

SCOPE OF WORK

Skylands Manor Botanical Garden Irrigation System

Ringwood State Park
Ringwood, Passaic County, NJ

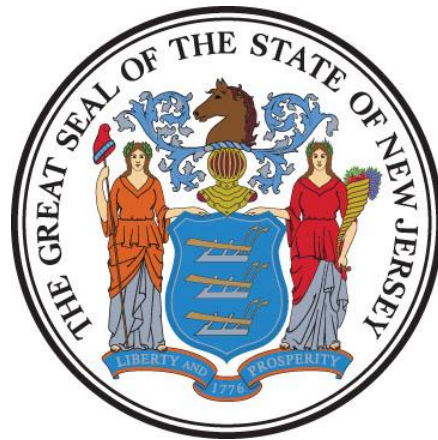
Project No. P1314-00

STATE OF NEW JERSEY

Honorable Philip D. Murphy, Governor
Honorable Sheila Y. Oliver, Lt. Governor

DEPARTMENT OF THE TREASURY

Elizabeth Maher Muoio, Treasurer



DIVISION OF PROPERTY MANAGEMENT AND CONSTRUCTION

Christopher Chianese, Director

Date: August 29, 2023

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I. OBJECTIVE

The objective of this project is to design and install a new irrigation system for the State of New Jersey Botanical Gardens at Skylands Manor in Ringwood State Park, Passaic County. The new system will include a new non-potable water supply well.

II. CONSULTANT QUALIFICATIONS

A. CONSULTANT & SUB-CONSULTANT PRE-QUALIFICATIONS

The Consultant shall be a firm pre-qualified with the Division of Property Management & Construction (DPMC) in the following discipline(s):

- **P005 Civil Engineering**

The Consultant shall also have in-house capabilities or Sub-Consultants pre-qualified with DPMC in:

- **P002 Electrical Engineering**

As well as, **any and all** other Architectural, Engineering and Specialty Disciplines necessary to complete the project as described in this Scope of Work (SOW).

III. PROJECT BUDGET

A. CONSTRUCTION COST ESTIMATE (CCE)

The initial Construction Cost Estimate (CCE) for this project is \$ 250,000.

The Consultant shall review this Scope of Work and provide a narrative evaluation and analysis of the accuracy of the proposed project CCE in its technical proposal based on its professional experience and opinion.

B. CURRENT WORKING ESTIMATE (CWE)

The Current Working Estimate (CWE) for this project is \$ 408,750.

The CWE includes the construction cost estimate and all consulting, permitting and administrative fees.

The CWE is the Client Agency’s financial budget based on this project Scope of Work and shall not be exceeded during the design and construction phases of the project unless DPMC approves the change in Scope of Work through a Contract amendment.

C. CONSULTANT’S FEES

The construction cost estimate for this project *shall not* be used as a basis for the Consultant’s design and construction administration fees. The Consultant’s fees shall be based on the information contained in this Scope of Work document and the observations made and/or the additional information received during the pre-proposal meeting.

IV. PROJECT SCHEDULE

A. SCOPE OF WORK DESIGN & CONSTRUCTION SCHEDULE

The following schedule identifies the estimated design and construction phases for this project and the estimated durations.

PROJECT PHASE	ESTIMATED DURATION (Calendar Days)
1. Site Access Approvals & Schedule Design Kick-off Meeting	14
2. Investigation Phase	28
• <i>Project Team & DPMC Plan/Code Unit Review & Comment</i>	14
3. Design Development Phase	42
• <i>Project Team & DPMC Plan/Code Unit Review & Comment</i>	14
4. Final Design Phase	42
• <i>Project Team & DPMC Plan/Code Unit Review & Approval</i>	14
5. Final Design Re-Submission to Address Comments	7
• <i>Project Team & DPMC Plan/Code Unit Review & Approval</i>	14
6. DCA Submission Plan Review	30
7. Permit Application Phase	21
• <i>Issue Plan Release</i>	14
8. Bid Phase	42
9. Award Phase	28

10. Construction Phase	180
11. Project Close Out Phase	30

B. CONSULTANT’S PROPOSED DESIGN & CONSTRUCTION SCHEDULE

The Consultant shall submit a project design and construction schedule with its technical proposal that is similar in format and detail to the schedule depicted in **Exhibit ‘A’**. The schedule developed by the Consultant shall reflect its recommended project phases, phase activities, activity durations.

A written narrative shall also be included with the technical proposal explaining the schedule submitted and the reasons why and how it can be completed in the time frame proposed by the Consultant.

This schedule and narrative will be reviewed by the Consultant Selection Committee as part of the evaluation process and will be assigned a score commensurate with clarity and comprehensiveness of the submission.

V. PROJECT SITE LOCATION & TEAM MEMBERS

A. PROJECT SITE ADDRESS

The location of the project site is:

Ringwood State Park
2 Morris Road
Ringwood, NJ 07456

GPS Coordinates: 41.1269° N, 74.2396° W

See **Exhibit ‘B’** for the project site location map.

B. PROJECT TEAM MEMBER DIRECTORY

The following are the names, addresses, and phone numbers of the Project Team members.

1. DPMC Representative:

Name: Michael Ryan, Jr., Project Manager
Address: Division of Property Management & Construction
20 West State Street, 3rd Floor
Trenton, NJ 08608-1206
Phone No: (609) 984-5062
E-Mail: michael.ryan3@treas.nj.gov

2. Department of Environmental Protection:

Name: William White, Project Manager
Address: Department of Environmental Protection
275 Freehold-Englishtown Road
Englishtown, NJ 07726
Phone No: (609) 802-5886
E-Mail: William.White@dep.nj.gov

VI. PROJECT DEFINITION

A. BACKGROUND

Ringwood State Park is a 4,444-acre state park located in the northeastern part of New Jersey in Passaic County. The land contains the earliest sites and buildings home to a developing iron industry in the early 18th century. Making use of the nearby river and the construction of waterwheels, power was provided to fuel the furnaces and forges. In 1740, the Ringwood town was developed and the region became key for the iron ore industry before and after the Revolutionary War. The land became home to many of the miners and iron workers who lived on the iron “plantation” and became Ringwood “Manor” through successors of iron masters for almost 200 years. The development of the estate reflects an era when wealthy industrialists invested their money in expansive country property.

A prominent New York lawyer, Francis Lynde Stetson, purchased and developed the Skylands estate and named the region for its acres of rich woodlands with extensive views of the Ramapo Mountains. The Stetson house, was replaced in the 1920s when the land was sold to Clarence McKenzie Lewis, a New York investment banker who also was a trustee to the New York Botanical Gardens. Lewis had a passion for exotic plants and specialty gardens and hired an Architect, John Russell Pope, to design the current standing 44-room Tudor revival mansion. The mansion and grounds, known as the Skylands Manor, is a reproduction of an English mansion and includes two eras of landscape architecture.

New Jersey purchased 1,117 acres of Skylands in 1966. In March 1984, the central 96 acres surrounding the Skylands Manor in Ringwood State Park were designated as the official site of

the New Jersey State Botanical Gardens. The Skylands property is the first property purchased under the Green Acres program. The Skylands estate was added to the State and National Register of Historic Places on September 28, 1990.

The water distribution system was designed and used to irrigate the 96-acres of plants, trees and gardens. The original irrigation system was installed in the early 1900's and services all of the garden areas by a combination distribution system of cast iron mains and lines. The current water source and irrigation configuration is failing to provide a sufficient water supply to satisfy the daily demand and survival of the matured plants, trees and gardens. The irrigation system has been significantly reduced due to line corrosion, aged wells, leaks, outdated sprinkler heads and water pressure reduction. Based on the referenced irrigation system study and prior dated reports, recommendations are outlined for installing an additional well and replacement of the current irrigation system.

B. FUNCTIONAL DESCRIPTION OF THE BUILDING/ GROUNDS

The New Jersey State Botanical Garden is part of Ringwood State Park, New Jersey Division of Parks and Forestry, Department of Environmental Protection and appears on both the State and National Registers of Historic Places. The New Jersey Botanical Gardens provides educational and academic learning experiences to individuals, groups, students and seniors throughout the calendar year.

The year-round visited 96-acre garden region consists of outdoor and indoor plant habitats, curated botanicals, historical building architecture, evolved hardscape, greenhouse, walking paths, lawn meadows, visitor center, lake, a private residence, pump house, parking facilities and roadways.

VII. CONSULTANT DESIGN RESPONSIBILITIES

A. DESIGN REQUIREMENTS

1. Well:

The Consultant shall provide a complete design for a new non-potable water supply well. The Consultant shall determine the accurate location of the new water supply well based on the available electrical supply and the underground water resources. The areas and regions supplied by this new water supply well are to be determined by the Botanical Garden design and layout. The Consultant shall calculate the volume of a new water well tying into a new irrigation supply system, also under this scope. The Consultant is responsible for providing a design and specifications for all civil, mechanical and electrical aspects of a new well. The Consultant shall determine the pumps, piping, valves, electric power source, required enclosures and all incidental items for a complete operational water supply well.

The Consultant shall conduct any surveying, geotechnical investigation, land assessments, including test holes, and power utility investigation necessary to determine the best tie-in points for the well. Any available land and water source mapping will be provided to the Consultant. All supplied drawings and/or documentation shall be verified by the Consultant and findings reviewed by the Agency prior to any final new well supply design.

2. Irrigation System:

The Consultant shall design a non-potable water PVC irrigation system to service 10 (ten) acres of the specialty gardens, ornamental fountains and decorative pools. The Consultant shall design an irrigation system for seasonal use with specific time-of-day control capabilities. The Consultant shall abandon-in-place any existing irrigation lines. The Consultant shall design an irrigation system meeting the calculated demands of the landscape and botanical layout. The Consultant shall determine the location and layout of all newly installed system lines. . The Consultant is responsible for providing the full design, drawings and any specifications.

The Consultant shall determine the make and model of any replacements of hose bibs connections and sprinkler head attachments. Drawings of the existing distribution system shall be provided to the Consultant. However, all supplied drawings and/or documentation shall be verified by the Consultant and findings reviewed by the Agency prior to any final irrigation system design.

3. Controls:

The Consultant shall design the necessary controls for the new non-potable water well and the proposed irrigation system design determined by the garden design, layout and seasonal needs. The controls shall provide flow rate monitoring, automation, remote on/off, alternate route, and scheduling functions.

4. State Historic Preservation Office Approval:

The Consultant shall complete an “Application for Project Authorization Under the New Jersey Register of Historic Places Act” and submit it to the State Historic Preservation Office for review and approval prior to securing the required UCC permits.

The “Application for Project Authorization Under the New Jersey Register of Historic Places Act” can be found at: http://www.nj.gov/dep/hpo/2protection/sr_revapp_min.pdf

B. EXISTING DOCUMENTATION

Copies of the following documents will be provided to each Consulting firm at the pre-proposal meeting to assist in the bidding process.

- Irrigation System Study – New Jersey Botanical Gardens – Ringwood State Park dated December 2020 LAN Associates.
- P355-01: Skylands Manor Water Main Improvement, November 1986, Wehran Engineering

Review these documents and any additional information that may be provided at a later date such as reports, studies, surveys, equipment manuals, as-built drawings, etc. The State does not attest to the accuracy of the information provided and accepts no responsibility for the consequences of errors by the use of any information and material contained in the documentation provided. It shall be the responsibility of the Consultant to verify the contents and assume full responsibility for any determination or conclusion drawn from the material used. If the information provided is insufficient, the Consultant shall take the appropriate actions necessary to obtain the additional information required.

All original documentation shall be returned to the provider at the completion of the project.

VIII. PERMITS & APPROVALS

A. NJ UNIFORM CONSTRUCTION CODE PLAN REVIEW AND PERMIT

The project construction documents must comply with the latest adopted edition of the NJ Uniform Construction Code (NJUCC).

The latest NJUCC Adopted Codes and Standards can be found at:

<http://www.state.nj.us/dca/divisions/codes/codreg/>

1. NJ Uniform Construction Code (NJUCC) Plan Review

Consultant shall estimate the cost of the NJUCC Plan Review by DCA and include that amount in their fee proposal line item entitled “**Plan Review and Permit Fee Allowance**”, refer to paragraph XI.A.

Upon approval of the Final Design Phase Submission by DPMC, the Consultant shall submit the construction documents to the Department of Community Affairs (DCA), Bureau of Construction Project Review to secure a complete plan release.

As of July 25, 2022, the Department of Community Affairs (DCA) is only accepting digital signatures and seals issued from a third party certificate authority. The DCA ePlans site can be found at:

<https://www.nj.gov/dca/divisions/codes/offices/ePlans.html>

Procedures for submission to the DCA Plan Review Unit can be found at:

https://www.state.nj.us/dca/divisions/codes/forms/pdf_bcpr/pr_app_guide.pdf

Consultant shall complete the “Project Review Application” and include the following on Block 5 as the “Owner’s Designated Agent Name”:

Joyce Spitale, DPMC
PO Box 235
Trenton, NJ 08625-0235
Joyce.Spitale@treas.nj.gov 609-943-5193

The Consultant shall complete the NJUCC “Plan Review Fee Schedule”, determine the fee due and pay the NJUCC Plan Review fees, refer to Paragraph X.A.
The NJUCC “Plan Review Fee Schedule” can be found at:

http://www.state.nj.us/dca/divisions/codes/forms/pdf_bcpr/pr_fees.pdf

2. NJ Uniform Construction Code Permit

Upon receipt of a complete plan release from the DCA Bureau of Construction Project Review, the Consultant shall complete the NJUCC permit application and all applicable technical sub-code sections. The “Agent Section” of the application and certification section of the building sub-code section shall be signed. These documents, with **six (6) sets of DCA approved, signed and sealed construction documents** shall be forwarded to the DPMC Project Manager.

The Consultant may obtain copies of all NJUCC permit applications at the following website:

<http://www.state.nj.us/dca/divisions/codes/forms/>

All other required project permits shall be obtained and paid for by the Consultant in accordance with the procedures described in Paragraph VIII.B.

3. Prior Approval Certification Letters:

The issuance of a construction permit for this project may be contingent upon acquiring various “prior approvals” as defined by N.J.A.C. 5:23-1.4. It is the Consultant’s responsibility to determine which prior approvals, if any, are required. The Consultant shall submit a general certification letter to the DPMC Plan & Code Review Unit Manager during the Permit Phase of this project that certifies all required prior approvals have been obtained.

In addition to the general certification letter discussed above, the following specific prior approval certification letters, where applicable, shall be submitted by the Consultant to the DPMC Plan & Code Review Unit Manager: Soil Erosion & Sediment Control, Water & Sewer

Treatment Works Approval, Coastal Areas Facilities Review, Compliance of Underground Storage Tank Systems with N.J.A.C. 7:14B, Pinelands Commission, Highlands Council, Well Construction and Maintenance; Sealing of Abandoned Wells with N.J.A.C. 7:9D, Certification that all utilities have been disconnected from structures to be demolished, Board of Health Approval for Potable Water Wells, Health Department Approval for Septic Systems. It shall be noted that in accordance with N.J.A.C. 5:23-2.15(a)5, a permit cannot be issued until the letter(s) of certification is received.

4. Multi-building or Multi-site Permits:

A project that involves many buildings and/or sites requires that a separate permit shall be issued for each building or site. The Consultant must determine the construction cost estimate for *each* building and/or site location and submit that amount where indicated on the permit application.

5. Special Inspections:

In accordance with the requirements of the New Jersey Uniform Construction Code N.J.A.C. 5:23-2.20(b), Bulletin 03-5 and Chapter 17 of the International Building Code, the Consultant shall be responsible for the coordination of all special inspections during the construction phase of the project.

Bulletin 03-5 can be found at:

http://www.state.nj.us/dca/divisions/codes/publications/pdf_bulletins/b_03_5.pdf

a. Definition:

Special inspections are defined as an independent verification by a certified Special Inspector for **Class I buildings and smoke control systems in any class building**. The special inspector is to be independent from the Contractor and responsible to the Consultant so that there is no possible conflict of interest.

Special inspectors shall be certified in accordance with the requirements in the New Jersey Uniform Construction Code.

b. Responsibilities:

The Consultant shall submit with the permit application, a list of special inspections and the agencies or special inspectors that will be responsible to carry out the inspections required for the project. The list shall be a separate document, on letter head, signed and sealed.

B. OTHER REGULATORY AGENCY PERMITS, CERTIFICATES AND APPROVALS

The Consultant shall identify and obtain all other State Regulatory Agency permits, certificates, and approvals that will govern and affect the work described in this Scope of Work. An itemized list of these permits, certificates, and approvals shall be included with the Consultant's Technical Proposal and the total amount of the application fees should be entered in the Fee Proposal line item entitled, "**Permit Fee Allowance.**"

The Consultant may refer to the Division of Property Management and Construction "Procedures for Architects and Engineers Manual", Paragraph "**9. REGULATORY AGENCY APPROVALS**" which presents a compendium of State permits, certificates, and approvals that may be required for this project.

The Consultant shall determine the appropriate phase of the project to submit the permit application(s) in order to meet the approved project milestone dates.

Where reference to an established industry standard is made, it shall be understood to mean the most recent edition of the standard unless otherwise noted. If an industry standard is found to be revoked, or should the standard have undergone substantial change or revision from the time that the Scope of Work was developed, the Consultant shall comply with the most recent edition of the standard.

IX. ENERGY INCENTIVE PROGRAM

The Consultant shall review the programs available on the "New Jersey's Clean Energy Program" website at: <http://www.njcleanenergy.com> as well as New Jersey electric and gas utility websites to determine if any proposed upgrades to the mechanical and/or electrical equipment and systems for this project qualify for "New Jersey Clean Energy Program" or utility approved rebates and incentives.

Consultant shall identify all rebates and incentives in their technical proposal.

The Consultant shall be responsible to complete the appropriate registration forms and applications, provide any applicable worksheets, manufacturer's specification sheets, calculations, attend meetings, and participate in all activities with designated representatives of the programs and utility companies to obtain the entitled financial incentives and rebates for this project.

All costs associated with this work shall be estimated by the Consultant and the amount included in the base bid of its fee proposal.

X. ALLOWANCES

A. PLAN REVIEW AND PERMIT FEE ALLOWANCE

The Consultant shall obtain and pay for all of the project permits in accordance with the guidelines identified below.

1. Permits:

The Consultant shall determine the various permits, certificates, and approvals required to complete this project.

2. Permit Costs:

The Consultant shall estimate the application fee costs for all of the required project permits, certificates, and approvals (excluding the NJ Uniform Construction Code permit) and include that amount in its fee proposal line item entitled “**Plan Review and Permit Fee Allowance**”, refer to Paragraph IX.A. A breakdown of each permit and application fee shall be attached to the fee proposal for reference.

NOTE: The NJ Uniform Construction Code permit is excluded since it will be paid for by the State.

3. Applications:

The Consultant shall complete and submit all permit applications to the appropriate permitting authorities and the costs shall be paid from the Consultant’s permit fee allowance. A copy of the application(s) and the original permit(s) obtained by the Consultant shall be given to the DPMC Project Manager for distribution during construction.

4. Consultant Fee:

The Consultant shall determine what is required to complete and submit the permit applications, obtain supporting documentation, attend meetings, etc., and include the total cost in the base bid of its fee proposal under the “Permit Phase” column.

Any funds remaining in the permit allowance will be returned to the State at the close of the project.

PROJECT NAME: Skylands Manor Botanical Garden Irrigation System
PROJECT LOCATION: Ringwood, Passaic County
PROJECT NO: P1314-00
DATE: August 29, 2023

XI. SOW SIGNATURE APPROVAL SHEET

This Scope of Work shall not be considered a valid document unless all signatures appear in each designated area below.

The Client Agency approval signature on this page indicates that they have reviewed the design criteria and construction schedule described in this project Scope of Work (including the subsequent contract deliverables and exhibits) and verifies that the work will not conflict with the existing or future construction activities of other projects at the site.

SOW PREPARED BY: Alison Gottlieb 8/29/2023
ALISON GOTTLIEB, PROJECT MANAGER DATE
DPMC PROJECT PLANNING & INITIATION

SOW APPROVED BY: James Wright 8/29/2023
JAMES WRIGHT, MANAGER DATE
DPMC PROJECT PLANNING & INITIATION

SOW APPROVED BY: W. White 8/31/23
WILLIAM C. WHITE, PROJECT MANAGER DATE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

SOW APPROVED BY: Michael Ryan 8/31/2023
MICHAEL RYAN, JR., PROJECT MANAGER DATE
DPMC PROJECT MANAGEMENT GROUP

SOW APPROVED BY: Richard S. Flodmand 9/5/2023
RICHARD FLODMAND, DEPUTY DIRECTOR DATE
DIV PROPERTY MGT & CONSTRUCTION

XII. CONTRACT DELIVERABLES

The following are checklists listing the Contract Deliverables that are required at the completion of each phase of this project. The Consultant shall refer to the DPMC publication entitled “Procedures for Architects and Engineers,” 3.0 Edition, dated September 2022 available at <https://www.nj.gov/treasury/dpmc/Assets/Files/ProceduresforArchitectsandEngineers.pdf> for a detailed description of the deliverables required for each submission item listed. References to the applicable paragraphs of the “Procedures for Architects and Engineers” are provided.

Note that the Deliverables Checklist may include submission items that are “S.O.W. Specific Requirements”. These requirements will be defined in the project specific scope of work and included on the deliverables checklist.

This project includes the following phases with the deliverables noted as “Required by S.O.W” on the Deliverables Checklist:

- **ADVISABILITY STUDY**
- **INVESTIGATION PHASE**
- **DESIGN DEVELOPMENT PHASE**
- **FINAL DESIGN PHASE**
- **PERMIT APPLICATION PHASE**
- **BIDDING AND CONTRACT AWARD**
- **CONSTRUCTION PHASE**
- **PROJECT CLOSE-OUT PHASE**

XIII. EXHIBITS

- A. **SAMPLE PROJECT SCHEDULE FORMAT**
- B. **PROJECT SITE LOCATION MAP**
- C. **PROJECT SITE**
- D. **DRAWING**
- E. **PHOTOS**
- F. **DOCUMENTS**
- G. **REGIONS & CONNECTIONS**

END OF SCOPE OF WORK

Deliverables Checklist Permit Application Phase

A/E Name: _____

A/E Manual Reference	Submission Item	Required by S.O.W.		Previously Submitted		Enclosed	
		Yes	No	Yes	No	Yes	No
16.1.	N.J. UCC Permit Application						
16.4.	Drawings, Signed and Sealed (6 Sets)						
16.5.	Specifications, Signed and Sealed (6 Sets)						
16.6.	Current Working Estimate/Cost Analysis						
16.7.	Project Schedule						
16.8.	Plan Review/Scope of Work Compliance Statement						
16.9.	Permit Application Phase Deliverables Checklist						
S.O.W. Reference	S.O.W. Specific Requirements						

This checklist shall be completed by the Design Consultant and included as the cover sheet of this submission to document to the DPMC Project Manager the status of all the deliverables required by the project specific Scope of Work.

_____ Consultant Signature

_____ Date

Deliverables Checklist Bidding and Contract Award Phase

A/E Name: _____

A/E Manual Reference	Submission Item	Required by S.O.W.		Previously Submitted		Enclosed	
		Yes	No	Yes	No	Yes	No
17.1.1.	Notice of Advertising						
17.1.2.	Bid Proposal Form						
17.1.3.	Bid Clearance Form						
17.1.4.	Drawings (6 Sets)						
17.1.5.	Specifications (6 Sets)						
17.1.6.	Construction Schedule						
17.3	Pre-Bid Conference/Mandatory Site Visit						
17.3.1.	Meeting Minutes						
17.4	Bulletins						
17.5	Post Bid Meeting						
17.6.	Contract Award "Letter of Recommendation"						
17.8.	Bid Protests - Hearings						
17.9.	Bidding and Contract Award Phase Deliverables Checklist						
S.O.W. Reference	S.O.W. Specific Requirements						

This checklist shall be completed by the Design Consultant and included as the cover sheet of this submission to document to the DPMC the status of all the deliverables required by the project specific Scope of Work.

Consultant Signature

Date

**Deliverables Checklist
Construction Phase**

A/E Name: _____

A/E Manual Reference	Submission Item	Required by S.O.W.		Previously Submitted		Enclosed	
		Yes	No	Yes	No	Yes	No
18.2.	Pre-Construction Meeting						
18.3.	Submittal Log						
18.4.	Construction Schedule						
18.5.	Project Progress Meetings						
18.7.	Contractor's Invoicing and Payment Process						
18.8.	Contractor Submittals						
18.10.	Testing						
18.11.	Shop Drawings (6 Sets)						
18.12.	As-Built & Record Set Drawings (6 Sets)						
18.13.	Change Orders						
18.14.	Construction Photographs						
18.15.	Field Observations						
18.17.	Construction Phase Deliverables Checklist						
S.O.W. Reference	S.O.W. Specific Requirements						

This checklist shall be completed by the Design Consultant and included as the cover sheet of this submission to document to the DPMC the status of all the deliverables required by the project specific Scope of Work.

_____ Consultant Signature

_____ Date

**Deliverables Checklist
Project Close-Out Phase**

A/E Name: _____

A/E Manual Reference	Submission Item	Required by S.O.W.		Previously Submitted		Enclosed	
		Yes	No	Yes	No	Yes	No
19.3.	Development of Punch List and Inspection Reports						
19.5.	Determination of Substantial Completion						
19.6.	Correction/Completion of Punch List						
19.7.	Submission of Close-Out Documentation						
19.7.1.	As-Built and Record Sets of Drawing (6 Sets)						
19.8.	Final Payment						
19.9.1.	Contractors Final Payment						
19.9.2.	A/E's Final Payment						
19.10.	Project Close-Out Phase Deliverables Checklist						
S.O.W. Reference	S.O.W. Specific Requirements						

This checklist shall be completed by the Design Consultant and included as the cover sheet of this submission to document to the DPMC the status of all the deliverables required by the project specific Scope of Work.

Consultant Signature

Date

February 7, 1997
Rev.: January 29, 2002

Responsible Group Code Table

The codes below are used in the schedule field "GRP" that identifies the group responsible for the activity. The table consists of groups in the Division of Property Management & Construction (DPMC), as well as groups outside of the DPMC that have responsibility for specific activities on a project that could delay the project if not completed in the time specified. For reporting purposes, the groups within the DPMC have been defined to the supervisory level of management (i.e., third level of management, the level below the Associate Director) to identify the "functional group" responsible for the activity.

<u>CODE</u>	<u>DESCRIPTION</u>	<u>REPORTS TO ASSOCIATE DIRECTOR OF:</u>
CM	Contract Management Group	Contract Management
CA	Client Agency	N/A
CSP	Consultant Selection and Prequalification Group	Technical Services
A/E	Architect/Engineer	N/A
PR	Plan Review Group	Technical Services
CP	Construction Procurement	Planning & Administration
CON	Construction Contractor	N/A
FM	Financial Management Group	Planning & Administration
OEU	Office of Energy and Utility Management	N/A
PD	Project Development Group	Planning & Administration

EXHIBIT 'A'

Activity ID	Description	Respon	Weeks
<PROJ>			
Design			
CV3001	Schedule/Conduct Pre-design/Project Kick-Off Mtg.	CM	
CV3020	Prepare Program Phase Submittal	AE	
CV3021	Distribute Program Submittal for Review	CM	
CV3027	Prepare & Submit Project Cost Analysis (DPMC-38)	CM	
CV3022	Review & Approve Program Submittal	CA	
CV3023	Review & Approve Program Submittal	PR	
CV3024	Review & Approve Program Submittal	CM	
CV3025	Consolidate & Return Program Submittal Comments	CM	
CV3030	Prepare Schematic Phase Submittal	AE	
CV3031	Distribute Schematic Submittal for Review	CM	
CV3037	Prepare & Submit Project Cost Analysis (DPMC-38)	CM	
CV3032	Review & Approve Schematic Submittal	CA	
CV3033	Review & Approve Schematic Submittal	PR	
CV3034	Review & Approve Schematic Submittal	CM	
CV3035	Consolidate & Return Schematic Submittal Comment	CM	
CV3040	Prepare Design Development Phase Submittal	AE	
CV3041	Distribute D. D. Submittal for Review	CM	
CV3047	Prepare & Submit Project Cost Analysis (DPMC-38)	CM	
CV3042	Review & Approve Design Development Submittal	CA	
CV3043	Review & Approve Design Development Submittal	PR	
CV3044	Review & Approve Design Development Submittal	CM	
CV3045	Consolidate & Return D.D. Submittal Comments	CM	
CV3050	Prepare Final Design Phase Submittal	AE	
CV2001	Distribute Final Design Submittal for Review	CM	
CV3052	Review & Approve Final Design Submittal	CA	
CV3053	Review & Approve Final Design Submittal	PR	
CV3054	Review Final Design Submittal for Constructability	OCS	

Sheet 1 of 3

Bureau of Design & Construction Services

EXHIBIT 'A'

NOTE:
Refer to section "IV Project Schedule" of the
Scope of Work for contract phase durations.

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Activity ID	Description	Respn	Weeks
CV6014	Roughing Work Complete	CON	
CV6021	Interior Finishes Start	CON	
CV6022	Install Interior Finishes	CON	
CV6030	Contract Work to Substantial Completion	CON	
CV6031	Substantial Completion Declared	CM	
CV6075	Complete Deferred Punch List/Seasonal Activities	CON	
CV6079	Project Construction Complete	CM	
CV6080	Close Out Construction Contracts	CM	
CV6089	Construction Contracts Complete	CM	
CV6090	Close Out A/E Contract	CM	
CV6092	Project Completion Declared	CM	

DBCA - TEST

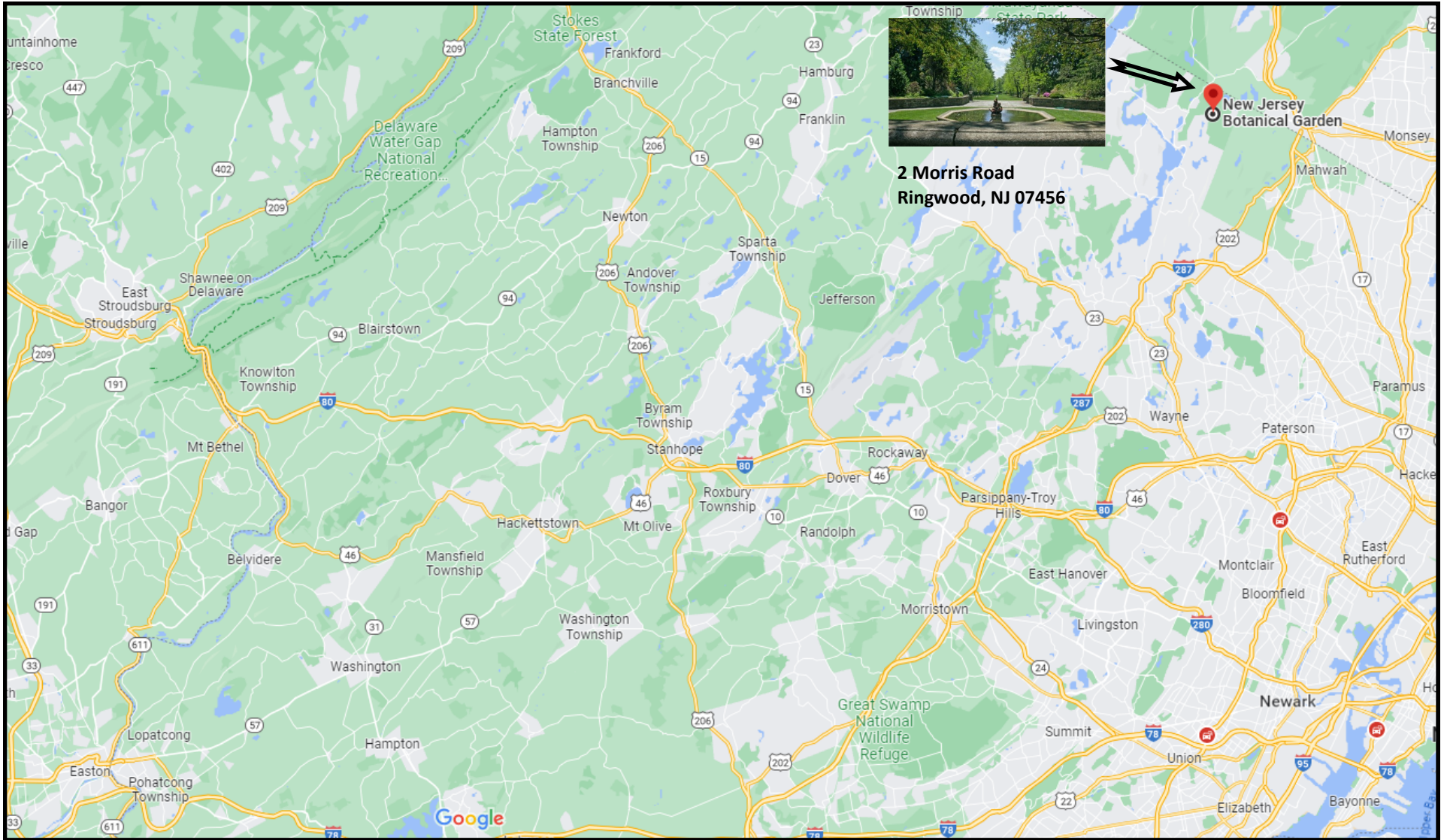
Sheet 3 of 3

Bureau of Design & Construction Services

EXHIBIT 'A'

NOTE:
Refer to section "IV Project Schedule" of the
Scope of Work for contract phase durations.

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Project Site Location Map
New Jersey Botanical Garden - Ringwood State Park
EXHIBIT 'B'



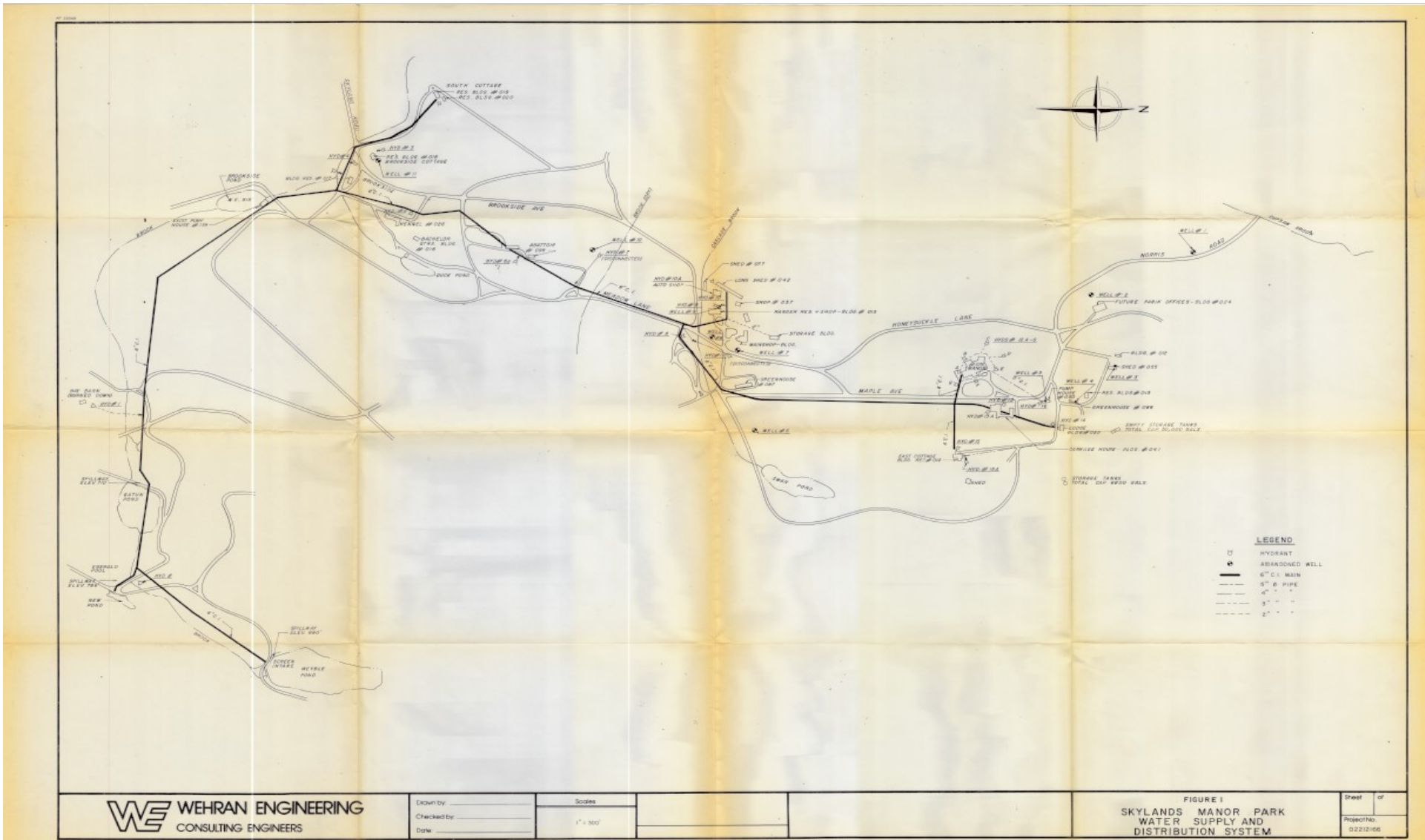
Project Site—Entrance view

New Jersey Botanical Garden - Ringwood State Park

EXHIBIT 'C'



Project Site
New Jersey Botanical Garden - Ringwood State Park
EXHIBIT 'C'



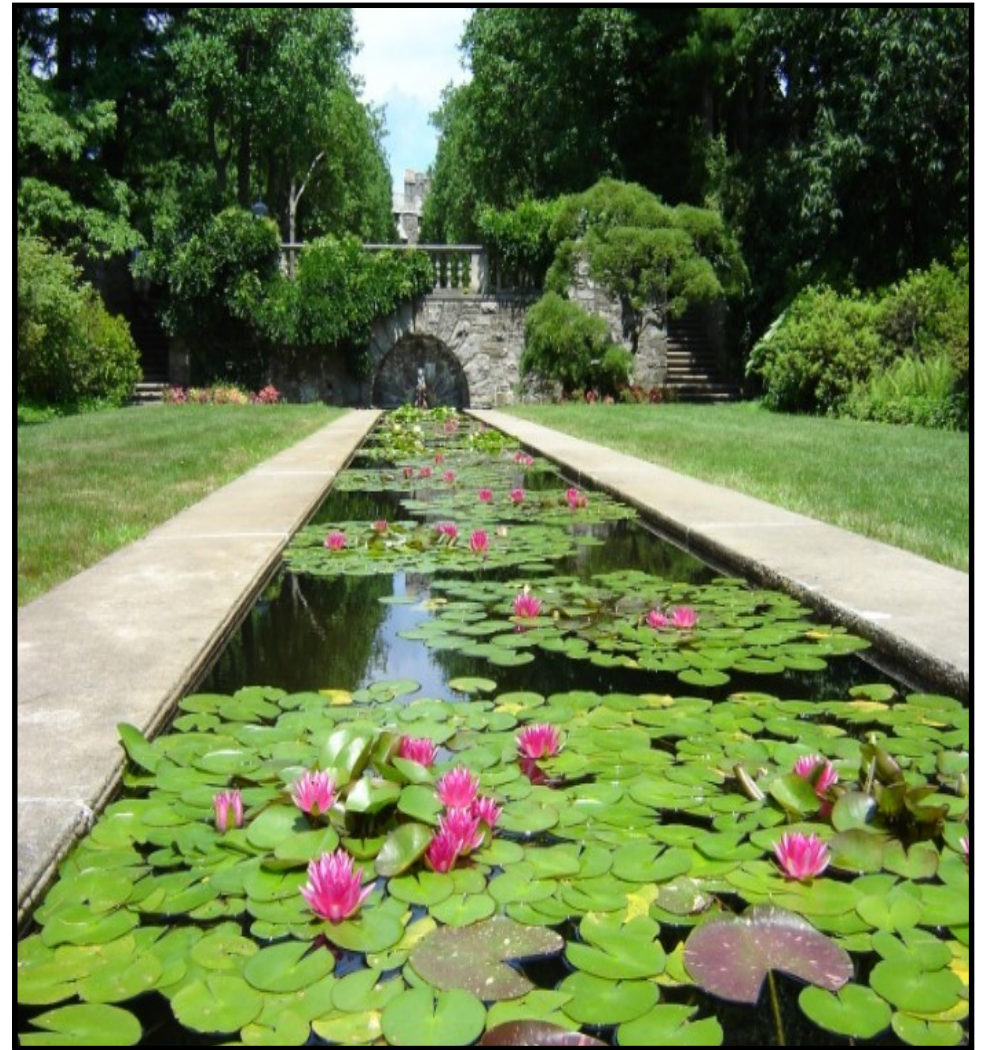
Site Drawing
 New Jersey State Botanical Garden
EXHIBIT 'D'



Photos

New Jersey State Botanical Garden—Skyland Manor

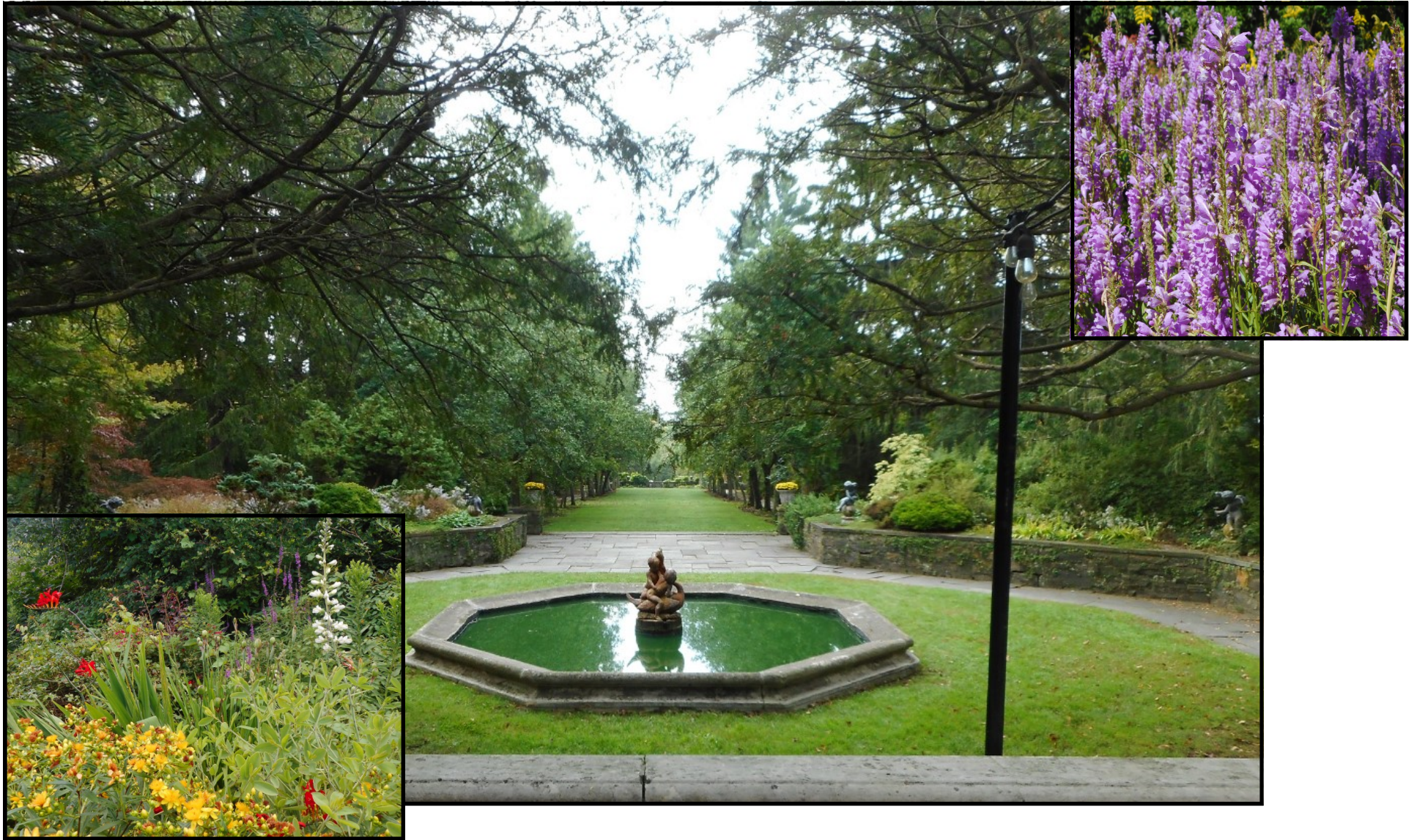
EXHIBIT 'E'



Photos

New Jersey State Botanical Garden - Azalea Garden

EXHIBIT 'E'



Photos

New Jersey State Botanical Garden - Octagonal Garden

EXHIBIT 'E'



Photos
New Jersey State Botanical Garden - Annual Garden
EXHIBIT 'E'



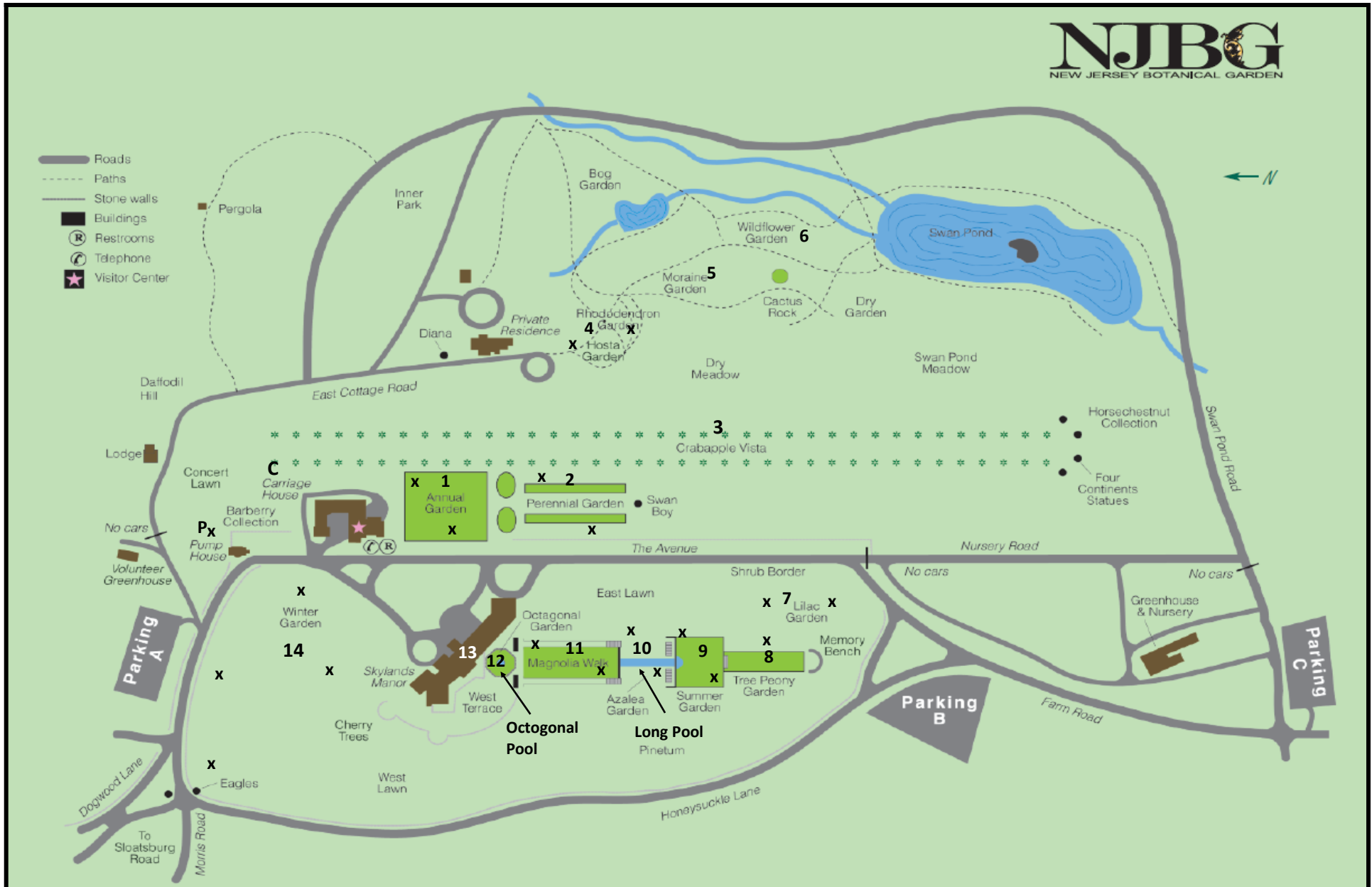
Photos

New Jersey State Botanical Garden - Pump & Utilities

EXHIBIT 'E'



Irrigation System Study
New Jersey State Botanical Garden
EXHIBIT 'F'



AUTOMATIC IRRIGATION AREAS (Seasonal)

HOSE BIB CONNECTIONS YEAR-ROUND (Below Frost Line)

OCTOGONAL POOL & LONG POOL CONNECTIONS

C Carriage House

1 Annual Garden/ Butterfly/ Humming Beds

2 Perennial Garden/ Oval Garden

4 Hosta/ Rhododendron Garden

5 Moraine Garden

TOTAL AREAS —(11)

8 Tree Peony Garden

9 Summer Garden

10 Azalea Garden

11 Magnolia Walk

12 Octagonal Garden

P Pump House (1)

1 Annual Garden/ Butterfly/ Humming Beds (2)

2 Perennial Garden/ Oval Garden (2)

4 Hosta/ Rhododendron Garden (2)

7 Lilac Garden (2)

TOTAL HOSE BIBS—(20)

8 Tree Peony Garden (1)

9 Summer Garden (2)

10 Azalea Garden (2)

11 Magnolia Walk (2)

14 Winter Garden (4)

12 Octagonal Garden

10 Long Pool

* Connect Long Pool to System to Fill

* Connect Octagonal Pool to System to Fill

EXHIBIT

'G'



New Jersey State Botanical Gardens at Skylands

Ringwood State Park

SHEET #1 **AUTOMATIC IRRIGATION AREAS (SEASONAL)**



LEGEND

- Parking Lots
- Restrooms
- 1** **CARRIAGE HOUSE**
- 2 Pump House
- 3 Winter Garden
- 4 Skylands Manor
- 5 West Lawn
- 6 West Terrace
- 7** **OCTAGONAL GARDEN**
- 8** **ANNUAL GARDEN + BUTTERFLY/HUMMING BEDS**
- 9** **MAGNOLIA WALK**
- 10 East Lawn
- 11** **PERENNIAL GARDEN + DYAL GARDEN**
- 12** **AZALEA GARDEN**
- 13 Pinetum
- 14** **SUMMER GARDEN**
- 15** **TREE PEONY GARDEN**
- 16 Maple Ave. Shrub Border
- 17 Lilac Garden
- 18 Greenhouse & Nursery
- 19 Horsechestnut Collection
- 20 Four Continents
- 21 Crabapple Vista
- 22 Swan Pond Meadow
- 23 Cactus Rock
- 24 Wildflower Garden
- 25 Dry Meadow
- 26** **MADRAS GARDEN**
- 27** **HOSTA/RHOD. GARDEN**
- 28 Bog Garden
- 29 Private Residence
- 30 Inner Park
- 31 Barberry Collection
- 32 Lodge
- Foot Path
- Stone Wall

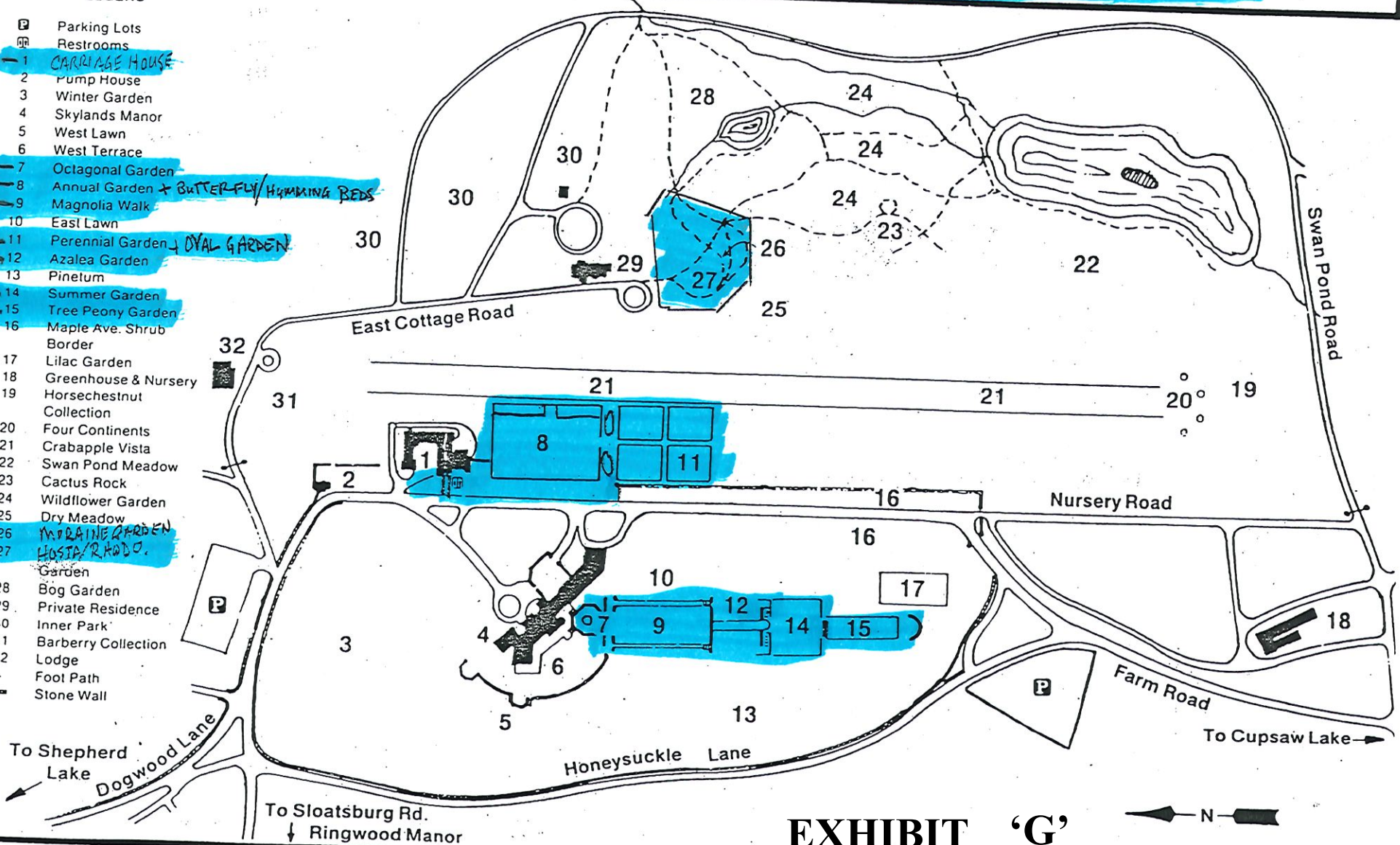


EXHIBIT 'G'



New Jersey State Botanical Gardens at Skylands

Ringwood State Park

SHEET #2

HOSE BIB CONNECTIONS (YEAR ROUND - BELOW FROST LINE)



LEGEND

- Parking Lots
- Restrooms
- Visitors Center
- Pump House
- Winter Garden
- Skylands Manor
- West Lawn
- West Terrace
- Octagonal Garden
- Annual Garden
- Magnolia Walk
- East Lawn
- Perennial Garden
- Azalea Garden
- Pinetum
- Summer Garden
- Tree Peony Garden
- Maple Ave. Shrub Border
- Lilac Garden
- Greenhouse & Nursery
- Horsechestnut Collection
- Four Continents
- Crabapple Vista
- Swan Pond Meadow
- Cactus Rock
- Wildflower Garden
- Dry Meadow
- Heather Garden
- Rhododendron Display Garden
- Bog Garden
- Private Residence
- Inner Park
- Barberry Collection
- Lodge
- Foot Path
- Stone Wall

HOSE BIBS:
29 total

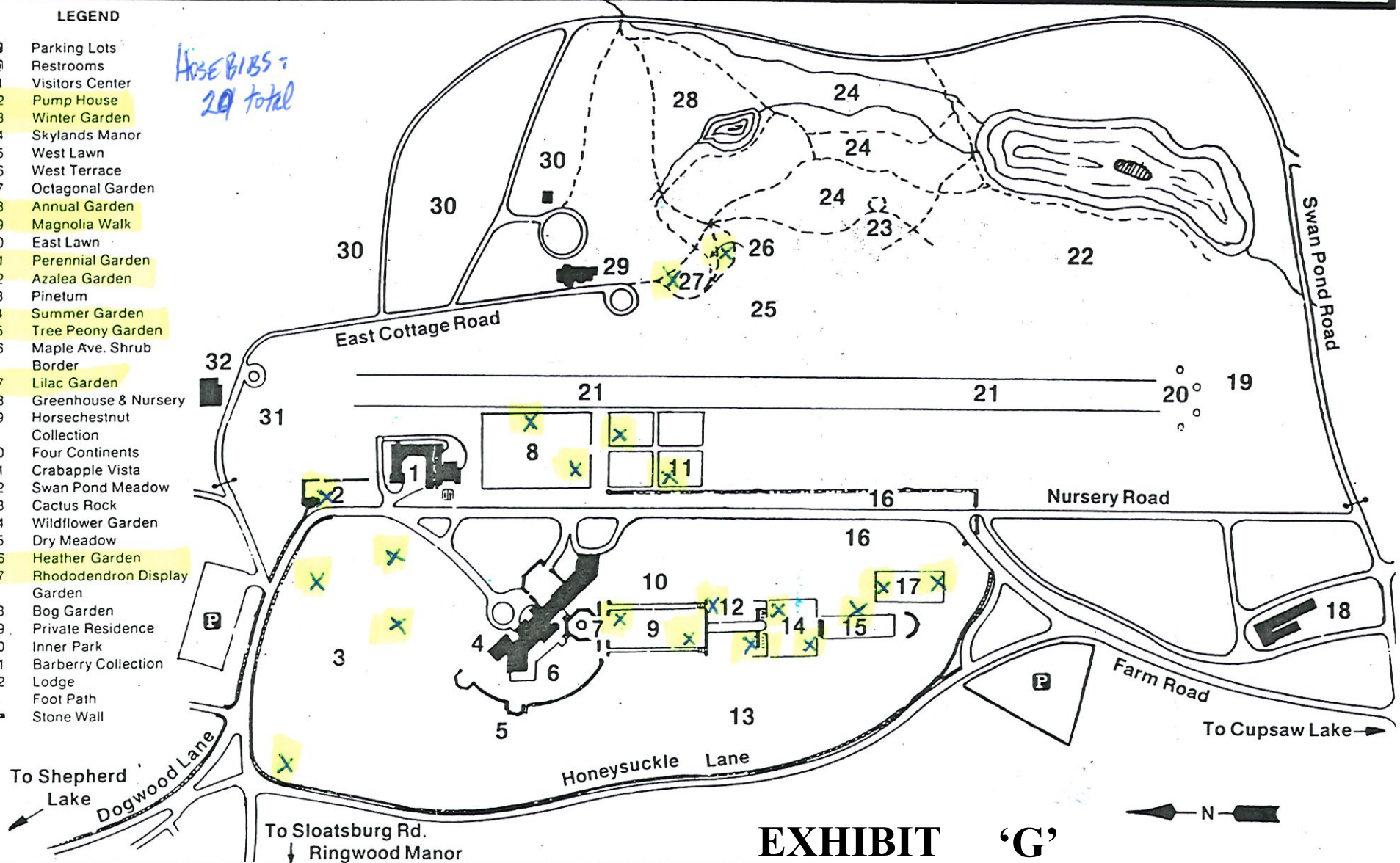


EXHIBIT 'G'



New Jersey State Botanical Gardens at Skylands

Ringwood State Park

SHEET #3 **OCTAGONAL POOL + LONG POOL CONNECTIONS**



LEGEND

- Parking Lots
- Restrooms
- 1 Visitors Center
- 2 Pump House
- 3 Winter Garden
- 4 Skylands Manor
- 5 West Lawn
- 6 West Terrace
- 7 Octagonal Garden**
- 8 Annual Garden
- 9 Magnolia Walk
- 10 East Lawn
- 11 Perennial Garden
- 12 Azalea Garden**
- 13 Pinetum
- 14 Summer Garden
- 15 Tree Peony Garden
- 16 Maple Ave. Shrub Border
- 17 Lilac Garden
- 18 Greenhouse & Nursery
- 19 Horsechestnut Collection
- 20 Four Continents
- 21 Crabapple Vista
- 22 Swan Pond Meadow
- 23 Cactus Rock
- 24 Wildflower Garden
- 25 Dry Meadow
- 26 Heather Garden
- 27 Rhododendron Display Garden
- 28 Bog Garden
- 29 Private Residence
- 30 Inner Park
- 31 Barberry Collection
- 32 Lodge
- - Foot Path
- Stone Wall

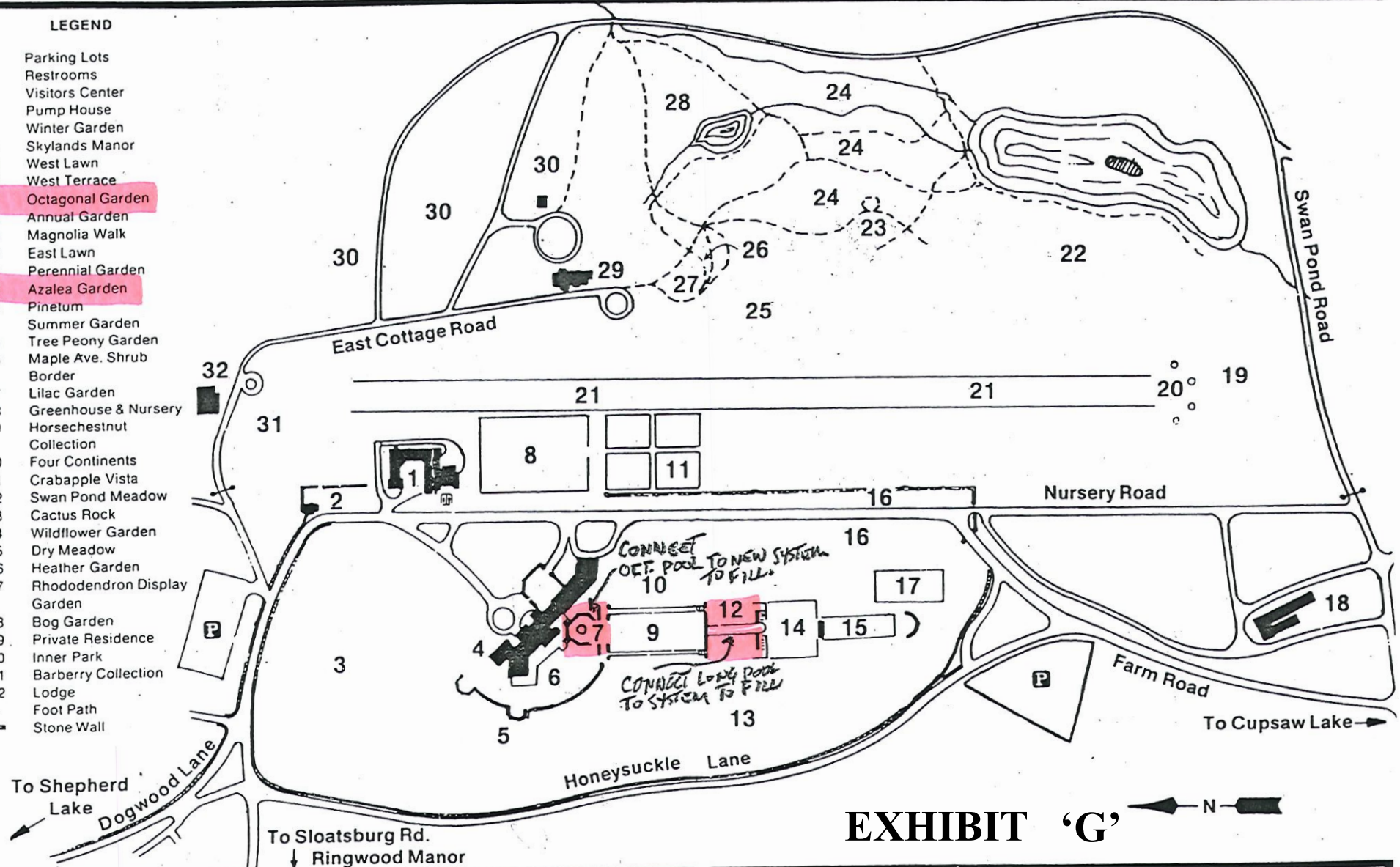


EXHIBIT 'G'