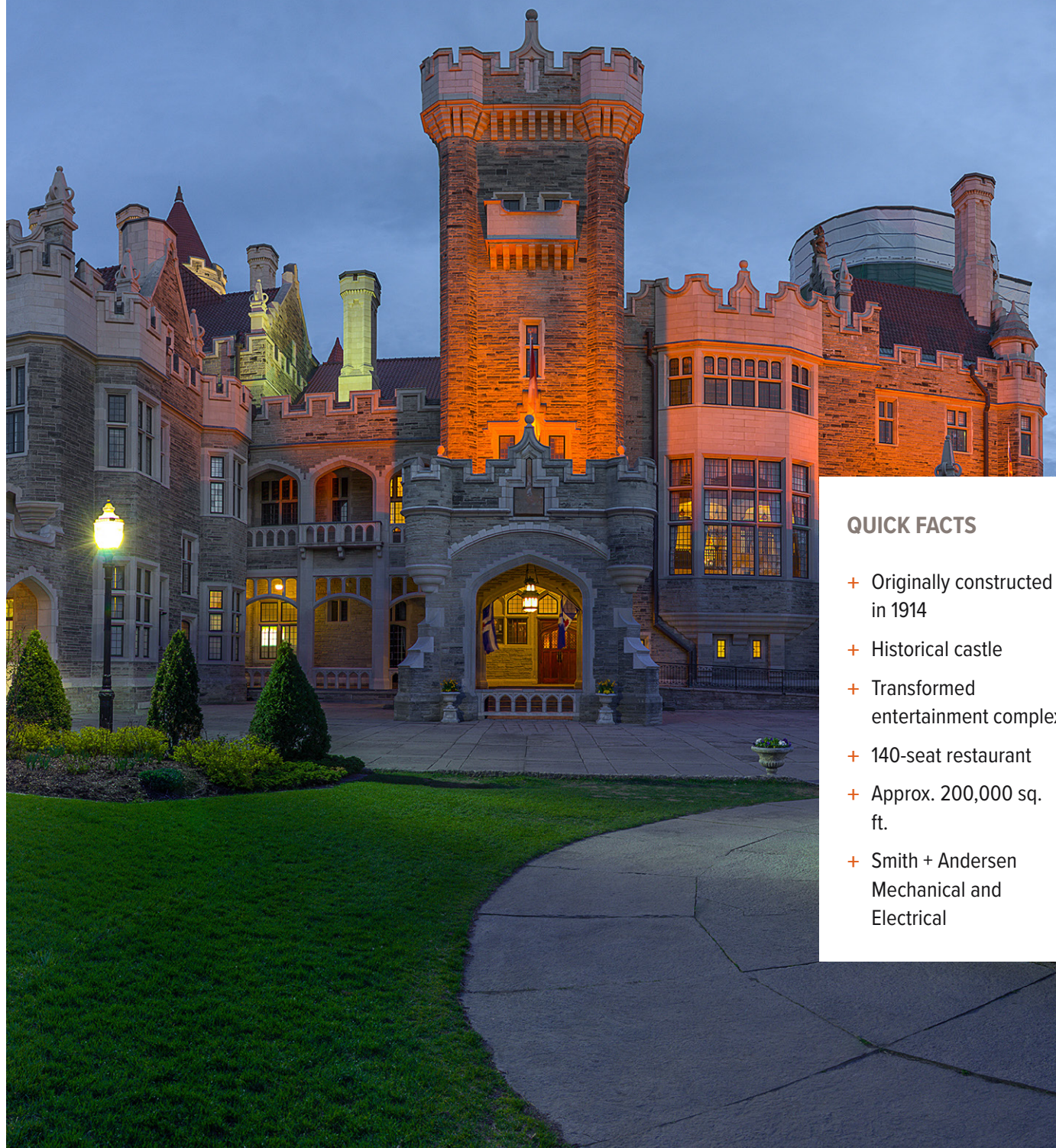




CASA LOMA RETROFIT

TORONTO, ON



QUICK FACTS

- + Originally constructed in 1914
- + Historical castle
- + Transformed entertainment complex
- + 140-seat restaurant
- + Approx. 200,000 sq. ft.
- + Smith + Andersen Mechanical and Electrical



CASA LOMA RETROFIT

ABOUT THIS PROJECT

- + Initially constructed in 1914 as a residence for Sir Henry Pellatt, and now stands as an icon of Toronto's history and as one of the city's most popular tourist destinations.
- + Liberty Entertainment Group began transforming the castle into an entertainment complex in 2014, with additions such as an escape room series, an outdoor event pavilion, and a high-end restaurant (the BlueBlood Steakhouse).
- + 140-seat restaurant located in a main-floor wing of the castle, and was integrated into the historical Oak, Billiard, and Smoking rooms.
- + Design of mechanical and electrical systems was intentionally unobtrusive, complementing Casa Loma's historical features and heritage facade.
- + Century-old features of the castle established stringent mechanical design restrictions, as the walls of the castle are uninsulated and the windows consist of single-pane glass.
- + Successfully integrated chillers, strategic cooling, kitchen exhaust, and make-up air systems, as well as upgraded electrical service to satisfy new and future requirements.
- + Concealing the mechanical systems was crucial for the interiors as well as the exterior, as the design could not visually impact the castle (which is used heavily for outdoor functions each summer).
- + Avoided visibility and mitigated noise by locating specific mechanical (such as chillers) and electrical service equipment in a new room constructed in the existing parking garage.
- + The thick concrete and masonry structure helped with large swings in temperature by releasing absorbed energy at night to the environment and cooling system, while absorbing energy during the day to maintain conditions during occupied hours.
- + Air was delivered into the great hall and returned through the rest of the facility to temper the effects of the outdoor environment - a methodology that worked well without impacting the design.

LOCATION
Toronto, ON

SMITH + ANDERSEN
SERVICES PROVIDED
Mechanical, Electrical

SIZE
Approx. 200,000 sq. ft.
(18,580 sq. m.)

BUDGET
Confidential

COMPLETION YEAR
2017

HOT BUTTONS

MUSEUM

ENTERTAINMENT

RESTAURANT

HERITAGE BUILDING

FIT-UP SPACE

MECHANICAL DESIGN

ELECTRICAL DESIGN