Volume 25 Number 04

April 2009

www.landscapeonline.com

LANDSCAPE ARCHITECT

AND SPECIFIER NEWS

THE INDUSTRY TRADE MAGAZINE FOR THE COMMERCIAL LANDSCARE SPECIFIER NATIONWIDE:

Find 82 World Premieres
in this Issue
For Details See Page 8

SETTING THE STANDARD: Mission Creek Park North

By Lilian T. Fu, HLB Lighting, and Brian T. Franco

The main axis through Mission Creek Park North's sports park is on a diagonal and connects the entry plaza and main facilities building with the kayak storage structure.

ission Creek Park North is a unique public park located in the Mission Bay district of San Francisco. The park is one of the first developed by Catellus Development Corporation (now Mission Bay Development Group LLC) as part of the Mission Bay master plan; a visionary mixed-use development adopted by the San Francisco Board of Supervisors in 1998. Horton Lees Brogden was responsible for creating the lighting standards used in the entire development, and applying them to this park as well.



ABOVE: Lighting for the 5th Street Overlook remained low level so as not to obscure the waterfront view of the Mission Bay Development to the south. Custom fluorescent steplight fixtures integrated into the handrail design and louvered bollards provide pools of light that intermingle playfully on the overlook.

PHOTO COURTESY OF MARCIA LIEBERMAN

Mssion Creek Park (continued from page 64)

Many years in the making and successfully realized over the years, Mission Bay has truly become a remarkable development for San Francisco. Located alongside Mission Creek, an estuary wetland and wildlife habitat, Mission Creek Park North provides many amenities to the public, nearby residents and adjacent houseboat community.

In terms of park amenities, these include: a linear waterfront esplanade with a series of celebrated overlooks; a kayak and boat launch; a dog park; basketball courts; volleyball court; tennis court;

restroom and maintenance facilities. With the park being approximately three city blocks long, design and construction was divided into two phases. Notably, the most unique aspect of the park is the site at the west end, slated for the sports park component and described here as part of Phase Two.

Phase One

Our lighting design process in collaboration with Marta Fry Landscape Architects and Catellus began in early 2000 with the design development of Parcels NP1 and NP2, named here as Phase

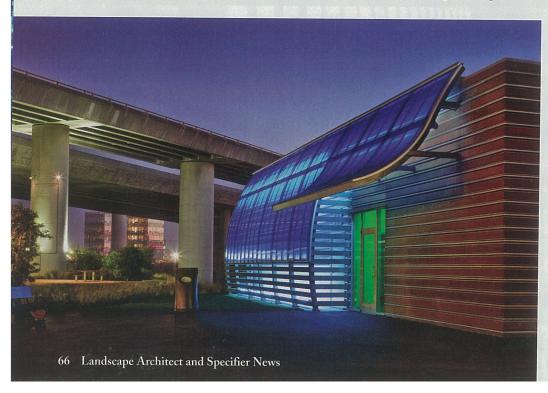
One. This portion of Mission Creek Park North includes most of the esplanade and overlooks which are located adjacent to the mid-rise residential buildings being constructed at the time. Phase One also includes the prominent 5th Street Overlook, a mid-block park for residents to enjoy that also conceals and protects San Francisco's pre-existing outfall structure and pump station mechanics.

Mission Bay Standards

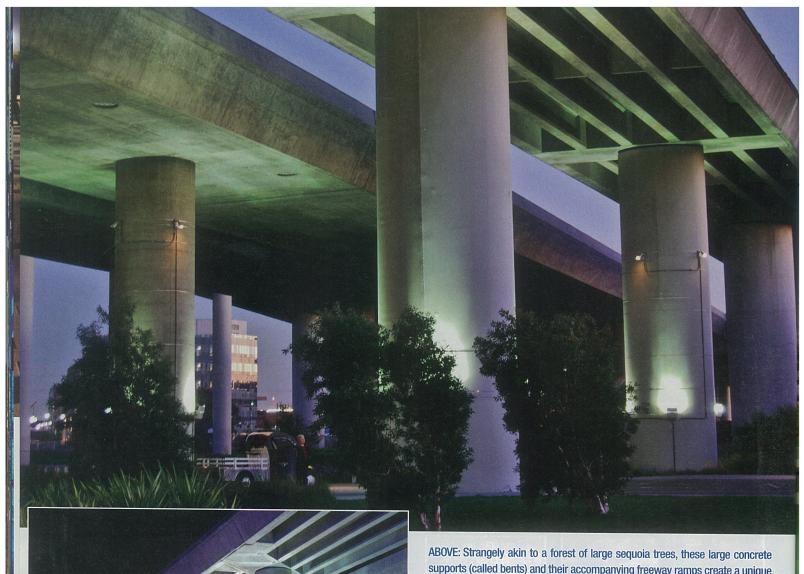
Early in the design process, it was established that the project would adopt

LEFT: The main facility building includes storage and maintenance work areas as well as the restroom facilities for the sports park. Blue phosphor fluorescent lamps behind the blue colored polycarbonate panels reinforce the concept of water at Mission Creek Park North.

PHOTO COURTESY OF JACOB ELLIOT



(Continued on page 68)



Mssion Creek Park (continued from page 66)

the standard Mission Bay pedestrian light pole to help establish a visual connection to the new park and to promote simplified maintenance for the city. The standard Mission Bay pedestrian light pole is a semi-custom pole fixture manufactured by Louis Poulsen and used throughout Mission Bay's sidewalk streetscapes. To coordinate the specific electrical project requirements for Mission Creek Park, drawings were exchanged with the manufacturer throughout the design process. This process also helped ensure the use of the latest lighting technologies available.

The pole fixture utilizes a 70 watt ED17 ceramic metal halide lamp with a warm 3000 Kelvin color temperature and color rendering index (CRI) rating of 82 for excellent color rendering.

ABOVE: Strangely akin to a forest of large sequoia trees, these large concrete supports (called bents) and their accompanying freeway ramps create a unique spatial environment for pedestrians in this active sports park. Reflected light from the indirectly illuminated freeway canopy helps to softly illuminate large areas of the park that otherwise do not have any specific pole lighting nearby.

LEFT: Fully shielded metal halide uplights strap-mounted to freeway support columns enliven these massive structures at night and help render the sculptural quality of these otherwise utilitarian concrete structures.

PHOTOS COURTESY OF DOUGLAS FU

In this public nighttime environment, visual identification of pedestrians and objects is important to providing a safe and friendly atmosphere. To provide improved color temperature stability for the ceramic metal halide lamps, the pole fixtures were specified with electronic ballasts rather than the typical magnetic. Electronic ballasts also offer increased energy efficiency compared to magnetic ballasts. To achieve appropriate pedestrian path illumination, fixtures were spaced approximately 70 feet on center and are approximately 14 feet tall including the fixture head. Each fixture head is outfitted with an integral photocell to automatically turn the lamp on at sunset and off at sunrise.

Mission Bay and Ceramic Metal Halide

Thanks to one of our previous research and development projects for Catellus Development Corporation, ceramic metal halide sources are the approved light source standard for all of Mission Bay rather than the city-wide San Francisco standard of high pressure sodium for streets and roadways. This helped



Mssion Creek Park (continued from page 68)

establish Mission Bay as a modern day urban community that has embraced new state of the art technologies promoting an enhanced visual environment.

The Esplanade

While the Mission Bay light pole provided a consistent, uniform and rhythmic expression of light along the esplanade, we designed a more subtle and low level expression at the pedestrian overlooks.

Working closely with Cole Lighting, the light fixture manufacturer, and MFLA, the landscape architects, we developed a custom compact fluorescent linear steplight integrated within the esplanade rail system. The fixture was designed around a 40 watt compact fluorescent biax lamp, which we determined via our in-house lighting calculations to be the lamping required to provide appropriate light levels within pedestrian areas.

With the park being so close to a marine environment, a stainless steel fixture housing was designed for this application. A louvered faceplate limits light spill toward the sky and provides

LEFT: A rich and colorful landscape weaves in and out of Mission Creek Park North expressing wave like patterns and a playful reflection of the sculptural ramps above. Dynamic and colorful during the daytime and nighttime, the kayak storage building coveys more of the park's nautical and playful theme. Photo courtesy of Marcia Lieberman

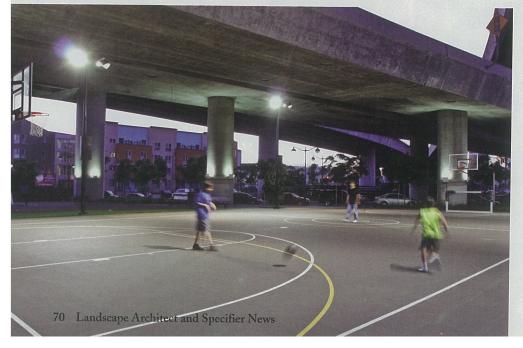
only the necessary illumination on the ground below to allow pedestrians a glare-free viewing experience of the city at each overlook. During the submittal process, prototype samples of the custom Cole Lighting fixture were provided to the project team. This allowed the design team to review the final product from an aesthetic standpoint while providing the contractor with real-time coordination of the installation prior to construction.

Located along the building side of the esplanade, small louvered BEGA steplights recessed in the low walls at each bench seating niche provide a small accent of light to identify these resting spots at night. Compact fluorescent sources were also chosen here for energy efficiency and long lamp life.

5th Street Overlook

The 5th Street overlook presented a few small challenges. The unusually large area of the overlook left areas needing more illumination than the perimeter steplights along the railing could provide. Conceptually, the design team also desired to have a clear view thru to the overlook from the streetscape side without the visual obstruction of light poles. However, poles provided a clear cost savings to a typical bollard solution. By optimizing the bollard performance and limiting other landscape lighting design features proposed, overall budgets and design concepts were maintained.

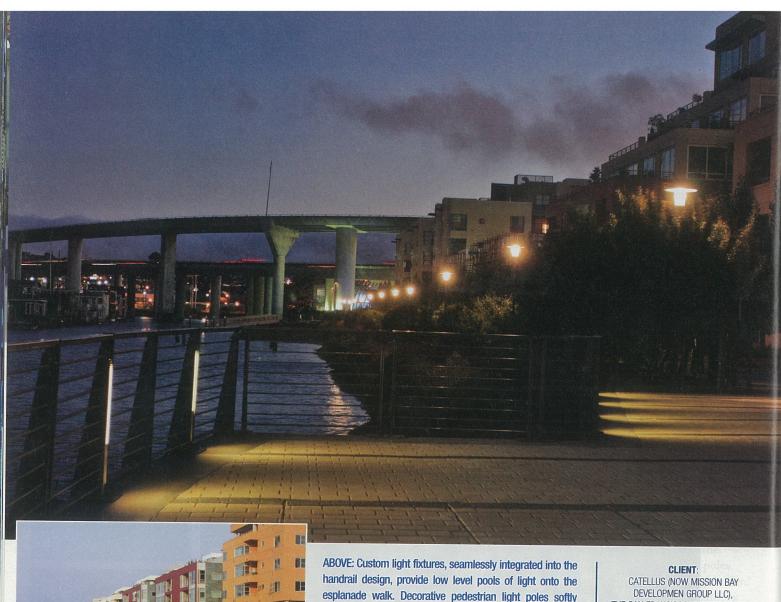
Careful selection of landscape fixtures were also required to address the issue of rainwater that is designed to flow thru to this outfall structure. Hydrel in-grade fixtures designed for underwater and dry conditions were specified.



Phase Two

The second phase for Mission Creek Park North involved designing and developing the remaining parcels, NP3, NP4 and NP5. This portion is the terminus of the park which spans a total of three city blocks. With sport courts, a kayak storage building plus human-powered boat dock, a beautiful landscape planted in dynamic, water-like patterns, the west end celebrates the park's adjacent water setting and the active lifestyle of so many in San Francisco.

LEFT: Sport court lighting fixture locations were carefully designed and coordinated with the many site limitations such as freeway maintenance access routes for vehicles and underground foundational structures. PHOTO COURTESY OF MARCIA LIEBERMAN



illuminate the long walk in between the overlooks. LEFT: View of Mission Creek Park North looking west towards the sports park in parcel NP5. Intermediate

overlooks give pedestrians an opportunity to stop and enjoy the view. Mid-rise residential buildings frame the north side of the park while Mission Creek bounds the south side.

PHOTOS COURTESY OF MARCIA LIFRERMAN

remain for daytime use only.

Mssion Creek Park (continued from page 70) **Sports Park** The biggest challenge for this end of the park began with the existing concrete forest of

freeway support structures and ramps. However, these same structures viewed at night under ambient moonlight seemed to fade into the shadows. Therefore, our most important lighting challenge was to design a lighting system for the park that encouraged park enthusiasts to feel safe.

There were other important issues to resolve as well such as: How long are the sport courts illuminated at night? While most parks close at dusk, is this one meant to have a nighttime experience especially for the sporting activities?

After team discussions, designing a park that provided sporting activities into the evening hours for Mission Bay was clearly the design intent. However to minimize cost impacts and create a visually balanced solution, only the tennis court, one full basketball court, and the boat launch ramp area would be illuminated at night while the one half basketball court and volleyball court would

The success of Mission Creek Park North is a direct result of a committed vision for the park by everyone involved. The success has also helped transform this once open industrial land area to a dynamic and active park that supports the Mission Bay vision for a thriving active mixed-use urban landscape.

DEVELOPMEN GROUP LLC), THE SAN FRANCISCO REDEVELOPMENT AGENCY (SFRA)

LIGHTING DESIGNER: HORTON LEES BROGDEN LIGHTING DESIGN INC.

LANDSCAPE ARCHITECT:

BUILDING ARCHITECT:

ELECTRICAL ENGINEER: FW ASSOCIATES

CIVIL ENGINEER: FREYER & LAURETA

HOHBACH-LEWIN

SAN FRANCISCO, CALIFORNIA

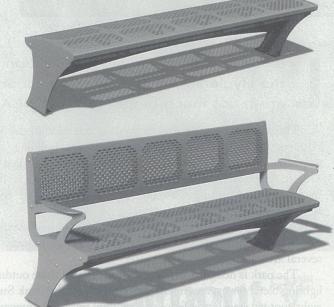
AREA: 7.5 ACRES

LIGHTING FIXTURE MANUFACTURERS:

LOUIS POULSEN, COLE LIGHTING, BEGA. PARAMOUNT LIGHTING, HYDREL. LUMIERE, HUBBELL LIGHTING, AND QUALITY LIGHTING

Introducing...







Designs PATENT PENDING • 2007-2008 All Rights Reserved Worldwide - LEADER®

MARTA FRY LANDSCAPE ASSOCIATES

STRUCTURAL ENGINEER:

LOCATION: