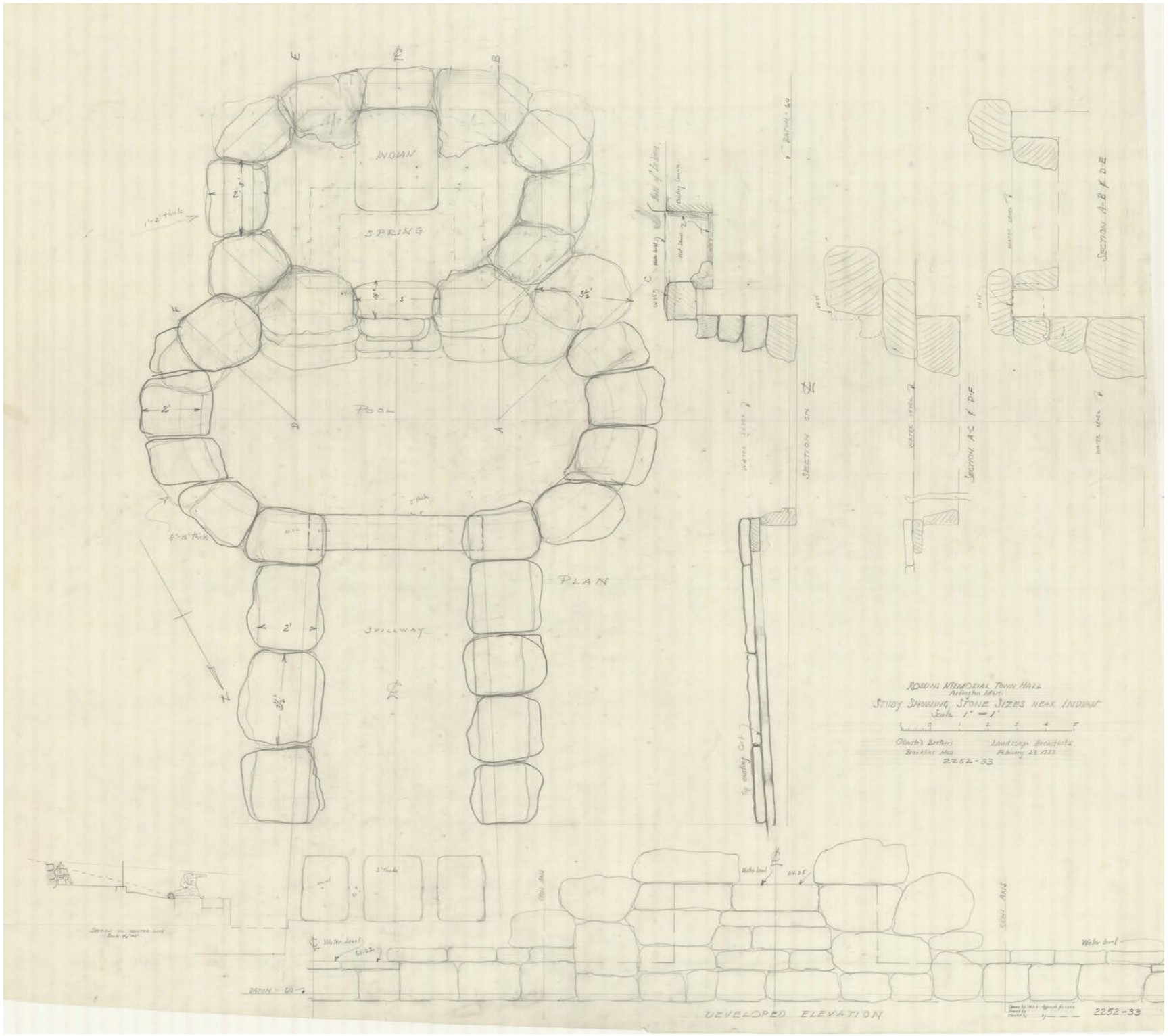
ELEVATION & SECTION C-D.
Scale 1½"=1'

ROBBINS MEMORIAL TOWN HALL
ARLINGTON MASS.
DETAILS FOR WALL NEAR POOL AND POOL COPING
Scales ⅛" & 1½"=1'

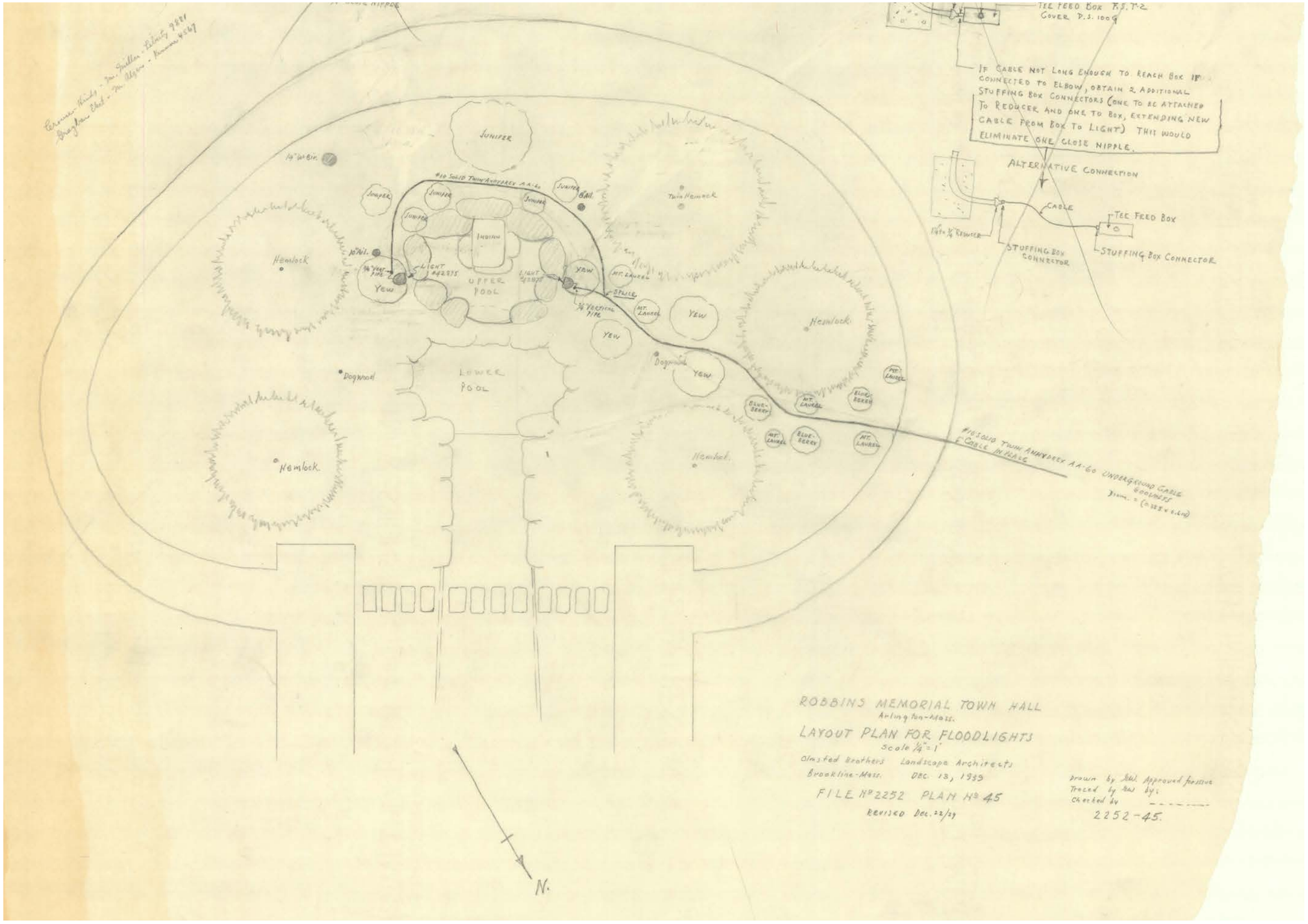
Olmsted Brothers Landscape Architects
Brookline Mass. Dec. 7, 1938.
FILE N° 2252 - PLAN N° 25

Drawn by M.F.S. Approved for issue
Traced by
Checked by C.Z. by ———
2252 - 25

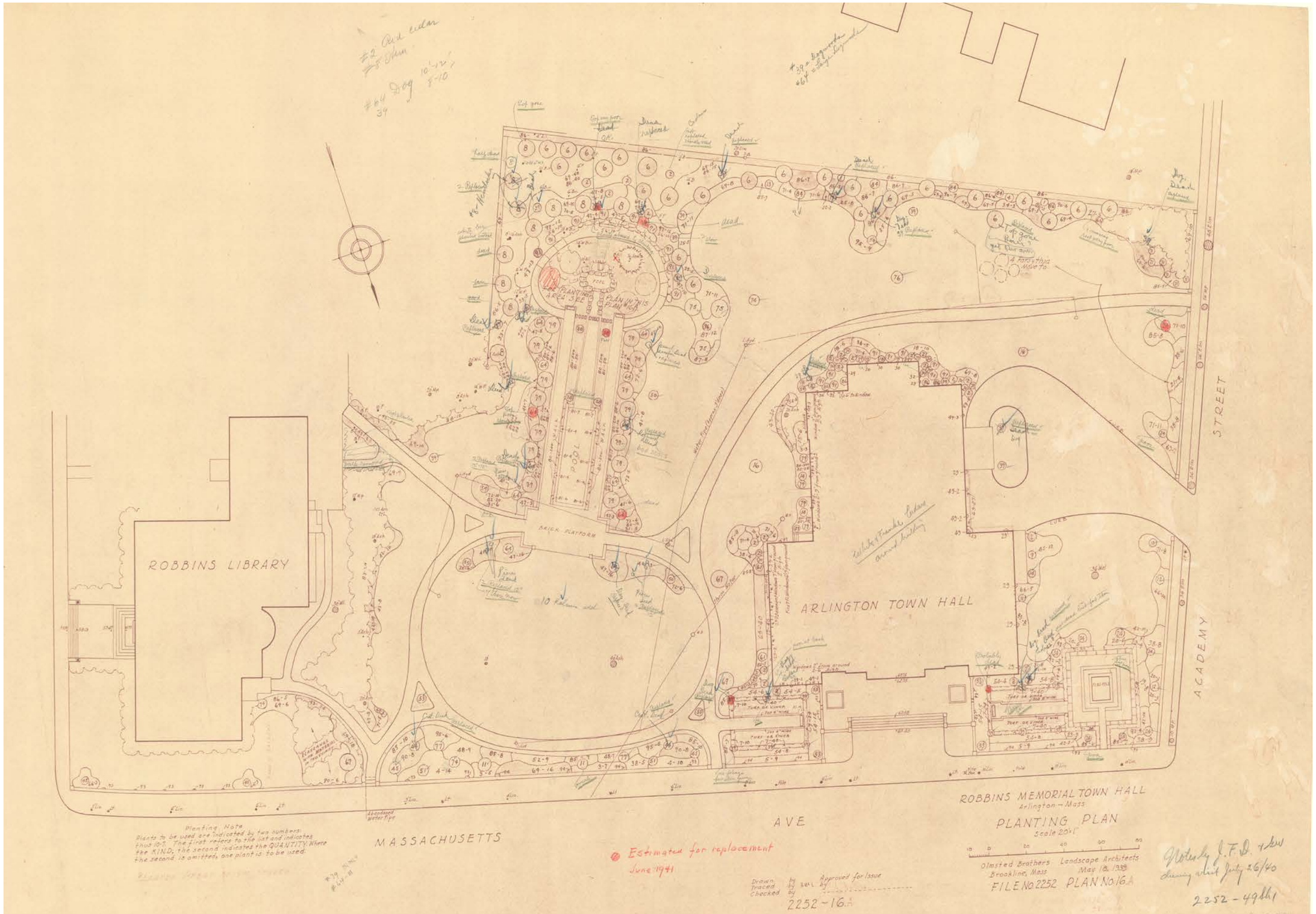
Olmsted Plan No. 25, "Details for the Wall near Pool and Pool Coping", dated December 7, 1938; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS



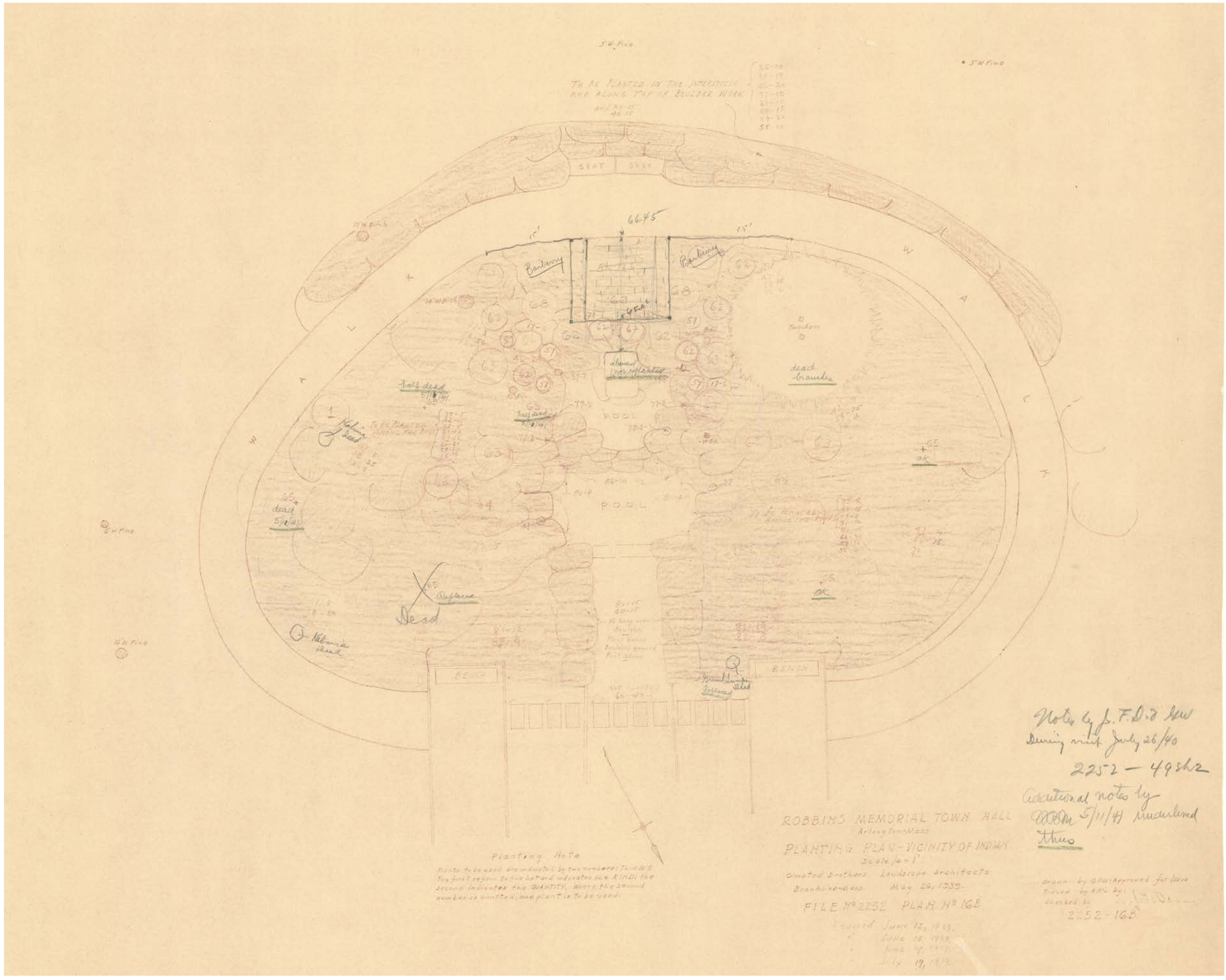
Olmsted Plan No. 33, "Study Showing Stone Sizes near Indian", dated February 27, 1938; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS



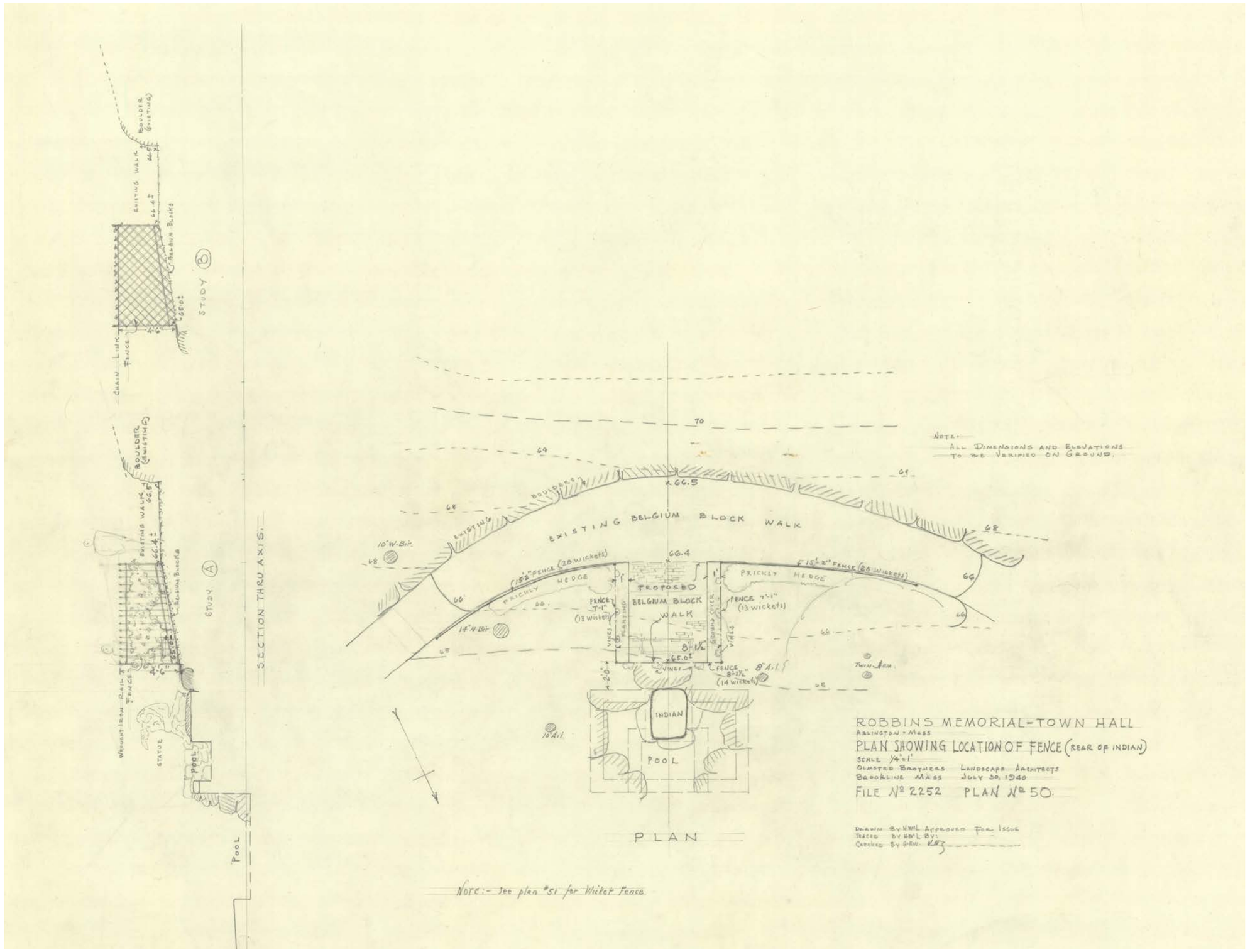
Olmsted Plan No. 45, "Layout Plan for Floodlights", dated December 13, 1939; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS



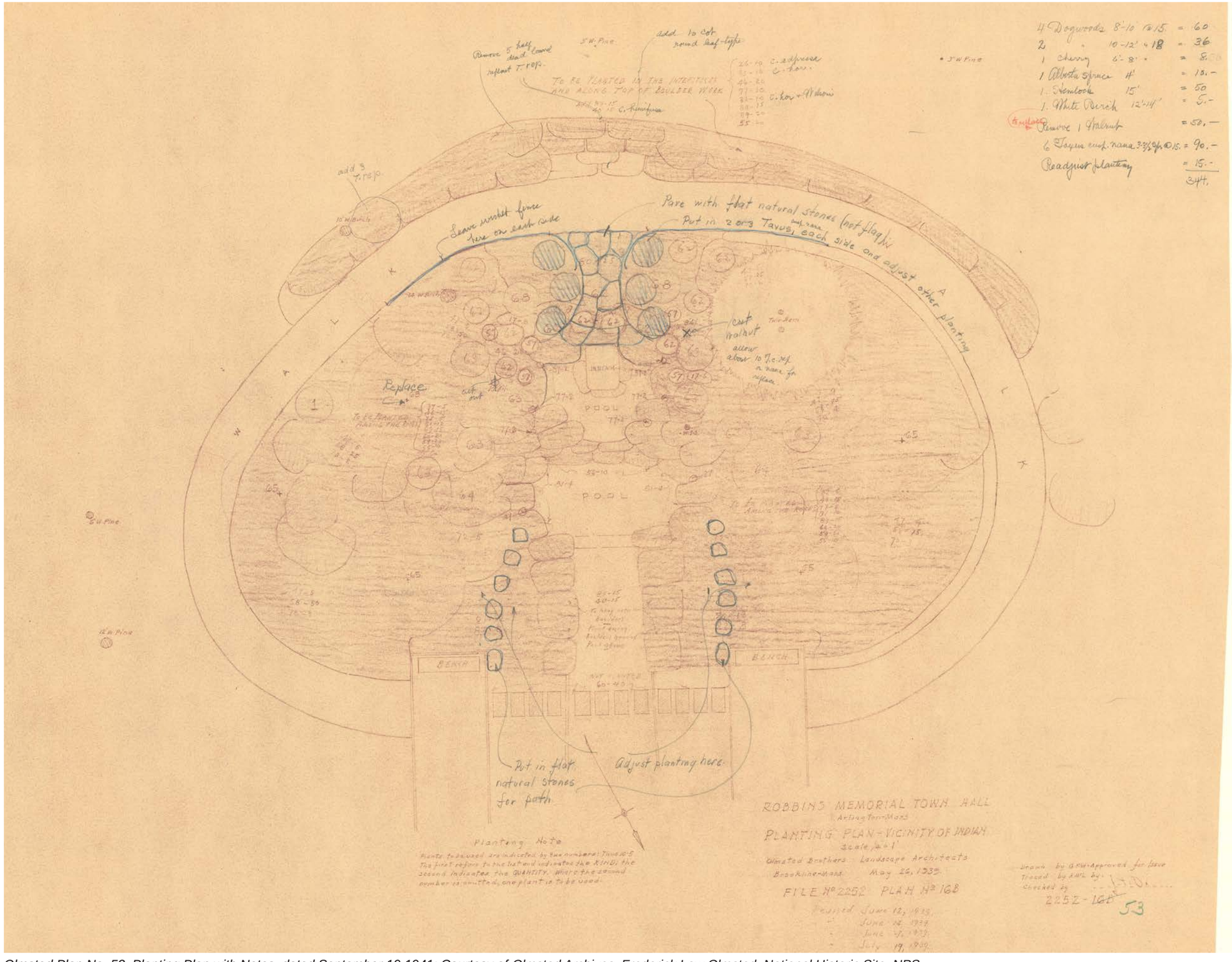
Olmsted Plan No. 49, Sheet 1, Planting plan with "Notes by J.F.D. and G.W. during visit July 26, 1940; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS



Olmsted Plan No. 49, Sheet 2, Planting plan with "Notes by J.F.D. and G.W. during visit July 26, 1940; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS



Olmsted Plan No. 50, "Plan Showing Location of Fence (Rear of Indian)", dated July 30, 1940; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS



Olmsted Plan No. 53, Planting Plan with Notes, dated September 19,1941; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS

ROBBINS MEMORIAL
Town Hall
Arlington, Massachusetts

TO ACCOMPANY PLANS 16A and 16B
File No. 2252

Olmsted Brothers,
Landscape Architects.

Brookline, Mass.
July 1939

1. Betula papyrifera
   Canoe Birch

2. Juniperus virginiana
   Redcedar

3. Philadelphus Bouquet Blanc, 4' apart
   Hybrid Mockorange

4. Philadelphus coronarius
   Fragrant Mockorange

5. Philadelphus Virginal
   Hybrid Mockorange

6. Pinus strobus
   White Pine

7. Berberis thunbergi
   Japanese Barberry

8. Tsuga canadensis
   Canada Hemlock

9. Prunus subhirtella
   Higan Cherry

10. Prunus subhirtella pendula
    Weeping Japanese Cherry

11. Prunus James H. Veitch
    Japanese Cherry - pink

12. Prunus Kwanzan
Japanese Cherry - bright pink

13. Prunus Shirofugen
Japanese Cherry - light pink

14. Prunus Amayadori
Japanese Cherry - double, white

15. Viburnum dentatum
Arrowwood

16. Prunus subhirtella autumnalis
Autumn-flowering Japanese Cherry

17. Beds, Plants

Hemerocallis fulva
Tawny Daylily

Hemerocallis thunbergi
Japanese Daylily

18. Cotoneaster racemiflora soongarica
Cotoneaster

19. Viburnum carlesi
Fragrant Viburnum

20. Deutzia scabra Pride of Rochester
Hybrid Deutzia

21. Forsythia

22. Beds, Plants

Myrica carolinensis
Northern Bayberry

Rhododendron wilsoni
Wilson Rhododendron

23. Syringa Marie Le Graye
Hybrid Lilac - single, white

24. Prunus Amanogawa
Japanese Cherry - pale pink

25. Rosa spinosissima in variety
Scotch Rose

26. Cotoneaster adpressa
Creeping Cotoneaster

27. Hypericum aureum
Golden St. Johnswort

28. Picea albertiana
Alberta Spruce

29. Hedera helix baltica
Baltic Ivy

30. Euonymus radicans vegetus
Bigleaf Wintercreeper

31. Myrica carolinensis
Northern Bayberry

32. Ampelopsis quinquefolia engelmanni
Engelmann Creeper

33. Rhododendron maximum
Rosebay Rhododendron

34. Rhodotypos kerrioides
Jetbead

35. Cotoneaster horizontalis
Rock Cotoneaster

36. Cotoneaster dielsiana
Diels Cotoneaster

37. Juniperus chinensis sargenti
Sargent Juniper

38. Philadelphus Avalanche
Hybrid Mockorange

39. Cornus florida
Flowering Dogwood

40. Cotoneaster humifusa
Bearberry Cotoneaster

41. Pieris floribunda
Mountain Andromeda

42. Hemerocallis flava
Lemon Daylily

43. Hosta lancifolia
Lanceleaf Plantainlily

44. Crataegus nitida
Glossy Hawthorn

45. Crataegus crusgalli
Cockspur Thorn

46. Arctostaphylos uva ursi
Bearberry

47. Kalmia latifolia
Mountain Laurel

48. Philadelphus Mont Blanc
Hybrid Mockorange

49. Hydrangea petiolaris
Climbing Hydrangea

50, Cornus florida rubra,
Redflowering Dogwood

51. Crataegus oxyacantha splendens
Paul's Double Scarlet Hawthorn

52. Deutzia gracilis
Slender Deutzia

53. Syringa japonica
Japanese Tree Lilac

54. Syringa chinensis
Chinese Lilac

55. Nepeta mussini
Catmint

56. Euonymus radicans colorata
Wintercreeper

57. Dirca palustris
Leatherwood

58. Beds, Plants, 9" apart

Dryopteris marginalis
Leather Woodfern

Dryopteris spinulosa
Toothed Woodfern

Polystichum acrostichoides
Christmas Fern

Arisaema triphyllum
Jack-in-the-Pulpit

59. Beds, Plants

Sedum acre
Goldmoss

Sedum sexangulare
Hexagon Stonecrop

Sedum album
White Stonecrop

60. Beds, Plants

Thymus serpyllum album
White Thyme

Thymus serpyllum lanuginosus
Woolly Thyme

61. Malus sargenti
Sargent Crab

62. Juniperus chinensis pfitzeriana
Pfitzer Juniper

63. Taxus cuspidata, spreading
Spreading Japanese Yew

64. Cornus florida, large specimens
Flowering Dogwood

65. Tsuga canadensis
Canada Hemlock

66. Forsythia suspensa
Weeping Forsythia

67. Ulmus americana
American Elm

68. Juniperus virginiana
Redcedar

69. Berberis thunbergi
Japanese Barberry

70. Vaccinium corymbosum
Highbush Blueberry

71. Spirea van houttei
Van Houtte Spirea

72. Azalea poukhanensis
Korean Azalea

73. Fagus sylvatica
European Beech

74. Malus theifera
Tea Crab

75. Magnolia soulangeana
Saucer Magnolia

76. Cladrastris lutea
Yellow-wood

77. Malus arnoldiana
Arnold Crab

78. Vaccinium pennsylvanicum
Lowbush Blueberry

79. Taxus cuspidata brevifolia
Dwarf Japanese Yew

80. Pachysandra terminalis
Japanese Pachysandra

81. Beds, Plants

Cotoneaster adpressa
Creeping Cotoneaster

Cotoneaster horizontalis prostrata
Prostrate Cotoneaster

82. Beds, Plants

Cotoneaster horizontalis
Rock Cotoneaster

Cotoneaster wilsoni
Wilson Cotoneaster

83. Iris

84. Quercus rubra
CommonRed Oak

85. Spiraea thunbergi
Thunberg Spirea

86. Privet

87. Roses

88. Beds, Plants

Juniperus chinensis sargenti
Sargent Juniper

Juniperus horizontalis
Creeping Juniper

Juniperus horizontalis douglasi
Douglas Juniper

89. Phlox subulata alba
White Moss Phlox

90. Rosa rugosa
Rugosa Rose

91. Juniperus chinensis pfitzeriana
Pfitzer Juniper

92. Syringa Ludwig Spaeth,
Hybrid Lilac - reddish purple, single

93. Rose Christine Wright
Climbing Rose - pink

94. Rose Dr. Van Fleet
Climbing Rose - pink

95. Cydonia japonica
Japanese Flowering Quince

96. Magnolia stellata
Star Magnolia

97. Cotoneaster dielsiana
Diels Cotoneaster

Image 2252-73, dated August 1939; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS

Image 2252-74, dated August 1939; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS

Image 2252-75, dated August 1939; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS

Image 2252-76, dated August 1939; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS

Image 2252-77, dated August 1939; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS

Image 2252-78, dated August 1939; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS

Image 2252-80, dated August 1939; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS

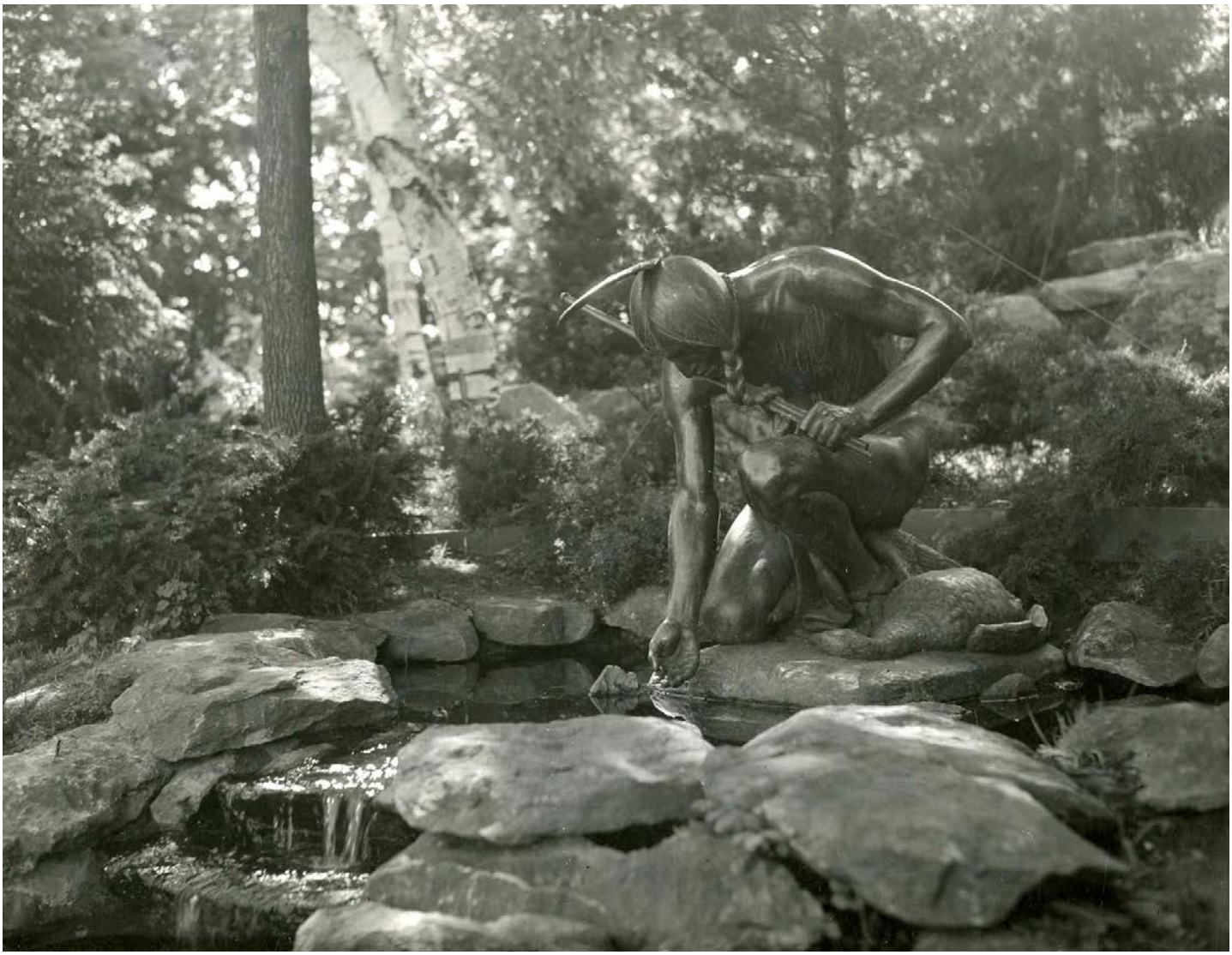


Image 2252-83, dated September 1939; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS

1999 Restoration

No records of work to the garden have been uncovered between 1941 and 1999.

The 1999 restoration was completed in two phases. Phase IA plans are dated April 22, 1998, and were prepared by Pat Loheed Landscape Architect of Somerville, MA. Phase IA included the following work:

- Restoration of bronze sculpture, including mortar setting bed under bronze base, and cleaning of concrete and stone, and resetting of stone veneer on concrete plinth
- Resetting of the Olmsted boulders at spring and upper pool, including removal of off-color mortar and cleaning of all stones
- Waterproofing of the spring and upper pool with liquid membrane
- Removal of old fountain system equipment
- Demolition and reconstruction of the ripple and installation of new spillway curb to depth below grade. The spillway was constructed in three segments with bond breakers.
- Resetting of bluestone stepping stones over spillway on mortar setting bed
- Removal of drains in the lower pool at the southwest corner, the northern end, and on the east side in the center
- Skim coating of concrete on base and sides of lower pool
- Installation of drain plugs in spring and the upper pool, three each, with waterproofing
- Installation of a 4-inch PVC pool drain line running under concrete features through on the center line
- Installation of drain at northern end of lower pool and adjustable overflow drain in northern wall of lower pool
- Installation of sump pit, outlet drain, and overflow drain on west side of where spillway meets lower pool (with memorial manhole cover)
- Installation of concrete vault with filter & chlorinator system
- Installation of new electrical conduit from Town Hall to mechanical vault
- Installation of new copper water connection from Town Hall to mechanical vault
- Replacement of site lighting
- Reproduction benches and installation of concrete pads under the benches

The Department of Environmental Management Contract plans, also prepared by Pat Loheed Landscape Architect (PL/LA), are dated March 18, 1999. These plans include the following work:

- New dry well and drain at the back of the sculpture (dry well and drain not confirmed or located on as-built plans)
- Resetting of the circular cobble walkway on 3-inch sand/cement setting bed
- Planting changes, including:
  - Replanting of the woodland planting behind the sculpture
  - Removal of all taxus within circular cobblestone walkway
  - Removal of pachysandra and taxus between water feature and brick walkways
  - Removal of dead trees, stumps and additional species in border planting
  - Transplanting of kousa dogwoods (two) to the Whittemore-Robbins House from border planting on east side
- Extensive replanting of all areas around the water features. Tree species include multi-stemmed paper birch and Rutgers University's hybrid dogwoods. The planting palette is heavy with broadleaf evergreens and evergreen groundcovers, including rhododendron, azalea, mountain laurel, sheep laurel, Andromeda, wintercreeper, inkberry, mahonia, pachysandra, and yews. Other species are natives like arrowwood viburnum and lowbush blueberry.

  This planting plan was implemented, but failed due to a lack of informed maintenance and unsupervised access to the sculpture. (It is worth noting that "PGA", *Picea glauca 'Conica'*, dwarf Alberta spruce is noted on the plans in the location of existing yews though no PGA is included on the plant schedule.)
- Irrigation plans show a series of zones with 6-inch spray heads within the circular cobblestone walkway, 1/4, 1/2, and 1/5 arc rotor nozzles immediately outside the circular cobblestone walkway, rotor nozzles through the woodland planting to the east, and a row of 1/2 arc rotor nozzle heads along the border of the Central School Senior Center. A 1-inch PVC main line connects to the backflow preventer in Town Hall.

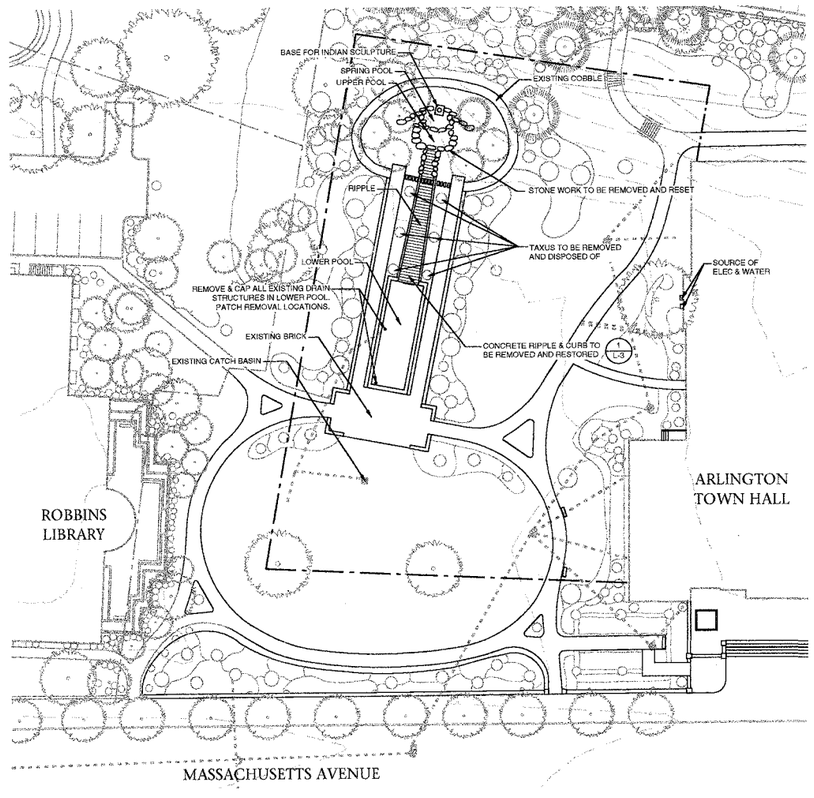
The Town of Arlington archives contain a large collection of photographs from the 1999 restoration projects. One of the photo albums is labeled "Town Hall Gardens, 1999, Tim Reid, Paragon Landscapes"; it is the assumption that this was the contractor for the restoration work.

Some additional information gleaned from these photos includes:

- The Alberta spruces were, in fact, planted as part of the garden restoration. However, the photographs show three planted on either side instead of two that are shown on the Olmsted Brothers plans.
- The circular cobblestone walk was reconstructed in its entirety.
- The concrete pool for the spring was rebuilt to some extent.
- The floor of the lower pool was patched.

WINFIELD ROBBINS MEMORIAL GARDENS
HISTORIC RESTORATION
PHASE 1-A

TOWN OF ARLINGTON
MASSACHUSETTS



EXISTING CONDITIONS & SITE PREPARATION PLAN

DRAWINGS:

LEGEND:

- EXISTING DECIDUOUS TREE
- EXISTING EVERGREEN TREE
- LIMIT OF WORK
- EXISTING DRAIN
- EXISTING CATCH BASIN
- EXISTING DRAIN STRUCTURE

0 5' 20' 40' 80'

WINFIELD ROBBINS MEMORIAL GARDENS
RESTORATION PHASE 1-A

LANDSCAPE ARCHITECT:
PAT LOHEED•LANDSCAPE ARCHITECT
1310 BROADWAY, SUITE 103
SOMERVILLE, MA 02144
617-623-4366 • FAX 617-623-4362

REVISIONS:

TITLE: EXISTING CONDITIONS / SITE PREPERATION

DRAWN BY: PL, TH
CHECKED BY: PL
DATE: 4/22/98
L-1

LEGEND:

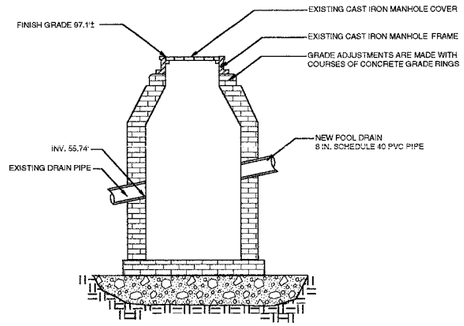
- EXISTING DECIDUOUS TREE
- EXISTING EVERGREEN TREE
- LIMIT OF WORK
- DRAINAGE STRUCTURES FROM ARLINGTON TOWN ENGINEERS PLAN & HOWE SURVEY ASSOC., INC.
- EXISTING CATCH BASIN
- EXISTING DRAIN STRUCTURE
- PROPOSED ELECTRICAL
- PROPOSED DRAIN
- PROPOSED WATER
- PROPOSED SLEEVE

WATER LINES				
RUN*	PIPE	SIZE (DIA.)	LENGTH	NOTES
A-1	COPPER	1-1/2"	NA**	**CONNECT TO EX. @ T. HALL
A-2	COPPER	1-1/2"	12'	TO BACKFLOW
B	PVC SCHED 80	1-1/2"	125LF	WATER MAKEUP TO FILL
C	PVC SCHED 80	1-1/2"	±65 LF	TO FILTER/CHLORINATOR
D	PVC SCHED 80	1-1/2"	±83LF	TO UPPER POOL #1
E	PVC SCHED 80	2-1/2"	52 LF	TO MIDDLE POOL #2
F-1	PVC SCHED 80	2"	65 LF	TO STRAINER
F-2	PVC SCHED 80	4"	65 LF	TO FILTER/CHLORINATOR
*LETTERS CORRESPOND TO PLAN L-2, NOT FOUNTAIN DIAGRAM				

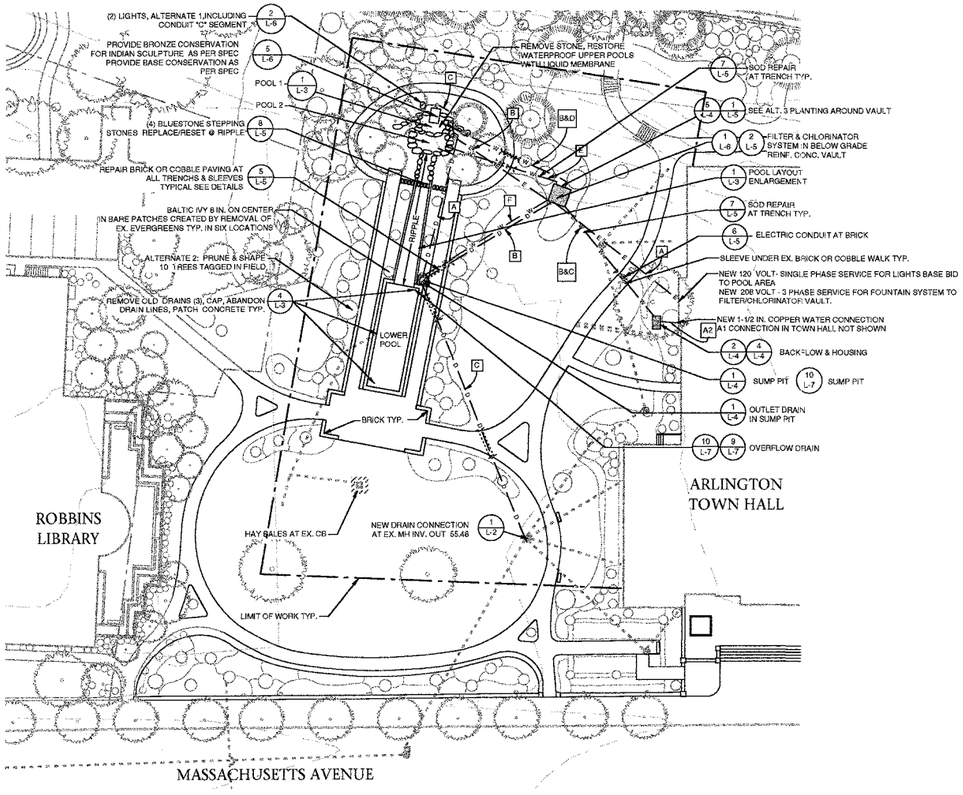
DRAIN RUN	PIPE	SIZE	LENGTH	INVERTS IN/OUT	NOTES
A1	PVC SCHED 40	4"	15LF		FROM POOL #1
A2	PVC SCHED 40	4"	±83 LF		POOL #2-SUMP
B	PVC SCHED 40	4"	±68 LF		VAULT TO SUMP
C	PVC SCHED 40	8"	118 LF		SUMP TO MH

ELECTRICAL	CONDUIT	SIZE	LENGTH	NOTES
A1-120V-SINGLE PH	PVC SCHED 80	2"	64LF	BASE BID
A2 - 208V-3PH	PVC SCHED 80	2"	64LF	BASE BID
B - 120V	PVC SCHED 80	2"	70LF	BASE BID
C - 120V	PVC SCHED 80	2"	±±15LF	ALT. 1

CONTRACTOR SHOULD VERIFY ALL QUANTITIES, MATERIALS AND CONNECTIONS



1/L-2 **DRAIN CONNECTION TO EXISTING STRUCTURE**
SCALE: N.T.S.



GENERAL LAYOUT PLAN

0 5' 20' 40' 80'

COMMONWEALTH OF MASSACHUSETTS EDMUND L. PAGE No. 24726 REGISTERED PROFESSIONAL ENGINEER

MASSACHUSETTS RHODA S. LOHEED No. 328 REGISTERED LANDSCAPE ARCHITECT

WINFIELD ROBBINS MEMORIAL GARDENS
RESTORATION PHASE 1-A

LANDSCAPE ARCHITECT:
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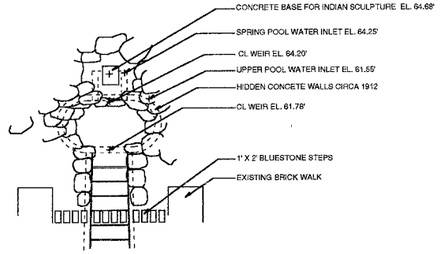
REVISIONS:

TITLE: **LAYOUT / ULTILTIES**

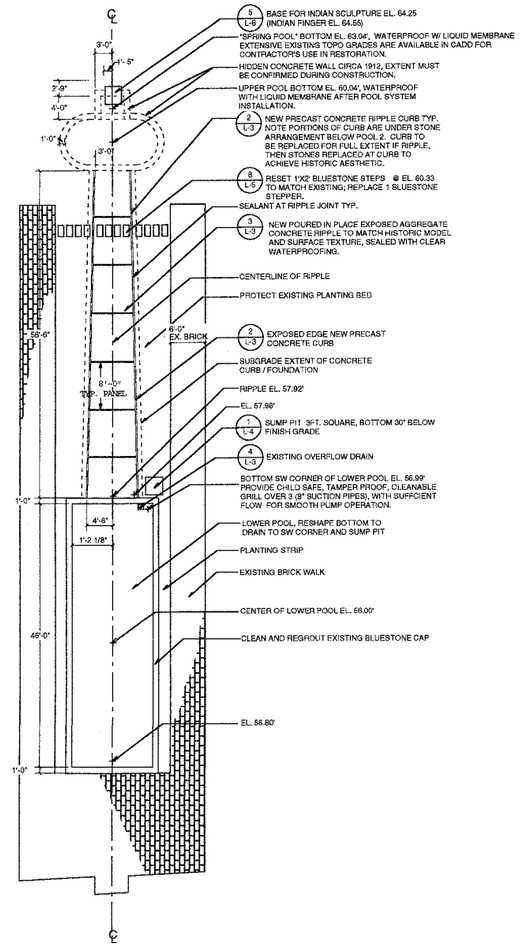
DRAWN BY: PL TH
CHECKED BY: PL

DATE: 4/22/98

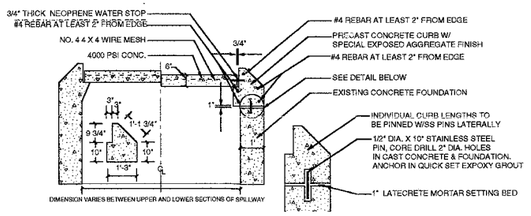
L-2



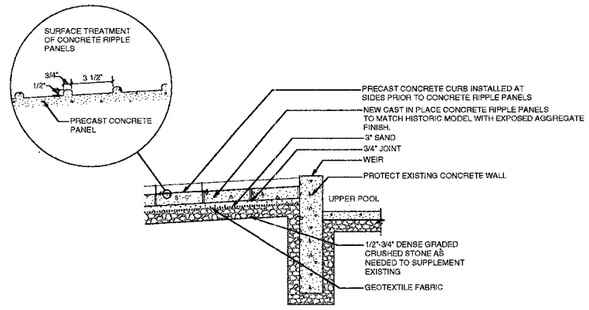
STONE RESTORATION AT UPPER POOL (POOL1) AND "SPRING POOL" (POOL 2)



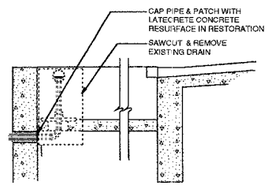
1 L-3 **POOL LAYOUT**
SCALE: 1/8" = 1'-0"



2 L-3 **RIPPLE CURB REPLACEMENT**
SCALE 1/2" = 1'-0"



3 L-3 **CONCRETE RIPPLE AT UPPER POOL**
SCALE: 1/2" = 1'



4 L-3 **EXISTING OVERFLOW DRAIN**
SCALE: 1/2" = 1'

WINFIELD ROBBINS MEMORIAL GARDENS
RESTORATION PHASE 1-A

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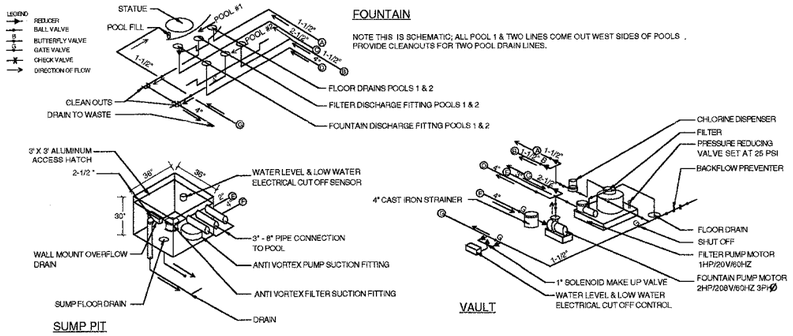
REVISIONS:

TITLE: **POOL LAYOUT/ DETAILS**

DRAWN BY:TH
CHECK BY: PL

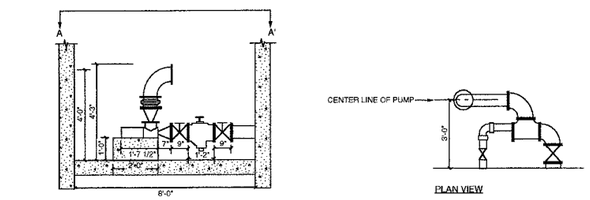
DATE: 4/22/98

L-3



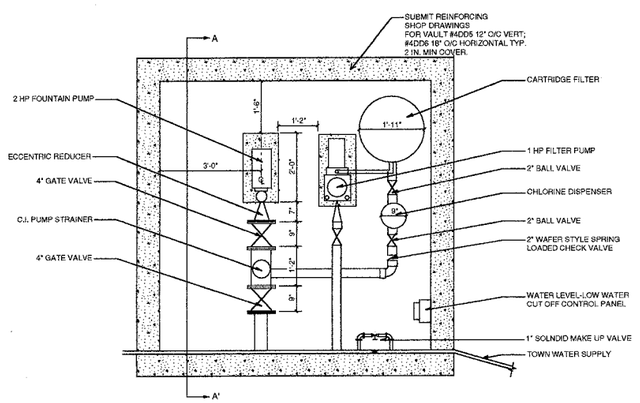
1 L-4 FOUNTAIN SYSTEM DIAGRAM

SCALE: N.T.S.



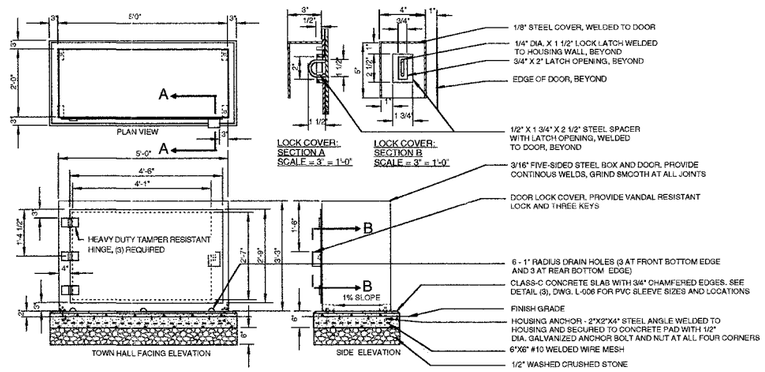
3 L-4 FOUNTAIN PUMP AND PIPING SECTION

SCALE: 1/2" = 1'



5 L-4 CHLORINATOR/FILTER VAULT PLAN

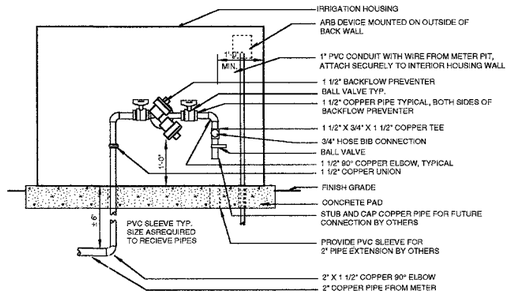
SCALE: 3/4" = 1'



NOTE: PRIME ONE(1) COAT AND PAINT, WITH TWO (2) COATS DARK GREEN EPOXY ENAMEL PAINT, ALL STEEL INSIDE AND OUT, (3) COATS TOTAL, IMMEDIATELY AFTER FABRICATION AND PRIOR TO INSTALLATION.

2 L-4 BACKFLOW PREVENTER HOUSING

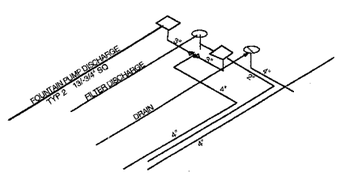
SCALE: 3/4" = 1'



NOTE:
1. PROVIDE CONCRETE SUPPORT PAD FOR BACKFLOW PREVENTER AND PROVIDE PIPE SUPPORTS ANCHORED INTO CONCRETE TO COMPLETELY SECURE PIPES AND EQUIPMENT FROM MOVEMENT DUE TO WATER THRUST.

4 L-4 BACKFLOW PREVENTER

SCALE: NTS



6 L-4 POOL 2 DIAGRAM

SCALE: NTS

WINFIELD ROBBINS MEMORIAL GARDENS
RESTORATION PHASE 1-A

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REVISIONS:

TITLE: **FOUNTAIN DIAGRAM / DETAILS**

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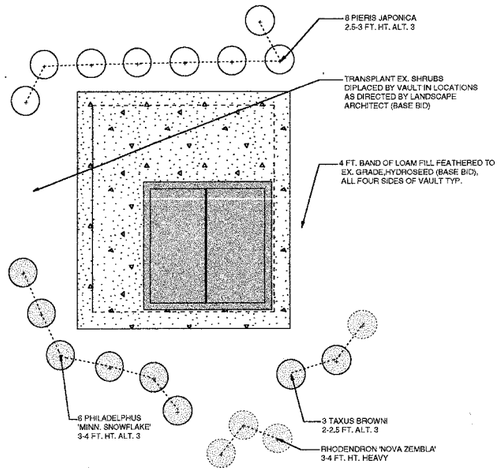
CHECK BY: PL

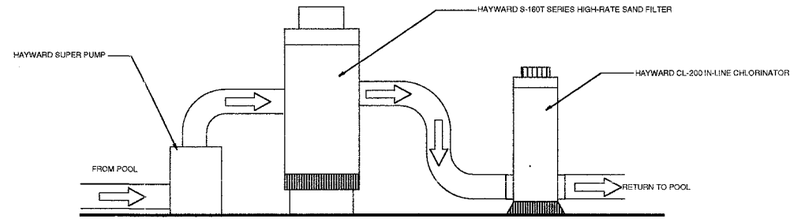
DATE: 4/22/98

L-4



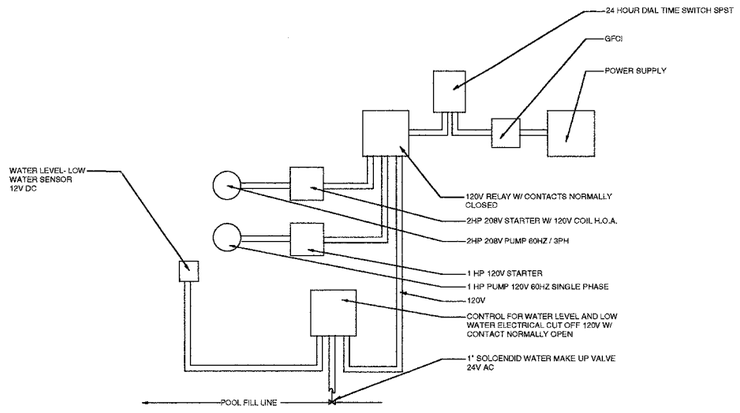
1 / L-5 **PLAN - BUFFER PLANTING AT FILTER/CHLORINATOR VAULT ALT. 3**

NTS



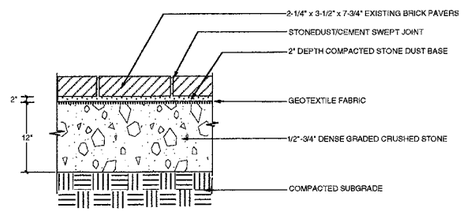
3 / L-5 **IN-LINE CHLORINATOR INSTALLATION**

SCALE: N.T.S



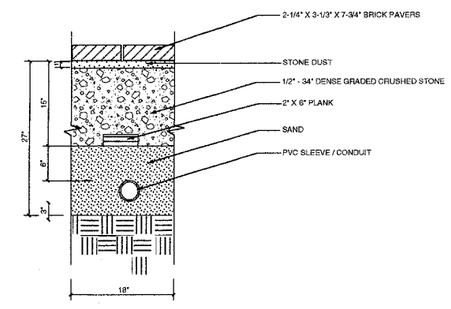
4 / L-5 **ELECTRICAL SCHEMATIC**

SCALE: N.T.S.



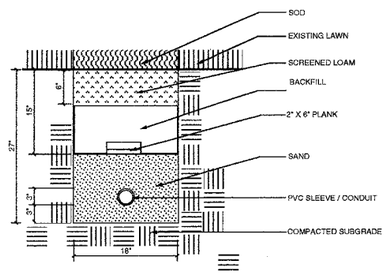
5 / L-5 **RESET BRICK PAVERS**

SCALE: 1-1/2" = 1'



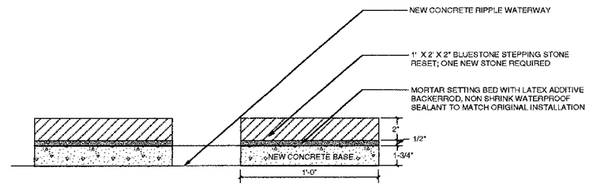
6 / L-5 **ELECTRIC CONDUIT BENEATH BRICK**

SCALE: 1-1/2" = 1'



7 / L-5 **SOD AT TRENCH & ELECTRIC CONDUIT**

SCALE: 1-1/2" = 1'



8 / L-5 **RAISED BLUESTONE STEPPERS**

SCALE: 3"= 1'

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EDMUND L PAGE
No. 24728
REGISTERED PROFESSIONAL ENGINEER

MASSACHUSETTS
PATRICIA S. LOHEED
No. 328
REGISTERED LANDSCAPE ARCHITECT

WINFIELD ROBBINS MEMORIAL GARDENS
RESTORATION PHASE 1-A

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REVISIONS:

TITLE: **FOUNTAIN DETAILS**

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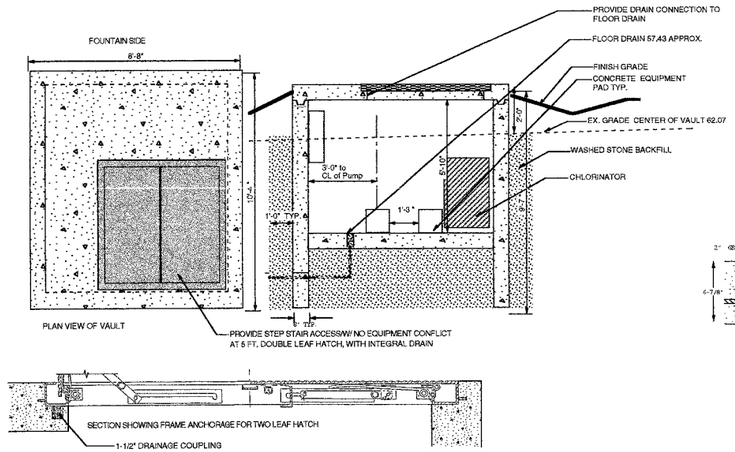
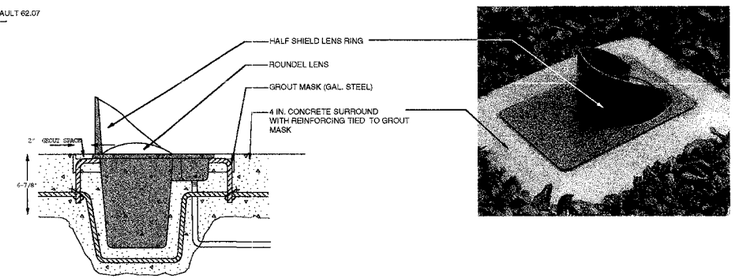
CHECK BY: PL

DATE: 4/22/98

L-5

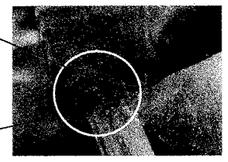


1 L-6 **FOUNTAIN FLITER / CHLORINATOR VAULT**
SCALE: N.T.S.



2 L-6 **DIRECT BURIAL LIGHT SECTION - ALTERNATE 2**
SCALE: N.T.S.

4 L-6 **STONE / INDIAN SCULPTURE RESTORATION**
SCALE: N.T.S.



MASSACHUSETTS PATRICIA S. LOHEED No. 228 REGISTERED LANDSCAPE ARCHITECT

WINFIELD ROBBINS MEMORIAL GARDENS
RESTORATION PHASE 1-A

LANDSCAPE ARCHITECT:
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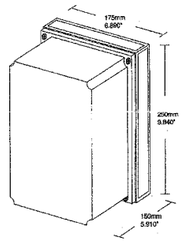
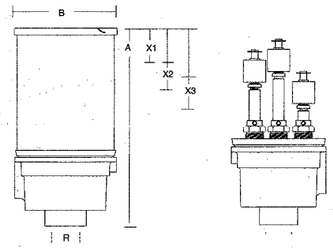
REVISIONS:

TITLE: **DETAILS**

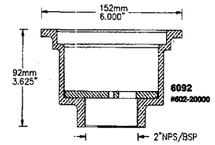
DRAWN BY:TH CHECKED BY: PL | DATE: 4/22/98 | L-6



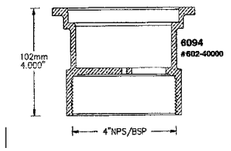
1 / L-7 **CONTROL PANEL WITH TRANSFORMER**
SCALE: NTS



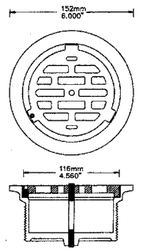
2 / L-7 **CONDUIT MOUNTED SENSOR**
SCALE: NTS



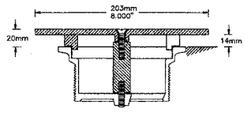
3 / L-7 **FILTER RETURN BASE**
SCALE: NTS



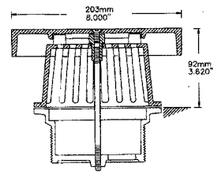
4 / L-7 **4" DRAIN BASE**
SCALE: NTS



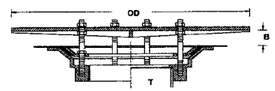
5 / L-7 **4" SURFACE DRAIN**
SCALE: NTS



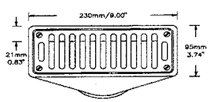
6 / L-7 **DISCHARGE FITTING**
SCALE: NTS



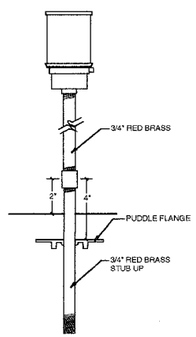
7 / L-7 **ANTI-VORTEX SUCTION FITTING/FILTER**
SCALE: NTS



8 / L-7 **VALVED ANTI-VORTEX SUCTION FITTING**
SCALE: NTS



9 / L-7 **ADJUSTABLE WALL OVERFLOW**
SCALE: NTS



10 / L-7 **SENSOR**
SCALE: NTS

POOL SYSTEM SCHEDULE

KEY	COMPONENT	MANUFACTURER/MODEL#	SPECIFICATION NUMBER
1	CONTROL PANEL WITH TRANSFORMER	PEM-L-104-100-42-EV-103	2.07
2	CONDUIT MOUNTED SENSOR	PEM-L-104-100-42-EV-103	2.07
3	FILTER RETURN BASE	PEM-6092-4-6216	2.10
4	4" DRAIN BASE	PEM-6094-4-6217	2.08 & 2.09
5	4" SURFACE DRAIN	PEM-6212	2.12
6	DISCHARGE FITTING	PEM-6092-4-6215	2.13
7	ANTI-VORTEX SUCTION FITTING/FILTER	PEM-6092-4-6216	2.09
8	VALVED ANTI-VORTEX SUCTION FITTING	PEM-6443-0072	2.14
9	ADJUSTABLE WALL OVERFLOW	6317-60-1	2.11
10	SENSOR	PEM-L-104-100-42-EV-103	2.07
	FOUNTAIN PUMP	ITT BELL & GOSSET 4AC	2.03
	PUMP STRAINER	HAYWORD MODEL 30	2.04
	FILTER	HAYWORD C-3000	2.05
	CHLORINE DISPENSER	HAYWORD CL-200-2S	2.06

WINFIELD ROBBINS MEMORIAL GARDENS
RESTORATION PHASE 1-A

LANDSCAPE ARCHITECT:
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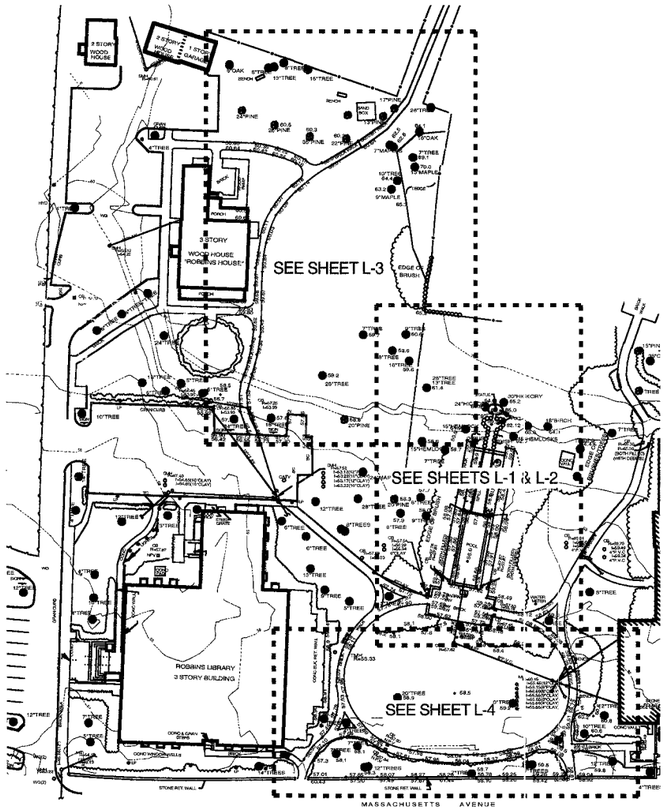
DIVISIONS:

TITLE: **FOUNTAIN SYSTEM DETAILS**

DRAWN BY: TH
CHECK BY: PL
DATE: 4/22/98
L-7

TOWN HALL GARDENS
HISTORIC RESTORATION
DEM CONTRACT

TOWN OF ARLINGTON
MASSACHUSETTS



DRAWINGS:

TOWN HALL GARDENS
HISTORIC RESTORATION - DEM CONTRACT

LANDSCAPE ARCHITECT:
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PAT LOHEED•LANDSCAPE ARCHITECT
1310 BROADWAY, SUITE 103
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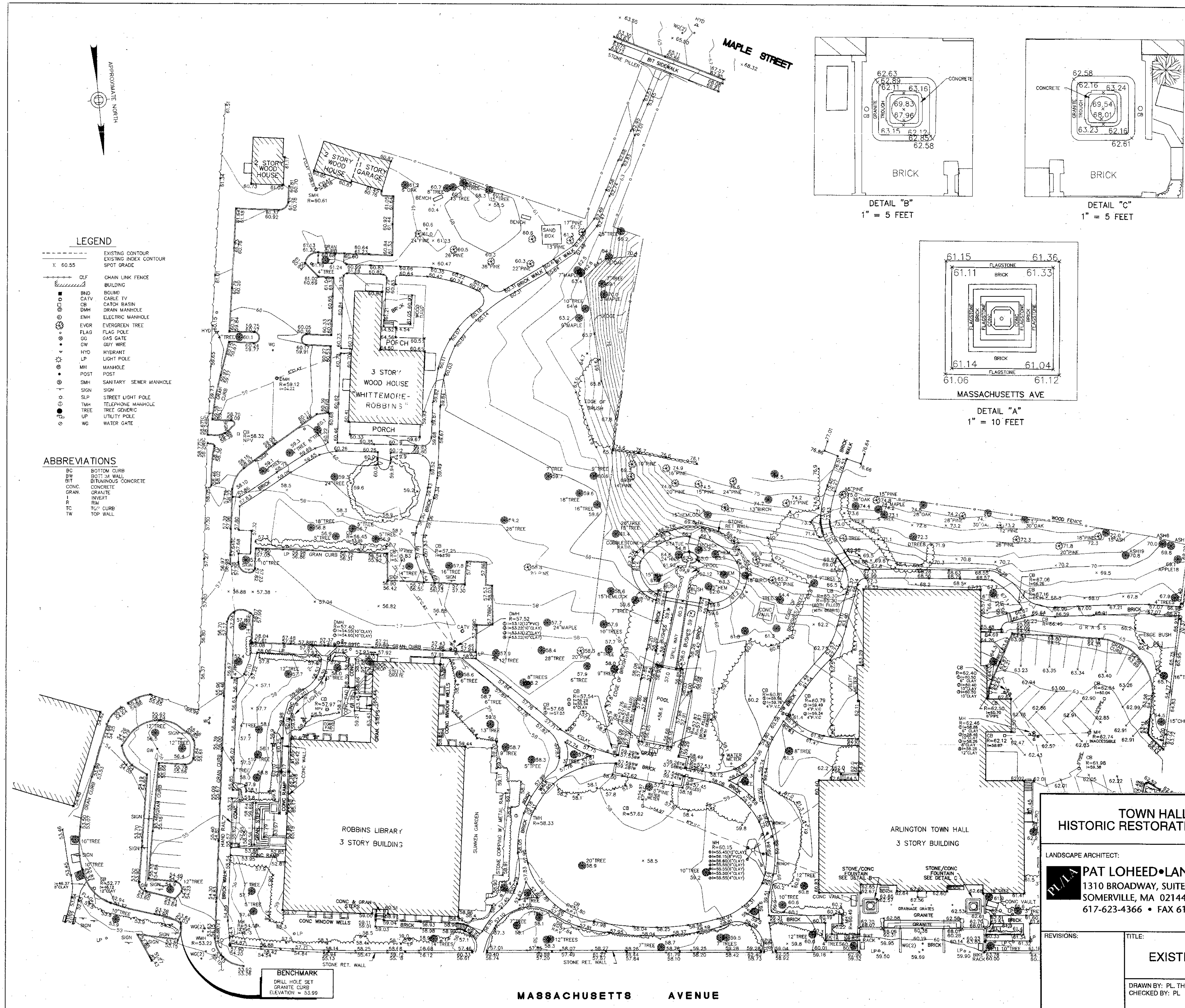
REVISIONS:

TITLE: EXISTING CONDITIONS

DRAWN BY: PL, JR
CHECKED BY: PL

DATE: 3/18/99

EX



HOWE SURVEYING ASSOCIATES, INC.

CIVIL ENGINEERS & LAND SURVEYORS

73 PRINCETON STREET
NO. CHELMSFORD, MA. 01863
(978) 251-3132

43 BUENA VISTA STREET
DEVENS, MA. 01432
(978) 772-1200

3-5-99

TITLE: EXISTING CONDITIONS
WINFIELD ROBBINS GARDENS

LOCATION: MASSACHUSETTS AVENUE
ARLINGTON, MA

PREPARED FOR: PAT LOHEED LANDSCAPE ARCHITECT
1310 BROADWAY STREET
SOMERVILLE, MA.
617-623-4366

DATE	REVISION	BY

0 10 20 40 80

TOWN HALL GARDENS
HISTORIC RESTORATION - DEM CONTRACT

LANDSCAPE ARCHITECT:

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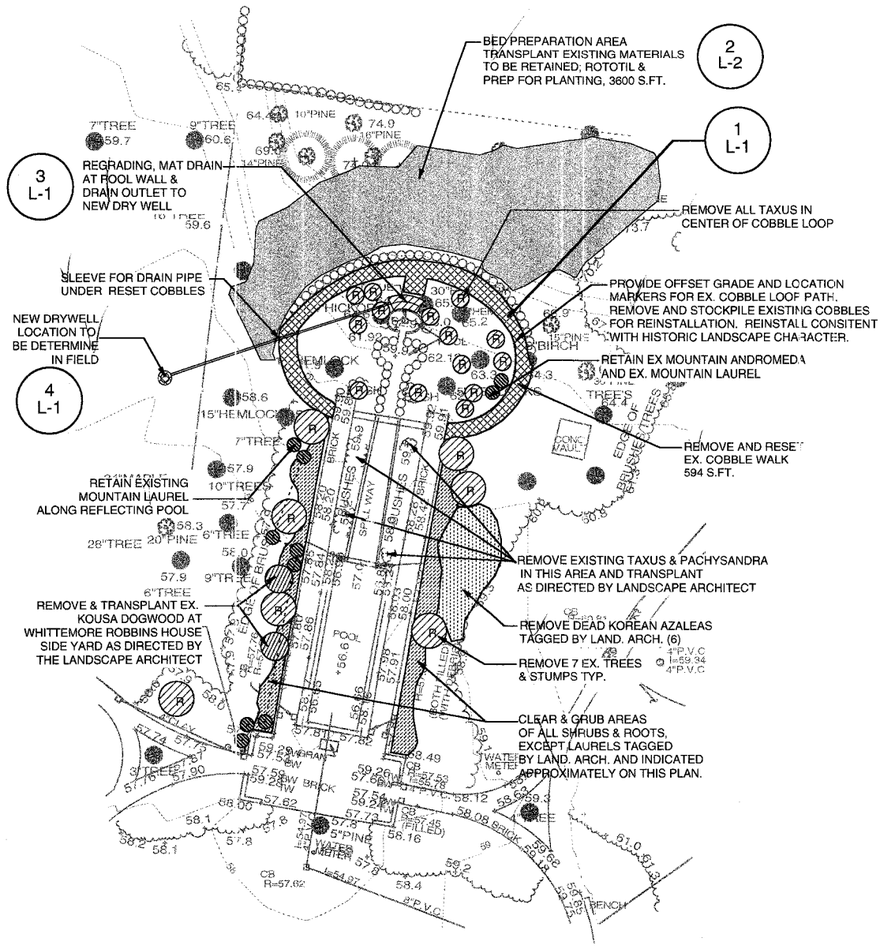
REVISIONS:

TITLE: EXISTING CONDITIONS

DRAWN BY: PL,TH
CHECKED BY: PL

DATE: 3/18/99

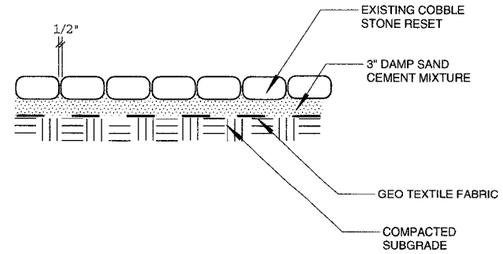
EX



REMOVALS & DRAINAGE AREA A PLAN

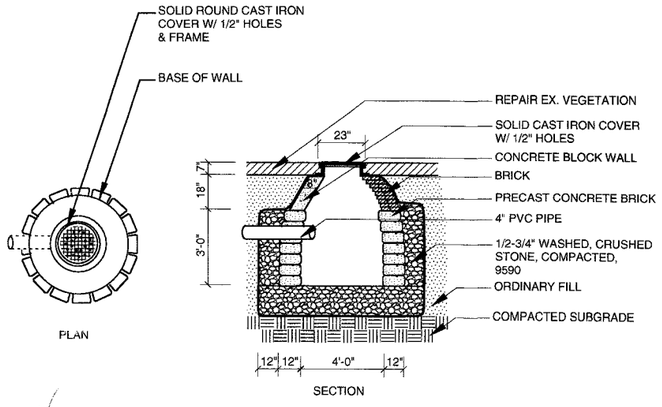
0 5' 20' 40' 80'

APPROXIMATE NORTH



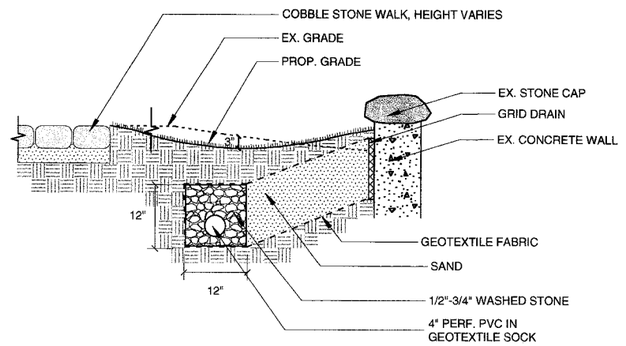
1 L-1 **COBBLE LOOP WALK**

SCALE: 3/4"=1'



3 L-1 **DRY WELL**

SCALE: N.T.S.



4 L-1 **DRAIN AT BACK OF POOL**

SCALE: N.T.S.

TOWN HALL GARDENS
HISTORIC RESTORATION - DEM CONTRACT

LANDSCAPE ARCHITECT:
PL/LA
PAT LOHEED•LANDSCAPE ARCHITECT
1310 BROADWAY, SUITE 103
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617-623-4366 • FAX 617-623-4362

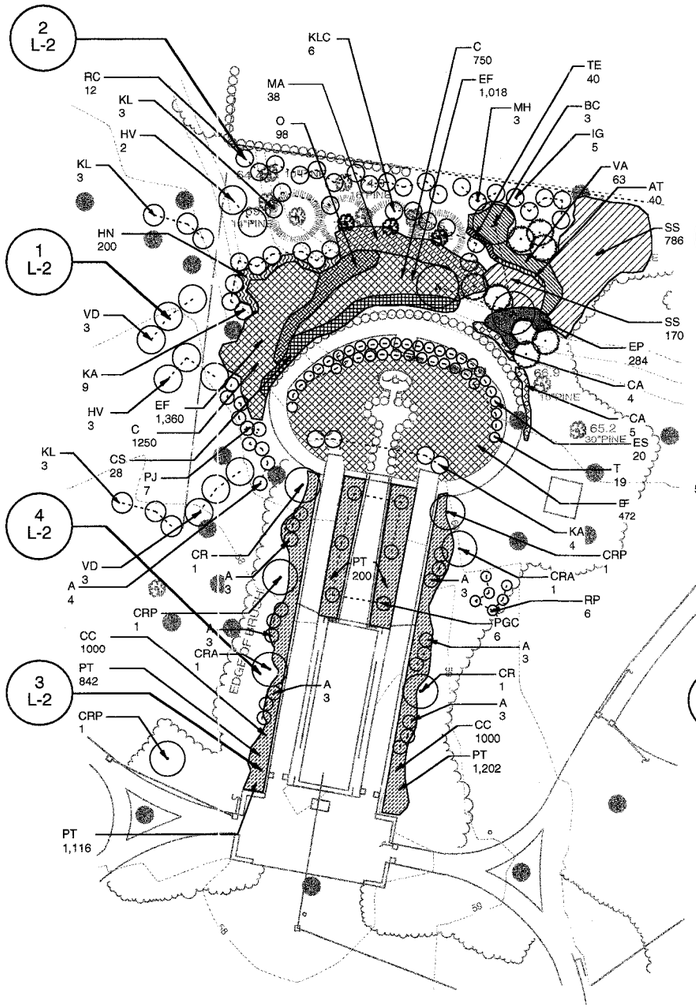
REVISIONS:

TITLE:
DEMOLITION AND SITE PREPARATION PLAN AREA A

DRAWN BY: PL, JR
CHECKED BY: PL

DATE: 3/18/99

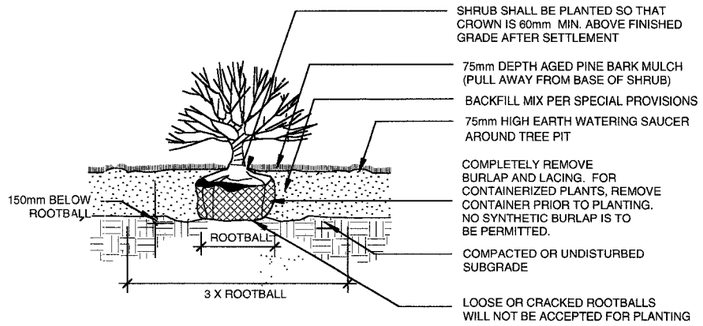
L-1



PLANTING AREA A PLAN

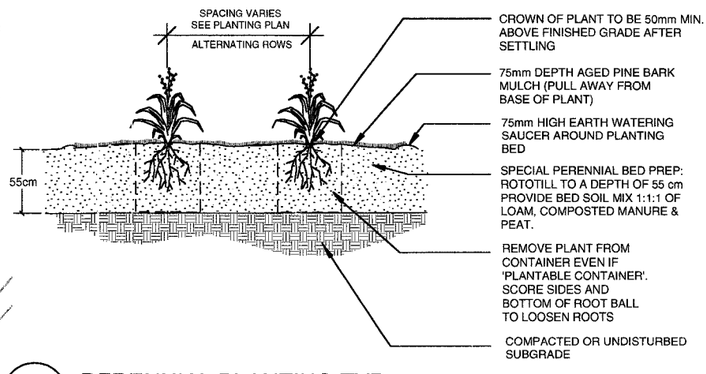
0 5' 20' 40' 80'

APPROXIMATE NORTH



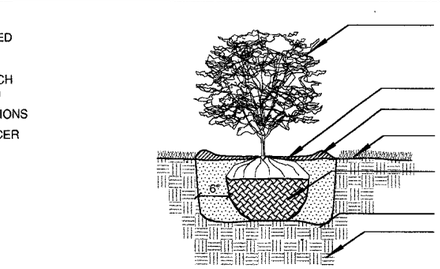
1 L-2 DECIDUOUS SHRUB PLANTING TYP.

NOT TO SCALE



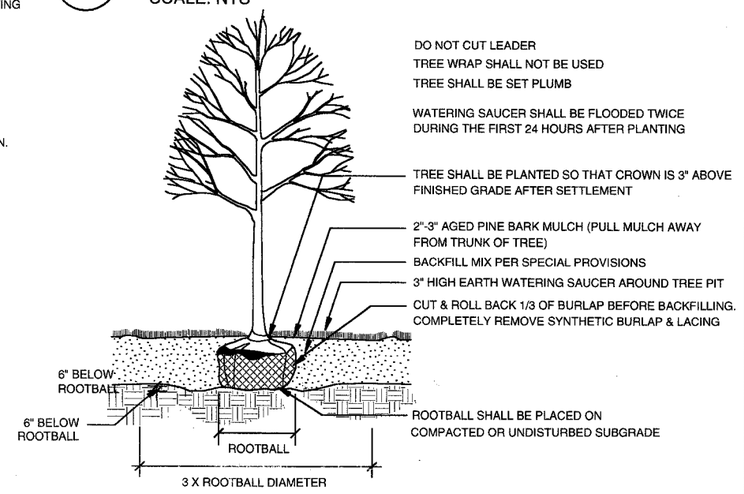
3 L-2 PERENNIAL PLANTING TYP.

NOT TO SCALE



2 L-2 BROADLEAF EVERGREEN SHRUB PLANTING TYP.

SCALE: NTS



4 L-2 DECIDUOUS TREE PLANTING TYP.

NOT TO SCALE

KEY	BOTANICAL NAME	COMMON NAME	QUAN.	SIZE	ROOT	NOTES	SPACING
	TREES						
BC	BETULA PAPYRIFERA	PAPER BIRCH - MULTI-STEMMED	3	8-10' HT.	B&B	SPECIMEN CLUMP	
CR	CORNUS RUTGERS 'RUTH ELLEN'	RUTH ELLEN RUTGERS DOGWOOD	2	8'HT.	B&B	TAGGED/ONHOLD	
CRP	CORNUS RUTGERS 'STELLAR PINK' HYBRID	STELLAR PINK RUTGERS DOGWOOD	3	7'HT.	B&B	"	
CRA	CORNUS RUTGERS 'AUOROA'	AURORA RUTGERS DOGWOOD	2	8'HT.	B&B	"	
	SHRUBS & GROUNDCOVERS						
A	AZALEA KAEMPFERI 'DELAWARE VALLEY WHITE'	DELAWARE VALLEY WHITE AZALEA	22	24-30"	B&B		
CA	COTONEASTER APICULATA	CRANBERRY COTONEASTER	9	24-30"	CONT.		3' O.C.
CS	COTONEASTER SALICIFOLIUS REPANDENS	WILLOWLEAF COTONEASTER	28	24-30"	CONT		3' O.C.
EP	EPIMEDIUM	EPIMEDIUM	284	1 GAL	CONT.		12" O.C.
ES	EUONYMUS FORTUNEI "SARCOXIE'	SARCOXIE EUONYMOUS	20	18-24" SP.	B&B		
EF	EUONYMUS FORTUNEI 'COLORATUS'	PURPLE WINTERCREEPER	2,850	8-12"	2.25" POT		8"
HV	HAMAMELIS VIRGINIA	COMMON WITCHHAZEL	5	4-5'HT.	B&B		
IG	ILEX GLABRA 'COMPACTA'	COMPACT INKBERRY	5	24-30"	CONT.		
MH	ILEX X MESERVEAE 'BLUE PRINCESS'	BLUE PRINCESS HOLLY	3	2.5-3'HT.	B&B	HEAVY	
KA	KALMIA ANGUSTIFOLIA	SHEEP LAUREL	13	18-24"SP	CONT		
KL	KALMIA LATAFOLIA	MOUNTIAN LAUREL	9	3-4'	B&B		
KLC	KALMIA LATAFOLIA COMPACTA 'ELF'	COMPACT MOUNTIAN LAUREL 'ELF'	5	24-30"	B&B		
MA	MAHONIA AQUIFOLIUM	OREGON GRAPEHOLLY	38	18-24" SP.	CONT.		18" O.C.
PT	PACHYSANDRA TERMINALIS	JAPANESE SPURGE	3360	2 yr.	2.25" POTS		8" O.C.
PJ	PIERIS JAPONICA	JAPANESE ANDROMEDA	7	24-30"	B&B		
O	OSMUNDA CINNAMONEA	CINNAMON FERN	98	1 GAL	CONT		18" O.C.
SS	POLYGONATUM BIFLORA	SMALL SOLOMON SEAL	956	1 GAL	CONT.		18"
RC	RHODODENDRON CAROLINIANUM 'ALBA'	WHITE CAROLINA RHODODENDRON	12	3-4'HT.	B&B		
RP	RHODODENDRON POUKHANENSE	KOREAN AZALEA	6	24-36" SP.	B&B		
T	TAXUS CUSPIDATA 'GREENWAVE'	GREENWAVE YEW	19	24-30"	B&B		
VA	VACCINIUM ANGUSTIFOLIUM	LOW BUSH BLUEBERRY	63	18-24"SP.	CONT.		2' O.C.
VD	VIBURNUM DENTATUM	ARROWWOOD VIBURNUM	6	3-4'	B&B		
	PERENNIALS & BULBS						
AT	ARISAEMA TRIPHYLLUM	JACK-IN-THE-PULPIT	40		BULB		8" O.C.
C	CROCUS SPP. MIXTURE:	SPECIES CROCUS					
	CROCUS 'GRAND MAITRE'	LIGHT BLUE CROCUS	1000		BULB	INTERPLANT	8" O.C.
	CROCUS PURUREA GRANDIFLORA	DEEP PURPLE CROCUS	1000		BULB	INTERPLANT	8" O.C.
CC	CAMPANULA MIXTURE:						
	CAMPANULA CARPATICA 'LIGHT BLUE CLIPS'	BELLFLOWER	1000	5 PT.	CONT	INTERPLANT	8" O.C.
	CAMPANULA CARPATICA 'DEEP BLUE CLIPS'	BELLFLOWER	1000	5 PT.	CONT	INTERPLANT	8" O.C.
HN	HEPATICA NOBIS	HEPATICA	200	1 PINT	CONT		8" O.C.
TE	TRILLIUM ERECTUM	WAKE ROBIN	40		BULB		8" O.C.

NOTES:

SHRUBS SHALL BE SET PLUMB

WATER BY FLOODING TWICE IN FIRST TWO HOURS

EXCAVATE TO REQUIRED DEPTH AND BACKFILL WITH PLANTING MIX

RAISE AND REPLANT ANY SHRUBS WHICH SETTLE MORE THAN 75mm AFTER PLANTING AND WATERING IN

WATER BY FLOODING TWICE IN FIRST TWO HOURS AFTER PLANTING. WATER AND MAINTAIN AS PER STANDARD SPECIFICATIONS

TOWN HALL GARDENS
HISTORIC RESTORATION - DEM CONTRACT

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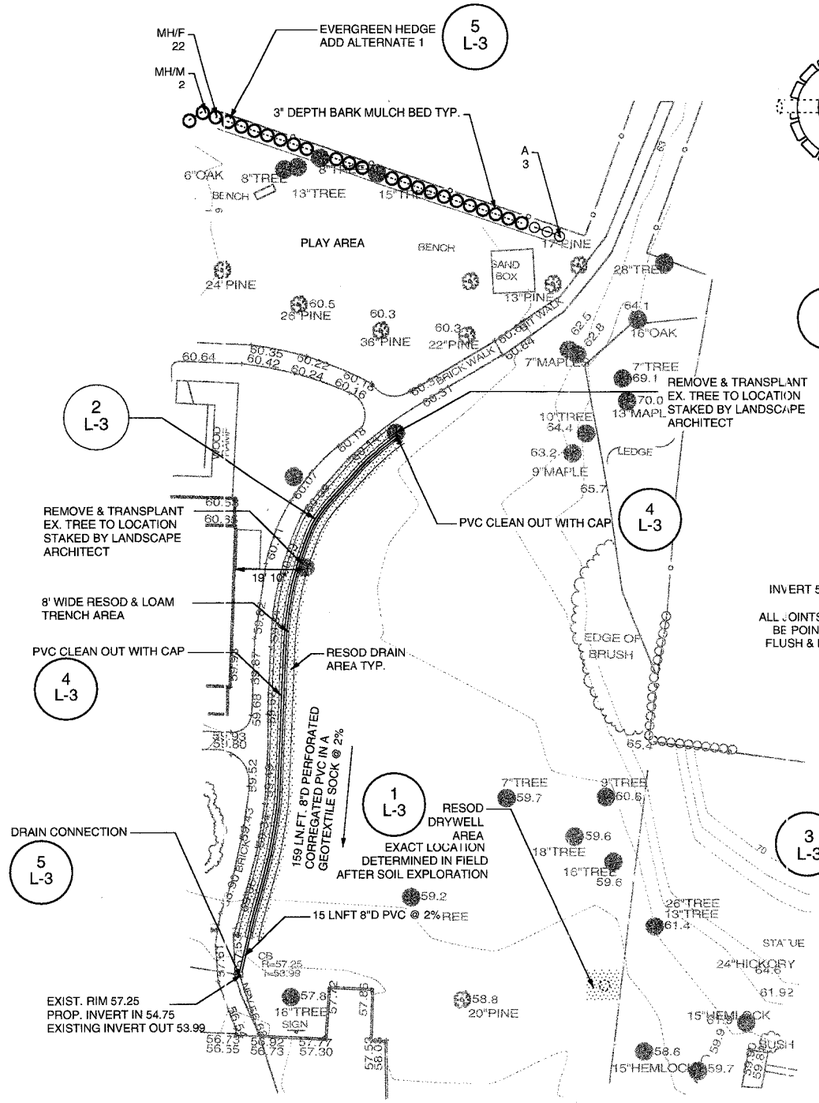
REVISIONS:

TITLE:
PLANTING PLAN
AREA A

DRAWN BY: PL, JR
CHECKED BY: PL

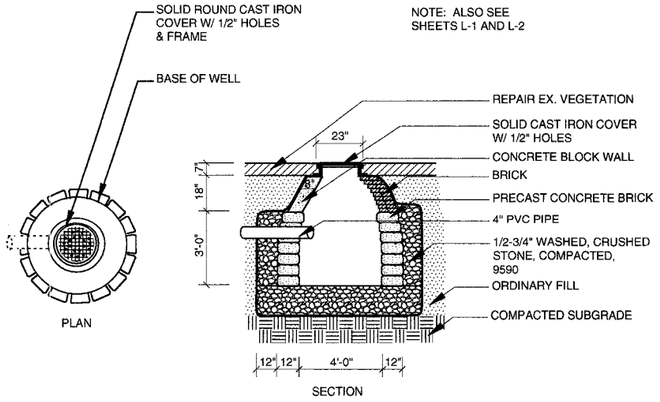
DATE: 3/18/99

L-2



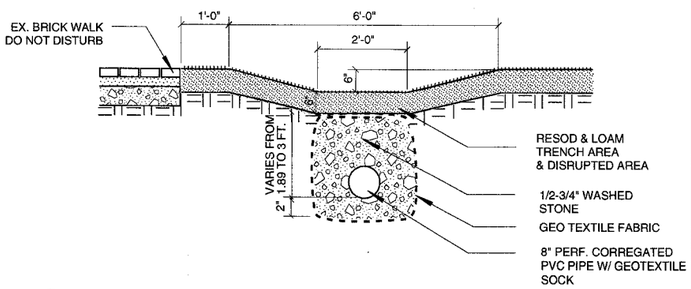
AREA B: DRAINAGE & PLANTING

PLANT LIST DEM AREA B (ALTERNATE 1)							
KEY	BOTANICAL NAME	COMMON NAME	QUAN.	SIZE	ROOT	NOTES	SPACING
A	AZALEA KAEMPFERI 'DELAWARE VALLEY WHITE'	DELAWARE VALLEY WHITE AZALEA	4	2-2.5' SP.	B&B		4' O.C.
MH/F	ILEX MESERVE 'BLUE PRINCESS'	MESERVE HOLLY BLUE PRINCESS	24	2.5-3'HT.	B&B		4' O.C.
MH/M	ILEX MESERVE 'BLUE PRINCE'	MESERVE HOLLY BLUE PRINCE	2	2.5-3' HT.	B&B		4' O.C.



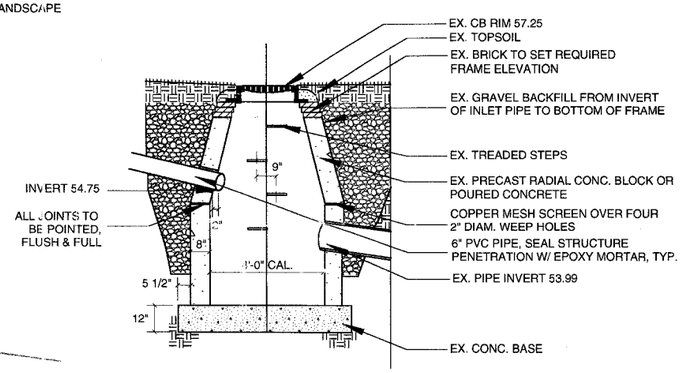
1 L-3 DRY WELL

SCALE: N.T.S.



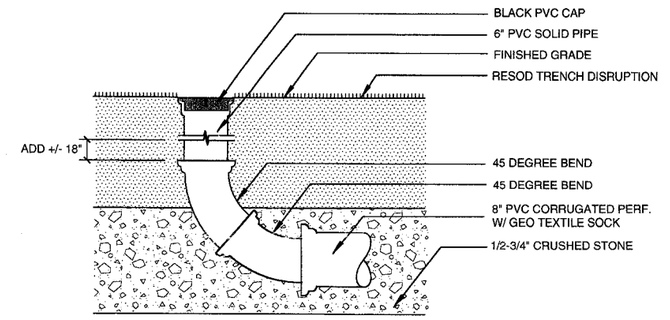
2 L-3 SWALE/ TRENCH DRAIN SECTION

SCALE: N.T.S.



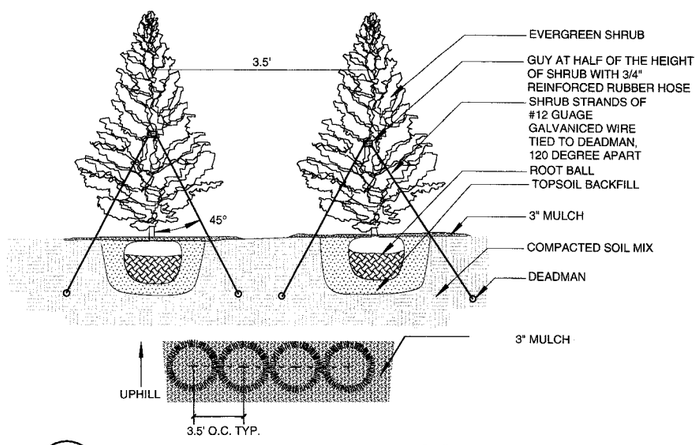
3 L-3 TRENCH DRAIN CONNECTION AT EX. CATCH BASIN

SCALE: N.T.S.



4 L-3 TYP. CLEAN OUT DETAIL (PROVIDE 2)

SCALE: NTS



5 L-3 EVERGREEN SHRUB HEDGE

SCALE: NTS

TOWN HALL GARDENS
HISTORIC RESTORATION - DEM CONTRACT

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REVISIONS:

TITLE: PLANTING PLAN AREA B

DRAWN BY: PL, JR
CHECKED BY: PL

DATE: 3/18/99

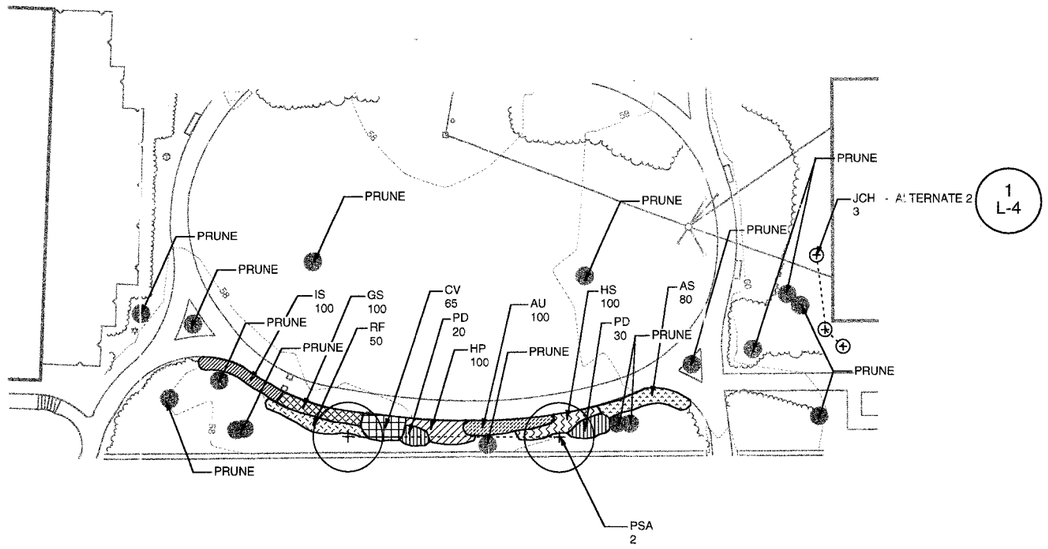
L-3

ALTERNATE 2: TREE PRUNING AREA C

TREE PRUNING SHALL BE FOR FORM AND SAFETY PURPOSES AND DONE UNDER THE SUPERVISION OF A MASS. CERTIFIED ARBORIST UNDER THE DIRECTION OF THE LANDSCAPE ARCHITECT.

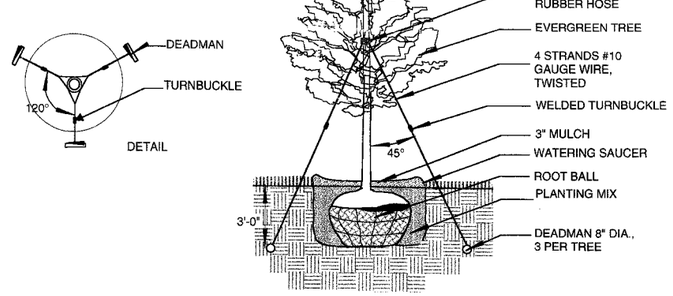
	PLANT LIST DEM AREA C (ALTERNATE 3)						
KEY	BOTANICAL NAME	COMMON NAME	QUAN.	SIZE	ROOT	NOTES	SPACING
JCH	JUNIPERIUS CHIN. HETZI	GREEN COLUMNAR CHINESE JUNIPER	3	6-7' HT.	B&B	SPECIMEN	
PSH	PRUNUS SUBHIRTELLA 'AUTUMNALIS'	AUTUMN FLOWERING CHERRY	2	3-3.5" CAL.	B&B	SPECIMEN	

	PLANT LIST DEM AREA C (ALTERNATE 4)						
KEY	BOTANICAL NAME	COMMON NAME	QUAN.	SIZE	ROOT	NOTES	SPACING
	PERENNIALS						
AS	ANEMONE SYLVESTRIS	SNOWDROP ANEMONE	80	3" POT	CONT		12" O.C.
AU	AURINIA SAXATILIS 'COMPACTUM'	BASKET OF GOLD	100	3" POT	CONT		12" O.C.
CV	COREOPSIS VERTICILLATA 'MOONBEAM'	TICKSEED	65	1 QT	CONT		15" O.C.
GS	GERANIUM SANGUINIUM 'ALBUM'	WHITE CRANESBILL	100	#1 POT	CONT		12" O.C.
HS	HEUCHERA SANGUINIA 'LEUCHTKAEFER	CORAL BELLS	100	#1 POT	CONT		12" O.C.
HP	HYPERICUM POLYPHYLLUM	ST. JOHN'S WORT	100	3" POT	CONT		12" O.C.
IS	IBERIUS SEMPERVIRENS 'OCTOBER GLORY'	CANDY TUFT	100	6 PT	CONT		12" O.C.
PD	PENSTEMON DIGITALIS 'HUSKER RED'	BEARD TONGUE	50	#1 POT	CONT		18" O.C.
RF	RUDBEKIA FULGIDA	BLACK-EYED SUSAN	50	1 QT.	CONT.		18" O.C.



PLANTING PLAN AREA C

1. NEW TREE PLANTING IN PLANTING AREA C IS ADD ALTERNATE 2.
2. PRUNING OF EXISTING TREES IN PLANTING AREA C IS ADD ALTERNATE 3.



1 L-4 EVERGREEN TREE PLANTING

SCALE: NTS

0 5' 20' 40' 80'

APPROXIMATE NORTH

TOWN HALL GARDENS
HISTORIC RESTORATION - DEM CONTRACT

LANDSCAPE ARCHITECT:
PAT LOHEED•LANDSCAPE ARCHITECT
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SOMERVILLE, MA 02144
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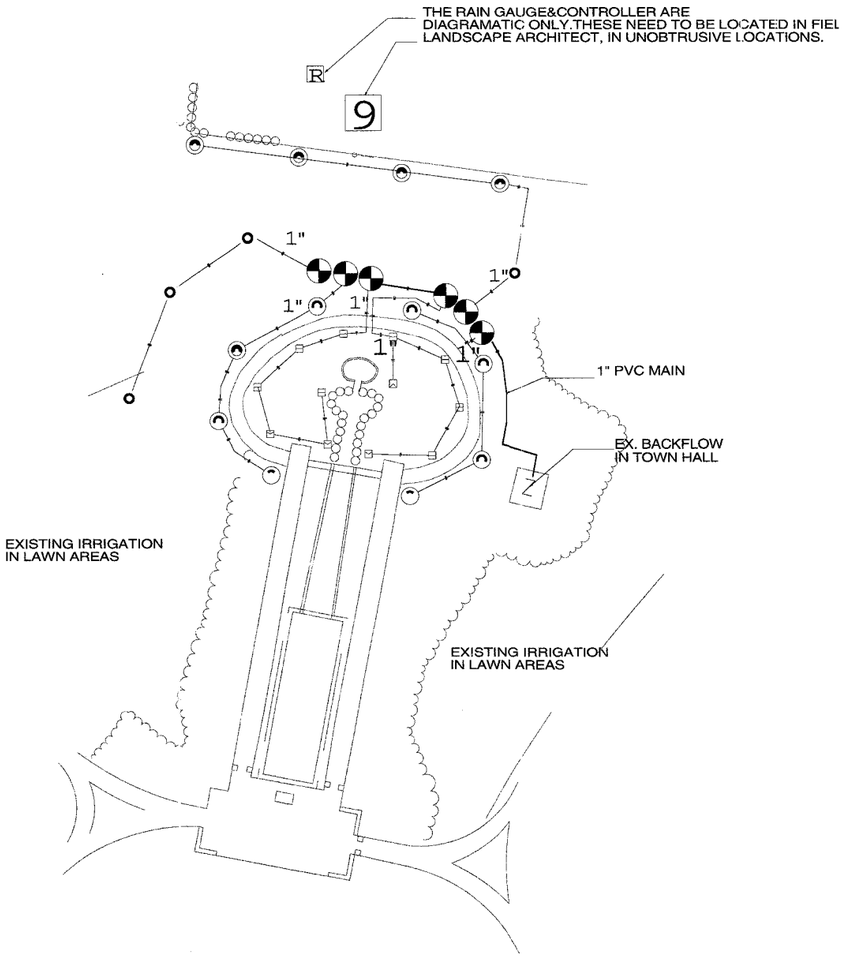
REVISIONS:

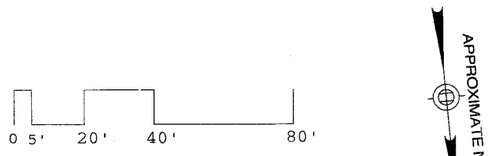
TITLE: PLANTING PLAN AREA C

DRAWN BY: PL, RJ, JR
CHECKED BY: PL

DATE: 3/18/99

L-4





QTY		DESCRIPTION
100'	—	PVC MAIN - CLASS 200 1" SW PVC PIPE
700'	—	POLY LATERALS - 100 PSI 1" POLY PIPE
1		BACKFLOW ASSEMBLY - FEBCO 825Y 1" RPD ON 1" COPPER
6		TORO 294-15-04 1" PLASTIC VALVE ASSEMBLY
1		TORO RAIN GAUGE MODEL 850-74
1		TORO VISION II PLUS CONTROLLER MODEL V2-M09 W/ RAIN GAUGE IN ENCLOSURE
2		TORO 300 1/4 ARC STREAM ROTOR W/ 03 NOZZLE
4		TORO 300 1/2 ARC STREAM ROTOR W/ 03 NOZZLE
6		TORO 300 1/5 ARC STREAM ROTOR W/ 03 NOZZLE
4		TORO 300 FC STREAM ROTOR W/ 03 NOZZLE
8		TORO 570 6" SPRAY HEAD W/ 15-H NOZZLE
3		TORO 570 6" SPRAY HEAD W/ 15-T NOZZLE
1		TORO 570 6" SPRAY HEAD W/ 15-TQ NOZZLE

1) SYSTEM IS DESIGNED FOR 16 GPM AT 65 PSI REQUIRED AT THE POINT OF CONNECTION.

2) INSTALLATION INSTRUCTIONS:

HEADS: INSTALL ON FUNNY PIPE SWING JOINTS. SET TO GRADE. BACKFILL IN CLEAN MATERIAL. PROPERLY ADJUST THROW, RADIUS, AND HEAD LOCATION SO THE SPRAY IS NOT DISRUPTED BY THE SHRUBBERY.

VALVES: INSTALL 3 PER STANDARD VALVE BOX. USE DBY SPLICE KITS. HIDE VALVE BOXES IN THE LANDSCAPE WHERE POSSIBLE. INSTALL A 1" QUICK COUPLER ON A GALVANIZED TEE IN AN ECONO VALVE BOX FOR BLOW-OUT, AFTER THE RPD.

CONTROLLER: WALL MOUNT IN A MCKINSTRY ENCLOSURE MODEL 56-20126LP WITH THE A.C. UNIT. RUN A DEDICATED, 115 VAC LINE FOR POWER. MOUNT THE RAIN GAUGE AT THE HIGHEST AVAILABLE, COMMON POINT, FACING THE SUN SO THE ELEMENT WILL PROPERLY DRY. CONTROLLER SHALL BE GROUNDED. RUN CONDUIT FOR ALL ABOVE GROUND WIRES, INCLUDING THE WIRES TO THE RAIN GAUGE.

WATER TAP & BACKFLOW: EXISTING TAP IN CONCRETE VAULT AS SHOWN ON THE PLAN. BACKFLOW IS EXISTENT, NIC. ON UNIONS SO IT CAN BE REMOVED IF NECESSARY. ENSURE THAT THERE IS A PROPERLY FUNCTIONING SHUT-OFF VALVE.

PIPE & WIRE: TRENCH OR PULL 12" DEEP. INSTALL PIPE & WIRE IN THE SAME TRENCHES WHERE POSSIBLE.

3) DESIGN IS DIAGRAMMATIC. CONTRACTOR SHALL FIELD LOCATE ALL ITEMS WITHOUT COMPROMISING THE INTEGRITY OF THIS DESIGN. THE SPRINKLER HEAD LOCATIONS SHALL BE CAREFULLY SELECTED IN THE FIELD SO THE SPRAYS OF THE HEAD ARE NOT DISRUPTED BY ANY OF THE PLANTINGS OR SHRUBBERY. USE RISERS WHERE NECESSARY. CONTRACTOR SHALL PROVIDE A 1"=20', ACCURATE PLOT PLAN TO THE OWNER, BEFORE FINAL PAYMENT IS MADE.

4) AVERAGE RUN TIMES PER ZONE: 300- 20 MINUTES PER DAY (MIN/DAY); 570- 8 MIN/DAY. END USER SHALL PROPERLY ADJUST RUN TIMES FOR CHANGING FIELD CONDITIONS.

5) IRRIGATION CONTRACTOR IS RESPONSIBLE FOR, BUT NOT LIMITED TO THE COMPLETE INSTALLATION OF THIS IRRIGATION SYSTEM. FOLLOW ALL APPLICABLE CODES AND LAWS. CONTRACTOR SHALL NOTIFY DIG-SAFE" IN THE STATE OF MASSACHUSETTS PRIOR TO THE COMMENCEMENT OF WORK. IRRIGATION CONTRACTOR WORK INCLUDES: ATTACHING TO THE EXISTING WATER TAP, CONTROLLER AND RAIN GAUGE INSTALLATION, SLEEVING IF NECESSARY, ALL IRRIGATION WORK, AND RELATED ITEMS. THE OWNER SHALL ENSURE THAT THIS WATER SUPPLY IS ADEQUATE ENOUGH FOR THIS SYSTEM (SEE NOTE #1), PROVIDE THE POWER SUPPLY FOR THE CONTROLLER (115 VAC), AND RELATED ITEMS.

System Designed By:
IDS
Irrigation Design Services
157 Moody Road, Enfield, Connecticut 06082
Tel: (860) 763-3581 Fax: (860) 763-5550

TOWN HALL GARDENS
DEM CONTRACT Ph 2A

LANDSCAPE ARCHITECT:
PAT LOHEED•LANDSCAPE ARCHITECT
1310 BROADWAY, SUITE 103
SOMERVILLE, MA 02144
617-623-4366 • FAX 617-623-4362

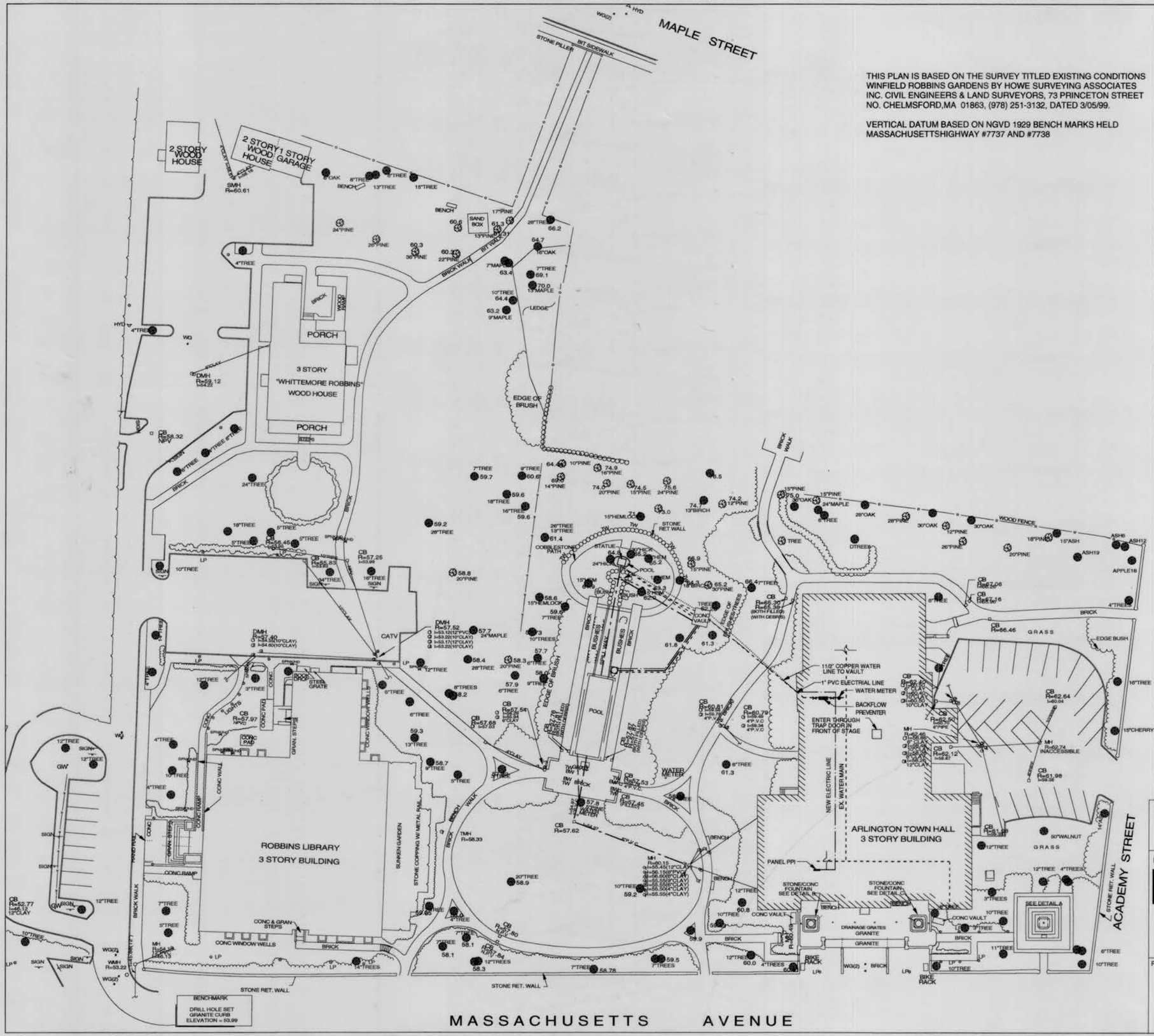
REVISIONS:

TITLE:
IRRIGATION PLAN
AREA A

DRAWN BY: PL, JR, EB
CHECKED BY: PL

DATE: 3/17/99

L-5



THIS PLAN IS BASED ON THE SURVEY TITLED EXISTING CONDITIONS WINFIELD ROBBINS GARDENS BY HOWE SURVEYING ASSOCIATES INC. CIVIL ENGINEERS & LAND SURVEYORS, 73 PRINCETON STREET NO. CHELMSFORD,MA 01863, (978) 251-3132, DATED 3/05/99.

VERTICAL DATUM BASED ON NGVD 1929 BENCH MARKS HELD MASSACHUSETTSHIGHWAY #7737 AND #7738

EXISTING CONDITIONS LEGEND

	EXISTING CONTOUR
	EXISTING INDEX CONTOUR
X 60.55	SPOT GRADE
CLF	CHAIN LINK FENCE
	BUILDING
BND	BOUND
CATV	CABLE TV
CB	CATCH BASIN
DMH	DRAIN MANHOLE
EMH	ELECTRIC MANHOLE
EVGR	EVERGREEN TREE
FLAG	FLAG POLE
GG	GAS GATE
GW	GUY WIRE
HYD	HYDRANT
LP	LIGHT POLE
MH	MANHOLE
POST	POST
SMH	SAN. SEWER MANHOLE
SIGN	SIGN
SLP	STREET LIGHT POLE
TMH	TELEPHONE MANHOLE
TREE	TREE GENERIC
UP	UTILITY POLE
WG	WATER GATE

ABBREVIATIONS

BC	BOTTOM CURB
BW	BOTTOM WALL
BIT	BITUMINOUS CONCRETE
CONC.	CONCRETE
GRAN.	GRANITE
I	INVERT
R	RIM
TC	TOP CURB
TW	TOP WALL

LEGEND

- 1 1/2" COPPER PIPE LINE
- 2" PVC PIPE LINE
- 4" PVC PIPE LINE
- 1" PVC ELECTRICAL LINE

APPROXIMATE NORTH

0 15 30 60 120

SCALE: 1" = 30'-0"

TOWN HALL GARDENS HISTORIC RESTORATION POOLS RECONSTRUCTION PH. 1A

LANDSCAPE ARCHITECT:

PAT LOHEED•LANDSCAPE ARCHITECT
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617-623-4366 • FAX 617-623-4362

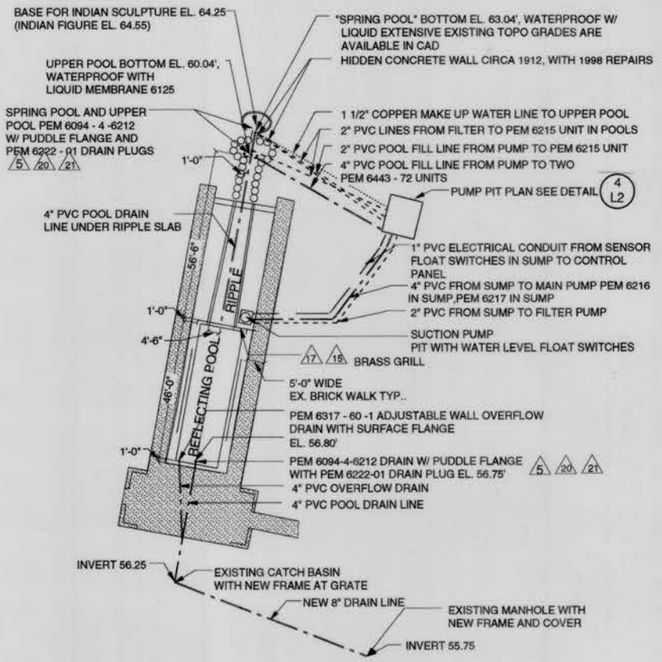
REVISIONS:

TITLE: AS BUILT PLAN

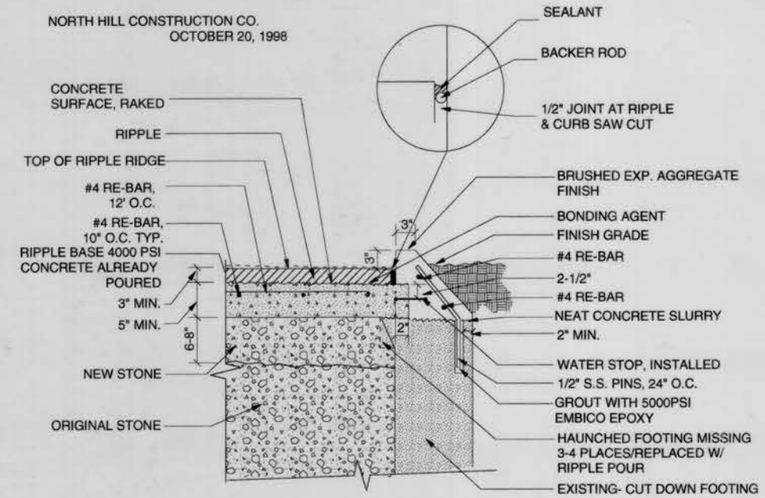
DRAWN BY: JR, JJ
CHECKED BY: PL

DATE: 9/99

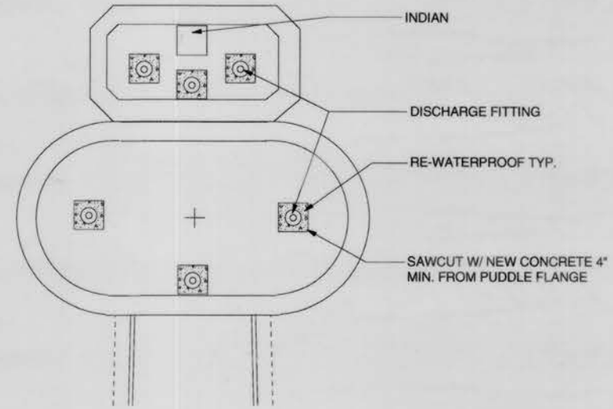
L-1



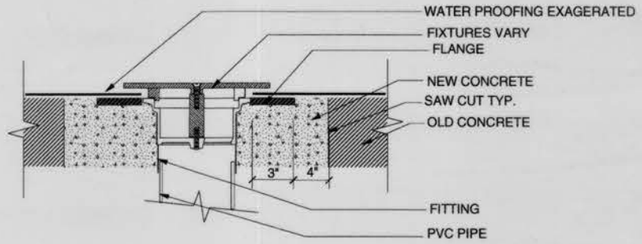
1 L2 POOL PLAN ENLARGEMENT
SCALE: N.T.S



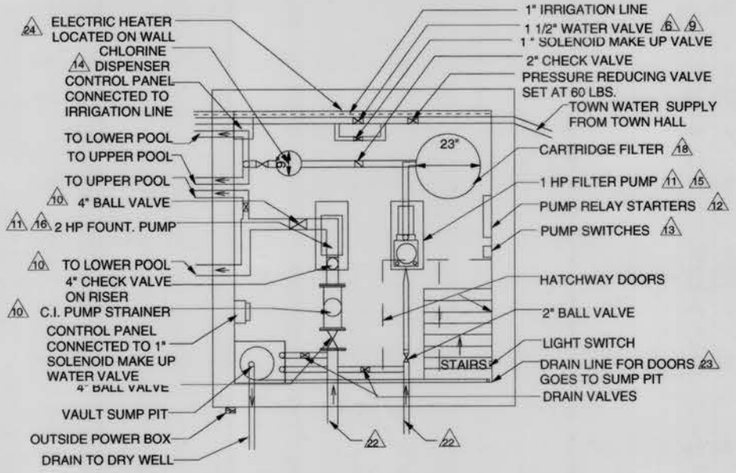
2 L2 RIPPLE & RIPPLE CURB SECTION
SCALE: N.T.S



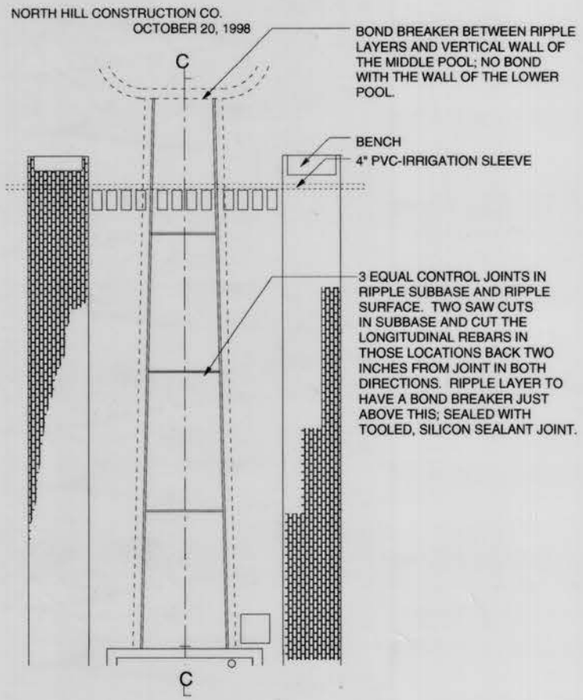
3 L2 POOL SKETCH
SCALE: N.T.S



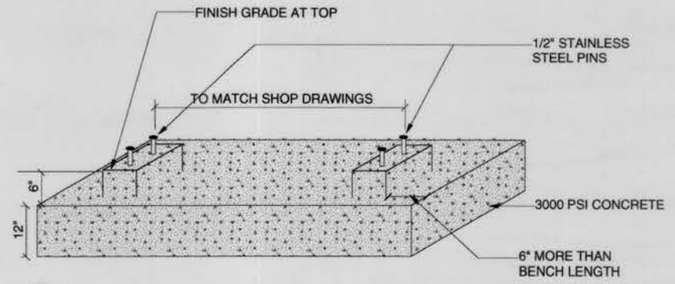
6 L2 TYP REPAIR SECTION
SCALE: N.T.S



4 L2 PUMP PIT PLAN
SCALE: N.T.S



5 L2 POOL LAYOUT
SCALE: N.T.S



7 L2 BENCH PADS
SCALE: N.T.S.

TOWN HALL GARDENS
HISTORIC RESTORATION
POOLS RECONSTRUCTION PH. 1A

LANDSCAPE ARCHITECT:
PL/LA
PAT LOHEED•LANDSCAPE ARCHITECT
1310 BROADWAY, SUITE 103
SOMERVILLE, MA 02144
617-623-4366 • FAX 617-623-4362

REVISIONS:

TITLE: AS BUILT DETAILS

DRAWN BY: JR. JJ
CHECKED BY: PL

DATE: 9/99

L-2

1999 image of restoration showing planting of 6 Alberta spruces; Courtesy of the Town of Arlington

1999 image of restoration showing Alberta spruces & pachysandra; Courtesy of the Town of Arlington

1999 image of cobblestone walk reconstruction; Courtesy of the Town of Arlington

1999 image of reconstruction of the “spring”; Courtesy of the Town of Arlington

1999 image of reconstruction of the “spring”; Courtesy of the Town of Arlington

1999 image of reconstruction of the “spring”; Courtesy of the Town of Arlington

1999 image of repairs to the lower basin; Courtesy of the Town of Arlington

2017 Conditions & Preservation Recommendations

Today, the water features are part of the well-loved gardens in the heart of the Town of Arlington. It has been determined that the Olmsted Brothers garden design is the period of significance to which the water features and gardens shall be restored. Most design plans from the Olmsted Brothers are dated 1939, but the firm's work continued into 1941. Most of this later work included revisions to planting based on specimens that did not survive, but other changes were made to the design of the area immediately around the sculpture, as access to the sculpture was clearly an issue.

Menotomy Indian Hunter sculpture and base

When this project began, the sculpture had some paint on the face and back of the figure. Prior to the completion of this report, the cleaning of the sculpture and the broken bow was repaired by Skylight Studios of Woburn, MA. The sculpture base has lost nearly all of the stone veneer and the waterproofing has peeled away. There is no longer lighting for the sculpture though it was included in both the 1939 and 1999 plans.

Recommendations:

- Consider lighting sculpture to discourage vandalism and misuse. Use existing conduit, if in suitable condition, and replace fixtures for LED.
- Remove liquid membrane waterproofing, clean concrete plinth, reset stones based on Olmsted design. Use 1999 restoration images as resource.
- Restore bronze bow to sculpture (Completed autumn 2017).
- Remove paint on sculpture (Completed autumn 2017).
- Consider installing fencing at rear of sculpture to limit access. See Olmsted Brothers' Plan No. 50 for reference.

Spring with stone spillway

The "spring" is the source of the water for the feature. Today the pool is very dark and filled with debris, including trash, leaves, and fruit from the walnut trees. Nearly all of the stones which were placed vertically have fallen, and others are loose with exposed mortar, and infill, including bricks. The concrete pool is exposed in several locations.

Recommendations:

- Remove any remnants of original fountain mechanical system. New fountain hardware should not be visible after the completion of construction.
- Remove all vegetative debris.
- Remove liquid membrane waterproofing, clean concrete pool, clean stones of mortar and other infill. Remove and dispose of waterproofing. Reapply waterproofing after cleaning on concrete.
- Reset stones based on Olmsted Brothers design. Consider pinning or other system of keeping the stones from sliding or falling. Whatever system is selected for securely mounting the stones, must not be visible after construction.

- Set water height to be just below hand of sculpture. See Olmsted Plan No. 33 and image 2252-01-83, dated September 1939, below. Water level is just above the base of elevation of the bronze base set on the concrete.
- Develop maintenance program to regularly clean leaves and walnuts from the pools.
- Consider restoring the bluestone spillway as shown in image 2252-78.

Image 2252-01-83, dated September 1939; Courtesy of Olmsted Archives, Frederick Law Olmsted National Historic Site, NPS

Upper pool

The condition of the upper pool is similar to that of the spring. The water is very dark in color, with considerable vegetative debris. The stones in the upper pool appear to have weathered better with fewer having been dislodged.

Recommendations:

- Remove and dispose of the liquid membrane waterproofing, clean concrete pool, clean stones of mortar and other infill.
- Reapply waterproofing after cleaning concrete. Waterproofing, mortar, and concrete should be minimally visible after installation.
- Reset stones based on Olmsted design.
- Water level is determined by the elevation of the ripple spillway.

Ripple with stepping stones

The ripple was restored as part of the 1999 project and is in good condition. There are areas where it appears that skateboards have run over the ripples damaging some of the profile. The sealant between the curb and ripple has worn away leaving a gap that collects debris. Two of the bluestone stepping stones are broken and all of them are loose.

Recommendations:

- Replace two broken bluestone stepping stones with stones of like size, color, and finish
- Re-mortar all bluestone stepping stones and consider a more permanent method of securing them in place
- Re-caulk between ripple spillway and concrete curb. Color to be approved in field.
- Remove expansion joint caulking and replace.
- Repair damage to ripples from skateboards
- Protect custom manhole cover

Lower pool with bluestone coping

The lower pool is in poor condition. The skim coating that was applied in the 1998-1999 restoration has failed. The original concrete wall reinforcing and infill material is exposed. The depth of the pool varies (from 15 1/4 inches to 16 inches at the northern end) due to the thickness of the skim coating. The overhang of the bluestone coping varies greatly all the way around the pool from 1/4 of an inch to 1-1/2 inches. The pool is shallower than the originally designed depth of 2 feet 3 inches which leads to the assumption that there may have been a later pour over the original concrete pour in 1913. The drain, installed in the 1998-1999 restoration is bright yellow and is in sharp contrast to the concrete and is distracting.

1911 image of lower pool; Courtesy of Digial Commonwealth: Massachusetts Collections Online

Image of children sailing boats at the lower pool, no date; Courtesy of Digital Commonwealth: Massachusetts Collections Online

The bluestone coping stones appear to be in relatively good condition and none appear to be out of place. Olmsted Brothers Plan No. 25 suggests that the coping stones have a central dowel keeping them in line. In the event that these dowels are in place, great care should be taken to ensure that the coping stones are not damaged during their removal. No historic records have been uncovered which detail the depth of the water within the pool either from Sturgis or the Olmsted Brothers plans. In historic images the water level appears to be just below the coping stone. (See images above.)

Recommendations:

- Remove, catalog, and clean bluestone coping of all mortar, gunite, paint, or other materials.
- Demolish existing cast-in-place concrete pool and skim coating.
- Recast the lower pool, with finish to match historic exposed aggregate concrete finish.
- Reset bluestone coping based on cataloging.
- Restore coping to original 3/4-inch reveal on both sides of pool wall.
- Restore water level to just below coping stones.
- Replace modern drain covers with metal drain covers with an appropriate finish that will withstand the chlorinated water, if treated, and will not be in contrast to the concrete.

Brick walkways and forecourt

For the most part, the brick walkways and forecourt are in fair condition and free of tripping hazards, though there is an occasionally brick missing. However, the brick soldier course edging is no longer vertical. Since the vertical bricks have pushed out, the entire walkway has splayed out, and most of the joints between the bricks are growing grass and weeds. Some of the joints have expanded such that brick pieces have been inserted to fill the gaps.

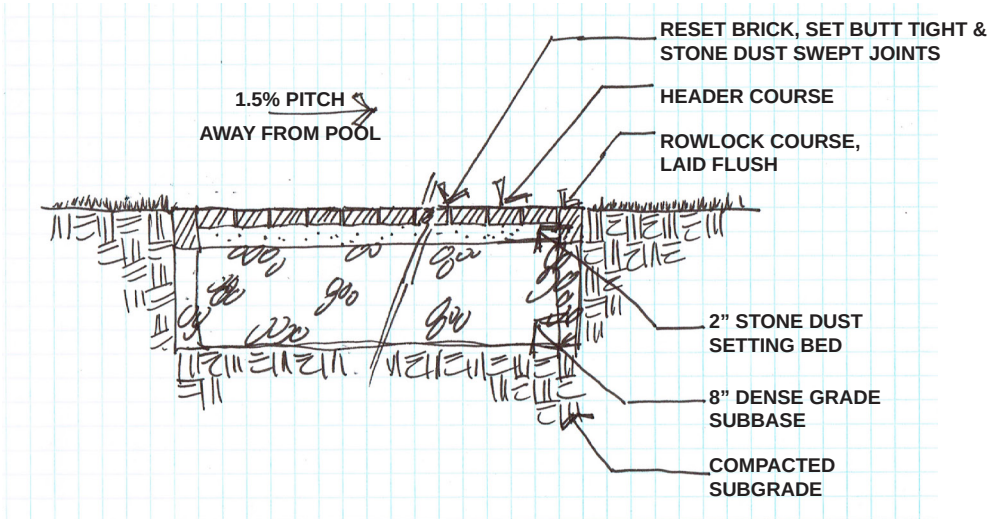
In order to complete the upgrades for the water feature's mechanical system, utility lines will cut across the brick walkways. The reconstruction of the lower pool will also require some level of excavation, removal, and replacement of the brick walks. In addition, as part of the restoration project, a cover for the lower pool and spillway is proposed. The detail proposed for the cover to be secured will impact the brick walkways. Because the Sturgis design for the brick walkways includes a 3.0% crown, as well as border bricks laid in a soldier course, it will be extremely difficult to repair portions of the walkways without disrupting large portions of the walkways. For these reasons, it is recommended that the brick walkways flanking the water feature be removed and reset, reusing the existing brick as much as possible. Also, the brick walkways were designed with a drainage system integral to the cross-section which is likely no longer functional. The drainage system will likely also have to be reconstructed or eliminated. Doing this will provide an opportunity to simplify the drainage by eliminating the crown in the walk and creating a cross-pitch to one side or the other.

The Arlington Civic Block Master Plan proposed options for the redesign of the brick paving and drainage detail. However, a drainage system is unnecessary for these walkways flanking the water feature. The walkways are six feet wide and surrounded by planting beds. It is recommended that the walkways be pitched towards the side planting (away from the water feature) with a cross-pitch of no more than 2.0%. It is also recommended that the border brick be changed to a header course laid flush so that it will be less

likely to settle out of plumb. It is worth noting that images included in the collection of photographs from the 1999 restoration show the brick walkway near the Whittemore-Robbins House to have the border brick laid flush, with no reveal as in the original brick walkways detail.

Recommendations:

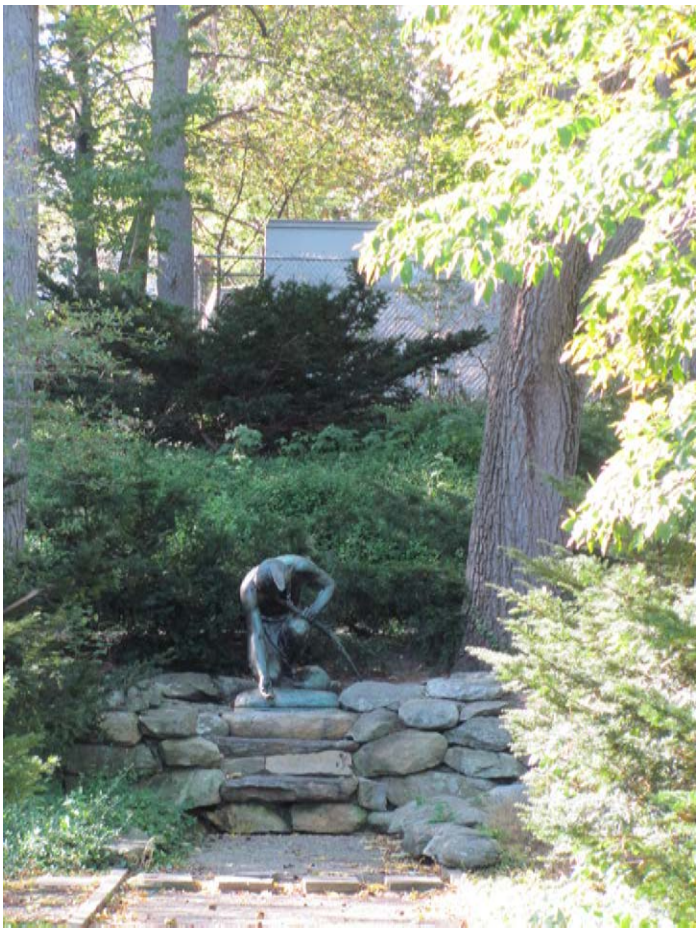
- Reset brick walkways to eliminate tripping hazards, and ensure positive drainage. Reuse as much of the existing brick as possible. New brick, as needed, should match the existing brick and be interspersed. Consider brick walkway detail shown below.
- Minimize disturbance to brick forecourt.
- Protect memorial stone in forecourt.
- Existing drains and drain lines to be removed and disposed of.



Recommended cross-section for brick paving

1999 image of brick walkway adjacent to the Whittemore-Robbins House with flush brick edging

View from brick walkway with dogwood limbs blocking view of sculpture



View of sculpture with utility cabinet cluttering the backdrop to the sculpture

Circular cobble walkway

The circular cobblestone walkway is in good condition having been reconstructed in 1999, but does have some missing stones which, given their depth, are a significant tripping hazard. The joints are growing grasses and weeds.

Recommendations:

- Replace missing cobblestones where necessary
- Remove grass in joints and sweep with a sand/cement mixture

Views up to and from sculpture

Many of the plantings have grown beyond the limits of the planting bed and are therefore screening portions of the water features and woodland planting. Above the brick walkways, the dogwood branches significantly encroaches the walkway therefore screening the sculpture from view and creating the potential for debris to fall on the walk or visitors.

A utility cabinet and chain link fence—part of the Arlington Senior Center/Central School facility—are located directly behind the sculpture. These are visible from the water feature and detract from the sculpture and its woodland setting. They should be carefully screened with the Olmsted Brothers evergreen shrub palette so as not to be seen from the memorial gardens.

Recommendations:

- Prune existing trees to open up views to woodlands and sculpture from brick walkways and forecourt.
- Use appropriate vegetation from the Olmsted Brothers planting palette to screen the utility cabinet and chain link fence from the memorial gardens.

Woodland planting behind sculpture

The rock wall which supports the slope behind the sculpture and cobble loop is covered in wintercreeper. Other plant species in this area include *Euonymous alatus*, burning bush which has been listed as an invasive plant species in Massachusetts, seven *Pinus strobus*, white pine (one of which appears to be in poor condition), and one *Acer platanoides*, Norway maple, which is also an invasive species in Massachusetts. There is also one *Morus alba*, white mulberry (another Massachusetts listed invasive species) growing near the path to the Robbins Library. Additional plants in this area include one spreading *Taxus spp.*, yew; *Prunus spp.*, cherry trees—mostly young trees; and, *Spiraea spp.*, spirea.

The Olmsted Brothers design for this planting area works off of the plantings proposed by the Sturgis plan, but it appears as though many of the trees on the Sturgis plan either did not survive or were never planted. Plan No. 16-A denotes only a dozen or so existing trees which vary from 3 inches to 16 inches in caliper. (This is confirmed by Plan No. 15, entitled "Topographical Map", dated October 25, 1938 which appears to show that the Olmsted Brothers planting plan did not remove any existing trees.) The Olmsted Brothers plan is heavy on three species of evergreen trees: *Pinus strobus,* white pine; *Tsuga canadensis,* eastern hemlock; and, *Juniperus virginiana,* eastern red cedar. The understory plantings are a mix of deciduous and evergreen shrubs but also rely more heavily on evergreen species. The perennial species are "to be planted in the interstices and along the top of the boulder work" as noted on Plan No. 16-A. It is also worth noting that only one birch tree remains, with an approximately 30-inch caliper diameter breast height (DBH), from the Sturgis and/or Olmsted Brothers planting.

On the east side of the woodland planting is the ornate metal fence which is historic to the Whittemore-Robbins House. The fence has been restored over the years and should be protected from damage.

Recommendations:

- Protect the ornamental metal fence from all construction activities.
- Remove all undesirable species.
- Remove all dead or dying plantings, as well as deadwood.
- Protect all trees and shrubs to remain from construction damage.
- Replant according to Olmsted Brothers' planting plan No. 16-A and 16-B, both dated May 26, 1939. The plant species include the following:

  (All plant names discussed in this section have been converted to modern botanical names. Plants have been listed in the following order: trees, shrubs, vines/groundcovers, perennials. Where multiple species are listed as a single line item, they were listed similarly on Olmsted Brothers plant lists.)

  - *Pinus strobus,* white pine
  - *Tsuga canadensis,* eastern hemlock - Species not recommend due to mortality rate from woolly adelgid
  - *Juniperus virginiana,* eastern red cedar
  - *Cornus florida,* flowering dogwood - Recommend substituting a disease-resistant hybrid
  - *Cotoneaster dielsiana,* Chinese cotoneaster - May be difficult to locate in commercially nurseries
  - *Cotoneaster adpressus,* creeping cotoneaster/*Cotoneaster horizontalis 'prostrata',* prostrate rockspray cotoneaster
  - *Juniperus chinensis 'pfitzeriana',* pfitzer juniper
  - *Vaccinium corybosum,* highbush blueberry
  - *Rhododendron maximum,* rosebay rhododendron
  - *Kalmia latifolia,* mountain laurel
  - *Ligustrum spp.,* privet - Invasive species in Massachusetts; cannot be planted
  - *Berberis thunbergiana,* Barberry - Invasive species in Massachusetts; cannot be planted
  - *Juniperus chinensis,* Chinese juniper/*Juniperus horizontalis,* rug juniper/*Juniperus horizontalis 'douglasii',* Douglas juniper
  - *Phlox subulata 'alba'*, white moss phlox
  - *Thymus serphyllum 'album'*, white creeping thyme/*Thymus serphyllum 'languinosus'*, woolly thyme
  - Existing species noted on the Olmsted Brothers plans include *Betula pendula*, white birch; *Pinus strobus*, white pine; and, *Fraxinus spp.*, ash.
- Use appropriate vegetation from the Olmsted Brothers' planting palette to screen the utility cabinet and chain link fence from the memorial gardens.

Planting within cobblestone walk around sculpture

Today the woodland planting behind the Dallin sculpture is comprised mainly of taxus shrubs and wintercreeper vines which are consistent with the 1999 planting by Pat Loheed's (PL/LA) office. Of the four mountain laurels shown on the PL/LA plans, only one remains. Behind the sculpture are two large walnut trees—approximately 30-inch and 46-inch DBH which predate the Olmsted Brothers work. One cherry tree also exists which may be a volunteer as it does not show up in any plans.

This is, perhaps, the most significant of the planting areas as it is directly surrounding the sculpture and creates its woodland context that is essential to the Olmsted Brothers design intent. This are should be a priority for restoration of the original palette. The Olmsted Brothers planting palette will have much greater species diversity, will reflect the original design intent, and will recreate the woodland setting for the sculpture with a mix of evergreen and deciduous species.

Recommendations:

- Selectively remove and dispose of yews and wintercreeper to work within the Olmsted Brothers planting plan.
- Remove any other plantings that do not conform to Olmsted Brothers planting plan. Species that can be relocated according to Olmsted Brothers planting plans should be carefully removed for transplant.
- Protect walnut trees but establish routine maintenance plan to remove leaves and fruit from all water features and walkways.
- Replant according to Olmsted Brothers planting plan No. 16-B, dated May 26, 1939. The plant species include the following:
    - *Betula papyrifera,* paper birch
    - *Tsuga canadensis,* eastern hemlock - Species not recommend due to mortality rate from woolly adelgid
    - *Cornus florida,* flowering dogwood - Recommend substituting a disease-resistant hybrid
    - *Juniperus virginiana,* eastern red cedar
    - *Taxus cuspidata,* Japanese yew
    - *Juniperus chinensis 'pfitzeriana',* pfitzer juniper
    - *Juniperus chinensis var. sargentii,* Sargent's juniper
    - *Juniperus chinensis,* Chinese juniper/*Juniperus horizontalis,* rug juniper/*Juniperus horizontalis 'douglasii',* Douglas juniper
    - *Rhododendron yedoense var. poukahensis,* Korean azalea
    - *Dirca palustris,* eastern leatherwood
    - *Euonymous fortunei var. radicans,* common wintercreeper - Species not recommended due to aggressive nature
    - *Pieris floribunda,* mountain Andromeda
    - *Kalmia latifolia,* mountain laurel

- *Vaccinium corybosum,* highbush blueberry
- *Cotoneaster adpressus,* creeping cotoneaster/*Cotoneaster horizontalis 'prostrata',* prostrate rockspray cotoneaster
- *Arctostaphylos uva-ursi,* bearberry
- *Pachysandra terminalis,* Japanese spurge
- *Hemerocallis spp.,* daylily
- *Dryopteris marginalis,* marginal shield fern
- *Dryopteris spinulosa,* toothed wood fern
- *Polystichum acrostichoides,* Christmas fern
- *Arisaema triphyllum,* Jack-in-the-pulpit
- *Phlox subulata 'alba'*, white moss phlox
- *Thymus serphyllum 'album'*, white creeping thyme/*Thymus serphyllum 'languinosus'*, woolly thyme
- Existing plantings shown on the 1939 Olmsted Plan No. 16-B also include *Pinus strobus,* white birch; *Ailanthus altissima,* tree of heaven - a listed invasive species in Massachusetts; a twin-trunk *Tsuga canadensis*, hemlock; as well as one *Juglans nigra*, black walnut.

- Cut existing stumps flush to grade and treat with herbicide.

Spillway planting

The 1999 Pat Loheed plans show a simple palette for the planting beds between the ripple spillway and the brick walkway: six *Picea glauca 'Conica',* dwarf Alberta spruce (three each side) and *Pachysandra terminalis,* Japanese spurge. (The *Picea glauca 'Conica'* is assumed as it does not show up on the plant schedule in the plan set, however, this is what was included in the Olmsted Brothers Plan No. 16-A but only with two on each side.) Today there are five *Taxus spp.*, yew in lieu of the spruces — one has died since the 1999 restoration. The beds also have some *Onoclea sensibilis*, sensitive fern growing.

In the Olmsted Brothers planting plan, the flanking beds were planted with *Pachysandra terminalis,* Japanese spurge; *Cotoneaster adpressus,* creeping cotoneaster and *Cotoneaster horizontalis 'prostrata',* prostrate rockspray cotoneaster. *Pachysandra* is an aggressive, shade-tolerant, evergreen groundcover. It can quickly fill in a planting area, similar to the wintercreeper that has filled in other planting beds in the memorial garden. In this location, between the brick walkways and the spillway, they are (almost) literally between a rock and a hard place and will likely not spread out of control if carefully maintained.

During a mid-fall visit, small *Fallopia japonica*, knotweed was observed; a Massachusetts listed invasive species.

Recommendations:

- Remove and dispose of yews. Protect existing Japanese spurge. Remove any other plantings that do not conform to Olmsted Brothers planting plan. Species that can be relocated according to Olmsted Brothers planting plans should be carefully removed for transplant.
- Remove all undesirable species.
- Replant according to Olmsted Brothers planting plan No. 16-A, including two *Picea glauca 'Conica'* on either side and a groundcover planting comprised of Japanese spurge and the two cotoneaster species.

Planting along lower pool

Today, these long, narrow planting beds are filled with *Sedum spp.* and *Astilbe spp.* with a few *Aster spp.* mixed in. (No plantings are shown in this area in the 1999 PL/LA plans.)

The Olmsted Brothers planting plan fills these beds with mostly *Pachysandra terminalis,* Japanese spurge and select groupings of *Cotoneaster adpressus,* creeping cotoneaster and *Cotoneaster horizontalis 'prostrata',* prostrate rockspray cotoneaster. Cotoneaster will eventually grow to have a spread of up to 6 or 8 feet depending on the species. These plantings, unless regularly and heavily pruned, will quickly grow beyond the limits of the three-foot wide planting strip. A replacement low-growing evergreen shrub or groundcover with a more appropriate spread for the narrow planting bed should be selected in lieu of the cotoneaster.

Recommendations:

- Maintain the existing sedum and astilbe plantings to maintain fall and spring blooms. Remove all other perennial plantings which are likely volunteer species from elsewhere in the gardens. As perennials need to be replaced, consider attractive blooming perennials that are consistent with a woodland-style planting palette.
- Reintroduce limited *Pachysandra* to incorporate evergreen for winter and to incorporate some of the Olmsted design intent.

Border planting outside brick walkways

The woodland style plantings continue outside the brick walkways on either side following the spillway and lower pool. These planting beds are dominated by dogwoods (*Cornus x 'Rutlan' Ruth Ellen, C. x 'Rutgan' Stellar Pink, C. x 'Rutban' Aurora)* with an understory planting of *Rhododendron x 'Delaware Valley White'*, Delaware Valley white azalea; *Rhododendron yedoense var. poukahensis,* Korean azalea; *Taxus cuspidata 'Greenwave',* greenwave yew; *Pachysandra terminalis,* Japanese spurge; and, *Campanula carpatica*, bellflower. These were the plants installed in the 1999 restoration, with the exception of the mountain laurel which may be from the Olmsted Brothers planting — several of which are in poor condition. Additional trees include *Malus spp.*, crabapple, and one tree-form *Taxus cuspidata*, Japanese yew which may have been mislabeled as a greenwave yew at the nursery but appears to be the straight species.

There are a few different invasive species in both the east and west planting beds: *Ailanthus altissima*, tree of heaven; *Euonymous alatus*, burning bush; *Ligustrum spp.*, privet; *Morus alba*, white mulberry; *Berberis spp.*, barberry; and, *Cynanchum rossicum*, pale swallow-wort. *Vitis spp.*, wild grape is not listed as an invasive species in Massachusetts but other northeast states have listed it due to its aggressive nature.

The Olmsted Brothers planting for these beds flanking the water feature were dominated by two species: *Taxus cuspidata 'brevifolia',* dwarf Japanese yew and *Cornus florida,* flowering dogwood (large specimens). The Olmsted Brothers plans had seven yews and six dogwoods per side. The beds would have had more light with the vast majority of the species being shrubs. Today's planting is dominated by tall shrubs/small trees which are dense and effectively create a vertical wall around the gardens.

Recommendations:

- Remove all dead or dying plantings. Remove all plants with less than 50% healthy, balanced branching structure that show viable terminal buds.
- Remove all undesirable species.
- Undertake extensive pruning on existing dogwoods, both for removal of dead wood and for viewshed management.
- Replant according to Olmsted Brothers planting plan No. 16-B, dated May 26, 1939. The plant species include the following:
    - *Cornus florida,* flowering dogwood - Recommend substituting a disease-resistant hybrid
    - *Cornus florida 'rubra',* red-flowering dogwood - Same as above
    - *Taxus cuspidata 'brevifolia',* dwarf Japanese yew - Recommend selecting a modern equivalent
    - *Rhododendron yedoense var. poukahensis,* Korean azalea
    - *Kalmia latifolia,* mountain laurel
    - *Pieris floribunda,* mountain Andromeda
    - *Morella pennsylvanica,* northern bayberry
    - *Juniperus chinensis,* Chinese juniper/*Juniperus horizontalis,* rug juniper/*Juniperus horizontalis 'douglasii',* Douglas juniper
    - *Cotoneaster wilsonii,* wilson cotoneaster/*Cotoneaster horizontalis,* rockspray cotoneaster
    - *Pachysandra terminalis,* Japanese spurge

Wooded planting around mechanical vault

The plantings around the vault continues the woodland planting palette but has two substantial trees as the planting backbone: one *Magnolia x soulangeana*, saucer magnolia and one multi-leader *Prunus spp.*, cherry tree (potentially a Kwanzan cherry as they were included on the Olmsted Brothers planting list.) The understory planting is mainly *Kalmia latifolia*, mountain laurel; *Rhododendron spp.*, rhododendron; and, a small tree/tall shrub *Magnolia spp.*—potentially a star magnolia. A few *Leucothoe spp.* are in the understory, yet these do not show up in the Olmsted Brothers' planting palette, nor the 1999 PL/LA plans. (In fact, the PL/LA did not propose any plantings in this area at all.)

Little of this planting palette reflects that of the Olmsted Brothers. Their planting included three of the *Magnolia x soulangeana*, saucer magnolia, a *Magnolia stellata*, star magnolia, with several shrubs in the understory.

Recommendations:

- Protect existing leucothoe plantings
- Prior to beginning any construction activities in and around the mechanical vault, lift and secure limbs of existing magnolia and cherry trees to prevent damage. Work must be completed by a Massachusetts certified arborist.
- Restore Olmsted Brother's planting plan No. 16-A. Species included:
    - *Magnolia stellata*, star magnolia
    - *Spiraea x vanhouttei*, Bridalwreath spirea
    - *Malus hupehensis*, tea crabapple
    - Roses — no form, species, or cultivar/variety noted
- If the mechanical vault is reduced in size, expand plantings in the vicinity, using species from the Olmsted Brothers' planting palette.

Major Repositories of Olmsted Collections used in this Report

Frederick Law Olmsted National Historic Site

99 Warren Street
Brookline, MA 02445
www.nps.gov/frla

Robbins Memorial Town Hall, Arlington, Massachusetts – Job # 2252, (1938-1941)
Collections include:
- Plans and Drawings
- Job Photographs
- Planting Lists

Library of Congress, Manuscript Division

James Madison Memorial Building
101 Independence Avenue, Room LM 101
Washington, D.C. 20540-4680
www.loc.gov/rr/mss

Olmsted Associates Papers (1938-1941), Microfilm 20,112-479P: Reels #85, Frame #537-690, Reel #86 Frames 001-119.
Collections include:
- Project Correspondence

Boston Athenæum, Special Collections

10½ Beacon Street
Boston, MA 02108
http://www.bostonathenaeum.org/

Sturgis, R. Clipston (Richard Clipston), 1860-1951. Architectural sketchbooks No. 48: (February 1911) through No. 53. (October 1913)

Town of Arlington, Massachusetts, Town Vault (Archives)

Town Hall
730 Massachusetts Ave
Arlington, MA 02476

Collections include:
- Photographs: 1999 Town Hall Gardens Historic Restoration

Digital Commonwealth: Massachusetts Collections Online

Digital Commonwealth
321 Walnut Street
Newton, MA 02460
www.digitalcommonwealth.org

Collections include:
- Historic Photographs & Postcards

Bibliography of Additional Resources

Friedberg, Betsy. Arlington Center Historic District Nomination Form, ARL-A. Massachusetts Historical Commission. Boston, June 1985.

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