

COMPLEX #8
THE J. MORTON POOLE & CO. MACHINE WORKS

Statement of Significance

Significant as an example of the machine manufacturing and metal processing establishments that located along the Philadelphia, Wilmington and Baltimore Railroad (PW&B) in Wilmington's Waterfront Analysis Area during the nineteenth century, the J. Morton Poole & Co. Machine Works pattern house (N-12465; see Figure 23, p. 130), erected in 1874, is eligible for inclusion on the National Register of Historic Places under Criterion A, buildings associated with events contributing to broad patterns of history. Currently standing alone on the block bounded by the AMTRAK Northeast Corridor viaduct to the north, the Avenue of the Arts (formerly Thorn Lane) to the east, the Christina River to the south, and properties formerly owned by the Harlan & Hollingsworth Co. (see Complex #7) to the west, the Poole building illustrates the growth of Wilmington's riverfront areas as a industrial corridor throughout the nineteenth century. Once part of a complex that stretched across the block directly to the east, the Poole pattern house stands as the only building paralleling its appearance during the period of its significance. Although additions to the building dating to the late nineteenth century and the early 1900s no longer exist, the building's current status more closely reflects its construction as the only substantial brick industrial-related building on the site in the 1870s. Established along the riverfront area in the late 1840s, a period when industrial concerns and commercial uses shared the Christina riverfront, the Poole & Co. Machine Works pattern house contributed to the growth of iron processing firms as one of the Area's predominant industries in the late nineteenth century.

The Wilmington Waterfront Analysis Area describes land forming portions of the Urban Geographic Zone (Zone V; see Figure 4, p. 9), an area described by the City of Wilmington's corporate limits according to the Delaware Comprehensive Historic Preservation Plan. However the Waterfront Analysis Area more accurately forms part of the Coastal Geographic Zone (Zone IV). Containing land bordering major and minor streams flowing into the Delaware River and Bay the Coastal Zone wetlands once supported a wide array of vegetation including arrowarum, spatterdock, water-willow, smartweed, and red and white oak marshes and waterways that provided shelter for turtles, muskrat, wood ducks, great blue herons, ospreys, turkey vultures and bald eagles in addition to many species of fish. Some of these plants and animals may survive in eastern and southern Wilmington where less-intensive development has occurred. Soils in the Zone range from moderately well-drained and medium-textured loam to tidal marshes. Extensive development activities, including landfilling, has concealed much of the city's pre-colonial riverfront. Forming an area surrounding the Christina and

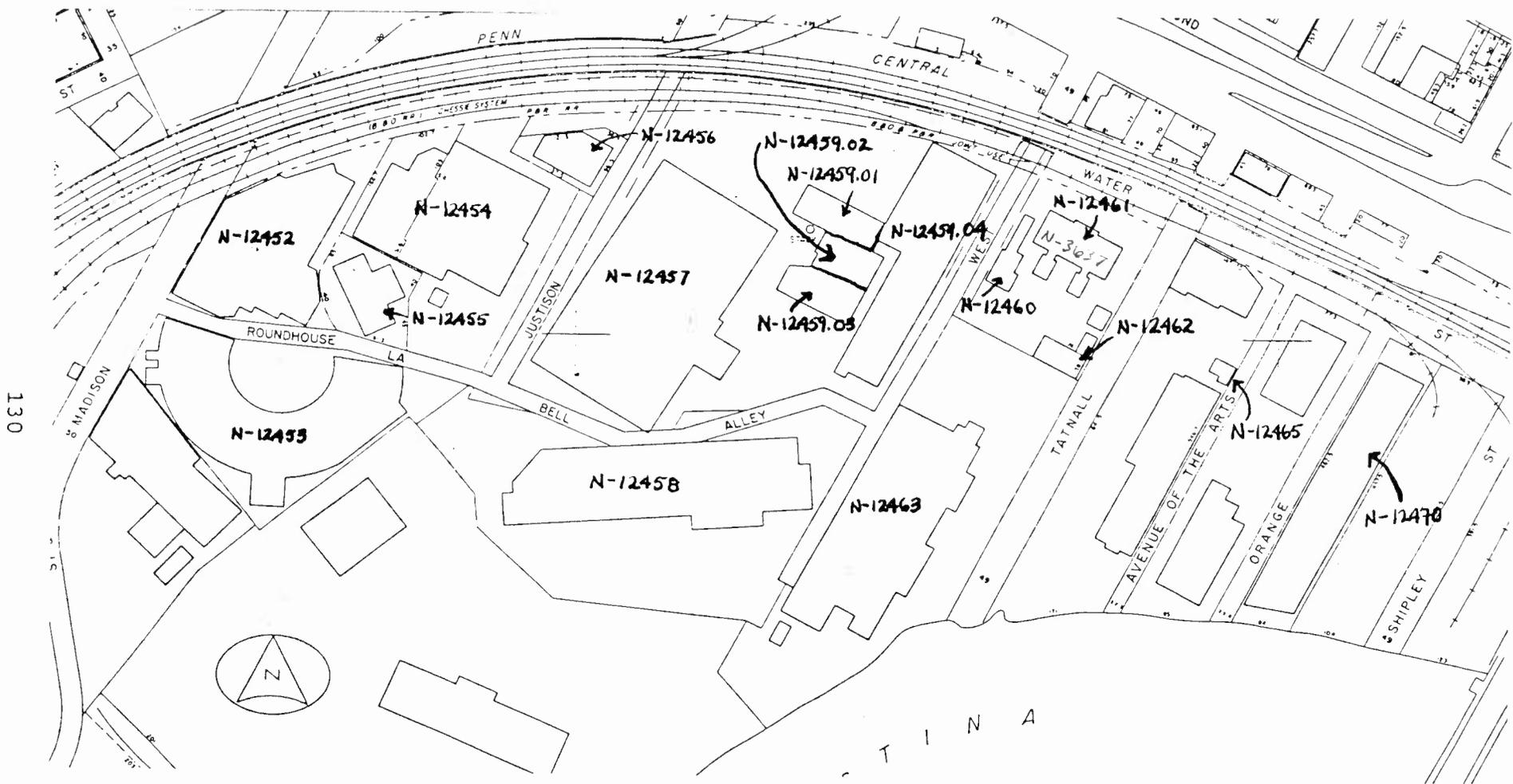


Figure 23: Site Plan of Complex #8
 The J. Morton Poole & Co. Machine Works and the Kent Building

Brandywine Rivers in Wilmington, the Waterfront Analysis Area defines a discrete geographical area established by the City of Wilmington's Office of Planning.⁷⁶

The J. Morton Poole & Co. Machine Works pattern house relates to the historic theme Manufacturing (6D) during the period of Industrialization and Early Urbanization (1830-1880 +/-) as defined by the Delaware Comprehensive Historic Preservation Plan. Manufacturing establishments typically use power driven machinery and/or handling equipment in the mechanical or chemical transformation of inorganic or organic materials into new products. These establishments function in buildings normally described as plants, factories or mills.⁷⁷ The period of Industrialization and Early Urbanization (1830-1880 +/-) witnessed the establishment of a great many manufacturing concerns in Wilmington reflecting a variety of industrial endeavors following the construction of the railroad through the zone.

Prior to the construction of the railroad, the Christina riverfront primarily served as home to various commercial shipping lines and wooden shipbuilders interspersed with related adjunct trades such as ropewalks, ship carpenters, coopers, and brass founders. An 1814 city directory describes four ship carpenters, four coopers, one ship chandler, one rope-maker, ten sea captains and three watermen lived between Second Street and the Christina. George W. Bush operated a freight and packet service from his wharf at French and Water Street. William Warner operated a coal wharf on the Market Street wharf. However, manufacturing activities in Wilmington during the preceding period of Early Industrialization (1770-1830 +/-) focused on grain milling along reaches of the Brandywine River.

The construction of the Philadelphia, Wilmington and Baltimore Railroad through the riverfront in 1838 refocused Wilmington's industrial growth along the rail line and nearby land skirting the Christina River. Providing access to faraway raw materials such as iron, steel and coal, and distant trading markets, the railroad spurred the settlement of foundries, machine shops, metal processing firms, iron shipbuilders and railroad related manufacturers. The PW&B, currently composed of the AMTRAK viaduct that forms much of the western boundary of the Waterfront Analysis Area, had a profound effect on Wilmington's industrial evolution creating an industrial zone between the Christina River and its tracks. Harlan and Hollingsworth (see Complex #7) opened their railcar manufactory and iron shipbuilding firm along the Waterfront Area in 1841. This firm actually began producing railcars in 1836 just north of the Area. Bush & Bonney's foundry commenced

⁷⁶ Ames, et al., pp. 31-36.

⁷⁷ Ibid., pp. 26, 36-37.

manufacturing railroad car wheels in 1831. This firm became the Lobdell Car Wheel, Tire and Machine Co. (see Complex #11), one of the country's pre-eminent manufacturers of chilled cast-iron car wheels. The Pusey & Jones Company established a foundry along the Christina in 1848. The transfer of the Poole machine works from a previous site along the Brandywine River to its current location along the Avenue of the Arts documents the attractiveness of the corridor defined by the railroad and the Christina River for industrial development.⁷⁸

J. Morton Poole started his machinist's business in 1839 in the basement of a textile mill along the Brandywine River belonging to Joseph Bancroft. In 1848 Poole purchased a small building at the foot of Orange Street near the location of the present building. Two years later the 1850 Census of Manufactures described Poole as a machinist employing 30 men. A steam engine using 200 tons of coal powered Poole's manufacture of machinery worth \$25,000. Poole brought William T. Porter, a former apprentice, into the firm as a partner in 1853. Construction of an elongated, one-story machine shop occurred shortly thereafter in the block immediately east of the pattern house (building #4 on Figure 24, p. 133). In 1860, J. Morton Poole & Co., machinists, still employed 30 men but only 125 tons of bituminous coal were used during the manufacture of steam engines and other machinery worth \$30,500. Poole & Co. began manufacturing chilled iron rolls used for grinding grain, and making paper and sheet rubber, in 1867, a transition that proved extremely lucrative to the firm.⁷⁹

The 1870 Census of Manufactures provides an excellent view of Poole's operation. One 30-horsepower engine drove a variety of machinery including planers, lathes, shavers, drills, milling machines, boring machines and a circular saw. Thirty-five men fashioned wrought iron, bar iron and steel into lapidaries, two steam engines and boilers and eight chilled-iron calendar rolls. Poole & Co. also manufactured assorted mill gearing and shafting. Total production accounted for over \$60,000 worth of machined goods and jobbing repairs. Within four years three additional buildings were constructed including the three-story brick pattern storehouse that now stands facing the Avenue of the Arts. The first floor of this building contained a harness room and opened into a frame stable attached to the northwest. An insurance survey undertaken in 1877 stated that this opening would shortly be bricked shut (see Figure 25, p. 134). At that time between 40 and 50 persons were employed in the manufacture of chilled calendar rolls, "Babcock & Wilcoxs' [sic] Patent Steam Engines," and boilers. J. Morton Poole

⁷⁸ Seely, pp. 1-19.

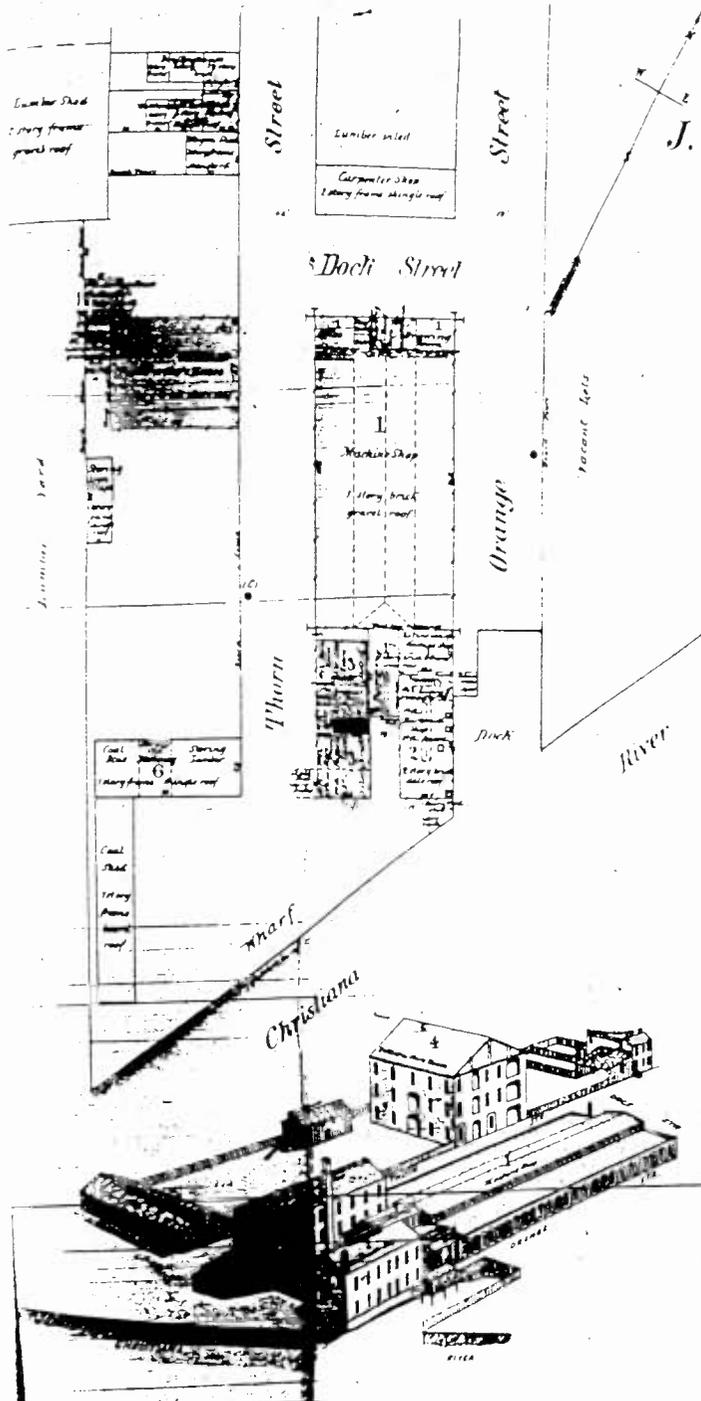
⁷⁹ Conrad, pp. 375-76; U. S. Census, Manufacturing Schedules, 1850, 1860. Microfilm on file at EMHL; Hexamer General Surveys, No. 1157 (August 1877). Microfilm on file at EMHL.

J. Morton Poole & Co., Machine Works,

Wilmington, Del.

MANUFACTURES: Chilled Cast-iron Bells, Reboilers & Millers' Pans, Steam Engines and Boilers.
CAPACITY: 40 in 24 hours, thirty men.

Surveyed August, 1877.
R. H. Mendenhall.



STORIES: J. Morton Poole & Co.
 APPROXIMATE: extent of the portions of the Works.
 NAME: J. Morton Poole & Co.'s Machine Shop.
 LOCATION: situated on Thorne street (1867) and facing on Christiana River, between
 Dock Street, Wilmington, Delaware.
 AREA: Building No. 1 and 2 covered 1841. No. 2 and 3 built 1873. The total area—
 17,000 sq. ft.
 CONSTRUCTION: good.
 HEIGHT: No. 1, one story high, from 14 to 16 feet—No. 2, 14—15—16—17—
 —No. 3, 12—13—14 and 16—
 FINISH: see diagram.
 CHARACTER: see plan.
 WALLS: of No. 1, brick; of No. 2, 3, 4 and 5, of stone.
 CEILING: in Nos. 2 and 3 painted; ceiling of Engine and Boiler Room in No. 2 and
 3 brick arched. Other in No. 1, tiled and plastered, where not decayed.
 BASE: No. 1, stone; No. 2, brick.
 FLOOR: see plan.
 QUARTERS: of No. 1, covered with gravel; of Nos. 2, 3 and 4, polished stone.
 ROOFS: see OUTLINE, of tile and painted iron.
 FOUNDATION: of brick.
 RECEIPTS: to roof with water to—
 TOWER: small wooden ladders kept on the premises reaching to the roof of the Machine
 Shop, No. 1.
 LIGHTING: see plan.
 FINISH: of Blacksmith Shop, No. 2, of clay, of English and Boston form, in No. 2, of
 brick, where of wood, see not to be finished.
 MATERIALS: see plan. Heavy iron pipes to all windows on ground floor.
 HEIGHT: of Nos. 1 and 2, made of wood, not made of No. 2, made of brick of
 No. 2, made of wood, made.
 MATERIALS: see plan.
 HEIGHT: inside of Nos. 2 and 3 of 6, 8, 10.
 HEIGHT: same as used by 11' (roughness and 1') and iron masonry railing on brick.
 LIGHTING: same as used by 11'.
 WALLS: same as in No. 1 on dry night and No. 2, same.
 MATERIALS: see plan.
 HEIGHT: see plan. No. 1 covered by brick walls. Engine and Boiler
 Room with brick floors and same as above. No. 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

.....	not according to the Roof.	.....	Windows
.....	Windows or Openings	.....	Double Brick
.....	not according to above the roof.	.....	Porcelain or Paper
.....	Brick Building	.....	Shedding of the Brick
.....	Brick and Plaster Structure	.....	Foundation
.....	Plaster Building	.....	Support
.....	Asphalt Building	.....	Plaster
.....		.....	Shedding

Figure 24: Detail of Poole & Co. from Hexamer General Survey #1157 (Reprinted courtesy of the Eleutherian Mills Historical Library)

died in 1879 leaving partner William Porter to become president of The J. Morton Poole Co. Poole's two sons, Alfred D. Poole and J. Morton Poole, Jr., joined the firm at that time. The Census of Manufactures in 1880 continued to describe the firm as engine and boiler machinists. However, chilled calendar rolls remained the primary product accounting for most of the firm's \$90,000 worth of manufactures. The expansion of facilities undoubtedly allowed Poole to increase production of chilled cast-iron rolls and to sell their product throughout the world.⁸⁰

The J. Morton Poole Co. manufactured chilled rolls and flour-making machinery into the early part of this century. During the 1930s the Wilmington Provisioning Company acquired the former Poole property and buildings and established a slaughter-house. By the mid-1950s the Zenith Meat Co., a subsidiary of the Safeway Stores food-chain, occupied the building. The property formed part of the A. R. Anthony & Sons Industrial Park in the early 1970s. The Grubb Lumber Co. stored lumber and building materials at the complex during this period. A fire in the buildings directly east of the storehouse during the 1980s resulted in the demolition of the northern half of the complex. The rehabilitation of the southern half following the fire has resulted in buildings that do not reflect their historic appearance or the size of the complex during the period of their significance. Recent inspections found unsafe conditions among buildings previously adjoining the storehouse resulting in those buildings demolition. The storehouse remains the only resource standing related to J. Morton Poole & Co.'s association with the development of industry along Wilmington's Waterfront Analysis Area reflecting the period of the complex's significance.⁸¹

Related to the historic theme Manufacturing during the period of Industrialization and Early Urbanization (1830-1880 +/-) the J. Morton Poole & Co. Machine Works pattern house documents the growth of the machine manufacturers and metal processing firms along Wilmington's Christina River throughout the nineteenth century. The construction of the Philadelphia, Wilmington and Baltimore Railroad through the Christina riverfront created a prime industrial corridor between the river and the railroad. Spurring industrial development in the Area by providing access to far-away raw materials and distant markets, the PW&B also became one of the city's major consumers of manufacturers and one of its largest employers. Wilmington manufacturers such as the Lobdell Car Wheel, Tire and Machine Co., Harlan & Hollingsworth and Jackson & Sharp, builders of railcars, and the Edwin J. Horner Car Spring factory, found the PW&B a ready consumer of their goods. Established in the

⁸⁰ U. S. Census, Manufacturing Schedules, 1870, 1880. Microfilm on file at EMHL; Conrad, p. 375.

⁸¹ Franklin (1936); Sanborn (1956); Sanborn (1972).

late 1830s, Poole & Co. first manufactured steam engines and boilers and probably moved to the Christina riverfront from quarters along the Brandywine in order to furnish his firm with iron, steel and coal resources not easily accessible at their earlier building. Poole & Co. switched their manufacturing focus to the construction of chilled cast-iron rolls for paper and grain mills in the 1860s. This shift in emphasis allowed Poole & Co. to further expand facilities and begin selling their products in international markets. Reflecting the rise of other metal processing firms throughout the Waterfront Area, the Poole & Co. pattern shop is eligible for inclusion on the National Register of Historic Places under Criterion A, buildings associated with events contributing to broad patterns of history.

Architectural Description

The J. Morton Poole & Co. Machine Works (Complex #8) spreads over two blocks south of the AMTRAK Northeast Corridor Viaduct along the north shore of the Christina River. South Tatnall Street and South Shipley Street respectively form the west and east boundaries of the complex (see Figure 23, p. 130). A small former pattern storage warehouse (N-12465) stands on the west side of Avenue of the Arts amidst approximately 2.15 acres land strewn with brick rubble and other building debris. Although encased by other buildings when surveyed during the Phase I Reconnaissance Level study of the waterfront area, demolition over the last year has left the warehouse physically isolated.

Composed of a three-story, gable-roofed brick building parallel to the viaduct, the pattern warehouse (N-12465) exhibits an asphalt shingle roof and a corbeled cornice with corbeled partial returns (see Plate 24, p. 138). The building's main elevation faces east overlooking the Avenue of the Arts and the recently constructed Delaware Theater Company building. Three brick piers divide the east elevation's corbeled, pedimented gable into four vertical sections. Boarded windows with wood lintels flank the center pier of the gable end. Five bays containing two boarded windows and three pairs of diagonal board and batten loading doors with wood sills and brick segmental-arch lintels pierce the second and third story. Second story loading bay doors are slightly larger than the third story loading doors. Four first-story bays contain concrete block and brick covering former loading bays. The northernmost bay has been enlarged in order to accept a modern garage door currently sheathed by wood boards. This entry once possessed a sliding exterior door. The upper runner for the door remains imbedded in the wooden lintel.

The five bay wide south elevation faces the Christina River and the rubble strewn lot. Window openings flank large central loading bays on the first and second story. Segmental-arched lintels crown loading bay openings. Pairs of iron hinge pintles survive on both sides of the loading bays. Five bays penetrate the third story. Brick fills first and second story openings while wooden boards cover third story windows. An unsheathed opening in the third story reveals the use of wooden frames and surrounds for sash windows with brick sills and lintels. Stucco coats much of the first story level.

A gable-roofed shaped scar composed of tar denotes the location of an earlier one-story building previously attached to the warehouse along its southern elevation. In addition to a steel post in the southwest exterior corner of the warehouse, I-beam purlins and ridge feet that once supported the south building's gable roof survive imbedded in the brickwork underneath the scar. The scar wraps around and continues along the west elevation. A wall plate

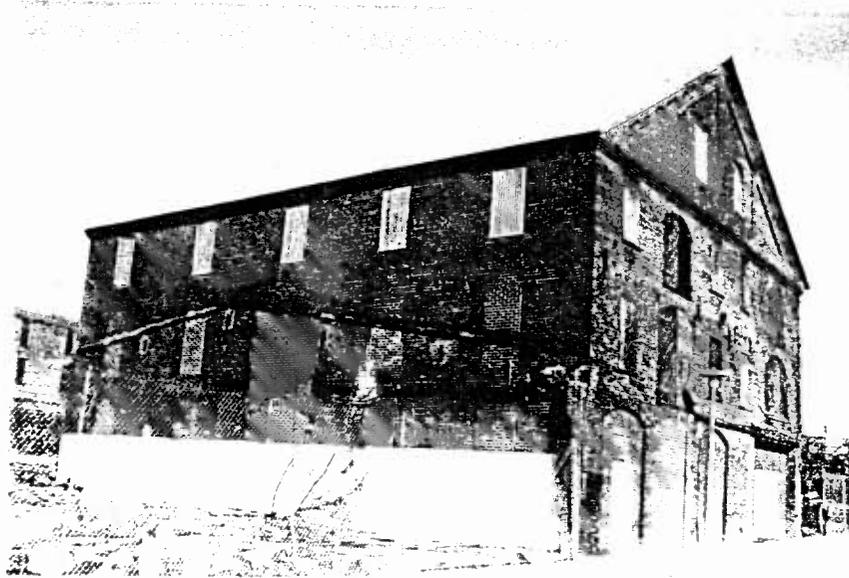


Plate 24: South and east elevations of the Poole & Co.
Pattern House (N-12465) looking north
(Photograph by Stuart Dixon)

or girt attached to the warehouse's west elevation delineates the position of the missing building's roof line.

A segmental arch lintel on the first story level of the west elevation crowns a doorway partially enclosed with brick that currently possesses a steel door. Stucco continues to obscure much of the first story level. A two-story, gable-roofed shaped scar on the north end of the west elevation indicates the position of another previously attached building. A rowlock segmental arch lintel capping a brick-infilled opening denotes where a previous second-story entrance communicated between the warehouse and the building to the northwest. Excavated purlin and joist pockets surround the former entry in the warehouse's west elevation. The roof scar of the northwest building extends approximately four feet along the north elevation of the warehouse indicating that the adjoining building wrapped around the north elevation as well.

Five upper-story windows and three second-story windows contain wood board sheathing. A second story door opening, enlarged from an original window and boarded on the interior side of the building, exhibits evidence of a bridge that connected the warehouse to a building to the north. Six-over-six wooden sash penetrate the second story's eastern window. The first story contains four window openings vertically longer than upper story windows and one door. Brick, rebar and plywood covers the openings.