

ANOKA AMPHITHEATER

ANOKA, MINNESOTA



CONDITION ASSESSMENT

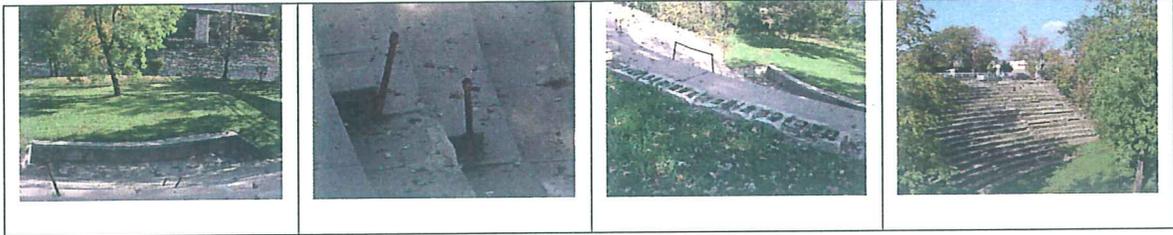
PREPARED BY

Architecture
Engineering
Interiors
Planning
COLLABORATIVE DesignGroup

100 PORTLAND AVENUE SOUTH, SUITE 100
MINNEAPOLIS, MINNESOTA 55401
PHONE: 612.332.3654 FAX: 612.332.3626
CONTACT: PHILIP WAUGH

Table of Contents

Anoka Amphitheater



HISTORY OF AMPHITHEATER	1
By Paul Pierce of Windego Park Society	1
CONSULTANT TEAM	3
CONDITION REPORT SUMMARY	4
INTRODUCTION	5
SCOPE OF WORK	5
Review of Documents	5
Observations	5
DISCUSSION	7
Concrete Slabs, Steps, and Seating Surfaces	7
Walls	8
RECOMMENDATIONS	8
Concrete Slabs, Steps, and Seating Surfaces	8
Walls	8
Other	8
Periodic Maintenance	9
APPENDIX A - Photographs	10
APPENDIX B – Cost Estimate	
APPENDIX C – Marketing Images	
APPENDIX D – List of Agencies	

HISTORY OF AMPHITHEATER

By Paul Pierce of Windego Park Society

Anoka's outdoor amphitheater was constructed in 1914. It was one of many projects inspired by the Chicago Exposition of 1893 and is a local example of the last wave of "City Beautiful" projects. The concept behind those constructions was that architecturally planned spaces could uplift and inspire those in the community, promoting the feeling of well being and coax out their cultural and creative abilities. The person most responsible for the existence of this lovely structure was Thaddeus P. Giddings (1868-1954). His father Dr. A. W. Giddings was one of the first settlers in town and Thaddeus was born and raised just a few yards from the theater site. He was Supervisor of Music for the Minneapolis Public schools. Along with his teaching skills and enthusiasm he was also known to be very creative. Thaddeus was one of Anoka's notable eccentrics (there are too many stories to retell here) his successes in 1913 with community sings was a positive example of the popularity and public enthusiasm for cultural activities on that site. The City Council purchased the land and twenty-four residents contributed \$50.00 each toward the construction of the concrete theater. His work with teaching and music gave him many important connections with people who could provide the necessary talents to achieve this goal. An example is William Gray Purcell, a notable architect from the Minneapolis firm of Purcell and Elmslie that Thaddeus had taught music to in Oak Park Illinois. William designed the structure and was particularly interested in designing the awning system to show how he believed the awnings over crowds in the ancient Roman Coliseum had worked. The project was done in sections with fundraising continuing during construction for a total cost of \$4,000.00. In 1916 Giddings described the park this way:

The flat part of the park on the bank of the river is the stage. It is covered with large trees and is 150 feet wide and 90 feet deep. The river behind is 100 feet wide with a high wooded bank on the opposite shore. The river is sluggish and plainly visible from every seat in the Stadium. The orchestra pit is four feet deep, lined with cement and large enough to accommodate a large band or orchestra. It is a lovely place in the day time and wholly shaded after 2:00pm. The stage is very lovely when lighted for a performance, or when the moon is glittering on the river beyond. Added to the charm of the setting is the fact that the acoustics are well nigh perfect. It is one of the most grateful places imaginable in which to sing or speak. This is owing to the several reasons of which the architect cleverly took advantage. The steepness and curve of the seats, the orchestra pit, the river behind. Many well known singers and speakers have appeared here and all praise the perfect acoustics. The softest tone is heard in the most distant seat. (Giddings quoted in McDermid 1967:431).

The theater consisted of a sound wall at the top with a ticket booth and projection room, 20 tiers of seating, at the base an orchestra pit and a grassy stage, underneath there was a dressing room and prop stage. The space allowed a capacity of 1600 people.

The Amphitheater is considered to be a very rare type of facility, especially for that time period. There is some hint that something similar may have been built around that same time in Grand Forks, North Dakota. Several "Works Progress Administration" Projects were built during the 1930's that had similar use and function possibly in Bagley, Duluth, and Grand Rapids Minnesota. But the Windego Park Auditorium design is a more active and theatric effort than the more common open air space or structured seating for band shell performances that is often found in city squares. It is the only amphitheater listed in the State Historic Preservation Offices' Minnesota Historic Properties Inventory.

The first official show was the "History of Anoka" with a cast of 300 on August 26th and 27th 1915. In August of 1916 there was another big production the "History of Agriculture" featuring Dionysus arriving from a barge on the river. There were many types of entertainment performed there grand pageants, operettas, recitals, comedians, movies where shown on a canvas stretched across the stage, community meetings, church services, ceremonies, bazaars, graduations and of course community sings. The programs were usually local talents. Giddings brought out the peoples abilities and gave folks a chance to express themselves in all ways. In 1936 the musical "Showboat" was the last big extravaganza at the theater. In the mid 1930's Thaddeus put his efforts into co-founding Interlochen Music camp and many people think the quality of the shows went down without his help. Purcell said in his autobiography "...the Anoka Theater back-slide into gatherings of no particular creative significance." In 1940 a war bonds rally was held there and the metal work for the awning was torn down and sent to the scrap metal yard for the war effort. Many have attributed the rise of television to the fall in interest in local talents. Top performers were on TV at home for free and local productions required a lot of work. The site was used for informal gatherings for several decades but eventually became too overgrown for any type of public use.

In 1979 the National Register survey was done in Anoka and the theater was found to be a rare surprisingly intact surviving example of the "Cities Beautiful" movement with importance in cultural history of Anoka in many categories and an association with individuals of possible National significance.

ANOKA AMPHITHEATER
CDG PROJECT NO. 05074.00
June 2006

CONSULTANT TEAM

Architecture, Structural Engineering and Historic Preservation

COLLABORATIVE DESIGN GROUP
100 PORTLAND AVENUE SOUTH, SUITE 100
MINNEAPOLIS, MN 55401
PHONE: 612.332.3654
FAX: 612.332.3626

Craig A. Milkert, Principal, PE

Philip Waugh, Principal Investigator - Project Manager

Masonry Estimate

RESTORATION TECHNOLOGIES, INC
5301 EAST RIVER ROAD, SUITE 103
FRIDLEY, MN 55421
763 502 2321

Scott W. Schreifels

CONDITION REPORT SUMMARY

Observations of the Anoka Amphitheater were performed by Collaborative Design Group in December 2005 and May 2006 to determine the current structural condition and determine a plan for restoration. The intent of this summary is to provide an overview of the following report. The Collaborative Design Group report must be reviewed in its entirety for a complete understanding of our conclusions and recommendations.

This facility was built in 1914, and was designed by the acclaimed firm of Purcell and Elmslie Architects. The Amphitheater is listed on the National Register of Historic Places. The Anoka Amphitheater is located along the Rum River south of the Main Street Bridge, directly adjacent to Highway 169, in Anoka, MN. This facility consists of cast in place concrete stairs and seating surfaces, constructed on the side of a hill. The amphitheater has 18 rows of seats, and reportedly has a capacity of 1600 people. An orchestra pit is located at the base of the seating area, and directly in front of the grass performing area. Overall, the Anoka Amphitheater is in poor structural condition at this time and is not safe for public use.

Review of the drawings shows that the amphitheater was to be constructed into the side of a hill. The hill had to be excavated in some areas, and filled in others to achieve the desired configuration. The majority of the seating area in Section A, B, and C appears to be on excavated soil, whereas the upper portion of Section D appears to have been constructed on fill. The fill material was indicated on the original drawings to be cinders. Much of the broken concrete in Section D, which contains the most damaged areas, appears to be from unstable soil conditions.

The majority of Section D will need complete replacement of the concrete. This replacement will include removal of all broken and deteriorated concrete, and removal of all poorly compacted fill materials. The soil should be replaced with compacted granular material. In order to extend the useful life of the remaining portions of the structure, the deteriorated concrete must be repaired with suitable materials and the rate of water penetration must be decreased in the remaining concrete areas.

Windego Park Society expressed their desire for a restoration and maintenance program that will provide a long-term life expectancy to the facility, while maintaining the historic nature of the design. The intent of the recommendations put forth in the report are to allow the historic components of the structure that are usable and do not impose a life safety hazard to be reused with minimal intervention. At the conclusion of this study, CDG and members of the Windego Park Society developed a scenario for rehabilitation to provide a basis for a project budget (refer to Appendix B and C).

INTRODUCTION

The Anoka Amphitheater is located along the Rum River south of the Main Street Bridge immediately adjacent to Highway 169, in Anoka, MN. This facility consists of cast in place concrete stairs and seating surfaces, constructed on the side of a hill. The amphitheater has 18 rows of seats, and reportedly has a capacity of 1600 people. An orchestra pit is located at the base of the seating area, and directly in front of the grass performing area.

This amphitheater was built in 1914, and was designed by the noted firm of Purcell and Elmslie Architects. The structure is listed on the National Register of Historic Places therefore any rehabilitation plans need to incorporate historically sensitive materials, solutions and workmanship.

SCOPE OF WORK

The following is a summary of the work performed by Collaborative Design Group (CDG) as part of this study.

Review of Documents

Review of the drawings shows that the amphitheater was constructed into the side of a hill. The hill was excavated in some areas, and filled in others to achieve the desired configuration. The seating area is divided into four sections (A, B, C, and D). The seating surfaces are constructed with relatively thin concrete sections cast in place directly on the excavated soil. The soil was to be excavated in a step pattern to follow the shape of the amphitheater. The thickness of concrete was not indicated, nor was any requirement for reinforcing. Joints were to be cut into the concrete surfaces with a specified pattern. 1'-0" of "well tamped cinders" was specified to be placed below the concrete seating area. The majority of the seating area in Section A, B, and C appears to be on excavated soil, whereas the upper portion of Section D appears to have been constructed on fill. The fill material was indicated to be "cinders". Dressing rooms were constructed under the upper portion of Section D.

Steel cables were shown, to be attached to a steel column superstructure used to support a removable canvas velarium or awning. A wall was to be constructed along the entire upper row to shield the view from the street. The method of construction of this wall is not indicated on the drawings. A ticket booth and projector booth were also indicated to be constructed. Flower boxes were to be constructed with rough sawn timbers at the entrances, as well as on either side of the orchestra pit.

Review of historic photographs indicates that the concrete seating areas have been in poor condition since at least the 1950s.

Observations

Visual observations of the facility follow. These observations include noting water seepage and drainage patterns, indications of movement of the structural elements, location and extent of deteriorated reinforcing, and locations and size of cracks, spalls, and delaminations in the

concrete surface. The interior of the dressing room constructed below the upper portion of Section D was not accessible during our site visit and was not observed as the entrance has been in filled with concrete block.

The following rating system was used in assessing the building condition:

- **Good:** The building component is new, with no apparent defects.
- **Average:** The building component is able to perform its originally intended function in its current condition. Any defects are minor and do not affect the performance of the building component.
- **Poor:** The building component is unable to perform its originally intended function in its current condition. The component has major defects, but is repairable.
- **Beyond repair:** The building component is unable to perform its originally intended function in its current condition, and cannot be economically repaired. Replacement of the building component is required.

	OBSERVATIONS
SLABS, STEPS AND SEATING SURFACES	<ul style="list-style-type: none"> • The concrete steps and seating areas are in overall poor condition • Many areas of the seating areas have cracked and/or spalled concrete. • Most of the concrete seating areas in Section D have deteriorated concrete, which appears to have been caused from settling or other ground movement. • No steel reinforcement is evident in any of the original concrete construction. • The concrete sidewalks leading to the street are in poor condition. • Five stairways have been constructed from the street level down to the amphitheater base by providing intermediate steps on the seating surfaces. Many of the intermediate steps are missing.
WALLS	<ul style="list-style-type: none"> • The wall constructed at the top of the seating area, the ticket booth, and projection booth have all been

	OBSERVATIONS
OTHER	<p>removed.</p> <ul style="list-style-type: none">• The concrete walls along the side of Section D framing the underground dressing rooms are in average - poor condition with cracked and spalling concrete.• The concrete walls surrounding the orchestra pit are in average - poor condition with cracked and spalling concrete.• The canvas covering system, along with the associated steel columns and cables, has been removed.• The wood framed flower boxes have been removed.• Handrails have been removed.

DISCUSSION

Overall, the Anoka Amphitheater is in poor structural condition at this time and is not usable.

Concrete Slabs, Steps, and Seating Surfaces

Typically, the main concern with the slabs in any concrete structure exposed to the elements is deterioration of the concrete due to corrosion of the reinforcing steel. As this amphitheater was constructed without the use of steel reinforcement (except over the dressing room) its problems are of a different nature.

Most of the obvious deterioration appears in the form of cracks, spalling, and broken concrete. Cracks are typically the result of high stresses, either caused by service loads, temperature changes, or other movements of the structure. Spalls in this type of un-reinforced concrete are usually caused by freezing water that has accumulated in the pores of the concrete. The use of air entrained concrete, as is commonly used today to avoid this problem, was not yet developed at the time of this construction.

Much of the broken concrete in Section D appears to be from unstable soil conditions. The soil in this area was indicated on the original drawings to have been compacted cinder fill. The observed movements of the concrete seating areas may have been due to poorly compacted fill, or possible erosion of the fill.

The majority of section D will likely have to be removed and re-constructed. Soil correction will be required. In order to extend the useful life of the remaining portions of the structure, the deteriorated concrete must be repaired with suitable materials and the rate of water penetration must be decreased in the remaining concrete areas.

Walls

Overall, the surviving walls are in average-poor condition at this time. Some cracking and spalling is evident on the walls of the dressing room and those surrounding the orchestra pit. These conditions are likely due to non-air entrained concrete as discussed above.

RECOMMENDATIONS

It is understood that the owner desires a restoration and maintenance program that will provide a long-term life expectancy to the facility, while maintaining the historic nature of the design. The intent of these recommendations is to allow the historic components of the structure that are usable and do not impose a life safety hazard to be reused with minimal intervention.

Concrete Slabs, Steps, and Seating Surfaces

All deteriorated concrete should be repaired. This repair includes removal and replacement of all un-sound concrete and replacement with suitable materials. Any areas of spalled and deteriorated concrete should be repaired by removing the loose concrete, sawcutting the perimeter, and patching with a low slump, air entrained concrete. All intermediate steps should be removed and replaced to mitigate any potential for tripping hazards.

The majority of Section D will need complete replacement of the concrete. This replacement will include removal of all broken and deteriorated concrete, and removal of all poor fill materials. The soil should be replaced with compacted granular material. The new seating surface should be constructed as a slab-on-grade with integral steps. This new concrete structure would be monolithic, and constructed with thicker, more durable concrete than the original construction. Joints should be cut into the seating area to replicate the original pattern. Soil testing should be undertaken at the beginning of the project.

Preferably, a urethane waterproof coating should be applied to all surfaces of the seating area and steps. This purpose of this coating is to prevent the penetration of water into the concrete. Understanding that this type of waterproofing would not be historically correct, a clear concrete sealer is the next best alternative. The sealer is considerably less expensive than the coating, but is also less effective. For this type of structure, the waterproof sealer may have to be re-applied every 3-5 years.

Walls

All walls should be repaired by removing deteriorated concrete and replacing with suitable materials. A waterproof sealer should be applied on all wall surfaces.

Other

Code complicate handrails should be installed on all stairs.

Periodic Maintenance

A periodic maintenance plan should be developed to avoid having minor issues become major expenditures. Periodic maintenance should include maintaining the concrete and sealers, along with periodic cleaning of all surfaces.

ANOKA AMPHITHEATER



Fig. 1 View from pedestrian bridge



Fig. 2 View from southwest



Fig. 3 View from northwest



Fig. 4 Section A overview



Fig. 5 Section A typical existing conditions



Fig. 6 Section A typical existing conditions



Fig. 7 Section A previous patching



Fig. 8 Section A typical existing conditions



Fig. 9 Section B overview



Fig. 10 Section B typical existing conditions



Fig. 11 Section B typical existing conditions



Fig. 12 Section B previous patching



Fig. 13 Section C typical existing conditions



Fig. 14 Section C typical existing



Fig. 15 Section C previous patching



Fig. 16 Section D overview



Fig. 17 Section D overview



Fig. 18 Section D severe deterioration



Fig. 19 Section D typical existing conditions



Fig. 20 Section D severe deterioration



Fig. 21 Section D severe deterioration

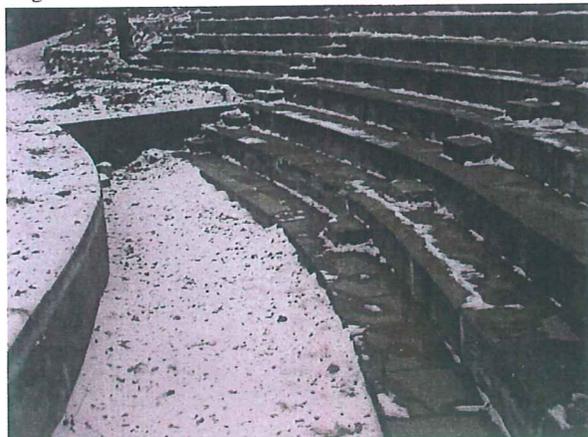


Fig. 22 Orchestra Pit overview

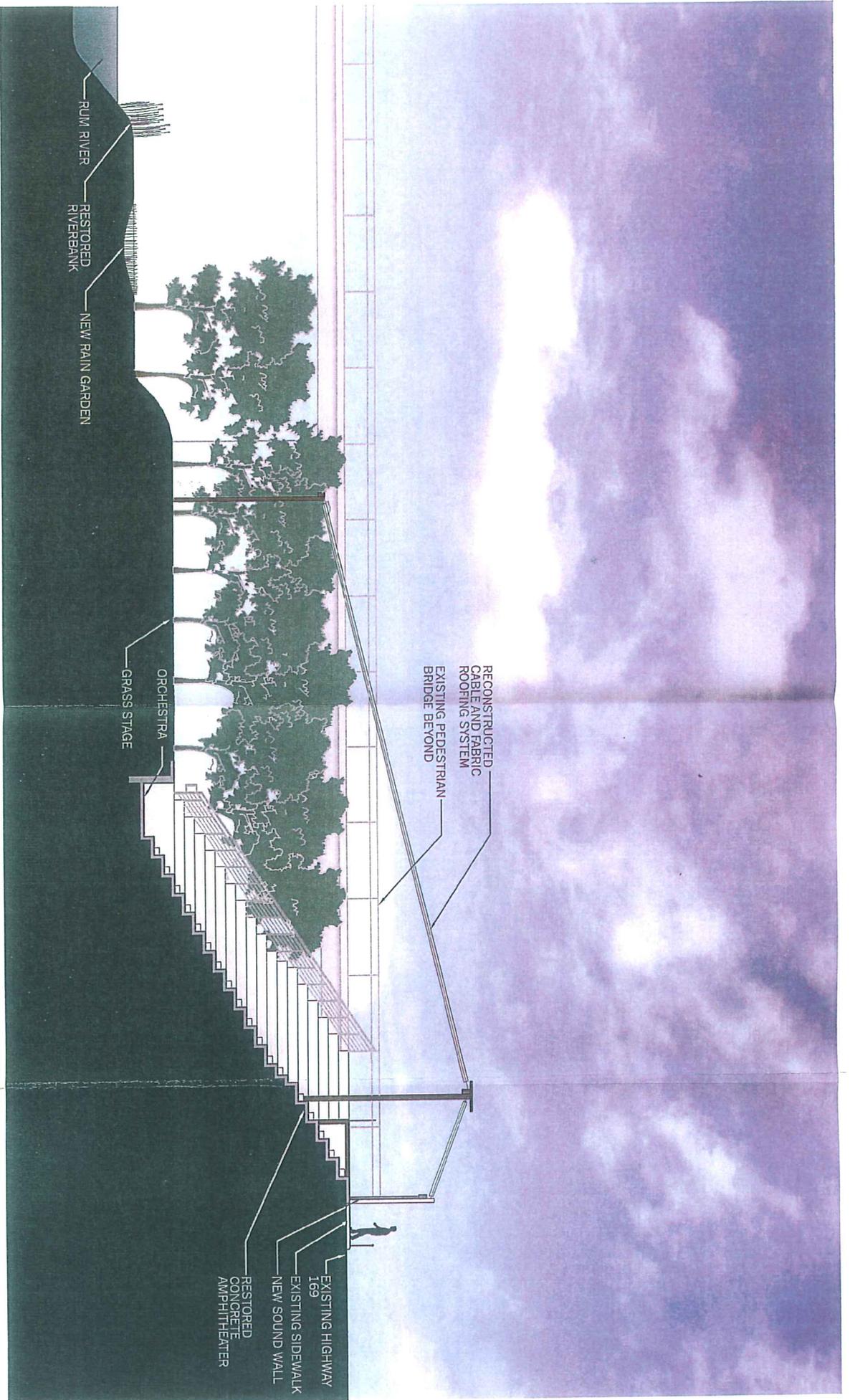


Fig. 23 Orchestra Pit typical existing conditions

CONSTRUCTION		Estimate	Range	Phase 1	Phase 2	Phase 3
Concrete Work						
	Section D: Remove all concrete and replace to match as close as possible:	\$135,000	\$148,500		x	
	Removal of selected areas and replace to match (sect's a-c): Allowance	\$77,500	\$85,250	x		
	Spot concrete patching (sect's a-c): Allowance	\$16,300	\$17,930	x		
	Dressing room restoration	\$25,000	\$37,500		x	
	New concrete steps where missing	\$5,500	\$6,050	x		
	New block walls	\$60,000	\$66,000		x	
	Sound Wall Finish Stucco	\$15,000	\$16,500		x	
	Concrete Protection Caulking all joints	\$16,380	\$18,018	x		
	Wash and seal concrete	\$3,360	\$3,696	x		
	Protective coating over dressing room	\$3,750	\$4,125	x		
	Deck construction New deck with wrought iron rails	\$85,000	\$120,000		x	
	Railing installation New rail for stairs	\$20,000	\$22,000	x		
	Step lights	\$12,000	\$18,000			x
	Restroom Build Out Walls, doors, sinks, toilets, etc.	\$55,000	\$60,500		x	
	Civil, infrastructure, cost to deliver services		\$0	x		
	Site Furnishings Benches, flagpoles, trash, etc.	\$15,000	\$16,500			
	Site Development River path, river restoration, site lighting, public benches					
	Canopy Construction Four Posts, footings	\$150,000	\$165,000	x		
	Cables, rigging, fabric, remainder of posts	\$350,000	\$385,000			x
	Technology Sound, lighting, controls, IT, security	\$8,000	\$8,800	x		x
	Electrical Convenience power, theatrical power, area lighting	\$20,000	\$22,000			x
	Set conduit/prep work	\$15,000	\$16,500	x		
	Signage In house ADA	\$1,500	\$1,650		x	
	Ornamental wayfinding, marquee	\$6,000	\$6,600		x	
	Landscaping (excludes access drive)	\$25,000	\$50,000		x	x
	Permits	\$15,000	\$16,500			
	subtotal	\$1,135,290	\$1,312,619			
	Overhead and Profit (10%)	\$113,529	\$124,882			
	General Conditions (10%)	\$113,529	\$124,882			
	Contingency (25%)	\$283,823	\$312,205			
	subtotal	\$1,646,171	\$1,874,588			
DESIGN						
	A & E Fees (10%)	\$164,617	\$181,079			
	subtotal	\$1,810,788	\$2,055,666			
INFLATION						
	Mid point 2007 (10%)	\$181,079	\$199,187			
	TOTAL	\$1,991,866	\$2,254,853			

NOTES

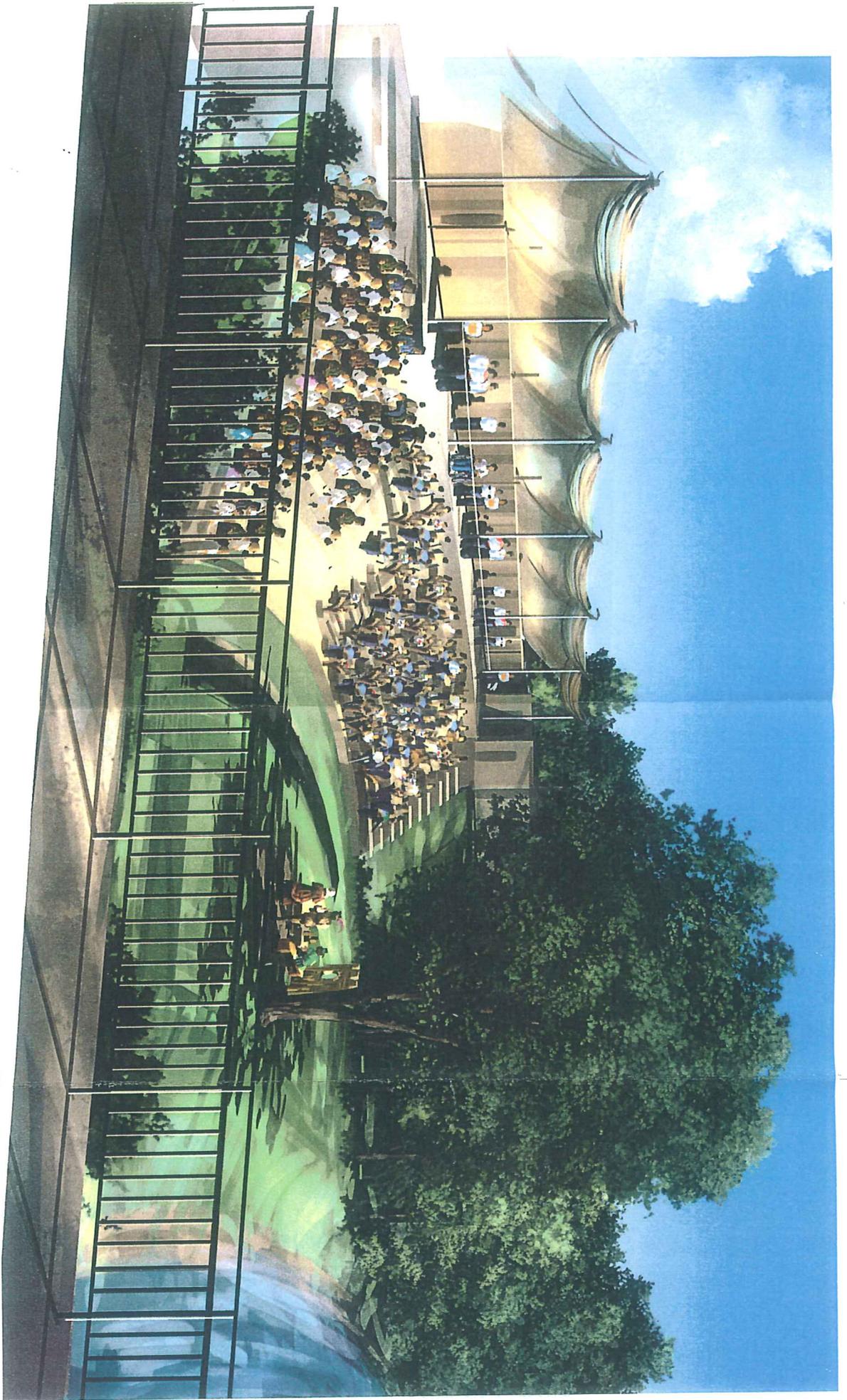
- Budget numbers were developed by Restoration Technologies Inc, a concrete restoration company
- Budget figures must be verified with final construction documents, testing, etc. at time of work
- Estimate does not include a theater consultant





WEST ELEVATION

 COLLABORATIVE Design Group, Inc.



VIEW FROM PEDESTRIAN BRIDGE

The following agencies possibly have jurisdiction over the Anoka Amphitheater Rehabilitation Project:

Agency	Contact	Reason for oversight	Permit/oversight required
MNRRRA: Minnesota National River and Recreation Area	Susan Overson (651) 290-3030 x225 John Amfinsen: X285 Jim Vanhaden x235 (mapping)	Site within Area boundaries?	Likely not in the boundary according to Jim. Will confirm and call back. (Possible funding source: Mississippi River Fund (?) grant)
Corp of Engineers	Tim Fell (651) 290-5360	Navigable waters. Biological line and ordinary high water mark.	Yes: depending on ordinary high water mark.
MN Department of Natural Resources	Tom Hovey (651) 772-7910	Wild and Scenic River. Flood plain issues. Critical area plan.	Yes: Will need to review plans.
MNDOT	Todd Sherman-planning (651) 582-1548	Site adjacent to Hwy 169	Need clarification
City of Anoka	Carolyn Braun (763) 576-2722	Building Permits	Yes: City to clarify
The Lower Rumm River Watershed Management Organization (LRRWMO)	Bob Obermeyer Barr Engineering 952-832-2600	Site-work adjacent to Rumm River	City to clarify
	Dennis Gimmetad (651) 296-5462	Site listed on the National Register of Historic Places	Yes: plan review
Anoka County Riverfront Park	Jeff Perry at Anoka County Parks (763) 767-2861	According to Jeff, site not within counties Jurisdiction	No