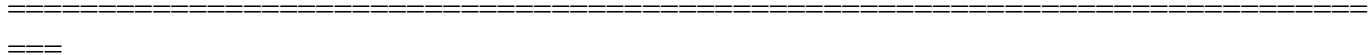


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Narrative Description

Reservoir 1, built in 1894, and Reservoirs 5 and 6, built in 1911, are located in 196-acre Mount Tabor Park in southeast Portland. The reservoirs, along with Reservoirs 3 and 4 in Washington Park located six miles due west across the Willamette River in Portland's west hills, provide storage and delivery of Portland's water in a gravity fed system from the Bull Run watershed in the Cascade Mountains east of the city. This system is little changed since its construction in the 1890s and still provides most of Portland with its water supply. Mount Tabor Reservoir 2, also built in 1894, was taken off line and sold in 1990 to a developer. Mitigation required retention of Gatehouse 2, sold to a private individual. An Historic American Engineering Record report was completed along with its acceptance to the National Register of Historic Places.

The Mount Tabor Reservoirs Historic District nomination consists of fifteen resources: seven contributing buildings (Gatehouse 1, Gatehouse 5, Inlet Gatehouse 6, Outlet Gatehouse 6, Weir Building 1, Weir Building 5, Covered Storage Tank Building), four contributing structures (three basins with their parapet walls, fences, lampposts and walkways, Covered Storage Tank), one contributing object (fountain at Reservoir 1), two non-contributing buildings (Out Building 5, Chlorination Building 6), and one non-contributing structure (Pump Station between Reservoirs 5 and 6).

Mount Tabor is one of numerous small volcanic buttes stretching between the foothills of the Cascades to the east and the northern Willamette Basin to the west. It is one of two volcanoes located within the limits of a city in the United States. (The other being in Bend, Oregon.) Mount Tabor is double-crested with an elevation of 640 feet. It was apparently not identified as volcanic by the white settlers until after the site was chosen for its elevation and location for the reservoirs in the 1880's. The Water Committee encouraged the taking of the land by the city of Portland. In 1909, when plans were made for a new pipeline from Bull Run, the land was obtained for the creation of Reservoirs 5 and 6 and land was also purchased for the park. Presently, Mount Tabor Park is a green island amidst a prime residential area in southeast Portland and is a major Portland landmark visible from all directions. Reservoirs 1, 5 and 6 are located on the south, higher west and lower west sides of the hill, respectively. Predominantly forested, the area around the basins of the reservoirs has been kept clear of trees with the use of grass and other groundcovers, so that the reservoirs and the deep water they hold afford vistas areas of the city framed with the surrounding towering evergreen and deciduous forest.

The Mount Tabor parkland provides tennis, picnicking, playgrounds, bicycling, a soapbox derby track, horseshoe pits but is most popular for walking and jogging. The original design of the park, as developed by

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Emanuel T. Mische, a former employee of the Olmsted firm who was retained as Portland's park superintendent from 1908 to 1915, included a series of curvilinear roadways and paths through a predominant forested parkland highlighting views of the city and the reservoirs. Since the 1970s, the Reservoir Loop Drive has been closed to public vehicular traffic making Mount Tabor Park a prime location for pedestrian and wheeled recreation, especially the walkways around the reservoirs, which are favorite areas for pedestrians, providing lighted access in early mornings and evenings. Grassy areas around the reservoirs provide informal picnic and lounging opportunities with good views to the north, south, and west. Each reservoir, with its deep, open water and individual design and location, provides a different feeling.

The Romanesque tower-styled Gatehouses, associated buildings, basins, and parapet walls of all of the reservoirs are of reinforced concrete. The Gatehouses and Weir Buildings were constructed of poured form concrete with the appearance of stone blocks made possible by wooden forms. The parapet walls are topped with decorative wrought iron fencing. Though harmonious, differences in style details exist between the 1894 and 1911 gatehouses and fences. All of the resources are in good to excellent condition with the primary alterations consisting of electrical conduits attached to the parapet walls and buildings and modern lighting that encircles the basins.

Originally water was delivered to Reservoir 1 by one main riveted steel conduit. Presently, water is delivered to Reservoir 1 via two main conduits. A third conduit can also feed Reservoir 1, but is commonly bypassed to go directly to Reservoir 5. Two pipes leave Reservoir 1 at the northwest corner of the basin through sluice gates traveling through a tunnel to emerge into the southeast section of Reservoir 5. Built at the same elevation as Reservoir 1, Reservoir 5 can work in tandem with Reservoir 1 via piping through the tunnel system. Two main conduits and two lines from Reservoir 1 feed directly into Reservoir 5 via the Reservoir 1 Gatehouse and the Reservoir 5 Weir Building. Reservoir 5 feeds Reservoir 6 through gravity piping in a tunnel extending to a buried pump house located halfway down the hill between Reservoir 5 and 6. This pump house supplies water to a covered storage tank, a smaller concrete cistern near the summit of Mount Tabor. Water leaves Reservoir 1 through the Gatehouse via pipeline to Southeast 68th Avenue and the Vernon area and pipeline to Reservoir 3 in Washington Park southwest Portland. Water leaves Reservoir 5 via three routes through the Gatehouse, a supply line to Vernon in N.E. Portland, a line to Reservoir 6, and a drain line. These lines serve the Southeast Hawthorne and Southeast Lincoln Street areas. Washdown piping is routed around the reservoirs and is discharged through a drain line in the gatehouses. Drainage for all the reservoirs is connected to the city sewer line.

Reservoir 1, is smallest and tucked into a ravine, provides an intimate experience with the deeply-hued water,

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forest, and romantic Gatehouse and Weir Building. Views south are possible from the top of the stairs descending the dam face. Reservoir 5, centrally located and with a variety of paths and service roads passing by, affords grand views across the water of the western cityscape, the expanse of the Forest Park's western hill line from the city stretching thirteen miles to the north, and a sweeping expanse of northwest, southeast and northeast Portland, including all of the city's most famous landmarks. Because of access by the main Salmon Street park entrance, Reservoir 5 is a key meeting place in Mount Tabor Park and the Gatehouse can be seen from across the Willamette River while traveling east up Hawthorne Boulevard. In darkness, the lights encircling the basin of Reservoir 5 are visible from across the city. Reservoir 6 is the lowest, largest, and most accessible reservoir in the system. The six tenths of a mile walkway around the reservoir is one of the most noted areas for jogging, walking, and stroller pushing and is used by a number of schools for athletic training. Reservoir 6 provides views from all directions of a large expanse of deep water with the reflected Gatehouses. Trails above Reservoir 6 and up the hundred stairs that climb between Reservoir 5 and 6, provide grand vistas of the city and the surrounding neighborhood. All of the lighted basins, with reflection in the deep water of the reservoirs, provide inspirational evening views for park users. Altogether, the reservoirs offer close to 20 acres of deep open water views.

RESERVOIR 1

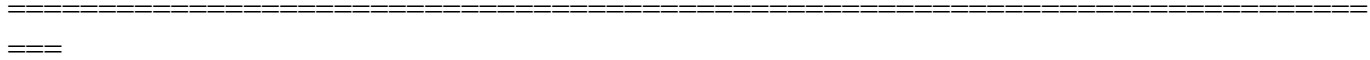
Reservoir 1, built in 1894, predates Mount Tabor Park by fifteen years. The construction of this first reservoir coincided with construction of the Bull Run system and Reservoirs 2, 3 and 4. Reservoir 1, on the southern flank of Mount Tabor, sits in an excavated hillside, at an approximate elevation of 411.6 feet above the low water level of the Willamette River. The original site purchased was about 3.5 acres with the reservoir basin encompassing 1.63 acres. Access to the reservoir is gained by foot from the intersection of Reservoir Loop Drive with Water Bureau Road from the northwest or from the south on Southeast Lincoln Street up a flight of 50 stairs. The reservoir is comprised of a basin, dam, parapet wall with wrought iron fence, a concrete walkway, Gatehouse, Weir Building, inlet waterfall, spring fed fountain, and several small outbuildings. Plantings around Reservoir 1 include ivy and blackberries on the surrounding embankments, fir, cedar, and deciduous trees and some ornamental shrubbery on the dam in front of the Gatehouse, referred to as the Terrace Garden in the preliminary plan for the park published in 1911, and along the walkway to the Weir Building. Reservoir 1 has an intimate feel, being substantially smaller than the other reservoirs and tucked into a ravine. North of the basin is a mowed, grassy area with mature big leaf maples flanked by one of the main trails up to the top of the butte. This area provides a grand view of Reservoir 1 including the Gatehouse and Weir Building. Other views exist from the trail paralleling the Reservoir Loop Drive, from Water Bureau Road and Reservoir Loop Drive west of the basin, from the Gatehouse and Weir House areas, and from the

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walkway encircling the basin. The north and west accesses also provide views of Reservoir 5. A defining feature of the natural amphitheater that the Reservoir sits in is the water sounds that are afforded by the waterfall entering the southwest side of the basin adjacent to the Weir Building.

Contributing buildings, structures, and objects

Basin and Accompanying Features

The basin was formed by a natural ravine, excavated and built so that the sides could conform, with minor modifications, to the existing slopes with an approximate slope of 1:1. A 319-foot long dam, 20 feet thick at its base, 6 feet thick at its top and backed by earth and rock to a thickness of about 100 feet, forms the south face of the reservoir basin, and is topped by an outlet Gatehouse. At the west end of the dam, a concrete Weir house is constructed. The top of the dam retains the park-like features of a mature formal-style landscape composed of shrubs and walkways. Concrete stairs with an iron handrail climb the grassy dam face from the roadway below, arriving at the Gatehouse and landscaped area. Looking to the south from the top of the dam at the Gatehouse provides a view of southeast Portland. The basin is constructed of cast in place reinforced concrete using the Ransome system of twisted iron bars placed ten feet on center in each direction and anchored at 10 foot intervals by iron anchors driven to a depth of 3 to 20 feet into the slopes and embedded in concrete. The thimble shaped basin is 250 feet wide east and west at the southern end with a parabolic curve to the north. At its longest point, it is 350 feet north and south. It has a water storage capacity of 12-14 million gallons. Water depth is up to 33 feet, making it the third deepest reservoir in the system. The basin of Reservoir 1 appears to be original with spalling and cracking. It could benefit from resurfacing but is still functional and in satisfactory condition.

Surrounding the basin is a parapet wall with raised diamond motifs set in recessed panels along the front, south-facing side. A wrought iron fence encircling the basin atop the parapet wall is made up of 1-inch square uprights about 6 feet high, with tops hammered into spear shapes. Double-scrolls are screwed on to secure the uprights to cross bars. Every other bar is approximately 4 inches taller and on these bars are two 3-inch hammered leaves. These are forged opposite of each other from two sides of the metal bar. At approximately twelve-foot intervals are taller bars. These have ball decorations below spear-shaped tops and are braced against the parapet with curved iron bars on the waterside of the wall. The fences for Reservoirs 1, 3, and 4 were identical and were designed by prominent architects, Whidden and Lewis, who went on to design Portland City Hall. The wrought iron work was done by a celebrated local craftsman, Johan Trueck. Like the basin, the parapet wall has spalling and cracking, but is sound and in relatively good condition. The fence is

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sound but is in need of refinishing.

Around the basin is a concrete walkway designed to afford “a delightful promenade” for visitors. Modern brushed aluminum street lamps with conical shades have been installed surrounding the walk. They provide lighting for pedestrians and the security cameras. Adjacent to the path is a culvert with catch basin which provides for site drainage. The walkway needs some concrete repair but it, too, is in relatively good condition.

Fountain

At the north end of the reservoir is a small, apparently spring fed, concrete fountain. Set into the hillside on top of the short concrete retaining wall that encircles the reservoir, the basin about 1 foot in diameter and 8 inches deep sits in an arched niche facing the reservoir. The date “1894” is inscribed on the modestly decorated arch. A small wrought iron step to the fountain imbedded in the concrete, allowed a perch above the drainage culvert affording access to the water basin. Below the step, an small overflow pipe emerges. A small wrought iron hook, probably installed for holding a drinking cup, is found in the concrete on the top of the arch in the left corner. Surrounding plants include horsetail, *Equisetum sp.* and rushes *Juncus sp.*, both native plants indicative of water seepage. Although cracked in places and in need of concrete repair, the fountain is functional and in satisfactory condition.

Gatehouse

The Gatehouse is located in the middle of the dam at the south end of the basin facing south. Romanesque in style, the oval shaped building is faced in rusticated reinforced concrete with a flat slightly projecting roof. Although made from poured form concrete, the wall surface gives the impression of rock due to wooden formwork constructed to give the concrete outlines of stone blocks. The concrete surface was bush-hammered and tooled as if it were natural stone. On each side of the south facing door are two “blocks” giving patent numbers for the concrete construction: Ransome’s Patent Construction 305229 and Ransome’s Patent Concrete Finish 105800.

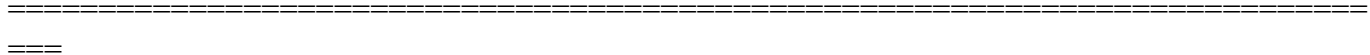
The Gatehouse has a pronounced water table and double hung wood-sash round arch windows, four over four, with rusticated concrete sill and surround. Metal screens were installed over the windows in the 1980s. The building has a double door on the south, accessed via a five-step concrete stairway. This door is similar in design to the windows with a wood sash fanlight and rusticated concrete surround; the original wood paneled doors were replaced in 1987 with metal doors. To the west of the door there’s a decorative wrought iron vent built into the south face of the building. Below its slightly projecting roof slab is a paneled frieze, and below

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that a corbelled band. On the north elevation of the gatehouse is a platform with original valves. The north elevation of the Gatehouse has an exterior steel access platform for the sluice gate operator.

The interior of the Gatehouse is in original condition. Original equipment includes; tanks, gauges, piping, cranks, valves, sluice gates, etc. Though not all of it is still functional, all of the equipment is original. Repair is needed in some places where bits of the reinforcing metal bars have been exposed. Some cracking on the outside of the building is visible but the Gatehouse is sound and in good condition.

Weir Building

At the southwest corner of the basin is a Weir Building (now referred to as the inlet chamber), built in 1923. Stylistically similar, the building blends into the setting. Rectangular in form, its concrete cornice and wall treatments are similar to those of the 1894 Gatehouse. Windows are square-headed, with six-over-six, double hung sash. Originally this building functioned as the inlet chamber or screening room to remove debris from water delivered from Powell Butte. The screens were dismantled and removed in the 1930s. Reservoir 1's Weir Building is in good condition with some repair needed where the reinforcing metal bars are exposed through the concrete.

Though little maintenance has been done on the Reservoir 1 site construction work is sound and maintenance reports from 2002 list the resource in good condition.

RESERVOIR 5

Located north and west of Reservoir 1, Reservoir 5 is comprised of a basin, dam, parapet wall with decorative wrought iron fence, a concrete walkway, Gatehouse, Weir Building (now the hypochlorite building), and inlet waterfall. A non-historic outbuilding is also associated with Reservoir 5. Built at the same elevation, a tunnel was constructed between Reservoir 5 and Reservoir 1 so that they could work as one reservoir since this elevation was considered the most useful for delivery by the gravity system. The Gatehouse is found at the center of the west end on top of the dam, with an access drive from the western foot of Mount Tabor via Southeast Salmon Street and Reservoir Loop Drive. This drive is open to the public for foot traffic and official city vehicular access. The loop roadway on the dam is a popular spot for park users who linger on the steps of the Gatehouse for views of the sunset and the city. The loop road travels along the west side of the reservoir encircling the hillside to the south of the site and then arrives above the east side. From the loop, the soapbox derby track that parallels the loop road and the trail that climbs to the top of the hill opposite

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Reservoir 5, picturesque views are afforded across the reservoir with the Gatehouse reflected in the water overlooking the city. The Reservoir Loop Drive was constructed to highlight vistas afforded across the deep water of the reservoirs. Water sounds are created by the inlet waterfall on the southwest side of the reservoir adjacent to the Weir Building. Plantings on the slopes to the north, east and south include large fir trees, flowering cherries, ground cover and several varieties of shrubbery arranged in naturalistic groupings. On the grassy western aspect, many people congregate on the grassy walls above the basin to enjoy the views, the water sounds, and the sunshine. A bench has been recently constructed above the loop road to accommodate the grand vistas of the city skyline across the reservoir.

Contributing buildings, structures, and objects at Reservoir 5

Basin and accompanying features

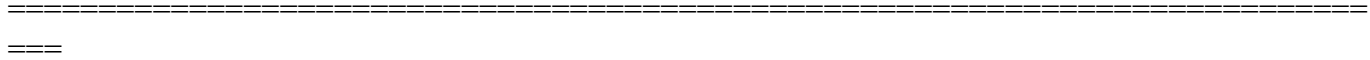
The basin of Reservoir 5 was formed by excavation of a natural shoulder on the western flank of Mount Tabor. The other sides were built to conform, with some modifications, to the existing slopes. The basin's dimensions were designed to use as much of the area as possible as this elevation was deemed to be the most useful for water delivery throughout the city. The kidney shaped reservoir basin is 460 feet east and west, and 750 feet north and south. The six-acre reservoir basin has a water storage capacity of 49 million gallons at a depth of 31 feet. A straight-line 362-foot long wall of reinforced concrete backed by earth and rock forms the west dam face of the basin. The earth was acquired from the excavation of the basin. It was estimated that over 210,000 cubic yards of earth were to be removed, but only 30,000 necessary for the dam. Park Superintendent, Emanuel T. Mische, agreed that some of the surplus material could possibly be used in the construction of the roads in the newly acquired park. Surplus earth was deposited on the slope of the hill between the sites of Reservoir 5 and 6, making it steep. Park plans included using the incline in a grand scheme of cascading waterfalls between the high and low service reservoirs to provide aeration of the water, hydroelectric generating power, and a park amenity. An open waterfall was never realized, however, at present a hydroelectric facility does generate power and a steep set of over one hundred stairs climbs the dam face dissecting the chain link fence that the Water Bureau erected in the mid-1990s. The dam is topped with the Reservoir Loop Drive, now closed to public vehicular traffic. At the north end, a locked gate limits vehicle access from the main Southeast Salmon Street entrance that becomes the Reservoir Loop Drive, that winds on up into the park. The Gatehouse sits in the middle of the dam facing west. The basin was constructed of cast-in-place concrete panels with caulked joints and "waterproofed concrete." This lining was prone to leaks and as early as 1914 its joints were overlaid with burlap and asphalt. In 1998 it was lined with a Hypalon membrane. Studies on the basin before the installation of the liner showed the original construction to be

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sound with leaking primarily at the joints between panels.

Surrounding the basin is a concrete parapet wall topped by a wrought iron fence made up of one-inch square uprights with tops hammered into spear shapes. Uprights are of alternating heights. Double scrolls secure the uprights to the crossbars. Newel posts are composed of one-inch square iron bars and connected by variously scrolled ironwork. The posts are now topped by large iron balls but originally served as pedestals for lampposts, identical to the ones on Reservoir 6. The wrought iron light posts and fixtures reportedly are stored in the Gatehouse. The fence is similar in design to the wrought iron fence encircling Reservoir 1 without the forged leaves on each upright. At the time of the liner installation in 1998, the fence was removed, sandblasted and refinished with epoxy and polyurethane. Lighting today is provided by contemporary rectangular lighting standards installed in 1987. Though not of the historic period, they do provide the light that was originally designed to make the reservoir accessible at dawn and evenings and their reflection in the deep water, with the city skyline as a backdrop, is a defining feature of Mount Tabor Park. The ring of lights, halfway up the Mount Tabor butte is also visible from across the city and is a Portland landmark. Surrounding the basin is a concrete walkway designed for pedestrian access and to carry storm water away from the reservoir. The parapet wall is in good to excellent condition. The fence is in excellent condition though the wrought iron lampposts should be reinstated. The walkway is in good condition.

Gatehouse

The Romanesque tower-style Gatehouse is oval in shape, faced in rusticated reinforced concrete with a corbelled crenellated parapet. The wooden forms used were designed to mimic stone block construction as in all of the other gatehouses. Original plans show the finish was to be bush hammered to match the earlier reservoirs, but this was never carried out. It has a pronounced concrete water table. Windows are double hung wood-sash arched windows, four over four, with projecting concrete sill and surround. Metal screens were added to the windows in the 1970s. The building has a double door on the south, accessed via a five-step concrete stairway. This door is similar in design to the windows with a wood sash fanlight and concrete surround; the original wood paneled doors themselves however were replaced in 1987 with metal doors. Five concrete steps provide access to the building.

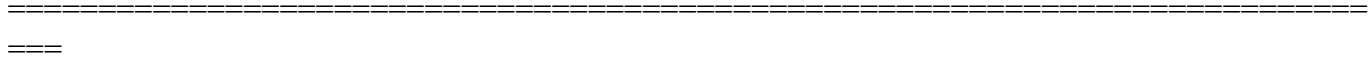
The interior of the Gatehouse is in nearly original condition. It holds original overflow piping, tanks, sluice gates, valves, drains piping, supply and distribution piping, and a weir. It also contains newer equipment, office and restroom. The Gatehouse is in good condition.

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Weir Building

To the south of the Gatehouse on the southwest edge of the basin is the 1951 Weir Building (Hypochlorite Building.) It is sympathetic in design and materials, and similar if less elegant than the original Gatehouse. The rectangular building is constructed of poured concrete shaped to appear as stone with simulated stone quoins. The crenellated parapet contributes to the overall Romanesque style and it is nearly identical to the rectangular Gatehouses at Reservoir 6. Windows are four over four double-hung wood sash. Metal screens were added to the windows in the 1970s. Various kinds of mechanical equipment protrude from the roof parapet and the north elevation. In 1994, hypochlorite equipment for secondary disinfection was installed. The Weir Building now functions as a booster hypochlorite facility which can provide sodium hypochlorite to outlets and inlets of all three reservoirs. This facility also provides hypochlorite to Reservoir 3 in Washington Park. The interior of the building holds no known historic equipment. A generator is located in this building. The Weir Building is in good to excellent condition.

Non-contributing Buildings/Structures at Reservoir 5

Out Building

A small rectangular concrete non-historic building is located at the northwest end of the Reservoir 5 basin. It is set back into a concrete block retaining wall built into the south facing slope of the basin. There's a metal door on the south elevation and a vented window on the west elevation. There is a slight overhang to the flat roof.

RESERVOIR 6

Reservoir 6 is located in Mount Tabor Park on the west slope, approximately at an elevation of 305 feet above the low water level of the Willamette River. Completed in 1911, Reservoir 6 was built west of and with a 100 foot drop directly below Reservoir 5. Reservoir 6 is comprised of a basin with surrounding parapet wall, wrought iron fence, concrete walkway, two Gatehouses, and a small non-historic outbuilding. Access to Reservoir 6 is via paths off Southeast 60th Avenue, various trails within the Park, or a series of one hundred concrete steps between Reservoir 5 and 6, originally designed to be a hydroelectric generating waterfall. Surrounding landscape is primarily manicured lawn with mature Lombardy poplars, a mature hawthorn grove, and a towering sequoia on the east side. Private residences border the reservoir on the north and south sides. A row of mature conifers is planted on the western dam face above Southeast 60th Avenue. A tennis court, built in the northeast corner above the basin, overlooks the reservoir to the south. The north and south

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property adjoins the backyards of residential homes on Southeast Stephens Street and Southeast Main Street. The area encompassing Reservoir 6 is one of the most popular in Mount Tabor Park. Being the lowest reservoir site with adequate lighting and walkway, it attracts many park users of various ages and abilities. Because of the large expansive view of open water and the attractive Gatehouses, Reservoir 6 provides magnificent scenic vistas into and out of the park. The view looking west from Reservoir 5 above provides a unique view of the historic Mount Tabor neighborhood and the city of Portland skyline.

Basin and accompanying features

The basin is rectangular in shape, 600 feet east and west, and 875 feet north and south divided by a concrete wall into two 22-foot deep cells making it possible to use one side at a time. The twelve-acre reservoir has a capacity of 75 million gallons. Unlike Reservoirs 1, 3, 4 and 5, Reservoir 6 was not located in a natural ravine. Its site originally sloped fairly evenly from east to west. Earth excavated from the eastern portion and basin was used to create berms along the western side. The outer slopes were to be of a “moderate angle” so that they could be properly treated as part of the park landscape. The grassy slopes of the dam drop down to the sidewalk along Southeast 60th Avenue.

The basin is lined with concrete poured in place in 15 by 20 foot sections. Concrete beams were run underneath the joints between the sections. The basin is currently lined with asphalt. Water jets that can send a fountain of water up to 75 feet high were located in the center of each half of the basin originally intended for the aeration of the water and beauty. According to reports the north fountain was dismantled in 1997. Typically, only one of the two cells is in operation at a time, though water can be stored above the center wall giving the appearance of one entire reservoir. Reportedly the basin is good condition with some cracking. The original dividing wall also has some cracking but is in good condition.

Encircling the basin, the original concrete parapet wall is topped by an original ornamental wrought iron fence. The fence design is identical to that of Reservoir 5. Iron bars of alternating heights, with their tops hammered into spear shapes are attached to cross bars by double-scrolled iron bars. Newel posts are composed of one-inch square iron bars and connected by variously scrolled ironwork. Some newel posts are topped by iron balls. Others serve as pedestals for lampposts that encircled the reservoir. The lampposts are also made up of scrolled bars. Arms for two glass globes extend from an iron ball at the top of this standard. There are presently no globes in place. Lighting is provided instead by contemporary lampposts installed to completely encircle the basin in 1987. As is true for Reservoir 5 and Reservoir 1, the modern lamps do not add to the period architectural features, but they do serve the original purpose of making the walkways accessible for

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dawn and evening visitors as well as providing lighting for the security cameras. They add an element of beauty with their light reflecting in the deep water of the reservoir. The parapet wall, fence and walkway are in good condition, though refurbishing is warranted.

Inlet and Outlet Gatehouses

At opposite ends of the wall running across the basin are two nearly identical poured form, reinforced concrete structures, an Inlet Gatehouse to the east and an Outlet Gatehouse on the west. The Inlet Gatehouse, painted white at some unknown time, was designed to accommodate a small hydroelectric turbine and is slightly larger than the Outlet Gatehouse. Electricity can be marketed from this facility and it can be used as backup power to the pump station and other needs in case of a power-outage. Original plans show the finish was to be bush-hammered to match the earlier reservoirs, but this was never carried out. The upper portions of the wall are corbelled below the crenellated parapet. Windows are wood, square-headed, with four over four, double-hung sash. The original plank doors with wrought iron hinges are in place at the inlet Gatehouse on the east. Those on the west Gatehouse have been replaced with metal doors. The interior of the Gatehouses contains original valves, sluice gate, piping, flap valves, and overflow piping. Both Gatehouses have exterior steel access platforms for the sluice gate operators. Water enters the Inlet Gatehouse providing power to the small hydroelectric facility. Water is delivered directly to the distribution system via pipes on each side of the Reservoir. Hosebibs are located around the perimeter of the basin for washdown.

The Gatehouses are in good condition with some cracking and spalling of the concrete. Some metal features need repair.

Non-contributing Buildings/Structures at Reservoir 6

Chlorination House

A small concrete non-historic Chlorination House is located east of the Inlet Gatehouse at Reservoir 6. This rectangular building has a flat roof with a wide overhang on the west elevation and smaller overhangs on the other 3 elevations. A metal door accesses the north elevation. The north, west, and south elevations have long, linear rectangular windows with decorative metal grates. The west elevation has an access entry built like a window with double hung hinged doors.

Mount Tabor Pump Station

Located between Reservoirs 5 and 6 along the route of the hundred steps that climb between Reservoir 5 and 6

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is the Mount Tabor Pump Station, a small metal unit on a concrete slab. Water from Reservoir 5 arrives at the pump station via gravity and the electric pump delivers water to a variety of locations in the system, including the covered storage tank on the north side of Mount Tabor.

Discontiguous Contributing Features

Included in the period of significance and associated with the Mount Tabor Reservoirs Historic District is another small “reservoir” and its associated building.² Constructed in 1912, conflicting information exists regarding the use of this tank and building. Discontiguous from the other resources, it is located near the peak of Mount Tabor on the northern slope at an elevation of about 590 feet. It is situated on the main east side path to the northwest of the steps to the summit of the butte.

Tank

The site includes a circular in-ground concrete tank with a concrete top. Another smaller circular concrete cap is attached to the large top on the north end of the structure giving the appearance of an “8” to the top of the structure. On the south end of the cap is a concrete rectangular structure.

Building

A small flat-topped, irregular-sided concrete building, painted green, is set into the north-facing hillside a few steps south of the tank. A romantic style is achieved with the round arched doorway and its matching wood plank door that provides access to the building on the north elevation. Other decorative features include the basalt block cornice. The side elevations have square wood framed vents. These are covered with iron grilles. This building reportedly contains irrigation equipment for the park.

Details regarding the covered storage tank are sketchy. In an accounting from a 1913 parks report an electric pump plant was being installed at the reservoir for delivering water to the attic tank in the residence on top of Mount Tabor, now demolished, which had been converted to a public comfort station. Water Bureau personnel currently report that there is no pump at the storage tank, as water is distributed by gravity. Some reports list its function as a tank for the park’s irrigations system holding 200,000 gallons of water. A more recent accounting by Water Bureau personnel confirm construction in 1912 and suggest that this is a reservoir serving approximately 850 water customers at the highest elevation in the Mount Tabor neighborhood. According to this report, water is delivered to the storage tank through a 12-inch pipe from the pump station located at the base of Reservoir 5, east and above Reservoir 6. The water is pumped from the outlet line that comes from Reservoir 5. A 12-inch pipe heads east from the storage tank to Southeast 71st Avenue, and an 8-

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inch pipe heads north from the tank to Southeast Yamhill Street to feed the distribution system. The building and tank are in good condition with little apparent modification.

Associated Landscaping at Mount Tabor Reservoirs Historic District

Striking vistas of the city skyline and west hills over the large bodies of deep, sparkling water are the most defining landscape characteristic of Mount Tabor Reservoirs 5 and 6. Reservoir 1, located in a steeper basin, has a more intimate feel with the towering coniferous forest reflected in the deep water. After dark, pleasing views of reflected lights in the waters of the reservoirs are afforded. Generally, low maintenance landscape with some mowed lawn, ivy, blackberry, and other low shrubby plants growing on the steep sides of the basins predominate at the site Reservoirs 1 and 5. Reservoir 6, without the ravine setting, is surrounded by mowed areas. Mature trees and shrubs requiring little care occupy areas away from the basins. The discontinuous covered storage tank is located along the concrete steps that ascend the summit through a mowed, forested area.

Reservoir 1 has remnants of a formal garden called the Terrace Garden on the 1912 map of Mount Tabor Park. Mature shrubs and trees, among them, *Rhododendron spp.*, witch hazel *Hamamelis virginiana*, *Cotoneasters.spp.*, cypress *Chamaecyparis spp.*, juniper *Juniperis media pfitzeriana* and red cedar *Thuja spp.*, run east and west across the dam face south of the Gatehouse. The steep basin walls are predominantly covered with English ivy *Hedera helix*. To the east and west of the basin native forest of Douglas fir *Pseudotsuga menzeisii* and big leaf maple *Acer macrophyllum* are most common. On the inside of the Water Bureau Road, on the west ridge above the basin, a row of California bay laurel, also called Oregon myrtle, *Umbellularia californica*, are planted amidst ivy. To the north is a groomed grassy hillside with a few mature big leaf maple trees. This area provides good southerly views overlooking the reservoir and the southeast portion of the city.

Encircling the basin at Reservoir 5, Himalayan blackberry *Rubus discolor* (syn. *Procerus*) and English ivy *Hedera helix* predominate. To the north of Reservoir 5, behind the unnamed building, star magnolias *Magnolia stellata*, mature hawthorns *Crataegus spp.*, and immature sequoias *Sequoiadendron giganteums* are planted. The eastern rim of the basin, below the soap box derby track, is an expanse of mowed lawn with a line of Japanese cherries *Prunus spp.*, equally spaced giving a formal look especially in the spring bloom time. The south basin is flanked by a tall, mature Douglas fir grove giving way to the naturalistic forest that predominates in the park. The west side of the reservoir area is composed of the dam topped with the Reservoir Loop Road. To the south of the Gatehouse mature cedar *Cedrus spp.* and California bay laurel

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grow. The dam face on either side of the steep stairway has been contained within a chain link fence since the mid-1990s. Most trees were removed and the area was left to naturalize with blackberry and other common weedy species predominating. There are some mature trees, a pear *Pyrus communi* (perhaps a remnant from the pear orchards that preceded the park in the Mount Tabor area during the 1800's when tons of fruit were shipped to the Bay Area during the California Gold Rush) and flowering crabapple *Malus spp.*

Above Reservoir 6, below the fence line, a footpath dissects the hillside from north to south through a mature hawthorn *Crataegus spp.* grove interspersed with other species such as native wild cherries *Prunus emarginata*. South of the hawthorn grove, is a grove of mature lombardy poplars *Populus nigra Italica* that give a striking golden display in autumn. A predominating feature below the trail overlooking Reservoir 6 is a massive sequoia tree, a native California species common to the Mount Tabor neighborhood. The flat north side of the reservoir sidewalk is lawn that gives way to the backyards of residential properties. The south side, built on fill, is primarily sidewalk with a steep drop down the dam face to residential backyards. The western sidewalk flanking the reservoir drops off into ivy and then onto a grassy shelf that is planted with a row of mature true cedars *Cedrus spp.* trees along Southeast 60th Avenue. Steps climbing up the dam face from the sidewalk adjacent to the Southeast 60th Avenue approach the Outlet Gatehouse.

The covered storage tank, on the north slope of Mount Tabor, is in a mowed clearing surrounded by a mature grove of Douglas firs *Pseudotsuga menziesii* and big leaf maples *Acer macrophyllum*. From this site, through the trees, is a view down the forested slope to the Reservoir Loop Road, the play ground, picnic shelter, and main parking lot of Mount Tabor Park.

Summary Statement of Integrity

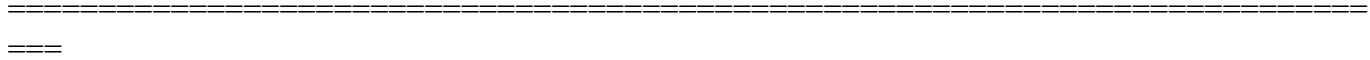
The Mount Tabor Park Reservoirs remain today largely intact and in as-built condition. While the basins have been relined numerous times, the character-defining elements such as deep open water, parapet walls, iron fences, and gatehouses exist today without modification or inappropriate adjacent development. General deferred maintenance of the concrete and metal is needed on all of the resources. The Reservoir 1 site has been the most neglected with corrosion of the fence and spalling along the parapet walls and basins being most notable. The buildings at Reservoir 1 need some restoration in places where the reinforcing metal bars have been exposed. Although modern modifications such as full hollow-core metal doors have not been sensitive to the architecture, the Reservoirs significantly retain their Romanesque styling. The 1980s era aluminum light fixtures surrounding the basins do not match the period, yet their illumination and reflection in the water after

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dark provides a connection with the original design that included light fixtures. The period lampposts should be refurbished and used to provide lighting. Also, the interiors of the buildings are predominately intact including the mechanical equipment.

Though the Reservoirs are 109 and 94 years old, they continue to function as a primary water source for Portland. Protection of the watershed coupled with a well designed distribution system has given Portland high grade water since 1895 when it first flowed to the city's faucets. The following remarks are taken from recent reports on the district and offer a good overview of the resource:

No waterborne disease outbreak or water quality incident of public significance has ever been recorded in connection with Portland's open reservoirs...¹ All features in good condition. ...a detailed maintenance program could extend the useful life of the open reservoirs to the year 2050.²

¹ Montgomery Watson Harza. Open Reservoir Study: Phase I Summary Report. City of Portland, January, 2002.

² Montgomery Watson Harza. Open Reservoir Study, Draft TM 5.7 Facilities Evaluation, City of Portland. August, 2001.