

OFFICE OF THE CITY AUDITOR

City and County of Honolulu
State of Hawai'i



Audit of the City's Planning, Design and Construction of Skateboard Park Facilities

A Report to the
Mayor
and the
City Council of
Honolulu

Report No. 08-01
July 2008

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Submitted by

THE CITY AUDITOR
CITY AND COUNTY
OF HONOLULU
STATE OF HAWAII

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Foreword

This is a report of our Audit of the City's Planning, Design and Construction of Skateboard Park Facilities. This audit was conducted pursuant to Resolution 06-373, requesting the City Auditor to Audit the City's Planning, Design and Construction of Skateboard Park Facilities, adopted by the Honolulu City Council on January 24, 2007. The city council passed this resolution based on its concern that the lack of coordination between the Department of Design and Construction and the Department of Parks and Recreation increased the cost of building these facilities.

We wish to acknowledge the cooperation and assistance of the staff and management of the Department of Design and Construction and others who we contacted during this audit.

Leslie I. Tanaka, CPA
City Auditor

EXECUTIVE SUMMARY

Audit of the City's Planning, Design and Construction of Skateboard Park Facilities

Report No. 08-01, July 2008

This audit was conducted pursuant to Resolution 06-373, requesting the City Auditor to Audit the City's Planning, Design and Construction of Skateboard Park Facilities, adopted by the Honolulu City Council on January 24, 2007. In passing the resolution, the city council expressed concern that the Department of Design and Construction (DDC) made changes to the design of some of the city's skateboard parks after those designs had already been approved by the director of the Department of Parks and Recreation (DPR). The council believes that this lack of coordination increased the cost of building these facilities. Thus, the council requested an audit to objectively review DDC's planning, design and construction of skateboard parks. The audit is included in the Office of the City Auditor's Annual Work Plan for FY2007-08 as communicated to the Honolulu City Council and mayor in June 2007.

Background

Over the past 10 years, DDC has completed nine skateboard parks on a budget of \$7.9 million for planning, design, construction and inspection. Of this amount, \$911,000 was budgeted for design and \$6.9 million was budgeted for construction. Design and construction contract awards totaled \$7.1 million, with \$616,300 awarded for design and \$6.5 million awarded for construction.

While Resolution 06-373 requested an audit of all skateboard parks in the past 10 years, we sought to address the city council's concerns, assess deficiencies in various processes, and the resulting increase in project costs, by focusing on one project: Banzai Skateboard Park. The first documented request for a skateboard park on the North Shore was on November 5, 1976, which was never built. The Banzai site was purchased by the city in 1995 as a support park, serving as an alternate location for a comfort station or shower facilities if DPR was unable to develop facilities in the area makai of Kamehameha Highway. Most recently, the Banzai Skateboard Park presents an example of the design-build project that the city has favored for skateboard parks, due to the flexibility given to designers to work with contractors under a single

contract. The city's goal was to produce an innovatively designed, timely and cost-effective structure that would keep skateboarders engaged and improve upon previously built parks.

Summary of Findings

Finding 1: DDC employed the design-build method for the construction of the Banzai Skateboard Park to encourage innovation, but failed to provide sufficient oversight over the contractor to provide reasonable assurance of the project's timely and cost-effective completion.

- The defining feature of the design-build delivery method is that the owner, i.e. the city, contracts with a single entity for the complete design and construction of a project. Instead of soliciting bids and awarding contracts separately, the design firm and the construction contractor form a single team, as either a joint venture or a general contractor-subcontractor relationship, or jointly sign a contract. Regardless of its composition, the design-build team agrees to provide a completed project that meets the owner's requirements for an agreed-upon price. This approach is viewed as a way of reducing possible conflicts between the two parties that could result in delays and additional costs. However, the flexibility awarded to the design-build team needs to be balanced by a detailed project description up front, which can be labor intensive and technically challenging for the owner. In addition, having a partnership between the design firm and construction contractor presents opportunities for efficiency, but also removes the designer from the role of the owner's advocate. Thus, design decisions may be determined or inappropriately influenced by team members other than the design firm.
- We found that DDC used the design-build approach but had not instituted measures within its Requests for Proposals (RFP) and design-build contracts to ensure that its benefits are achieved and risks are mitigated. Beyond bid solicitation and contract award, DDC does not have specific policies, procedures or design standards pertaining to the planning, design and construction of skateboard park facilities. In addition, the DDC project manager for Banzai was not aware of any department policies and procedures pertaining to the design-build process.

- We found that the RFP for Banzai skateboard park was not sufficiently detailed because it was created to solicit proposals for 11 other skateparks that were generally described as being in existing parks. Banzai ended up being the only skateboard park built under this RFP, even though it was not in an existing park. Given the broad coverage of the RFP, the contract would have been another means by which DDC could further clarify the city's objectives for specific projects. However, the Banzai design-build contract, awarded to general contractor PER Inc. based on a proposal submitted with subcontracted designer Dreamland Skateparks, was vague about the specific roles of the parties involved in the contract, relying mostly on the general terms and conditions used for all city construction contracts, which traditionally employ the design-bid-build method. Although the design-build method was selected to produce innovative designs, the contract was mostly silent on the role of the design firm. The most significant detail for which the contractor could be held accountable was a 240-day deadline for construction, but there was no additional guidance within the contract for planning or design. This contributed to a two-year gap between the notice to proceed with design and the notice to proceed with construction.
- According to the National Society of Professional Engineers (NSPE), it is imperative that the design professional and construction contractor upon whose qualifications the design-builder was selected be retained for the duration of the project. However, without a good partnership, conflicts between the two parties can delay the project, and the efficiency of having a single contract is diminished. For the Banzai project, DDC primarily relied on PER Inc. to provide project updates. When a dispute occurred between designer Dreamland Skateparks and general contractor PER Inc., DDC took the position that the dispute was a private matter to be resolved between the two companies. Although DDC was not contractually obligated to resolve the dispute, open lines of communication with both companies could have kept DDC apprised of potential problems.

Finding 2: DDC's poor planning of the Banzai Skateboard Park as a standalone facility on undeveloped land contributed to project delays, additional costs, and the completion of a skateboard park without essential support facilities.

- We found that municipalities such as the City of Portland, Oregon; the City of Seattle, Washington; the City of Penrith, New South

Wales in Australia, and the non-profit Tony Hawk Foundation, which promotes and helps finance public skateboard parks in low-income areas, have begun developing criteria for selecting sites that would be appropriate for skateparks. Such criteria include the creation of a safe and secure environment that provides adequate visibility for detection of emergency situations, vehicular and pedestrian access, and ease of routine maintenance; allows for clear, passive observation by parents, emergency services, police and the public; and access by public transportation and emergency vehicles.

- We found that because these features were lacking at Banzai Skateboard Park, its users' safety has been compromised, based on the *attractive nuisance* legal doctrine. This doctrine places responsibility on the landowner — i.e. the city — to provide reasonable protection against injuries that could result from structures that attract youth and children but also endanger their safety. Our site visits during this audit confirmed that the skateboard park has been in use since August 30, 2007, before the structure was substantially completed and accepted by the city. The city has taken the position that the contractor is liable for any injuries that occur at the skateboard park before the city accepts the structure.
- We also found that longstanding road easement issues that originated in the early 1990s delayed permits by almost two years. The skateboard park site was part of a larger parcel that was subdivided by a private owner in 1989, who was supposed to build driveways from Kamehameha Highway. When the private owner failed to construct the driveways and forfeited city-provided funds for this purpose, the city became obligated to construct the driveways in 1992. As of 2003, the contractor still required clarification from DDC on the city's use of the existing driveway easement to gain access to Kamehameha Highway. The contractor reported that this issue delayed its ability to obtain permits to start work.
- We found that change orders added \$100,789 to the original contract and delayed construction by 529 days — approximately 17 months. Additional funds needed for these change orders were taken from miscellaneous improvement funds for the district and the Department of Parks and Recreation's operating fund account. The largest change order (\$49,329) was for additional fill and revisions to a skateboard bowl, which was built following a protest rally by

community skateboarders and their failed attempt to secure private funding to restore Dreamland Skateparks' role during the construction phase. DDC attributed 469 days to this change order, but only three months elapsed between the contractor's proposal on July 25, 2007 and its estimated completion on October 23, 2007. While change orders added more than one year to the process, actual construction on the skateboard structure took only six months.

Recommendations and Response

The Department of Design and Construction should:

1. Improve internal design-build practices, specifically:
 - a. Develop policies and procedures specifically for design-build projects, from appropriate details to include in the RFP to deadlines for all key phases of the project, from design to construction.
 - b. Clarify the roles of all parties within the design-build contract. Provide open lines of communication through regular meetings with both the designer and the contractor to ensure that both are operating in the city's interest.
 - c. Develop specific RFP and contract guidelines for design-build projects and contractor oversight.
2. Develop criteria for future skateboard park site selection and development, including required preliminary studies, permits and components necessary for orderly project progression to include reasonable precautions against building potential *attractive nuisance* structures.
3. Develop guidelines to improve public and client agency notification of changes to particular projects to keep stakeholders up to date on changes that occur during construction.

In its response, DDC clarified the issue of whether the city had access to easements leading to the Banzai skatepark site, attributing a two-year delay to the state Department of Transportation's lack of response to the contractor. The report cites a memo in which the contractor was unclear on this issue and required further clarification. We note that our narrative of these events was based on project files provided to us during

this audit. However, DDC did not dispute that this issue took two years to resolve. The department also disagreed that the failure to construct the access road had a substantial impact on the project. Within the report, however, we stated that the failure to construct the access road led to delays in obtaining permits, which the department did not dispute.

DDC noted its disagreement with statements made by other sources directly involved with the project, such as Dreamland Skateparks and contractor PER Inc., as well as those contained within its own project files. For example, DDC noted that it was not certain of the source for a figure in Exhibit 1.1. However, all figures in this exhibit were from a spreadsheet that DDC provided to the city council on August 3, 2007. The department disagreed with our conclusion that rushing projects to encumber funds at the end of the year would have made a difference on this project. However, this was a conclusion we reached based on comments made by those directly involved in the project, when asked for recommendations that would facilitate improvements for future projects. In addition, the department stated in its response that it was never the city's intent to save time and money by using design-build. We based this conclusion on a combination of industry criteria touting design-build partnerships as potential time savers, and a memo from DDC to the Department of Budget and Fiscal Services, in which the former director noted that skateboard parks can be delivered at a higher level of quality for design and construction at a significantly lower cost by utilizing the design-build method. The former director also stated that proposals were anticipated to result in cost savings per square foot to the city. In another example, the department agrees that the construction of the skateboard park structure took only six months. However, it disagreed with the start date we cited as May 2007. This was based on a combination of email documentation between the contractor and DDC, and a direct quote from the contractor. The department also disagreed with our comparison of time delays as documented on the change orders and delays reflected in project files. We contend that because change orders affect the legal criteria by which a contract's timeliness and cost-effectiveness are evaluated, it is reasonable to compare what was stated in the revised contract with actual events.

The department clarified that the absence of detailed project requirements and the use of a broadly worded solicitation were selected as a means of fostering creativity and innovation among those proposing skateboard designs. However, we relied on the Construction Specifications Institute for design-build criteria, which states that the

owner is responsible for preparing project requirements in the form of a detailed project description.

The department cited the Kapolei skatepark as an example of a project that can be successful without detailed project descriptions. In fact, we presented Kapolei skatepark within the report as a comparison with Banzai Skateboard Park to illustrate that the design-build process could produce a positive outcome if well coordinated and properly executed. However, the contrasting outcomes between the two illustrated that, without specific frameworks with which to hold contractors accountable throughout the process, the city essentially leaves project outcomes largely to chance. In general, we believe that developing policies, procedures and guidelines specific to design-build project proposals and contracts could serve to improve the process for future design-build projects. DDC generally agreed with our account of the two-year delay in obtaining permits for the Banzai skateboard park project, the change orders that contributed to additional costs and delays due to the undeveloped site, and that open lines of communication with the designer would have facilitated the process.

Despite its disagreements with criteria we used based on the National Society of Professional Engineers and the Construction Specifications Institute, and comments made to us by Dreamland Skateparks and PER Inc. during the course of our audit, the substance of our report remains unchanged. However, the department's response provided some clarifying information, and changes were made to the final report where they were appropriate.

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Chapter 1

Introduction

This audit was conducted pursuant to Resolution 06-373, requesting the City Auditor to Audit the City's Planning, Design and Construction of Skateboard Park Facilities, adopted by the city council on January 24, 2007. The audit is included in the Office of the City Auditor's Annual Work Plan for FY2007-08 as communicated to the Honolulu City Council and mayor in June 2007.

In passing the resolution, the city council expressed concern that the Department of Design and Construction (DDC) made changes to the design of some of the city's skateboard parks after those designs had already been approved by the director of the Department of Parks and Recreation (DPR). The council believes that this lack of coordination increased the cost of building these facilities. Thus, the council requested an audit to objectively review DDC's planning, design and construction of skateboard parks.

While the resolution requested an audit of all skateboard parks in the past 10 years, we sought to address the city council's concerns, assess deficiencies in various processes, and the resulting increase in project costs, by focusing on one project: Banzai Skateboard Park. This is an example of the design-build project that the city has favored for skateboard parks, due to the flexibility given to designers to work with contractors under a single contract. The city's goal was to produce an innovatively designed, timely and cost-effective structure that would keep skateboarders engaged and improve upon previously built parks.

Background

When skateboards first emerged in California in the 1960s, they were used primarily on sidewalks until skaters discovered empty swimming pools, whose rounded bottoms and vertical waves mimicked ocean waves, according to *Metroscape* magazine, published by the Institute of Portland Metropolitan Studies at Portland State University. Most early skateboard parks, built in the late 1970s, were commercial enterprises charging \$3 to \$6 for a two-hour session, and many duplicated the typical California swimming pool precisely, including a rounded overhang and blue tile coping. Skateboarding declined a decade later due to a combination of maintenance costs, poor design, and liability concerns that shut down skateboard parks across the country. According to *The*

Insurance Journal, by the mid-1980s virtually every skateboard park in the country was closed.

Around this time, street skating emerged, in which skateboarders expanded their use of the space beyond what was expected by riding boards down handrails, sliding along park benches or curbs, and even riding up the vertical faces of buildings. Building owners considered this use of space as vandalism, and police were called to enforce non-skating laws, which municipalities passed in abundance.

Changes in liability laws, giving individuals responsibility for participating in the sport, helped municipalities become more comfortable with the sport. For example, California passed a law in 1992 that grants immunity to municipalities for skateboard facilities when an ordinance is adopted and signs are posted that require the use of safety equipment to include: helmets, elbow and knee pads—even though the rules and regulations are not enforced by on-site supervision.

These trends were mirrored in Honolulu, where city documents showed community interest in a North Shore skatepark in 1976, eventually leading to the city's attempts to build skateboard parks in the late 1980s, then restarted in 1997 with the then-mayor's increased emphasis on increasing recreational facilities for youth. In 2003, the state of Hawai'i passed Chapter 46, Section 72.5, Hawai'i Revised Statutes, limiting counties' liability for skateboard activities at public skateboard parks, stating that:

No public entity or public employee shall be liable to any person for injury or damage sustained when using a public skateboard park, except when injury or damage is caused by a condition resulting from the public entity's failure to maintain or repair the skateboard park.

Honolulu's history with skateboard parks

Before 1997, the city's attempts to build skateboard parks had failed to generate the desired results. The city had studied options and alternatives to accommodate skateboarding as a recreational activity, as early as 1988. In August of that year, the DPR director presented a Skateboard Plan of Action to the mayor, identifying 11 outdoor play courts that could be converted and designated as skateboard parks. However, by 1992, only three legal skateboarding areas existed on O'ahu at Ewa Beach, Wai'anae and Hickam Air Force Base.

In January 1997, in his State of the City address, then-Mayor Jeremy Harris pledged more emphasis on youth programs and recreational needs, promising to bring the *full force of our parks department to bear* on this issue, with more facilities for a variety of activities, including skateboarding. That same year, the mayor convened a Skating Ad Hoc Committee to consider possible skateboarding sites. The Ad Hoc Skating Committee discussed an island-wide master plan for skating programs in September 29, 1997. However, a city official familiar with skateboard planning had no recollection of such a plan being formally written.

DDC assumed responsibility for parks department projects in 1998 following city reorganization

The Department of Design and Construction was established in 1998, as the central agency responsible for the planning, design and construction management of the city's Capital Improvement Program (CIP). DDC administers the planning, development and implementation of capital improvements for all city agencies, known as client agencies. According to Section 6-503(c), Revised Charter of Honolulu:

The director of design and construction shall, in consultation with respective departments, direct and perform the planning, engineering, design and construction of wastewater facilities, parks and recreational facilities, and transportation systems.

In addition to its client agencies, DDC also serves the administration, previous vision teams, neighborhood boards and the city council. Its work is dictated by what is provided in the capital budget. Once funds are appropriated and released, DDC considers its mission as obligating the funds for the intended purpose before the lapse date.

Prior to the reorganization, the Department of Parks and Recreation was responsible for planning, design and construction management of park projects. As part of the reorganization, many of the project manager staff from the parks department transferred to DDC. Thus, the parks department became one of DDC's many client agencies, responsible for managing, maintaining, and operating all parks and recreational facilities of the city after such facilities are built. According to a DDC administrator, the priorities with respect to park projects, i.e. where to build skateboard parks and when, are set by the parks department. The city council also influences priorities with funding decisions.

Under DDC, park projects fall under the Facilities Division. The division's Design Branch B implements the city's CIP projects that provide new park facilities for the city and rehabilitates and upgrades existing park facilities to comply with present code standards such as the Americans with Disabilities Act. The Construction Management Branch manages and inspects both park and building CIP projects. DDC does not have any specific policies, procedures or design standards pertaining to the planning, design and construction of skateboard park facilities, but does apply general standards pertaining to the design and preparation of plans for skateboard park facilities.

In its current role as a client agency, the parks department typically reviews designs for park projects during the initial phase of the project, generally for maintenance-related features. Because skateboard parks were considered specialized structures, users were included in a design committee. DDC then presented the parks department with what it wanted to build based on the committee's deliberations. After reviewing the design, the parks department recommends changes.

If changes need to be made, for example, if the contractor runs into problems during construction, the contractor files a request for information (RFI) with DDC regarding ways to resolve the issue. This information is shared with the parks department, which gives its recommendation. Near the completion of the project, the parks department attends the pre-final inspection, which is scheduled by DDC's construction branch project inspector. The project inspector compiles a punch list from DPR and other appropriate organizations. This punch list includes items that need to be corrected, or plan specifications that were not followed properly. A complete punch list is then sent to the contractor for corrective action. The project inspector ensures that the pre-final punch list and deficiencies are corrected in a timely manner as required by the latest General Conditions of Construction Contracts for the City & County of Honolulu. After DDC and the parks department are satisfied that the punch list items are corrected, DDC accepts the project on behalf of the city.

Resources devoted to skateboard parks over the past 10 years

Over the past 10 years, DDC has completed nine skateboard parks on a budget of \$7.9 million for planning, design, construction and inspection. Of this amount, \$911,000 was budgeted for design and \$6.9 million was budgeted for construction. Design and construction contract awards totaled \$7.1 million, with \$616,300 awarded for design and \$6.5 million awarded for construction. The previous administration had promised

skateboarders as many as 21 parks would be built island-wide after 2002. However, more than half of those skateboard parks were cancelled for various reasons, ranging from substandard soil conditions to funding shortfalls.

Exhibit 1.1
DDC Skateboard Facility Projects Completed Since 1998

<i>Project Title</i>	<i>Contract Amount D = Design C=Construction</i>	<i>Budgeted Amount D = Design C=Construction</i>	<i>Construction Completed</i>
'A'ala Park	\$50,000 (D)	\$50,000 (D)	December 2002
	\$245,335 (C)	\$280,000 (C)	
Banzai Rock Beach Support Park/Hale'iwa Design-Build	\$587,760 (C)	\$150,000 (D) \$830,000 (C)	Pending (pre-final inspection on Nov. 2007)
Kapolei Regional Park	\$715,834 (C)	\$145,000 (D) \$670,000 (C)	January 2007
Kamilo Iki Community Park*	\$150,000 (D) \$1,143,077 (C)	\$150,000 (D) \$1,050,000 (C)	December 2002
Kaneohe District Park	\$53,600 (D) \$248,596 (C)	\$80,000 (D) \$250,000 (C)	September 2002
Keolu Hills Neighborhood Park	\$135,000 (D) \$773,130 (C)	\$135,000 (D) \$800,000 (C)	February 2002
Makiki District Park Improvement Project*	\$0 (In-house design) \$157,539 (C)	\$50,000 (C)	November 2000
Manana Community Park Youth Facility Phase 2	\$152,700 (D) \$2,030,869 (C)	\$126,000 (D) \$2,375,000 (C)	May 2004
Mililani District Park	\$75,000 (D) \$548,565 (C)	\$75,000 (D) \$550,000 (C)	December 2002
Total Design	\$616,300	\$911,000	
Total Construction	\$6,450,705	\$6,855,000	

*Supplemented by Recreational District Improvement bulk funds or parks and playground funds

Source: Department of Design and Construction

Resolution requesting the audit

Resolution 06-373 requested that the city auditor audit DDC's planning, design and construction of all skateboard parks constructed over the past 10 years. The council expressed the belief that the costs for some skateboard facilities planned, designed and constructed during this period had increased because their design was changed after they had been approved by the parks department.

During a January 9, 2007 hearing of the council's Public Safety, Health and Welfare Committee regarding this resolution, concerns regarding the cost of Banzai skateboard park were specifically expressed by one council member, as well as the cost of one cancelled skateboard park project in Hau 'ula. The resolution was unanimously supported by members of the public who submitted testimony. One testified to witnessing what was described as *starts and stops* of the skateboard park construction in that area. Another mentioned attending a groundbreaking ceremony more than a year prior to the hearing, but the park was still not completed.

Reasons for focusing on Banzai Skateboard Park

While Resolution 06-373 requested an audit of all skateboard parks in the past 10 years, in order to sufficiently address the city council's concerns and assess deficiencies in various processes as well as the resulting increase in project costs, we focused on one project, the Banzai skateboard park. This is an example of the design-build process that the city has more recently favored for skateparks, due to the desire for innovative designs. With design-build, the contractor has professional responsibility for design and has its own staff monitor that the work is proceeding as planned. DDC inspectors would observe the work to see whether the contractor is continuing to build according to the plan, and then authorize payments.

The first documented request for a skateboard park on the North Shore was on November 5, 1976. Attempts had been made to find an appropriate site, but DPR advised that careful consideration had to be given to proper planning, and finding an appropriate site, particularly one that could accommodate support facilities such as parking and restrooms.

The current site of Banzai skateboard park was originally purchased by the city in 1995 as a support park, serving as an alternate location for a comfort station or shower facilities if DPR was unable to develop facilities in the area makai of Kamehameha Highway. The lack of comfort station or shower facilities, and unsafe parking conditions were

cited as reasons for purchasing the land. However, this original intent was overshadowed by political considerations that prioritized building the skateboard park before these original concerns were addressed.

Objectives of the Audit

1. Review the Department of Design and Construction's planning, design and construction practices at Banzai Skateboard Park.
2. Assess the effectiveness by which the Department of Design and Construction oversees the work of its general contractor to control expenses and minimize waste of city resources.
3. Make recommendations as appropriate.

Scope and Methodology

Resolution 06-373 requested that the city auditor audit DDC's planning, design and construction of all skateboard parks constructed over the past 10 years. The council expressed the belief that the costs for some skateboard facilities planned, designed and constructed during this period had increased because their design was changed after they had been approved by the parks department. In order to address these concerns, the scope of our audit focused on specific processes that could contribute to increased costs, specifically the planning, design and construction of Banzai skateboard park from FY2000-01 to FY2007-08. To provide a comparison with the Banzai project and to determine possible causes for added costs, we also reviewed documents related to Kapolei Skateboard Park, which was built during the same period, using the same design-build process. We conducted Internet, literature, and other searches to identify commonly used skateboard industry best practices, as well as those used by other municipalities. We also identified appropriate design-build best practices as recommended by the Construction Specifications Institute, the National Society of Professional Engineers, and the Tony Hawk Foundation, an organization that promotes and helps finance public skateparks in low-income areas.

As part of our fieldwork, we conducted a documentation review of department policies and procedures, contract terms, change orders, and other documents related to Banzai skateboard park. We also reviewed additional documents made available by community supporters of the project.

We conducted interviews with DDC staff, particularly those within the Facilities Division familiar with the Banzai skateboard park project, as well as those familiar enough to provide a comparison with other similar projects planned, designed and constructed by the city. We conducted interviews with administrators and district supervisors at the Department of Parks and Recreation regarding information on that department's coordination of skateboard park projects with DDC. We interviewed the contractor and skateboard park design subcontractor for Banzai skateboard park and concerned members of the community. We conducted site visits at Banzai skateboard park and Kapolei skateboard park to assess their respective conditions.

Our work was conducted in accordance with generally accepted government auditing standards.

Chapter 2

The Department's Poor Planning and Limited Oversight Over the Contractor of the Banzai Skateboard Park Contributed to Construction Delays, Additional Costs, and the Completion of a Skateboard Park Without Essential Support Facilities

Skateboard parks have become popular public infrastructure projects nationwide as municipalities have sought to provide safe alternatives for the many street skaters whose drive to improve their skills led them to practice on structures that were not originally meant to be skated on—such as public monuments, stairs, park benches and parking structures—resulting in defaced public and private property. The creativity of its practitioners has led to the rapid evolution of the sport, leading to the challenge of keeping up with skateboard designs to keep users engaged and the skateboard parks in continuous use. After receiving feedback from skateboard park users who were dissatisfied with previous skateboard park projects, the Department of Design and Construction (DDC) in 2002 attempted to be responsive to skaters' needs for more innovative designs and comply with skateboard industry practices, by employing the design-build method at Banzai Skateboard Park that allowed design and construction firms to work as a team, integrated into a single procurement process. Design-build was viewed as a potentially more time- and cost-effective method of delivering a skateboard park. While the effort to use a promising approach was commendable, the department's poor planning in the implementation of this method, and inadequate oversight over the contractor tasked with designing and building the park resulted in a project that exceeded originally contracted amounts by more than \$100,000 and delayed the project by three years.

Summary of Findings

1. DDC employed the design-build method for the construction of the Banzai skateboard park to encourage innovation, but failed to provide sufficient oversight over the contractor to provide reasonable assurance of the project's timely and cost-effective completion.

2. DDC's poor planning of the Banzai skateboard park as a standalone facility on undeveloped land compromised users' safety, contributed to project delays, additional costs, and a skateboard park without essential support facilities.

DDC Employed the Design-Build Method for the Construction of the Banzai Skateboard Park to Encourage Innovation, But Failed to Provide Sufficient Oversight Over the Contractor to Provide Reasonable Assurance of the Project's Timely and Cost-Effective Completion

The design-build method was selected by DDC for Banzai skateboard park to produce an innovatively designed, time- and cost-effectively built skateboard park under one contract, in response to skateboarders' complaints about sub-standard features in previously built skateboard parks. However, the flexibility awarded to the design-build team was not balanced by detailed requirements up front. Instead, DDC used a broadly worded solicitation for proposals and a standard construction contract that only contained deadlines for construction but not the design phase.

The defining feature of the design-build delivery method is that the owner, i.e., the city, contracts with a single entity for the complete design and construction of a project. Instead of soliciting bids and awarding contracts separately, the design firm and the construction contractor form a single team, for example, as a joint venture or a general contractor-subcontractor relationship. This approach is viewed as potentially reducing possible conflicts between the two parties that could result in delays and additional costs.

Design-build procurement is the accepted industry standard for skatepark construction. Skateboard park users generally believe that comparable quality cannot be achieved by concrete contractors who typically lack the specialized expertise and tools to create concrete skate bowls. Professional designer-builders for skateboard parks prefer the design-build approach because it gives them some latitude in making minor on-the-spot modifications in the field.

Design-build can produce cost-effective and innovative structures but not without the owner providing a detailed project description up front. In contrast, when DDC used the design-build method for procuring services for Banzai skateboard park it lacked policies and procedures for developing detailed specifications in the Request for Proposals (RFP) and contracts using this method. Without sufficient guidelines from DDC, the achievement of efficiencies from the design-build method for future projects will continue to be inconsistent, depending solely on the initiative of each contractor.

Design-build is favored for skateboard parks

Skateboard designers favor the design-build approach because it ties the execution of the park to those who originated the design. The defining feature of the design-build delivery method is that the owner, i.e., the city, contracts with a single entity for the complete design and construction of a project. Thus, the designer and the construction contractor form a single team, as either a joint venture, a contractor-subcontractor, or two companies jointly signing a contract. This approach is viewed as a potential time and cost saver, reducing potential conflicts between the two parties that could result in delays and additional costs.

The challenge for municipalities seeking to build skateboard parks is that no specific standards have been established for skateboard design, materials and site requirements. This lack of standards, coupled with the loss of direct contact with the designer—which in a design-bid-build scenario would be contractually obligated to watch after the owner's best interest—has made many municipalities wary of such an approach. Concerned over the lack of accountability, some states have outlawed design-build. However, this method of delivery has both benefits and disadvantages.

Features of design-build

The design-build delivery method means that the owner, i.e., the city, has a contract with a single entity for the complete design and construction of a project. By comparison, the traditional design-bid-build method requires an owner to solicit bids for design first, award a contract with a design firm, approve the final design, and then has another bid solicitation with a separate firm for the construction phase based on that design.

The design-build team can take many forms: the design firm and construction contractor may be units within a single entity, or two or more entities may form a joint venture, establish a general contractor-subcontractor relationship, or jointly sign a contract. Either the design firm or the construction contractor may assume the lead role in any of these relationships. Regardless of its composition, the design-build team agrees to provide a completed project that meets the owner's requirements for an agreed-upon price.

The owner is responsible for preparing project requirements in the form of a detailed project description upon which prospective design-build teams can base their proposals or upon which a contract can be negotiated. After the design-build contract is awarded, the owner may be left out of many day-to-day decisions and will have less contact with

project activities than in the design-bid-build situation. The owner should, however, be involved with the oversight of quality control and quality assurance activities during design and construction.

According to the National Society of Professional Engineers (NSPE), the public sector has used design-build as a specialized project delivery system in certain limited situations, such as the design and construction of prisons, public and military housing, educational facilities, physical fitness facilities, warehouses, and other projects where the scope of work can be easily developed or replicated. The decision to use the design-build project delivery method should take into consideration the type of project, the owner's resources for preparing a detailed project description, the legal requirements in the area of the project, and the availability of design-build firms.

Pros and cons of design-build

Design-build has a number of advantages, most dealing with the efficiencies of having a single contract and having the design firm and construction contractor coordinating their efforts. However, disadvantages include increased technical demands on the owner prior to bidding, higher costs if there are unresolved permitting issues, and loss of control over design. The single-contract arrangement offers control over project timing and costs. Since the design team and construction contractor are contractually linked or form a single entity, fast-track scheduling is an available option for minimizing construction time. Fast-track procedures allow certain elements of construction to proceed in step with the design process. Because of the close coordination between the design firm and construction contractor during the design phase, the contractor can influence product selections by providing information regarding cost, availability and performance. The design-builder may also have specialized information regarding design and constructability of project elements, components and details.

Design-build gives the owner a single point of contact for communicating its goals, objectives and scope of work. Thus, the burden on the owner to mediate disputes between the design firm and the construction contractor is eliminated because a sole design-builder may be held contractually accountable and responsible for the entire project. In addition, the owner may gain the ability to fix total project costs earlier in the process than with other project delivery systems.

The project may proceed more efficiently because the design firm and construction contractor are on the same team. The close relationship

between the design firm and construction contractor may lead to the incorporation of more economical design features and the application of cost-saving construction methods. Construction efficiency may be improved because design efficiencies can be woven into the entire construction process and because the design firm, as a member of the design-build team, can participate directly in resolving design issues that surface during construction.

Design-build also has particular disadvantages. According to the National Society of Professional Engineers and the Construction Specifications Institute (CSI), the design-build project delivery system may be more labor intensive and technically demanding for the owner than is design-bid-build. Design-build projects require the owner to carefully prepare a scope of work that defines its requirements in detail. The design-builder usually will not perform any services not required by the owner's project description. Items normally taken for granted, such as shop drawings, product data, samples, testing and inspection, and extended warranties, may not be provided to the owner at all if not required by regulations or by the owner's project description.

Another disadvantage of design-build is the alteration of the direct relationship and line of communication between the owner and design firm. The owner may lose direct control over design because the designer becomes more accountable to the design-build team, of which he or she is an integral part, than to the owner. In addition, design decisions may be determined or inappropriately influenced by team members other than the design firm. This is more likely to occur when a non-designer is the lead on the design-build team. The leader may pressure designers to reduce self-imposed quality criteria or design standards to minimum levels in order to maximize profit.

When the design firm and construction contractor form a single contractual entity, the owner loses the benefit of the designer's independent construction oversight and monitoring on the owner's behalf. Consequently, the owner loses its ability to assure project quality through a system of checks and balances between the designer and the construction contractor, such as exists under the design-bid-build process. According to one city administrator, the flaw with the design-build process is that contractors see it as *quick money*, and that once a project is accepted by the city, then the contractor won't do anymore than it has to. Any type of project may be a candidate for the design-build project delivery method. However, these projects are usually

those with reasonably predictable project requirements that the owner is able to describe clearly and completely.

Design-build projects could cost more when delays or claims occur in the construction phase, such as the need to resolve permitting and environmental issues or to solidify owner preferences. The design-bid-build project delivery system, on the other hand, generally allows for resolution of these issues during the less-expensive design phase. Higher costs may be incurred if the owner chooses to employ a separate entity to oversee the design-build process. In the design-bid-build system the designer who has prepared the project plans and specifications, or another professional, typically provides oversight of construction to assure the owner that the project is properly constructed. When using design-build, some owners who lack specialized expertise in-house have found it necessary to engage an independent design and/or construction professional to review the work of the design-build team to ensure that the project has been properly executed.

The design-build project may require longer completion time, particularly if the scope of work or permitting issues are unresolved. Projects can be delayed if a design-bid-build project is awarded with an incomplete scope — including project specifications, if the scope is modified in-process, or if permitting and environmental issues are unresolved after construction has commenced.

DDC lacks policies and procedures to achieve benefits of design-build

DDC has used the design-build procurement approach, but has not instituted measures within its Requests for Proposals (RFP) and design-build contracts to ensure that its benefits are achieved and its risks are mitigated. Design-build can produce cost-effective and innovative structures but not without the owner providing a detailed project description up front. The design-build process places responsibility on the project owner to prepare detailed project descriptions upon which prospective design-builders can base their proposals or upon which a contract can be negotiated. According to the NSPE, it is particularly important that the scope of work be thoroughly defined, because this is the single statement of the owner's minimum project expectations. Without sufficient guidelines from DDC, the achievement of efficiencies from the design-build method for future projects will depend solely on the initiative of each contractor.

Despite the importance of detailed project descriptions at the beginning of the design-build process, DDC's procedures are limited to awarding

the design-build contract. No guidelines in developing design-build RFPs and the contracts themselves exist. DDC awards design-build contracts based on a two-step process. The first step is to solicit proposals, and qualifications from contractors. DDC's scoring criteria includes comparable past projects, quality of staff, contractor qualifications, and qualifications of the skateboard park designer. DDC also asks for a ballpark figure on small, medium or large parks to evaluate a general cost per square foot estimate. The second step is to negotiate the best and final offer with the contractor receiving the top score from an evaluation committee. If the best and final offer for the top scoring contractor exceeds available funds, then negotiation begins with the next highest scoring contractor.

Beyond bid solicitation and contract award, DDC reported that it does not have any specific policies, procedures or design standards pertaining to the planning, design and construction of skateboard park facilities. In addition, the DDC project manager for both Banzai and Kapolei was not aware of any department policies and procedures pertaining to the design-build process. According to the DDC Facilities Division chief, the design-build process is not as controlled by the owner (the city). The designer has more of a free hand as long as user groups buy into the design. The following exhibit compares the risks associated with design-build and the practices used by DDC at Banzai skateboard park.

Exhibit 2.1

Design-Build Risks vs. DDC Practices at Banzai Skateboard Park

<i>Risk</i>	<i>DDC Practice at Banzai</i>
<ul style="list-style-type: none"> Detailed project description required during the Request for Proposal (RFP) process increases technical demands on the owner. 	<ul style="list-style-type: none"> Project description section of RFP-013 includes only the names of parks and related budget ordinances.
<ul style="list-style-type: none"> Items normally taken for granted, such as shop drawings, product data, samples, testing and inspection, and extended warranties, may not be provided to the owner if not required by regulations or by the owner's project description. 	<ul style="list-style-type: none"> These items were not specified in the RFP. Inspection was covered only in the General Conditions of Construction Contracts, i.e. the city may perform inspections but is not required.
<ul style="list-style-type: none"> Unresolved scope of work or permitting issues—normally resolved during the less expensive design phase in design-bid-build—may require longer completion time. 	<ul style="list-style-type: none"> Unresolved road easement issues prevented the contractor from securing permits needed to start work in a timely fashion.
<ul style="list-style-type: none"> The owner may lose direct control over design because the designer is more accountable to the design-build team than to the owner. 	<ul style="list-style-type: none"> No contract deadline for design, only construction. There was a two-year gap between the notice to proceed with design given on July 7, 2003 and notice to proceed with construction effective September 15, 2005.
<ul style="list-style-type: none"> Design decisions may be determined or inappropriately influenced by team members other than the designer. 	<ul style="list-style-type: none"> No provisions to mitigate risk. Dreamland Skateparks reported that its original design had been inappropriately altered and that it had not approved a final design prior to construction. The city took the position that PER Inc.'s replacement of Dreamland was an internal matter.
<ul style="list-style-type: none"> The leader may pressure designers to reduce self-imposed quality criteria or design standards to minimum levels in order to maximize profit. 	<ul style="list-style-type: none"> No provisions to mitigate risk. DDC had limited contact with designer Dreamland Skateparks and mostly communicated with PER Inc.

Sources: Construction Specifications Institute, National Society of Professional Engineers, City & County of Honolulu Department of Design and Construction

DDC project manager lacked sufficient time to develop proper guidelines within the RFP and contract documents

DDC did not allot sufficient time to implement the recommended design-build practice of carefully preparing detailed requirements during the

RFP process and mitigating the risk of losing direct control over design, within the contract. DDC's project manager for Banzai skateboard park had never developed a design-build RFP or contract prior to this project. The project manager acknowledged that, especially with design-build, the department needs to plan ahead. There needs to be enough time to put out a good RFP, a good evaluation of proposals, and to prepare a good design-build contract. At Banzai, there was not enough time because the department was rushing at the end of the year to encumber the funds.

The timeline for this project was affected by funding over two separate fiscal years: FY1999-00 and FY2001-02. The sequence of events was as follows:

- Banzai skateboard park funds were budgeted for FY1999-00, \$168,000 for design and \$600,000 for construction.
- December 29, 2000: Design consultant contract was awarded to Bryce Uyehara, AIA, Inc. and the construction contract was awarded to Kaikor Construction Associates. Additional funds were appropriated for Banzai skateboard park in FY2001-02, \$30,000 for design and \$950,000 for construction.
- November 15, 2001: Letter from DDC to the Department of Budget and Fiscal Services (BFS) explains that the notice to proceed with construction was never given because driveways required at the time of the city's purchase of Banzai site were never constructed.
- May 9, 2002: Construction funds lapsed.
- August 19, 2002: RFP-013 issued for the design-build delivery of 12 skateparks and proposals were due on September 30, 2002.
- August 22, 2002: DDC notified BFS that Banzai will not be constructed under the previous contract, asking that Kaikor be released from its contract with the city.
- December 20, 2002: The design-build contract for Banzai was awarded to PER Inc.

According to the project manager, the end of the year is the busiest time for both DDC and those processing contracts at BFS, so the process was rushed at the end. The project manager noted that there was no reason to put out the RFP in the last quarter of the year, when everyone is pressed for time. However, a DPR administrator noted that there was tremendous public pressure to get the project done quickly, so DDC rushed the project.

RFP and contract documents contained insufficient details for design-build

DDC did not include a sufficiently detailed project description within its RFP for Banzai skateboard park, nor did it include a deadline for the project's design phase. The design-build process places responsibility on the project owner to prepare detailed project descriptions upon which prospective design-builders can base their proposals or upon which a contract can be negotiated. According to the NSPE, it is particularly important that the scope of work be thoroughly defined, because this is the single statement of the owner's minimum project expectations, upon which the design-builder submits its proposal, is selected, and then proceeds, with the price to complete the project already agreed to in advance.

The RFP for Banzai skateboard park was not sufficiently detailed because it was created to solicit proposals for 11 other skateparks that were generally described as being in existing parks. Banzai ended up being the only skateboard park built under this RFP, even though it was not in an existing park. Instead of the city specifying its requirements, those who wanted to submit proposals were asked to provide an estimated time frame, work program and estimated cost per square foot for skateparks in a wide range of sizes, from 10,000 square feet or smaller, to 20,000 square feet or larger. In contrast, a design-build RFP for a skatepark in Washington County, Oregon specified the construction of a beginner's level public park, estimated project timelines, included detailed background information on the site along with the nearest parking lot, aerial photographs, desired construction methods, a topographical survey, and associated amenities such as benches, trash receptacles and accessible walks.

Given the broad coverage of the RFP, the contract would have been another means by which DDC could further clarify the city's objectives for specific projects. Since completion time is of the essence, and the design-build firm is under pressure to rapidly plan and execute the project, the time available for consultation is limited. Thus, if an owner

expects to obtain a quality project through design-build, its scope of work must be considerably more detailed than a scope of work for the design of a design-bid-build project. A precise scope assists the design-build firm and the owner in ensuring that they supply and receive a completed project that fulfills the owner's expectations.

However, the Banzai design-build contract, awarded to general contractor PER Inc. based on a proposal submitted with designer Dreamland Skateparks, was vague about the specific roles of the parties involved in the contract, relying mostly on the general terms and conditions used for all city construction contracts, which traditionally employ the design-bid-build method. Although the design-build method was selected to produce innovative designs, the contract was mostly silent on the role of the design firm. The most significant detail for which the contractor could be held accountable in the Banzai design-build contract itself was a 240-day deadline only for the construction phase, but there was no additional guidance for planning or design. DDC's lack of a deadline within its contract for the design phase and lack of specific provisions for open lines of communication among the design firm (Dreamland Skateparks), the city and the construction contractor (PER Inc.) led to a two-year lag between the notice to proceed with design and the notice to proceed with construction that left Dreamland Skateparks vulnerable to pressure from PER Inc. to modify its designs as other construction-related costs increased. During this period, DDC had no measure by which to hold the contractor accountable for delays until after construction started. There was also no assurance that both major components of the design-build team were working together in the city's best interest to produce the best value product for the price. When asked for suggestions for improvement based on lessons learned from the Banzai skateboard park project, DDC's project manager, Dreamland Skateparks and PER Inc. all agreed that there should have been deadlines for the design phase of the project.

Checks and balances between design firm and construction contractor were insufficient to ensure that the city's interests were served

DDC communicated primarily with PER Inc. throughout the project, increasing the risk that the construction contractor may inappropriately influence or determine design decisions. Having a partnership between the design firm and construction contractor presents opportunities for efficiency, but also removes the designer from the role of owner's advocate. According to the NSPE, owners should not assume that an independent *checks and balances* system is an inherent element of the design-build project delivery system. Since the greatest cost in a design-build project is usually construction-related rather than design-related,

the construction contractor may dominate the interface with the owner, and possibly override specific decisions. The NSPE recommends that the designer have direct access to the owner in all matters concerning design. However, for the Banzai project, DDC generally allowed the contractor to serve as the conduit for information from the designer.

According to a parks department administrator, contractors are generally not adequately monitored by DDC's construction inspectors. The administrator noted that when the inspector is not on-site, contractors may cut corners to finish the project. The administrator said that oversight from DDC's inspectors during construction is insufficient, because they are there for a few minutes, then move on to the next project. Another parks department administrator said that logically, a contractor should try to meet deadlines because of the money lost from delays. However, for government projects, this does not seem to apply. The administrator noted that a contract can go on for years because contractors may not address concerns in the punch list. The parks department then feels that it cannot accept an incomplete project on behalf of the city. The administrator added that design-build makes holding contractors accountable more difficult, because the city starts with not much more than a concept.

Indeed, when asked about the Banzai project's two-year delay between the notice to proceed with design in 2003 and the notice to proceed with construction in 2005, the DDC project manager acknowledged that it should not have taken that long. The DDC project manager suspected that the contractor, PER Inc., was probably busy with other projects. For its part, contractor PER Inc. acknowledged that the company had previous experience building Manana skateboard park, but it was not directly involved with helping to design the skateboard area, only portions of the park's interior. Banzai was the first full design-build skateboard park contract for PER Inc.

When asked for suggestions for future projects, DDC's project manager, Dreamland Skateparks and contractor PER Inc. all advocated specific timelines for both design and construction phases of the project, instead of the single deadline for the construction phase. Dreamland, which has functioned as a general contractor in past projects, said that the city needs to make sure that the people who develop the RFPs have had previous experience. In addition, the city needs to have stricter guidelines in terms of completion time, meeting budgets, and contract amendments. PER Inc. had a similar suggestion, stating that future

contracts should include a timeline for securing permits and completing the design phase, to serve as a guideline.

Banzai skateboard park's weak design-build partnership diminished single-contract efficiency

Personnel changes at PER Inc. weakened the partnership between the company and its design-build partner, leading to the termination of a partnership and undermining intended efficiencies. Teamwork is essential to the success of a design-build project, as the designer and contractor are tasked with working together to find the best way to make minor modifications to a project as needed while fulfilling their obligation to the owner. According to the NSPE, it is imperative that the design professional and construction contractor upon whose qualifications the design-builder was selected be retained for the duration of the project. However, without a good partnership, conflicts between the two parties can delay the project, and the efficiency of having a single contract is diminished. For the Banzai project, when a dispute occurred between designer Dreamland Skateparks and general contractor PER Inc., DDC took the position that such disputes were a private matter to be resolved between the two companies. Although DDC was not contractually obligated to resolve the dispute, open lines of communication with both PER Inc. and Dreamland could have kept DDC apprised of potential problems between the two companies before they escalated.

Initially, Dreamland and PER Inc. appeared to complement each other's abilities. Dreamland Skateparks teamed with PER Inc. for Banzai skateboard park because they saw it as a combination of their expertise with a construction company that had extensive local expertise. While technically a subcontractor to PER Inc., Dreamland saw its contribution as strictly labor, but that the project would be a collaboration between the two companies. Banzai skateboard park was PER Inc.'s first full design-build skatepark contract. PER Inc. had previously constructed Manana skateboard park at the city's request, after it had already been designed. That park had been designed by California Skateparks, with input from the Hawai'i Skatepark Association.

During the course of the partnership between Dreamland and PER Inc., PER Inc.'s original project manager left the company and was replaced. Dreamland and DDC differed on whether or not this change was positive. From Dreamland's perspective, the PER Inc. staff members with whom they originally worked were better communicators, but their initial contacts within the company were either fired or left the company.

Over the four-year duration of the Banzai project, there were instances where Dreamland had to give new people information they had provided before. However, from DDC's perspective, PER Inc.'s project manager during the design phase was not responsive to its requests. In general, DDC's project manager said the PER Inc. project manager assigned during the construction process was more responsive.

For its part, PER Inc. said that Dreamland was dropped as a subcontractor because they wanted double their original proposal for a smaller park. PER Inc.'s project manager needed to confirm that California Skateparks was available and willing to take over before Dreamland could be notified of the decision to terminate their contract. Dreamland had stated that they would not come without a change order, but since DDC said there was no additional money, there was no change order forthcoming. PER Inc. said that Dreamland was not timely with its response. California Skateparks was more receptive; once it received the numbers, they were able to come within a week.

Based on this experience, the contractor said that it does not want to bid on anymore design-build projects, citing a preference for the traditional design-bid-build process, where the city approves the design before bringing in a contractor so that permits would already have been approved. This would keep the contractor from absorbing the cost of the time it takes to obtain permit approvals.

Dreamland, which has functioned as both a general contractor and subcontractor on other skateboard park projects, called this the worst experience it has had in working with other municipalities. In the time that Dreamland was waiting on Banzai, Dreamland had built 30 skateparks in other areas, including one project where they had to raise money for three years. In this case, the combination of a skateboard park designer that considers its work cutting-edge, with a contractor inexperienced with the design-build process, coupled with the changing dynamics due to staff turnover, was a mismatch that had detrimental results.

Kapolei skateboard park was completed with fewer delays due to the contractor's responsiveness to emerging issues

The Kapolei skateboard park illustrates an instance when design-build was able to deliver a structure that was well regarded by its users, delivered in a timely manner and with minimal cost overruns, according to a wide range of sources, from city staff to skateboarders to other contractors. We compared Banzai skateboard park to the Kapolei

project because both were built during the same period, using the same design-build method. The RFPs and contracts for both projects were also similar. Both contracts included a 240-day deadline for construction, but no deadline for design.

Regardless of this omission from the contract, the design-build team of Ralph S. Inouye Co. Ltd. (RSI) and Wormhoudt Inc. performed its tasks in a more timely manner, according to staff from DDC, DPR and PER Inc. Project files indicate that the city was able to take partial acceptance two months before the scheduled construction completion date of December 26, 2006. The timeline for the Kapolei skateboard park was as follows:

- January 15, 2004: RSI was notified of the conditional award of \$665,000. The contract was executed on January 19.
- April 6, 2004: Authorization to proceed with design.
- August 12, 2005: DDC received the soil investigation for the Kapolei facility, which states that site can generally be developed as planned, with some recommendations.
- April 24, 2006: Notice to proceed with construction by May 1, 2006 was issued.
- October 2, 2006: Effective date of city's partial acceptance of Kapolei skateboard facility with the exception of landscaping.
- May 21, 2007: Notice of final acceptance.

Kapolei had a total of four change orders, which totaled \$50,834 and a total extension of 19 days. In comparison, Banzai skateboard park also had four change orders totaling \$100,789 and a documented total extension of 529 days, or 18 months. At Kapolei, the largest change order totaled \$28,460 and entailed no extension. This was approved on November 20, 2006, comprising additional work to provide labor, material and equipment to furnish a 24-inch layer of select fill under the concrete slab-on-grade of the new skate facility in lieu of the 6-inch layer shown in contract drawings. This was required according to a previously submitted soils report. At Banzai, no soils report was provided at the time of the RFP, and the unsuitable soils encountered presented a differing site condition. According to the General Conditions of

Construction Contracts for the City & County of Honolulu, differing site conditions include: (1) subsurface or latent physical conditions at the site differing materially from those indicated in the contract; or (2) unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work of the site characteristics provided for in the contract. The relatively smooth resolution of this soil-related issue at Kapolei was partly because the cost to mitigate this issue was within available funds. However, it also showed that the design-build process can produce the desired results in the hands of a well-coordinated design-build team.

Another point of comparison is that, as at Banzai skateboard park, the skateboard facility at Kapolei was built as the first phase, with adjacent comfort stations as the second phase. While this same sequence of construction was used at Banzai, this approach worked better at Kapolei because of the park's proximity to a suburban commercial area with restrooms and refreshment areas. In contrast, users of Banzai skateboard park have no public bathrooms or drinking fountains within walking distance, as the nearest beach park is a quarter of a mile away. Thus, the determination of site selection and sequencing of construction phases for future specialized sports structures such as skateboard parks need to consider the proximity to such amenities, whether through public parks, commercial or residential areas.

DDC's Poor Planning of the Banzai Skateboard Park as a Standalone Facility on Undeveloped Land Compromised Users' Safety, Contributed to Project Delays and Additional Costs, and a Skateboard Park Without Essential Support Facilities

DDC built Banzai skateboard park as a standalone facility on undeveloped land despite documented practices by other municipalities of considering amenities such as parking, pay phones, restrooms and drinking fountains as key items for determining skateboard park sites. The design-build method of delivery for Banzai skateboard park empowered the community to provide input into the process via a design committee that had direct contact with the designer, but underutilized the parks department's institutional knowledge and previous experience with maintaining and operating skateboard parks. The community's anxiety was understandable, as Banzai skateboard park itself had been delayed in 2003 due to lack of funds for bathrooms and a parking lot. Because of this history, the community supported building the skatepark without basic amenities. Now that the park is built, however, the lack of basic amenities increases risks to users' safety and the facility's security.

In addition, building the Banzai skateboard park as a standalone structure did not exempt the city from permitting issues that would have

been better addressed if basic facilities such as driveways and parking lots had been built first. While the city may have sought to save time and money by building the skateboard park first, but not prioritizing longstanding road easement issues, permits for the skateboard park were instead delayed by almost two years. The city had been obligated to build driveways on a privately owned easement as early as 1992. However, the city's access over the easement remained in question. Driveways were not included in the scope of the Banzai skateboard park contract, but without a driveway built, PER Inc. could not start work. According to DDC project files, the Banzai contractor required clarification on whether the city was authorized access on September 2, 2003. On March 1, 2005, PER Inc. requested an authorization letter from DDC allowing the contractor to build a temporary construction entrance on Easement 241, the last piece of information needed before final drawings could be submitted to the Department of Planning and Permitting. Building permits were finally secured on October 19, 2005, which completed both the design and permit phases.

During the construction phase, change orders added more than \$100,000 to the original design-build contract and delayed construction by more than a year. Additional funds needed for these change orders were taken from Miscellaneous Improvement Funds for Recreational District No. 4 and the Department of Parks and Recreation's operating fund account. We found that change order documents painted a misleading picture of the project's sequence of events. The following exhibit shows discrepancies between the extensions of dates attributed to each change order within project files, and the actual delays reported through interviews with DDC staff, the contractor and other supporting documents.

Exhibit 2.2

Comparison of Delays Attributed to Change Orders vs. Project Documents

<i>Reason for Delay</i>	<i>Change Order</i>	<i>Project Documents</i>
Traffic study and house demolition	CO#1 resulted in no extension	PER Inc. reported that the traffic study took 9 months to complete.
Unresolved road easement access issues delayed building permits	No change order	DDC project files showed that the contractor requested clarification regarding the city's access to the existing driveway easement on September 2, 2003. Building permits were secured on October 19, 2005.
Soft soils found at skateboard park site	CO#2 resulted in a 30-day extension	Construction inspector logs show soft soils were found on November 21, 2005 but the change order was approved 4 months later, on March 31, 2006
Backfill of unforeseen cesspool	CO#3 resulted in a 30-day extension	No discrepancy noted.
Bowl modification	CO#4 proposal noted a 469-day extension	Three months between change order request on July 25, 2007 and estimated completion on October 23, 2007.

Source: Department of Design and Construction

Undeveloped site, lack of water service and overgrown foliage inhibits park's visibility, vehicular access and compromises users' safety

DDC built the skateboard park to expediently respond to public pressure, but the lack of basic amenities potentially created an *attractive nuisance* for young users of the park, compromises the safety of its users and leaves the city at risk should injuries occur at the site. The skateboard industry and other jurisdictions that have built skateboard parks stated that accessibility to basic amenities such as parking, restrooms and drinking fountains are key elements to selecting the site of such parks before they are built. Instead, the city chose to build these facilities as the second phase of the project, after the skateboard park had already been built. Without these amenities on-site, users engaging in the strenuous sport have to travel a quarter of a

mile to the nearest beach park to use the restroom or have access to drinking fountains, creating the potential for heat or dehydration-related injuries.

Accessibility to basic amenities such as parking, pay phones, restrooms and drinking fountains are considered key items to be considered in a skatepark site by the Portland Parks and Recreation Bureau, the City of Seattle's Skatepark Advisory Task Force, Penrith City Council in Australia, and the Tony Hawk Foundation, an organization that promotes and helps finance public skateparks in low-income areas.

On its web site, the Tony Hawk Foundation advises skateboarders to be involved during the design and construction of skateboard parks, including the selection of the appropriate site. Key questions that the foundation advises skateboarders to ask when evaluating a site include: Is the site accessible? Is there adequate parking, pay phones and restrooms? Is security an issue?

For their part, municipalities have begun developing criteria for selecting sites that would be appropriate for skateparks. Following voters' approval of a parks levy that included two public skateparks in 2002, the City of Portland's Parks and Recreation Bureau convened a volunteer committee that met for a year and half to develop the vision for the city's skatepark system and to review locations citywide that would work as viable skatepark sites. This Skate Park Legacy Advisory Team (SPLAT) was made up of neighbors, police, a noise control officer, Neighborhood Coalition representatives, skaters, parents of skaters, freestyle BMX riders, risk specialists, business leaders, school teachers, and others. They developed a vision for a skatepark system, the criteria for selecting sites to be part of this system, and made recommendations about specific sites. While the committee developed three categories for skateparks: small-scale neighborhood skate spots, then progressively larger district and regional skateparks, there were several criteria that all skatepark areas had in common:

- Allow for the creation of a safe and secure environment; providing for separation from vehicular traffic, adequate visibility for detection of emergency situations, vehicular and pedestrian access, and ease of routine maintenance.

- Allow for clear, passive observation by parents, emergency services, police and the public.
- Accessible by public transportation and emergency vehicles.

In addition, criteria for placing skateparks in larger district and regional parks included access to basic amenities such as parking, restrooms, telephones, and drinking fountains.

The City of Seattle's Citywide Skatepark Plan noted that certain features enhance the safety and security of skateparks' users. The plan noted that when skateparks are highly visible, integrated into larger parks, or next to active roads, minimal or no crime or drug use is reported. Skateparks that are hidden away from public view and not integrated into a larger park can have more problems. Park and police agencies stated that location and visibility are the most important aspects of siting a successful skatepark.

After a 2002 Youth Needs Audit that identified the need for skatepark facilities for young people in the local government area, the City of Penrith, New South Wales in Australia, tasked a team of council officers to investigate the opportunities for the development of a local skatepark. The team included the following criteria to identify a site:

- location in relation to other amenities and buildings,
- visibility, road crossings, safety and security, and
- proximity to public transport and road access.

Thus, while other municipalities considered the presence of basic amenities and vehicular access prior to placing a skatepark at particular sites, the process was reversed at Banzai skateboard park.

Street visibility and access to basic amenities are widely considered key criteria for selecting skatepark sites. Street visibility is critical because it allows for detection of emergency situations, passive observation from parents, emergency services, police and the public. Vehicular and pedestrian access is critical not only for emergency situations but also for ease of routine maintenance.

At Banzai skateboard park, these amenities were budgeted for FY2006-07 under Phase II improvements. According to the budget ordinance for that year, \$175,000 in planning and design funds for this phase includes but will not be limited to a comfort station, shower facility, driveway, parking lot, fencing, landscaping and other improvements.

During a pre-final inspection on November 2, 2007 a parks department safety inspector noted that although the skatepark has not yet been accepted by the city, individuals were already using the facility. Our site visits during this audit confirmed that the skatepark had been in use as early as August 30, 2007, while a construction trailer was still parked in front of the park. Banzai skateboard park was not visible from Kamehameha Highway due to tall grasses and was accessible on foot through two dirt paths.

Exhibit 2.3
View from Kamehameha Highway Entrance to Banzai Skateboard Park



Note: The path leading to the skateboard path in Exhibit 2.4 is perpendicular to this area.

Source: Office of the City Auditor

Exhibit 2.4
Dirt Path From Two Perspectives



This shows the path from Kamehameha Highway toward the skateboard park in the mauka direction.



This shows the same path from the skateboard park in the makai direction toward Kamehameha Highway.

Source: Office of the City Auditor

The pre-final inspection also noted that one area being used to access the skatepark directly from the highway is over uneven, slippery-when-wet terrain. The inspector recommended installing fencing along the highway to direct users to an authorized access route. During our site visit on January 14, 2008, we observed that the fencing had not been installed, and a backhoe was blocking access to one of the dirt paths.

**Exhibit 2.5
Backhoe Blocking Vehicle Access Through Alternate Dirt Path**



Source: Office of the City Auditor

PER Inc. reported that the backhoe has been there since October 2007 to block cars from approaching the skateboard park because the site was only approved for temporary construction access and not permanent public access. Since then, the backhoe has been vandalized. PER Inc. was concerned that after the backhoe is taken out, cars will park around the bowl, resulting in more unevenness on the unlandscaped ground. As early as March 2005, when there was a dispute regarding a utility pole fronting the easement, DDC determined that there would be no public vehicle access until parking lot construction starts. In the meantime, one resident reported that a skateboarding accident resulted in a serious injury. Because of the lack of emergency vehicle

access, the accident victim was reportedly carried out on a stretcher over uneven ground.

By building the Banzai skateboard park with no support facilities, the city has potentially created an *attractive nuisance* that attracts children but may also endanger their safety. Attractive nuisance is a legal doctrine that holds the landowner liable for injuries caused by such a man-made structure. According to a report produced for the American Society of Landscape Architects, risks to public health and safety occur when access to attractive nuisances is not appropriately restricted, and when opportunities for crime are enhanced by designs that interfere with visibility and surveillance. Skateboarders had been known to sneak into previously built facilities at Keolu, Mililani and Hawai‘i Kai, before they were officially opened. In addition, DDC’s construction inspector had documented that the skateboard park has been in use for several months before the structure was substantially completed and submitted by the contractor for pre-final inspection. This previous experience and knowledge places responsibility on the city to take reasonable precautions to protect against the danger to young users of the park. The city has taken the position that the contractor is liable for any injuries that occur at the skateboard park before the city accepts the structure. However, the attractive nuisance doctrine places responsibility on the landowner to provide reasonable protection for youth and children.

During pre-final inspection for Banzai skateboard park, the Department of Parks and Recreation (DPR) noted its concerns over the lack of fencing and signage. In addition, a DPR administrator warned about the safety hazard of an open retention basin designed to absorb precipitation at the skateboard park. This was of particular concern to the parks department due to the drowning of a five-year-old child four years ago in a similar structure in Pearl City that this year has resulted in a 2008 state legislative proposal to tighten regulations for such structures.

Exhibit 2.6
Banzai Skateboard Park



Facing Kamehameha Highway, this photo shows partial views of the skateboard park's Kahuku side, with the bowl in the foreground and adjacent larger skating area.



Facing mauka, this photo shows the Haleiwa side of the park, with partial views of the larger skating area in the foreground. The skateboard bowl is on the left side beyond the borders of this photo.

Source: Office of the City Auditor

In addition, a parks department administrator also pointed out that there was no water service at the park, which would make it difficult to grow landscaping to cover unstable gravel slopes or maintain the park. The Honolulu Board of Water Supply (BWS) confirmed that there was no water service at the park as of the date of our fieldwork. This goes against one of the agency comments that led to the approval of the final environmental assessment related to the skateboard park's previous design-bid-build contract in October 2001. At the time, the BWS stated that it would build a 16-inch water main within a year and a half to provide sufficient water for fire protection. However, according to BWS, this project was never built and is not scheduled until 2010. This lack of water service and the resulting difficulty in maintaining the park could leave the city liable for injuries that may occur at the site before other amenities are in place. Although Hawai'i Revised Statutes 46-72.5 limits the counties' liability for injuries occurring at skateboard parks, once Banzai is accepted by the city, this lack of infrastructure could leave the city open to liability for injuries *when damage is caused by a condition resulting from the public entity's failure to maintain or repair the skateboard park.*

DDC's failure to resolve easement issues resulted in permitting delays

DDC acknowledged the need to clarify the city's access over a private easement for the Banzai skateboard park project as early as its 2001 attempt, but continued delays affected PER Inc.'s ability to secure permits in a timely manner. Driveways were not included in the scope of the contract, but their absence brought into question the city's access over a privately owned easement, which in turn prevented the contractor from securing needed permits to start work in a timely fashion. The skatepark site was part of a larger parcel that was subdivided by a private owner in 1989, who was supposed to build driveways from Kamehameha Highway. When the private owner failed to construct the driveways and forfeited \$13,000 to the city in 1992, the city became obligated to build driveways on the privately owned easement. The former Department of Public Works failed to act and the driveways were never constructed.

Eleven years later, according to a May 29, 2003 memorandum from the DDC director to a community inquiry about the skateboard park, explained that the Banzai project was delayed due to the wording of the appropriation in the FY2001-02 Capital Improvement Program (CIP) ordinance. According to the director, the CIP ordinance did not accurately describe the full extent of each project, including the need for site access. Additional construction funds were appropriated in FY2001-02, but the Banzai skateboard park appropriation description was not amended. Therefore, the project was cancelled since no access could be provided under the CIP description for the use of these funds. As a result, the city pursued a design-build skateboard facility using a different source of CIP funds.

As of September 2, 2003, PER Inc. still required clarification on the city's use of the existing driveway easement to gain access to Kamehameha Highway. According to PER Inc., the title to the easement was not in the city's name, so it appeared that the city did not have authorized access. Because of this discrepancy, PER Inc. was not able to obtain a permit to start work.

On September 5, 2003 PER Inc. requested access from the state Department of Transportation onto Kamehameha Highway for the Banzai project. PER Inc. noted that the City & County of Honolulu funded only the skateboard park project, but not the driveway and parking lot master plan in 2002, nor the comfort station contained in a previously submitted topographical study. After that, DDC project files indicated that the issue remained unresolved for almost two years. On March 1, 2005, PER Inc. requested an authorization letter from DDC

allowing the contractor to build a temporary construction entrance on the privately owned property identified as Easement 241, the last piece of information needed before final drawings could be submitted to the Department of Planning and Permitting. In a March 14, 2005 memorandum to the property's owner, DDC noted that, under the terms of the deed for the park property, the city is entitled to access over the portion of Easement 241. In conjunction with the new skateboard facility project, the city proposed to construct a temporary access road on this easement, designed to remain in place throughout the construction of the new skateboard facility. DDC noted that a permanent roadway constructed on the same easement providing access from Kamehameha Highway to the future Banzai Rock Support Park parking lot to replace the temporary access road was subject to future funding. Building permits were finally secured five months later, on October 19, 2005, which completed the design and permit phases.

Change orders added more than \$100,000 to the original contract and delayed construction by more than one year

Banzai skateboard park incurred four change orders totaling \$100,789, resulting in a documented total delay of 529 days—approximately 17 months. Additional funds needed for these change orders were taken from miscellaneous improvement funds for the district and the Department of Parks and Recreation's operating fund account. DDC records indicate that two change orders resulted in a total of 60 days' extension, while the last change order accounted for 469 days' extension, for a total of 529 days. However, our fieldwork indicated that that one change order added approximately four months and another added nine months. Furthermore, although the 469 days' extension was attributed to the fourth change order, our document review indicated that the contractor's proposal was submitted on July 25, 2007 with an estimated completion of October 23, 2007—approximately three months. This means most of the delays were attributed to the last change order, which comprised a relatively small percentage of the total delays to the project.

While change orders added more than one year to the process, actual construction on-site took only six months. The original notice to proceed with construction was given on September 15, 2005, but actual construction of the skateboard structure started in May 2007. The structure was sufficiently complete to schedule a pre-final inspection on November 2, 2007, thus actual construction lasted only six months. PER Inc. explained that the rest of the time was spent waiting for an answer from DDC.

**Exhibit 2.7
Summary of Banzai Skateboard Park Change Orders**

<i>Reason for Change Order (CO)</i>	<i>Amount</i>	<i>Date Approved</i>
CO#1: Demolish existing house structure and reimburse contractor for traffic study	\$24,520	March 10, 2004
CO#2: Remove unsuitable soil and replace with select fill wrapped in geotextile fabric to provide a stable sub-base	23,957	March 31, 2006
CO#3: Backfill an unforeseen existing cesspool	2,983	June 8, 2006
CO#4: Additional fill and revisions to small bowl	49,329	December 24, 2007
Total	\$100,789	

Source: Department of Design and Construction

Traffic study and house demolition added \$24,520 and nine months to the project

The first change order at Banzai skateboard park included a traffic study required by the state Department of Transportation for the permit review process. The approved change order noted that no time extension would be required to make this change, but the contractor reported that the study delayed the project by nine months. This traffic study element of the change order cost \$15,420. Another element was a demolition change order due to an existing house structure on the land that was supposed to be sold by another city agency and removed from the property prior to the project, but its sale fell through. This element cost \$9,100.

The purpose of the traffic study was to identify and document traffic-related impacts of the proposed project, and evaluate traffic improvements required to provide adequate access and egress to and from the proposed project and to mitigate the project's traffic impact. The contractor noted that there was no driveway in the scope of its contract, but without the traffic study, PER Inc. could not get an approved permit to start work.

The traffic study required an increase in the contract contingency amount by 36 percent, from \$44,730 to \$60,730. Because the contingency amount was funded with construction phase funds and not design-related funds, DDC could not utilize those funds for this study. DDC asked the Department of Budget and Fiscal Services to supplement the contingency amount with planning funds. The total cost of this change order was \$24,520—\$15,420 for the traffic study and \$9,100 for the house demolition. Additional funds were taken from the Department of Parks and Recreation's FY2003-04 CIP account for Recreation District No. 4 Miscellaneous Improvements. The managing director approved this request on April 21, 2004.

Addressing unsuitable soil conditions added \$23,957 and a four-month delay

The contractor's pre-construction soil study was conducted in the wrong location, due to the lack of information from DDC to the contractor about the specific site of the skateboard facility. This meant that unsuitable soil conditions at the site were not discovered until after construction was underway, leading to another change order costing \$23,957 and a delay of four months. According to PER Inc., the soil study was conducted as part of the design process. Geolabs Inc., hired by the project's engineering consultant, SSFM International, Inc., submitted a soil study proposal on June 16, 2003. The completed study was submitted to SSFM and PER Inc. on April 20, 2004.

PER Inc. alleged that the study was already completed when DDC informed PER Inc. of the skatepark's specific location in relation to a comfort station and parking lot, to be built as a separate project in Phase II. Lacking this information, PER Inc. was not able to provide Geolabs with the footprint of the park, and thus no soil boring occurred at the actual site of the park. Even after the error was detected, PER Inc. noted that the city was not likely to provide additional funds to repeat a soil study after the notice to proceed with design was already given.

DDC project files showed that there was confusion over the possible location of the comfort station and skatepark as early as 2003. On July 18, 2003, PER Inc. requested clarification due to an inconsistency between the site plan and topographical study that showed both in the same location. At the time, DDC responded that the location of the future comfort station would be determined by PER Inc. subject to approval by the city. The following year, on March 19, 2004, DDC advised PER Inc. to take into account the location of a comfort station

based on a revised master plan. However, the soil study was already underway.

The untested location was later found to have unsuitable soil conditions, which delayed construction. PER Inc. received the notice to proceed with construction effective September 15, 2005, but the process was interrupted when soft soils were reported on November 21, 2005. According to DDC's construction inspector, grayish material was detected in the ground during the foundation work for concrete walls, so the contractor PER Inc. brought in Geolabs Inc., the same company that performed the original soil testing to serve as a consultant. PER Inc. stated that it had underestimated the size of the area with soft soil, and did not notify DDC right away, but instead dug up the estimated site and replaced it with fill. DDC was notified later, when PER Inc. realized soft soils comprised a bigger area. Afterwards, DDC responded that there would be no additional funding to remedy the soil at that location, and approved the relocation of the park on the same property.

Soft soils were reported a second time, on February 16, 2006, after the park footprint had been shifted 40 feet makai and 75 feet toward the Kahuku side. According to PER Inc., the new site was at a lower elevation and a lower slope than the previous location, so there was a shortage of material to build it up to the slope the skatepark needed. As a result of this finding, the soft soils were excavated and backfilled with rock wrapped in non-woven filter fabric. This resulted in a change order totaling \$23,957.

Bowl modification to appease community skateboarders added another \$49,329 and reported delay of 469 days

DDC modified a skateboard bowl at Banzai park following a protest rally by community skateboarders, and a failed attempt at securing private funding to restore Dreamland Skateparks' role during the construction phase. The skateboarding community first expressed concern over the reduced size of the park in November 2006, which later erupted in a public protest in June 2007 when the community learned that Dreamland Skateparks, PER Inc.'s original design-build partner, had been replaced with California Skateparks for the construction phase. Appeasing community concerns led to a change order of \$49,329 and a reported delay of 469 days. When construction was set to take place, the contractor reported that Dreamland Skateparks had submitted a 60 percent increase in its original bid to assist with the construction of what ended up being a smaller facility than originally designed. PER Inc. said that its decision to terminate

Dreamland's contract was made after Dreamland said it would not do the job without a change order, and that no additional funds were forthcoming, according to DDC. Although PER Inc. had requested permission from DDC to replace Dreamland in April 2007, the contractor remained in contact with Dreamland until May.

For its part, Dreamland reported that its prices had increased due to the rise of prevailing wage rates since 2003, when the design-build team was originally awarded the contract. Dreamland was officially terminated by PER Inc. on June 14, 2007, due to insufficient funding. At this point, the contractor had secured the services of California Skateparks.

When the community learned of this change, according to DDC's construction inspection logs, on June 21, 2007, 40 protesters broke through a temporary entry barricade and walked around while work was ongoing. PER Inc. recommended that they stay out of the work area for safety reasons but they refused. The general contractor called the police, who advised the protesters to stay out of the work area. Protesters hung a banner wanting to stop PER Inc.'s work.

On June 29, 2007, skateboarders met with representatives from the council chair, mayor's office and DDC. Skaters alleged that the modified design was unsafe, demanded that construction be stopped, and requested that Dreamland be brought back to the project. At the meeting, city representatives explained that Dreamland was replaced because the company had requested a \$60,000 increase to its original \$100,000 contract to cover escalation and labor rate increases. The skateboarders offered to find private funding for the additional \$60,000.

However, because the skateboarders also wanted Dreamland back on the project, on July 18, 2007, DDC told a private company supporting the skateboarders that an additional \$350,000 in funding would be needed to have Dreamland come in and rework what had already been constructed to date in order to construct their original design minus the street elements, plus compensate the contractor for additional work, materials and to dismiss California Skateparks from the project. After further deliberation that same day, DDC's final cost proposal to the private company was \$426,079, due immediately to allow DDC to issue a stop work order to the contractor and start the process of the city accepting it as a gift. Given the amount and the short time frame, the private entity declined.

As a compromise, the skateboarders asked to make a small change to a bowl in a section of the park. The change was proposed to California Skateparks, which provided a quote of \$40,000. The group found a corporate sponsor, but the city declined because the sponsor wanted a logo on the structure. On July 25, 2007, PER Inc. submitted a proposal for \$40,059 to modify the bowl to accommodate skateboarders. On August 6, 2007, DDC notified BFS that funding for this change was available in DPR's FY2007-08 operating fund account. Another \$9,270 was included for additional fill.

Exhibit 2.8
Banzai Skateboard Park Bowl



Source: Office of the City Auditor

DDC addressed public concerns during project construction on an ad hoc basis, leading to public frustration. In contrast, Denver's Department of Parks and Recreation developed a public meeting process that identifies four categories for when such a public meeting should take place. The first two options lead to a process of scheduling a public meeting prior to decision-making.

1. Major – significant planning or capital project with complex public issues and a large number of stakeholders that will be impacted. Decisions and recommendations are extensive and a wide range of alternatives may be developed.
2. Minor – simple planning or capital project that has impacts to stakeholders and requires public buy-in. Relatively few alternatives anticipated.
3. Notification – simple planning or capital project with limited impacts to stakeholders. Alternatives limited.
4. None – limited to minor maintenance projects and improvements. No anticipated impacts to stakeholders, including adjacent neighbors, other agencies, and elected officials.

Based on these criteria, the change in design sub-contractor may have merited at least public notification, leading to earlier public buy-in within the community that could have minimized additional costs and delays.

Conclusion

Nationwide, municipalities have become increasingly convinced of the value of building skateboard parks not only to provide safe recreational facilities for the public but also to safeguard its own capital investments, that is, to keep determined street skateboarders from defacing public and private property by skating on such structures as stair railings, benches or parking lots. The challenge is to keep up with the dynamic evolution of skateboard park design, which is led by the increasingly complex skills that its users bring to the sport. After building six skateboard parks in 2002, the Department of Design and Construction attempted to be responsive to skaters' needs for more innovative designs by using the design-build process and employ a potentially more time- and cost-effective method of delivering a skateboard park. While the effort was commendable, its execution fell short, because of long-standing practices that transcend specific delivery methods. One example is the short-sighted practice of rushing projects at the end of the year to ensure that funds are encumbered, regardless of whether sufficient time has been allotted to develop project requirements to ensure that the city obtains structures that fulfill the desired functions.

The National Society of Professional Engineers notes that the public expects its construction projects to be safe for habitation or use,

healthful, environmentally sound, free of functional and cosmetic flaws, and long-standing. The public also expects governments to construct projects at reasonable costs. While the public is not particularly concerned with which project delivery method is utilized, their primary consideration is whether the project fulfills the users' needs. When the department becomes unclear about its project requirements by cutting corners during the planning process, then failing to communicate with its stakeholders results in unforeseen circumstances, the need for additional funds and the constant scramble to find funds outside of a project's original appropriation in order to complete projects become commonplace.

Proper planning could have revealed the impact of one long-neglected project at Banzai skateboard park. The failure to construct an access road for which the city has been obligated to build since 1992, led to delays in obtaining permits for the skateboard park project more than a decade later. Problems were further compounded when the political pressure to build a skateboard park was treated as a higher priority item than building the support facilities that would ensure that park users and visitors could function in a safe environment. While involving community skateboarders in a design committee was in line with skateboard industry design-build practices, this process effectively reduced the involvement of the Department of Parks and Recreation, which has the responsibility to maintain and operate such facilities, and has long advocated more careful planning before proceeding with the building of a skateboard park in the community. While the city may have intended to save time and money by constructing what appeared to be a simple skateboard park, the lack of an orderly progression in building the components of the entire park resulted in a project contracted for 240 days but took several years to execute.

Recommendations

The Department of Design and Construction should:

1. Improve internal design-build practices, specifically:
 - a. Develop policies and procedures specifically for design-build projects, from appropriate details to include in the requests for proposals to deadlines for all key phases of the project, from design to construction.

- b. Clarify the roles of all parties within the design-build contract. Provide open lines of communication through regular meetings with both the design firm and the construction contractor to ensure that both are operating in the city's interest.
 - c. Develop specific RFP and contract guidelines for design-build projects and contractor oversight.
2. Develop criteria for future skateboard parks or other specialized sports facilities' site selection and development, including required preliminary studies, permits and components necessary for orderly project progression to include reasonable precautions against building potential *attractive nuisance* structures.
3. Develop guidelines to improve public and client agency notification of changes to particular projects to keep stakeholders apprised of changes that occur during construction.

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Response of Affected Agency

Comments on Agency Response

We delivered draft copies of this report to the Department of Design and Construction on June 5, 2008. A copy of the transmittal letter is included as Attachment 1. The DDC director submitted a written response dated June 20, 2008, which is included as Attachment 2.

In its response, the department generally agreed that open lines of communication with the designer would have facilitated the process, rather than its practice of relying primarily on the general contractor for project updates. The department clarified that the absence of detailed project requirements and the use of a broadly worded solicitation were selected as a means of fostering creativity and innovation among those proposing skateboard designs. However, we relied on the Construction Specifications Institute for design-build criteria, which states that the owner is responsible for preparing project requirements in the form of a detailed project description.

The department cited the Kapolei skatepark as an example of a project that can be successful without detailed project descriptions. In fact, we presented Kapolei skatepark within the report as a comparison with Banzai Skateboard Park to illustrate that the design-build process could produce a positive outcome if well coordinated and properly executed. However, the contrasting outcomes between the two illustrated that, without specific frameworks with which to hold contractors accountable throughout the process, the city essentially leaves project outcomes largely to chance. In general, we believe that developing policies, procedures and guidelines specific to design-build project proposals and contracts could serve to improve the process for future design-build projects.

The department clarified the issue of whether the city had access to easements leading to the Banzai skatepark site, attributing a two-year delay to the state Department of Transportation's lack of response to the contractor. The report cites a memo in which the contractor was unclear on this issue and required further clarification. We note that our narrative of these events was based on project files provided to us during this audit. However, DDC did not dispute that this issue took two years to resolve. The department also disagreed that the failure to construct the access road had a substantial impact on the project. Within the report, however, we stated that the failure to construct the access road led to delays in obtaining permits, which the department did not dispute.

The department disagreed with the Banzai skateboard park contract amount in Exhibit 1.1. The figures within this exhibit were provided by DDC to the city council on August 3, 2007, in response to an inquiry about the costs associated with city-built skateboard parks over the past 10 years. The department also disagreed with our comparison of time delays as documented on the change orders and delays reflected in project files in Exhibit 2.2. We contend that because change orders are essentially contract revisions affecting the criteria by which a contract's timeliness and cost-effectiveness are evaluated, it is reasonable to compare them with actual events.

The department agrees that the construction of the skateboard park structure took only six months. However, it disagreed with the start date we cited as May 2007. This was based on a combination of email documentation between the contractor and DDC, and a direct quote from the contractor. The department also disagreed with our conclusion that rushing projects to encumber funds at the end of the year would have made a difference on this project. However, this was a conclusion we reached based on comments made by those directly involved in the project, when asked for recommendations that would facilitate improvements for future projects.

Finally, the department stated that it was never the city's intent to save time and money by using design-build. We based this conclusion on a combination of industry criteria touting design-build partnerships as potential time savers, and a memo from DDC to the Department of Budget and Fiscal Services, in which the former director noted that skateboard parks can be delivered at a higher level of quality for design and construction at a significantly lower cost by utilizing the design-build method. The former director also stated that proposals were anticipated to result in cost savings per square foot to the city.

Despite its disagreements with criteria we used based on the National Society of Professional Engineers and the Construction Specifications Institute, and comments made to us by Dreamland Skateparks and PER Inc. during the course of our audit, the substance of our report remains unchanged. However, the department's response provided some clarifying information, and changes were made to the final report where they were appropriate.



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LESLIE I. TANAKA, CPA
CITY AUDITOR

June 5, 2008

COPY

Mr. Eugene C. Lee, Director
Department of Design and Construction
650 South King Street, 11th Floor
Honolulu, Hawai'i 96813

Dear Mr. Lee:

Enclosed for your review are two copies (numbers 12 and 13) of our confidential draft audit report, *Audit of the City's Planning, Design and Construction of Skateboard Park Facilities*. If you choose to submit a written response to our draft report, your comments will generally be included in the final report. However, we ask that you submit your response to us no later than 12:00 noon on Friday, June 20, 2008.

For your information, the mayor, managing director, and each councilmember have also been provided copies of this **confidential** draft report.

Finally, since this report is still in draft form and changes may be made to it, access to this draft report should be restricted to those assisting you in preparing your response. Public release of the final report will be made by my office after the report is published in its final form.

Sincerely,

A handwritten signature in cursive script that reads "Leslie I. Tanaka".

Leslie I. Tanaka, CPA
City Auditor

Enclosures

DEPARTMENT OF DESIGN AND CONSTRUCTION
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DEPUTY DIRECTOR

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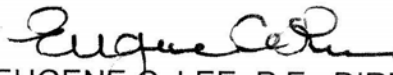
June 19, 2008

MEMORANDUM

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TO: LESLIE I. TANAKA, CPA, CITY AUDITOR
OFFICE OF THE CITY AUDITOR

C & C OF HONOLULU
CITY AUDITOR

FROM: 
EUGENE C. LEE, P.E., DIRECTOR

SUBJECT: AUDIT OF THE PLANNING, DESIGN, AND CONSTRUCTION
OF CITY SKATEBOARD PARK FACILITIES

The Department of Design and Construction (DDC) has completed our review of the draft audit report dated June 2008 entitled, Audit of the City's Planning, Design and Construction of Skateboard Park Facilities. We would like to take this opportunity to address some of the contents of the draft report by offering our insights.

Our comments are as follows:

Item No.

1. Page 5, Exhibit 1.1: We are not certain where the amount of \$587,760 was obtained from. The original contract amounts for Banzai Rock Beach Support Park were \$89,000 for design and \$447,300 for construction.
2. Page 9, first paragraph: The statement implies that the "department's poor planning" and "inadequate oversight over the contractor" were solely responsible for the \$100,000 cost overrun and 3 year project delay. We believe that the statement should be tempered to acknowledge events beyond the control of both DDC and the Contractor which largely contributed to the cost overrun and delay. Examples include lengthy reviews and approvals and the discovery of poor soil under the originally planned location of the skate facility, which resulted in a change order.

3. Page 9, Summary of Findings, Paragraph No. 1: Similar comment to Item No. 3. Also, use of the word “ensure” is inappropriate in this context. There is no process that will ensure that any given construction project will be completed on time and on-budget when the overseeing agency does not have the authority to control every step in the delivery of a project.
4. Page 10, first paragraph: At the time of the request for proposals, the absence of detailed project requirements and the use of a broadly worded solicitation were seen as means of affording the prospective designers with the freedom to be innovative and creative with their designs. This was in response to criticism received from the skateboarding community directed at existing skate parks which were regarded as being obsolete.
5. Page 10, last paragraph: We do not concur with the statement that “... design-build can produce cost effective and innovative structures but not without the owner providing detailed specifications up front.” Detailed project specifications are not typically provided by the Owner on design-build projects. One of the main advantages of the design-build process is that it allows for the selection of the most qualified design-build team. The design-build team generally brings with them the detailed specifications for the project, which must address constructability and profitability issues for the design-build Contractor, within the framework of the Owner’s goals, budget and time frame.

In fact, the lack of detailed specifications has little bearing on the outcome of a project. An example is the Kapolei Skate Park, which was recently completed via design-build project delivery using nearly identical RFP documents and procurement procedures as Banzai Rock Skate Park. As described elsewhere in the draft report, the Kapolei Skate Park was acclaimed as a success by all concerned parties. Comparison of the two skate park projects confirms that very different outcomes can be achieved using the same methodology.

6. Page 12, second paragraph: We do not concur that design-build method of project delivery places “...increased technical demands on the owner prior to bidding” as compared to the traditional design-bid-build method. We believe that the opposite is true. Under design-bid-build, the owner must review and approve detailed construction drawings and specifications prior to bidding, placing the greater technical burden on the owner since he gives the final approval.

7. Page 14, third paragraph: This paragraph appears to equate “detailed specifications” with what the NPSE describes as the importance of defining the scope of work. Based on our understanding the terms, “scope of work” is not the same as “detailed specifications”.
8. Page 15, last paragraph: The remark attributed to the DDC Facilities Division Chief noted that the design-build process is not as controlled by the owner (the City). It should be clarified that the intent of the remark was to allow innovation and creativity with the design of the skate park. The mandate from the skateboarding community at the time was for different riding experiences at each of the future skateparks, not “cookie cutter” designs.

Also, since the original RFP-013 listed 11 skateboard park sites, not including the Banzai Rock Support Park site (which was added later), it was understood that the RFP should be written with a minimum of requirements to allow for the broadest range of designs for each of the skatepark projects.

9. Page 19, second paragraph: The statement that “...all agreed that there should have been deadlines for the design phase of the project” should be clarified. In hindsight, it can be argued that deadlines during the design phase might not have helped with the delays on this project. Factors beyond the control of the both owner and the design-build contractor created delays which would have exceeded even a conservative design schedule. As an example, the long delay in getting answers from the State Department of Transportation regarding their requirements for this project held up the final permit approval.
10. Page 19, last paragraph: It should be noted that DDC communicated primarily with PER, Inc. because: a) they were the contracted party, b) they are a local company while the designer is based in Oregon, and c) the designer was frequently out of the office for other projects.
11. Page 20, first paragraph: Regarding the National Society of Professional Engineers (NSPE) recommendation that the designer have direct access to the owner, it should be noted that there were no contractual limitations against such access for this project. In hindsight, there could have been more of an effort made to foster and encourage direct communication between the owner and the designer which may have produced somewhat better results.

12. Page 20, last paragraph: Regarding the suggestion of specific timelines for both design and construction phases for future projects, it can be argued in hindsight that deadlines during the design phase might not have helped with the delays on this project. Factors beyond the control of the owner and the contractor created delays during the design phase which could not have improved the schedule even if design phase deadlines were in place. See Item #9 for examples.
13. Page 20, last paragraph, last sentence: PER Inc.'s suggestion that contracts should include a timeline for securing permits is not realistic since both parties to the contract have no ultimate control over the duration of the permit process.
14. Page 21, first paragraph: We do not concur that personnel changes at PER, Inc. was the major factor contributing to the termination of the design-build partnership between PER, Inc. and their designer as implied in this paragraph. The major factor in the breakup was Dreamland's demand for a substantial increase in compensation for their construction phase services due to time elapsed from the execution of their original contract agreement with PER. Given that PER, Inc. was advised by DDC that additional funding for the project would not be forthcoming, PER, Inc. had little recourse but to find a cheaper subcontractor or absorb the additional costs requested by Dreamland. It should be noted that DDC's role in resolving the dispute between PER, Inc. and Dreamland was limited to the extent of its contract with PER, Inc. and not because it was a "private matter".

Whether "open lines of communication" could have prevented the dissolution of the design-build partnership is questionable, given that the cause of the breakup was largely a financial matter. For its part, PER, Inc. did keep DDC well apprised of the situation due to the project schedule. On more than one occasion, DDC was informed that Dreamland would not be available during a certain period due to other commitments which delayed work on the project.

15. Page 23, last paragraph: Revise "slab-on-grass" to "slab-on-grade".
16. Page 24, first paragraph: It should be noted that the relatively smooth resolution of the soils-related issues at Kapolei Skate Park was because the cost to mitigate the unsuitable soil was within the available funds. Banzai Rock was impacted to a much greater extent by unsuitable soils. The original cost proposal to mitigate was \$111,121, which was more than available funding. The resulting decision to shift the location was attributed to the soils issue and resulted in further delays to the project.

17. Page 24, third paragraph: The sentence stating that "...the community was willing to forego basic amenities to get the skate park built first" should be revised since it implies that the community made the decision to proceed with the skate park project.
18. Page 25, first paragraph: This paragraph seems to have misinterpreted some of the documentation regarding the easements and access to the skate park property. Access to the skate park property over the Easement 241 was never in question. The right to access over the easement is clearly spelled out in the deed to the property. Instead, the major questions regarding this issue pertained to: a) whether or not the State Department of Transportation (DOT) would approve of the project if the access driveway over Easement 241 was not constructed as a part of the skate park project, and b) the conditions to be imposed by the State DOT as a condition for their approval of the project. Our understanding was that the results of the traffic study would determine what improvements at the highway and the access easement would be prescribed by State DOT.

As it turned out, the State DOT did not have authority to impose any conditions for the easement and did not have to sign off on the permit since no work was being done in the right-of-way. However, it took a better part of 2 years for the Contractor to finally get those answers from the State DOT.

19. Page 25, second paragraph: The audit inaccurately implies that change order documents should reflect the project sequence in which the change order work will occur. This is not necessarily true. On most projects, the change order documents do not correspond to the actual sequence of the change order work. In fact, it is common to combine many separate items of work, occurring at different times during the work sequence, on one change order. Also, time extensions granted by change orders do not necessarily correspond to the actual time required to complete the change order work. Other factors contribute to the extension of time granted by a change order, including the time required to negotiate the change order price and the time required to process and approve the change order documents.
20. Page 26, Exhibit 2.2: The comments from Item #19 apply to Exhibit 2.2 and the point to be noted here is the that difference between the time extension granted by a change order and the actual time required to complete the change order work is not necessarily a "discrepancy".

As an example, there was a 4 month lag time between the discovery of the soft soil on November 21, 2005 and the execution of CO #2 for the remediation of the soft soil. Work at the site was suspended shortly thereafter until a satisfactory resolution was agreed upon. The Contractor's original cost proposal for remediation of the soft soil was rejected due to insufficient funds. As an alternative, DDC agreed to allow the facility to be shifted away from the soft soil and work resumed in February 2006 only to be interrupted by the discovery of another soft patch in the new location on February 16, 2006. Another proposal to remediate this second patch of poor soil was submitted and approved as CO #2.

CO #4 for the modification of the small bowl is another example of a substantial difference, between the time extension granted by the change order and the actual time required to complete the change order work. In this case, the 469-day extension approved as part of the final negotiations with PER, Inc. to allow the project to be completed within the available funds. Thus, the 469-day period more accurately reflects the amount of time elapsed from the original completion date than of the actual time required to complete the modifications to the small bowl.

21. Page 32, last paragraph: It should be noted that DDC is currently working with DPR on interim improvements to address the security and safety concerns.
22. Page 34, third paragraph: In a September 30, 2003 response to PER, Inc. regarding the easement issue, we stated that "...one of the conditions of purchase (of the skate park property) was the granting of access to the City over Easement 241." As far as the City was concerned, there were never any doubts about the legality to access the skate park property over Easement 241 because it was stated in the deed for the property and we thought that the matter was clarified in our response.
23. Page 35, 2nd paragraph: This paragraph again discusses the differences between the change order extensions and the actual duration of the change order work. See Items #19 and #20 for explanation.

24. Page 35, last paragraph: The statement that "...actual construction started in May 2007" is inaccurate. The actual work on site started on or around November 1, 2005. The soft soils were discovered on November 15, 2005 during the mass grading of the site. Thereafter, work at the site was restarted and suspended on different occasions and for various lengths of time, so six months may be a fairly close estimate of the actual construction time.

The statement attributed to PER, Inc. that "...the rest of the time was spent waiting for DDC" is also inaccurate and a gross oversimplification of the various issues which created the delays on this project.

25. Page 37, third paragraph: Comparing the March 19, 2004 memo and sketch showing the general location of the comfort station and the skate park with the boring locations in the soils report, it appears that at least 2 of the soil borings (B-4 and B-5) were drilled within the limits of the skate park as shown on the March 19, 2004 sketch.
26. Page 39, last paragraph: The last sentence is inaccurate. Given the amount and the short time frame, the private entity was not able to secure the required funds.
27. Page 40, first paragraph: The report is inaccurate in stating that "...the City declined because the sponsor wanted a logo on the structure". While there was some discussion about corporate financial backing for the \$40,000, a firm offer of funding from the sponsor was never made. Also, it should be noted that permanent commercial advertisements and logos are generally not allowed on City facilities. Eventually, the City provided the necessary funding to modify the small bowl.
28. Page 41, Conclusion, first paragraph: We believe that the discussion centering around "...the short sighted practice of rushing projects at the end of the year" and "...whether sufficient time has been allotted to develop project requirements" would not have affected the outcome of project. Bidding the project earlier would not have changed the project requirements. Refer to Item #5.

29. Page 42, Conclusion, second paragraph: We do not agree with the assessment that the failure to construct the access road had a substantial impact on the project. While confusion regarding this issue may have created some of the delays during the design phase, ultimately it did not matter that the access road had not been constructed. The building permit for this project was approved and the skate park was constructed without the access road.

The last sentence of the conclusion misses the mark on the following points: It was never the City's intent to "...save time and money" on this project. The goal was simply to build a "state-of-the-art" skate park with the funding available. The "...lack of an orderly progression in building the components" does not accurately describe the issues which caused the delays in this project. Lastly, the construction contract time was 240 calendar days and not six months as stated.

30. Page 43, Recommendations, paragraph c: Although we generally agree with this statement, the "...open lines of communications and regular meetings" were difficult for this project, since Dreamland is based in Oregon.
31. Page 43, Recommendations, paragraph d: In our experience, the most important component for a successful skate park project is the specialized experience and expertise required to build and finish the freeform concrete structures which makeup the skate park. To our knowledge, there is no one locally available with the demonstrated expertise in concrete finishing work required for this highly specialized project type.
32. Page 43, paragraph No. 3: Our standard practice is to notify our client agencies whenever a major revision is required during construction which will affect the function of a facility. Generally, communications with the general public during construction of a project are coordinated with the client agency.

Should there be any questions, please feel free to call me at 768-8480.

Very truly yours,

Eugene C. Lee, P.E.
Director

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