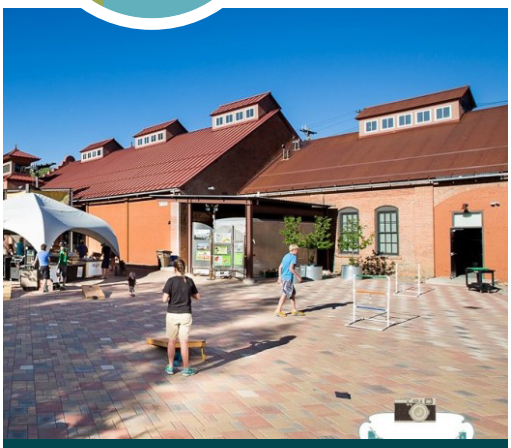
COLORADO BROWNFIELDS

CASE STUDY: DURANGO

POWERHOUSE SCIENCE CENTER

COLORADO BROWNFIELDS PARTNERSHIP



PROJECT SUMMARY

Constructed in 1893, the Durango Powerhouse, designed in historic Mission-style architecture, is the oldest standing alternating current (AC) coal-fired power plant in the world. By 1972 after nearly 80 years of operations, the Powerhouse building sat idle and vacant, riddled with environmental contamination. In the mid-1990's, the City of Durango eventually purchased the property and site. However, funding for remediation and renovation proved to be difficult.

Founded in 1994, the Children's Museum of Durango (operating under Durango Discovery Museum) eventually outgrew their original 1,100 square feet facility. In 2002, the Children's Museum contacted the City and submitted a proposal for converting the historic plant into an interactive science museum. The Durango City Council responded positively to the proposal by passing a resolution supporting the restoration and conversion of the Powerhouse into the Durango Discovery Museum. Beginning in 2002, volunteers began obtaining grants for historical renovation, asbestos removal, and site cleanup from the State of Colorado.

By 2006, after significant fundraising and cleanup, the brownfield remediation of the site and the exterior renovation of the Powerhouse had been completed while the interior renovation of the Powerhouse into an interactive exhibit space took an additional four years to conclude. The museum opened to the public in February 2011. Since 2011, the museum has continued to evolve with new exhibit and education space, administrative offices, and a café being added.

QUICK FACTS

Location: Historic Downtown Durango, Colorado

Project type: Industrial power plant to interactive children's science museum

Site: 8,000 sf plant on 3 acres

Former Use: Alternating current (AC) coal fired power plant

Renovated Use: Children's Museum - operating under Durango Discovery Museum (DDM) from 2011-2015; Powerhouse Science Center from 2015 to present

Environmental Issues: Uranium tailings, mercury, asbestos, and petroleum plume

Reuse Partners:

- City of Durango
- Colorado Department of Local Affairs
- Colorado Department of Public Health & Environment
- Colorado Historical Society
- Durango Arts Center
- Durango Discovery Museum
- La Plata County
- National Parks Service
- Private Donors and Volunteers
- Rebuild Colorado

INFO@COBROWNFIELDSPARTNERSHIP.ORG

COBROWNFIELDSPARTNERSHIP.ORG

COLORADO
Hazardous Materials & Waste Management Division
Department of Public Health & Environment

community builders
PEOPLE | PLACE | PROSPERITY

ENVIRONMENTAL CHALLENGES

The Powerhouse site contained several environmental concerns, including unknown levels of asbestos and other contaminants as well as decades of pigeon waste buildup. In addition to containing visible remnants of coal and other byproducts from the plant's operations, the soil was also contaminated from radioactive tailings from a nearby site. Lastly, the soil was compromised by a petroleum plume which extended from a nearby gas station's underground storage tanks. Remediation efforts included physically removing the contaminated soil and hot spots from the site. Mitigation of the radioactive tailings included infilling with pea gravel and a drainage net to filter out the tailings without compromising the drainage system. The most expensive part of the cleanup was due to asbestos in the plant's building materials. All of the remediation was made possible through grants provided through state (CDPHE) funding.

FINANCING AND DEAL STRUCTURE

The total cost of the restoration project was estimated to be approximately $4 million. Multiple entities partnered together to address the financial needs of the redevelopment by fundraising, collecting grant money, contributing countless hours of volunteer work, and garnering state support. From the state, the project qualified for a Targeted Brownfields Assessment of $135,000. Of this amount, approximately $45,000 came from CDPHE's Section 128(a) State and Tribal Response Program Grant to perform assessments on initial contamination assumptions. Another $90,000 came from state funds for the removal of asbestos and more than 1,000 cubic yards of contaminated soil. Public and private donations contributed another $2 million and included $100,000 from the Gates Family Foundation and $50,000 from BP America for solar equipment. In addition, many local firms donated time, labor, and materials.

FINANCIAL IMPACT:

Total New Investment:

$4,00,000

Estimated Induced Local Spending:

+ $2,100,000

Jobs Created: (full time)

+32

SOCIAL IMPACT

- Advances the City's goals of improving quality of life for residents, stimulating local businesses, and preserving historic character.
- Incorporated educational opportunities and historic preservation to transform an eyesore to into an asset.
- Serves as a demonstration project and catalyst for river front revitalization.
- Produced new recreational space and mobility connections for both tourists and local residents.

ECONOMIC IMPACT

- Value added to the building is estimated at $56,000.
- Created 8 full-time jobs, with salaries that contribute to the local economy.
- Attracts 20,000+ visitors per year that induce significant spending in the local economy.
- **Estimated sales tax increase -** $5,000 annually
- **Added property value -** $56,430

HELP FOR YOUR PROJECT

Regardless of where you are in the process, the Colorado Brownfields Partnership (CBP) will help you learn about brownfields assistance for your community. We provide many types of support to communities interested in redevelopment of potentially contaminated sites. Contact info@cobrownfieldspartnership.org for more information.

INFO@COBROWNFIELDSPARTNERSHIP.ORG

COBROWNFIELDSPARTNERSHIP.ORG

COLORADO
Hazardous Materials & Waste Management Division
Department of Public Health & Environment

community builders
PEOPLE | PLACE | PROSPERITY