OREGON STATE HOSPITAL-SALEM

Historic Review

Narrow-Gauge Rail Lines and Building 73

February 2009

prepared for
Oregon State Department of Human Services
Salem, Oregon

prepared by
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SUMMARY

In order to comply with the City of Salem’s Historic Landmarks Commission’s decision to allow for the demolition of Building 73 (HIS08-14 – Condition 11), a detailed archaeological investigation of the farmstead area, the history of OHS’s narrow-gauge rail lines and the history and design of OHS Building 73 was prepared.

In February 2008, the Oregon State Hospital campus was listed in the National Register of Historic Places as an historic district for its association with the evolution of philosophies and policies related to mental health care in Oregon, as well as for its concentration of historic institutional buildings that have been used for the provision of mental health care since 1883. Among the contributing buildings and landscapes within the historic district is the system of narrow-gauge rails running throughout the hospital’s tunnels and above ground in the service areas and former farmland. The historic use of the narrow-gauge rails was closely connected with the day-to-day operations of the Oregon State Hospital as well as extensive farming operations from 1884-1960.

Part A of this report presents an historic review of the narrow-gauge rail system still extant on the Oregon State Hospital property by examining the rails’ historic locations, uses, and period of operation within the historic district. It also examines the history and period of use of Building 73 within the context of the historic farm operations at the Oregon State Hospital.

Part B documents the design of Building 73 (Vegetable Storage) in building plans, which show its as-built conditions. The plans are supplemented with photographs.
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Section I: Narrow-Gauge Rails
SECTION I: NARROW-GAUGE RAILS

Overview

The narrow-gauge rails were an integral part of the original 1883 hospital design, extending throughout the ward buildings via basement tunnels. The above-ground tracks were early twentieth century additions to the campus, connecting barns, farm storage buildings, and service buildings with the original “J” Building. As of December 31, 2008, very few of the historic narrow-gauge rails remain south of Center Street. With the exception of the basement tunnel tracks running from Building 49 to Building 48, and the east-west tunnel running between Building 46 and Building 59, the narrow-gauge rails have largely been removed and the tunnels repaved.¹

Evidence of the above-ground rail system exists west of Building 73, near Building 61 and just north of Building 58. The narrow-gauge tracks running from Building 61 west toward Building 31 were removed in November 2008 before a survey of the historic rails was conducted. The above-ground rails running south from Building 73 to Buildings 71 and 74 were also removed in November/December before a survey was conducted.

For further reference on the location of the rail system, see Part A: Appendix A Maps: Historic Location of Narrow-Gauge Rails and Appendix B: Survey of Existing Narrow-Gauge Rails, December 31, 2008, along with additional existing conditions photographs.

¹ The current building numbering system was established by the Oregon State Hospital staff in order to enable location of buildings on the hospital campus. The building numbers used throughout this report reference current building numbers, as opposed to historical numbering systems that are no longer in place. See Figure 1 for reference to the current building numbering system.
Existing Conditions as of December 31, 2008

View north into tunnel underneath Bldg. 49.

View of narrow-gauge tracks west of Bldg. 61.

View south of tracks on west side of Bldg. 73.

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Figure 1: Site plan of Oregon State Hospital, Salem, Oregon (Architectural Resources Group, Oregon State Hospital Historic Resources Report, January 23, 2008).
Figure 2: The development of the original “J” Building (1883-1915) corresponds with the construction of basement tunnels and narrow-gauge rail development. (Architectural Resources Group, “J” Building Development, Oregon State Hospital, Salem, Oregon).
History and Use of Narrow-Gauge Rails at the Oregon State Hospital

Architect Wilbur F. Boothby designed the original Oregon State Insane Asylum (Oregon State Hospital) “J” Building with the aim of producing a “suitable commodious structure” befitting the attitudes toward treating mental disorders at the end of the nineteenth century. Generally accepted principles for the care of the mentally ill during this time period were established in 1854 and later revised in 1880 by Dr. Thomas Kirkbride in his formative work, *On the Construction, Organization and General Arrangements of Hospitals for the Insane*. Kirkbride’s book created a highly detailed framework for the site selection, construction, and operation of asylums that was incorporated into the designs for the Oregon State Hospital. Specific guidelines regarding the arrangement of utilitarian spaces, such as the basement tunnels with “railroads for the distribution of food etc.,” were implemented to provide an effective mode of transporting necessary goods throughout the campus. The initial system of narrow-gauge rails was placed in the basement level of the building (Figure 3):

The basement under the ward buildings being 7’4” in the clear, is constructed for the purpose of providing room for the railways intended to convey food and other necessities from the kitchen to the dumb-waiters for the various dining-rooms on the floors above and also for the furnace and wood rooms. The basement of the kitchen building is 10’4” in height and is located directly in the rear of the main or office building….A car track runs from the kitchen to the center of the building connecting with a turn-table enabling the car to run either to the right or left as desired.2

The narrow-gauge tracks guided small, flat, wheeled railroad cars throughout the hospital tunnels (Figures 4 and 5). Depending on the type of goods being transported, the cars were outfitted with various bins and boxes. Various carpenter’s reports from the early 1900s through the 1930s discuss repair of rail cars as well as specific items such as “laundry boxes with lids,” “railroad cars, kitchen,” and “railroad cars, for wood” constructed for the purposes of transporting a variety of necessities.3

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2 Oregon Board of Insane Asylum Commissioners, *Report of the Supervising Architect and the Board of Insane Asylum Commissioners to the Legislative Assembly*, 1882 (Salem, OR: State Printer, 1882), 5.

Figure 3: Basement Plan of the Oregon State Insane Asylum, 1881, showing the “car track” (highlighted) intended to transport necessary goods to the wards. The building construction was completed in 1883.
A patient’s 1954 account of the hospital tunnels written in *The Lamplighter* (a hospital publication written and distributed by the patients) describes the railroad cars:

The food carts with their containers of steaming food, and bread compartments make their way through the tunnel system three times daily. Patients of varying ages and size push these carts down their own corridors onto the main channel route….The carts…converge onto the kitchen elevator then slowly are lifted into the main kitchen, where from huge vats the food is dipped into the cart containers. Across the way is the bakery, where armfuls of delicious bread are carried on the carts. Often, boxes of fruits, vegetables, and extra specials are loaded on top of the carts to balance precariously as cart wheels pince into the railroad tracks, which make easier pushing of laundry and garbage cars.4

As the hospital continued to grow, the rail system was expanded and modified to incorporate additional buildings into the basement tunnel system (Figure 2) as well as connect to above-ground tracks to outlying farm and service areas. Initial construction of the above-ground rails coincided with the growth of the hospital’s expanded farming program, the first instance of which was noted in the 1892-94 biennium. During this time period, an “elevated railway from infirmary to hog house, for conveying kitchen refuse, wood, etc.” was constructed (Figure 6). Specifically, a new switch in the track and a car turntable were built on the south side of the Infirmary building (no longer extant) located southeast of the Women’s Wards (Building 46). During the biennium, approximately 855 feet of rails were constructed.5 Between 1902 and 1904, a new hog barn was constructed “at a considerable distance from all other buildings,” and was connected to an elevated track that terminated in the basement track of the main hospital.6

Between 1910 and 1912, the Oregon State Hospital engineer’s department reported having “never been so busy before with the installation of water tanks, making car track connections, building tunnels, walks and roads.” During this time, the new Receiving Hospital (Building 36) was completed on the north side of Center Street and a basement tunnel for connecting services

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5 Oregon Board of Insane Asylum Commissioners, *Sixth Biennial Report* (1895), 38-43, 56.

Figure 4: An example of the railroad cars used at the Oregon State Hospital. The carts were refitted with pneumatic tires after the rail system was no longer in use.

Figure 5: A railroad car wheel found on the Oregon State Hospital Grounds.
Figure 6: Detail of Buildings and Grounds of the Oregon State Hospital, ca. 1936. The red highlighted area depicts the “elevated railway” constructed in 1902-04 that connects the new hog barn (not depicted on this map) with the basement tracks under the Infirmary (Physical Plant Office, Oregon State Hospital).
was excavated. Throughout the 1920s, no further mention of elevated railroad construction appears in the Oregon State Board of Control’s *Biennial Reports*, with the exception of general maintenance reports for rails and railroad carts.

According to Sanborn maps, a considerable amount of growth had occurred at the Oregon State Hospital between 1890 and 1926. Clustered southeast of the south wing of the original “J” Building is the Infirmary, Open-Air Tubercular Wards (constructed in 1917-18), two small greenhouses, and a root house (Building 73). The Laundry building and Power House are also extant in 1926, showing planned movement of hospital service buildings further away from the patient wards.

The 1926 Sanborn map indicates an “underground passage” between the south wings of the “J” Building and the Infirmary, indicating that a portion of the underground tunnel running east-west between the Women’s Wards (Building 46) and the Laundry (Building 59) was completed (Figure 7). Also of note is the Southern Pacific standard-gauge railroad spur on the east edge of the hospital campus. The track was used to transport hog fuel to the Fuel Yard and Power Plant via a large conveyor belt above the power plant. By the mid-1930s, a considerable network of narrow-gauge rails was present at the Oregon State Hospital. The Evans Hospital (tubercular ward) was constructed in 1930-32 just east of the Open-air Tubercular Ward and was connected to the basement tunnel system. In addition, above-ground tracks connected the farm buildings to the south with the hospital basement tunnels, new tracks connecting the eastern service zone to the main building.

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8 Hog fuel is an unprocessed mix of coarse bark and wood fiber. This type of fuel (and the conveyor belt) was replaced in the 1970s. John Hamilton, Interview by Erin Brasell, Oregon State Hospital, Salem, OR; For further reference on standard-gauge track locations, see Appendix B: *Survey of Existing Narrow-Gauge Rails*, December 31, 2008.

9 Oregon State Board of Control, *Tenth Biennial Report* (1933), 8, 28. Evidence of the tracks connecting the Evans Hospital and the underground tunnel running east from Building 46 is extant. See Appendix C for existing conditions photographs of basement tunnels and remaining tracks.

10 Research did not uncover the precise date of construction for this particular set of tracks.
Figure 7: Sanborn Map (1926) depicting growth of the Oregon State Hospital campus. Of note are additional patient wards, including: the Infirmary (A) and Open-air Tubercular Building (B), and service buildings including the Laundry (C) and Power House (D). A spur of the Southern Pacific Railroad (E) connects to the Power House and leads to the Penitentiary south of the hospital. The “underground passage” between the Infirmary and Women’s Wards is highlighted in red.
By 1937, an additional patient ward (Building 49) was constructed east of the Industrial Building. The narrow-gauge rail was extended from the Fuel Yard (Building 58) to the basement tunnel under Building 49 and curved to connect with the east-west tunnel running underneath the original “J” Building.\(^\text{11}\) (See Appendix A, *Historic Location of Narrow-Gauge Rails* for a comprehensive look at the above-ground narrow-gauge rails constructed at the Oregon State Hospital by 1936-37.) Expansion of the hospital campus in the following years was focused on building new facilities to accommodate a greatly increasing population.

In the years leading up to and directly following World War II, the hospital was extremely overcrowded due to the fact that nearly all construction projects were placed on hold. The tunnels and narrow-gauge rails were still in use throughout the late-1950s and “a constant flow of men and materials pass through the tunnels on errands of maintenance.”\(^\text{12}\) The Oregon State Hospital reached its peak patient population in 1958, at which time a major shift in administration philosophies at state-run mental caused the population to greatly decline between 1960 and 1965. This decline was due largely to the advent of modern psychiatric drugs and outpatient treatment programs. Following the shift in patient population, only the criminally insane were housed at the Oregon State Hospital, leaving very few workers for the farm operations. With the exception of a small row crop at the main hospital grounds, all farmland run by the hospital was transferred to other state institutions for vocational training (Figure 8).\(^\text{13}\) Within the same period, the narrow-gauge rails became obsolete for everyday use on the hospital grounds. The railroad carts formerly used to transport goods on the narrow-gauge rails were adapted for pneumatic tires. A large stretch of the tracks underneath Buildings 30, 31, 41, 42, 43, 47, and 48 were removed. The tunnels under these buildings were repaved for the adapted railroad carts. At this time, the use of

\(^{11}\) Ibid., *Twelfth Biennial Report* (1937), 7. The above-ground tracks extending from Building 58 to Building 49 are no longer extant. The remaining tracks begin at the basement passageway at Building 49 and continue in the underground tunnel approximately until the intersection of Building 48 and 47.

\(^{12}\) Oregon State Hospital, “Hospital Tunnels,” *The Lamplighter* (August 1954), 22.

the rail system outside of the buildings was reduced and eventually decommissioned when the farm operations were no longer used to actively grow food crops for the hospital.\textsuperscript{14}

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\textsuperscript{14} John Hamilton, Interviewed by Erin E. Brasell. Oregon State Hospital, Salem, Oregon. 9 January 2009.
\end{flushright}
Figure 8: Aerial photograph of Oregon State Hospital campus ca. 1960 showing a largely uncultivated farm area south of the main building with the exception of a few row crops highlighted in red.
Section II: Building 73 (Vegetable Storage)
SECTION II: BUILDING 73 (VEGETABLE STORAGE)

Overview

The construction and history use of Building 73 is closely related to the overall history of the farm operations at the Oregon State Hospital. Significant dates in the history and construction of Building 73 include:

1902-1904: First “elevated” narrow-gauge rails were built to connect the hog shed to the underground tracks in the basement of the main hospital building. These tracks were eventually connected to Building 73.

1904-1916: Approximate date range for the construction of Building 73. Originally used as a root house or vegetable storage house.

1916-1926: Farm production increases at the Oregon State Hospital and by the end of this time period, Building 73 is one of many farm buildings, including a horse and cow barn with corrals, a wagon shed, hog shed, two greenhouses, and an implement shed.

1920s-1940s: Additional acreage is acquired and leased by the Oregon State Hospital, amounting to over two thousand acres by 1942. The various farm products produced at the main hospital and its neighboring farmsteads produced commodities worth $250,000 in 1943. Building 73 is used a vegetable storage house.

1950s: Oregon State Hospital reached its peak population during the 1950s, which coincided with major philosophical shifts in the care of the mentally ill.

1960-1962: Farm production was halted at Oregon State Hospital and all farmlands outside of the 173 acres at the main hospital building were transferred to other state-run agencies. During this time Building 73, along with the adjacent farm buildings, were converted into storage for tools and mechanical equipment.

1960s-2008: Through December 2008, Building 73 was used as storage space for the hospital’s Physical Plant.
Existing Conditions as of August 2008

View of West (main) Façade, Building 73 (Architectural Resources Group, August 2008)

View of South and East Façades
(Architectural Resources Group, August 2008)

View of West and North Façades
(Architectural Resources Group, August 2008)
History of Oregon State Hospital Farm Operations

According to the generally accepted principles established in Dr. Thomas Kirkbride’s *On the Construction, Organization and General Arrangements of Hospitals for the Insane*, farm operations were an essential component for successfully treating the mentally ill:

> Every hospital for the insane should possess at least 100 acres of land, to enable it to have the proper amount for farming and gardening purposes, to give the desired degree of privacy, and to secure adequate and appropriate means of exercise, labor, and occupation for the patients….While less than one hundred acres should be deemed too little for any institution, State hospitals having a large number of farmers or working men, will find it useful to possess at least double that amount.¹⁵

Farm production at the Oregon State Hospital began shortly after the initial patients arrived in 1883. By the end of 1886, the hospital had produced approximately $9,700 in farm goods including vegetables, fruit, soap products and tallow.¹⁶ In the following years, between 1887 and 1890, the hospital continued to plant large plats of berries, vegetables, and fruit trees to supplement the patients’ diets. Employing patients “out of doors” was considered a form of treatment and therapy and hundreds of patients were given industrial tasks to prevent idleness. With an ever increasing population of patients each year, the hospital continually expanded the breadth of services undertaken by the patients to include work in baking, laundry, carpentry, and sewing. Women, in particular, were sent from various wards to pick berries and small fruits in season (Figure 9). The female patients were found to be more careful when handling the produce and seemed to enjoy the berry-picking activities. According to 1888 and 1890 Sanborn Maps, cultivated fields were located just south of the main hospital building as well as to the east of the south wing. Two stables for cows and hogs were also located on the grounds.


Figure 9: Female patients picking berries in fields south of the main hospital building, ca. 1910-12 (Oregon State Library).

Figure 10: “Modern horse barn constructed in 1902-04 biennium (Oregon State Library).
During the 1889-90 biennium, the Stanley farm of 640 acres was purchased three-and-one-half-miles southeast of the hospital (where the Oregon Correctional Institution is currently located). The tract was renamed Cottage Farm and considered an excellent addition for its natural beauty and ideal conditions for growing additional crops and livestock. By this time, the crop and livestock production at the hospital had grown to such a degree that a new cow barn for 100 cows was requested along with ample storage for the growing tonnage of vegetables harvested by the patients. The Oregon State legislature continued to buy land for the hospital and by the 1893-94 biennium, Cottage Farm comprised nearly one thousand acres and provided a bulk of the food crops harvested by the hospital. It was also during this time period that the hospital was first able to fully supply its own needs in vegetables and dairy products, sending surplus to local schools for the deaf and blind.

Significant grounds improvements were completed between 1899 and 1890, including a plank walk from the infirmary to the barn, 3,447 feet of sidewalk, and an “elevated railway” from the infirmary building to the hog house for conveying kitchen refuse, wood, and other materials. This rail was the first permanent connection between increasingly farmed open area and day-to-day operations within the main hospital buildings. Building improvements were also carried forth in the farm area south of the main hospital building during the 1902-04 biennium. Two “modern barns” were constructed for horses and cows to replace the old stables that were too small to accommodate the existing animals and were deemed old and unsafe (Figure 10). Also constructed was a new hog barn measuring 50 feet by 100 feet “at a considerable distance from all the other buildings.” An elevated car track was built to connect the new hog barn with the basement track in the main building.

Despite continuous building and growth in the farm area, the hospital grounds still lacked appropriate storage for the harvested produce. Fruits and vegetables were stored in bins in the hospital basement directly under the wards. Requests for a

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18 Oregon Board of Insane Asylum Commissioners, Third Biennial Report (1889), 9; Oregon Board of Insane Asylum Commissioners, Fourth Biennial Report (1891), 10.


Figure 11: Sanborn Map (1926) showing a wagon shed (A), horse barn (B), cow barn (C), corrals (D), a hog shed (E), vegetable washing shed (F), and root house/Building 73 (K).

Figure 12: Sanborn Map (1926) showing two greenhouses (G & H), an implement shed (J), and a root house/Building 73 (K).
a special storeroom measuring 32 by 100 feet with a loft was requested in the 1904-06 biennium.

A vegetable house with sufficient capacity for storing all vegetables and green fruit was completed by 1908. A chicken yard was added on the north side of Center Street between 1911 and 1913 and a “root house” was constructed between 1914 and 1916. The root house, which likely functioned as a vegetable storage building, is located on a 1926 Sanborn Map in the position of current Building 73. Oregon State Hospital carpenters’ reports detail that the wood frames for the concrete foundation and the root house shelving was constructed on site. A new greenhouse was requested for the 1917-18 biennium, measuring 30 feet by 100 feet. Additional farm buildings appear on a 1926 Sanborn map, which include: two greenhouses located on the future site of the Evans Hospital building, a vegetable washing house in the approximate location of Building 71, an implement shed just south of the Laundry, as well as the 1902-04 cow, horse, and hog barns. Located south of the horse and cow barns was a fenced-in corral (Figures 11 and 12).

By 1920, Cottage Farm’s land holdings amounted to 1,190 acres compared to the main hospital grounds’ 170 acres. Additional acreage to the southeast of the main hospital building was added by the 1929-30 biennium, increasing the total land holdings of the main campus to approximately 253 acres. An additional 225 to 1,360 acres of land were leased for farming purposes between 1920 and 1946. Of the farm land surrounding the main hospital buildings, a majority of the acreage consisted of large berry fields to the south and southwest of the “J” Building, a 38-acre fruit tree orchard, and garden tracts located just south of the Laundry. The fruit-bearing trees

21 According to a database held at the Oregon State Historic Preservation Office, Building #73 was constructed in 1901. However, research indicates that the hospital did not have designated vegetable storage facilities until 1906-08 (vegetable storage), and 1914-16 (root house). The precise construction date of Building #73 is unclear; however the date likely falls during the 1906-1916 period. This range of construction dates remains within the 1883-1915 “Kirkbride Period” as defined by the Oregon State Hospital Historic Resources Report prepared by Architectural Resources Group in January, 2008.


23 Oregon State Board of Control, Fourth Biennial Report (1921), 79; Oregon State Board of Control, Ninth Biennial Report (1931), 95.
provided fresh produce in season, while a large quantity was dried for use during the off-season. The hospital projected that the mature fruit tree orchards would eventually produce an average of 25 tons of dried fruit per year.\textsuperscript{24} Throughout the 1920s and 1930s, the farm continued to produce sufficient crops, dairy, and livestock to sustain the growing hospital as well as provide for several surrounding state institutions. During this period, building and improvements were focused on new wards for patients as well as maintenance and repair of existing farm structures.

Between 1938 and 1940, reports of the farming and gardening pursuits were “very satisfactory,” as “these departments are better organized than before.” Credit for the continuing success was given to Cottage Farm’s additional acreage and the consolidation of the poultry department from the main building. A plan to consolidate the hog operation at Cottage Farm during the following biennium was also noted.\textsuperscript{25} Additional land was acquired in Polk County for the purposes of farming between July 1940 and June 1942. Colony Farm was comprised of around 402 acres, bringing the total farmland for the Oregon State Hospital to approximately two thousand acres. The hospital Superintendent relayed that “with some degree of pride may I say during the year 1943 we produced on our various farms and in our various departments commodities worth near a quarter million dollars.” This figure was significant to the hospital administrators during a time when food and materials costs were rising, yet the hospital’s cost per capita remained low.\textsuperscript{26}

Patient numbers continued to rise throughout the 1950s, reaching a peak of approximately 3,500 patients between 1955 and 59.\textsuperscript{27}

Major state-wide shifts in the institutional farm programs as well as the function of the Oregon State Board of Control occurred in between 1958 and 1960. The Board of Control took a more active role in administrating the various state agencies, employing a farm administrator, food

\textsuperscript{24} Of the 38-acres of fruit trees, 23 acres was dedicated to prune trees. Oregon State Board of Control, \textit{Second Biennial Report} (1917), 104.

\textsuperscript{25} Ibid, \textit{Fourteenth Biennial Report} (1941), 41.

\textsuperscript{26} Ibid, \textit{Sixteenth Biennial Report} (1945), 38.

\textsuperscript{27} Ibid, \textit{Twenty-sixth Biennial Report} (1965), 29.
consultant, consulting engineer, and management analyst to oversee the overall operations of the individual state agencies. A farm administrator was responsible for coordinating all activities of the various institution farms, which totaled 5,500 acres of land. The shift in the Board of Control’s oversight coincided with shifting views on the treatment of patients in mental institutions, including the institutional farm program. Modern psychiatric drugs combined with more intensive treatment greatly reduced the able population of patients within the state’s mental institutions and affected the productivity of farming practices. The outpatient clinic established at the Oregon State Hospital in 1953 had grown in size and numerous geriatric patients were transferred to other institutions within the state. As a result of the shift in patients and a growing use of outpatient treatment, the Oregon State Hospital population decreased by over 1,500.

In January, 1960 the Cottage Farm was transferred from the Oregon State Hospital to the Oregon Fairview Home for the mentally retarded. A shortage in population necessitated closing the dairy and poultry production at the Oregon State Hospital and the cows and chickens were transferred to the State Penitentiary. Additional functions, such as providing bakery and meat-cutting services to several Salem institutions were transferred to the Oregon State Correctional Institution. A limited truck crop program was retained temporarily on the hospital’s main grounds, but the land on the southwest corner (near Walker and 25th Streets) was deemed unsuitable for crops and leased to the City of Salem for park development. By 1963, all state hospitals had eliminated all active farming programs, leaving a small row crop operation at the Oregon State Hospital. Following the shift of the farming operations from the hospital to other state-run institutions, Building 73, along with the other vegetable storage and farm buildings located south of the main hospital were converted into storage spaces for maintenance equipment and tools.

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**Maps**


APPENDICES

A. Map: Historic Location of Narrow-Gauge Rails

B. Map: Survey of Existing Rails, December 31, 2008

C. Existing Conditions Photographs of Narrow-Gauge Rails
APPENDIX A

Map: Historic Location of Narrow-Gauge Rails

Key:
- Standard Gauge Rail
- Light Gauge Rail
- Light Gauge Rail, Underground
APPENDIX B

Map: Survey of Existing Rails, December 31, 2008

Key:
- Rail Tracks, Existing
- Rail Tracks, Existing, Underground
- Rail Tracks, Removed
APPENDIX C

Existing Conditions Photographs

1. View north into tunnel under Building 49, connecting tracks to the basement.

2. View west, basement tunnel, narrow-gauge railroad tracks approximately under Building 63.

3. View west at termination of narrow-gauge tracks at the intersection of Buildings 47 and 48

4. View east of basement corridor under Building 42. No narrow-gauge tracks extant.

5. View north of basement tunnel running under Center Street to Dome Building. Evidence of narrow-gauge tracks present.


7. View east, basement tunnel, narrow-gauge tracks under Building 31.


10. Detail of typical dirt-covered tracks in tunnel running east-west between Building 46 and Building 59.

11. View west of tracks in east-west tunnel near former entrance to Evans Hospital building.

12. Detail of split tracks at entrance to tunnel under the former Evans Hospital site.

13. View west of narrow-gauge tracks leading into Building 46.


17. View south of narrow-gauge tracks leading from underground tunnels to Building 73.

18. View north of switch in tracks that lead to Building 73.

19. View east of narrow-gauge tracks leading into Building 73.
20. View east toward Building 61 showing section of tracks remaining on west side of building.

21. View of narrow gauge tracks bisected by sidewalk on west side of Building 61.

22. View east of segmented narrow-gauge tracks on north side of Building 58.

23. View west of segmented narrow-gauge tracks on north side of Building 58.
1. View north into tunnel under Building 49, connecting tracks to the basement.

2. View west, basement tunnel, narrow-gauge railroad tracks approximately under Building 63.
3. View west at termination of narrow-gauge tracks at the intersection of Buildings 47 and 48

4. View east of basement corridor under Building 42. No narrow-gauge tracks extant.
5. View north of basement tunnel running under Center Street to Dome Building. Evidence of narrow-gauge tracks present.

7. View east, basement tunnel, narrow-gauge tracks under Building 31.


10. Detail of typical dirt-covered tracks in tunnel running east-west between Building 46 and Building 59.
11. View west of tracks in east-west tunnel near former entrance to Evans Hospital building.

12. Detail of split tracks at entrance to tunnel under the former Evans Hospital site.
13. View west of narrow-gauge tracks leading into Building 46.


17. View south of narrow-gauge tracks leading from underground tunnels to Building 73.

18. View north of switch in tracks that lead to Building 73.
19. View east of narrow-gauge tracks leading into Building 73.

20. View east toward Building 61, showing section of tracks remaining on west side of building.
21. View of narrow gauge tracks bisected by sidewalk on west side of Building 61.

22. View east of segmented narrow-gauge tracks on north side of Building 58.
23. View west of segmented narrow-gauge tracks on north side of Building 58.
Part B: Existing Conditions Building 73 (Vegetable Storage)
PART B: Building 73 As-Built Survey, January 2009

Section I: Existing Conditions Photographs

Photograph 1.0: Exterior, facing Southeast, 2009.
Photograph 1.6: Exterior, Detail, West Elevation, 2009.
Photograph 1.7: Exterior, Detail, West Elevation, 2009.
Photograph 2.1: Interior, Basement Level, facing West, 2009.
Photograph 2.2: Interior, Basement Level, facing East, 2009.
Photograph 2.3: Interior, Detail, Basement Level, 2009.
Photograph 2.4: Interior, Detail, Basement Level, 2009.
Photograph 2.5: Interior, Basement Level, facing North, 2009.
Photograph 2.6: Interior, Basement Level, facing South, 2009.
Photograph 3.1: Interior, First Floor, facing West, 2009.
Photograph 3.2: Interior, First Floor, facing North, 2009.
Photograph 3.4: Interior, First Floor, facing West, 2009.
Photograph 3.5: Interior, First Floor, facing South, 2009.
Photograph 3.6: Interior, Detail, First Floor, 2009.
Photograph 3.7: Interior, Detail, First Floor, 2009.
Photograph 3.8: Interior, Detail, First Floor, 2009.
Section II: Existing Conditions Drawings

| A.1.1.1-P-S | Plan: Site       |
| A.1.1.2-P-V | Plan: Vicinity  |
| A.1.2.1-P-G | Plan: Ground Level |
| A.1.2.2-P-1 | Plan: First Level |
| A.1.2.3-P-2 | Plan: Second Level |
| A.1.2.4-P-R | Plan: Roof Level |
| A.1.3.1-RCP-G | Plan: Ground Level, Reflected Ceiling |
| A.1.3.2-RCP-1 | Plan: First Level, Reflected Ceiling |
| A.1.3.3-RCP-2 | Plan: Second Level, Reflected Ceiling |
| A.1.4.1-E | Exterior Elevations |
| A.1.5.1-EE-X | Exterior Elevations [Enlarged] + Section |
Section I: Existing Conditions Photographs
SECTION I - PHOTOGRAPHS

Photograph Key Legend

i.e., For Photograph 1.5, imagine standing in the middle of the circle and facing in the direction of the arrow, so that you would be looking to the Northeast. This is the direction the photograph was captured in 2009.

For Photograph 2.6, imagine standing in the middle of the circle and facing in the direction of the arrow, so that you would be looking due South.

Photograph Key: Upper Level

Photograph Key: First Level

Photograph Key: Ground Level
Photograph 1.0: Exterior, facing Southeast, 2009.


The circular element is a large steel plate and tie-rod that is connected back through the board-formed concrete wall to the wood structure on the interior. See Photograph 1.7 as a reference for where this exact tie-rod is located. Similar tie-rods are located along all walls at the same height, and in alignment with the interior structural column grids, see Floor Plans. These tie-rods were probably added as part of a seismic retrofit of the building years after original construction, due to the post-tensioning pressure cracks.
Photograph 1.7: Exterior, Detail, West Elevation, 2009.

View showing the rail tracks leading into the Basement level of the building through lateral sliding wood doors. The door above swings inward. Note the paint line, which is approximately where the construction switches from board-formed concrete on the Basement level and then brick masonry above. The archway above the large rail service door is cast in concrete.

See Photograph 1.6 for a description of the element circled.
View showing the rail tracks on the inside of the building. Note the 6-inch x 6-inch wood posts that parallel the tracks, running in an East – West direction spaced approximately in 10-foot wide bays. In the upper foreground of the photograph is a trap door that allows materials to be lifted from the Basement level to the Upper level.
Photograph 2.2: Interior, Basement Level, facing East, 2009.

View showing the rail tracks on the inside of the building. Note the wood slatted partition that attaches to the 6-inch x 6-inch wood post. These partitions are removable, and can be placed along any of the structural bays to create stalls of differing bay increments. The equipment parked in the middle of the building is used for general maintenance around the Oregon State Hospital campus and has a front bucket and rear mower blades.
View of the structural connection between a series of gravity-loaded structural lumber. These pieces of lumber are toe-nailed together and there are no steel connections, other than the end connections to tie-rods, see Photograph 1.6.

The 6-inch x 6-inch wood post in the basement with a 4-inch x 6-inch wood capitol that transfers the load from the 6-inch x 8-inch beams above into the post. The beams span differing lengths from two to three bays [approximately 20 – 30 feet] and always have their ends directly supported by a post and capitol, as shown here. The beams span in the East – West direction. The 5-inch x 5-inch post is from the First level, and penetrates the floor boards. The 2-inch x 12-inch joists at 16-inches on center support the First floor above. The joist span in the North – South direction from a wood ledger along the top of the North and South concrete walls, to the central wood beams. The joists length alternate between spanning approximately 10 or 20 feet, with a joint above the beam that ties one 10-foot joist to its sistered 20-foot joist.
Photograph 2.4: Interior, Detail, Basement Level, 2009.

View showing the base of the 6-inch x 6-inch post in the Basement. Note the ¼-inch x 1-inch C-shaped steel bar that is used to protect the base of the post from impact damage.
View of the North wall in the Basement level. The slat wall is spaced out from the board-formed concrete wall by a 2-inch x 4-inch wood stud placed parallel to the wall surface, hence creating a 2-inch space behind the slats. The slats are ¾-inch x 4-inch wood boards and reach a height of 7-foot 8-inches. Note the water along the ground, which is condensation from the cold concrete wall, which is below ground in this area. At the left and right of the photograph are pairs of 2x4’s that are attached to the slat wall, and allow for removable partitions be placed along any of the structural bays to create stalls of differing bay increments. [See Fig 2.2] At the top of the photograph it can be seen that the board-formed concrete wall steps back to accept a 2x4 wood base plate and wall-mounted wood ledger to receive and support the 2-inch x 12-inch joints.
View of the South wall in the Basement level. The slat wall is spaced out from the board-formed concrete wall by a 2-inch x 4-inch wood stud placed perpendicular to the wall surface, hence creating a 4-inch space behind the slats. The slats are ¾-inch x 4-inch wood boards and reach a height of 6-foot 10-inches. The wood provides a convenient surface for tools and equipment to be hung upon. The tools upon the table are mostly for fixing equipment that maintains the Oregon State Hospital campus.
Photograph 3.1: Interior, First Floor, facing West, 2009.

View showing the North brick wall with a pilaster that extends out from the face of the wall by one brick wythe [approx 3-1/2 inches]. There is a window beyond, see Photograph 3.2.
View of North window with brick pilaster to the right. Note the brick arch and wood transom. The opening is filled with a translucent corrugated fiberglass panel, which replaced the original window glazing. Below the window are an assortment of tires that fit various maintenance equipment and vehicles.
View of an ad-hoc cabinet on the First floor. The room beyond is in the Northeast corner of the building and is formed out of 2-inch x 4-inch wood stud walls that are covered with ½-inch x 4-inch wood boards on only the inside face of the wall. At the top and bottom foreground of the photograph are trap doors that allow materials to be lifted from the Ground level to the First and Upper levels.
View of the First floor interior facing the primary access door to the building on the East façade. Next to the exterior door is a orange painted steel ladder that provides access to the Ground level. The opening in the floor is protected by a simple steel railing and a removable length of chain with a hook and eyelet. To the left and right of the photograph are rooms enclosed with 2-inch x 4-inch wood stud walls that are covered with ½-inch x 4-inch wood boards on only the inside face of the wall.
Two cabinets that were used for impromptu storage of papers and materials in the building. To the right of the photograph is a wood bench leaning up against the South brick wall. To the left of the photograph is a door that leads to the outside. This door is approximately 7-foot 3-inches above the sloping soil and grass outside, see “South Elevation” drawing on Sheet A.1.4.1-E, Exterior Elevations and Photograph 1.3.
View of the structural connection between the 5-inch x 5-inch wood post on the First level with a 3-inch x 5-inch wood capitol that transfers the load from the 5-inch x 5-inch beams above into the post. The beams span two bays [approximately 20 feet] and always have their ends directly supported by a post and capitol, similar to Fig. 2.3. The beams span in the East – West direction. The 2-inch x 6-inch joists are 2-foot on center and support the Upper floor. The joists span in the North – South direction from the top of the exterior brick walls to the central wood beams. The joists length alternate between spanning approximately 10 or 20 feet, with a joint above the beam that ties one 10-foot joist to its sistered 20-foot joist. The hook was for a fire extinguisher that used to hang on this post, “#12”.

Photograph 3.6: Interior, Detail, First Floor, 2009.
View of the stair leading from the First floor to the Upper floor. The edge of the stair aligns with one of the wood posts. The stair is approximately at the center of the building, and leads up in the North direction.
Photograph 3.8: Interior, Detail, First Floor, 2009.

View of the 5-inch x 5-inch wood beam notched into a pocket in the exterior brick wall. Note that the top of the beam and top of the brick wall align since the joists that are supported by the beam are also supported at their ends by the brick wall.

View of diagonal 2-force wood chords that support the gable roof. These chords are nailed to every other 2-inch x 6-inch roof rafter and toe-nailed into the floor boards, which align with the joists below. Beyond is a 2-inch x 8-inch ‘kicker’ board that cants up at an angle to stop things from rolling into the area at the base of the roof towards the eaves, which are open to the First floor below. The roof itself is composed of 1-inch x 6-inch ‘skip’ sheathing with 4-inch spacing.
View of fruit and vegetable crates. The West end of the Upper level is stacked full with them. The East side of the Upper level is used to store miscellaneous length of pipe and other maintenance materials.
Section II: Existing Conditions Drawings
Oregon State Hospital
Building 73
Vegetable Storage

GROUND LEVEL REFLECTED CEILING PLAN

NOTES:

1. Ceiling heights and stairwells are shown.
2. See schedules for equipment locations.
3. Lighting and electrical fixtures are shown.
4. Access doors and windows are indicated.

DRAWING NO.: A431-RCP-G

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PROJ. NO.: A431

DATE: JANUARY 2024

ISSUANCE:

DESCRIPTION:

REVISIONS:

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