

# Beatrix Farrand

Consultant Landscape Architect  
to Yale Campus 1920-1945

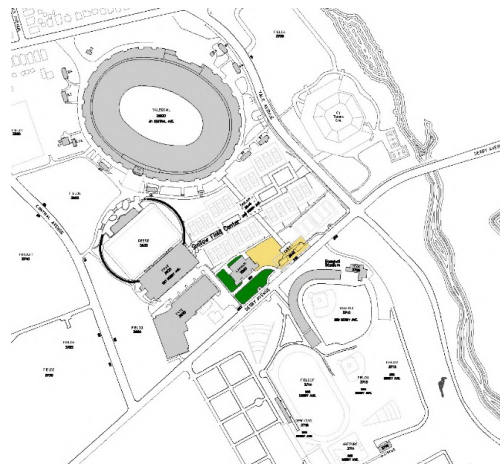
## Yale University Campus Farrand Cultural Landscapes Study

### Yale Office of Facilities

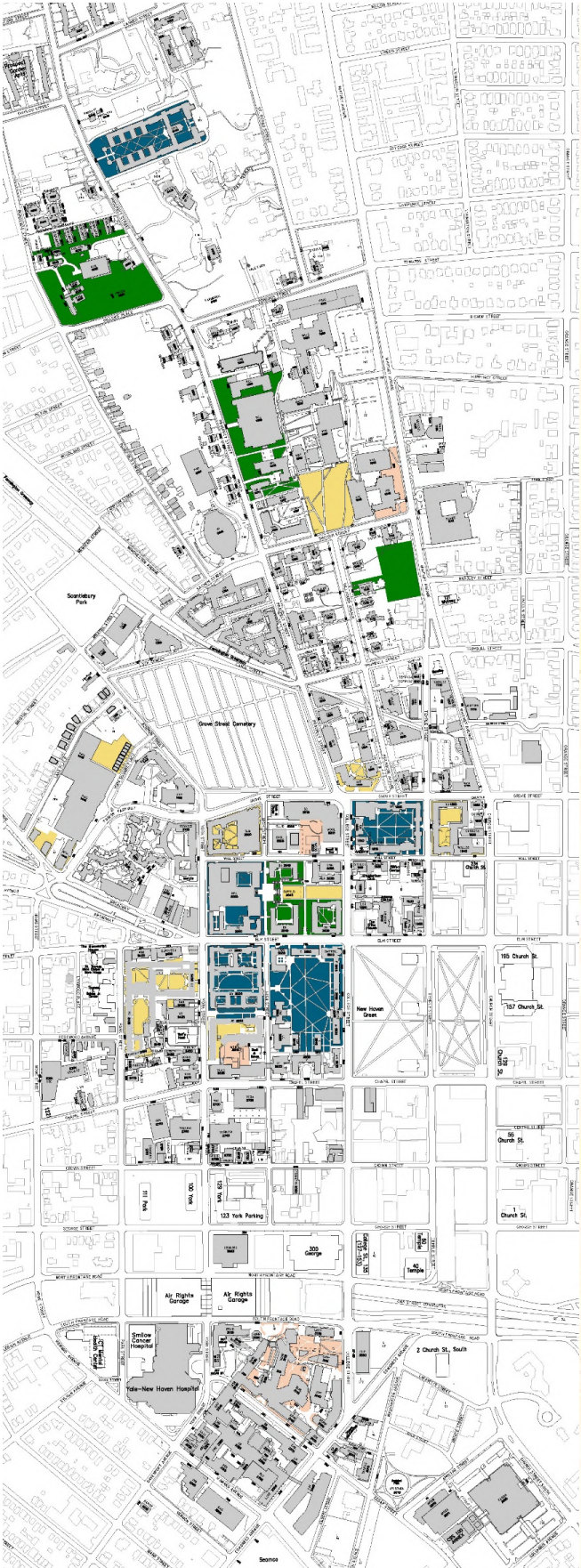
Kristina Chmelar, AIA, LEED AP BD&C, Major  
Projects Planner  
Michael West, Manager of Planning and Standards

### Heritage Landscapes LLC

Patricia M. O'Donnell, PLA, FASLA, AICP, Principal  
Peter F. Viteretto, PLA, ASLA, Senior Associate  
Beth Powell Faragan, PLA, Associate ASLA  
Thomas Helmkamp, ASLA  
Norwalk Connecticut & Charlotte Vermont



Extent of Farrand campus landscapes documented



At Marsh Botanical Garden Greenhouse, 1927

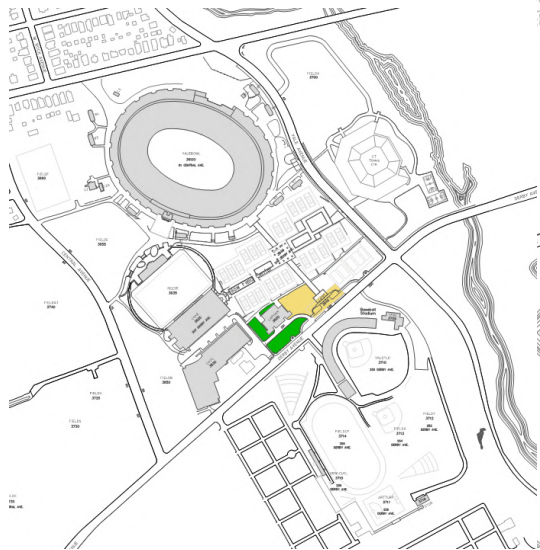


# Yale University Campus

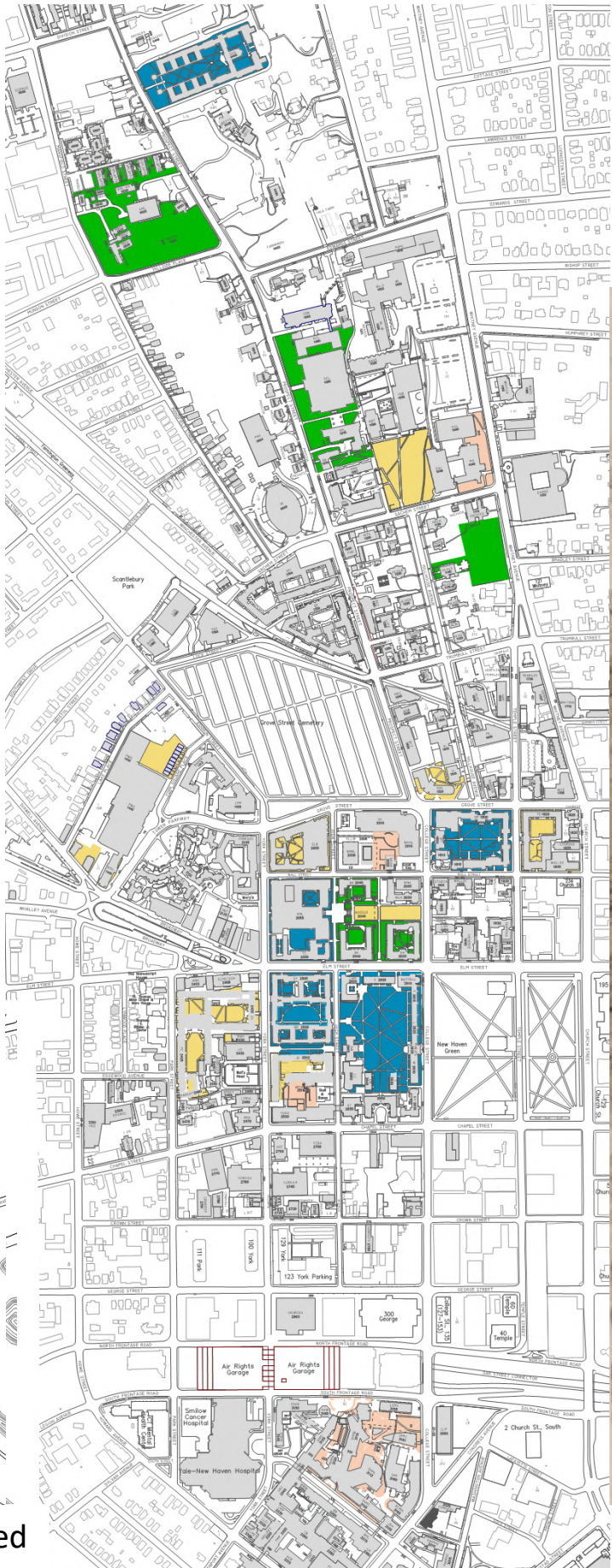
## Farrand Cultural Landscapes Study

### Methodology

- Gather and Study Archival Documents
- Conduct Farrand Landscapes Field Review
- Study Secondary Sources
- Collaborate with Judith Tankard on Context Piece
- Assemble Corroborating Sources, 2 or more to Verify Farrand Contributions
- Describe Farrand Character-Defining Features
- List Character-Defining Features present 2019
- Prepare Selected Existing Landscape Plans
- Develop Recommendations by Category
  - Legible
  - Remnant
  - Overwritten
  - Unconfirmed



Extent of Farrand campus landscapes documented



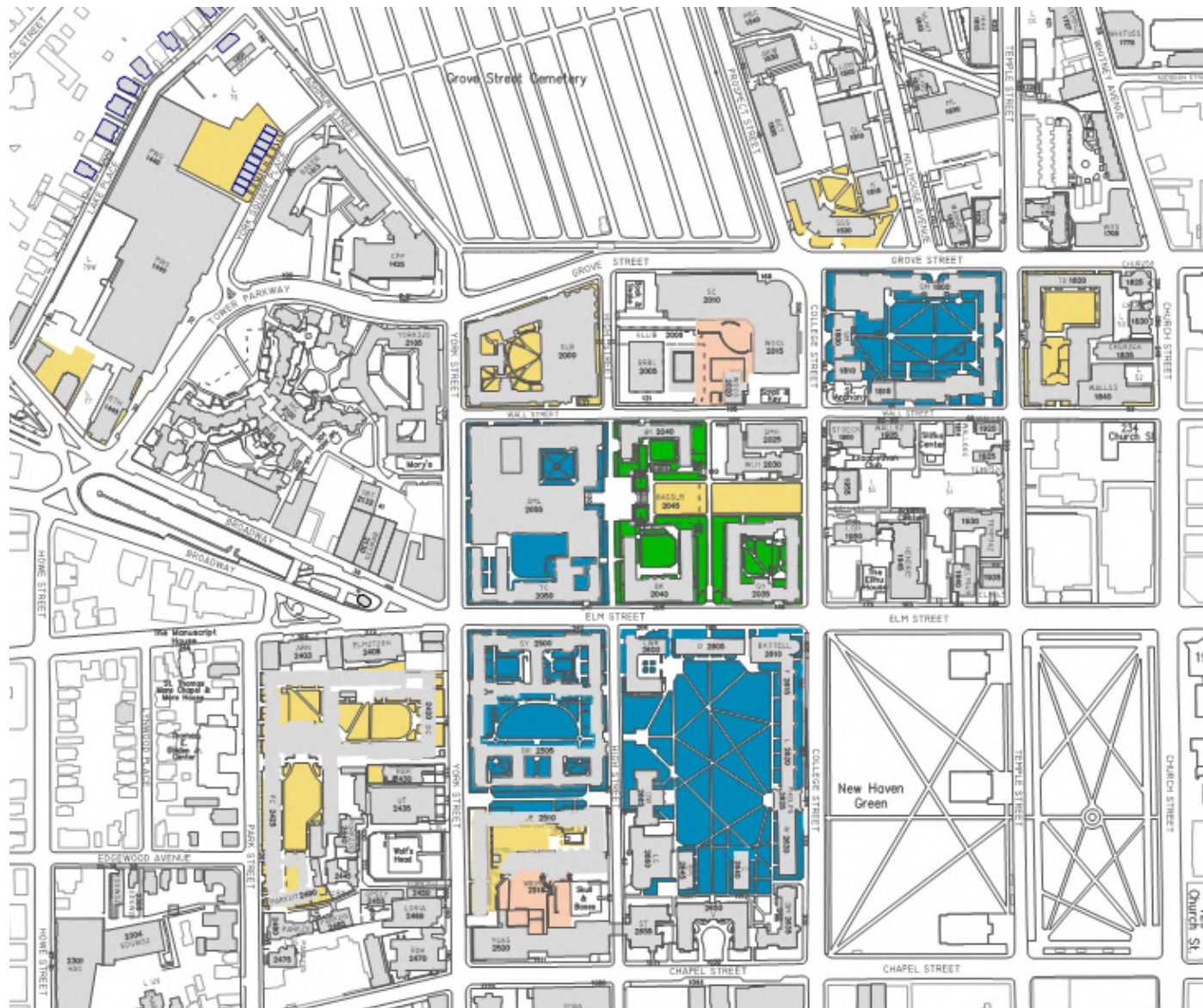
At Marsh Botanical Garden, 1927



# Yale University Campus

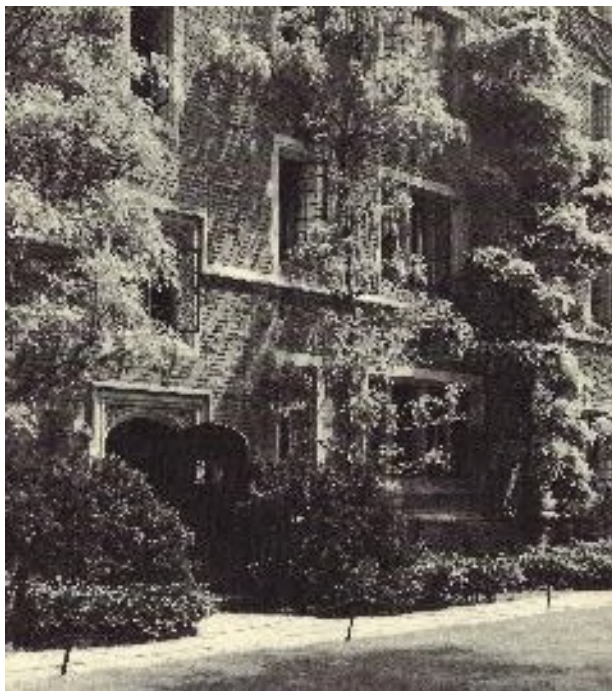
## Farrand Cultural Landscapes Study

- Legible
- Remnant
- Overwritten
- Unconfirmed

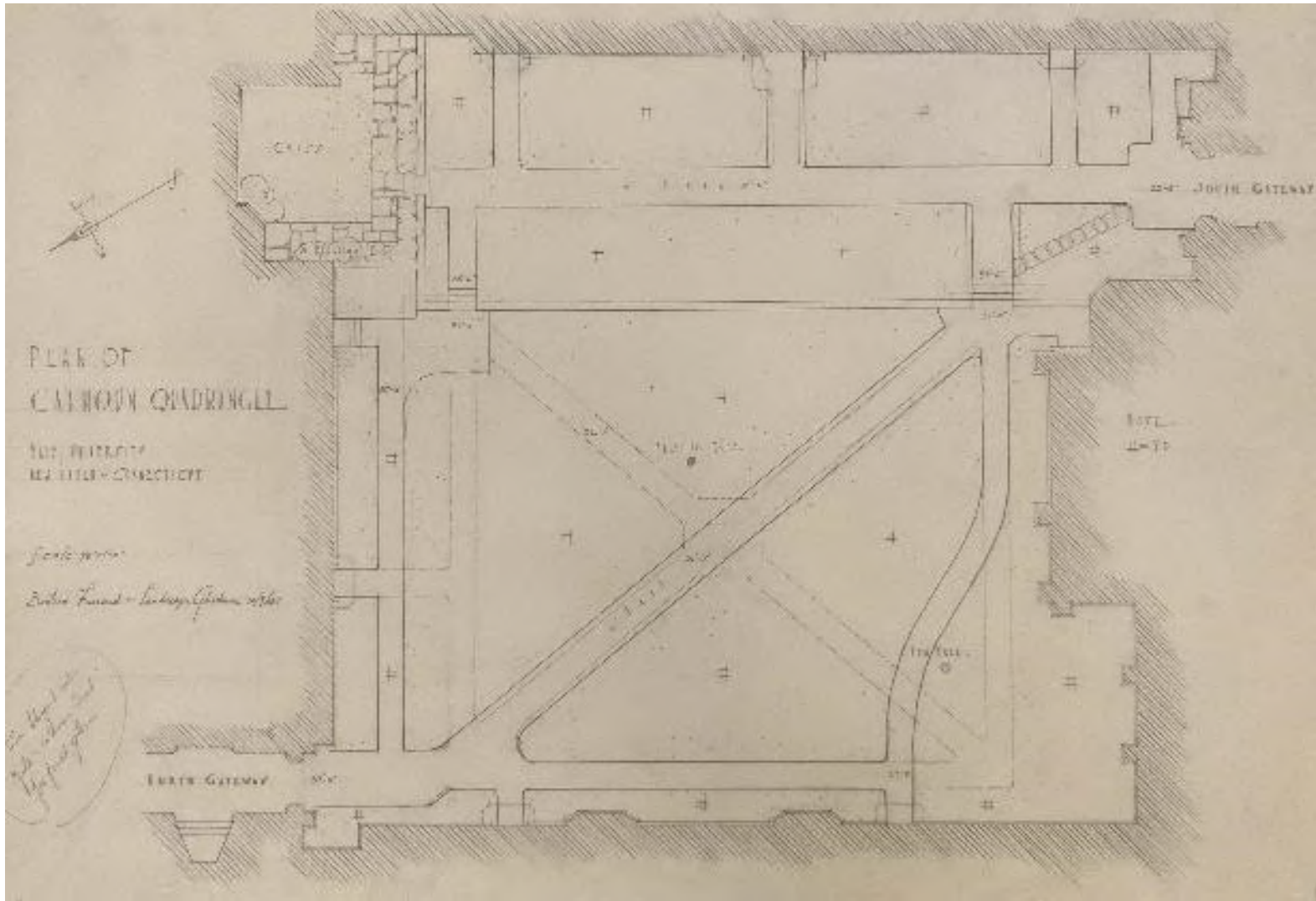




Beatrix Farrand  
Yale Campus Chronology of Works



Calhoun Quadrangle Plan, 1931, Yale Scene Photo, 1950s

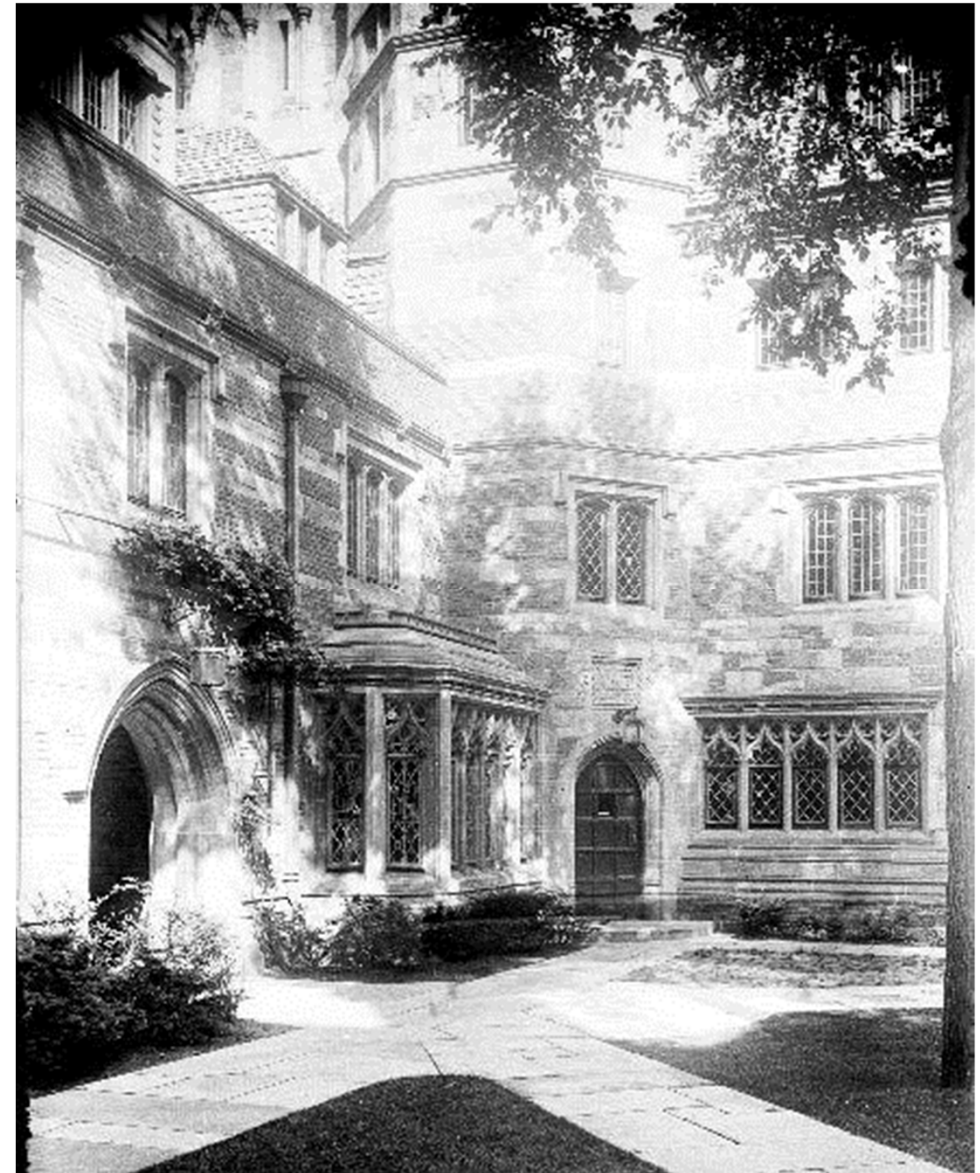


1921-22	Harkness Quadrangle
1923 Oct	Farrand hired as Consulting Landscape Gardener
1923	Formed Landscape Organization, George Cromie
1923	Established Yale Nursery
1923	Old College Campus
1923	Peabody Museum
1924	Pierson-Sage Square
1924	Lapham Field House
1924	Sloan Physics Laboratory
1924	Sterling Chemistry Laboratory
1924	Weir Hall
1924-27	Marsh Botanical Garden
1926	Yale Honorary Master of Arts
1927	Yale Alumni War Memorial
1928	Walter Camp Memorial Gateway
1929	New Haven Hospital
1930	Sterling Memorial Library
1931	Pump House
1931	Calhoun College (now Hopper College)
1931	New Athletic Field
1931-32	Old Library Street
1932	Yale Divinity School
1933	Trumbull College
1934	Berkeley College
1937	President's House
1940	Silliman College



## Farrand Related Materials at Yale University Library Manuscripts & Archives

- Yale University building and grounds photographs collection
- Yale University buildings and grounds architectural documentation
- Samuel Chamberlain postcards
- Mary Williams photographs of the Memorial Quadrangle collection
- Aerial Views 1926 to 1930s, some 70 count
- Farrand material from the University Treasurer's reports, 1923-1927
- Forestry School Treasury records
- Marsh Botanical Garden correspondence and plant lists
- Marsh Botanical Garden Annual Reports
- Yale Courtyards brochure



Example of Mary Williams photographs circa 1930s Killingworth and Linonia Courts



Yale University Library Manuscripts & Archives

Forestry Correspondence Example

April 24, 1936

Mr. Everett V. Meeks,  
Gallery of Fine Arts,  
Yale University

My dear Meeks:

Mrs. Max Farrand is interested in preparing a lecture on the educational values of the landscape work on the grounds of the University and elsewhere. It would be an illustrated lecture. It seems to me that this would be exceedingly interesting both for students and for the public generally. She plans to work on this during the next six months or so. What would you think of such a lecture next winter, perhaps under the auspices of your school?

Very sincerely yours,

HSC/MC

BEATRIX FARRAND  
1650 ORLANDO ROAD  
SAN MARINO, CALIFORNIA

December 2nd, 1937.

Henry S. Graves, Esquire,  
Dean of Forestry,  
Sage Hall, Yale University,  
New Haven, Conn.

Dear Mr. Graves:

That attractive and nice person, Tom Farnam, has sent me a clipping from the New Haven Journal-Courier of November 29th implying that some announcement has been made of a collaboration between the Park Board and Yale. If there is anything you think I should know with regard to this, can you ask good Miss Coby to send it on.

Also I should be immensely interested and grateful to know whether Mr. Nichol's visit to you with regard to Mr. Farnam's garden really had any significance, and whether it frees the Farnam garden for a more attractive and less scientific future.

Max sends his best messages with mine to you.

Yours sincerely,

Beatrix Farrand

BF:KCE

Henry S. Graves, Dean, Forestry, April 1936, December 1937



# Farrand Cultural Landscapes Study

## University of California, Berkeley, Farrand Archives

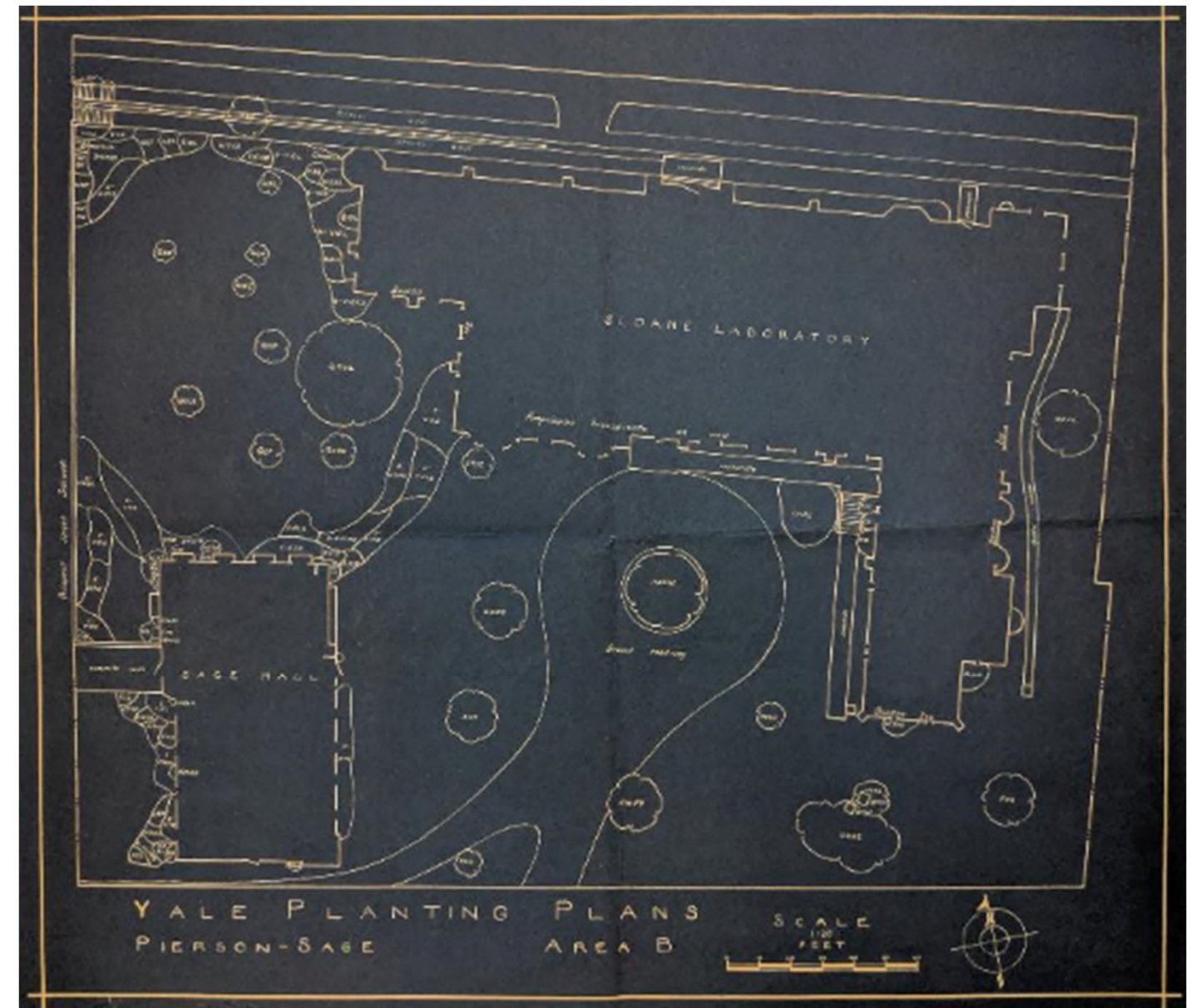
- Beatrix Farrand, "Landscape Gardening at Yale," Yale Alumni Weekly, 12 June 1925, 1146–53.
- Farrand plans, sketches, and annotated drawings
- Historic photographs



Lapham Field House with vines, roses UCB, undated



Branford Court, UCB, 23 May 1932

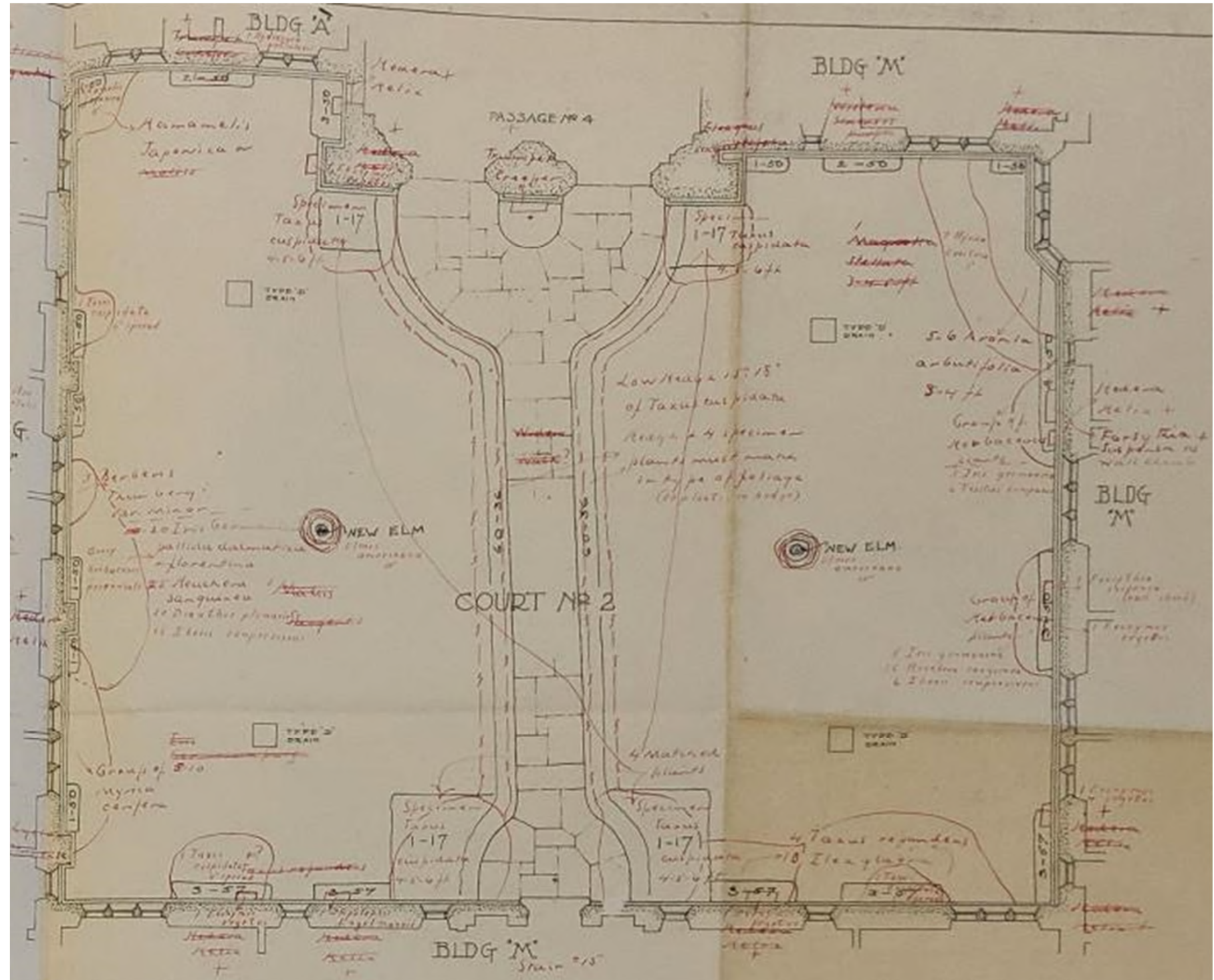


Pierson Sage Planting Plan, UCB, no date or signature, circa 1924



University of California, Berkeley, Farrand Archives

YALE UNIVERSITY PLANTINGS to MEMORIALS March 10, 1924.		
<i>W. E. Bailey</i>		
<u>Old Campus</u> (Wall shrubs)		
Bignonia	Deutzia	Cotoneaster
Ilex	Magnolia Soulangeana	Eleagnus angustifolia
Laburnum	Prunus pissardi	Hydrangea petiolaris
Tamarix	Amygdalus Communis	Nistaria
Stephanandra	Cornus mas	Ivy
Foraythia		
<u>Sage Hall</u>		
Viburnum	Cornuta	Actinidia
Vaccinium	Quercus	Evonymus
<u>Sterling Chemical</u>		
Berberis	Aronia	Myrica
Quercus	Ampelopsis	Aristolochia
Rhus	Symphoricarpos	
<u>Botanical Garden March</u>		
Asaleas (Rhododendron)	Magnolias	Juglans
Spireas	Cerasus	Parrotia
Roses	Fagus	Syringa
Broad-leaved Evergreens		Cercidiphyllum
<u>Memorial Quadrangle</u>		
Taxus	Kalmia	Ilex
Juniperus-(dwarf)		
<u>Osborn</u>		
Weigelia	Akebia	Carpinus
Deutzia		
<u>Lapham Field</u>		
Malus	Crataegus	Tilia
Pyrus	Acer	Vitis
Prunus		
<u>Sterling Medical</u>		
Lonicera	Ligustrum	Wisteria
Foraythia		
<u>Peabody</u>		
Cornus	Cotoneaster	Sassafras
Vaccinium	Acer	Hakianthus
Hamelia	Celastrus	Ilex Deciduous

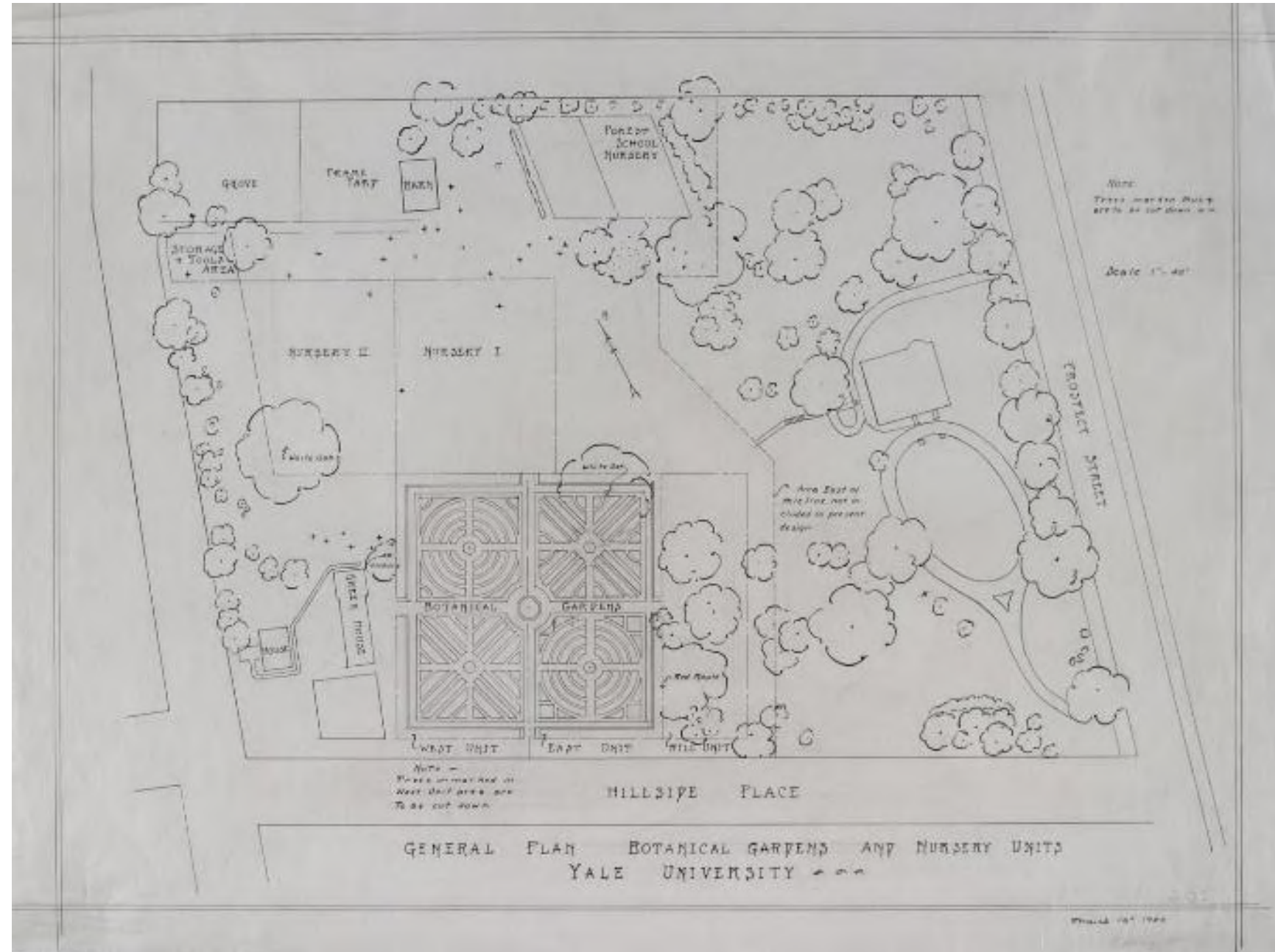


List of Yale University "Plantings to Emphasize" Harkness Memorial Quadrangle, Calliope Court, Planting Hand Annotated, 1920



# Farrand Cultural Landscapes Study

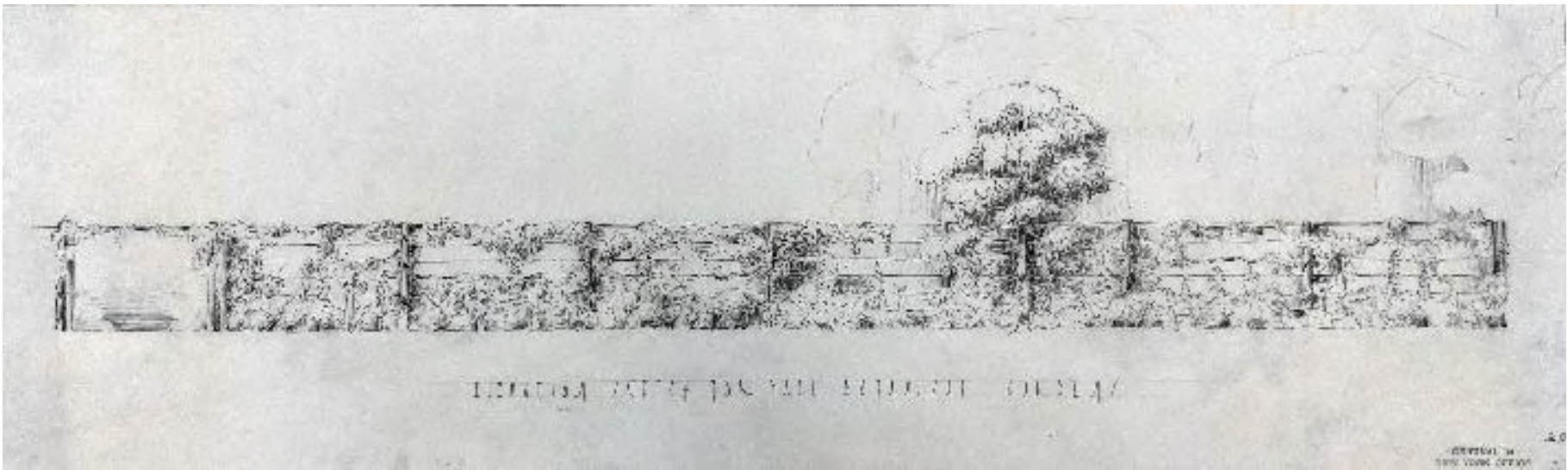
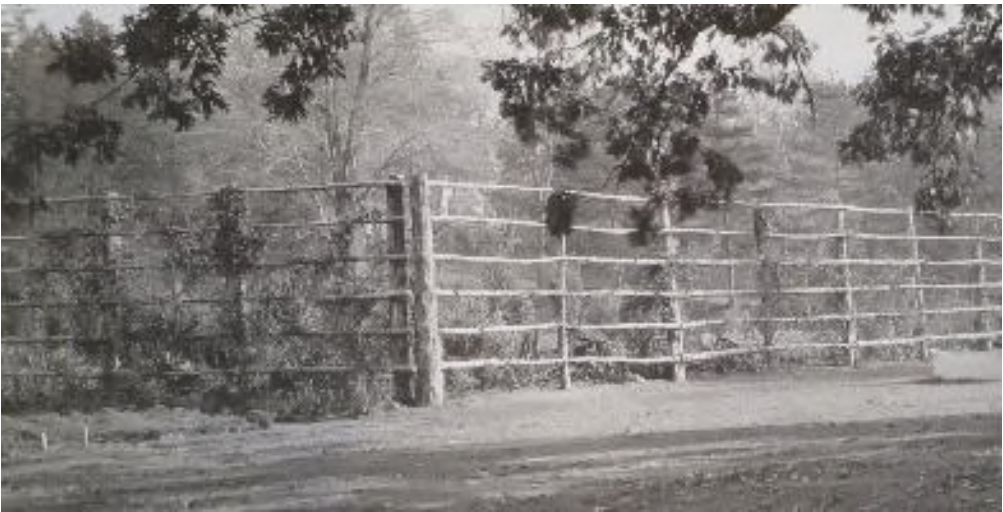
University of California, Berkeley, Farrand Archives



Marsh Botanical Garden, Notes on Survey, undated, General Plan, 1924



**Farrand Cultural Landscapes Study**  
University of California, Berkeley, Farrand Archives



Marsh Botanical Garden, Photographs, Entrance Gate and Elevation Sketches, Photographs of rustic fences, UCB, late 1920s



## Preservation of Trees

- Farrand worked with and added to existing trees
- Elm trees planted by James Hillhouse
- New Haven Street Trees
- Sachems Woods

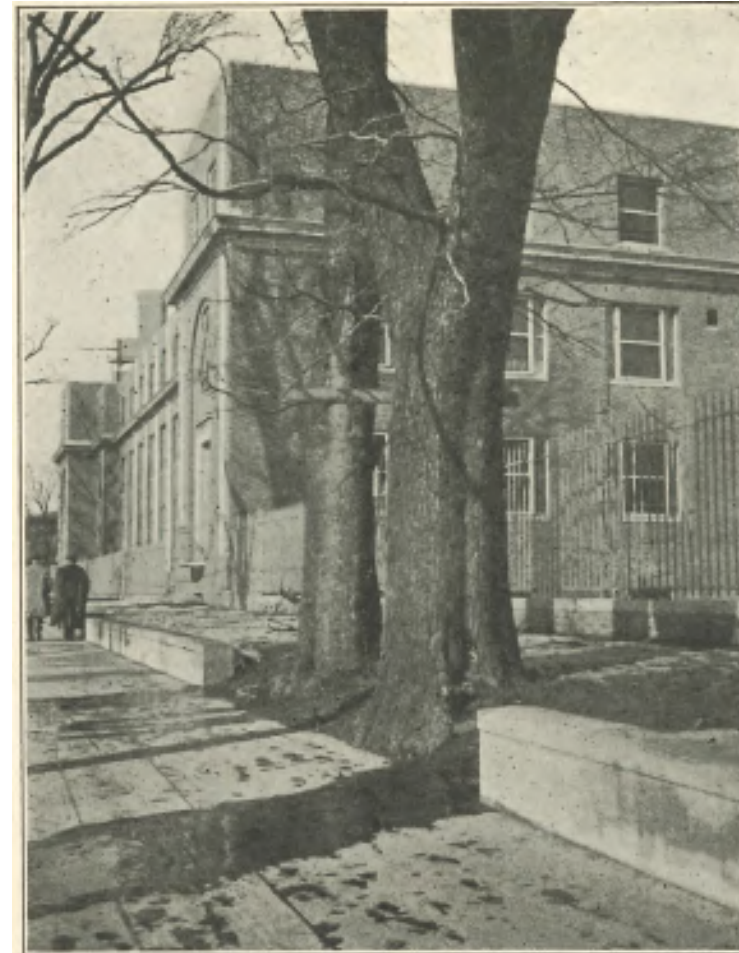


Hillhouse Avenue 1865,  
Sachem's Woods and

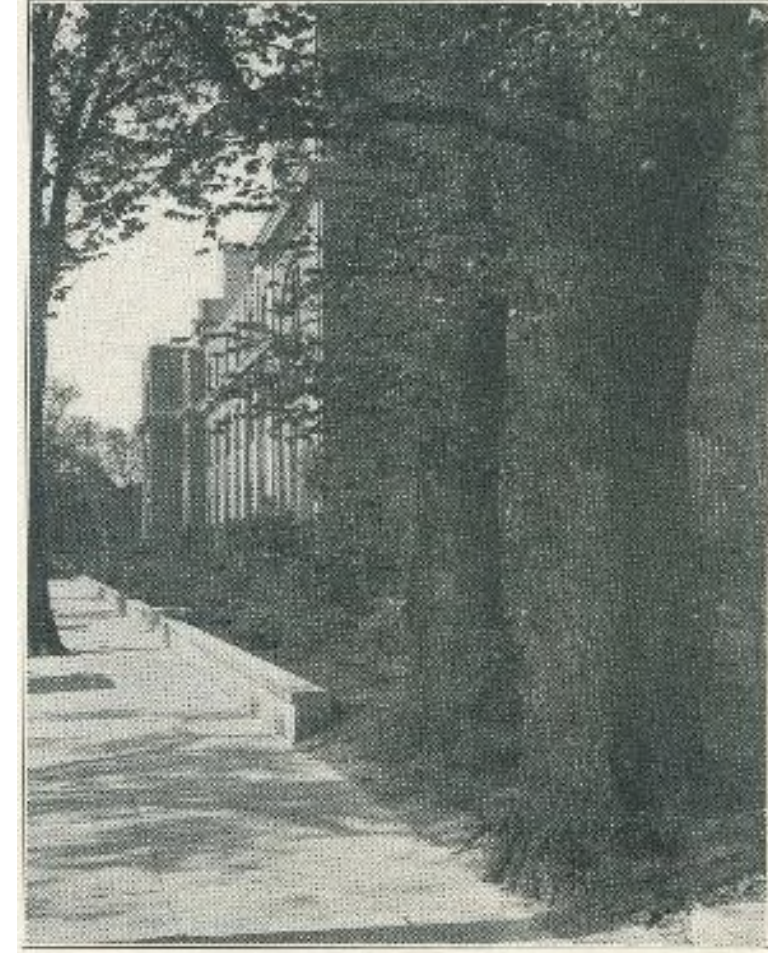


The Yale Campus was well known for the number and beauty of the numerous elm trees across its campus. The planting of elm trees in New Haven and on the Yale campus can be traced to James Hillhouse who began a tree planting program in the late eighteenth century leading to New Haven's epithet: "City of Elms." In a speech given in 1907, Mary Perkins Quincy described the impact of the New Haven elms on Litchfield, Connecticut:

*The young Wolcotts of Litchfield, and other students on returning from Yale College had been greatly impressed with the beauty of the elms planted there by Mr. James Hillhouse, giving the name of 'City of Elms' to New Haven; and as Mr. Hillhouse had interested many of the young men in the value of shade on village or city streets, his wishes resulted in the beautifying of Litchfield with elm trees by his disciples.*



*Cedar Street part of the Sterling Hall of Medicine in early Spring, 1914.*



*The same scene a year later. Cedar Street front of the Sterling Hall of Medicine in May, 1915, showing the result of the first year's growth on the framing of the buildings.*

Showing existing trees, Farrand used this pair of before and after images, Yale Weekly, 1924



# Farrand Cultural Landscapes Study

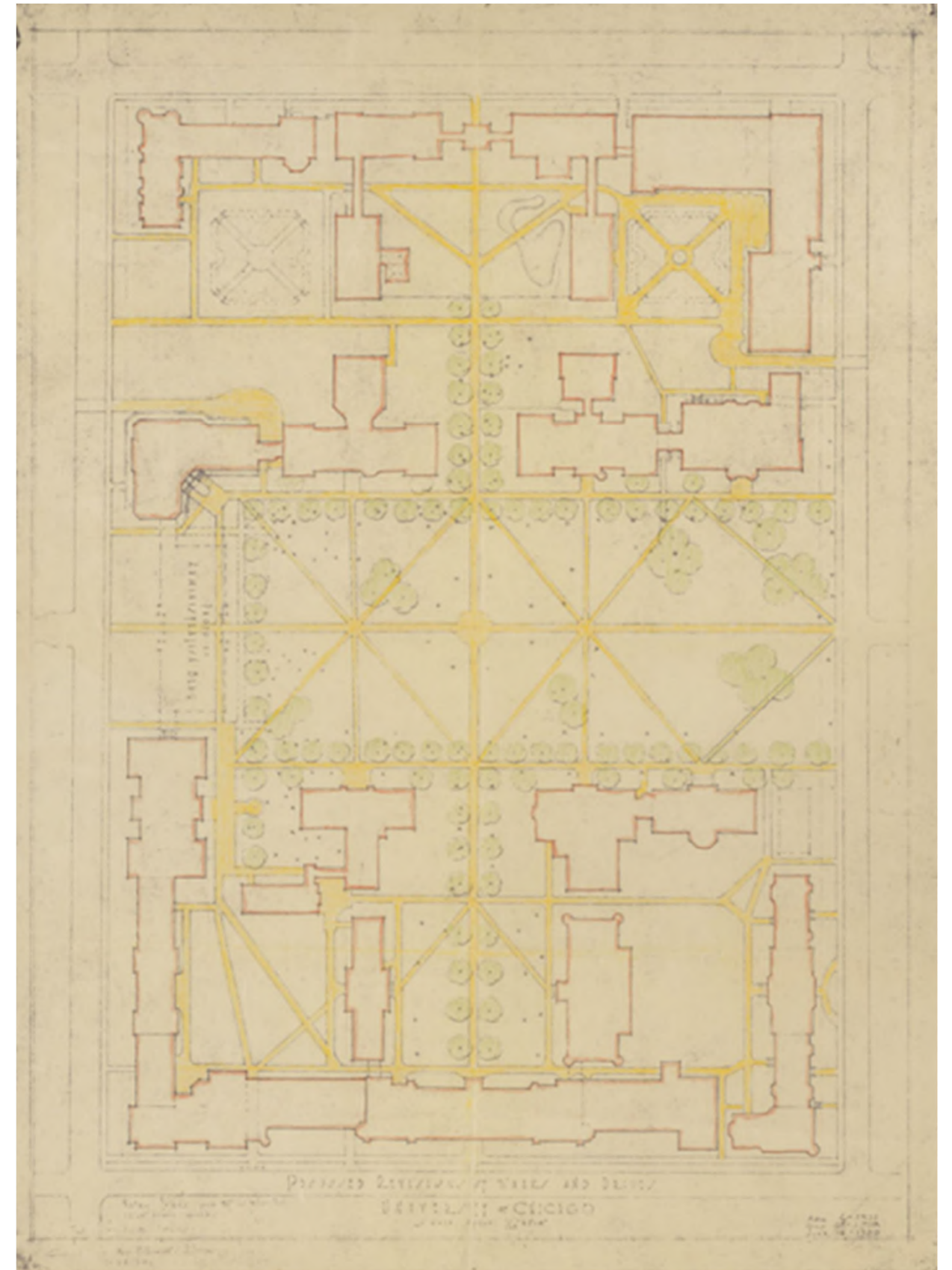
## Judith Tankard, Farrand's University Works Context



Farrand, in fact, was singular among her colleagues, such as Ellen Shipman, Martha Brookes Hutcheson, and Marian Cruger Coffin, in this institutional aspect of her career. In recent years much has been discovered about Farrand's life and work, but little has been published specifically on her importance as a landscape consultant to educational institutions.

After her successes at Princeton, Farrand was invited to consult on seven other campuses, including Yale University. However, *none of her subsequent work was as involved and long-standing as that for Yale and Princeton.*

Other university commissions include Vassar College (1926-1927), California Institute of Technology/Caltech (1929-1938), University of Chicago (1929-1936), Occidental College (1937-1940), and Oberlin College (1937-1946).



Princeton photo of Farrand Courtyard, Princeton website; Proposed Revisions of Walks and Drives, University of Chicago, 1931, UCB



## Yale Campus ■ Character Defining Features

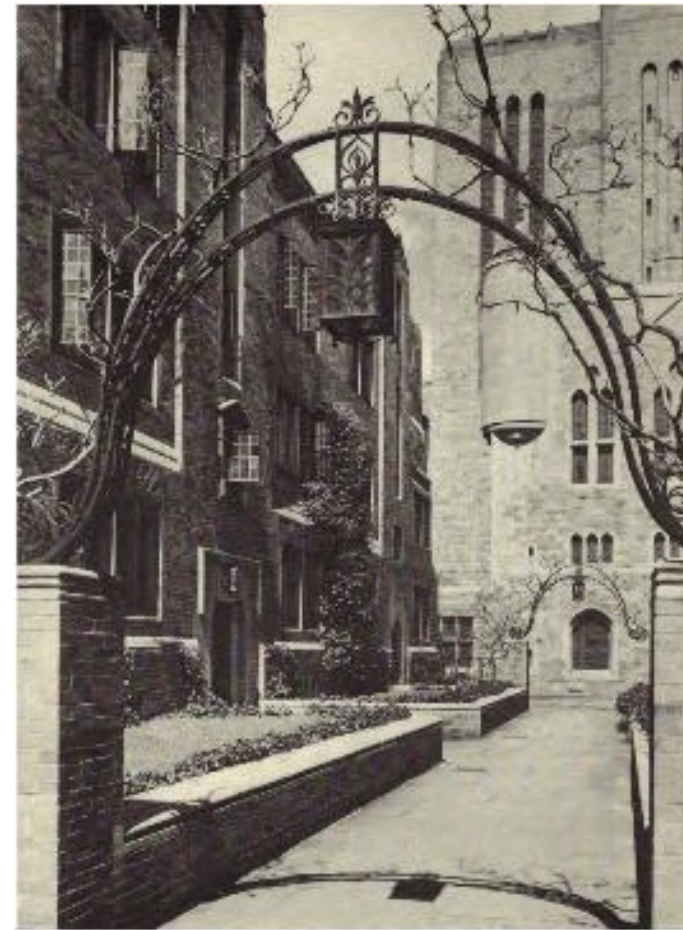
- **Spatial Organization**- open center, enclosing elements, gradient light and shadow, planted moats along streets, connected spaces
- **Views and Visual Relationships**- previews of landscapes beyond, expansive views within courtyards, along corridors, individually recognizable spaces, bright entries and archways frame views



Silliman College, 1940



Cross Campus, 1940



Trumbull College, 1950



Harkness Memorial Quad, Calliope Court, 1950



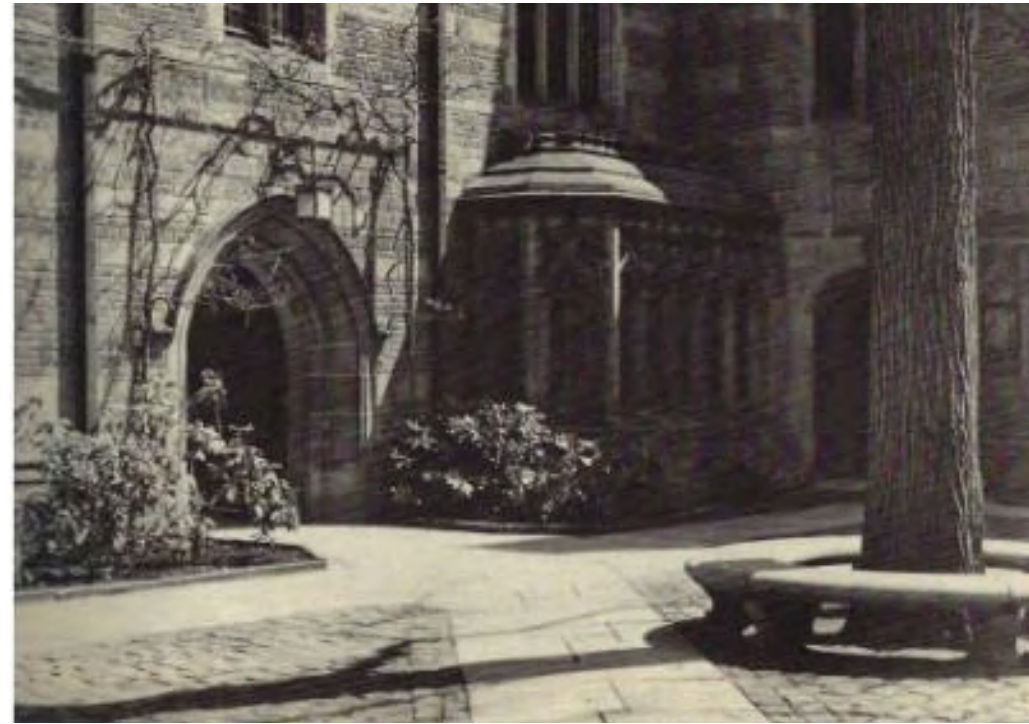
## Yale Campus ■ Character Defining Features

- **Topography**- level courtyards, gentle grading, stepped retaining walls, vegetated hillsides

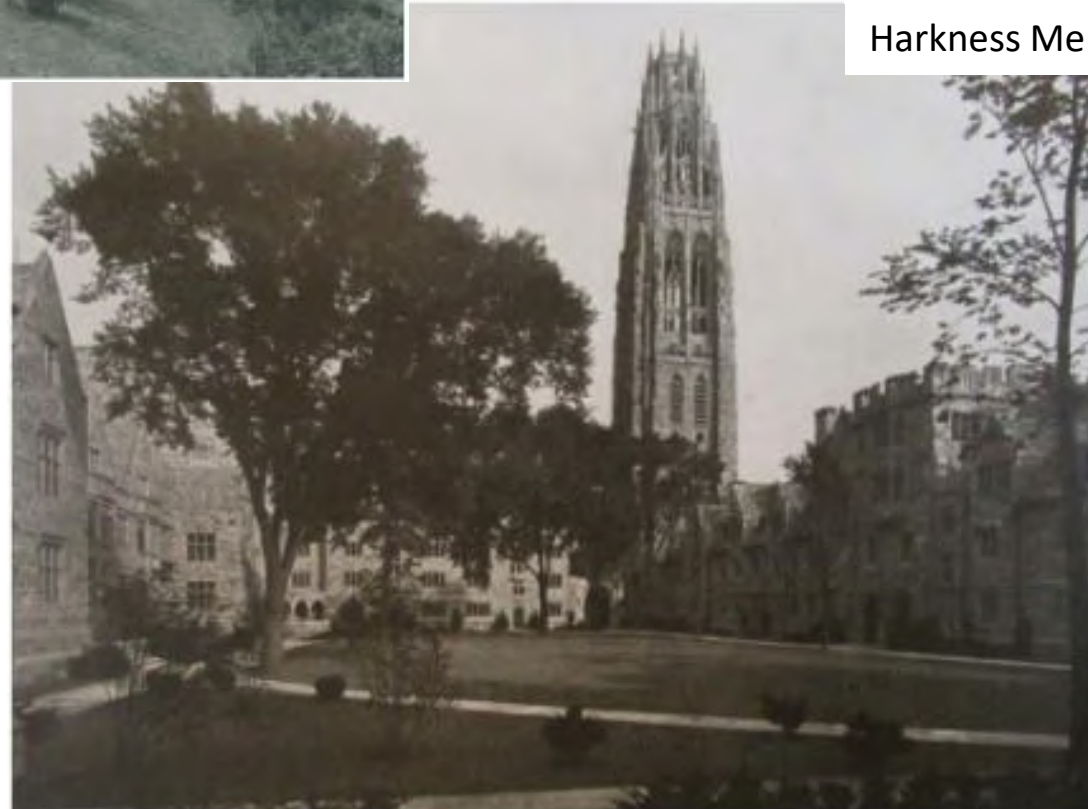


Sterling Chemistry, 1925

- **Circulation**- generous width, bluestone walks and terraces, rounded corners for ease of movement, use of contrast, curbs on planters and drives



Harkness Memorial Quad, Linonia Court, 1950



Harkness Memorial Quad, Branford Court, 1921

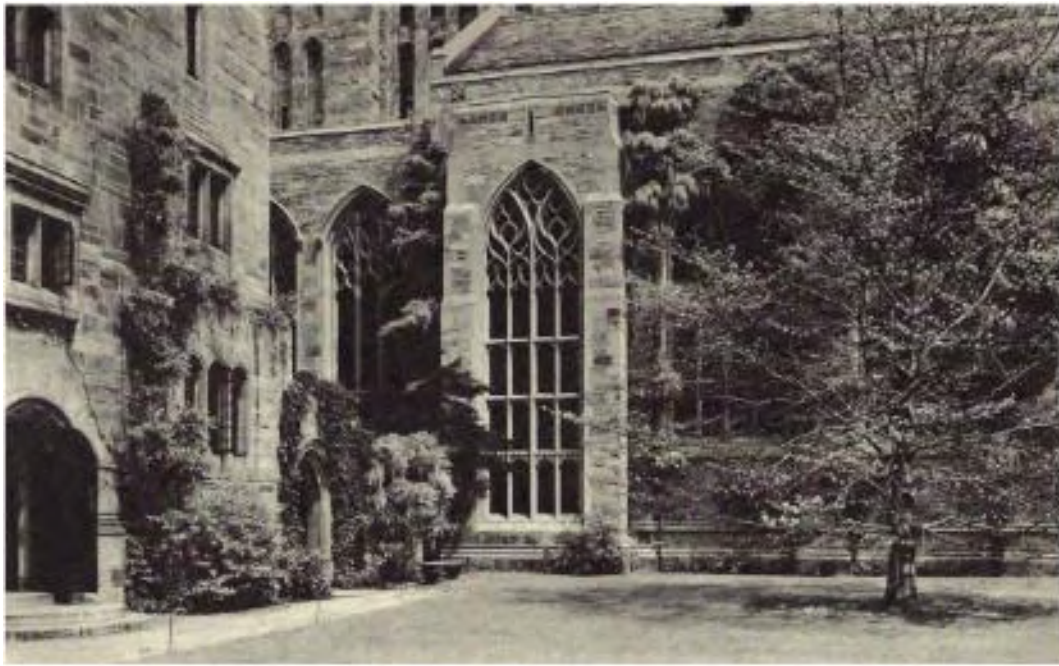


Old Campus, 1940



## Yale Campus ■ Character Defining Features

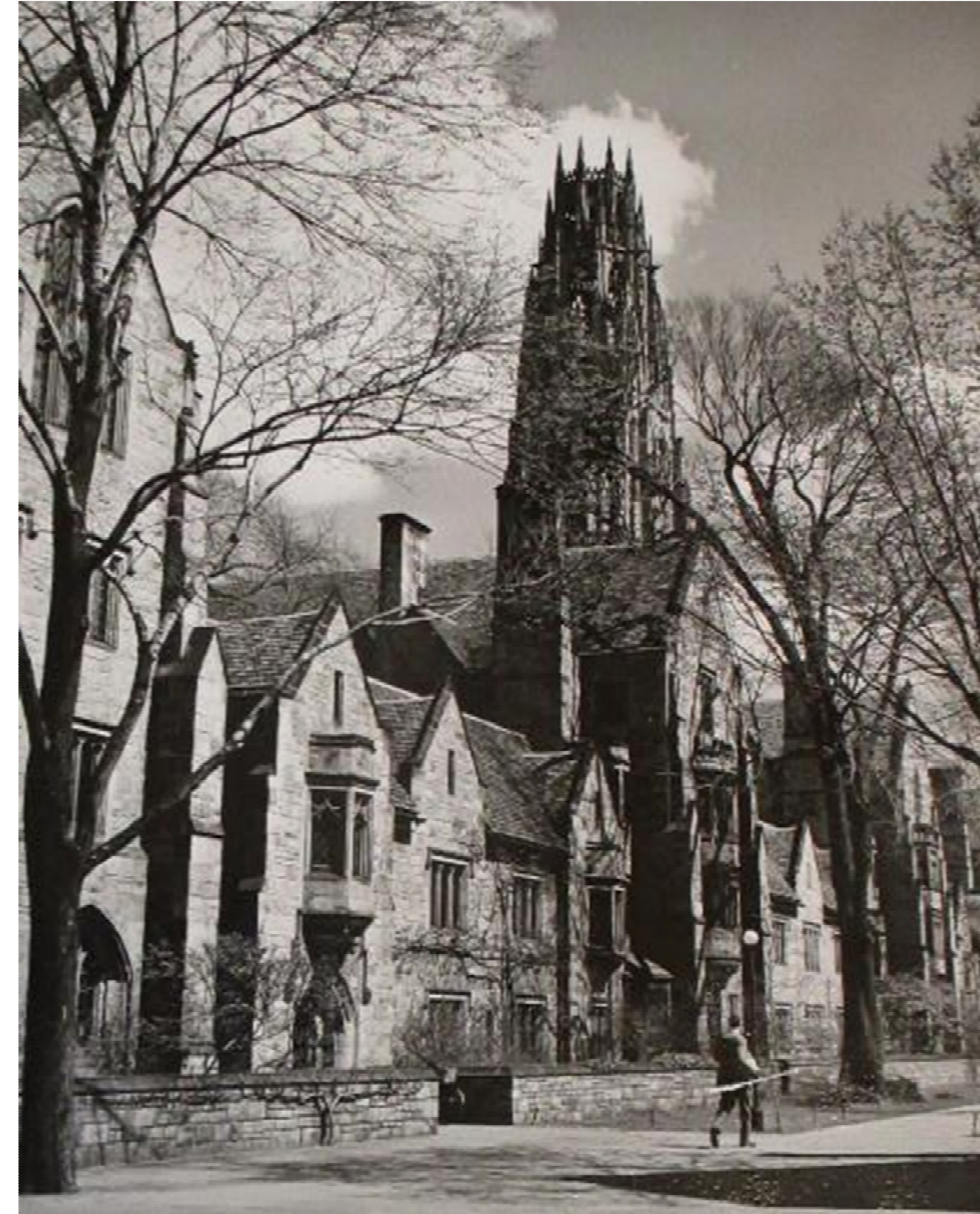
- **Vegetation**- plant for spring and fall interest of primarily native plants, canopy shade trees
  - **Courtyards** - perimeter plantings of shrubs, understory trees, evergreen hedges and ground covers in beds along walks, canopy trees in lawns, building base plantings of shrub masses, wall-trained shrubs and flowering trees, and climbing vines trained on supports to soften architecture
  - **Moats** - trained understory trees and/or pruned large shrubs against building, groundcovers at base, trained vines



Trumbull College, 1950



Silliman College, 1950



Library Walk, 1940



## Yale Campus ■ Character Defining Features

- **Landscape Structures** – low and high walls with caps, wall-edged moats, retaining walls, entry piers, all shaping spaces and providing formal frames
- **Water Features**- limited, naturalistic pool, riffle Marsh Rock Garden and geometric fountain Sterling Memorial Library
- **Furnishings and Small Objects**- iron gates, wood fence, stone bench- straight or 1/4 circle, wood bench, light poles, bike racks



Berkeley Courtyard, 1950



Courtyard, Sterling Memorial Library, 1950



Old Campus Quadrangle, nd



Harkness Memorial Quadrangle, Killingworth Court 1982



■ Legible Landscapes

These seven landscapes are the most intact, requiring some rehabilitation to reinforce character and features

- Harkness Memorial Quadrangle
- Old Campus
- Old Library Street
- Sterling Divinity Quadrangle
- Sterling Memorial Library
- Silliman College
- Trumbull College

Farrand Yale Cultural Landscapes Study ■ Confirmation Sources Summary									
YFCL Study Code	File Name	LANDSCAPE NAME	Years	BF Drawing or BF Notes	BF Corresp	BF Article	Drawing UCB	UCB Historic Photos	Balmori Text
Legible Landscapes									
4A	HMQ	Harkness Quadrangle / Memorial Quadrangle Courts-Branford	1921-22	Dwg +			Arch	■	■
4B	OC	Old Campus/Old College	1923+	Dwg	■	■	Arch*		
4C	LS	Old Library Street / Library Walk	1931-32	Dwg			Dwg ns		
4D	SDQ	Sterling Divinity Quadrangle / Yale Divinity School	1932	Dwg				■	■
4E	SML	Sterling Memorial Library	1930	Dwg			Arch Dwg ns	■	
4F	SC	Silliman College	1940	Notes			Arch Dwg	■	■
4G	TC	Trumbull College	1933	Dwg					





Past to Present Comparison ■ Old Library Street, Library Walk



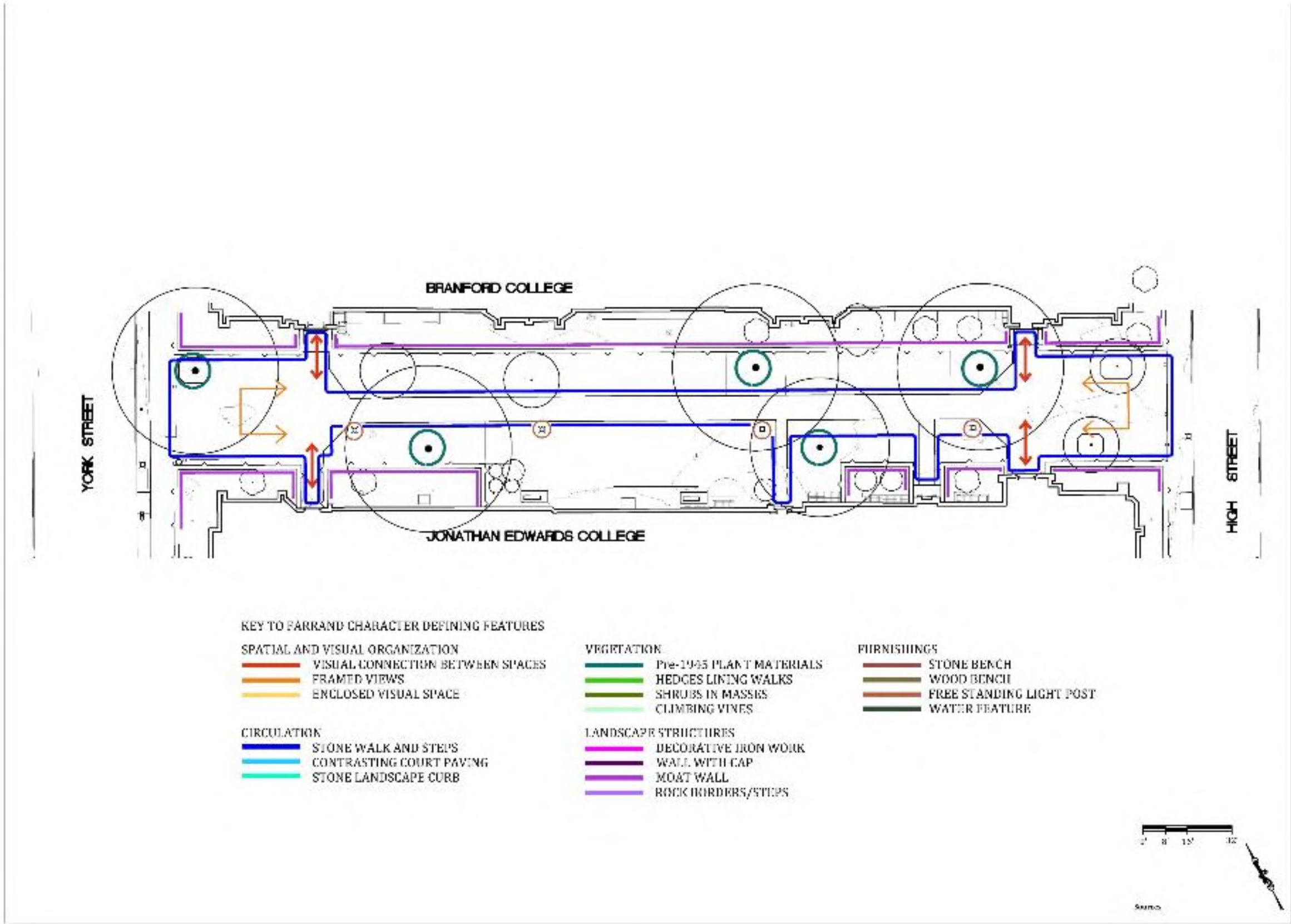
Library Walk, 1940



2019



Character Defining Features ■ Old Library Street, Library Walk



**Yale Campus · Farrand**  
**Cultural Landscape Study**  
New Haven, Connecticut

Client:  
Yale University  
Office of Facilities Planning  
2 Whitney Avenue  
New Haven, CT 06510



Heritage Landscapes LLC  
Providence Landscape  
Architects & Planners  
One Hill Street, Suite 200  
Providence, RI 02903

Designed by:  
Yale University  
(Site Plan)

Drawn by:  
**2019 Old Library Street Landscape**

Date:  
November 2019

Drawing Number:  
**L6**



Past to Present Comparison ■ Branford Court, Harkness Memorial Quadrangle



Harkness Memorial Quadrangle – Branford Court 1932



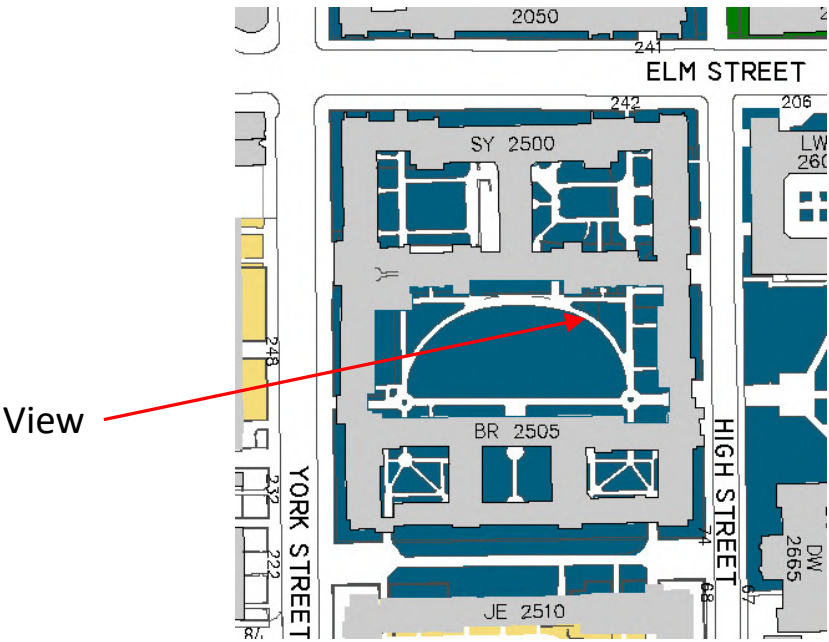
1940



2019



Past to Present Comparison ■ Branford Court, Harkness Memorial Quadrangle



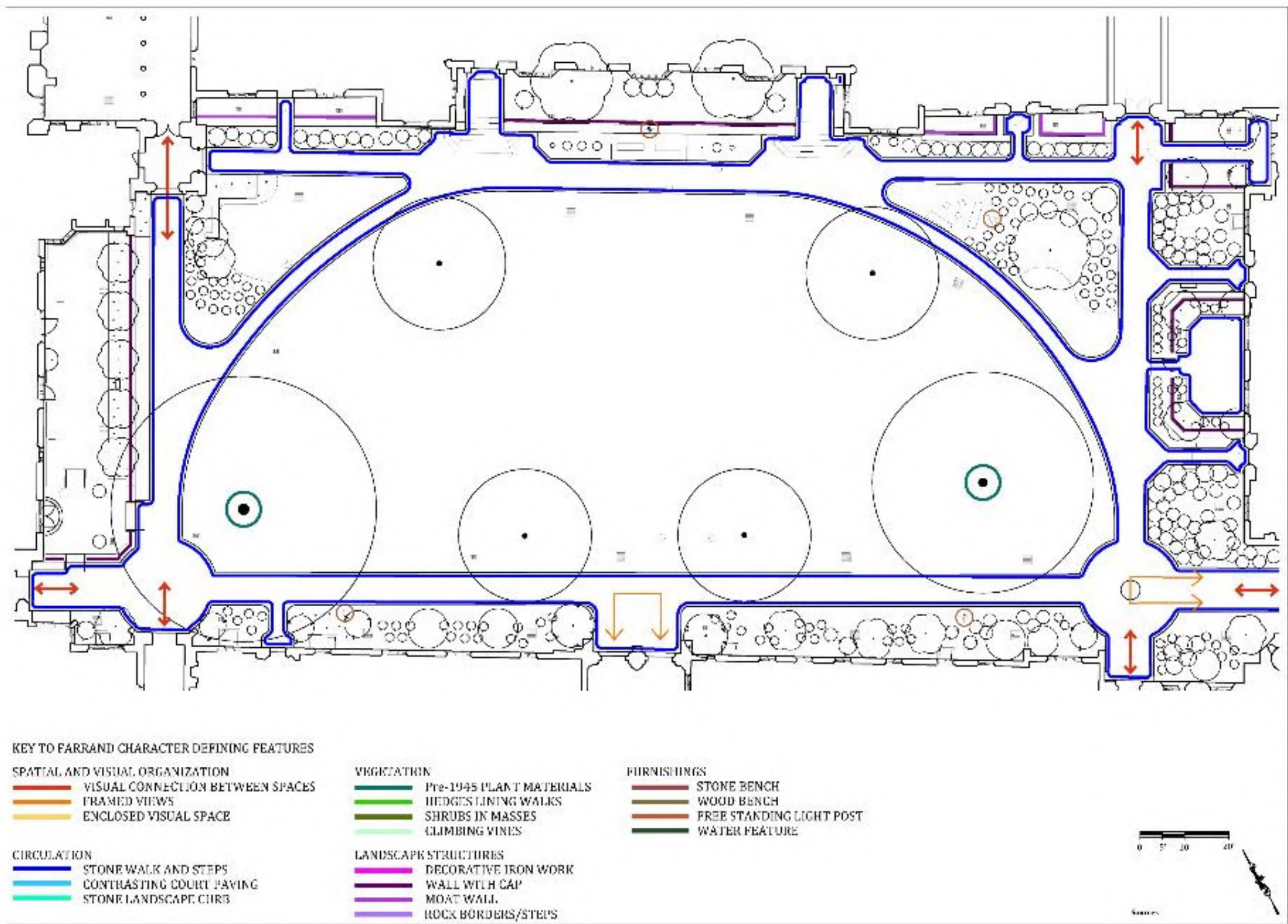
Harkness Memorial Quadrangle – Branford Court 1921



2019



# Character Defining Features ■ Branford Court, Harkness Memorial Quadrangle



## Yale Campus · Farrand Cultural Landscape Study New Haven, Connecticut

Client:  
Yale University  
Office of Facilities Planning  
29 Whalley Avenue  
New Haven, CT 06510



Heritage Landscapes LLC  
Preservation Landscape  
Architecture & Planning  
Charlton, VT 05745-0000  
Newark, CT 07102-9999

Prepared for the Farrand Cultural Landscape Study  
by Heritage Landscapes LLC

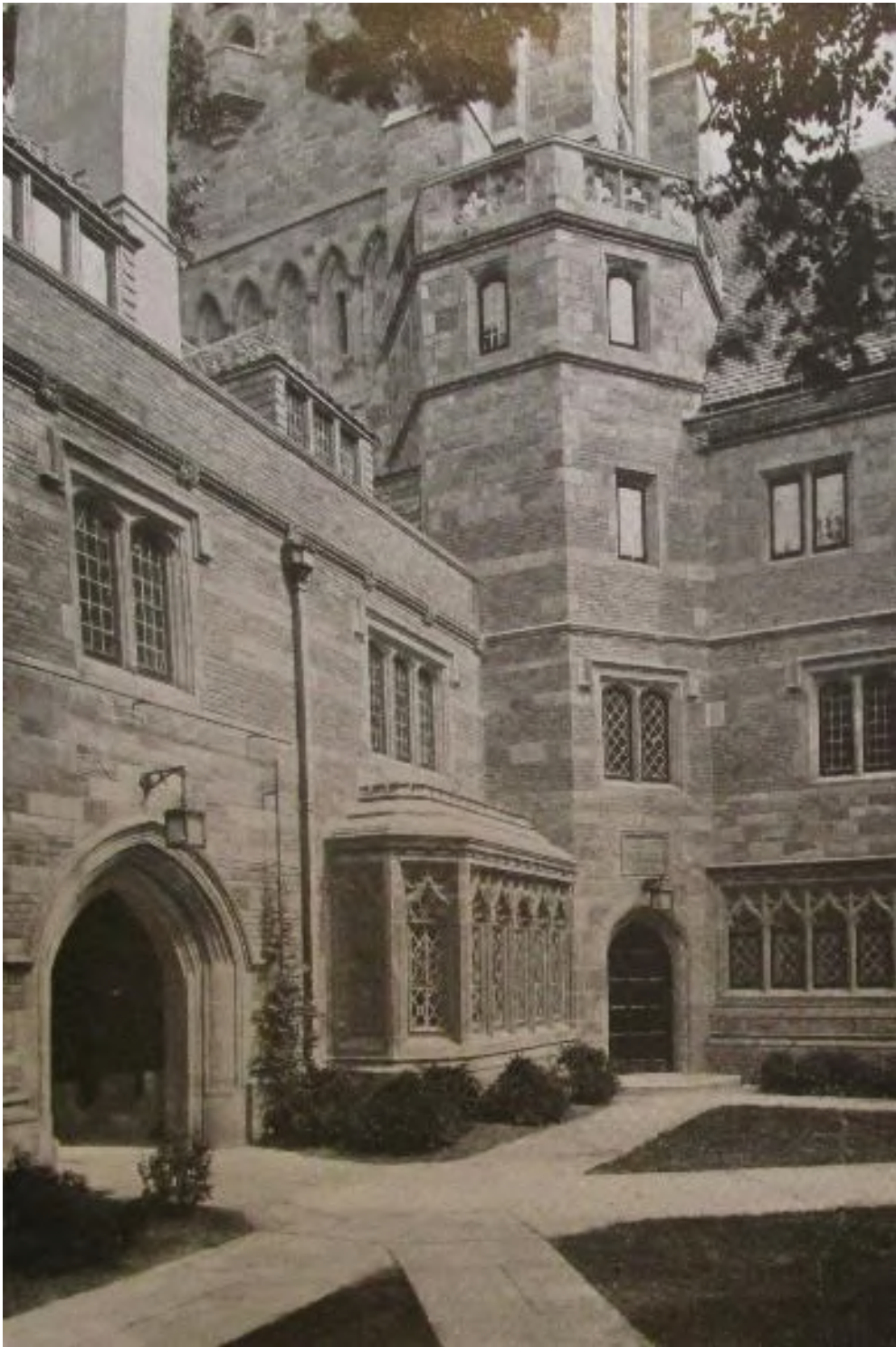
Drawing Title:  
2019 Branford Court  
Landscape

Date:  
November 2019

Drawing Number:  
L4



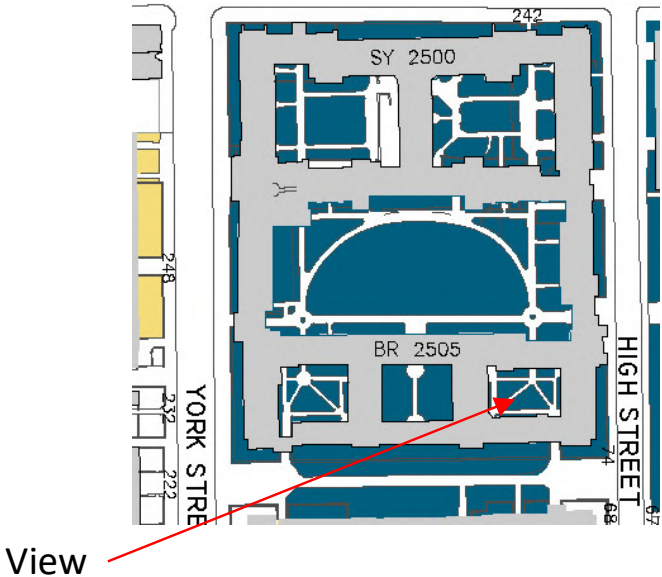
Past to Present Comparison ■ Linonia Court, Harkness Memorial Quadrangle



Linonia Court 1921



Linonia Court 2019





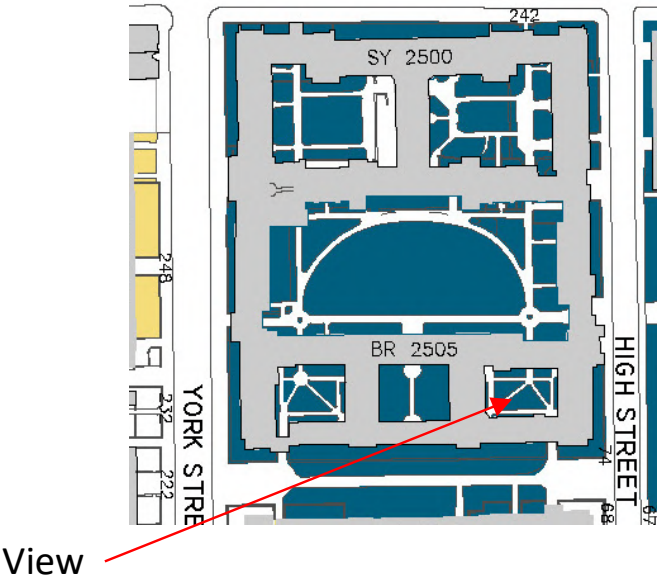
Past to Present Comparison ■ Linonia Court, Harkness Memorial Quadrangle



1950

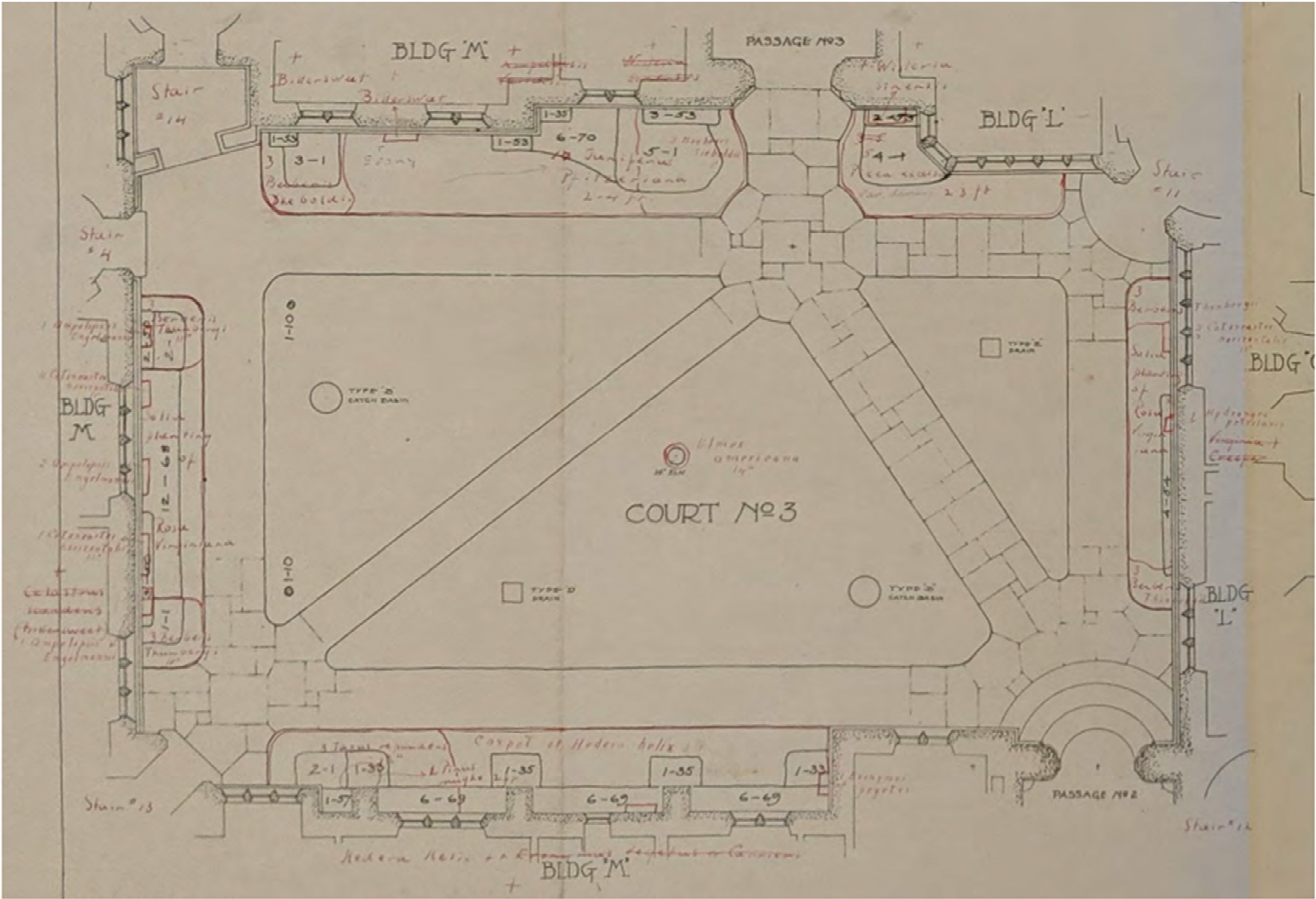


2019





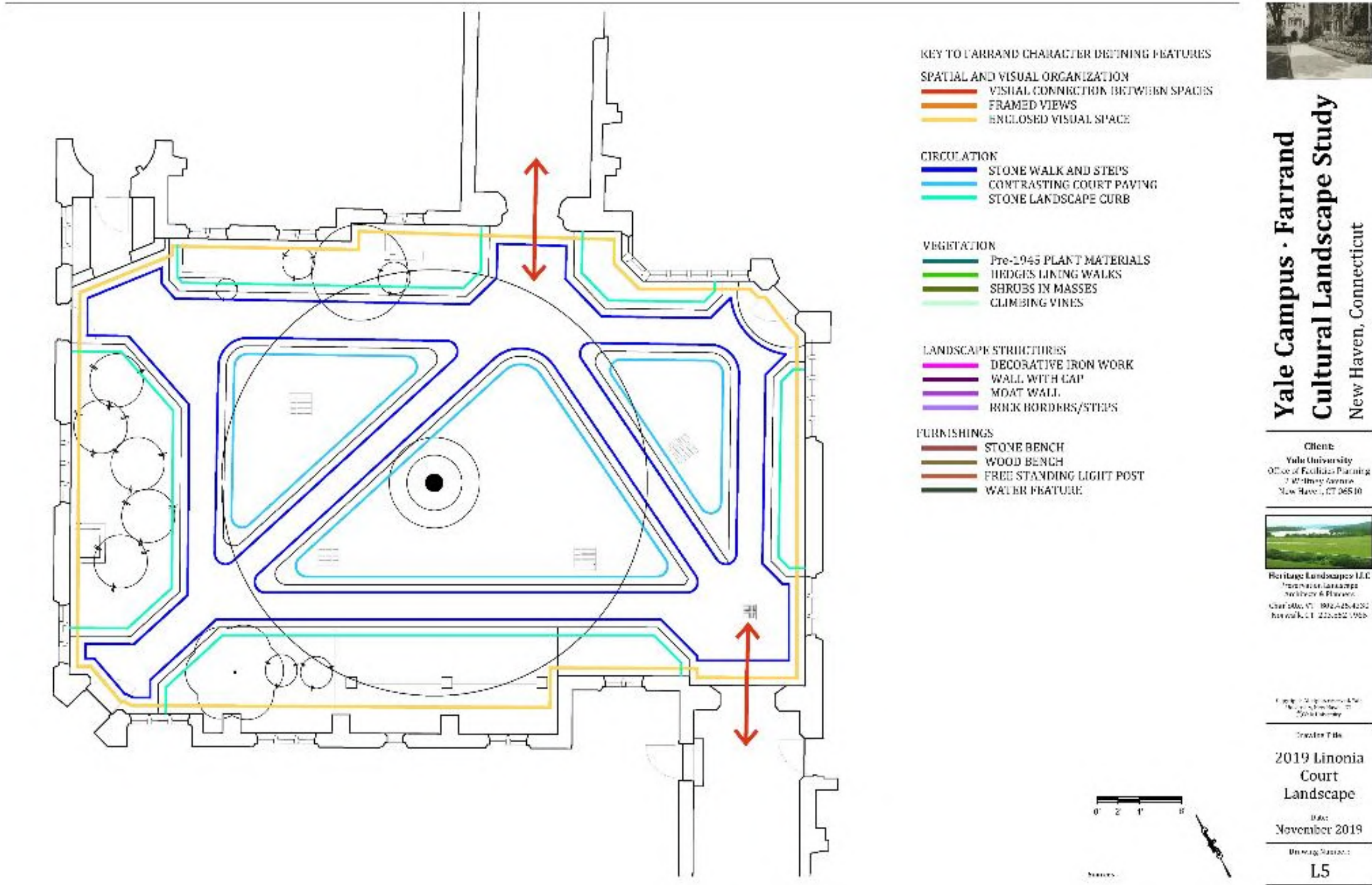
Farrand Annotated Planting Plan ■ Linonia Court, Harkness Memorial Quadrangle



Circa 1920



# Character Defining Features ■ Linonia Court, Harkness Memorial Quadrangle





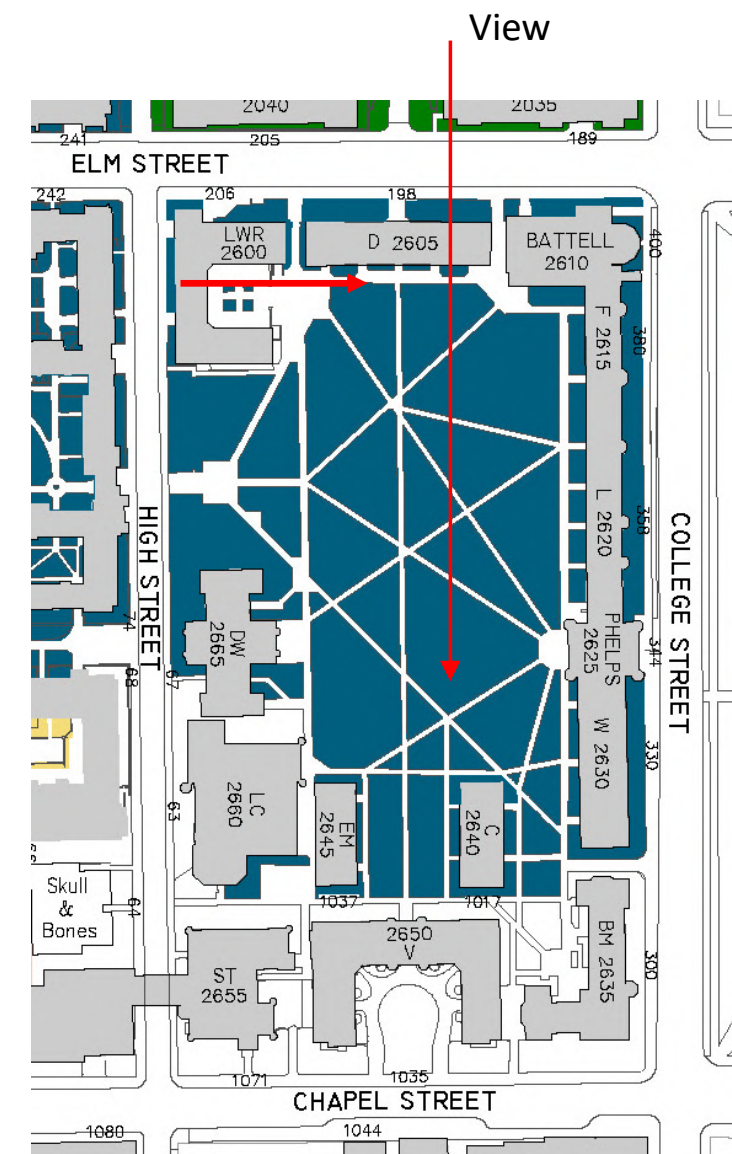
## Past to Present Comparison ■ Old Campus



Old Campus, 1950



2019

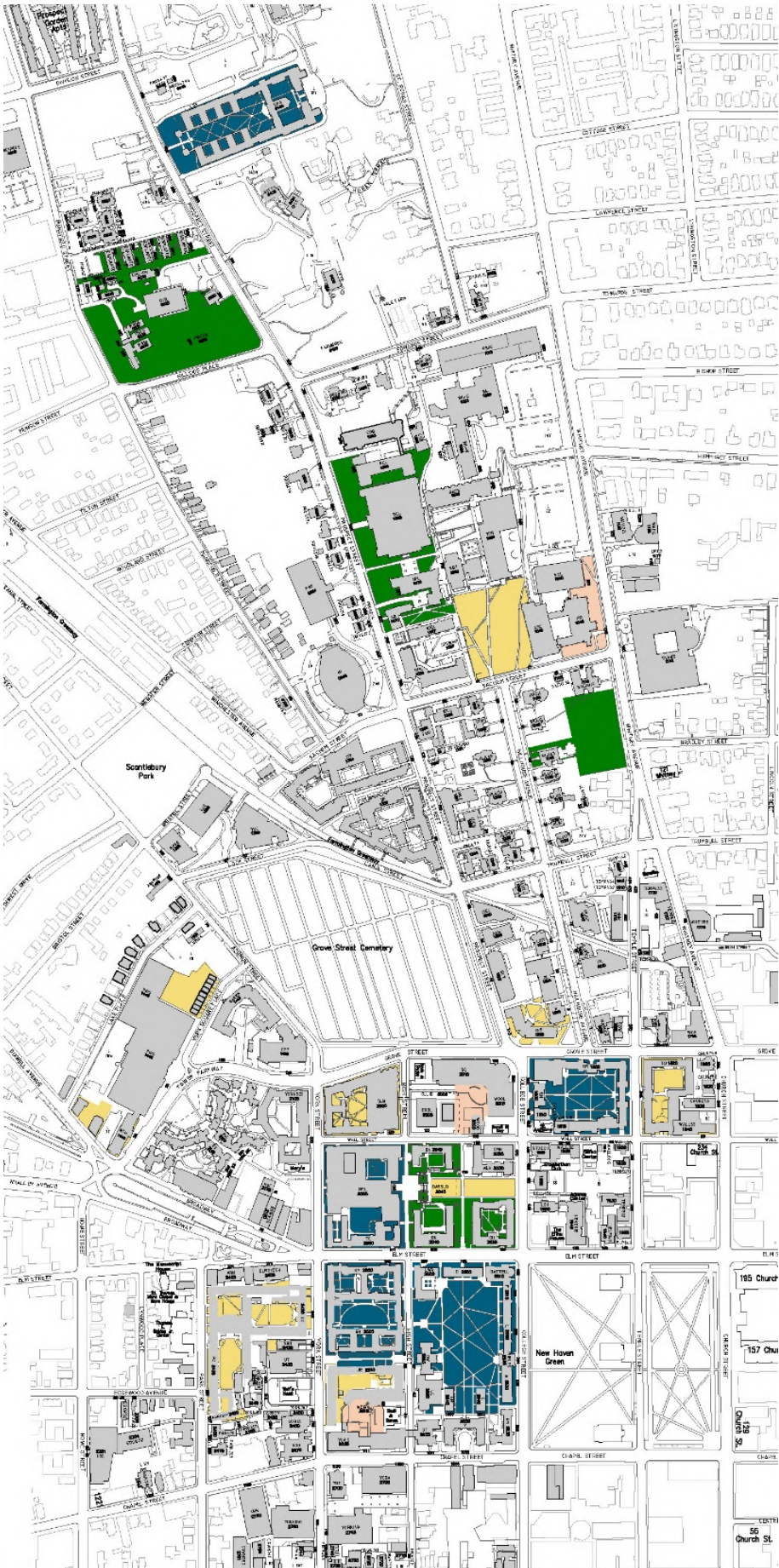
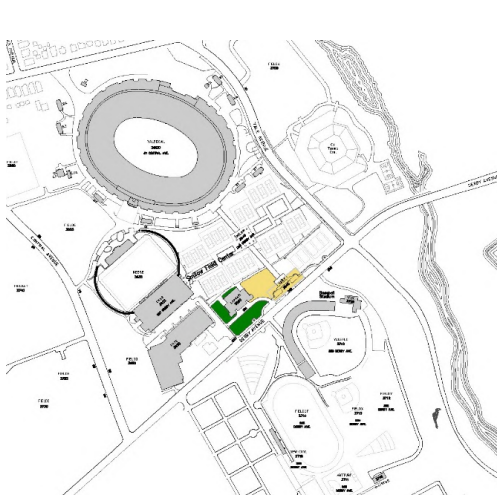




■ Remnant Landscapes

Seven landscapes where discernable fragments of Farrand character and/or features remain, an opportunity to reinstate features may be pursued

- Berkeley College
- Calhoun College
- Golf Course
- Lapham Field House
- Yale Campus Nursery, Hamden
- Marsh Botanical Garden, Nursery, Building
- Pierson-Sage Square and Sloan Physics Laboratory



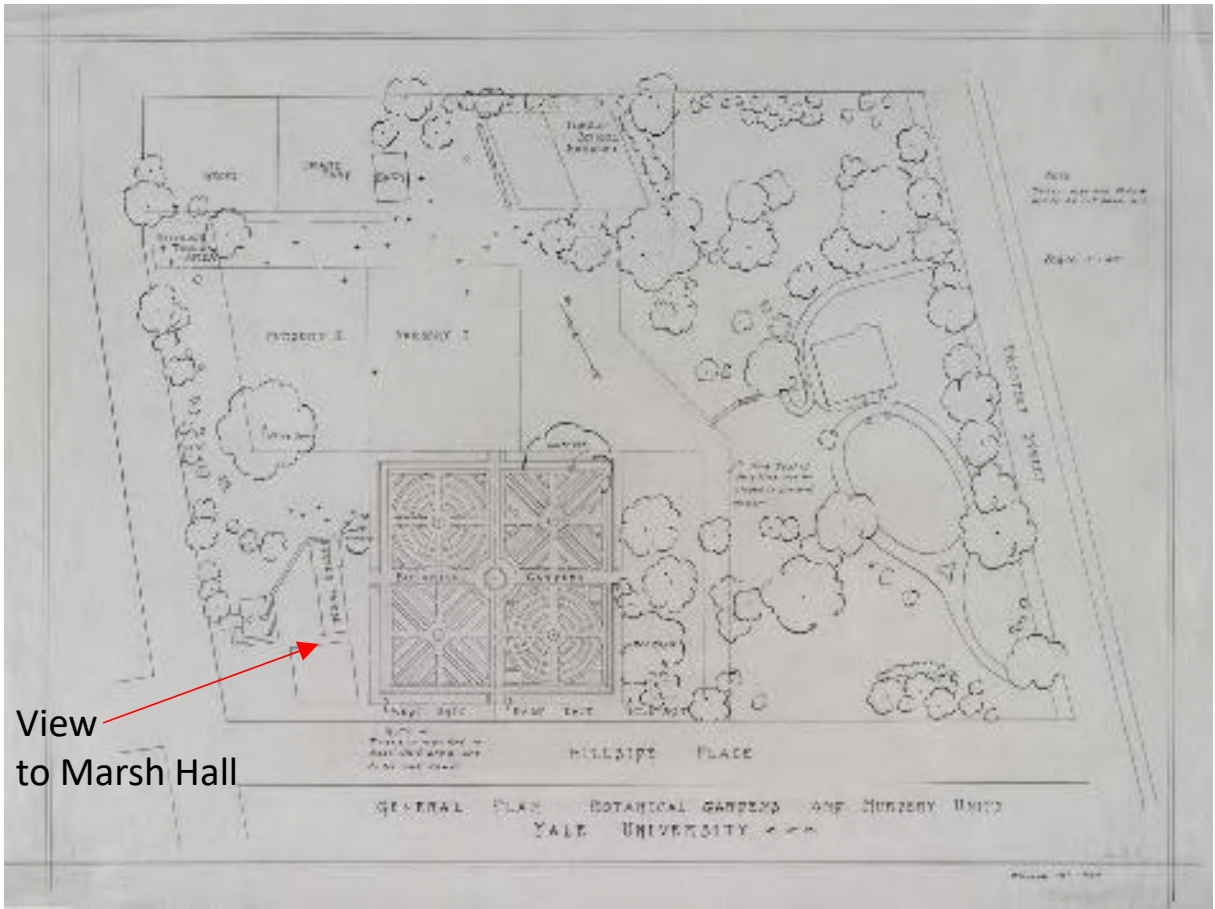
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YFCL Study Code	File Name	LANDSCAPE NAME	Years	BF Drawing or BF Notes	BF Corresp	BF Article	Drawing UCB	UCB Historic Photos	Balmori Text
Remnant Landscapes									
5A	BC	Berkeley College	1934	Notes			Arch Dwg		
5B	CAC	Calhoun College	1931	Dwg					
5C	GOLF	Golf Course	1931	Dwg			Dwgs		
5D	LFH	Lapham Field House	1923-	Dwg		■	Arch Dwg	■	■
5E	HPN	Yale Campus Nursery Hamden CT				■			
5F	MBG	Marsh Botanical Garden and Nursery	1924-27	Dwgs	■	■		■	■
5G	SPL	Sloan Physics Laboratory (Pierson-Sage Square)	1924	Dwg	■				■
5G	PSS	Pierson-Sage Square	1924	Dwg		■	Arch Dwg		■
5H	PH	President's House	1937	Dwg					■
5I	SCL	Sterling Chemistry Laboratory (Pierson-Sage Square)	1924			■	Engineer	■	■



Past to Present ■ Marsh Botanic Garden, Specimen Garden



View to Marsh Hall, 1927



General Plan, 1924



View of oak and greenhouse, View to Marsh Hall, 2019



Past to Present ■ Marsh Botanic Garden, Rock Garden



Rock Garden walk, boulders, planting, pool



Rock Garden Remnants, Boulders and Spring Pool, 2019



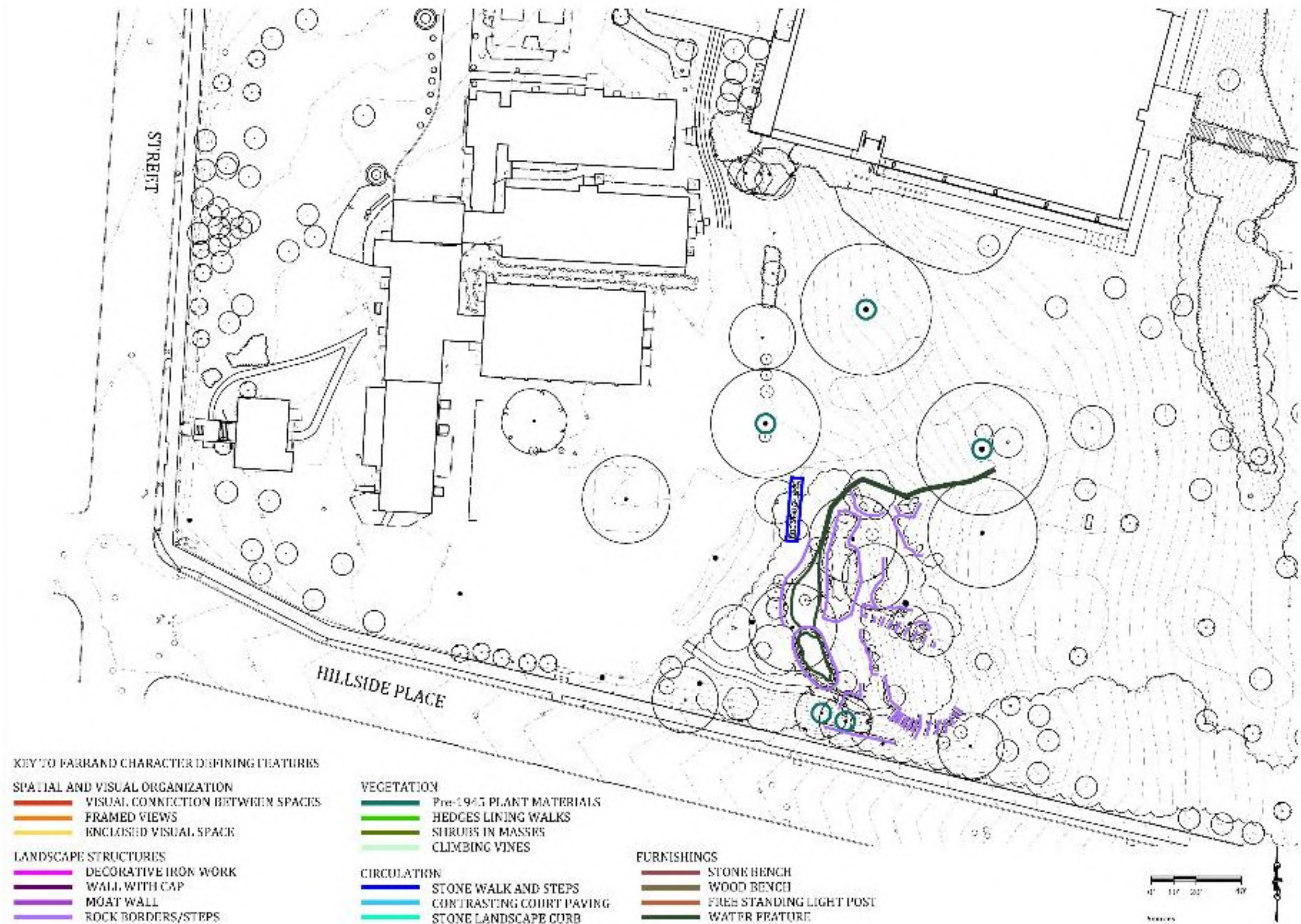
Farrand sketch, nd



Rock Garden Installation, 1932



Character Defining Features ■ Marsh Botanical Garden, Rock Garden



**Yale Campus · Farrand**  
**Cultural Landscape Study**  
New Haven, Connecticut

Client:  
Yale University  
Office of Facilities Planning  
32 Whitney Avenue  
New Haven, CT 06510



Heritage Landscapes LLC  
1700 Madison Avenue  
New Haven, CT 06510  
Connecticut 203 425 4820  
New York 212 684 9986

Designed by: Heritage Landscapes LLC  
Designed by: Heritage Landscapes LLC

Drawing Title:  
2019 Marsh  
Botanical  
Garden Display  
Beds & Rock  
Garden

Date:  
November 2019

Drawing Number:

L9

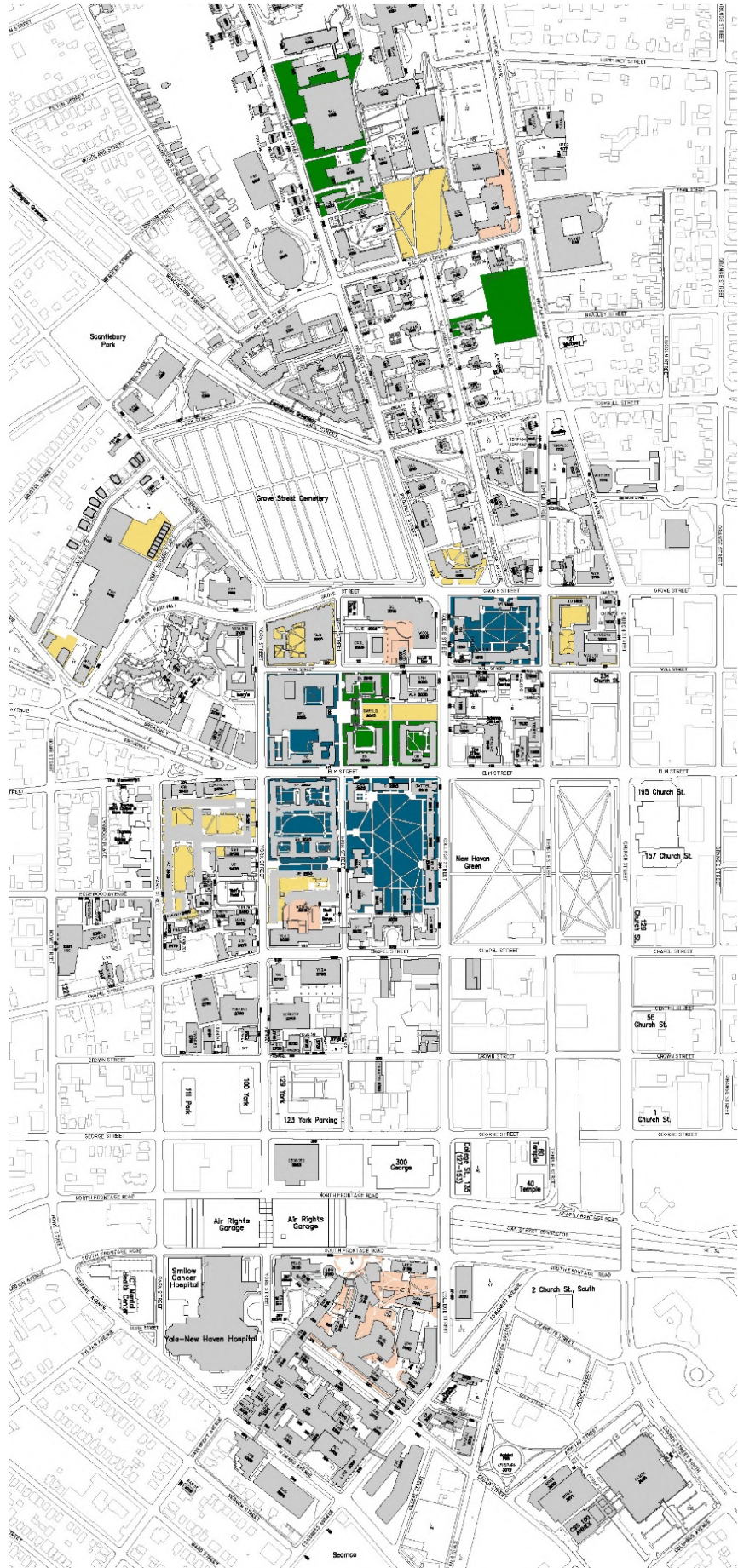


■ Overwritten Landscapes

These Farrand campus landscapes are no longer legible as Farrand designs, overlaid by subsequent landscape design and construction

- New Athletic Field
- New Haven Hospital
- Peabody Museum
- Pump House
- Sterling Hall of Medicine and Institute of Human Relations
- Yale Alumni War Memorial
- Weir Hall / School of Architecture

Farrand Yale Cultural Landscapes Study ■ Confirmation Sources Summary									
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Overwritten Landscapes									
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6B	NHH	New Haven Hospital	1929		■		Arch Dwg		■
6C	PM	Peabody Museum	1923			■	Arch Dwg		■
6D	PPH	Pump House	1931	Dwg				■	
6E	SHM	Sterling Hall of Medicine and Institute of Human Relations	1930	Dwg +		■	Arch Dwg		■
6F	AWM	Yale Alumni War Memorial	1927		■		Dwgs	■	
6G	WH	Weir Hall / School of Architecture	1924			■	Arch Dwg*		■

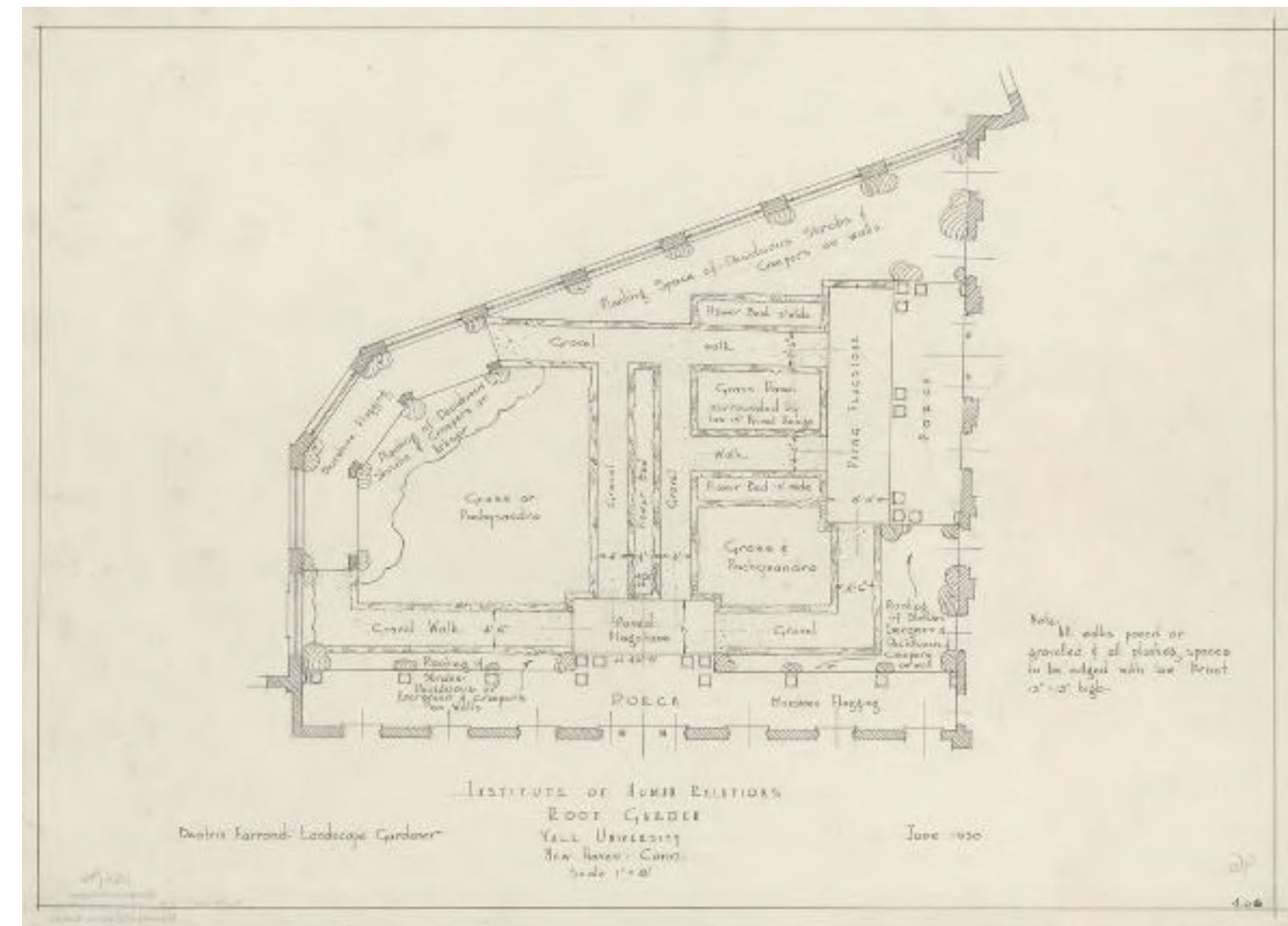
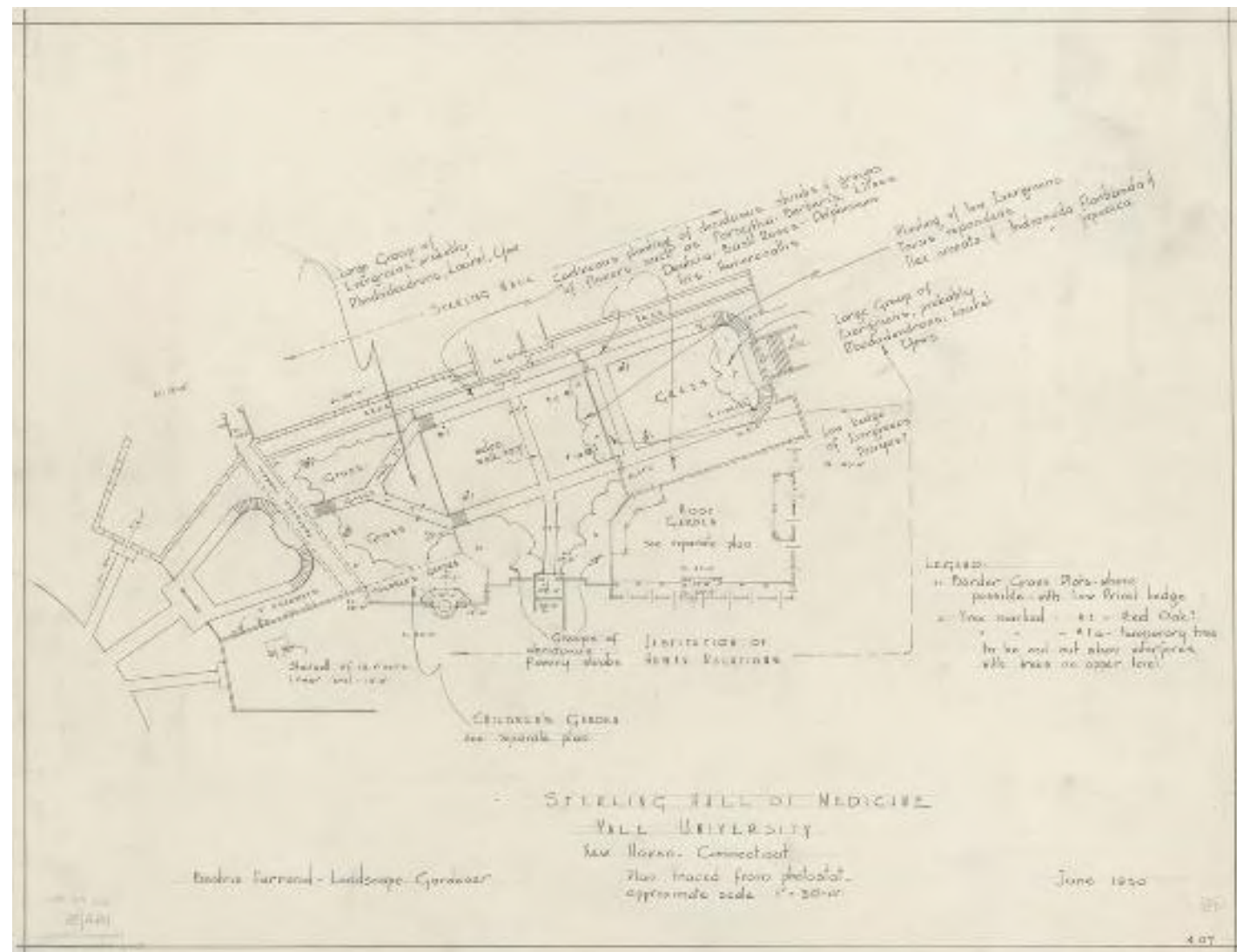




## ■ Overwritten Landscape



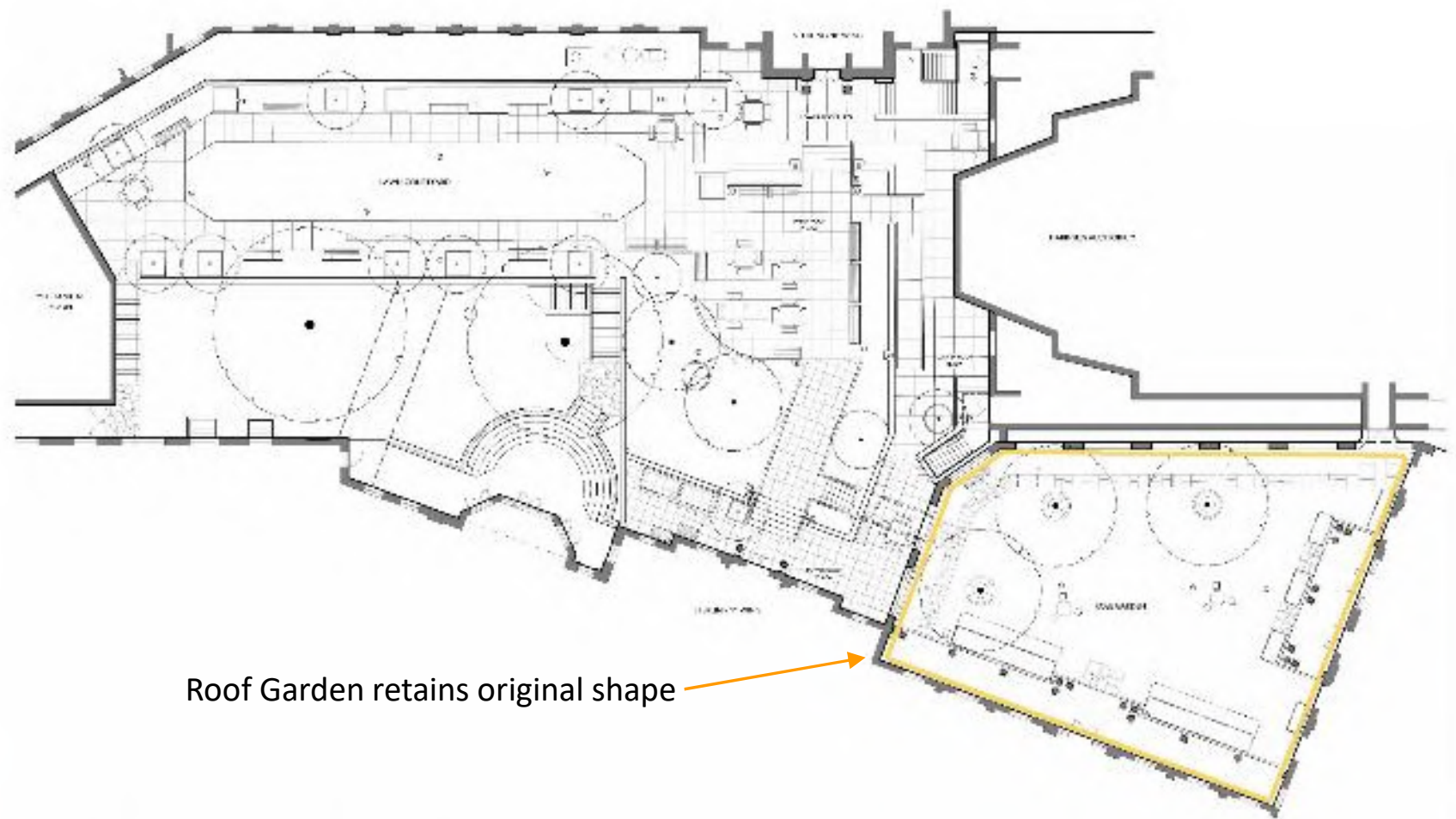
1949 Aerial



Farrand plans for Sterling Hall of Medicine and Roof Garden, 1930



Character Defining Features ■ Institute of Human Relations



Roof Garden retains original shape

KEY TO FARRAND CHARACTER DEFINING FEATURES

SPATIAL AND VISUAL ORGANIZATION

- VISUAL CONNECTION BETWEEN SPACES
- FRAMED VIEWS
- VISUAL SPACE

CIRCULATION

- STONE WALK AND STEPS
- CONTRASTING COURT PAVING
- STONE LANDSCAPE CURB

VEGETATION

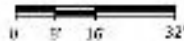
- Pre-1945 PLANT MATERIALS
- HEDGES LINING WALKS
- SHRUBS IN MASSES
- CLIMBING VINES

LANDSCAPE STRUCTURES

- DECORATIVE IRON WORK
- WALL WITH CAP
- MOAT WALL
- ROCK BORDERS/STEPS

FURNISHINGS

- STONE BENCH
- WOOD BENCH
- FREE STANDING LIGHT POST
- WATER FEATURE



Sources:  
2019 ACAD composite  
drawing, Courtesy  
Towers Gordon



Yale Campus · Farrand  
Cultural Landscape Study  
New Haven, Connecticut

Client:  
Yale University  
Office of Facilities Planning  
2 Whalley Avenue  
New Haven, CT 06510



Heritage Landscapes LLC  
Preservation Landscape  
Architects & Planners  
Clarkston, VT 05735-0210-0290  
Newtown, CT 06857-9566

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Drawing Title:  
2019 Institute  
of Human  
Relations  
Landscape

Date:  
November 2019

Drawing Number:

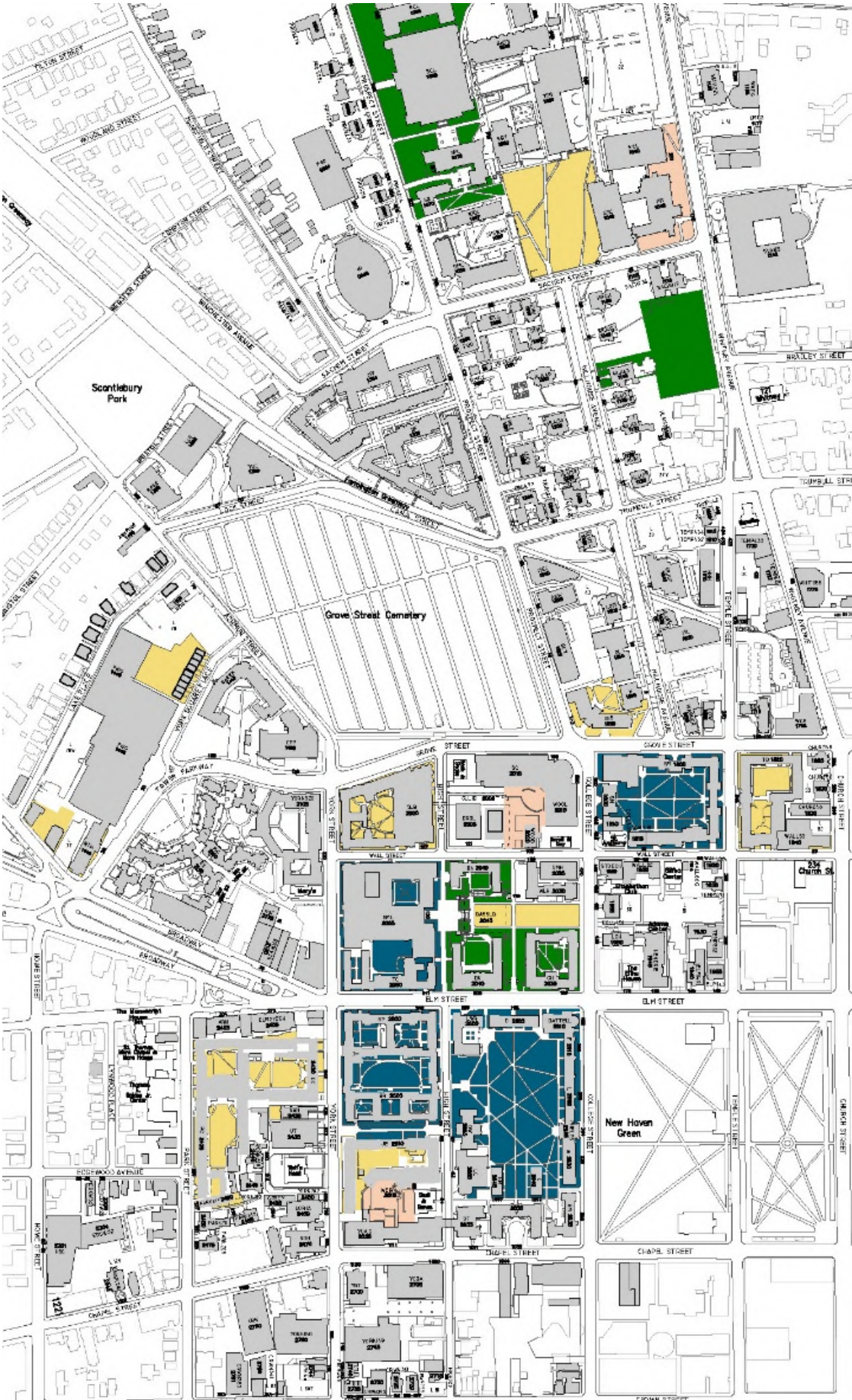
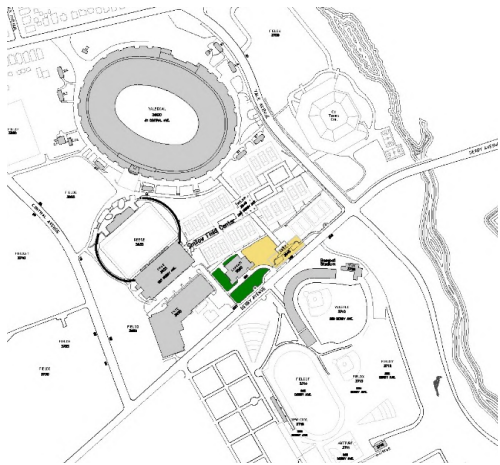
L10



■ **Unconfirmed Landscapes**

While some evidence may exist, two corroborating sources were not located for these 10 campus landscapes, they may have Farrand influence

- Beta Theta Pi Fraternity House
- Cross Campus
- Davenport College Courtyard
- Jonathan Edwards College
- Pierson College Courtyard
- Sachem's Wood
- Sheffield Hall front (two weak sources)
- Sterling Law
- Timothy Dwight College, Temple College Group
- Walter Camp Memorial Gateway



Farrand Yale Cultural Landscapes Study ■ Confirmation Sources Summary									
YFCL Study Code	File Name	LANDSCAPE NAME	Years	BF Drawing or BF Notes	BF Corresp	BF Article	Drawing UCB	UCB Historic Photos	Balmori Text
Unconfirmed									
BTP	Beta Theta Pi Fraternity House	Beta Theta Pi Fraternity House					Arch Dwg*		
CC	Cross Campus	Cross Campus	1934				Arch Dwg*		
DC	Davenport College Courtyard	Davenport College Courtyard	1933						■
JEC	Jonathan Edwards College	Jonathan Edwards College	1932						■
PC	Pierson College Courtyard	Pierson College Courtyard	1933						■
SAW	Sachem's Wood	Sachem's Wood				■			
SH	Sheffield Hall front	Sheffield Hall front	1932					■	■
SL	Sterling Law	Sterling Law	1931				Arch Dwg	■	
TDC	Timothy Dwight College, Temple College Group	Timothy Dwight College, Temple College Group	1935				Arch Dwg*		
WCM	Walter Camp Memorial Gateway	Walter Camp Memorial Gateway	1927				Arch Dwg*		



## ■ Opportunities Presented from Study

- ❑ **Create Landscape Design and Maintenance Standards**
- ❑ **Add Landscape section to Basis of Design**
- ❑ **Implement FY20 Landscape Improvements Project**
- ❑ **Refresh Principles related to Landscape in “A Framework for Campus Planning”**

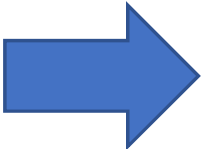




■ Yale Design Standards

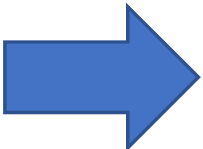
■ New Sections in Exterior Improvements

Section 32 01 01 Exterior Improvements  
Landscape Design



Basis of Design – new chapter added “Landscape and Civil Systems”

Section 32 01 01 Exterior Improvements  
Site Maintenance Plan



Submittals required –  
Site Layout by Area Type  
Planting Schedule  
Site Maintenance Plan Gantt Chart



## ■ Yale Design Standards

## ■ New Section 32 01 01 Exterior Improvements Landscape Design


### Purpose

- to provide context and requirements for landscape design that will continue Yale's distinctive campus vocabulary
- to know historic features and adapt to present conditions
- to support an ecosystems services approach

### Requirement – all landscape projects

### Includes

- References to Yale planning and sustainability studies, upcoming Yale Tree Management Plan, 01 Div Tree Protection Spec, and Recommended Planting Species List
- Site Evaluation and Sustainability Assessment
- Site Design Intent and Campus Integration
- Special Requirement – Landscape Character Definition
- Submittals – Site Maintenance Plan
- Site Protection from Construction Activity

	Title: YALE OFFICE OF FACILITIES PROCEDURE MANUAL Chapter: 01 - Yale Design Standard Division: 32 01 01 Exterior Improvements Landscape Design	Section: 32 01 01 Exterior Improvements Landscape Design
		Date: 02/04/2020
		Author: University Planning

### PART 1 - INTRODUCTION TO YALE CAMPUS LANDSCAPE DESIGN

#### 1.1 PURPOSE

- A. To provide durable, low maintenance landscapes that unify Yale campuses and are respectful of Yale's landscape design history. Landscape design is to align the distinctive campus character, adapt to urban conditions, encourage ecosystem health, reinforce sense of place and produce harmony and integration across various campus areas. With reference to historical precedent, Yale campus buildings and landscapes went through a period of significant expansion between 1920-1940, under the expertise and guidance of notable architects with Beatrix Farrand, landscape architect and Yale's consulting landscape gardener. This work shaped the Yale landscape character and defined the distinctive contributing features of the campus. Subsequent landscape design has been site specific with a practice to promote and evolve the Farrand intent.

As interventions are made through project design and construction, these standards for landscape design indicate the requirements to be considered for Yale's landscapes, of all sizes. The standards direct change that reinforces and perpetuates an overall campus landscape vocabulary, that is both rooted in historical features and adapted to present conditions, functional needs and aesthetic quality. The standards direct shaping landscapes to support an urban, ecosystem services approach, emphasize the interconnectivity of all systems, and addresses the health of – soil, water, air, plants, animals, microbes – that are integral to the ecological health of campus and the university community. This approach supports an environmentally responsible infrastructure for resiliency, integrity and longevity. Campus landscapes are intended to contribute to continued supply and regulation of clean air and water, decomposition of waste, regulation of microclimates, stormwater management via water detention and infiltration, erosion control, and habitat value and connectivity.

### PART 2 - GENERAL DESIGN AND CONSTRUCTION REQUIREMENTS

- 2.1 Each landscape project, regardless of scale or scope, is required to refer to the following reference guideline documents, "A Framework for Campus Planning, 2000", the 2013 "Sustainability



## ■ Yale Design Standards

## ■ New Section 32 01 01 Exterior Improvements Landscape Design

### Site Evaluation and Sustainability Assessment

- Gain understanding of existing physical conditions per LEED V4 Sustainable Sites
  - Use credits Environmental Site Assessment, Site Assessment and Rainwater Management as basis for evaluation
- Explore opportunities for sustainability
- Assess historic value

### Site Design Intent and Campus Integration

- Concept
- Intended Use
- Material, Vegetation, Tree Selection
- Visibility – heights of plantings
- Soil
- Public Art
- Operations considerations – trash/recycling/card access/tents





## ■ Yale Design Standards

## ■ New Section 32 01 01 Exterior Improvements Landscape Design

### Special Requirement – Landscape Character Definition

- Evaluate features that serve as design principles and tie to campus whole
  - Spatial Organization
  - Views and Visual Relationships
  - Etc.

### Site Protection from Construction

- Evaluate minimal impact from construction per LEED V4 Sustainable Sites, Construction Activity Pollution Prevention, at a minimum evaluate
  - Pollutants from construction – monitor and manage
  - Soil – erosion and sedimentation control plan, soil protection and reuse
  - Vegetation – plant and tree protection, reuse
    - Tree and Plant Protection Specification
  - Habitat – ecosystem services approach - balance





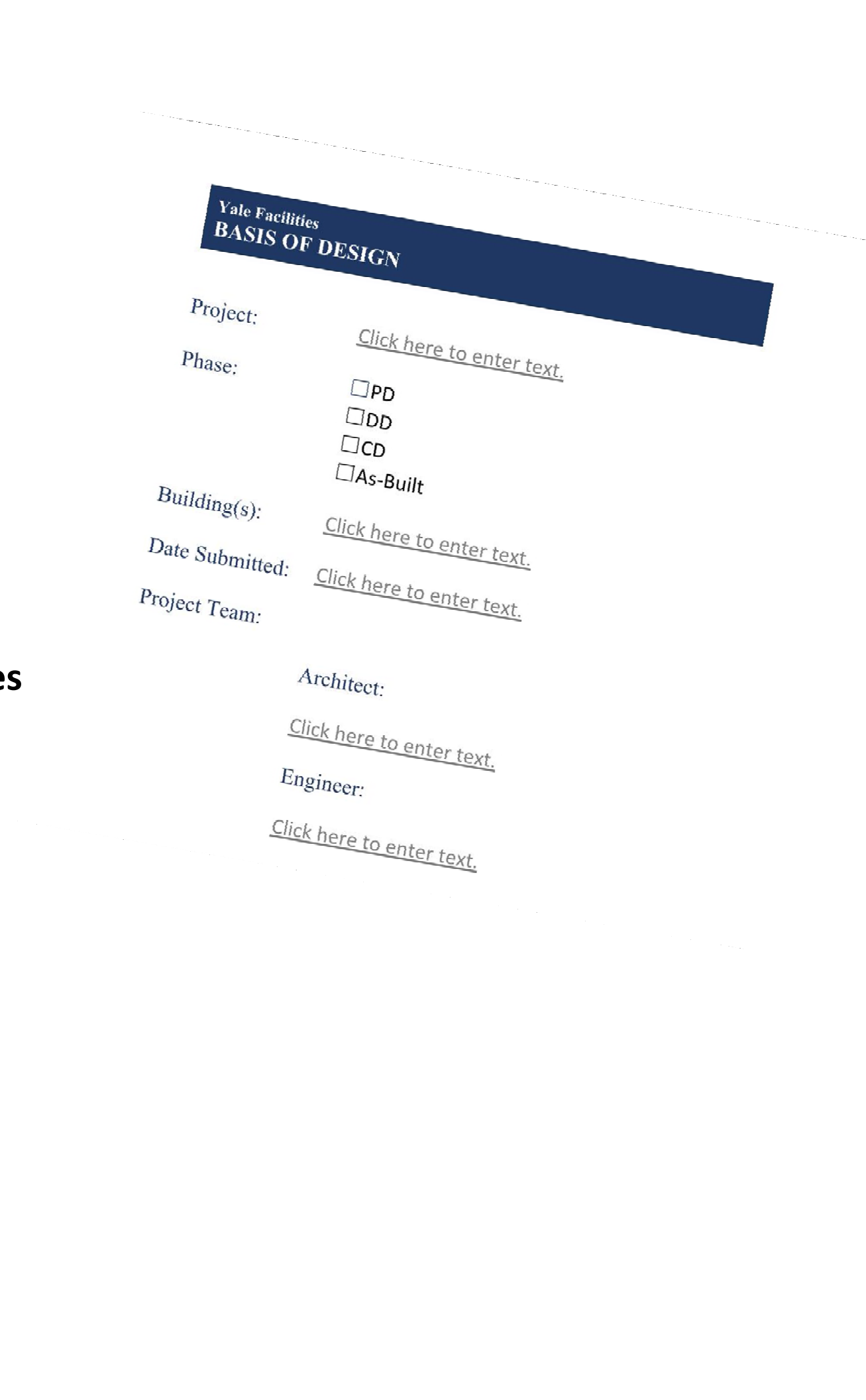
■ Yale Design Standards

■ Basis of Design: Landscape and Civil Systems

Narrate design approach as outlined in the standards.

Applies to any project that includes -

- ☐ Exterior Landscape Design
  - ☐ Exterior Landscape required for site staging or construction activities
- If not then –
- ☐ No Exterior Landscape Impacts





## ■ Yale Design Standards

### ■ New Section 32 01 02 Exterior Improvements Site Maintenance Plan

#### **Purpose**

- Identify labor requirements for proposed projects
- “How to” for design firms to identify labor
- Match current staffing levels?
  - Change in staffing level
  - Change to design

**Requirement** – all landscape projects

#### **Includes**

- University expectations
- Area Types
- Sustainable Objectives
- Output – Site Maintenance Plan





## ■ Yale Design Standards

## ■ New Section 32 01 02 Exterior Improvements Site Maintenance Plan

### University Expectations of the landscape

- Well maintained appearance

### Area Types

- Components of the landscape
- Different tasks lists

### Sustainable Objectives

- Plant health is the focus
- Integrated Pest Management
  - Correct plant selection is responsibility of the designer





## ■ Yale Design Standards

## ■ New Section 32 01 02 Exterior Improvements - Site Maintenance Plan

### Site Maintenance Plan

- Goal of LGM: maintain the design intent
- Summary of the required labor
- Documents required
  - BoD narratives completion
  - Site Drawing of Area Types – include in “L” Series drawings
  - Planting Schedule – include “L” Series drawings
  - Site Maintenance Plan Gantt Chart – include in BoD





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2 Whitney Avenue  
New Haven, CT 06520



SET FLAP



Quantity	Key	Botanical Name	Common Name	Design Intent	Selection criteria
Example Line					
1	Xxx	Botanical Name	Common Name	Visual purpose - framed for maintenance to achieve the visual purpose i.e. relating to Character Defining Features	Plant growth habits explaining physiological success in specific location i.e. relating to Sustainable Objectives - selection of plant material
Canopy Trees					
2	LiR	Liriodendron tulipifera	Tulip Poplar	Grand stature when mature, sightlines under the canopy, yellow spring flowers	Native New England tree, very successful locally in a variety of environments
1	NySy	Syssa sylvatica 'Wildfire'	Wildfire' Blackgum	Columnar stature when mature, sightlines under the canopy, red fall foliage	Swamp tree tolerant of wide varieties of soil, no serious disease or insect issues
Understory Trees					
6	AmL	Amelanchier laevis	Allegheny Serviceberry	White showy/fragrant early spring flowers, frame stairwell	Tolerates sun to part shade
3	CeC	Cercis canadensis 'Alba'	Alba' Eastern Redbud	Pink early spring flowers, random arrangement for texture	Native New England tree, tolerates sun to part shade
Bed, shrub					
7	HaVe	Hamamelis vernalis	Vernal Witchhazel	Late winter/early spring color accent to entranceways	low maintenance, tolerate full sun to part shade
27	IlCr	Ilex crenata 'Helleri'	Helleri' Japanese Holly	Hardy ever green shrub to highlight bed edges, low growing	low maintenance, disease and insect resistant
Bed, ground cover					
1972	ViM	Vinca minor	Common Periwinkle	Evergreen groundcover	highly competitive with weeds
Lawn					
3379 sqft	Lawn	Tall fescue	Festuca arundinacea	Hardy low maintenance/nutrient/water bunch type grass	Low water & nutrient requirements, highly traffic tolerant, disease resistant

# Yale

Central Campus

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2 Whitney Avenue  
New Haven, CT 06520



[illegible]



## ■ Yale Design Standards

## ■ Rollout Schedule

### **March 2020**

- 32-01-01 Exterior Improvements Landscape Design
- 32-01-02 Exterior Improvements Site Maintenance Plan
- Basis of Design – Landscape and Civil Systems
- Review and coordinate with Master Deliverables Checklist

## ■ In-house Responsibilities

### **Planners/Project Managers:**

- Inform Consultant Teams
- Include in Design and Budget Reviews
- Use as tools for design and to establish maintenance budgets
  - Each project must carry a maintenance budget in the overall project budget
- Hardcopies of Farrand Cultural Landscape Study are available on 7<sup>th</sup> floor, WGS.



FY20 Landscape Improvements – formulation phase



Library Walk



Branford Courtyard



HMQ, Saybrook Courtyard

FY 20 Scope

**Views and Visual Relationships**

- Limb up canopy trees
- Clear views to entries
- Removal of invasives

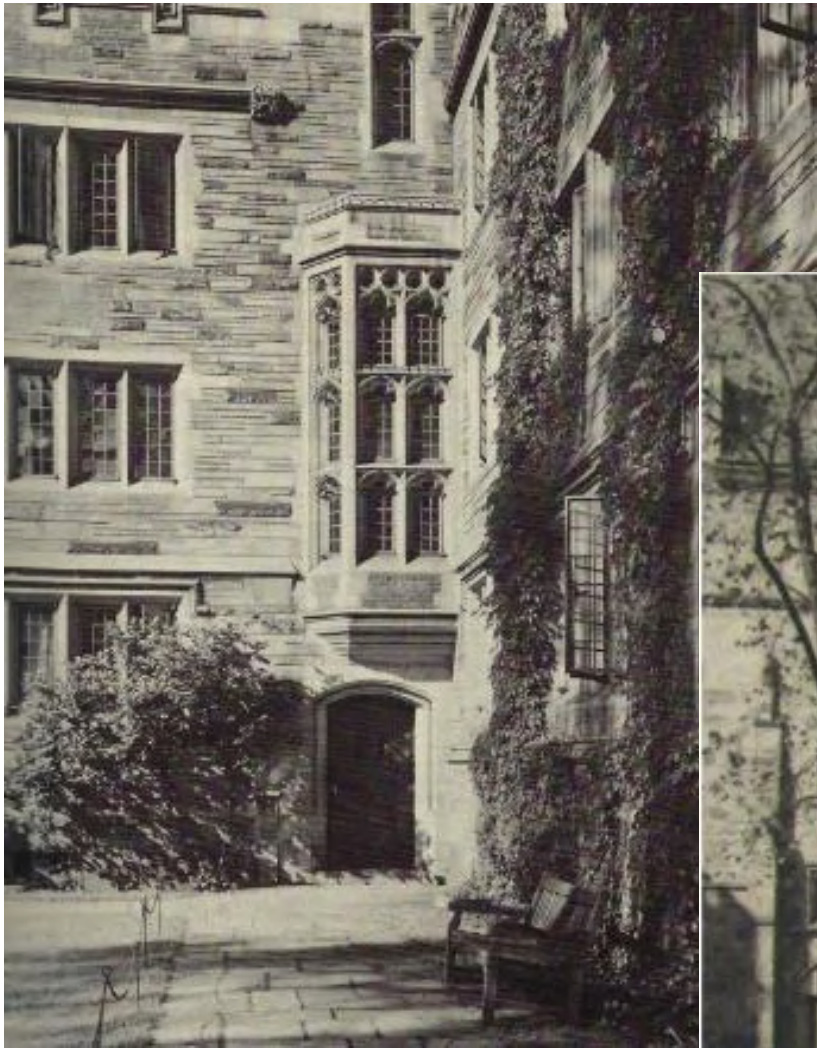
**Vegetation - Beds**

- Install flowering beds
- Install climbing vines
- Test nursery

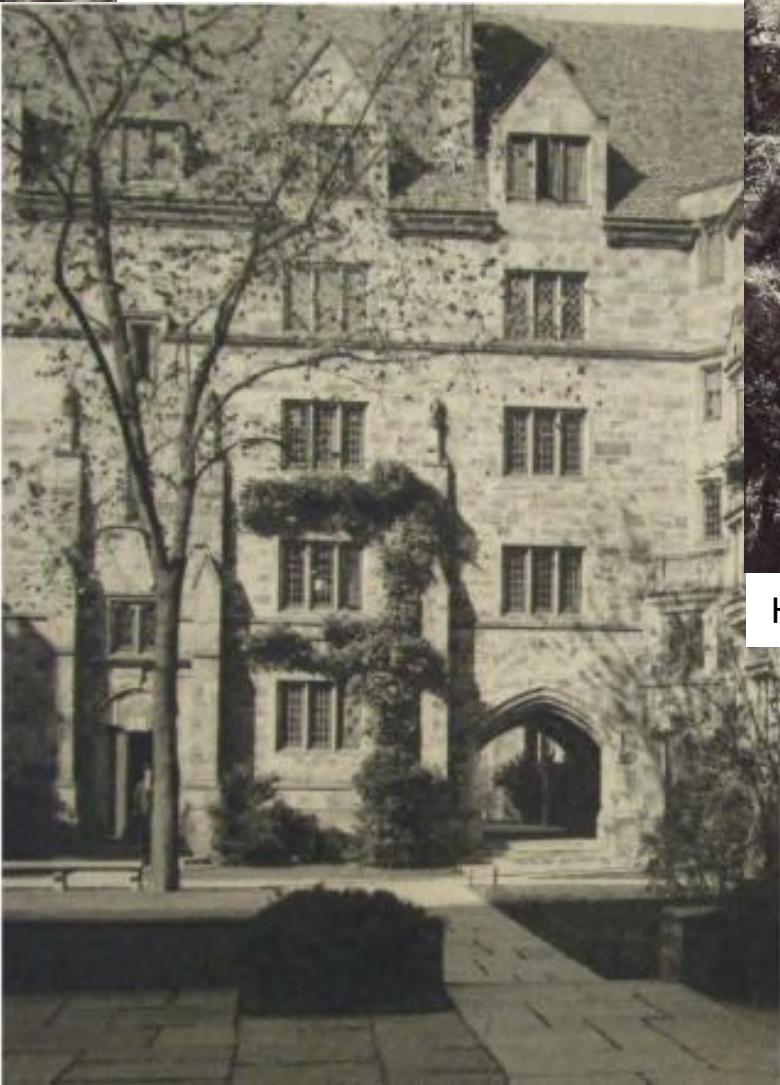




FY20 Landscape Improvements



Berkeley Courtyard, 1950



Killingworth Courtyard, 1940



Hopper, 1950



Old Campus



# Beatrix Farrand

Consultant Landscape Architect  
to Yale Campus 1920-1945

## Yale University Campus Farrand Cultural Landscapes Study

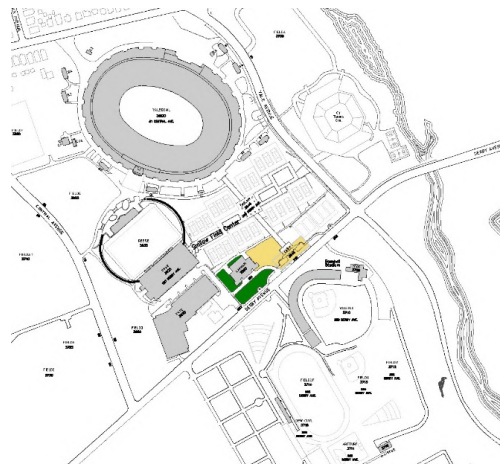
### Yale Office of Facilities

Kristina Chmelar, AIA, LEED AP BD&C, Major Projects  
Planner

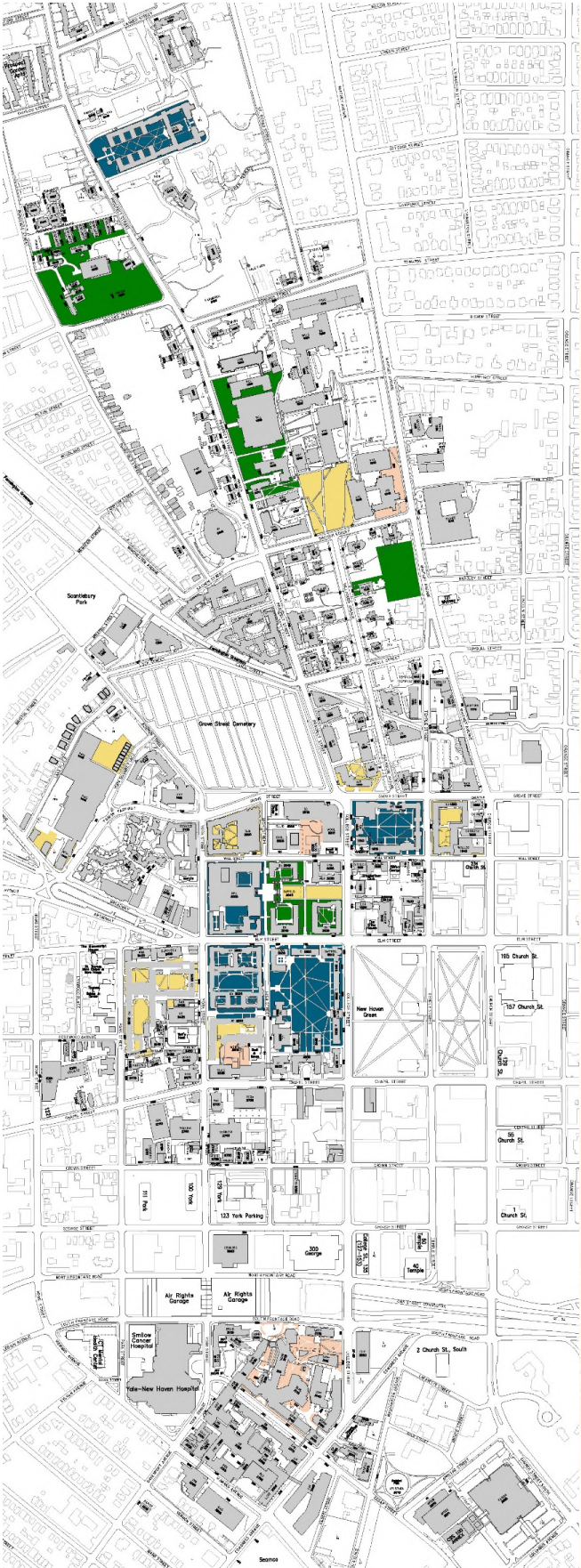
Michael West, Manager of Planning and Standards

### Heritage Landscapes LLC

Patricia M. O'Donnell FASLA, AICP, F.US/ICOMOS



Extent of Farrand campus landscapes documented



At Marsh Botanical Garden Greenhouse, 1927



FY20 Landscape Improvements ■ Old Library Street, Library Walk



1940



2019



FY 20 Scope

**Views and Visual Relationships**

limb up canopy trees

**Vegetation - Beds**

- remove damaged trees
- train understory trees for open, narrow form
- install hedge as moat wall
- install ground cover
- install climbing vine

**Vegetation - Court**

- install grass up to tree base
- remove ground cover, plant grass

**Soils**

- Improve soils for fertility, humus, pH, drainage

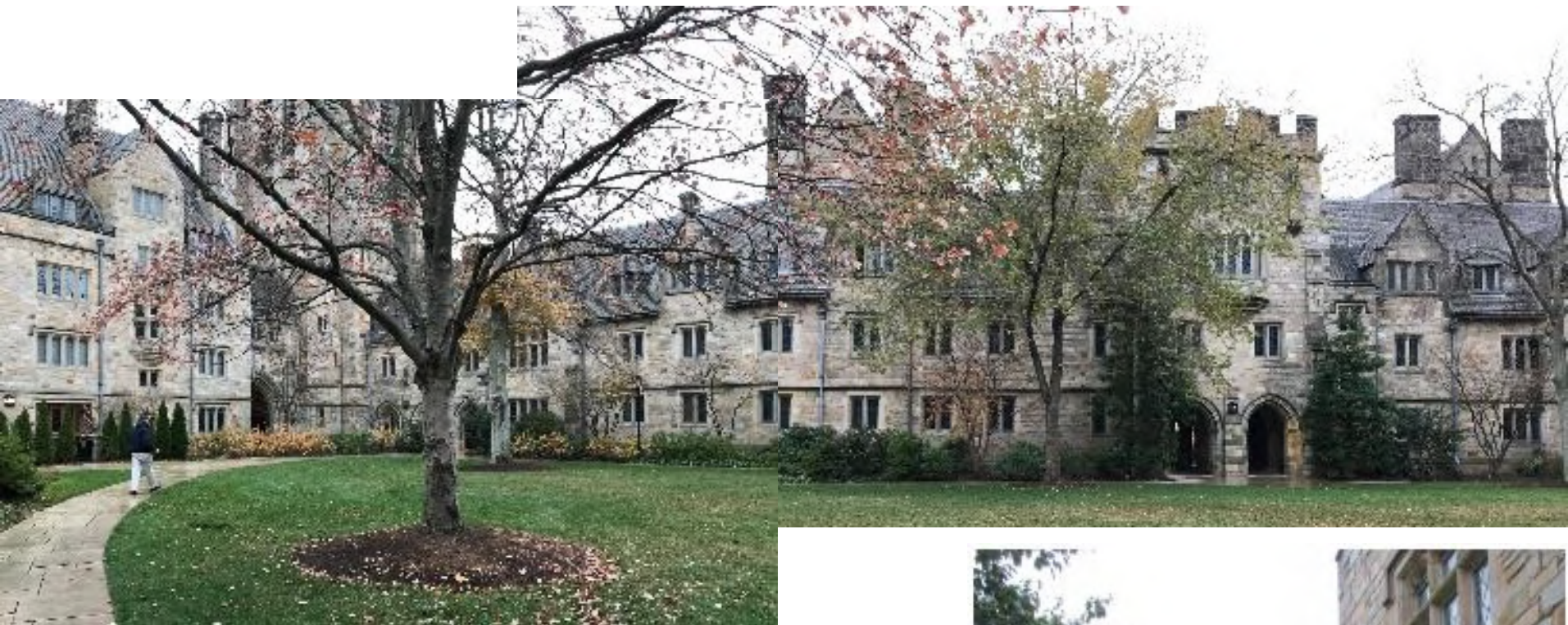
Future FY

**Landscape Structures**

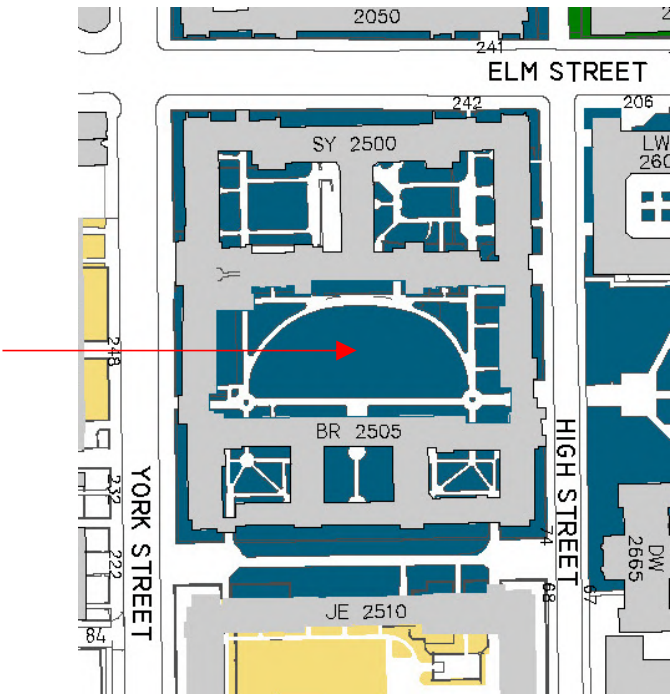
- remove wood bollards
- remove bulletin board



FY20 Landscape Improvements ■ Branford Court, Harkness Memorial Quadrangle



2019



- FY20 Scope**
- Views and Visual Relationships**
    - limb up canopy trees
    - train understory trees for open, narrow form
  - Vegetation - Beds**
    - remove damaged and out of context trees
    - install/prune shrubs at building base
    - test native ground cover, naturalize spring bulbs, install climbing vine
  - Vegetation - Court**
    - install grass up to tree base, avoid tree trunk damage when mowing
    - remove ground cover patches, plant grass
    - thin shrubs for open form
  - Irrigation** Provide as needed
  - Soils** Improve soils for fertility, humus, pH, drainage



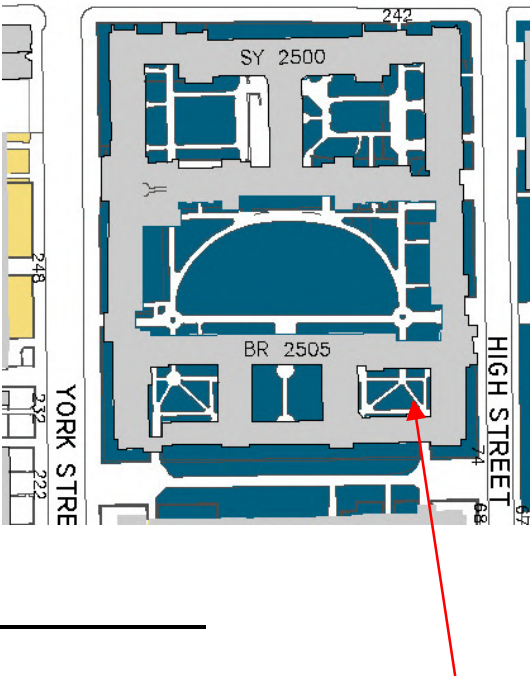
Rehabilitate **Legible** Landscape ■ Linonia Court, Harkness Memorial Quadrangle



2019



2019



Scope –

Views and Visual Relationships

train understory trees for open, narrow form

Soils

Improve soils for fertility, humus, pH, drainage

Vegetation - Beds

install building base shrubs, test native  
ground cover, naturalize spring bulbs,  
install climbing vine

Vegetation - Court

install and train flowering tree against  
wall

Irrigation

For beds as required



FY20 Landscape Improvements ■ Old Campus



1950



2019

**FY20 Scope**

**Views and Visual Relationships**

- limb up canopy trees
- train understory trees for open, narrow form
- remove damaged trees, replant

**Vegetation - Beds**

- install building base shrubs, test native ground cover, naturalize spring bulbs

**Vegetation - Court**

- install grass up to tree bases, avoid mowing damage to trunks

**Irrigation**

- Provide as needed for beds

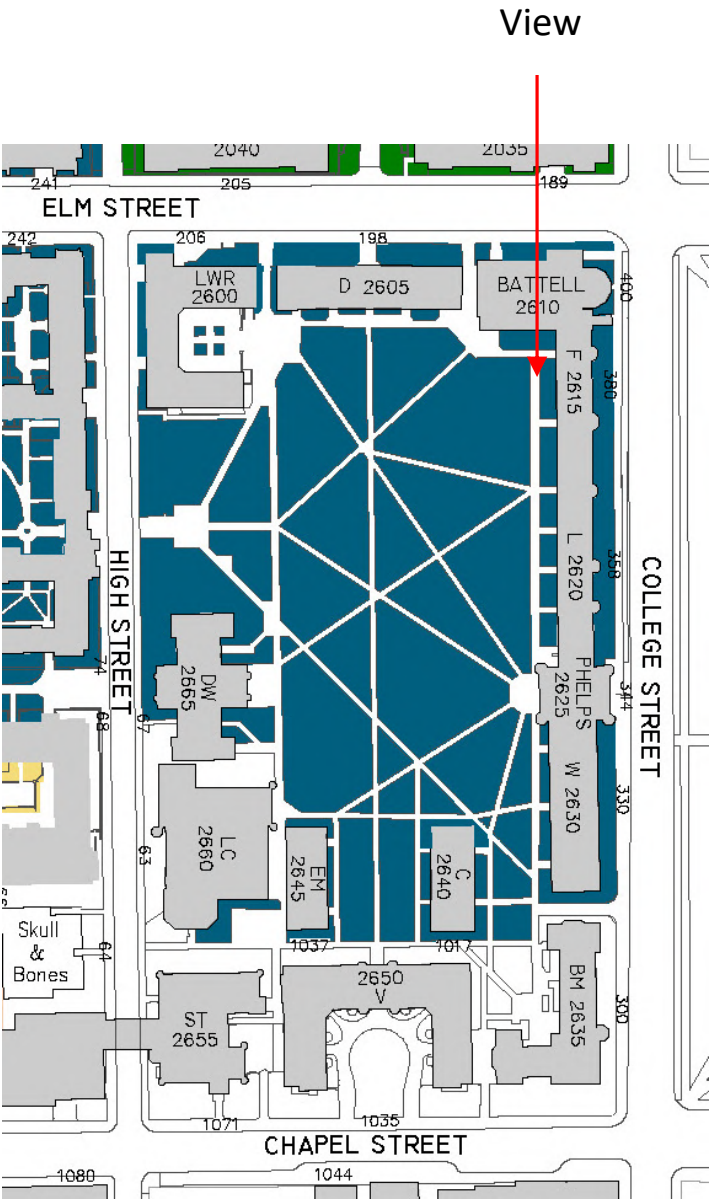
**Soils**

- Improve soils for fertility, humus, pH, drainage

**Future FY**

**Landscape Structures**

- repair wood fence
- relocate plastic bins



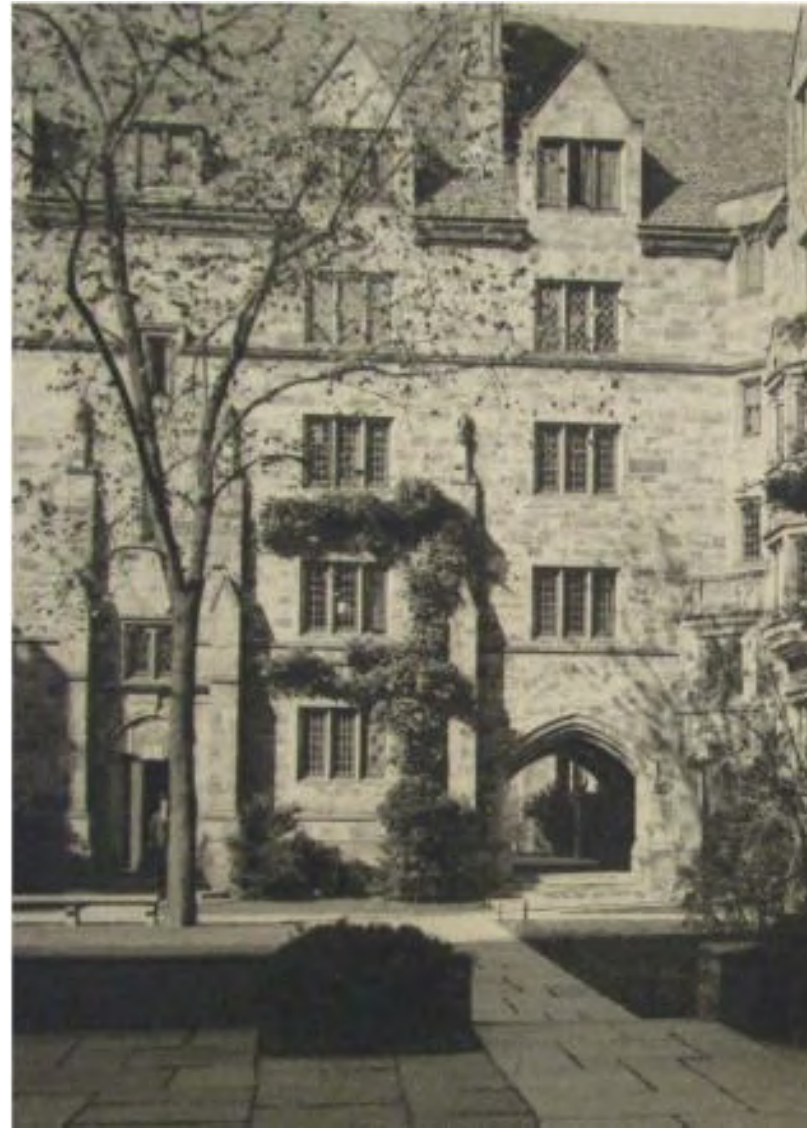


## ■ Test/Monitor Climbing Vine and Support Systems

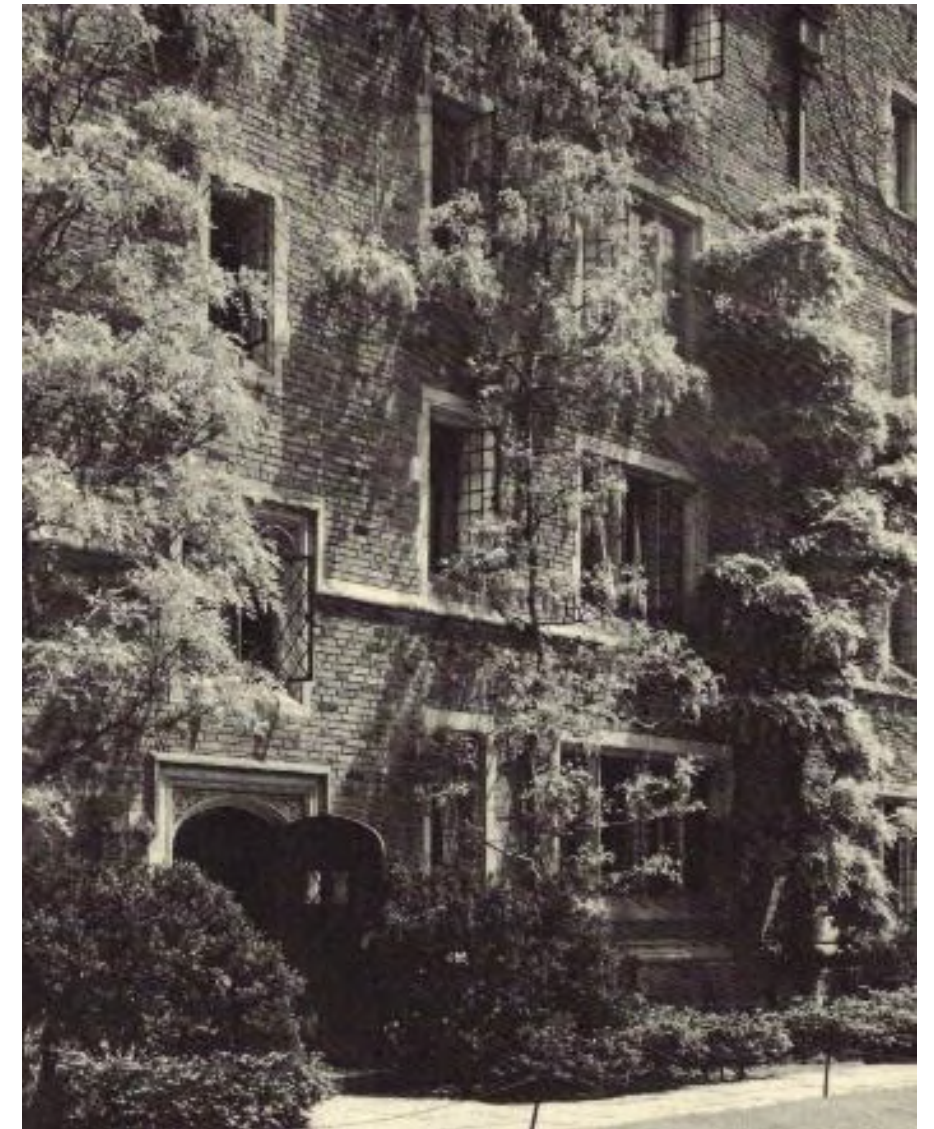
### Climbing Vines ■ Historic Images



Berkeley Courtyard, 1950



Killingworth Courtyard, 1940



Hopper, 1950



## Test Vines ■ Living Example

- Trim climbing Japanese hydrangea
- Trim ivy from wall down to bed



Berkeley North Courtyard 2019

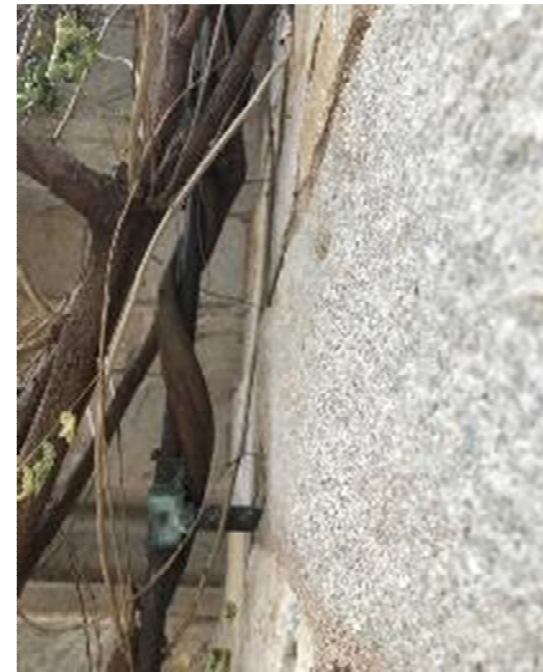


## Test Vines ■ Living Example and Remaining Support

- Trim climbing wisteria
- Determine suitable twinning vines to use
- Plant new vines on existing supports



Harkness Memorial Quadrangle, Killingworth Courtyard 2019



HMQ, Saybrook Courtyard 2019





## Test Nursery

- Plant 10-12 trees at Yale Farm / Farnam Gardens

