

Exhibit X.C.2 - LEED Certification

The Traditions Gaming Facility will be a certified LEED facility, showcasing the following features of energy efficient and sustainable operation. A LEED Project checklist, follows this text, indicates anticipated points from the following planned design features.

Sustainable Sites

Credit 5.2 **Site Development – Maximize Open Space**

The Traditions Resort & Casino project has made design efforts to reduce the development footprint and maximize open space and will achieve the criteria for Credit 5.2.

The Code of the Town of Union, Part 1, Chapter 300 Zoning, Article 65, Section 300-65.4 Area Requirements establishes the Open Space requirements for projects within the Planned Unit Development (PUD) District. This applies to the Traditions site. Not less than 25% of the total PUD area shall be set aside for common open space. This land is required to be owned by the developer as it will remain private and shall be set aside as a deed restriction. The required area per town code is 107.69 acres of open space. Traditions currently has 109.57 acres dedicated within their deed.

Traditions sits on 430.74 acres of PUD, with additional non-PUD lands contiguous and controlled by Walsh. The existing open space within the project boundary is able to be expanded such that the amount of open space exceeds local zoning requirements by 25%.

Traditions has also strived to reduce the footprint of the project boundary throughout development of project plans. The initial free standing parking garage was eliminated and is now basement levels under the proposed casino. This reduced the site footprint by almost 2 acres, which reduces the heat island effect, reduces stormwater runoff, and greatly reduces impacts to existing open space. Similarly, parking has been placed under the Hotel reducing the footprint by 1/8 acre. An existing remote paved surface (1.5 acres) that is currently underutilized will be repaired and developed as the 'Shuttle Parking' lot for employees, buses, and limousines as opposed to developing an additional 1.5 acres. Lastly, the existing golf course maintenance yard hard packed and paved areas that are underutilized (approximately 1.1 acres) will be utilized for increased amounts of maintenance staff and employees instead of disturbing new areas.

Credit 6.1 **Stormwater Design – Quantity Control**

A stormwater management plan has been designed to prevent the post-development peak discharge rate and quantity from exceeding the pre-development peak discharge rate and quantity for 1-year and 2-year 24-hour

Exhibit X.C.2

design storms. This will be achieved by use of a detention pond, use of permeable surfaces, and use of subsurface storage and infiltration control measures to reduce runoff from the project site. Other efforts will also be employed, such as soil restoration of areas compacted temporarily during construction. Channel protection will also be addressed as required by the NYS Department of Environmental Conservation.

Credit 6.2 **Stormwater Design - Quality Control**

A stormwater management plan has been designed to reduce impervious cover, promote infiltration, and capture and treat the stormwater runoff from 90% of the average annual rainfall using acceptable best management practices (BMPs). The BMPs selected are designed in accordance with the standards and specifications from both a local program (Town of Union Municipal Separate Storm Sewer System (MS4)) and a State program (NYSDEC SPDES permit), both of which have adopted the necessary performance standards.

Credit 8 **Light Pollution Reduction**

Rather than relying on traditional outdoor lighting high-intensity discharge (HID) lamps, exterior lighting will utilize energy efficient LED lamp technology with individually aim-able LED optics to create exact light patterns that eliminate light trespass and glare.

Water Efficiency

Credit 1 **Water Efficient Landscaping**

Landscaping selected for the project does not require irrigation. No irrigation system will be necessary for the Phase I Casino or for the Phase II Hotel.

Credit 3 **Water Use Reduction**

Water use will be reduced by installation of water efficient plumbing fixtures. Water closets will be battery dual flush valve type with 1.6 gpf or 1.1 gpf. Urinals will have a battery flush valve with 0.5 gpf. Lavatories will have solar metered faucets with a tempered supply rated for 0.5 gpm. For Phase II, showers will have 1.5 gpm shower heads.

Energy and Atmosphere

Credit 1 **Optimize Energy Performance**

The Phase I Casino will use approximately 40 Btuh per square foot for heating and cooling throughout the year, totaling 110,000 therms of heating and 2,738,000 ton hours of cooling. It will use approximately 15,768,000 kWh of electricity over the course of a year. If these energy needs were supplied by conventional sources, approximately 975,690 equivalent therms of energy would be consumed by the facility each year at a cost of \$1,829,000/year.

Exhibit X.C.2

However, the proposed Combined Cooling, Heat and Power (CCHP) onsite generation system will reduce peak electrical demand as well as capture rejected thermal energy for use in building heating and cooling processes. CCHP systems have greatly increased total efficiencies when compared to central station power plants and separate thermal systems. CCHP systems also produce lower emissions compared to traditional fossil fuel generation.

It is estimated that the proposed system will consume a net of 865,000 therms of energy at a cost of \$1,196,500/year. Comparing this energy use to that estimated if conventional energy sources were used (975,690 therms consumed each year at a cost of \$1,829,000), the planned design will achieve a 34.5% reduction in energy costs.

- Credit 2 **On-Site Renewable Energy**
The project will include 200-kW of fixed tilt PV panels installed on the roof of the new Casino. Traditions Resort and Casino LLC will enter into a SPPA (Solar Power Purchase Agreement) with a solar service provider who will own, operate and maintain the PV system. The solar production will occur during peak electric load hours and will support the CCHP system without reducing the need for full CCHP electric output and associated thermal output.
- Credit 3 **Enhanced Commissioning**
Rather than the traditional approach of enlisting the services of a commissioning agent at the end of construction, a commissioning agent will participate during all stages of the project, from design through construction. This will provide many opportunities to ensure that sustainable design intent and energy efficiency goals are shepherded to completion. This approach gives the agent enhanced access for monitoring progress and for making timely suggestions to ensure LEED objectives remain an active part of planning and execution.
- Credit 4 **Enhanced Refrigerant Management**
HVAC equipment and refrigerant types/quantities shall be selected to minimize the contribution to ozone depletion and climate change.
- Credit 5 **Energy Measurement and Verification**
A measurement and verification (M&V) plan will be developed and implemented as part of the project's participation in the NYSERDA CCHP program. Hourly production of power and thermal energy will be recorded and submitted to NYSERDA. Monthly and annual reports will be generated. This system will be expanded to include other large energy consuming systems in the building to provide a total energy picture. Monthly reports will be shared with administrative and maintenance staff. Shifts in energy consumption can be noted and investigated to ensure systems are still operating as designed.

Exhibit X.C.2

Materials and Resources

Credit 2 **Construction Waste Management**

The project team will identify construction debris haulers and recyclers to recycle and/or salvage non-hazardous construction debris. The minimum goal will to recycle or salvage 50% of the construction debris. A waste management plan will be developed during the design phase and implemented by the contractor during the construction phase. Debris will be tracked and a report will be prepared showing percentage of debris recycled and/or salvaged.

Credit 4 **Recycled Content**

The project team will establish a goal of 10% recycled content for material during the design and material selection phase and will add the LEED requirements in the specifications. The design team will run preliminary calculations during the design phase, then prepare a record list of manufacturers with cut-sheets of materials and maintain a list of the materials to be used to meet the 10% recycle content requirement.

Credit 5 **Regional Materials**

The project team will establish a goal of 20% regional materials during the design phase and will include the requirement in the specifications. The architect will work with the contractor during the budgeting phase to ensure that local materials are included in sub-contractor bids. The contractor will track and document the regional materials installed and the total cost of those materials.

Indoor Environmental Quality

Credit 1 **Outdoor Air Delivery Monitoring**

CO2 monitoring and outdoor airflow measurement strategies shall be utilized for ventilation system capacity control.

Credit 2 **Increased Ventilation**

Ventilation equipment shall be provided to exceed the requirements of ASHRAE 62.1-2007 by at least 30%. This additional ventilation will be provided through the roof-mounted energy recovery ventilators.

Credit 3.1 **Construction IAQ Management Plan – During Construction**

Before the start of construction, the contractor will prepare an IAQ management plan that meets SMACNA and ASHRAE guidelines and standards. During construction a member of the construction team will be selected as the indoor air quality manager and will take responsibility for identifying problems and implementing solutions.

Credit 3.2 **Construction IAQ Management Plan – Before Occupancy**

After the completion of construction and prior to occupancy, a building flush-out will be performed per the LEED requirements. A total of 14,000 cubic feet

Exhibit X.C.2

of outside air will be supplied per square foot of floor area during the flush – out. Flush-out delivery rates, internal temperature and humidity will be recorded and monitored during the flush-out.

Credit 4.1 Low-Emitting Materials – Adhesives and Sealants

During the design phase, the design team will prepare specifications for adhesives and sealants that meet the minimum VOC limits as specified in the LEED table. During construction, the manufacturers will be required to submit product data showing that the adhesives and sealants to be used meet the standards specified. A list will be maintained of all products used and their VOC rating.

Credit 4.2 Low-Emitting Materials – Paints and Coatings

During the design phase, the design team will prepare specifications for paints and coatings that meet the minimum VOC limits as specified in the LEED table. During construction, the manufacturers will be required to submit product data showing that the paints and coatings to be used meet the standards specified. A list will be maintained of all products used and their VOC rating.

Credit 4.3 Low-Emitting Materials – Flooring Systems

The design team will include the project specifications requirements that all flooring elements meet the California Dept. of Health Services Standard Practice for Testing of Volatile Organic Emissions from the Various Source Using Small-Scale Environmental Chambers. During construction, the manufacturers will be required to submit product data showing that the flooring materials to be used meet the standards specified. A list will be maintained of all products used.

Credit 5 Indoor Chemical and Pollutant Source Control

The design team will employ vestibule entry systems and floor grate systems to capture dirt and particulates before they enter the building. The building air filtration media specified will have a minimum MERV of 13 or higher.

Innovation and Design Process

Credit 1.1 Innovation in Design

The planned CCHP system provides significantly more efficient energy for new facilities than conventional energy systems would provide. With electricity generated on site, transmission and distribution line losses associated with conventional utility-supplied electricity are avoided. With the generators on site, heat produced during electricity production can be efficiently captured and channeled to meet on site heating and cooling needs.

Credit 1.2 Innovation in Design

In an effort to conserve water and energy and minimize waste water discharge, the hotel will post signs in all hotel rooms requesting that guests hang towels to dry after use and re-use towels again.

Exhibit X.C.2

Credit 2 LEED Accredited Professional
Several LEED Accredited professionals will be involved in the design of new facilities.

Regional Priority Credits

Credit 1.1 Regional Priority-Specific Credit
Storm water management measures on the Traditions site will include two detention ponds and detention chambers installed beneath the parking lot. Post-construction run-off will be less than run-off at the existing site.

Credit 1.2 Regional Priority-Specific Credit
Solar production from the 20 kW roof-mounted solar system will reach 236,000 kWh/year, or 1% of the building's needs.