New York Gaming Facility Location Board Response to Request for Applications to Develop and Operate a Gaming Facility in New York State

TIOGA DOWNS RACETRACK, LLC Exhibit VIII.C.18.a.



e2 Firm Profile

Energy & Environmental Solutions (e2) is a national resource in green building and full service sustainability consulting firm with headquarters in Pittsburgh, Pennsylvania. Founded in 1993,our commitment has always been to understand our clients' needs and together create and implement effective sustainable solutions that align with their business and organizational goals. We provide decades of real-world understanding and experience to solve complex building, development, and planning projects that honor the long-term viability and health of the planet, its people and their economy. The strength of the e2 team comes from the depth of experience of our staff, whether developing energy baselines, carbon footprint or global impact and green business planning to providing in-depth energy analysis, improving employee health, and design and construction of new projects, as well as assisting in the marketing of their sustainable endeavors. Because of this integrative diversity, we avoid the prescriptive approach and limited time horizon of others in the marketplace, making e2 uniquely qualified and cost effective. The e2 team has consulted on 80 LEED Projects across the country, new and existing buildings, meaning that we understand both design and construction concerns and long-term operations and maintenance issues.

Through the completion of several hundred projects, our staff is highly experienced in comprehensive pre-design planning — the most important phase of a green construction project. This experience also has helped us to develop extensive protocols and procedures that ensure successful delivery, on-time completion, within budget, and exceeding the owner's expectations.

e2 Approach

Each building is different in its performance requirements and goals. We focus first on the owner's financial goals, aggregation of incentives, and delivery of financial instruments that best suit the client's business model. We are fully cognizant of all the life-cycle factors that impact a property, from design and construction, through operation and ultimate decommissioning. We are always focused on ensuring ongoing operational success for the owner. We communicate effectively and regularly, enabling our team to integrate seamlessly with the client's representatives — including their executive management, technical staff, operational personnel, financial analysts, and accounting department.







The first step in all of the potential applications for these services is to define the Owner's Project Requirements. This applies to building program, operations, energy efficiency, and system expectations. These requirements will provide the performance roadmap for all project work. We strongly believe that the time spent in the Programming and Planning phase is the best possible investment in the success of any project. Some of the specific challenges to address include the following:

- Short and Long-Term Business Goals
- Continuity with Organizational Goals
- Energy Reduction

Exhibit VIII.C.18.a. (cont.)

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- Preservation of Aesthetic, Functional and Comfort intent
- Sustainable Facilities Management & Operations Performance and Costs
- Long Range Facility Evolution
- Stakeholder Engagement

e2 Philosophy

We have served clients in the educational, hospitality, art, gaming, commercial, retail, governmental, and industrial sectors to deliver top performing, financially strong and sustainable developments. All of our projects include a focused emphasis on financial performance, with special emphasis on incorporating all potential incentives and entitlements.

e2's work is centered on the four principles of Green Building, Sustainability, Renewable Energy and Education. As a full-service consultant and premier resource in Green Building, e2 offers expertise in LEED consulting, Corporate Responsibility and Governance, and a wide variety of Education programs. e2 has over 44 million square feet of LEED building construction and consulting on our resume. e2 President, Chris Klehm, wrote the book for the US Green Building Council on "LEED for General Contractors and Construction Managers". Chris is a member of the USGBC LEED Faculty and teaches across the world on cost effectively achieving LEED.

e2's perspective ranges from project visioning and planning to sustainable operations and management of the completed project.

- Illuminating the owner's goals, and crafting strong strategies to best meet those goals including social, financial, and resource conservation.
- Exploring and evaluating the most effective configuration of buildings that respect the way sunlight, wind, rain, and water flow across the project site.
- Support the planning, design, and construction of the most energy efficient, high-performance, and environmentally sound buildings that benefit the owner and the building occupants and the community.
- Assistance and guidance on how to best manage the completed project to protect the health and welfare
 of occupants, respect the environment, manage risk, and control expenses.
- Ongoing sustainable operations

Green Building

Since 1993, e2 has been instrumental in the growth of green building in North America. We are early members of the US Green Building Council (USGBC) and served, and continue to serve, in key roles within the organization. We have performed as the builder or consultant on over 80 LEED-certified projects, equating to over \$12 billion in construction costs and over 44 million square feet of commercial and residential floor space.

e2 has performed consulting services on all sizes of commercial and institutional projects. Our ability to look at each project as a unique opportunity has allowed us to be able to seamlessly navigate between the massive and cuttings edge of technology of Las Vegas Integrated resort design to the sensitivity of adaptive re-use of the Barn at Falling Water. Our project experiences include serving as LEED Consultant for the CityCenter project for MGM in Las Vegas, Nevada; an 8-building complex comprising 18 million square feet of commercial space, the largest project in the world ever to achieve LEED certification. Other gaming experiences include Fontainebleau, Caesars Palace and Harrah's. We also have experience with medical buildings and hospitals, including the Children's Hospital of Pittsburgh as well as various government and institutional buildings including the Regional Animal Campus in Las Vegas, Pittsburgh's Children's Museum and work for many school districts. e2 is currently working with organizations such as Caesars Entertainment, the world's largest provider of branded casino entertainment, to baseline and improve the impact their holdings make on the planet and their bottom line. e2 has done similar service for the Los Angeles Transit authority, Kohler and Decca.

e2 operates exclusively through an informed process; evaluating design considerations to provide scientific data as to the cost and energy use of various strategies. Our goal is to assist the owner to accomplish a project which improves the bottom line, comfort and health, community/professional goodwill, while adhering to or surpassing organizational goals.

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e2 Recommendations

Nick Hart, President, Decca Hospitality

Top qualities: Great Results, Expert, Good Value

"Energy & Environmental Solutions consulted and guided us in converting our 2.1M sq feet manufacturing facility to LEED standards. Their knowledge and expertise of the "green movement" was of tremendous value to our company. They were conscious of cost and worked well with our group of both American and Asian employees. Their work was excellent and his guidance helped us obtain our objective of becoming the industry leader in offering LEED products to our customers."

Louis DeSantis, Director of Design MGM Mirage and Fontainebleau Resorts

Top qualities: Great Results, Expert, High Integrity

"Chris Klehm and the e2 team and I have worked together on 2 Hotel/Resort Gaming projects in Las Vegas, Nevada Both projects, for private development companies, needed his expertise and experience with the USGBC and his knowledge of the LEED Certification process. Chris and his team thoroughly understand the very complex issues in achieving a LEED certification; they are very creative in finding and implementing solutions that fit within the total project framework. Their knowledge and support from the initial concept to construction completion on a project assist ownership in achieving their LEED certification and a sustainable facility that has long term benefits for both the Owner and the Community."

H. Evan Rubin, LEED AP, Senior Director of Architecture, Fontainebleau Resort

Top qualities: Expert, High Integrity, Creative

"Chris Klehm is the consummate professional demonstrating is knowledge and passion for the environment and the world around us by helping design and construction projects maximize their potential for sustainability while minimizing their carbon footprint and ultimate cost of ownership for years to come. Chris is willing to share his knowledge as a mentor. I am anxious to learn more under his leadership. Thank you for the opportunity to share my thoughts."

Ryan Snow, Education Director, US Green Building Council

Top qualities: Great Results, Expert, High Integrity

"I have known Chris Klehm for about a decade and consider him a 'practical visionary' in the green building movement. Chris can inspire innovation on projects or in the class room, while keeping teams and students grounded in the realities of budgets, schedules and other boundaries. Chris is a systems thinker who approaches the design-build process with wisdom. Over the years, I have learned a lot from Chris!"

Jeff Burd, Editor of Breaking Ground magazine

Top qualities: Expert, High Integrity, Creative

"Chris Klehm has been passionate about sustainability since I met him in 1994. He was writing & designing solutions for green building long before LEED existed & well before the business community 'got it.' He comes at problems from a different angle; he was the same way with construction. Chris has always been more interested in doing things the right way, even if it wasn't the easiest way."

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e2 Project Experience

Fontainebleau Resort and Casino

Client: Fontainebleau Resorts and Turnberry West Construction Location: Las Vegas, NV

U.S. Green Building Council LEED Silver (pending)

Fontainebleau Resorts and Turnberry West Construction retained e2 as the Executive LEED Consultant for the \$1.9 billion Fontainebleau Resort and Casino that consists of four concurrent projects; a 4,000 Guest Room Tower, Casino, Convention Center, Theater, Retail areas and parking totaling over 8.7 million square feet. This is the second largest LEED Project on record. e2 is responsible for providing overall green building strategic planning and cost reduction management for the project as well as organizing the project into effective LEED submissions.

In addition to LEED Consulting, the e2 team is providing energy modeling and measurement and verification planning for the entire Resort campus. The project will achieve energy and water use reductions saving over 40 million gallons of water a year. A major focus of the project is the continuing operations and maintenance program. e2 is working with Fontainebleau Operations on developing green education programs for staff and guests as well as green cleaning, green procurement and operations procedures aimed at continuing sustainability after the construction of the project.. This project is targeting a LEED-NC Silver rating.





Cashman Equipment Rental and Power Solutions

Client: Cashman Equipment Company – Burke & Associates, Inc. Location: Las Vegas, NV

U.S. Green Building Council LEED Gold

Cashman Equipment, Nevada's Caterpillar dealership, is a company that prides itself on doing the right thing. With the construction of their new 308,000 square foot industrial complex they wanted a sustainable facility that was responsive to the community, the employees, and the environment. The campus is built on 53 acres, making it the largest environmentally sustainable industrial campus in the state. Seven separate buildings house administrative offices, equipment rental and sales operations, repair facilities and warehousing. The project employs a campus wide geothermal system with 360 wells drilled 400 feet deep that provide heating and cooling for all buildings and will reduce energy costs by 45%. There is also an on-site equipment washing facility that utilizes water reuse. Solatubes and daylighting was used extensively on this project combined with daylight and occupancy sensors. e2 served as LEED Consultant and Accredited Professional.





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Felician Sisters Convent and Sacred Heart High School

Client: Felician Sisters Convent Location: Coraopolis, PA

U.S. Green Building Council LEED Gold

The Felician Sisters – an order of Catholic nuns – in Coraopolis, Pennsylvania knew they had to renovate their Convent and High school Building and wanted to do it in a sustainable manner. e2 partnered with Sota Construction to develop a plan for sustainably restoring and reducing energy costs on the 1930s building. The project's green construction elements included significant reuse of existing materials, specification of recycled content materials, recycling of on-site construction waste and specification of sustainable furniture. A solar thermal system was installed to provide renewable hot water heating for the project. Changing the occupancy schedule for the HVAC System reduced the supply by 45 tons. Through the extensive retrofits combined with renewable energy, the Felician Sisters Convent and High School Building exceeds ASHRAE 90.1 for energy efficiency by 35% providing significant long term savings and environmental benefits.



Project CityCenter

Client: Perini Building Group Location: Las Vegas, NV

U.S. Green Building Council LEED Gold & Silver

Project CityCenter is being developed by MGM Mirage in the heart of the Las Vegas Strip. CityCenter reflects an optimistic vision of the future, a vision that combines a healthy quality of life with a global commitment to sustainable design. Eight award-winning architects have engineered a "city within a city," where residents and visitors can live, work, and play. This vibrant community will transform your expectations, providing a remarkable demonstration that a community can be both beautiful and sustainable. The project consists of 18 million square feet of new construction over 66 acres with construction costs of \$8.2 billion. It is currently the largest construction project in the United States. e2 was hired as LEED Consultant to the General Contractor, Perini Building Company to develop a project management plan to cost-effectively integrate LEED into the project. e2 was responsible for General Contractor compliance with LEED credit responsibilities, including the Construction IAQ Plan, the Construction Waste Management Plan, use of low-VOC materials, and planning the purchasing of materials, emphasizing recycled and regional content. Anticipated completion is November 2009. Silver and Gold LEED ratings are targeted for the various buildings.





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Caesar's Palace Additions

Client: Harrah's Operations, Inc.

Location: Las Vegas, NV

U.S. Green Building Council LEED Silver

e2 has been hired as the national LEED Building Consultant to Harrah's Operations, Inc., the largest gaming company in the world. Harrah's Entertainment is aggressively addressing its environmental challenges and responsibilities. Harrah's has developed a comprehensive environmental program, CodeGreen. e2 assisted in implementation of that program and LEED for the Caesar's Palace Additions. The Caesar's Palace Additions project consists of construction of a new hotel tower (Octavius Tower) and Convention Center. The Convention Center was completed in August, 2009 and the Tower in 2012. Goal and achieved LEED Silver though increases in energy and water efficiency as well as model indoor air quality. E2 estimates an energy reduction of 18.5% below ASHRAE 90.1-2004 and 24% below code plus water savings of over 3.6 million gallons of water per year. Construction Value: \$1.2 billion.





David L. Lawrence Convention Center

Client: Green Building Alliance Location: Pittsburgh, PA

U.S. Green Building Council LEED Gold

e2 was hired as the LEED Consultant to the Green Building Alliance and the Turner/PJ Dick constriction team between the beginning of the project and March 2002. Encompassing nearly 1.5 million square feet and costing \$375 million, green is seamlessly integrated into the building design and belongs to the building as intrinsically as its world-class aesthetics and engineering. Extensive computer modeling resulted in a 35% energy savings compared to ASHRAE 90.1. The project also utilizes a gray water system that saves an estimated 6.4 million gallons annually. Over 95% of the demolition waste from the original Center was recycled by crushing it into useful fill material. 50% of the new materials were produced within 500 miles of Pittsburgh thus reducing the carbon footprint. In addition, almost ten percent of the building materials are comprised of post-consumer recycled content.

The use of natural light and ventilation provides environmentally friendly surroundings for events. Natural light is in abundance at the DLCC where over 75% of the entire building is naturally lit. The primary hall space of 236,000 square feet is 100% naturally lit by skylights and glass walls. The exterior of the building uses reflective materials to allow for the building to capture existing city lights to reduce the amount of exterior lighting. The building is designed with a natural ventilation system which allows natural fresh air to cool the building. This feature is provided by the roof design and riverside louvers. The David L. Lawrence Convention Center is the largest LEED Gold certified convention center in the U.S.



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Regional Animal Campus

Client: The Animal Foundation Location: Las Vegas, NV

AIA 2006 COTE Top 10 Award Winner
U.S. Green Building Council LEED Silver

The Regional Animal Campus is an 18,000 square foot sustainable adoption center designed and built to follow its guiding principles and values of commitment to saving and improving the lives of animals as well as being environmentally responsible. The design team focused on minimizing facility maintenance and operation costs while maintaining a high level of quality for the adoption process. The bugalow's form and orientation are governed by daylighting and wind-powered ventilation to allow the dogs and their human visitors to remain comfortable. These strategies reduced building cooling loads and provide 100% fresh air to the bungalows. This project uses a living machine to filter on site wastewater and also features photovoltaic panels to provide power and shade to the project. e2 served as Green Building Consultant and LEED Accredited Professional.





The Barn at Fallingwater

Client: The Western Pennsylvania Conservancy Location: Mill Run, PA

AIA 2005 COTE Top 10 Award Winner

U.S. Green Building Council LEED Silver

The Barn at Fallingwater is an adaptive reuse of a 19th century heavy-timber barn and its 20th century addition, framed in dimension lumber. The 12,000 square foot space was the first phase of a conference complex for the Western Pennsylvania Conservancy. The project is located on the organization's 5,000 acre Bear Run Nature Reserve adjacent to Frank Lloyd Wright's world-famous Fallingwater Project. The design was driven by the Conservancy's desire to express the lessons of good stewardship for the environment and the cultural landscape. All landscaping for the site is native to the locale and the design team utilized bioswales and retention ponds to filter runoff from the site. The project also is designed with a zero-discharge wastewater reclamation system, graywater flushing, and low flow fixtures. e2 was involved from predesign through construction as the General Contractor, LEED Consultant and LEED Accredited Professional.





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Children's Hospital of Pittsburgh

Client: Barton Malow/ PJ Dick Joint Venture Location: Pittsburgh, PA

U.S. Green Building Council LEED Silver

Completed in the fall of 2008, the Children's Hospital of Pittsburgh of UPMC is a state of the art 1.5 million square foot facility located on ten acres in the Lawrenceville neighborhood. The new Hospital of is designed as a "green" campus, meaning that buildings will use key resources such as energy, water, materials, and land more efficiently than buildings erected simply to building code. Children's commitment to employ green practices extends well beyond its bricks and mortar. This means Children's will employ new operating policies and procedures regarding facility maintenance, housekeeping, food service, and waste management. Children's will also foster its green philosophy by working with our clinicians, academicians, and community to conduct research on the subject of sustainability and its health effects on children.e2 was the LEED Consultant to Barton Malow/PJ Dick Joint Venture. Construction Value: \$372 million. Architect: Astorino.





Pittsburgh Children's Museum

Client: Children's Museum of Pittsburgh Location: Pittsburgh, PA

U.S. Green Building Council LEED Silver
Green Building Alliance 2006 Shades of Green Leadership Award

The Children's Museum of Pittsburgh's (CMP) 80,000 square foot expansion project was the largest LEED Certified Silver museum in the country at the time it opened in November of 2004. The CMP views green building as a natural extension of the museum's mission and it was a collective decision made very early in the process by the board and staff. The museum purchases 100% of its electrical power from renewable sources and owns a three kWh photovoltaic system. Through energy optimization and commissioning, the building uses approximately 15% less energy than a typical project. In addition, since this building was an expansion and remodel, 100% of the existing building shell and over 50% of the interior walls and ceilings were re-used. e2 was the LEED and Green Building Consultant. Construction Value: \$8.4 million. Architect: Koning Eizenberg Architecture and Perkins Eastman Architects.





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COMPANY REFERENCES

Caesars Palace Hotel and Convention Center

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Virgin Hotel Design and Construction Guidelines

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Mark David Furniture Product Development

Mark David Furniture High Point, NC

Contact: Mark Norcross, CEO MN Consulting

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Children's Hospital of Pittsburgh

Barton Malow/ PJ Dick Joint Venture

Pittsburgh, PA

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Fontainebleau Resort and Casino

Fontainebleau Resorts and Turnberry West Construction

Las Vegas, NV

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Exhibit VIII.C.18.a. (cont.)



Chris Klehm LEED BD+C, O+M. USGBC LEED[®] Faculty™

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PUBLICATIONS

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MARKET SECTORS

RECENT EDUCATION & TRAINING

SAMPLE US PROJECT **EXPERIENCE**

2003, Author, USGBC's LEED for General Contractors and Construction Managers

- 2003 present USGBC LEED Faculty
- 1995 Founding Chair, Pittsburgh's Green Building Alliance. 2002-2006 Board Member
- Chair General Contractors Council, Associated Builders & Contractors, 1998-2004
- Board Member, Conservation Consultants, 1998-2006

30 YEARS OF PROJECT CONSULTING & TEAM MANAGEMENT | With over 30 years of experience in green building, consulting and construction, Chris has developed national reputation as a thought leader, trusted consultant and expert teacher for LEED and sustainable building techniques. He has contributed to over 75 LEED projects, and over 44 million square feet of green development, providing every level of customized consulting and support to owners, architects and contractors. With expertise in sustainable goal setting, design strategy planning and implementation, building materials and LEED documentation his experience ranges from one of the first LEED pilot projects in 1999 (Pittsburgh Community Food Bank) to the largest LEED development in the world (Project City Center in 2009).

20 YEARS OF TRAINING & EDUCATION | Chris has provided education and training on LEED and general green building strategies for over 20 years, sharing knowledge and developing skills for international corporations such as Sprint and Tetra Tech, and for general contractors such as Perini Building Company and 40% of the ENR Top 100. As a member of the USGBC LEED Faculty he teaches across the country on cost effectively achieving LEED certification, designing and constructing green buildings and holistic sustainability approaches. Chris also teaches Commissioning, Energy Auditing and Building Performance and Analysis.

LEED Faculty | LEED & Green Building Consultant | LEED Consultant | Living Buildings | Energy Auditor | LEED AP

Hospitality | Convention Centers | Healthcare | Higher Education | Office Buildings | Gaming | Existing Buildings | Schools | Manufacturing | Transportation | Materials Reuse Strategies | Government & Authorities

- Caesars Palace Beats The Odds, October 6, 2010 Las Vegas, NV, Facilities Decisions Conference & Expo
- LEED and the General Contractor/Construction Manager, November 11, 2009, Phoenix, AZ, USGBC Greenbuild
- All About LEED A Process Approach, December 9, 2009, Washington, DC, Ecobuild 2009 Conference
- LEED Existing Buildings Opportunities (Keynote), April 7, 2009, Las Vegas, NV, Mechanical Svc Contractors of US
- LEED for General Contractors, Great Lakes Building Trades Council, Education Series, January 23, 2010, Erie, PA
- Whole Building Commissioning to Meet Performance Goals, February 7, 2013, Atlanta, GA

LEED RESPONSBILITIES				RATING SYSTEM	COMPLETION STATUS	PROJECT NAME, LOCATION
	Х			NC	LEED Silver, 2006	WYEP-FM Offices & Studios, Pittsburgh, PA
			Х	EB v2	LEED Gold, 2009	YWS Architects Office, Las Vegas, NV
		Χ		EB	LEED Gold, 2004	Green Building Alliance - CCI Center, Pittsburgh, PA
		X		EB v3	LEED Gold, 2010	LA Metro Transit Authority – Gateway Building, Los Angeles, CA
			Χ	NC	LEED Gold, 2005	Pittsburgh Glass Center, Pittsburgh PA
			Х	NC	LEED Gold, 2003	Felician Sisters Convent & Sacred Heart High School, Coraopolis, PA
			Х	NC	LEED Silver, 2006	The Barn at Falling Water, Pittsburgh, Mill Run, PA
		Χ		NC	LEED Gold, 2006	David L Lawrence Convention Center, Pittsburgh, PA
			Х	NC	LEED Certified, 2009	Children's Hospital of Pittsburgh, Pittsburgh, PA
	Х			NC	LEED Silver, 2006	Pittsburgh Children's Museum, Pittsburgh, PA
			Х	NC v2	LEED Silver, 2010	Caesar's Palace Convention Center, Las Vegas, NV
			Х	NC	LEED Gold, 2009	Project CityCenter Hotels and Casino, Las Vegas, NV
			Х	NC	LEED Gold, 2006	The Pittsburgh Project Hospitality Inn, Pittsburgh, PA
			Х	NC	LEED Gold. 2009	Cashman Equipment Facility, Henderson, NV
			Х	NC v2	LEED Gold, 2010	FedEx HSHA Building, Las Vegas, NV
		X		NC v2	LEED Gold, 2010	UMB Bank, Collinsville, IL
			Х	NC v3	Construction	Harrah's Atlantic City Convention Center, Atlantic City, NJ
			Х	Pilot NC	LEED Silver, 1999	Greater Pittsburgh Community Food Bank, Duquesne, PA