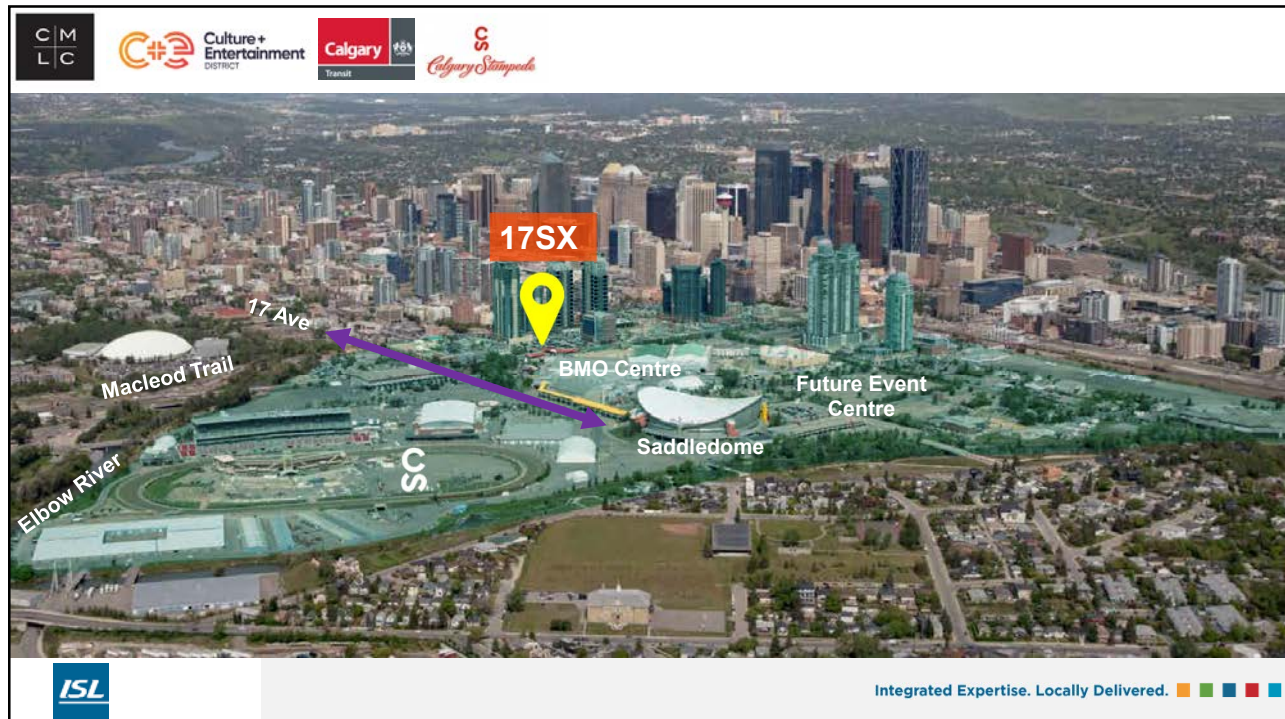


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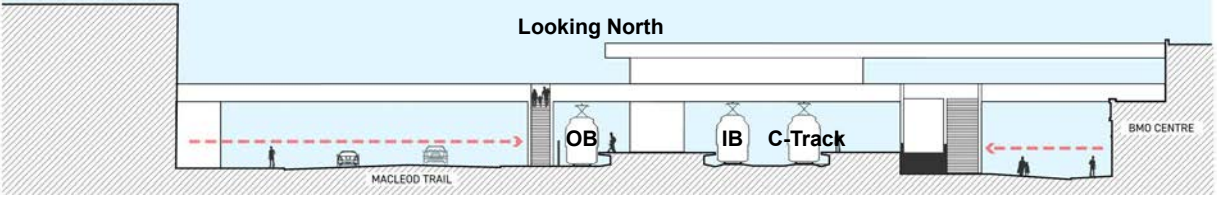



4


# 17 Ave S.E. Extension



5

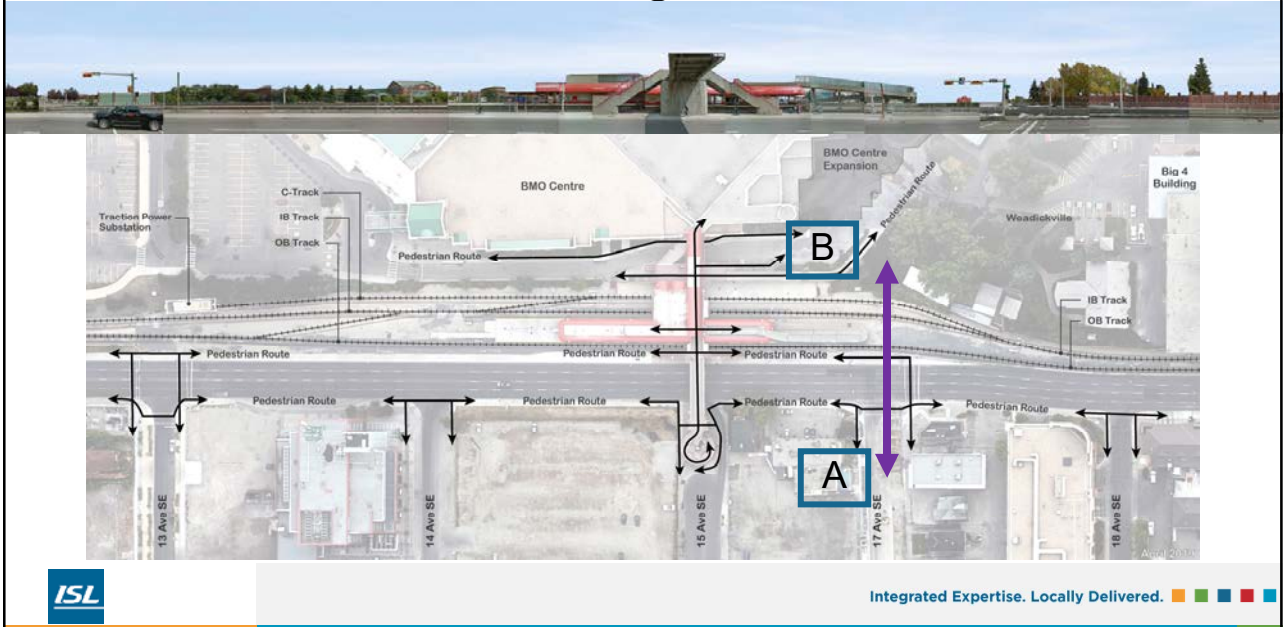
# LRT Station Site Conditions - Original



Integrated Expertise. Locally Delivered. 

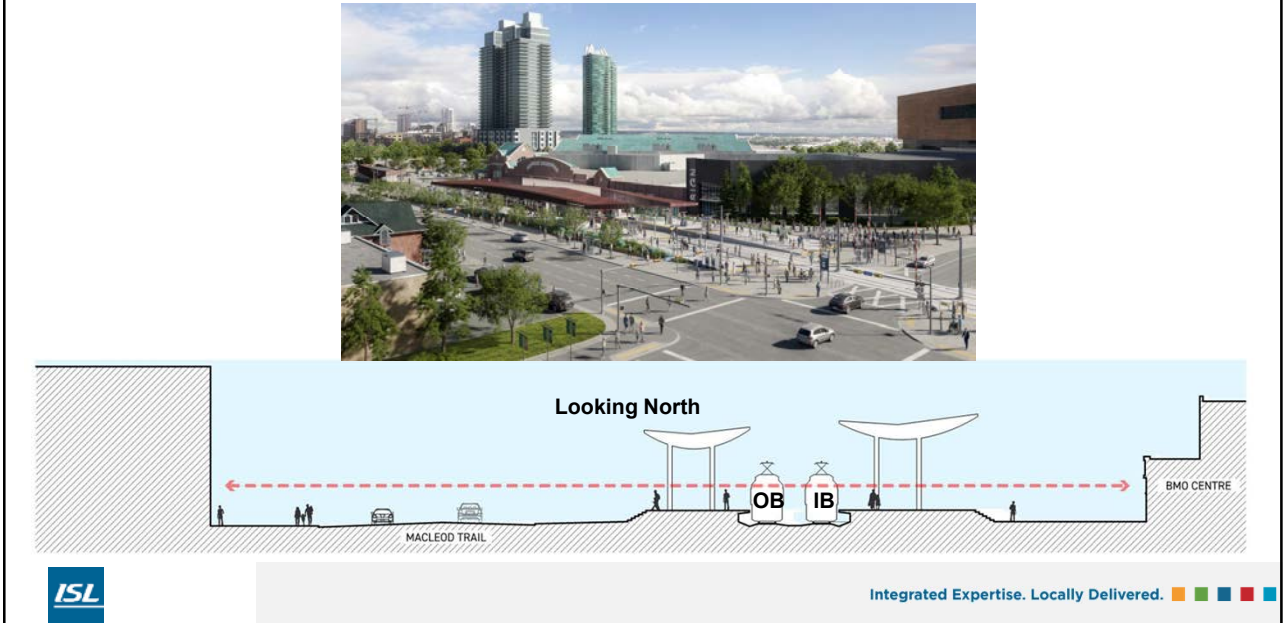
6

## LRT Station Site Conditions - Original



7

## Victoria Park / Stampede LRT Station Rebuild



8

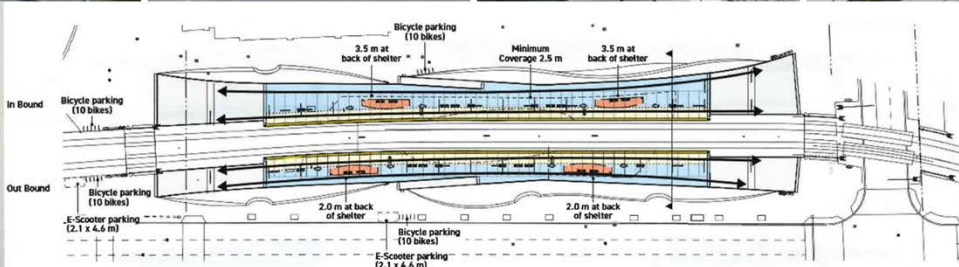
## Victoria Park / Stampede LRT Station Rebuild



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## Victoria Park / Stampede LRT Station Rebuild



	IB (East) Platform Area m <sup>2</sup>	OB (West) Platform Area m <sup>2</sup>	Total Platform Area m <sup>2</sup>	Total Platform Area Comparison	IB (East) Platform Area Distribution (%)	OB (West) Platform Area Distribution (%)	Paths/Planters Area m <sup>2</sup>	Canopy Area m <sup>2</sup>	Canopy Coverage %	Notes
Existing	n/a	n/a	850	1.0	n/a	n/a				
Ultimate	968	777	1745	2.0	55.5%	44.5%	1650	790	45.2	

October 1, 2020

DL2020-0004



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## Construction Phasing to Maintain Transit Operations

- Shoo-fly Track
- Temporary Station
- Roadway Narrowed
- Clear Area for Construction



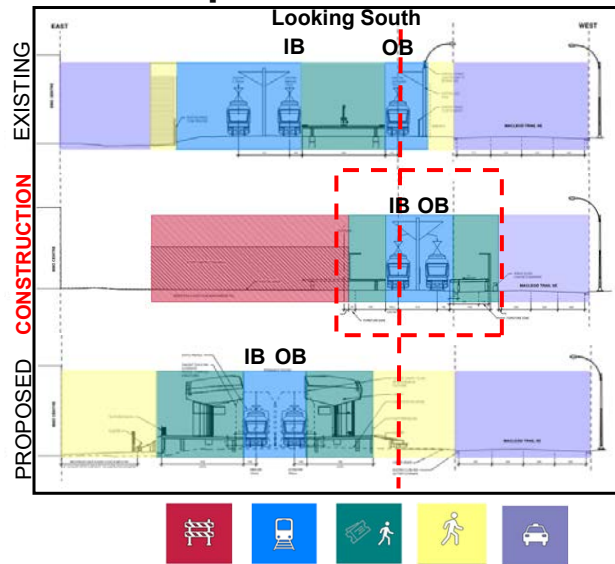
No long-term station closure at Victoria Park / Stampede Station



Reduced costs with no LRT replacement service



Reduced schedule risk due to a more balanced construction scope



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11

## Construction Phasing - Photos

ORIGINAL



CONSTRUCTION - part 1 - Enabling Works

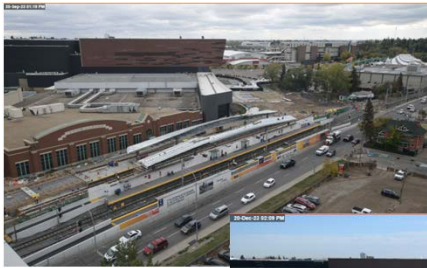


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## Construction Phasing - Photos

CONSTRUCTION - part 2 - Ultimate Works



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## At-Grade Crossing Design

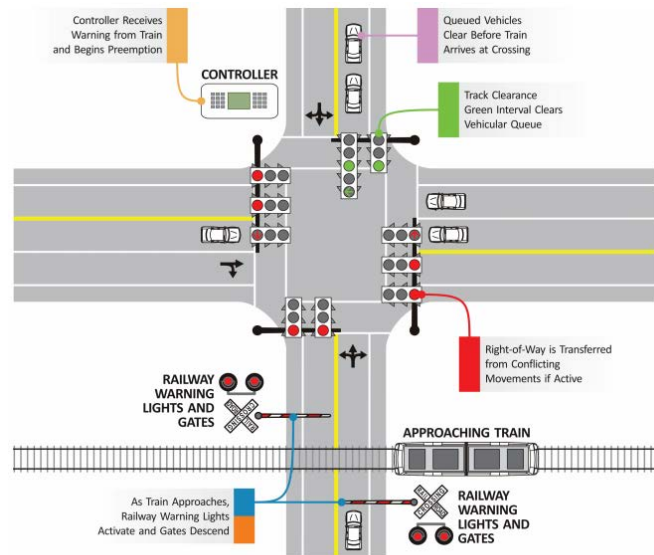


FIGURE 5 Railway preemption actions at an at-grade crossing. Source: Adapted from NCHRP Report 812: Signal Timing Manual, Second Edition (Urbanik et al. 2015).

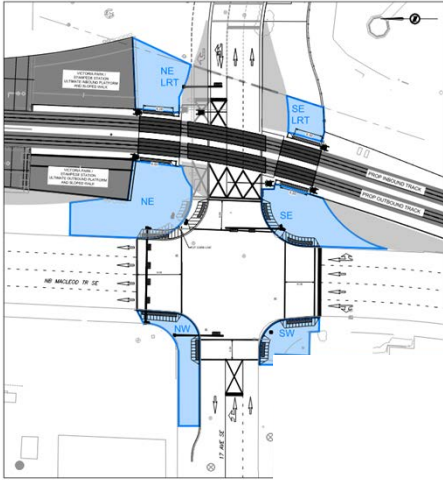


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## Pedestrian Storage



- Ultimate Condition




PEDESTRIAN STORAGE AREA (m2) ULTIMATE CONDITION			
LOCATION	DESIGN	MODEL	VARIANCE
NW	116	100	16
NE	252	250	2
SW	76	50	26
SE	164	80	88
NE LRT	124	120	4
SE LRT	51	45	6

PEDESTRIAN SIDEWALK WIDTH (m) ULTIMATE CONDITION			
LOCATION	DESIGN	MODEL	VARIANCE
MACLEOD TRAIL NORTH	9	12	-3
MACLEOD TRAIL SOUTH	6	6	0
NORTH LRT CROSSING	6	6	0
SOUTH LRT CROSSING	5	5	0

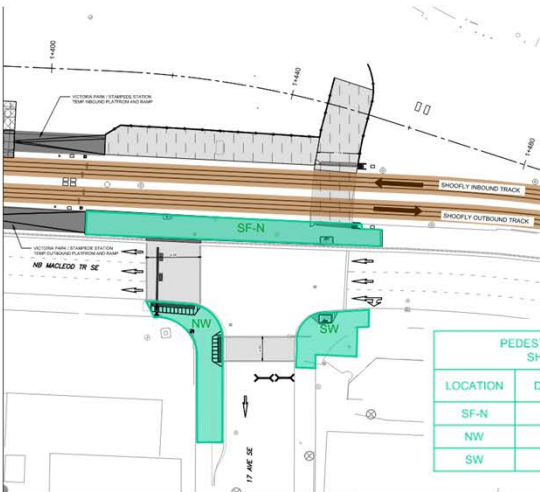


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## Pedestrian Storage


- Shoofly Under Construction / In Operation




PEDESTRIAN STORAGE AREA (m2) SHOOFLY IN OPERATION			
LOCATION	DESIGN	MODEL	VARIANCE
SF-N	175	95	80
NW	115	105	10
SW	79	70	9

PEDESTRIAN SIDEWALK WIDTH (m) SHOOFLY IN OPERATION			
LOCATION	DESIGN	MODEL	VARIANCE
MACLEOD TRAIL NORTH	9	7	2
LRT CROSSING	7	7	0





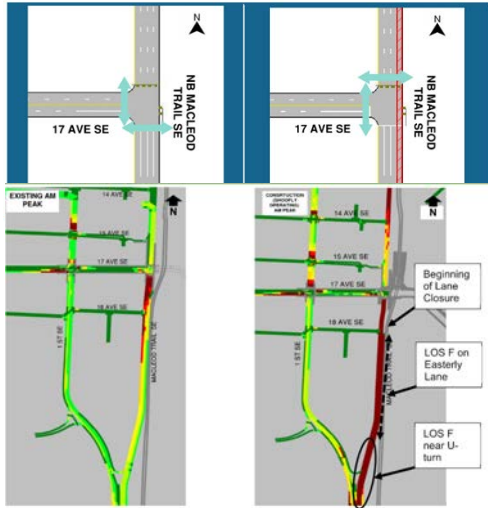
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## 17 Ave SE: One-Way WB

- Shoofly Under Construction / In Operation

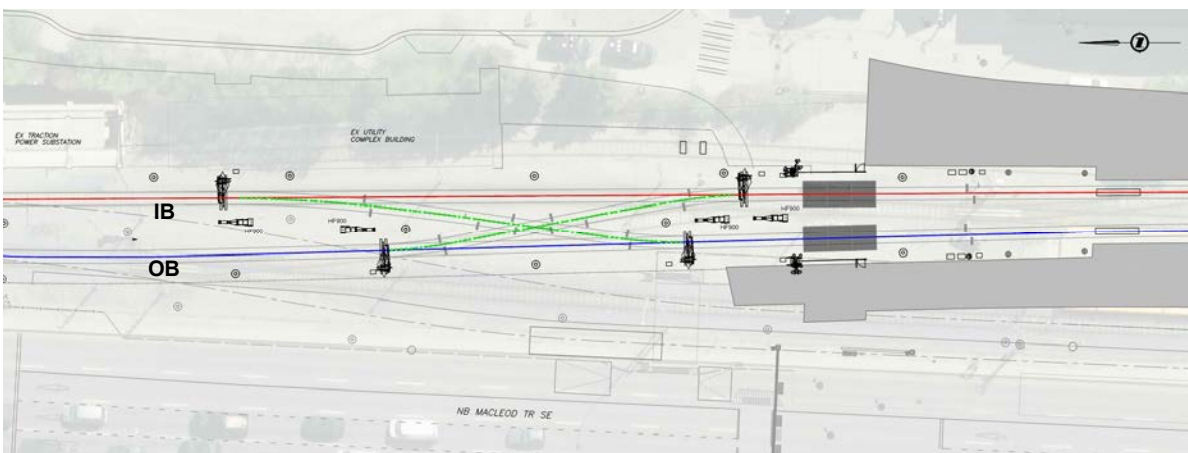


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## Adding Operational Flexibility

- Asymmetric Double Crossover



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## Elbow River Siding – LRT Bridge

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## Elbow River Siding – LRT Bridge

**127.400 BRIDGE SPAN (GROUND)**

**128639 GIRDER FABRICATION LENGTH AT +20°C (SEE NOTE SB-150)**

**100.00**

HIGH PT STA: 1+855.550  
 HIGH PT ELEV: 1048.187  
 PVI STA: 1+852.246  
 PVI ELEV: 1048.402  
 K: 57.8629  
 LVC: 100.000

**30.300 (GROUND)**

WORKING STA: 0+116.627  
 BRIDGE 1+841.209  
 RECORDING STA: 1+897.762  
 ELEV: 1046.032  
 ELEV: 1047.799

**30.500 (GROUND)**

WORKING STA: 0+116.627  
 BRIDGE 1+841.209  
 RECORDING STA: 1+897.762  
 ELEV: 1046.032  
 ELEV: 1047.799

**30.300 (GROUND)**

WORKING STA: 0+116.627  
 BRIDGE 1+841.209  
 RECORDING STA: 1+897.762  
 ELEV: 1046.032  
 ELEV: 1047.799

**30.500 (GROUND)**

WORKING STA: 0+116.627  
 BRIDGE 1+841.209  
 RECORDING STA: 1+897.762  
 ELEV: 1046.032  
 ELEV: 1047.799

**100.00**

1-100 YEAR FLOOD LEVEL  
 ELEV: 1047.79

12-YEAR FLOOD LEVEL  
 ELEV: 1042.92

SURVEY RIVER BANK LEVEL  
 ELEV: 1041.25 (AVERAGE)

EXP

FXD

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### Construction Photos



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### Construction Photos



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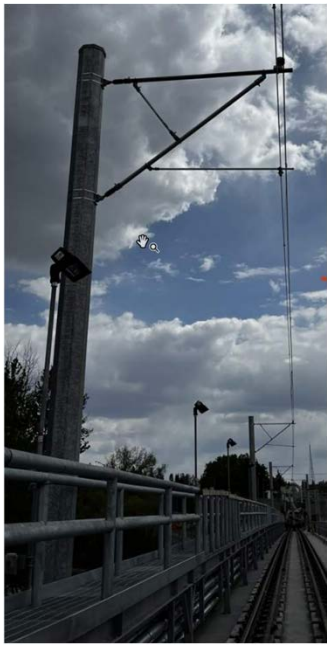
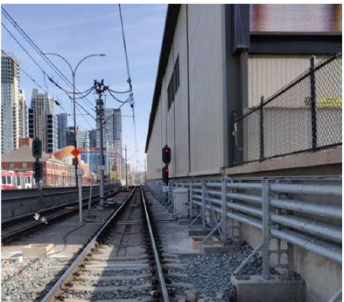
22

### Construction Photos



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### Construction Photos



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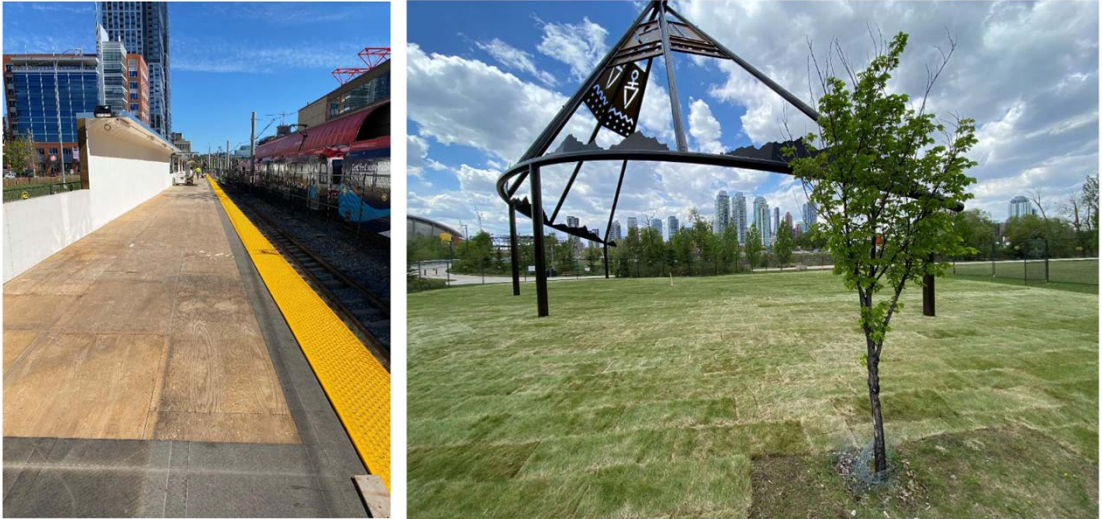
### Construction Photos



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### Construction Photos



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### Construction Photos



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### Construction Photos



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### Construction Photos



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### Construction Photos





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# Construction Photos

Space for additional photos





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# Construction Photos

Space for additional photos



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# Construction Photos

Space for additional photos



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# Construction Photos



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### Construction Photos



March 4-11, 2024 photo



Integrated Expertise. Locally Delivered. [Colorful squares]

### Construction Photos

Space for additional photos



Integrated Expertise. Locally Delivered. [Colorful squares]

### Construction Video: December 2023 Time-Lapse




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### Project Timeline

Graphic in progress

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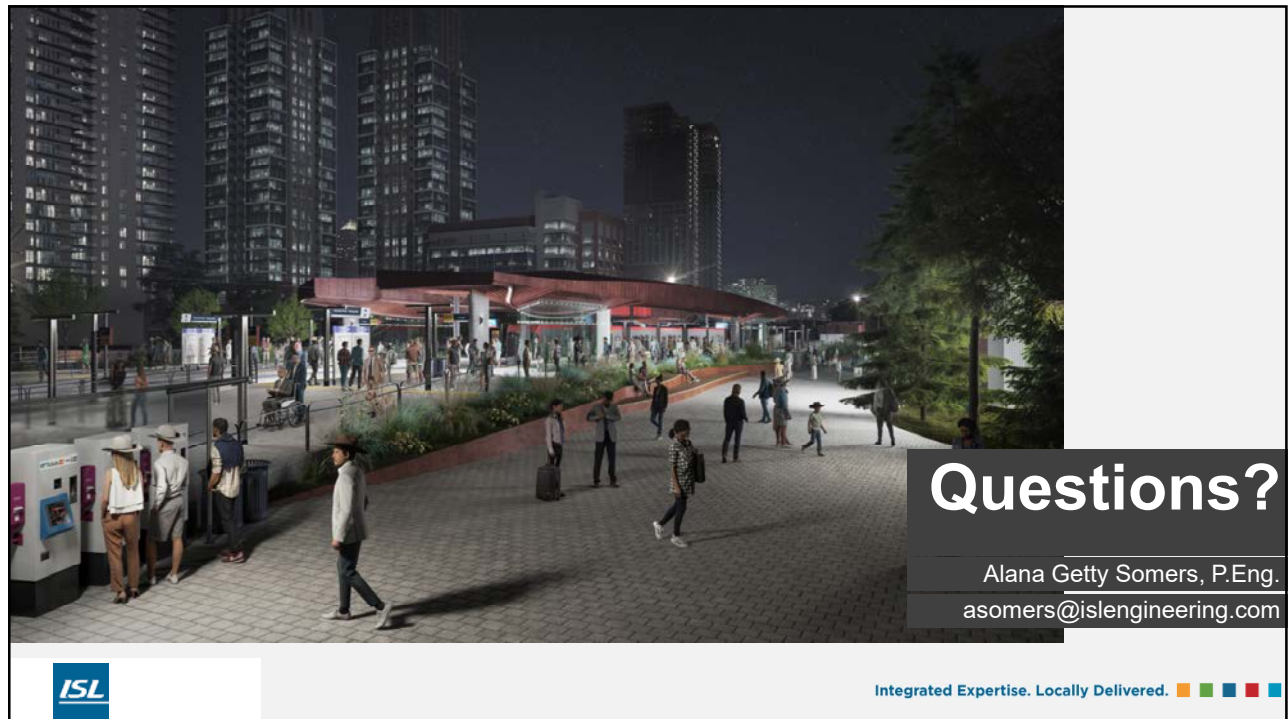


## BMO Centre Expansion

- A catalyst project for the Culture + Entertainment District, this visually stunning expansion, valued at \$500 million, will significantly grow and modernize the facility and enable Calgary to host major conventions on a global scale.
- Q2 2024 Substantial Completion
- Stampede 2024 Opening




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**Questions?**

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[asomers@islengineering.com](mailto:asomers@islengineering.com)



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