

part 2

## Land Acquisition

From a **small** forty acre initial area, the village acquired or annexed land until, at present, it includes approximately 350 acres. 'During this **time** the population has grown from a summer population of 270 people to a year round population of **610 residents**.

The two major land acquisitions were by **annexation** of the **Wardenclyffe** Estates area east of **Woodville** Road, and an area known as the Slopes, **76** acres south of the original village. (See Fig. 18.) By **annexation**, the **Shoreham** Estates landowners avoided paying a costly Brookhaven Town Highway **Tax** for road repair, and the village added an area whose residents were already using village facilities without paying taxes for them. This **annexation** became official on **Aug. 29, 1951**.<sup>53</sup> Annexation of the Slopes took place in **1959** after the area had been sold to a real estate developer who **planned** a housing subdivision on the **property**.<sup>53</sup> By annexation, the village could control its development according to the standards of the village zoning ordinance. Both of these **annexed** areas have been extensively developed with single family dwellings, under conditions of the 1951 zoning ordinance.

The first zoning ordinance, passed in 1927, set up three zoning use 'districts - private **residence**, general residence, including boarding **houses**, hotels, and private clubs, and a business district, **confined** to fourteen lots including the postoffice and general store.<sup>54</sup> This law was amended in 1951 to include a public utility district. The residence districts were changed to Districts A and B which were limited to single **family** dwellings, churches, libraries, or private clubs, with **minimum** lot requirements of one acre for District A and three-fourths acre for District B.<sup>55</sup> (See Fig. 18.)

The first interest in acquiring parkland for the village was expressed at a **meeting** on Feb. 28, 1926 concerning the possibility of buying a strip of land along the **village's** western boundary. Such land was purchased in **1934**<sup>56</sup> and in **1959**<sup>57</sup> and today extends the length of the village from

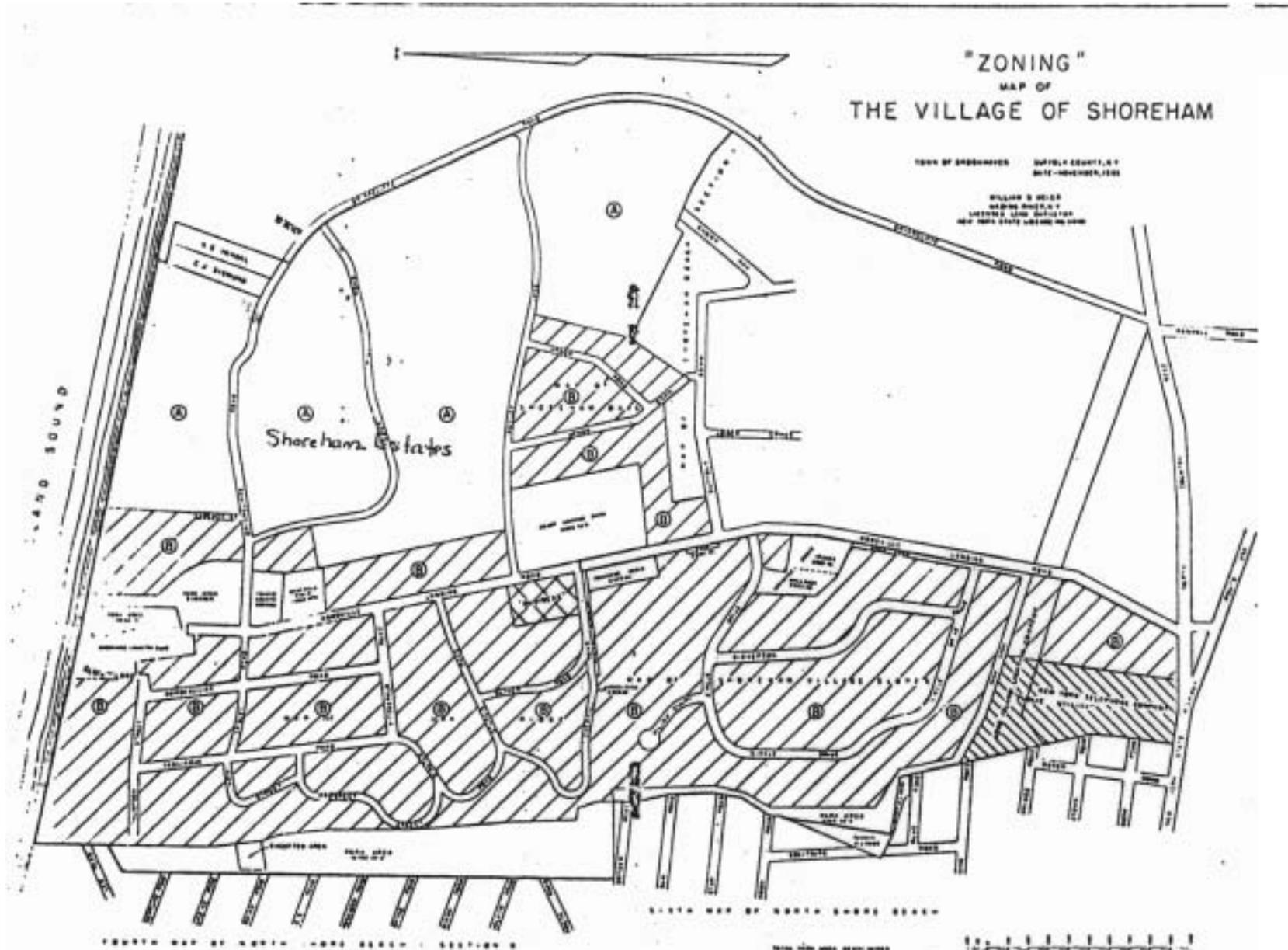


Fig. 18. Zoning Map of Shoreham Village. From the Village of Shoreham Village and Zoning Ordinances, 1961.

Long Island Sound to Route 25A. In 1954, the Major Hopkins **Park**, consisting of six acres in the middle of the village, was donated to **the village** by Mrs. Arthur Sackett to be preserved as a natural **memorial** to her brother, Major **Hopkins**.<sup>58</sup> Six acres of land at the intersection of **Briarcliffe** and Woodville Roads were purchased for parks, a ballfield, and **tennis** courts in 1954<sup>59</sup> and 1964.<sup>60</sup> By the end of 1965, the village had acquired a total of 26.6 acres of parkland, **much** of it forested with oak, hickory, and maple trees. Appendix 1 contains a list **of birds** observed in the forest by one birdwatcher.

#### **Shoreham Country Club**

A dominating force in terms of village recreation and social **life** was focused in the **Shoreham Country Club**. **The** country club was founded by a group of citizens who raised money by private subscription to build a **log** cabin on the beach at the north end of Woodville Road. The **log cabin** was used as a clubhouse for drinks and parties for its members, who included 99% of the village residents. In 1916, the **Shoreham Country Club** offered to the village "the use of its building for village purposes in exchange for tax exempt **status**."<sup>61</sup> Thereafter, the Log Cabin was used by the village **government** for its annual **meeting** and for a grievance **day** meeting while being used the remainder of the time for club activities. On **July, 1919**, the village trustees discussed the possibility **of** building a **pavilion** on the clubhouse property and one day later they voted to **accept** the gift of the present club property for the purposes of a village **hall** and park, subject to mortgages not to exceed \$6,000. <sup>62</sup> At the next meeting the village trustees voted to spend \$3,000 to erect a pavilion onto the clubhouse. <sup>63</sup> After spending village tax money to improve the **"village building"** the trustees voted to **lease** to the **Shoreham Country Club, Inc.** such portion of its buildings as shall not at all times be required by Village uses for... \$500 per year. <sup>64</sup> Village uses still consisted of only two meetings a year. It appears that the

village government was allowing the country club to function as the recreational unit of the government with the use of village funds, . . . There is some evidence that there was dissatisfaction with this arrangement by some residents, as a special election was scheduled in 1924 to see if residents wished to continue to rent the building.<sup>65</sup> A hundred residents attended a meeting preceding the vote and "it appeared there had been a misunderstanding among a few of the residents. . . as to the true situation in regard to these matters."<sup>66</sup> The rental arrangement persisted, however, and continues at present; In some years the Shoreham Country Club paid for additions or repairs to the village building,<sup>67</sup> in other years the village paid for such items.<sup>68</sup>

A lifeguard, youth counsellor, and dancing teacher were hired by the village each summer from 1944 to 1958. Their programs were administered by the country club. In 1959, employment of these individuals was assumed by the country club. This partial separation of village and club functions coincided with an increase in nonclub village residents and complaints about the use of village funds for club activities.<sup>69</sup> The village subsequently assumed responsibility for some recreational functions, including maintenance of 4 tennis courts and 2 platform tennis courts, and employment of a part-time summer lifeguard.<sup>70</sup> The Shoreham Country Club still provides most of the recreational programs, however.

The population of the village began to shift towards year-round residency after World War II when Brookhaven National Laboratory and the Grumman Aerospace Corporation opened. However, by 1964, the official census of the village was only 368 people, of which 224 were year-round residents.<sup>71</sup> Completion of the Long Island Expressway to Shirley in 1972 caused a large increase in the growth rate both in Shoreham Village and the surrounding areas. This growth is reflected in the number of schools built in the Shoreham school district between 1972 and the present: two elementary school additions, a middle school, and a high school.

#### Shoreham-Wading River School District

The history of the Shoreham-Wading River School District began in

1813 when the common school districts of New York State were laid out. District #6 included inhabitants of Miller Place and east to Wading River. District #1 included residents in Brookhaven Town "bounded on the East by the Wading River creek and on the West by the westerly line of James Woodhull's property."<sup>73</sup> In 1818 there were 26 children educated in District #1. In 1838 the easterly portion of District #6 was renumbered to #35,<sup>74</sup> and in 1842 a new school district, #10, was formed upon the petition of residents from Districts #35 and #1.<sup>75</sup> Shoreham Schl. Dist. # extended from Long Island Sound at the western boundary of Shoreham Village south four miles, and east to the Wading River creek.

The first school building was erected on Woodville Road in the early 1800's and was used until after the Civil War when it was sold as being inadequate for school use. The second and third schools, located on North Country Road, were destroyed by fire. A fourth, Spanish style building, which remains in use today as a district maintenance building, was constructed on North Country Road in 1927.<sup>76</sup> This was used for elementary students until 1951 when the Upham Mansion in Shoreham Village was purchased and used under the name of the Briarcliff School. (See Fig. 19.)



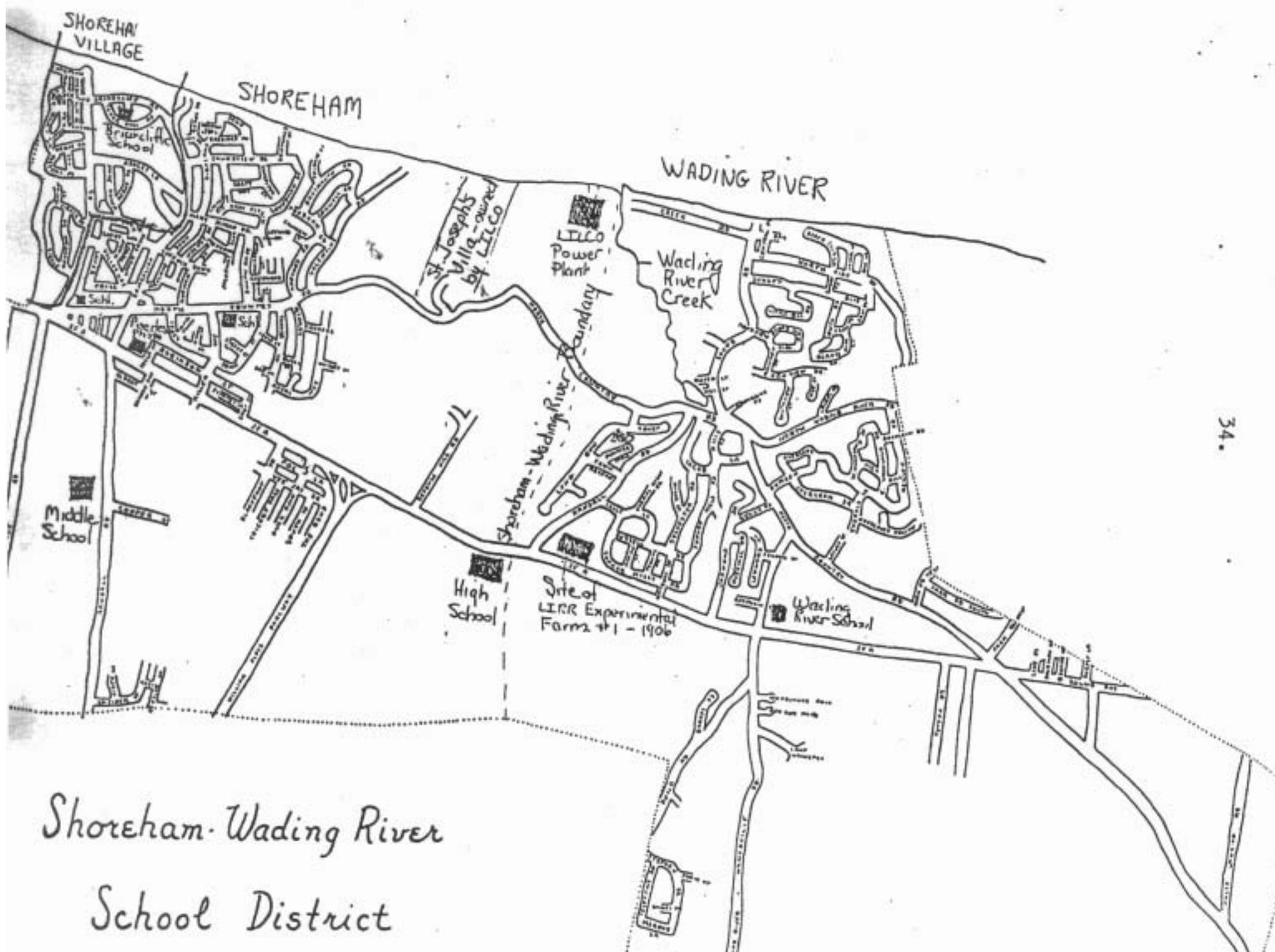
Fig. 19. Shoreham School, 1927-1951. Briarcliff Elementary School, 1951-1959. From Shoreham-Wading River Central School District #1 Photograph Collection.

The mansion had previously been converted in 1923 for use as a **private** boarding school.<sup>77</sup> Increasing student enrollment necessitated the **building** of an additional elementary school, the Miller **Ave.** School, in **1961**, to which extensions **were** added in 1966 and 1970.

Students at the secondary level were sent to the 'Port Jefferson **secondary** schools from the early **1900's** until a middle school, housing grades 6-8, was built in **Shoreham** in **1973**. Transportation to **Port** Jefferson was by railroad and frequently meant a twelve hour day, leaving home at 7 AM. and returning at 7 P.M. or later.<sup>78</sup> In 1927 the railroad **discontinued** regular service and substituted shuttle service, consisting of a one car combination engine-passenger car, which-made one **roundtrip** a day.<sup>79</sup> In **1938** service was discontinued completely and students were transported by bus. The Port Jefferson School District declined to accept **Shoreham** secondary school students after 1976, and in preparation for 'educating its own high school-students, **Shoreham** **voted** to merge with the Wading River School District. On July 1, 1973 the Shoreham-Wading River Central School District **#1** was formed.<sup>80</sup> (See Fig. 20.) Combining the two districts provided a large enough student population to make **their** education practical and a large enough tax base to enable construction of a secondary school building. On **Oct.24**, 1973, residents voted to erect a high school building on a forty acre tract of surplus **Brookhaven** National-Laboratory land acquired from the federal government. The 1,200 student capacity Shoreham-Wading River High School, located at the eastern edge of **Shoreham** on Route 25A, admitted its first students in Sept., 1975. (See **Fig.21.**)

#### **Shoreham Nuclear Power Plant**

A major contributor to the Shoreham-Wading River School District tax base, besides the 2,000 residences, is the Long Island Lighting Company **Shoreham** Nuclear Power Plant presently under construction. The power plant is located on an 880 acre site on Long Island Sound at the



Shoreham-Wading River  
School District



Fig. 21. Aerial View of Shoreham-Wading River High School. From the Shoreham Wading River Central School District #1 Photograph Collection.

west bank of the Wading River Creek. The reactor itself is being constructed on the northeast corner of the site about 1600 feet from the beach; station buildings will occupy another 80 acres nearby; 39 additional acres will be cleared for transmission Lines. LILCO will provide a 125 foot greenbelt on the boundaries of the site, and will provide permanent access to a beach and parking field at the Sound. (See Fig. 22) The power plant consists of an 820 megawatt boiling water reactor powered by nuclear fuel. The reactor will generate 2436 megawatts of heat, of which 1,587 megawatts are

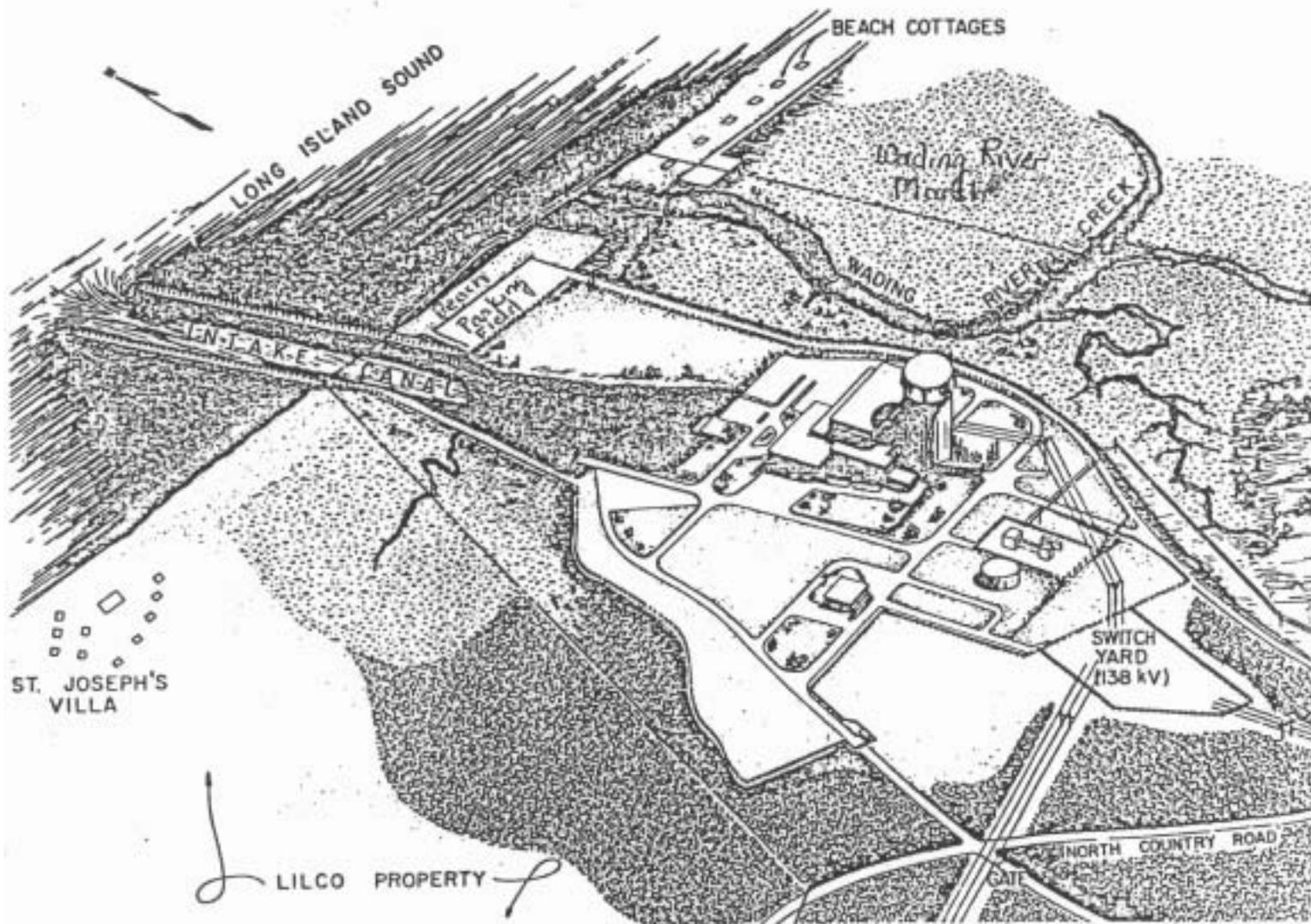


Fig.22. Drawing of the Long Island Lighting Company Shoreham Nuclear Power Station and its site as it will appear when completed. From LILCO Final Environmental Statement related to Operation of Shoreham Nuclear Power Station (1972).

waste heat. This will be cooled by seawater drawn into the plant from Long Island Sound and discharged back into the Sound heated approximately  $17^{\circ}$  above intake temperature. Cooling water will be supplied to the plant through a 1600 foot long intake canal, which includes two stone jetties extending 600 feet from shore into the Sound, and a 12 foot deep, 1,000 feet long canal that has been dug from the shore toward the plant. The outflow pipe consists of a discharge pipe extending 1600 feet into the Sound. The increase in surface water temperature from the thermal discharge will be  $1.5^{\circ}$  to  $4^{\circ}$  F. above ambient water temperature except within a radius of 300 feet from the discharge pipe.<sup>81</sup> The estimated release of liquid and gaseous radioactive wastes into the atmosphere of Long Island Sound will be very small, amounting to 15 curies per year. Four hundred truckloads of solid radioactive wastes containing a total of 550 curies of radiation will be shipped offsite annually,<sup>82</sup>

The effect of the plant upon the ecology of the area has been extensive. Six acres of ecologically productive marshland (about 14% of the Wading River Marsh) has already been destroyed by construction on the site. Blowing sand may fill and destroy additional acreage. Deciduous forests in the 119 acres used for station buildings and transmission line corridors have been destroyed. The stone jetties extending into the Sound have increased erosion of the barrier dunes north of the Wading River Marsh, eliminating some of the marsh's protection from the open Sound, and endangering homes situated on the dunes. Material will have to be periodically dredged from the area west of the jetties and used to fill areas east of the Wading River creek outlet.<sup>83</sup>

The effects of the discharge of heated water upon the marine organisms in the Sound is difficult to estimate. LIICO claims that the "effects should be minimal outside the immediate area of the diffuser discharge pipe,"<sup>84</sup> The thermal discharge will be  $17^{\circ}$  F above ambient water temperature at the area of discharge but will be quickly cooled to  $1.5^{\circ}$  to  $4^{\circ}$  F. above normal upon contact and mixing with the cooler water. Marine organisms are unable to tolerate wide temperature differences, however, and will be

affected. **The** number of species with northern affiliations (those whose geographical range extends further to the north of Cape Cod than to the south) will be reduced and possibly eliminated. These include the softshell clam (*Mya arenaria*), lobster (**Homarus americanus**), isopod (**Chiridotea tuftsi**), amphipod (**Ampelisca macrocephala**). Species with southern affiliations will be favored. These include the majority of species in the Sound oyster (*Crassostrea virginica*), hardshell clam (**Mercenaria mercenaria**), razor clam (**Solen viridis**), blue crab (**Callinectes sapidus**), and starfish (**Asterias forbesii**). Unfortunately shellfish predators are among those favored by the warmer waters. **Fish** will be less severely affected although the warmer water temperature near the discharge pipe may bring about a change in their winter migration habits. <sup>85</sup>

Chlorination of the water to kill slime on condenser tubing could be detrimental to aquatic life if durations exceed 400 minutes. This possibility seems likely during the summer months. Release of other chemicals, such as copper, ozone, sodium phosphate, and sulfuric acid, may also be detrimental. <sup>86</sup>

One of the most significant impacts will be due to impingement of fishes upon the intake screens of the water cooling system. The damage is expected to be greatest to the populations of winter flounder, but is also likely to affect all shoreline schooling species. <sup>87</sup> 1,310,000 fish were killed in a similar situation at the Indian Point Nuclear Power Plant in a period from Nov., 1969 to Jan., 1970. LILCO admits that there is significant potential for the same damage to occur at Shoreham. <sup>88</sup>

The effects of radiation exposure were estimated by LILCO assuming the most severe exposure pathway: example - that a duck in the area would be exposed to atmospheric radiation and would only consume marine plants growing directly next to the discharge area; the duck would concentrate radiation in its body and would then be consumed by man. The radiation levels thus acquired by man are estimated to be extremely low, well within Federal Gov't. limitations, and far below natural background radiation

found in a normal area. The estimate is that 5 millirems per year would be acquired from the power plant as compared to 100 millirems per year from normal background radiation. The possibility of an accident or sabotage to the plant resulting in significant radiation release is statistically estimated to be extremely remote.<sup>89</sup>

The power plant's effect on the environment has been and will continue to be a significant one. How damaging that effect is and whether it is worthwhile in terms of the increased electrical productivity gained can begin to be assessed upon operation of the plant in 1981. A final answer depends upon long term effects of such operation.

Shoreham, 100 years ago part of the Wading River community, evolved a separate identity due to the economic pressures of a burgeoning cordwood industry. Today, having gone through its history as a cordwood shipping center, a summer resort area, and presently a stable suburban community, finds economic pressures moving it towards a closer relationship once more with Wading River. Mutual interests in the education of their children have resulted in the formation of a centralized school district. A public library, housed in the high school, serves both communities. The LILCO Shoreham Nuclear Power Plant affects both communities, through its contributions to the school district tax base and its environmental effects on the Wading River Marsh, Shoreham forest areas, and Long Island Sound.