CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

LEBANON WAS NEVER MORE than a regional shipping point for less than a hundred square miles of sparsely-settled farmland. Just as a short-line railroad is just as wide as Conrail, if not as long, so Lebanon exhibits all the features of a port, if smaller than most.

On two occasions, entrepreneurs built factories in the project area that were intended to process raw materials at a point convenient for shipment of the finished goods to market. The ambitious ironworks, nailery, and sawmill projected by the Hunns was not a success in its own right, but it provided a physical foundation on which to build a port complex; even today, we are using part of it. The Collins cannery was short-lived, but it helped to build a market for Delmarva processed food that later was exploited by canners in every Delaware village.

The industrial activities of both periods had different specific geographical requirements that were in close proximity to each other, but were not coterminous. One might ask why an area with so many natural advantages did not thrive better and produce a more dominant central place. Perhaps the relatively diffuse nature of Lebanon's geographical advantages prevented the development of a multiplier effect which would have made Lebanon a more important town today.

Conclusions

As a stage in the development of American manufacturing, the Lebanon cannery provides insights into the larger history of technology. Tinsmithing is an ancient art, practiced even today by highly trained craftsmen who draw upon a long craft tradition. A master tinsmith could make the finest tin cans, but they would be too expensive and there would never be enough of them. As the canning industry began to grow, a new kind of tinsmithing was invented to meet the demand for cheap containers made quickly in quantity.

Some of the first canners were tinsmiths who developed methods that could be followed by workmen who would never become skilled craftsmen. Each worker was assigned a simple task in a sequence, producing a can that was serviceable but never perfect. When professional tinsmiths ran canneries, innovation continued and other products came out of the shops during off seasons. Richardson and Robbins in Dover and Stetson and Ellison in Camden continued to make architectural tin, special

containers, and other tin goods even after their primary businesses had become food canning. The canners who obtained patents and advanced the craft were the old tinsmiths.

As the canning industry expanded, entrepreneurs with no tinsmithing experience went into the business. Their shops could make cans according to prescribed processes, but they were unlikely to do anything else or to innovate. Can manufacture became an unskilled trade, conducted under unskilled supervision; the cans served the purpose, but craftsmanship was absent.

The system of breaking skilled work into unskilled components, and of simplification for the sake of production, is called the American System of Manufacture. The Collins, Geddes cannery represents a step in this shift from a craft to an industrial process. The next step would be a can factory in which the workman was replaced by machines and individual sheets by huge rolls of tin. The new method of manufacture was sweeping the nation at the time, and Lebanon gives us an opportunity to watch it in action.

Lebanon's history is intertwined with that of Camden and of the hinterland. Throughout the history of shipping at Lebanon, the same names and families reappear. First among the developers of Lebanon were the Hunn, Mifflin, and Jenkins families, who also developed Camden. During the nineteenth century, Camden businesses had a presence at Lebanon. The related Dyer and Maloney families dominated the village of Lebanon during much of the nineteenth century, buying and selling lots along the road to Rising Sun. Thomas Pickering, who farmed just south of the village, was also involved in shipping, bark milling, and shipbuilding. Proprietors of canneries in Rising Sun and Camden owned ships at Lebanon, and Lebanon captains took partners among the Camden merchants. Such intimate long-term commercial relationships are typical of a port's dependence upon inland business.

It is inaccurate to say that railroads displaced waterborne commerce; on the contrary, technological improvements that accompanied the railrod may have stimulated navigation. Even though the Delaware Railroad after 1856 opened new markets and new networks for inland farmers, the river ports continued to flourish, many of them reaching their highest prosperity after railroad "competition" is popularly supposed to have drained off the business. Lebanon's first scheduled steamboat service began thirty years after the railroad was built only five miles to the west. It was possible to get a train from Wyoming to Philadelphia, but the *Mary U. Githens* apparently attracted enough passengers and freight to keep her going for fifteen years.

Eligibility

As currently proposed, the project will not affect any properties on the National Register. The nearest registered property is Great Geneva. No properties in the project area have been determined to be eligible for the Register.

Hunn Town is potentially eligible for registration on the basis of its role in the history of free blacks before the Civil War. Two small tests gave evidence that the site may be relatively undisturbed; since the current project will not encroach upon Hunn Town, no evaluation was made.

The modern span known as bridge 356a has been surveyed as part of the state inventory, and has been assessed as not eligible for the National Register. The underlying dam possesses local significance, but there is no way to assess its integrity without digging up the causeway. Since the causeway will not be disturbed by the project, there was no need to sink tests under the roadway.

The steamboat-era buildings may be beyond practical preservation. Although the project will bypass them, the structures cannot be expected to last much longer. The integrity of the complex has been compromised by loss of wharf structures, moved buildings, and deterioration. There remains sufficient physical evidence on site to re-create Lebanon on paper, if not on the ground.

Hunn's forge probably was obliterated by the gravel operations that also took away Isaac Draper's house and the office shown on the 1809 survey. The sawmill at the other end of the mill seat may have left some below-ground remains, but the integrity of the whole complex has been diminished by two centuries of road building.

Most promising of all the project area's candidates for the National Register is the cannery site. Because there are no archæological surveys of cannery sites, there is no way to evaluate this site in comparison with similar sites elsewhere. The most striking feature of the cannery, its waste pile, can be salvaged for future reference.

Project effect

The proposed Road 356a project involves two operations: replacement of the bridge over Tidbury Branch and straightening of a curve in the Lebanon waterfront area. Road 356a passes between two Hunn family farms, Great Geneva and Wildcat. Great Geneva is listed in the National Register of Historic Places and Wildcat was once proposed for registration. No effect on these sites is anticipated, since the road will be essentially unchanged in their vicinity. There will, however, be some effect in the immediate project area.

A cemetery at the south end of the causeway is known from several sources, including a living eyewitness. The cemetery was not found, but some of it may exist.

Since it appears that the 1793 dam, and possibly the sawmill, lies directly beneath the present road, the new construction will actually protect the remains. When the old concrete bridge is removed, part of the dam structure may be exposed to view for the first time in many years. Had the proposed parking lot been built, it would have had significant impact on Hunn Town. Since the parking lot will not be built, there is no effect. Changes in the causeway structure certainly will affect the old dam, but most of it will remain encased under fill. So long as the fill is not removed, the old Hunn dam remains safe. Tests adjacent to the embankment failed to reveal any auxiliary structures protruding from it. The submerged causeway east of the bridge is outside the project area, but it could be affected by any attempt to clear the stream.

The road will pass through two borrow pits, on the sites of an eighteenth-century house and an eighteenth-century ironworks. Research indicates that both sites were removed by the same gravel operations that disturbed the graveyard. Two areas containing known historic remains will be affected by the proposed construction. First of these is a small spur of relatively undisturbed land between the ironworks site and the house site. This area has been virtually completely excavated, and is reported herein. The second area is the Collins, Geddes cannery site of 1869, once reputed to be the largest cannery in the world. Artifactual material from this site is discussed in its technological context in appendix 3.

Part of the former cannery lot that lies in the modern duplex apartment lot will be affected by a hillside cut (FIGURE 12). Between ER 19 and ER 20 (FIGURE 8, PAGE 46), is an active septic tank, which probably destroyed any archæological deposits that might have existed. This cut lies outside the cannery site proper, and away from the cannery waste dump; the canmakers tipped their waste onto the neighbor's hill rather than their own. Excavations in this small area are therefore unlikely to produce significant evidence of the cannery, even though a considerable surface scatter of artifacts were found.

Recommendations

Since this is one of the first cannery sites in the region to be systematically studied, its information potential is limited. Archæological knowledge builds upon previous research; each new investigation asks questions that had not occurred to its predecessors. Each succeeding project is therefore more sophisticated than the last. Through publication of this report, the Collins, Geddes cannery is assured of a place in the literature of industrial archæology, but later cannery digs will yield more data as the field matures. Canmaking waste from this site has yielded considerable technological data that will help us understand the transition from craft to an assembly-line in a major industry, but one cannot predict the future course of

canmaking archæology and the questions that future investigators may ask, or the techniques they might employ.

The 1793 mill complex underlies the present roadway. Near the south end of the causeway, the builders should expect to encounter the old course of Tidbury Branch, possibly with remains of a spillway. Near the north end, intact remains of the sawmill's headrace might come to light. When the bridge is replaced, a cross-section view of the original dam structure may be exposed. Construction and engineering personnel should be aware of these remains, and should be prepared to allow archæologists to make a record of any that are exposed.

A graveyard once existed on the hill at the south end of the dam. Exhaustive search around the perimeter of the gravel pit failed to uncover any exposed remains, but there may be graves still embedded in the hillside, probably beyond the project limits. We recommend that the area of the graveyard be protected during construction, preferably by filling.

The surviving steamboat-era buildings are crumbling. Only the warehouse has any chance of surviving, provided it is rescued by a well-financed owner. Aside from their historical associations, the three buildings are quite ordinary; they were recorded as "shacks" by the state cultural resources surveyor (K-3255). They will not be directly affected by the project.

This project area is surrounded by known prehistoric sites. One piece of pottery, many chips, and the tip of a point, were found in the survey. In most parts of the site, prehistoric material is found. On the north end of the project area, the work will be confined to existing right-of-way, with no effect on the known adjacent historic and prehistoric sites.

Two corners of the cannery lot will be clipped by the project, probably obliterating a large part of the industrial waste. The underlying prehistoric site certainly was compromised by the cannery, to the extent that it is unlikely to yield significant information. On the other hand, if the project were to disturb the field west of the cannery lot, there would be adverse effect on a significant prehistoric resource. We recommend archæological data recovery on the plant site before construction and collection of a representative sample of the waste.

A cut through the small portion of the cannery lot that now lies on the duplex apartment lot can be effectively monitored during construction. This area is unlikely to produce buildings associated with the cannery, if Dr. Bryan's sketch map (FIGURE 14, PAGE 110) is at all accurate. In the event that any cannery remains were not disturbed by the septic tank, they will be recorded.