

Toronto Parking Authority

TPA Parking Facilities
Design and Construction

February 3, 2020





How Design and Construction Supports TPA's Mandate

New design considerations with focus on customer experience:

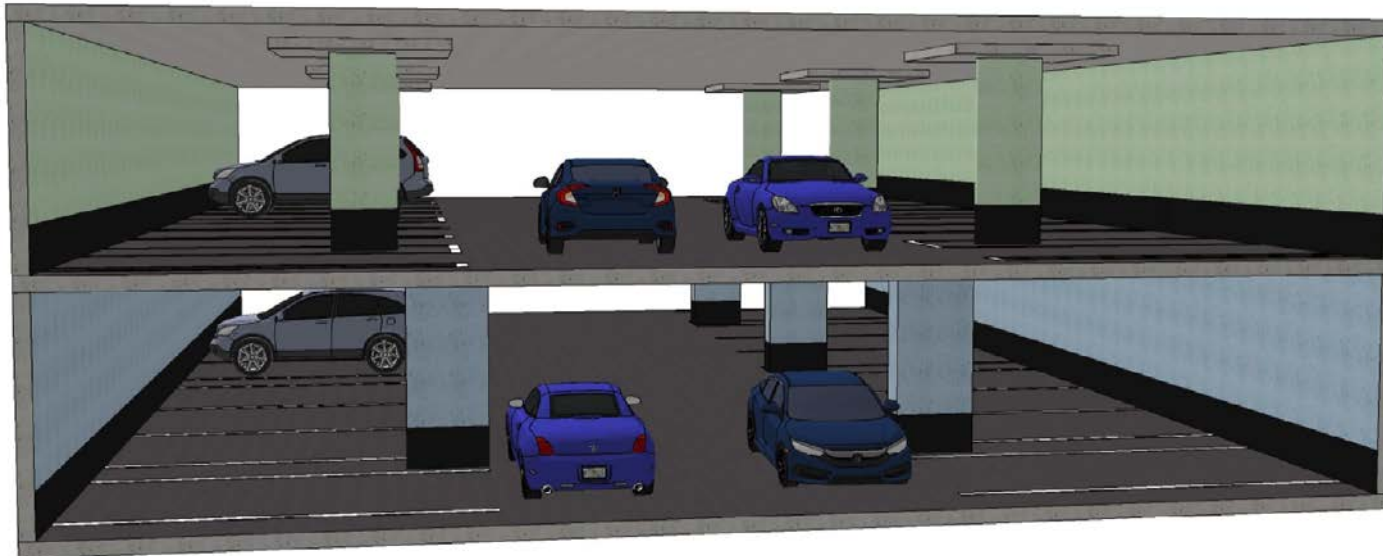
- ▶ Creating friendly, welcoming environments
- ▶ Supporting operational consistency across facilities
- ▶ Promoting public security and safety
- ▶ Constructing facilities that compliment and enhance communities
- ▶ Seeking to promote environmental sustainability
- ▶ Emphasizing functional efficiencies
- ▶ Specifying durable materials requiring less maintenance



Customer Experience



- ▶ Highly visible entrances fronting onto main roadways for easy identification
- ▶ Bright interior garage environments and well-lit surface lots
- ▶ Spacious drive aisles and well-defined parking stalls





Customer Experience (Cont'd)

- ▶ Directional signage and pedestrian wayfinding
- ▶ Highly visible elevator vestibules and stairwells with convenient exit to street level
- ▶ Accessibility designs meeting AODA (Accessibility for Ontarians with Disabilities Act, 2005) Requirements

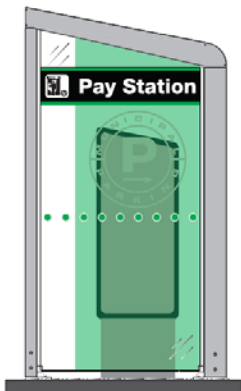




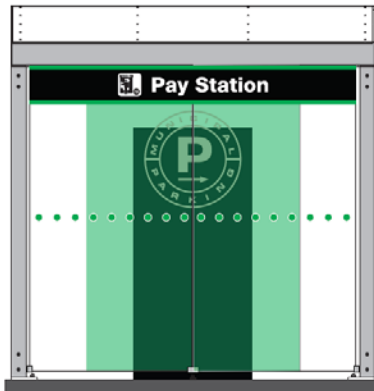
Customer Experience (Cont'd)



- ▶ Providing clear paths and walkways leading to sidewalks to reduce drive aisle pedestrian traffic
- ▶ Providing surface lot shelters to protect customers and equipment from weather
- ▶ Providing extra exit lanes and bail out lanes where space allows, for convenience and reduced wait times
- ▶ Designing customer service offices near exit lanes to support quick response time



Side View



Back View





Public Security and Safety

- ▶ Providing lighting levels which exceed Building Code requirements
- ▶ Using tamper-proof light fixtures in stairwells and elevator vestibules to support reliability
- ▶ Constructing wider drive aisles and unobstructed sight-lines to improve safety
- ▶ Heating ramps during winter to reduce slipping risk
- ▶ Designing traffic flow to promote one-way traffic with minimal cross traffic
- ▶ Meeting and exceeding building and safety code requirements
- ▶ Customer assistance stations strategically located throughout the garage





Enhancing Communities



- ▶ Visually appealing landscape features including pavers, benches and gardens
- ▶ Providing walkways connecting adjacent streets
- ▶ Incorporating easy access to Bike Share infrastructure which won't conflict with traffic patterns





Environmental Considerations

- ▶ Permeable pavers and landscaping features designed to reduce water diversion
- ▶ Stormwater collection and filtration systems to treat runoff water before entering the City storm system
- ▶ Bioswale and stormwater retention components
- ▶ Oil interceptors in garages





Sustainability



Reducing environmental impacts over the lifetime of facilities:

- ▶ Focusing on efficient stormwater management, use of raw materials, energy and land use
- ▶ Designing with considerations for supporting potential multi-purpose property uses, such as residential, commercial and retail
- ▶ Reducing native materials, such as using recycled granular material in our surface lots
- ▶ Constructing facilities for long term durability to increase service life
- ▶ Using corrosion resistant materials
- ▶ Converting to energy saving LED lighting in all facilities
- ▶ Creating a waterproof environment to protect structural, mechanical and electrical components



Green P Plus Program

Program established in 2015 to phase in greening of our surface lots as part of the State of Good Repair repaving program

Key Features:

- Installation of permeable pavers
- Landscaping components and planters
- LED energy efficient lighting
- Pedestrian walkways





Future Design and Construction Projects

- ▶ Electric Vehicle (EV) charging station expansion planning underway to establish infrastructure for use in garages and surface lots
- ▶ Guidance system designs for large facilities requiring additional direction to available parking stalls
- ▶ Modifications to operations of garages and surface lots, redesigning layouts to support customer service focus
- ▶ Upgrading existing facilities to incorporate elevator(s) where possible
- ▶ Establishing an asset life-cycle management plan in conjunction with the 2020 ERP implementation



International Parking and Mobility Institute Design Awards

TPA is the recipient of 4 Awards in the
“Best Design/Implementation of a Surface Parking Lot”

2013 – 3885 Yonge Street - Jolly Miller

2014 - 201 Claremont Street

2016 - 453 Spadina Road

2017 - 1624 Queen Street West



Thank you