Glensheen's Landscape: The Congdon/Leavitt Story

There were four things Chester Congdon wanted in the landscape design for his estate, Glensheen. First was a water supply for the grounds. Second was private access to Lake Superior. Third was to be non-intrusive on the natural environment with his building scheme. And, finally, he wanted to experiment with plant materials to determine those that could thrive in Duluth's type of climate. Charles W. Leavitt, Jr., landscape engineer, gave Congdon what he wanted.

A gravity-flow irrigation system was used previously by Congdon in Yakima, Washington. He established a company there in the early 1890's to carry water via a canal approximately 15 miles from the Natches River to his orchards in the Yakima Valley. Nearly 15 years later, a similar system was built in Tischer Creek (which runs through the property) to supply water for the grounds at Glensheen. This allowed Congdon to create and maintain the landscape design that he envisioned.

While most other wealthy individuals were constructing homes on Duluth's east hillside, Chester and Clara Congdon built on the Lake Superior shore. This was intentional. The earliest landscape designs (1904) show a boat house at the mouth of Tischer Creek. This plan was eventually abandoned in favor of positioning the boat
house right on the shore of Lake Superior. The HESPERIA, a 58 foot
yacht, was built in 1911 for Chester Congdon. Today this remains
the only boat house in existence on Minnesota's Lake Superior
shore.

Leavitt's plan caused minimal disturbance to the natural
environment. Roads, terraces, buildings and other land
modifications were executed with little noticeable impact on the
wooded areas. Leavitt controlled the transition of a rustic,
wooded area to an English country estate nestled in formal
landscaped surroundings. The end result was an estate that looked
like it had been there for many years rather than one that imposed
on its natural surroundings.

It was Congdon's interest in fruit farming that made him take
an avid interest in how Glensheen's landscape evolved. The orchard
area of the estate tested a variety of fruit bearing materials to
determine hardiness in Duluth's climate. Non-native trees and
shrubs were also planted in various areas around the mansion.
Congdon would personally examine these materials and write comments
in several notebooks. There are notations in his diaries that tell
specific information about how plant materials performed, whether
they were hardy, or if a different variety should be tried.

This twenty-minute paper will discuss in greater detail
Charles W. Leavitt's master plan to create a formal estate in a
natural environment.
Gardens have a history all their own, and the gardens of Glensheen are no exception. As one wanders through the many paths and walkways found on this picturesque site, it can be the start of an adventure through time and space— to a time that will never come again.

Glensheen was the name given to the estate owned by Chester and Clara Congdon. Located on the shore of Lake Superior, it took three years and nine months to transform a heavily wooded section of land into an English country estate. The time was 1905 to 1908. The architect selected to create the needed buildings was Clarence H. Johnston. A revival of the Jacobean style of architecture was chosen. Glensheen was designed to be a self-sufficient estate. Accordingly, grounds were set aside for pastures for the horses and dairy cows. (This area was located where the present day parking lot is found.) The layout of the grounds has a decided east/west flavor with the service/working areas being located on the eastern sides of the property and house. As was common to this style of architecture, the manor house was situated in the center of the estate.

Styles of architecture can greatly affect garden design. A characteristic of the Jacobean style of architecture, as it affects the layout of gardens, is the use of formal gardens rather than an enclosed courtyard with interior gardens. The gardens at Glensheen follow a strong architectural bent, with their geometrically styled flower beds and brick walkways. The gardens themselves are based on English landscape gardening concepts of the 18th and 19th centuries. At first glance, the English garden appears to be informal with a looseness of planting and an abundance of flowers. But, in reality, the gardens are structured around a tightly woven framework of walls, hedges, beds, borders, and paved walkways. At Glensheen two main axes (which run north and south) are used to provide needed symmetry and balance, two important criteria of the Jacobean style. The brick walkways provide the garden's "bones" and serve to divide the space into separate compartments. Adjacent to the house is a terrace which provides a clear view of the sunken gardens below. Long, raised walkways are used to define the sides of the designated garden areas.
Charles Leavitt was the landscape engineer chosen by Chester Congdon to design the estate grounds. He was an interesting choice for the project. Leavitt's background was as a civil as well as landscape engineer. This engineering experience in New Jersey and New York where he had to design such diverse environments as roadways, race courses, and municipal parks, provided him with the training and expertise needed to handle the task now set before him.

Charles Leavitt had an ambitious plan for Glensheen, but the plan was not a static plan. For example, Leavitt changed his planting index (the listing of plants to be used) three times. Modifications were recorded in 1906, 1907, and 1909. Some of these alterations were probably made because selected trees such as the red oak and the black walnut did not adapt well to the Minnesota climate. It is mindboggling to read some of the original correspondence and see the tremendous number of plants and trees which were ordered to stock the four greenhouses built on the site and to create and maintain a planting plan on the site. In 1906, Charles Leavitt made a list for Chester Congdon of the plants, trees, vines, grasses, shrubs, ferns, and perennials he wished to use. There were 145 items on the list.

Charcoal renderings of the proposed site give us another clue as to how the original site plan was altered. These drawings show two identical fountains being placed in either side of the ellipse configuration that the formal gardens represented on paper. As one can see now by looking at the gardens, there is only one fountain, sculptured by George Thrana, located in the center of the sunken pool.

Constructing an estate as large as Glensheen has to have had an impact on the site. The entire estate was built at the same time. In order to bring materials to the site, a roadway had to be built. This affected the lay of the land. The curving driveway found on the London Road side of the house was raised and constructed on fill. This building method was efficient because it did not require carving
the road out of the slope. As a result, the existing trees found along the edges of the new road were able to be saved. Trenches for drain pipes were cut in the area where the house and formal gardens were to be situated. Drainage from the eaves and ground runoff was directed south and east toward Bent Brook. All utilities such as water, gas, electric lines were located underground with accessibility for repair through several manholes which are still visible on the property. The lining of Bent Brook with stones that were cemented into place is evidence that the Congdons and Leavitt were concerned that their encroachment into the natural environment be camouflaged and minimalized.

In May, 1906, grounds crews began concreting the sides of the fountain. The area for the fountain and gardens behind the house having been staked out the previous year. Nothing was wasted. Soil from the excavation of the house was deposited and used for the gardens. Because of the terrain, bridges were needed to allow easy access to all parts of the estate. Stone and wooden bridges were constructed. Recreational areas such as the bowling green, clay tennis courts, and a pathway system were mapped out in the overall scheme. Loam and black soil were brought to the site to improve the growing capacity of the soil. Our records show that in 1905, 500 loads of black soil was received.

Water was never a real problem. Glensheen is fortunate to have an abundance of natural water sources. With Bent Brook to the east of the main house, Tischer Creek on the west, and Lake Superior to the north, one would think that supplying all the water needed for irrigation would be a cinch. It was not a problem because a reservoir system was developed by Charles Leavitt to meet the demand. Here was another area where Charles Leavitt's engineering skills came into play. The reservoir was constructed across London Road, just east of Greysolon Place, along the west side of Tischer Creek. The reservoir relied upon gravity to direct the water into an intake and through an underground pipe to a filtering bed. The water was then filtered through several layers of natural materials from a fine sand to a layer of coarse gravel. Through an intricate system of underground pipes to which a ten inch water main was connected, the water was channeled to Glensheen. This system was so well
designed, that it is still in use today. The water pressure is so strong, that if all the valves to the fountain were opened, it is estimated that a plume of water could shoot 75 feet into the air.

Two characteristics that Charles Leavitt and Chester Congdon shared were their thoroughness and attention to detail. This becomes clear when one reads the orders Leavitt gave to the nurseries from which he ordered stock.

Make out bill in duplicate to Mr. Congdon and send to me. Unless invoice is sent in duplicate to this office when shipment is made, I will not check same or receive stock.

There is to be no substitution without orders from this office. If you are unable to supply any of this stock, please let me know at once....

In order to supply Glensheen with the tremendous number of bedding plants which were needed each year to maintain the gardens and grounds, four greenhouses were constructed on the site. They were connected to the gardener’s cottage and were named after the various plants grown in each. There was a palm house where exotic plants such as orchids and bananas were grown. This was the largest of the four greenhouses. Next, was the rose house which supplied Glensheen with roses year round and Easter lilies and poinsettias in season. The carnation house provided carnations for floral arrangements and other uses. The last greenhouse was the general plant house. Here seedlings and bedding plants could be started and nurtured. Tomatoes, petunias, zinnias, verbena, pansies, violas, cosmos, marigolds, and begonias were some of the plants grown in this building. Some 6,000 seedlings were grown each year in this manner. The greenhouses were heated by a huge coal furnace located in the basement of the gardener’s cottage. Until an automatic stoker was installed in 1927, the gardener had to get up several times at night to feed the furnace. At $12.00 a ton, coal was relatively inexpensive. 65 tons a year was used to heat the greenhouses. The greenhouses were on the site until 1971 when they were dismantled because they became too expensive to maintain.

When one talks about the gardens and grounds at Glensheen, the name of another gardening family comes to mind. This is the name of Wyness. George Wyness came to Glensheen with his family in 1921.
Prior to the beginning work for Clara Congdon, George worked for such notables as Lord Keith on the Usan Estate in Montrose, Scotland and the estate of Henry Frick, Chairman of the Board of Managers for the Carnegie Steel and Coke Business which later merged with the United States Steel Corporation. George Wyness maintained the flower gardens, greenhouses, a large vegetable garden and an apple orchard (The apple orchard was located above London Road on other land owned by the Congdons.)

One change George Wyness made to the original layout of the estate occurred after 1942. At this time, the view of Lake Superior from the house, that is so popular with visitors to Glensheen, was opened up. Prior to that time, the view had been obstructed by trees.

In 1945, another Wyness took over the position as head gardener for Glensheen. This was the son of George Wyness. His name was Robert Wyness. Robert Wyness' life at Glensheen is told in the booklet, "Their Roots Run Deep".

Glensheen is interesting because it goes beyond having just formal gardens. It also incorporates the use of a naturalized garden scheme for the rest of the site. Following the lead of such prominent 19th century American landscape architects as Frederick Law Olmsted, the concept of utilizing features found in the natural environment to enhance the aesthetics of the site fit in well with the philosophies of Chester Congdon toward land management.

Reverence for nature has always been a fundamental United States philosophy. Glensheen was constructed at a time President Theodore Roosevelt was establishing the first National Parks in the United States. Chester Congdon had a similar appreciation of nature. Proof of this shows in the natural system of pathways he had developed around the property for use by family members. These trails used such natural features such as stepping stones as a means of crossing Tischer Creek. At other impassable portions, several wooden bridges were built. Remnants of this trail system can still be seen. Mr. Congdon also donated land to the city of Duluth. This land, located
along the north shore of Lake Superior from Lester River almost to Two Harbors, was donated with the stipulation that the land never be developed commercially, making it possible for all citizens to enjoy the scenic beauty of the land.

Today, Glensheen is owned by the University of Minnesota. The property was given to the University in 1968 by members of the Congdon family. In 1979, Glensheen was opened to the public.

Glensheen, as a site, will never remain static. Nature alone will see to that. The philosophy that we, at the University, follow is to preserve and enhance what remains, while maintaining the grounds. The long range goal is to restore the property to where it was in the early years when Chester and Clara Congdon were in residence. It is hoped, that in this manner, everyone will have the opportunity of experiencing a lifestyle that is past.