

New Stadium Summary of Sustainable Design Elements

September 20, 2022

The New Stadium will replace the nearly 50-year-old Existing Stadium with a new, intimate reduced capacity venue that will contain the amenities and features of a modern NFL stadium. The guest experience will be greatly enhanced with wider concourses, elevated food and beverage offerings, modern entertainment technologies, and improved entry/egress provisions. The stadium's exterior appearance will also be elevated with a more architecturally unified and pleasing façade treatment.

Sustainability Measures

The New Stadium will incorporate several sustainability measures that are more environmentally sensitive than the Existing Stadium. Additionally, its reduced capacity will inherently generate less vehicular traffic in the immediate area.

Electrical Systems

Newer technologies that are more energy efficient than existing systems will be employed throughout the site and buildings. LED video displays used in the seating bowl and concourses are more energy efficient than previously available models, thus use less electricity power per square foot than the existing systems. More energy efficient LED lighting fixtures within the building and throughout the site including playing field lighting will be used. A more extensive lighting control system will be used to minimize the use of electricity and conserve energy when areas are unoccupied. The use of shielded site LED light fixtures and roof canopy will greatly diminish skyglow and provide a more wildlife friendly environment.

Water Conservation

Lower water consumption toilet fixtures and flush valves will be used to reduce the amount of water used by the New Stadium as compared to the Existing Stadium and also reduce the amount of sanitary waste drainage volume created during events. Low water use landscape technology will be utilized throughout the site. Higher-efficiency water heaters and pumping systems over existing systems will be utilized for generating and distributing domestic hot water throughout the facility.

HVAC Systems

An improved building envelope using high performance glazing and increased exterior thermal insulation will reduce heating and cooling loads for interior spaces. Improved HVAC automated controls and use of higher efficiency equipment including the use of airside economizers on all air handling systems will increase the New Stadium's energy efficiency and optimize its performance. The Building Management System (BMS) will incorporate energy-saving schemes such as economizer optimization (based on both outdoor air dry bulb and enthalpy), demand-controlled ventilation (DCV), demand limiting to minimum electric demand charges, and occupancy setpoints to optimize energy efficiency for varying occupancy schedules in a transient stadium facility. The mechanical equipment will incorporate variable pumping and fan control schemes, supply air temperature reset, heating water temperature reset, energy recovery, and efficient EC and premium efficiency motors.

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Increased Greenspace

The New Stadium project will result in an increase of landscaped areas, improving the pedestrian experience and reducing the urban heat island effect. Bioswale retention areas will be used to reduce the amount of storm water runoff. The Existing Stadiums' concrete structure will be ground up and recycled as fill material within its existing bowl area to reduce off-site waste material haul off.