

**Report: Disabled Access for James Edoff Memorial
Bandstand**

Prepared for the City of
Oakland

Revised 5/8/07



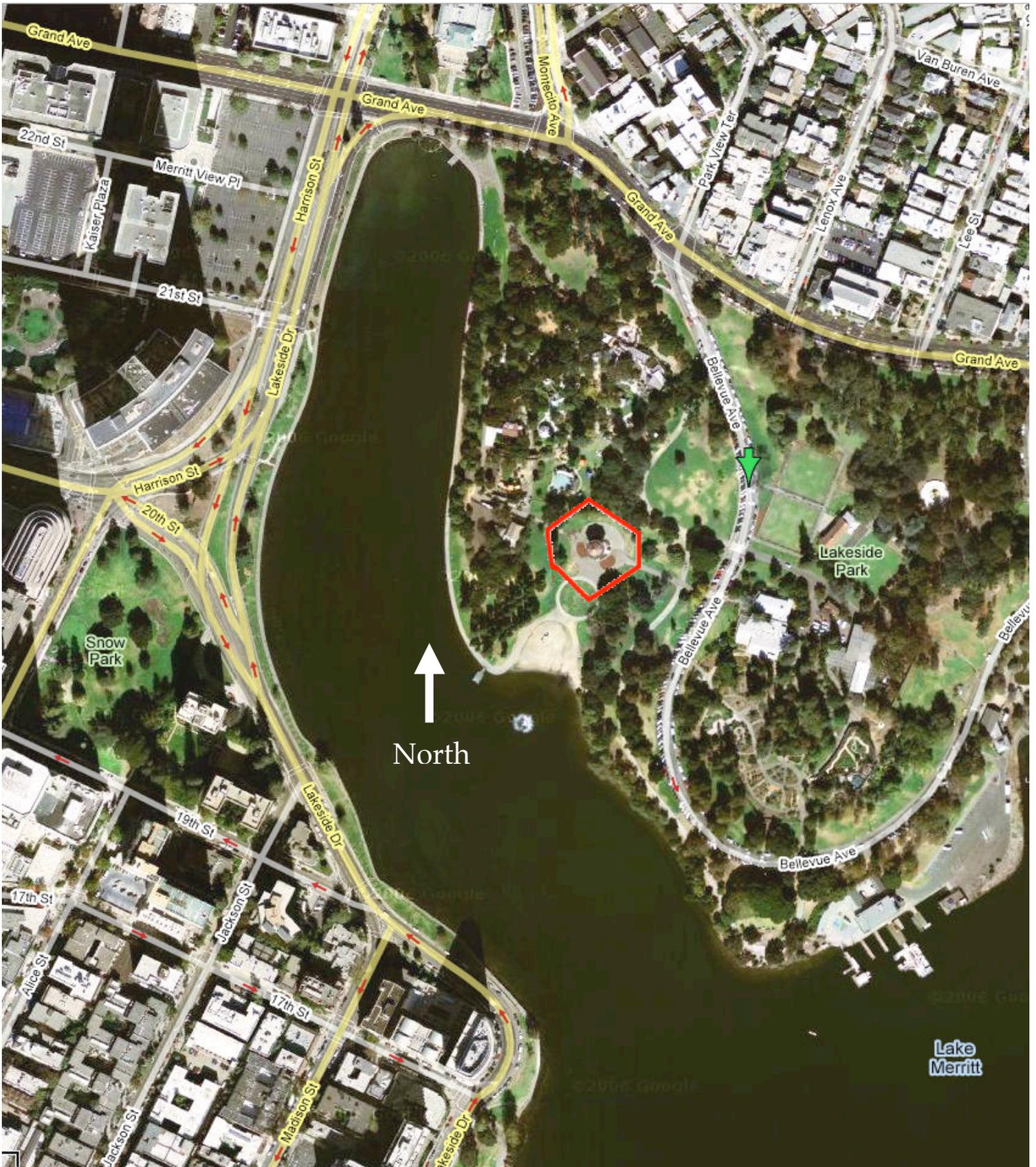
Historic photos show asphalt or gravel paving in a complete circle around the Bandstand. Path in foreground, through the oak trees, has been removed.

Note shrubs next to Bandstand. Paving appears to be compacted gravel (not concrete).

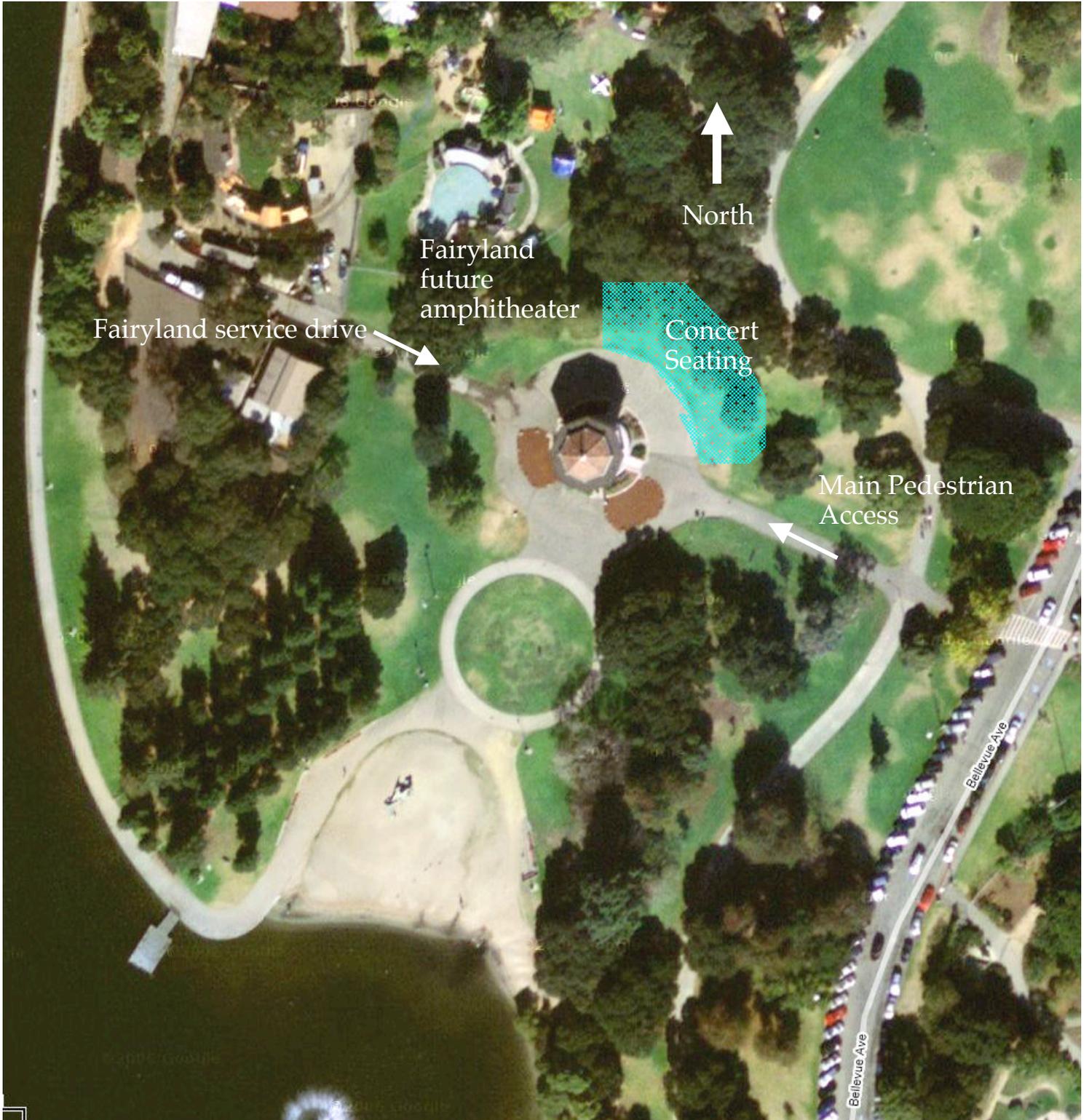
Upper photo from Oakland Museum, 1936. Lower photo courtesy Oakland Library.

Table of Contents

Location Photo	3
Site Photo	4
I. History	5
II. Existing Conditions	6
III. Current Use	9
IV. Accessibility	10
V. Options	12
Table of Options	13
Option 10. Wraparound ramp	14
Option 11. Switchback ramp	16
Option 12. Lifts	17
Option 13. Shifted Wraparound Ramp	18



Location -Aerial photo showing the bandstand (outlined in red) in context.



Site -Aerial photo, closer view, showing main pedestrian approaches, concert seating, and relationship to Fairyland.

I. History

The James Edoff Memorial Bandstand at the East end of Lake Merritt, adjacent to Children's Fairyland, was originally constructed in 1923. In 1991, Architects Hansen/Murakami/Eshima, Inc. completed a comprehensive historic report (Appendix A) prior to repairing earthquake damage to the structure.

According to that report, "Architects ... Walter Reed and William Corbett modeled the building after a bandstand in Milan, Italy. Photographs of this bandstand taken by Paul Steindorff were used as a basis for design." The structure was designed to accommodate the Oakland band, which formed in 1911 and drew crowds of 5,000 in 1912.

The Bandstand is an Oakland Landmark, according to Ordinance No. 9945, passed by the Landmarks Preservation Advisory Board of Oakland in 1979. The ordinance designated the entire park in which the bandstand is located, or "Lake Merritt bounded by Lakeside Drive, Grand Avenue, Lakeshore Avenue, and 12th Street", as Landmark. It specifically lists several structures within the park that "shall be preserved," amongst them the Edoff Memorial Bandstand.

The bandstand is a study in symmetry. The structure is an open-walled octagon with limestone columns and limestone entablature above a cast stone (precast concrete) base. Eight columns hold up the corners of the sloped tile roof, with arches between. The vertical distance between the stage platform and the level of the ground is 3' 10". Four staircases lead up to the stage, and the areas between the staircases are planted with shrubs and flowers. An original cast stone curb surrounds the stair and planted area. On either side of the South stairs are two curving staircases that lead down to the basement (see center photo next page). A flat circle of paving surrounds the bandstand; chairs are set up on this paving and on the sloped lawn areas for performances. The structure has good basic historical integrity and appears much as it did in 1923.



Recent photo shows concrete paving on the North side of the bandstand, and areas of redwood bark that replace former paving on the sides. Historic shrubs have been partially replaced with lower-growing flowers.



Since the purpose of this study is to propose methods of providing disabled accessibility for the bandstand, this discussion will focus particularly on the relationship of the structure to the ground around it. The relationship of the historic bandstand to the paving around it will probably be found to be a significant character-defining element of the historic structure. The flat pavement that encircles the bandstand, the limestone curbs that connect the four stairs at the base of the building, and the planter areas between the stairs all have historic significance.

II. Existing Conditions

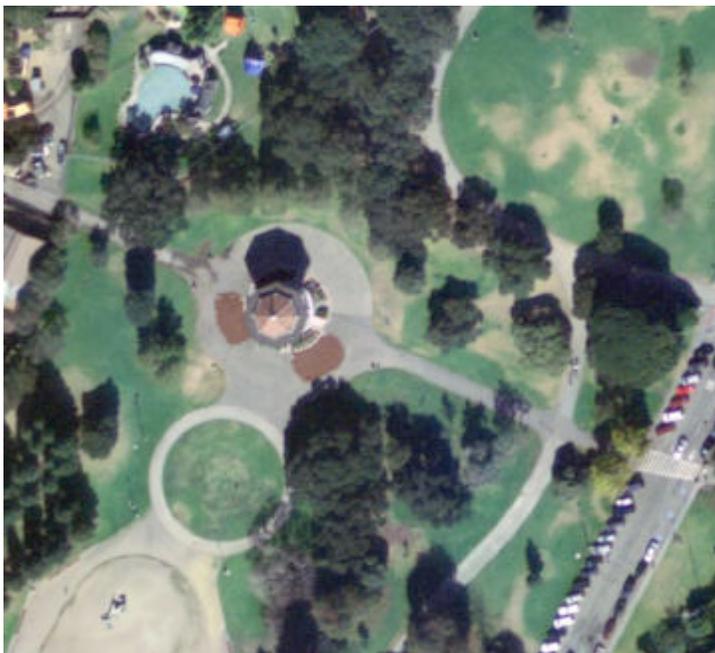
There are several differences between the original design and the present condition. These changes can be seen on the aerial photo below. The circular area around the base, which was probably originally gravel or asphalt, has been paved with concrete on the North side. Two planting areas, which show as brown patches of redwood bark in the aerial photo, have been inserted into the circular pavement. Historic photos show that this area was once planted (see photo p. 7). Comparison on the historic photos with current conditions also shows that the decorative cast stone curbs are not as high as they used to be. They have been partially covered by new paving, which is higher than the original paving.

In 1993, in accordance with the recommendations made by Hansen/Murakami/Eshima, Inc., the building was seismically upgraded. Steel reinforcing columns were enclosed within the original columns, a modification which had no impact on the appearance or historical integrity of the structure.

A big detractor from the historical appearance of the building is a pair of brilliant blue portable toilets, which are used for large events (see photo, lower left).



South stair and stairs to basement. Note rust stains on walls.



View from SE. Portable toilets are brought in for special occasions. South stair has a handrail; the other stairs have no



Top right: spalled cast stone at the edge of bandstand floor. Rusted round pins may be from a previous repair.

Above: repaired cast stone doesn't match color or texture of original.

Below: previously repaired spalls about to fail.



Rust stains and spalling deface the base of the bandstand. Both the stains and spalling are caused by corrosion of the metal support posts of the existing historic rail, where the posts are embedded into the cast stone. Water runs down the posts and gets into the joint, where it rusts the metal. The rusted metal expands, cracking the cast stone and causing it to spall.

The spalls and iron stains have been repaired previously, possibly as part of the 1993 seismic upgrade. The spall repairs seem to have involved the gluing of some sort of fabric to the surface of the cast stone. The entire cast stone edge was then painted so the repairs would not be so obvious. The textured cast-stone walls below the bandstand floor have also been painted, possibly to disguise the rust stains as well as to hide ongoing graffiti.

Most of the repaired spalls are starting to fail again, and new rust stains disfigure the appearance of the bandstand.



Painted cast-stone wall. The original material is exposed where paint is chipping off. Cast-stone stairway is unpainted.



Gutter with filled-in drain at the floor of the bandstand.



Existing non-functional underground lift. The City is currently responding to a lawsuit relating to this lack of accessibility.



Historic photo from the early 1960's showing planting in the area currently occupied with redwood mulch, and existing black railings. Note also the extensive open spalling at the railing attachments.

A more permanent repair to address the underlying cause of the problem might involve cutting all the existing rail support legs below the existing collar, removing the rail, drilling out the existing rusted legs, and replacing them with new non-rusting material (such as stainless steel) grouted into the cast stone and underlying concrete. While the rail is removed it could be sent out to be hot-dipped galvanized to protect it from further corrosion before it is repainted and re-attached to the new legs. The existing white rails appear as black in most historical photos (see photo, this page), hence painting the rails black at this time might be appropriate.

New spall repairs will involve cutting back the existing feather edge to a depth of $\frac{1}{2}$ " or more and installing stainless steel or nylon reinforcing anchors into the adjacent sound cast stone before filling in with a carefully formulated composite material.

The bandstand floor was constructed with integral gutters just inside the rail. Each of the four gutters (one for each quadrant) had two drains that presumably led to a concealed rainwater leader in the basement. These drains have been filled in and are not currently in use. It is not known whether this contributes to the existing rusting and spalling problem.

In 1995, a wheelchair lift was installed in an underground pit on one side of the bandstand. To accomplish this, about 4' was cut out of the historical curb to allow for the installation of a new concrete pad leading to an underground lift. Other than the curb cut and the paved walkway, the existing lift is relatively inconspicuous (as seen in the photo at left). Only the two posts with the controls are visible.

However, the lift is no longer operational due to water damage, meaning that the structure is not in

compliance with ADA accessibility codes. The City is currently responding to a lawsuit relating to this lack of accessibility.

The existing lift was not installed in the location indicated on the plans, which show the lift centered on the basement window. It was moved to one side, closer to the column. The column is visible in the photo at lift. This means that the upper gate does not have the clearance required by code on the floor of the bandstand, because the column is in the way.

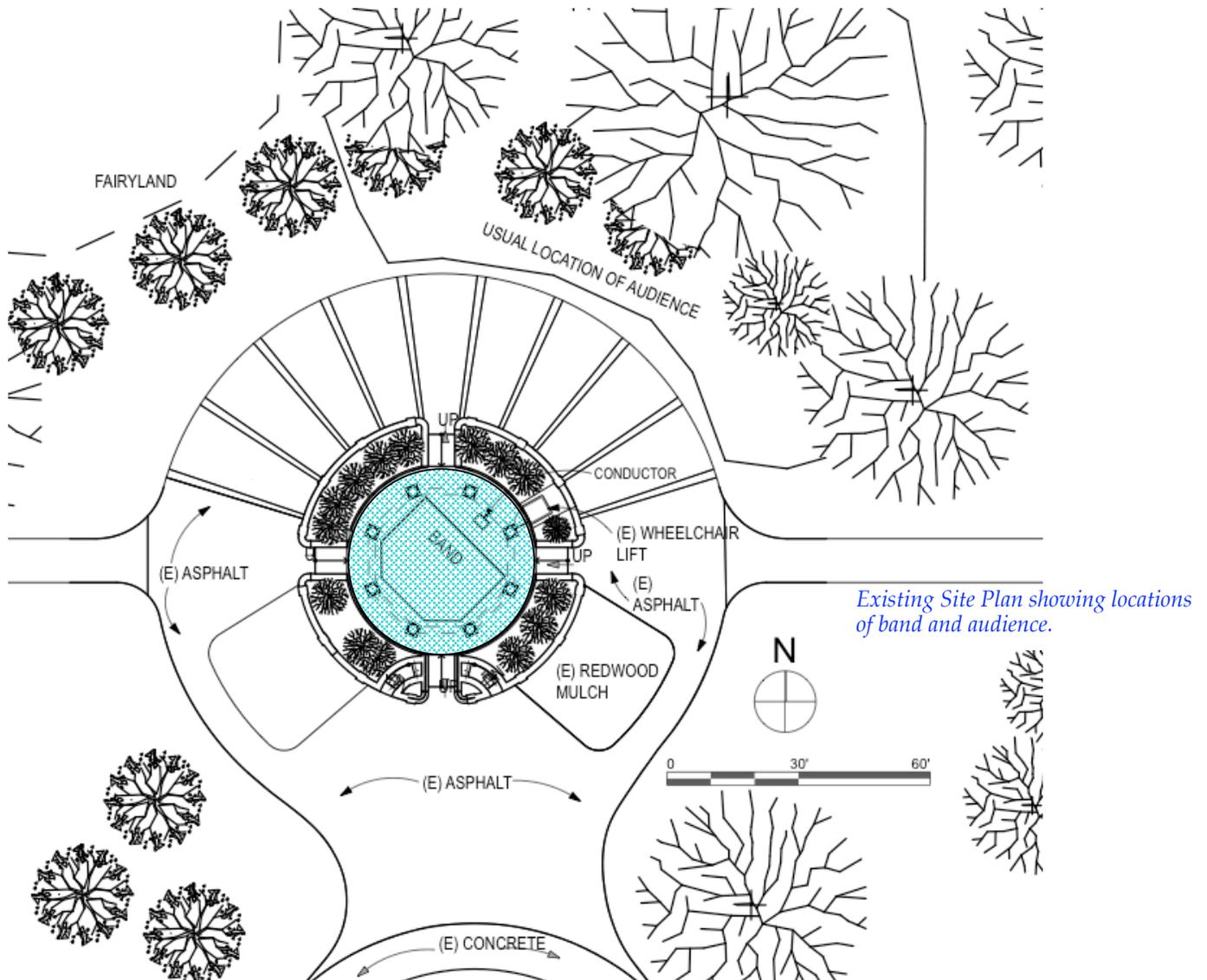
III. Current Use

The total size of the raised bandstand floor is 1445 square feet (with almost 43 feet diameter inside the rails). The platform could hold up to ninety-six people, seated at tables or performing in a band, based on an allowance of 15 sq. ft. per person.

The bandstand is currently used for a variety of formal and informal uses, including regular performances by the Oakland Municipal Band, for five to six appearances every summer. The City of Oakland reports that there are normally between seven and ten other city uses, and approximately ten private events each year, in addition to the band concerts. City uses include health fairs, small organization festivals, and walkathons. Private events range from private parties and weddings, to picnics, and company walkathons.

Beyond this, informal usage of the Bandstand goes on nearly every day of the year, ranging from Chinese Tai Chi exercise, to a gathering spot for groups of students in after-school programs, to a quiet place to observe the view across the lake, to a resting spot after a jog around the lake.

Some performances utilize a canvas curtain to block sun and wind coming from behind the band. During band concerts, the conductor stands at the NE side of the bandstand, against the rail. The audience is seated on benches on the grassy slope in the NE quadrant. Band audiences are smaller than they used to be historically.



IV. Accessibility

Wheelchair Lift requirements: Current California code allows the use of a wheelchair lift for a rise of less than 5 feet (the rise for the bandstand is 3' 10") without a key or attendant. Lifts must be tested every two weeks to make sure they are operational. The code also allows the lift to be locked for security reasons as long as it remains unlocked during "normal business hours". A lift may not be used for the transportation of equipment to the stage.

A lift may be **above-ground or in-ground**, like the existing, non-functioning lift. General opinion indicates that it would be impractical to either repair the existing lift or install a new in-ground lift because it is clearly susceptible to water damage. Hence the choice among lifts is narrowed to the above-ground option. An internet search revealed that in-ground outdoor lifts are no longer marketed, perhaps because most of the ones installed have failed.

Above-ground lifts include unenclosed, semi-enclosed, or fully enclosed types. The **unenclosed lift** is essentially a box with a door on it that goes up and down. When the box is up, the space underneath is exposed. Animals or small children could get underneath the lift while it is up. This type of lift is allowed by California code as long as it has a safety switch that will stop the downward movement if any obstructions are detected below the lift.

A **semi-enclosed lift** has taller enclosure doors and walls that enclose both the lift and the space below it, even when the lift is up. Nothing can get underneath it. The enclosure has no top on it and extends only high enough to form the required railing when the lift is up. Animals or children could climb inside from the top when the lift is not in use.

A **fully enclosed lift** has a roof on it and doors that prevent access except when it is in use. It must extend at least 7' above the highest landing, in order to have clearance for a full door at the top. We did not pursue a fully enclosed lift as an option because it would be too visually intrusive for the bandstand.

The code requires that the walls of the lift enclosure be smooth on the inside so that a person using the lift cannot catch or pinch their fingers in the structure, as the lift is moving.

Ramp vs. lift: The alternative to a lift is a ramp. Functionally, a ramp is preferred to a lift by the disabled community, as well as the ADA Programs Division of the City of Oakland, because it is always available for spontaneous visits and is easier for most people to use than a lift. The disabled complainant in the lawsuit against the city also prefers a ramp.

The Public Works Agency and the Office of Parks and Recreation also prefer a ramp because the ramp will require less maintenance by the City, is not subject to mechanical failure, and is less subject to problems due to vandalism or unintended use by children. A ramp could also be used to bring heavy equipment to the stage.

Ramp requirements: Code requires a ramp to be at least 4' wide, with a 6' x 6' landing at each change of direction. A 5' wide ramp is preferred because it will allow two people to pass comfortably and is more functional for bringing equipment to the stage. Maximum slope is 1" per foot of ramp length.

A ramp must have a handrail. Note that a slope of 5% or less (1:20) is not considered a "ramp" and does not require a handrail. In addition to a handrail, a guardrail with closely spaced pickets is normally required where the ramp or landing is more than 30" above grade. However, guardrails may be omitted for ramps that



Unenclosed lift – Manufacturer's photo (c/o National wheel-o-vator)



Semi-enclosed lift – Manufacturer's photo. (c/o National Wheel-o-vator)



Fully enclosed lift – Manufacturer's photo. (c/o National Wheel-o-vator)



Skateboard deterrent attachments on a handrail. (c/o Ravensforge Skateboard Solutions)

serve a stage (such as the bandstand). This means that the ramp could have only a top handrail, with no pickets below the rail. The Public Works department would prefer that the handrails have pickets. They are concerned that an open handrail might pose a falling hazard for small children and also encourage its use as unintended play equipment.

Ramps may be attractive to skateboarders. Multiple switchbacks might be more attractive to advanced skaters because they would pose more of a challenge. Skaters might also try to skate on the handrails. The floor of the ramp can be grooved, to make the skating experience less pleasant. The rails could incorporate specially manufactured skateboard deterrents (see photo at left) that would still allow use as a handrail. The rail bumps could be retrofit if they are found to be necessary.

A special transition detail is desirable for the top of the rail where it connects to the existing historic rail. The main bar of the historic rail is lower than the code-required handrail. The top 2' of the new, sloped handrail could level off to meet the historic rail, which technically doesn't meet the code but only for a short length of rail. It may be necessary to make an "AMMR" (Alternative Methods & Materials Request) to justify this detail.

Apparently a ramp was proposed in 1995 and was rejected by the Landmarks Advisory Board as being inappropriate for the historic character of the building. The configuration of the ramp that was proposed at that time is unknown.



Rails with pickets



Rails without pickets



Passing chairs from the basement for the band performance

V. Options

A number of options to provide accessibility were reviewed, and options 10, 11, and 12 were selected by the subcommittee to be developed for discussion by the full Landmarks Board. Option 13 was added as a result of further discussions about how a different placement of the ramp could help with set-up for band performances. Each option is described in detail in the following pages.

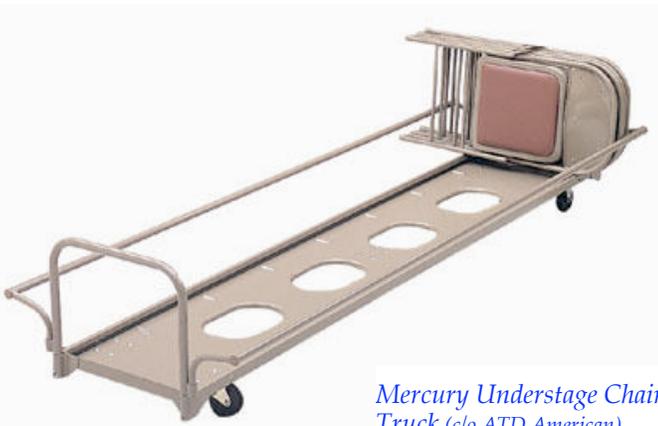
Besides providing accessibility, certain other work needs to be done on the bandstand. This includes repair of the curb and rail where they were cut for the existing lift, restoration of the landscaping to its historical condition, and repair of the spalling in the cast-stone of the bandstand. Connection of the rails to the cast-stone should be improved to prevent further spalling. The landscape improvement will not be part of the current project, but will be addressed by the city as funds become available. The other items will be part of the accessibility project.

Where possible, new construction will be designed to be “reversible” so that it could be removed with no harm to the historic fabric. The accessibility ramp will be formed with a simple concrete slab, supported on steel posts, rather than from solid concrete. The sidewall skirt of the ramp will be made either of stucco or concrete, formed and textured to blend in with the appearance of the rest of the bandstand.

New rails will have simple, square pickets and bottom horizontal bar with the same dimensions and 6” spacing as the historical rails. The 6” spacing is wider than allowed by current codes, for guardrails, but should be acceptable since the new rail is not officially a “guardrail.” The top handrail will be a similar shape to the existing historic top rail. We will not attempt to duplicate the existing finials or decorative “harp” panels. Collars could be added to the new pickets to match the existing rail if desired.

Note, as well, that various features are depicted on selected ramp options, but each feature is not “fixed” to any particular option. Features should be considered available to mix and match with an option, to achieve the desired final package. Feature possibilities to consider in this way should include a smooth (option 13b) or recessed skirt (option 10, detail at stairs), a curved landing (option 13a), and a storage area below the landing. Any of the ramps, except the double switchback could accommodate storage under the landing.

The materials used in the lift, if that option is chosen, would be provided by the manufacturer, and would be painted to match the color of the existing cast-stone. The unenclosed lift is made with sheet aluminum, and the semi-enclosed & fully enclosed lifts are built with clear acrylic panels set in an aluminum framework.



Mercury Understage Chair Truck (c/o ATD American)



View of the bandstand from Lakeside drive

The position of the lift or ramp is affected by several critical factors: since the audience normally sits on the grassy slope to the northeast during performances, and the band faces directly toward this crowd, the accessibility ramp should be located as far as possible away from this area, in order to prevent obstruction of the performance, and to minimize the audience view of the ramp. Such factors dictate that the best location of the ramp is in the SW quadrant of the bandstand, 180 degrees away from the audience, and this can be seen in the locations of the several options presented below.

Options 10 and 11 show a ramp located in the NW quadrant, which is second choice after the SW quadrant. The SW quadrant has less space for a ramp because of the existing basement stair. The external view of the bandstand becomes an important factor, since this is a major visible element from the opposite side of the lake (see picture previous page). In fact the SW quadrant is one of the more visible parts of the bandstand viewed from this location. It seems to be far enough away, though, that the new accessibility feature would have a minimal presence.

The band normally enters the bandstand stage from the western stairs, whose function will be lost under options 10 and 11.

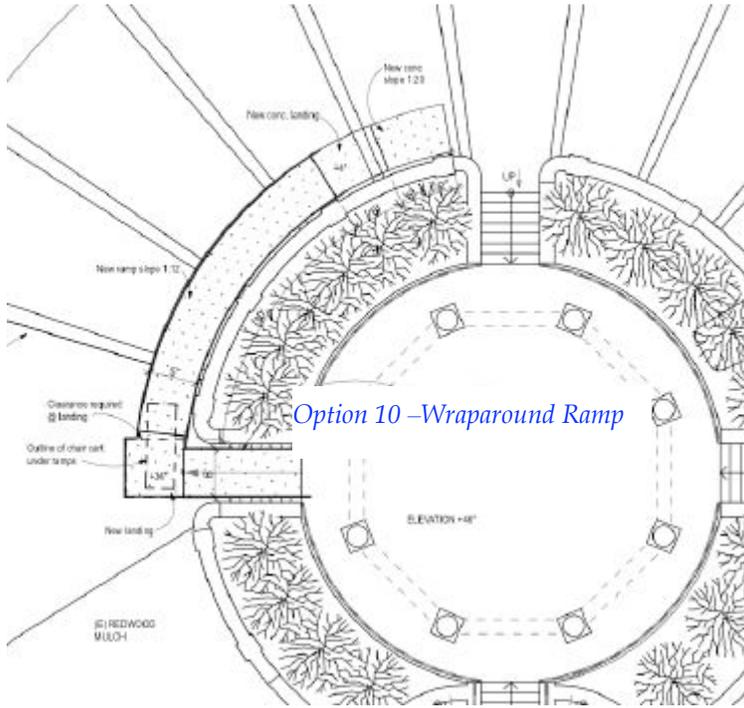
Table of Options

Option	Name	Pickets	Historical Elements Altered				Function	Notes
			Rail	Curb	Stair	Landscape		
10a	Wraparound Ramp	Yes	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> a,g	<input type="checkbox"/>	<input checked="" type="checkbox"/> d,e	
10b	Wraparound Ramp	No	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> a,g	<input type="checkbox"/>	<input checked="" type="checkbox"/> d,e	
11a	Switchback Ramp	Yes	<input type="checkbox"/>	<input checked="" type="checkbox"/> b	<input checked="" type="checkbox"/> c,g	<input checked="" type="checkbox"/> a,c	<input checked="" type="checkbox"/> d	
11b	Switchback Ramp	No	<input type="checkbox"/>	<input checked="" type="checkbox"/> b	<input checked="" type="checkbox"/> c,g	<input checked="" type="checkbox"/> a,c	<input checked="" type="checkbox"/> d	
12a	Unenclosed Lift	-	<input checked="" type="checkbox"/> b	<input checked="" type="checkbox"/> b	<input type="checkbox"/>	<input checked="" type="checkbox"/> b	<input type="checkbox"/>	Constant maintenance required
12b	Semi-enclosed Lift	-	<input checked="" type="checkbox"/> b	<input checked="" type="checkbox"/> b	<input type="checkbox"/>	<input checked="" type="checkbox"/> b	<input type="checkbox"/>	Constant maintenance required
13a	Shifted Wraparound Ramp – round landing	Both options available	<input checked="" type="checkbox"/> b	<input checked="" type="checkbox"/> b	<input checked="" type="checkbox"/> a,h	<input checked="" type="checkbox"/> b	<input checked="" type="checkbox"/> f	Raise level of pavement at stairs
13b	Shifted Wraparound Ramp – square	Both options available	<input checked="" type="checkbox"/> b	<input checked="" type="checkbox"/> b	<input checked="" type="checkbox"/> a,h	<input checked="" type="checkbox"/> b	<input checked="" type="checkbox"/> f	Raise level of pavement at stairs

Alteration Codes:

- a – covered in a reversible manner
- b - +/- 5' wide section removed
- c – major area removed
- d – lose western stair

- e – single cart storage
- f – two cart storage
- g – entire stair is covered
- h – lowest step is covered



Option 10. Wraparound ramp. The option shown at left, and in the images on the next page, include a curved “wrap-around” ramp, which goes up to a landing outside the existing stairs, and then continues up to the bandstand floor above the stairs. The landing and curved ramp are located just outside the existing cast-stone curb.

This modification to the historic structure would be completely reversible, should a ramp no longer be needed in the future. The ramp will be supported on posts on top of the existing stairs, so none of the existing historic structure needs to be removed. The historic curbs and stairs will still be visible to the side of the new ramp. It will have a stucco or concrete “skirt” to enclose it down to the pavement. This skirt will be scribed closely to the existing stairs, where the ramp rises directly above the stair, with minimal effect, leaving the stairs intact beneath the ramp (see figure this page).



Detail view – Ramp construction at stairs. Skirt is shown recessed, with a door for storage beneath.



Option 10a – Ramp, and rail with pickets



Option 10a – View from south

The options in this design include a handrail with pickets (Option 10a), or one without pickets (Option 10b). Option 10b is possible, since the building code requiring guardrails has an exception for ramps leading to stages; however, the Parks and Recreation department has strongly recommended the rail with pickets, because of liability issues involving injuries to children.

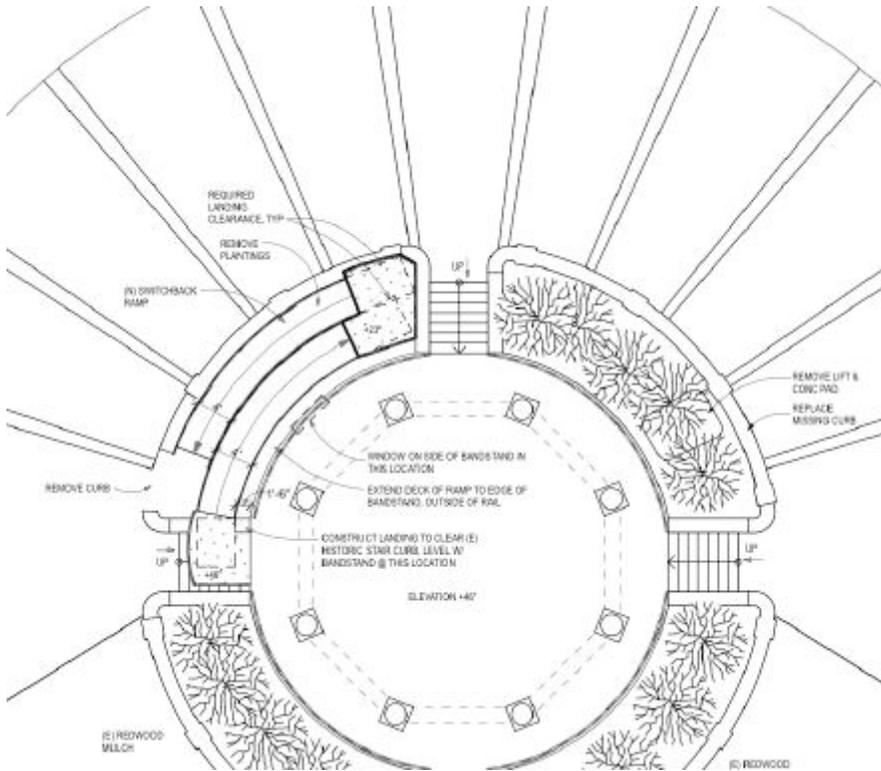
Note that this option removes the use of one of the four existing stairs (the west stair). Currently, band performers use the west stair to enter and leave the stage for performances.



Option 10b – Ramp, and rail without pickets

Option 10a – Birdseye view





Option 11 – Switchback ramp

Option 11. Switchback Ramp.

A switchback ramp arrangement that has a double slope on one side of the bandstand, between stairs is possible, but will not fit with landings between the existing stairs. We have developed an option in which one of the existing stairs is covered by the top landing. The ramp is able to fit completely into the existing landscaped area between the existing curb and the bandstand.

Once again we are showing options with pickets on the rail (Option 11a), and one without pickets (Option 11b).

The ramp removes the functionality of the west stair. It will be more difficult to use this ramp for large equipment dollies because three sharp turns are required at the landings, rather than only one turn for the wraparound ramp.

The construction of the landing above the West stair may require removal of a portion of the historic cast-stone sloped curb, which extends to the elevation of the bandstand floor. For this reason, the construction is not completely reversible.



Option 11a – Birdseye view, rail with pickets



Option 11b – Switchback ramp without pickets



Left: Option 12a – Unenclosed Lift



Right: Option 12b – Enclosed Lift

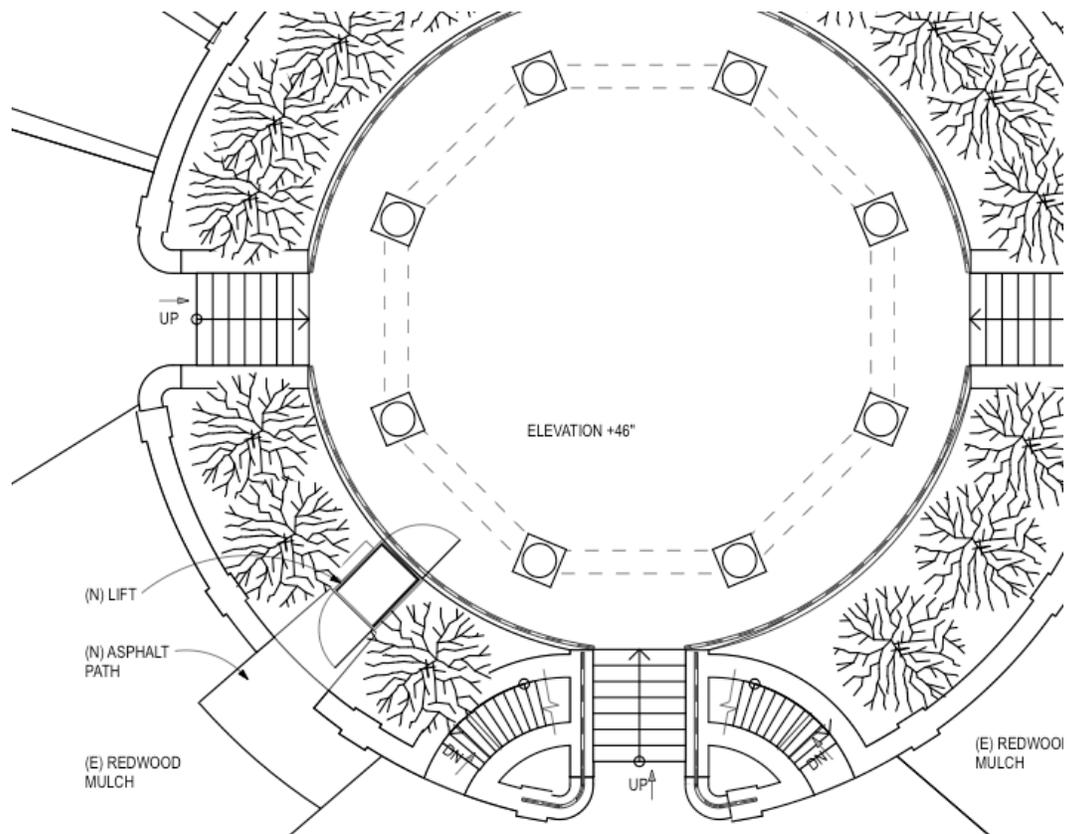
Option 12 - Lifts.

Replacement of the existing lift with a new above ground lift. We recommend that any new lift have a side enclosure to prevent problems due to objects or animals getting under the lift. (Option 12b)

An unenclosed lift is also allowed by California code, with a safety switch that will stop the downward movement if any obstructions are detected below the lift. (Option 12a)

The code requires that the walls of the enclosure be smooth on the inside so that a person using the lift cannot catch or pinch their fingers in the structure as the lift is moving. Parts of the enclosure could be glass or Plexiglas, as shown in the renderings.

Installation of any new lift will require modifying the historic rail, cutting the existing cast-stone curb, and removing or covering a basement window.



Option 12 – Plan view



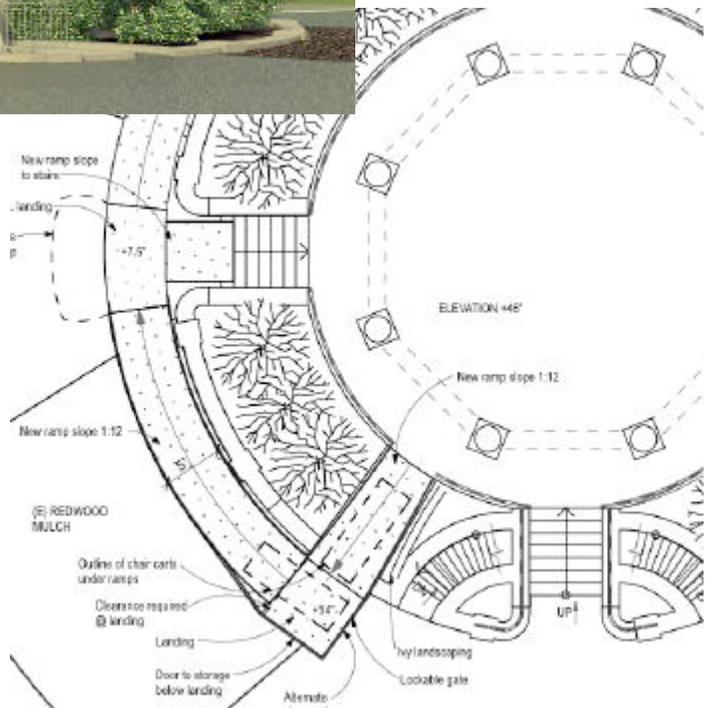
Option 13a – Ramp with round landing, from south



Option 13a – Ramp with round landing, from west



Option 13a – Ramp with round landing and recessed skirt, showing storage door and additional planting.



Option 13b – Ramp with square landing, with incorporated storage



Option 13b – Birdseye view - ramp with square landing



Option 13b – Ramp with square landing, from south



Option 13b – Ramp with square landing, from west