

E. 34th Street Station Schematic Design

Presented to: Planning & Development Committee
April 5, 2016



Project Background

- Station services the Red, Green & Blue Lines.
- Station must be brought to current ADA Accessibility Guidelines (ADAAG).
- Station currently has a low ridership
- Construction Cost Budget: \$5 million.
- Total Project Budget: \$7.7 million.
- RTA Staff was asked to investigate the cost of providing an elevator for access to platform.



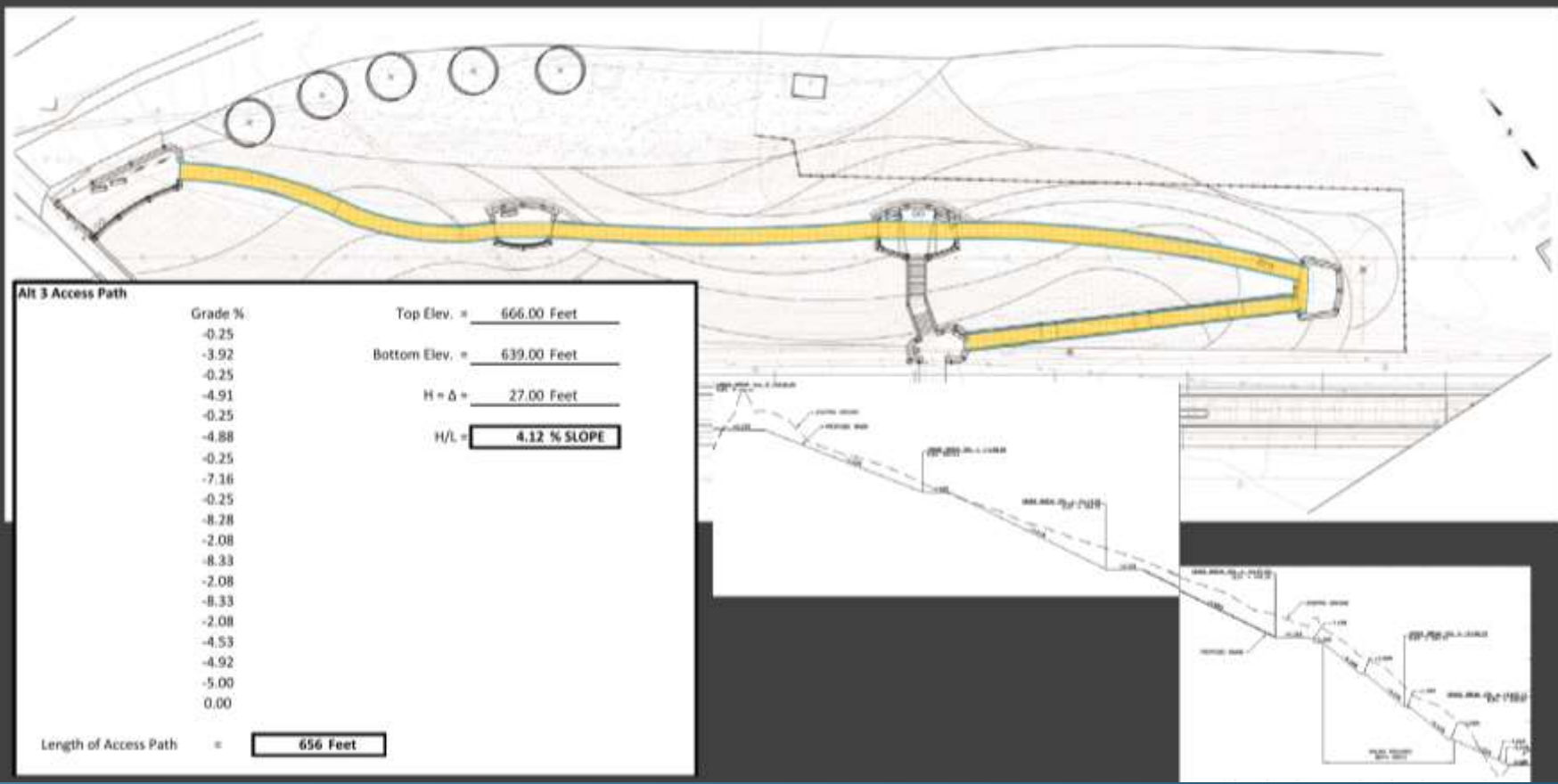
Existing Condition – View of Station from Bridge



Existing Condition – View Looking Up Service Road



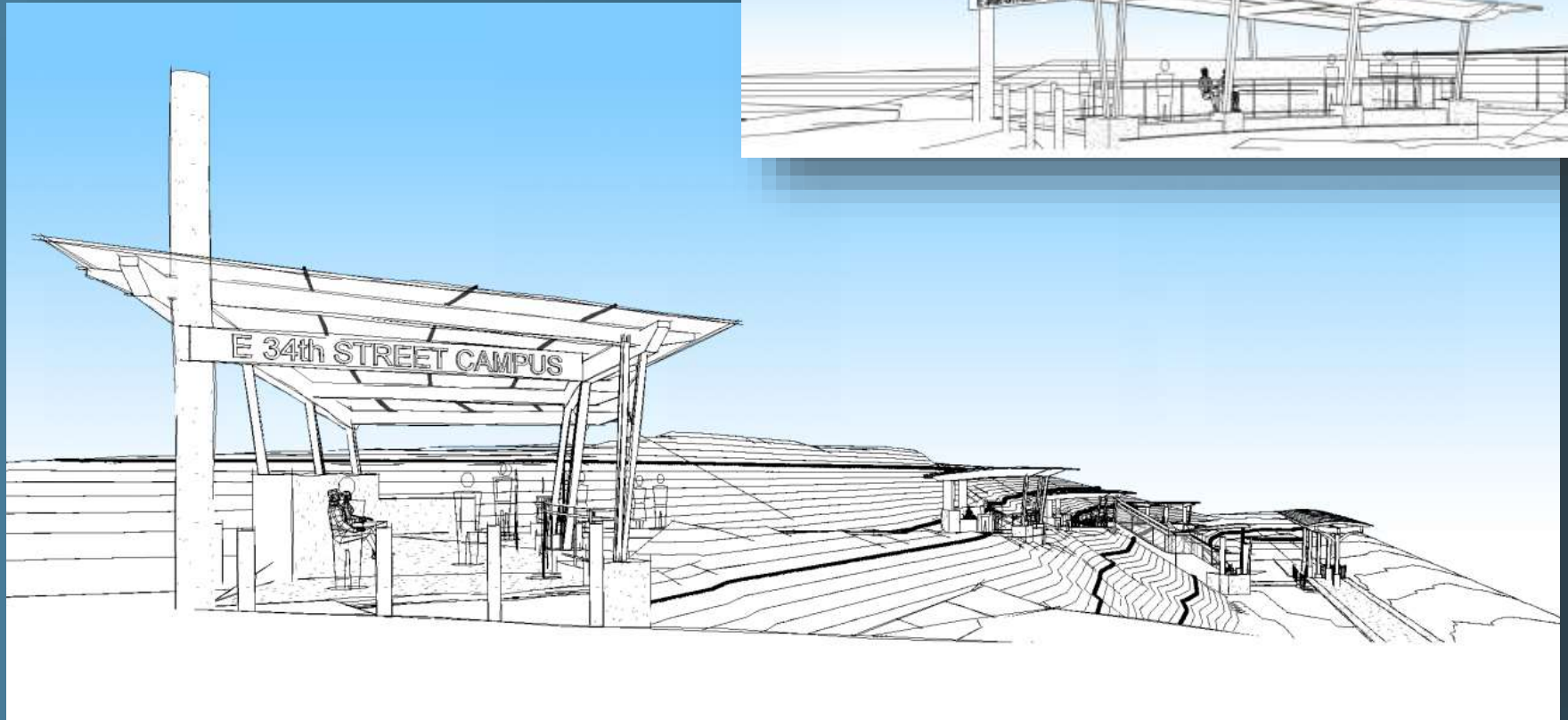
Existing Condition – Street Level



Schematic Design - Option 3 (Casual Path with Ramp)



Schematic Design – Aerial View New



Schematic Design – Entrance Plaza

Ramp vs. Elevator Cost Comparison

	Ramp Option	Elevator Option
Design Fee	\$700,000	\$1,187,500
Construction Cost	\$5,000,000	\$9,500,000
Force Account	\$513,305	\$930,573
Contingency/ 3 rd Party	\$1,483,195	\$2,504,477
Total Project Cost	\$7,696,500	\$14,122,550

Ramp vs. Elevator Cost Comparison

- Contributing factors to increased cost of Elevator Option:
 - Cost of elevator and required building structure.
 - Relocation of existing track structure.
 - Relocations of existing signal and communication cables.
 - Requires additional track shutdowns.
 - Additional design fees for elevator/ stair structure and track work.
 - Extended construction schedule.

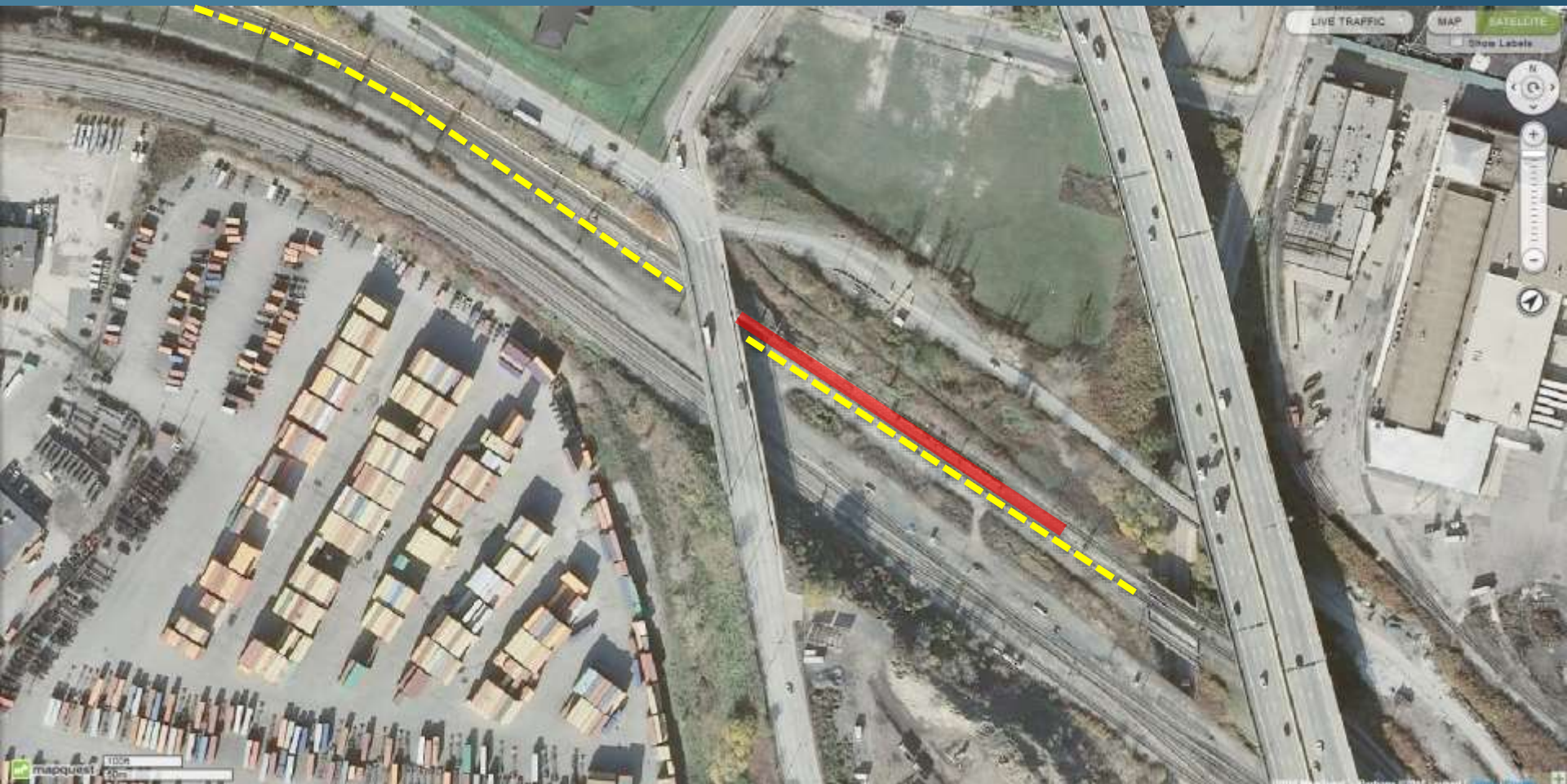
Ramp vs. Elevator Comparison



Ramp Option



Elevator Option



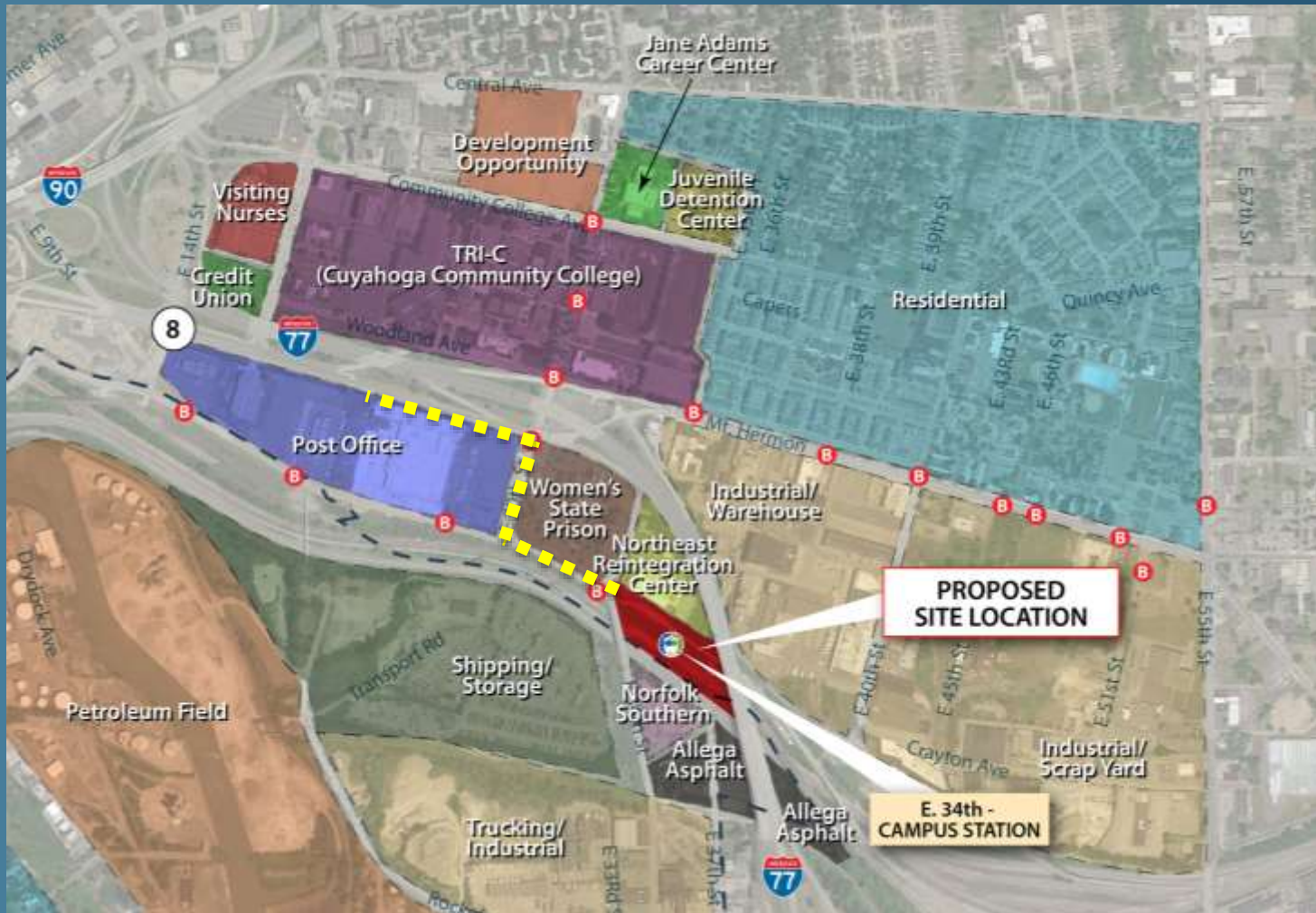
Track Work Limits (1,800 feet) - Aerial View

Ramp vs. Elevator Comparison

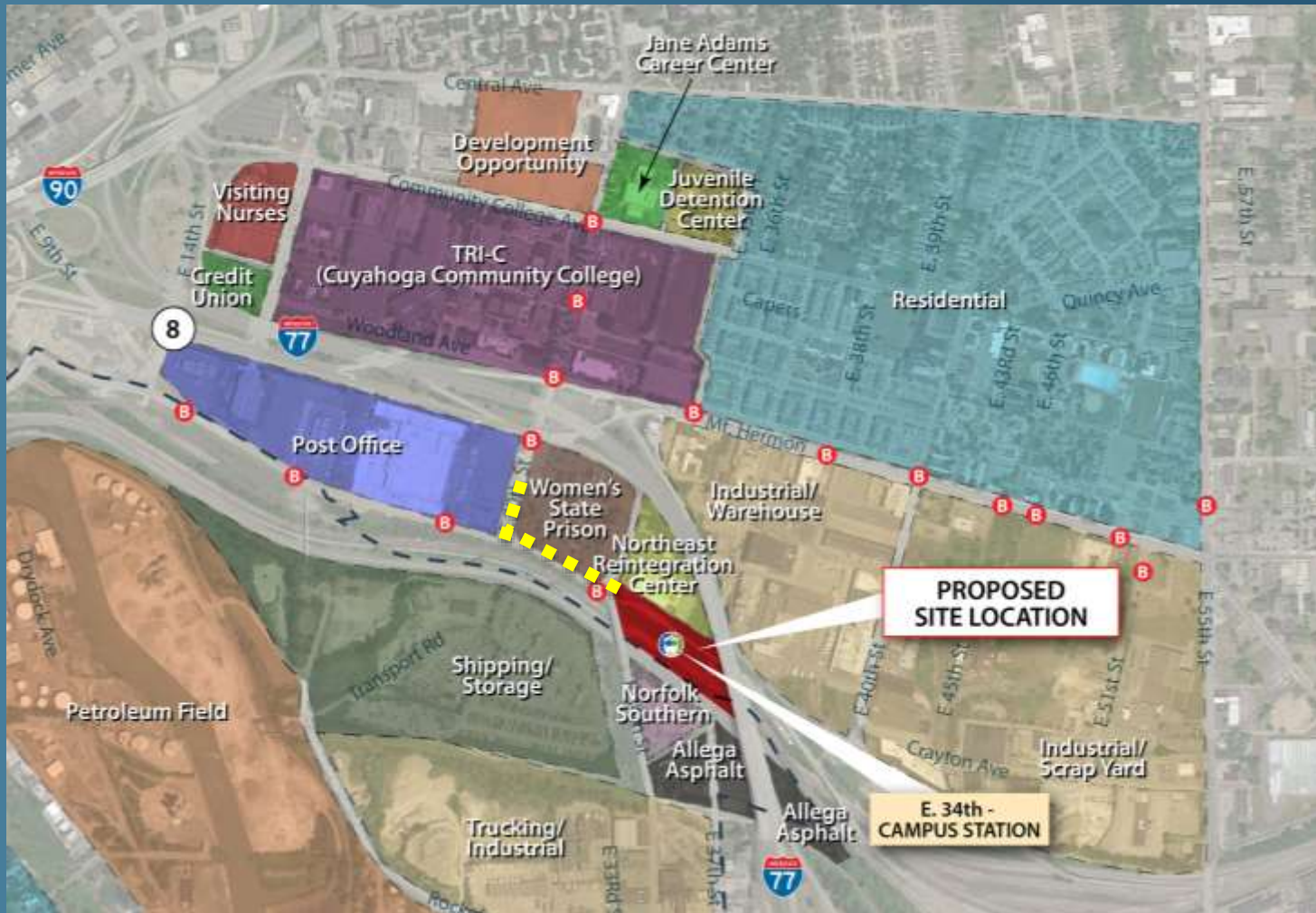
- Advantages of Elevator:
 - Travel distance is reduced for ADA customers.
 - No pedestrian track crossing is required.
- Disadvantages of Elevator Option:
 - Increased construction and maintenance cost.
 - Station will need to be closed during construction.
 - Additional rail shutdowns will be required for construction.
 - Station entrance will be on the bridge with no direct access for bus drop off.



Post Office – Employee Entrance: 1,700 feet



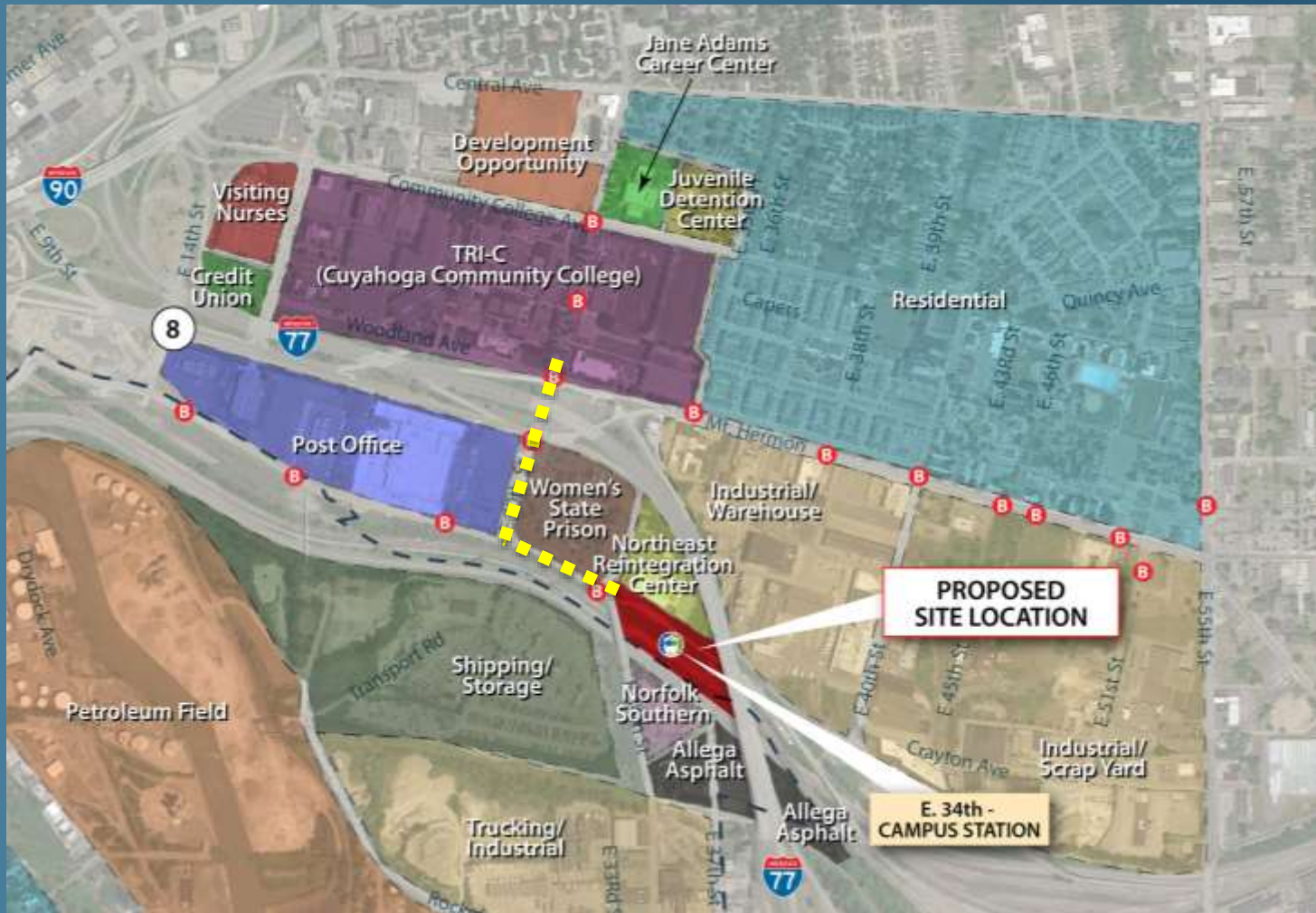
Post Office – Public Entrance: 3,100 ft



Women's State Prison: 1,500 feet



Northeast Reintegration Center: 950 feet



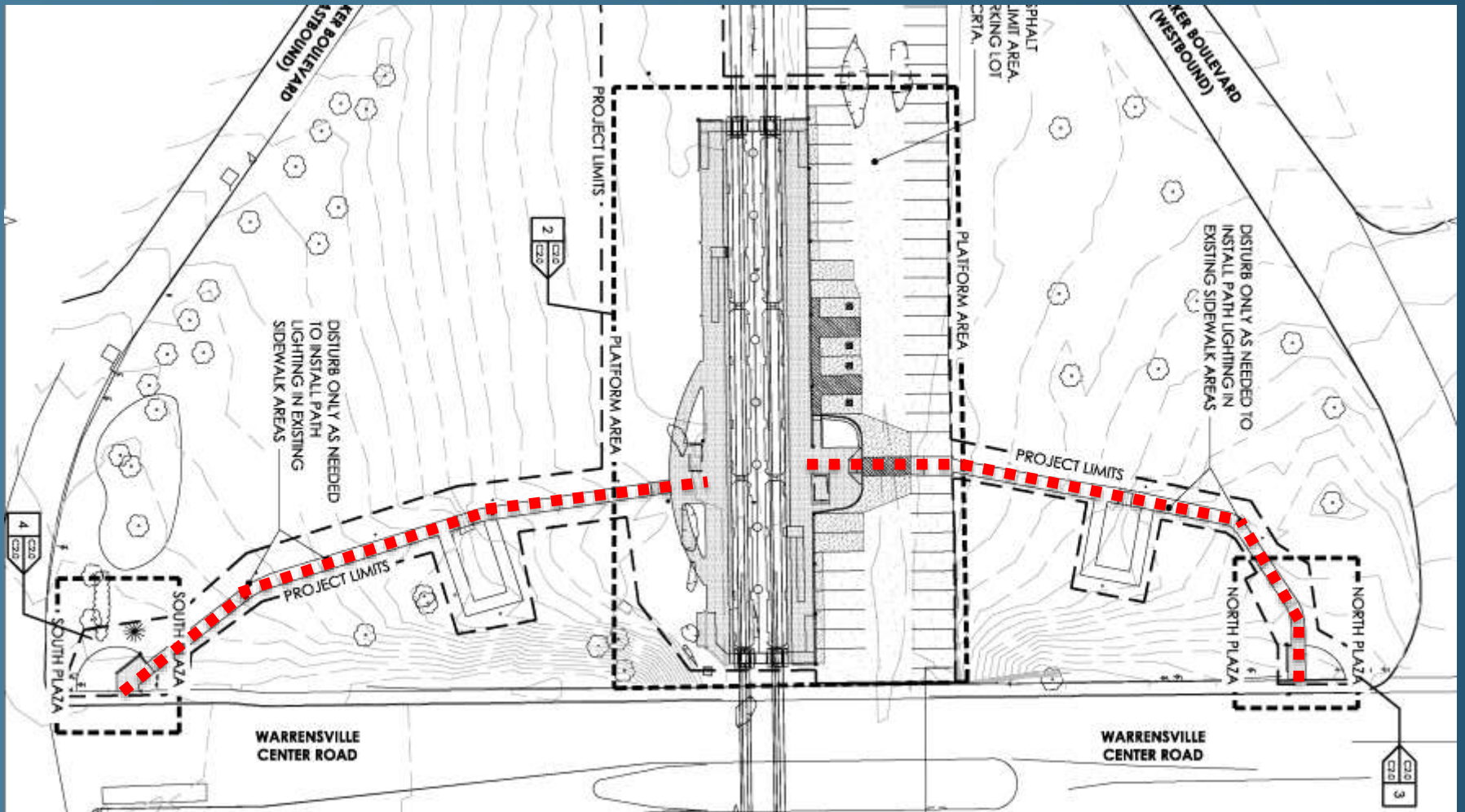
TRI-C Advance Technology Training Center: 2,300 feet

Schematic Design Ramp Option 4

- Shifted center pause point up hill towards entrance.
 - Minimizes unprotected travel distance from station entrance to platform.
 - Travel distance via the stairs is 380 feet.
 - Same distance as existing station from bus stop to middle of light & heavy rail platforms.
- Added an additional pause point along path.
 - Reduces travel distance between canopy protection from 140 feet to 100 feet.

Warrensville-Shaker Station

- Similar access from street level to platform.
 - North side travel distance is 355 feet.
 - South side travel distance is 367 feet.
 - Two paths were installed in 2010 when main stair was closed.
 - Neither of two paths are protected by canopies.
- Comparable ridership: 170 passengers per day.
- Total Project Cost \$2,500,000 once construction of platforms are completed.



Warrensville – Shaker Station: Site Plan



Warrensville – Shaker Station: Access Paths



Questions / Comments

Greater Cleveland Regional Transit Authority

