Delta Hardwood
Boonville, New York

FACILITY SURVEY
Overall Campus

BUILDINGS
- There is a large contiguous building comprised of the 10 buildings (Buildings 0-9 described below). Photos of these buildings are included as Appendices 0-9 following the descriptions.
- The roofs of the 10 buildings comprising the large contiguous building are a combination of membrane and metal. Condition varies. See Appendix 11 for photos of the roofs.
• There are also several outbuildings in various states of use or abandonment. See drawing above.
  - The building labeled ‘Abandoned Building’ is the original boiler plant built in the 1920’s.
  - The building labeled ‘Outbuilding’ was called out as Saw Mill and Loading Shed on a 1976 survey
  - The building labeled ‘Storage Building’ is the old “Pre-Dryer” building when there were kilns on site. Photos of the exterior are included as Appendix 10.

MECHANICAL
• There is no central HVAC system serving the facility. Hydronic heating is present in buildings 1, 2, 3, & 7 and is served from a wood fired boiler and zone pumping system in a boiler room connected to building 7.

ELECTRICAL
• Electrical Service: The facility receives a single overhead medium voltage primary service from Boonville Municipal. The feeder originates from Charles Street and extends over building 7 and 4A to a facility owner 3000KVA pad mount transformer. The 3000KVA pad mount transformer transforms the medium voltage to 480/277V and distributes to a single 4000Amp, 480/277V service switchboard. This service switchboard feeds the entire facility. The service switchboard is approximately 20 years old and is in good condition. The transformer condition is harder to ascertain by viewing it. Its age is unknown. Oil sampling test is recommended to determine its actual condition
• Telecomm Service: The facility receives telecom service from Time Warner Cable via an overhead lateral.
• Fire Alarm: The building has a Simplex Fire Alarm System that is approximately 20 years old and is reportedly operational and regularly serviced. The building is a manual system, consisting of pull stations and notification devices. It was noted that several areas seemed to be lacking proper coverage
• Exit Lighting and Emergency Lighting: Exit lights and emergency lights were noted with the facility but not at all required locations. There was a range of age and condition. Some are in good condition and some were in poor condition.

PLUMBING
• Water Service: The facility is served by the Village of Boonville water system via a combined domestic/fire protection service.
• Sanitary Sewer: The facility is connected to the Village of Boonville system.
• Gang Toilet facilities are present at the manufacturing break room area.
• Water heating is tank type electric located at toilet facilities.

FIRE PROTECTION
• Water Service: The facility is served from the Boonville water system via two service lines one 8in. and one 6in. creating a looped supply. The water service lines fill two suction tanks containing 100,000 and 250,000 gallon storage capacity. Two diesel fire pumps, one at each suction tank location, support exterior hydrants and dry pipe sprinkler system risers within the buildings.
Building No. 0

OFFICE BUILDING

The office building is a typical residential wood framed structure with roof trusses and a sloping shingled roof. Although no documentation of its construction could be found, the original building was likely constructed in the 1960’s and was renovated and expanded in 1978.

Building No. 1

BUILDING

The primary structural frame is wide flange columns to riveted steel girders. There are two rows of interior columns. The exterior walls are concrete, with large single-glazed steel windows that have been covered with metal siding at the exterior and painted over on the interior. There is one large overhead door at dock height (3’-8”±) on the west side accessible via the ramp on the inside (see photos). The roof over is of timber purlins with wood decking. Part of the roof, where a clerestory element once existed, is filled in with metal purlins with metal decking.

Built ~1924. Building Area ~19,300 SF. Clear height ~12’-6”.

MECHANICAL

Heating is provided via column mounted steam unit heaters, with local thermostats, converted to operate with hot water supplied from a wood fired boiler and zone pumped hot water loop located in Building 7. Local electric heat is present in the dry-pipe alarm valve room and water service room. Ventilation is achieved from infiltration and exhaust from production equipment. Column mounted propeller fans circulate air within column bays and are manually operated.

ELECTRICAL

Power Distribution is through many panels, of varying ages and condition, in this area to serve existing production equipment. Some panels are in good and some are in fair condition. Light fixtures are fluorescent. Lighting levels are generally good.

PLUMBING

Domestic water service entrance and meter are located in the northwest corner of the building. The cold water main runs out to the toilet rooms in Buildings 7 & 8.

FIRE PROTECTION

Building 1 is fully sprinkled by a dry-pipe system. A 6 inch fire protection riser enters the building on the southwest corner and is controlled by dry-pipe alarm check valves. The alarm valves serve dry pipe sprinklers throughout Buildings 1 and 2. Air pressure to maintain the dry system is achieved by pipe mounted compressors directly above the alarm valves.

Building No. 2

BUILDING

Building 2 is an addition to Building 1 and is of matching construction (see above). There is one row of interior columns and one large (9’x9’±) sliding door at grade on the west side.

Built ~1927. Building Area ~12,000 SF. Clear height ~12’-6”.
MECHANICAL
Heating is provided via column mounted steam unit heaters, with local thermostats, converted to operate with hot water supplied from a wood fired boiler and zone pumped hot water loop located in Building 7. Ventilation is achieved from infiltration and exhaust from production equipment. Column mounted propeller fans circulate air within column bays and are manually operated.

ELECTRICAL
Power Distribution is through many panels, of varying ages and condition, in this area to serve existing production equipment. Some panels are in good and some are in fair condition. Light fixtures are fluorescent. Lighting levels are generally good.

PLUMBING
No plumbing systems in this building. A cold water main, from Building 1 runs through this building to serve toilet rooms in Building 7 & 8.

FIRE PROTECTION
Building 2 is fully sprinkled by a dry-pipe system. The alarm valve is located in Building 1.

Building No. 3

BUILDING
Building 3 was originally constructed as a separate building with connecting passageways. It has load bearing concrete exterior walls, with small steel windows. A structural frame of wide flange columns and beam runs down the center supporting steel beams and wood plank roof decking. The 12’± space between this building and the adjacent buildings has been mostly filled in over time.
Built ~1929. Building Area ~10,950 SF. Clear height ~8’-6”.

MECHANICAL
Heating is provided via column mounted steam unit heaters, with local thermostats, converted to operate with hot water supplied from a wood fired boiler and zone pumped hot water loop located in Building 7. Ventilation is achieved from infiltration and exhaust from production equipment. Column mounted propeller fans circulate air within column bays and are manually operated.

ELECTRICAL
No power panels in this area. Light fixtures are fluorescent. Most lighting fixtures were not operating (unknown if due to fixtures being off, blown lamps or other deficiencies). Lighting levels were poor.

PLUMBING
No plumbing systems in this building. A cold water main, from Building 1 runs through this building to serve toilet rooms in Building 7 & 8.

FIRE PROTECTION
Building 3 is fully sprinkled by a dry-pipe system. The alarm valve is located in Building 4.
Building No. 4

BUILDING
Building 4 is a typical pre-engineered metal building. It is a ‘clear span’ building with no interior columns. There are 3 links, approximately 10’ long, connecting the building to adjacent Buildings 1, 2 & 3. There is a coiling fire door separating the building from adjacent building 8. There are no exterior overhead doors.
Built ~1970. Building Area ~16,200 SF. Clear height below rigid-frames ranges from ~12’-6” to ~16’-8”.

MECHANICAL
No heat is present. Ventilation is achieved from infiltration. Column mounted propeller fans circulate air within column bays and are manually operated.

ELECTRICAL
No power panels in this area. Light fixtures are fluorescent. Several light fixtures were not operating (unknown if due to fixtures being off, blown lamps or other deficiencies). Lighting levels were fair.

PLUMBING
Roof drains and interior rain leaders are present along the southeast side of the building to allow the roof to drain where Building 8 was constructed. No other plumbing systems in this building noted.

FIRE PROTECTION
Building 4 is fully sprinkled via dry-pipe system with the alarm valve located in this building.

Building No. 5

BUILDING
Building 5 is a typical pre-engineered steel structure with metal deck and conventional roof. There are two rows of interior columns. Exterior walls are covered with metal siding inside and out. The floor slab on the west end is at the elevation of the floor slab in Building 7 but is ~5’ lower in the eastern third. There is an interior ramp between the two levels. There are four loading docks on the south side, two at the west end and two at the east end of the raised slab area. The eastern third has a slab on grade and concrete walls up to the level of the upper slab. It has a large grade level overhead door (20’x16’±) on the south side.
Built ~1973. Building Area ~31,400 SF. Clear height ~13’-3”, ~18’-3” where the slab is ~5’ lower.

MECHANICAL
No heat is present. Ventilation is achieved from infiltration. Column mounted propeller fans circulate air within column bays and are manually operated.

ELECTRICAL
No power panels in this area. Light fixtures are fluorescent. Several light fixtures were not operating (unknown if due to fixtures being off, blown lamps or other deficiencies). Lighting levels were fair.

PLUMBING
Roof drains and interior leaders are present along the north side of the building to allow the roof to drain where Building 8 was constructed. No other plumbing systems noted in this building.
FIRE PROTECTION
Building 5 is fully sprinkled by a dry-pipe system. The alarm valve is located in this building.

Building No. 6
Building 6 is an addition to Building 5. The structure is a pre-engineered steel clear span rigid frame with metal deck and conventional roof. The floor slab is at the elevation of the lower floor slab in Building 5. Exterior walls are concrete to the level of the upper slab of Building 5 and above that are covered with metal siding inside and out. Like Building 5, there is a large grade level overhead door (20'x16'±) on the south side.

Built ~1978. Building Area ~9,600 SF. Clear height ~18'-4”.

MECHANICAL
No heat is present. Ventilation is achieved from infiltration. Column mounted propeller fans circulate air within column bays and are manually operated.

ELECTRICAL
Power Distribution is through one panel in this area which is in fair condition. Light fixtures are fluorescent. Light fixtures were not operating (unknown if due to fixtures being off, blown lamps or other deficiencies). Power Distribution-

PLUMBING
Roof drains and interior leaders are present along the north side of the building to allow the roof to drain where Building 8 was constructed. No other plumbing systems noted in this building.

FIRE PROTECTION
Building 6 is fully sprinkled by a dry-pipe system. The alarm valve is located in building 5.

Building No. 7
BUILDING
Building 7 is a pre-engineered metal building. The primary structure is a typical 'rigid-frame' with a single row of round interior columns running down the center. At some point the original metal roof was covered with a membrane roof with added insulation. Exterior walls are covered with metal siding inside and out.

Built ~1983. Building Area ~24,750 SF. Clear height below rigid-frames ranges from ~13'-3” to ~16'-2”.

MECHANICAL
The boiler serving the hydronic heating zones serving buildings 1, 2, 3, & 7 is located in an addition on the south side of this building. The boiler is a ‘Wood Gun’ wood fired boiler with wood supplied from a hopper and auger system. All controls are local to the boiler room. The wood fired boiler maintains primary loop temperature and supplies hot water to the four zones serving buildings 1, 2, 3, & 7. The zone pumps are located just outside of the boiler room. The primary boiler loop and each zone’s hot water returns to a buffer tank.

Heating for this building is provided via column mounted steam unit heaters, with local thermostats, converted to operate with hot water supplied from a wood fired boiler and zone pumped hot water loop
located in the addition on the south side of this building. Local electric heat is present in the dry-pipe alarm valve room and water service room. Ventilation is achieved from infiltration and exhaust from production equipment. Column mounted propeller fans circulate air within column bays and are manually operated.

**ELECTRICAL**

The main service switchboard for the facility is located in this building. The switchboard is 4000amps. 480/277V, is approximately 20 years old and appears to be in good condition.

Power Distribution is through many panels, of varying ages and condition, in this area to serve existing production equipment. Some panels are in good and some are in fair condition. Light fixtures are fluorescent. Lighting levels are generally good.

**PLUMBING**

The manufacturing break room and toilet facilities are located in the infill area between this building and Building 8. Hot water is supplied to the break room sink and toilet room wash fountains and sinks from a tank type electric water heater. Underground Sanitary sewer exits to the north below the building erected in Building 8.

**FIRE PROTECTION**

Buildings 7 is fully sprinkled by a dry-pipe system. The alarm valve is located in this building.

**Building No. 8**

**BUILDING**

Building 8 is a pre-engineered metal building. The primary structure is typical 'rigid-frames' with 3 rows of wide flange interior columns. The roof is metal deck with a standing seam metal roof. Exterior walls are covered with metal siding inside and out. There are 4 loading docks (refer to the photos – Appendix 8). A 2-hr masonry wall separates this building from adjacent buildings 4, 5, 6 & 7.

Built ~1999. Building Area ~48,000 SF. Clear height below rigid-frames ranges from ~14'-10” to ~18'-1”.

**MECHANICAL**

Existing air handling units are present on the west side of the building hung below the bottom cords of the roof structure. The air handlers are equipped with steam heating coils, supply ductwork with registers directly off the side of the duct main which running the length of the building. The air handlers are non-functioning, steam piping has been disconnected and abandoned and the supply air registers have been covered with cardboard.

**ELECTRICAL**

No power panels in this area. Light fixtures are fluorescent. Several light fixtures were not operating (unknown if due to fixtures being off, blown lamps or other deficiencies). Lighting levels were fair.

**PLUMBING**

Storm water piping below the slab picks up the roof drains and interior leaders from adjacent buildings 4 on the west side and 5 & 6 on the south side. There is a storm water collection system on the north side of the building. The below slab storm piping exits the building on the south end of the east wall through a storm manhole within the building and continues to the site storm water system via an 18 inch storm
lateral. Men’s and Women’s toilets and showers are located on the east side of the building served from the cold water main within building 7. Hot water is supplied to the break room sink and toilet room wash fountains and sinks from a tank type electric water heater. Sanitary sewer exits below slab at the northeast corner of the building into a sanitary manhole outside of the building to the Park Ave. sewer system.

FIRE PROTECTION
Building 8 is fully sprinkled by a dry-pipe system. The alarm valve is located in building 5.

Building No. 9

BUILDING
Building 9 is a pre-engineered metal building originally constructed as a Steam Plant. The structure is a pre-engineered steel clear span rigid frame with metal deck and standing seam metal roof. Exterior walls are covered with metal siding inside and out. A 2-hr CMU wall is located on the north wall at the link to Building 4 to separate the building from Building 4. The main floor slab is 4’ below the floor slab in Building 7. There are several steel grate mezzanines throughout. The building is divided in two by a 2-hr CMU wall. The east half is the Boiler Room, the west half is a Maintenance Shop. There are two large (14’x16’) grade level doors on the south wall, one in each half.

Built ~1999. Building Area (exclusive of mezzanines) ~7,700 SF. Clear height ~28'-9”.

MECHANICAL
The existing two 600 horsepower “English” wood fired steam boilers and associated steam and condensate equipment and piping are non-functioning. The steam plant has been shut down and abandoned. Minimal heat is provided from the hot water heating zone serving building 4 via unit heaters.

ELECTRICAL
There is significant power distribution equipment, in good condition, in this building. Lighting-Lighting fixtures are a mix of fluorescent and HID. Lighting levels are generally good on the maintenance side but poor on the boiler side.

PLUMBING
Cold water for boiler makeup and a service sink is present. Sanitary drainage for floor and sink drainage is present routing below slab is unknown.

FIRE PROTECTION
The building is fully sprinkled by a dry-pipe system. The alarm valve is located in building 7.
Facility Layout Plan (key)
Building 1
Building 4
Building 5
Building 6
Building 7
Building 9

Building 10 (pole barn/storage)