2015 FRA Rail Program Delivery

RAIL Moving America Forward

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

ANDREW M. CUOMO
Governor

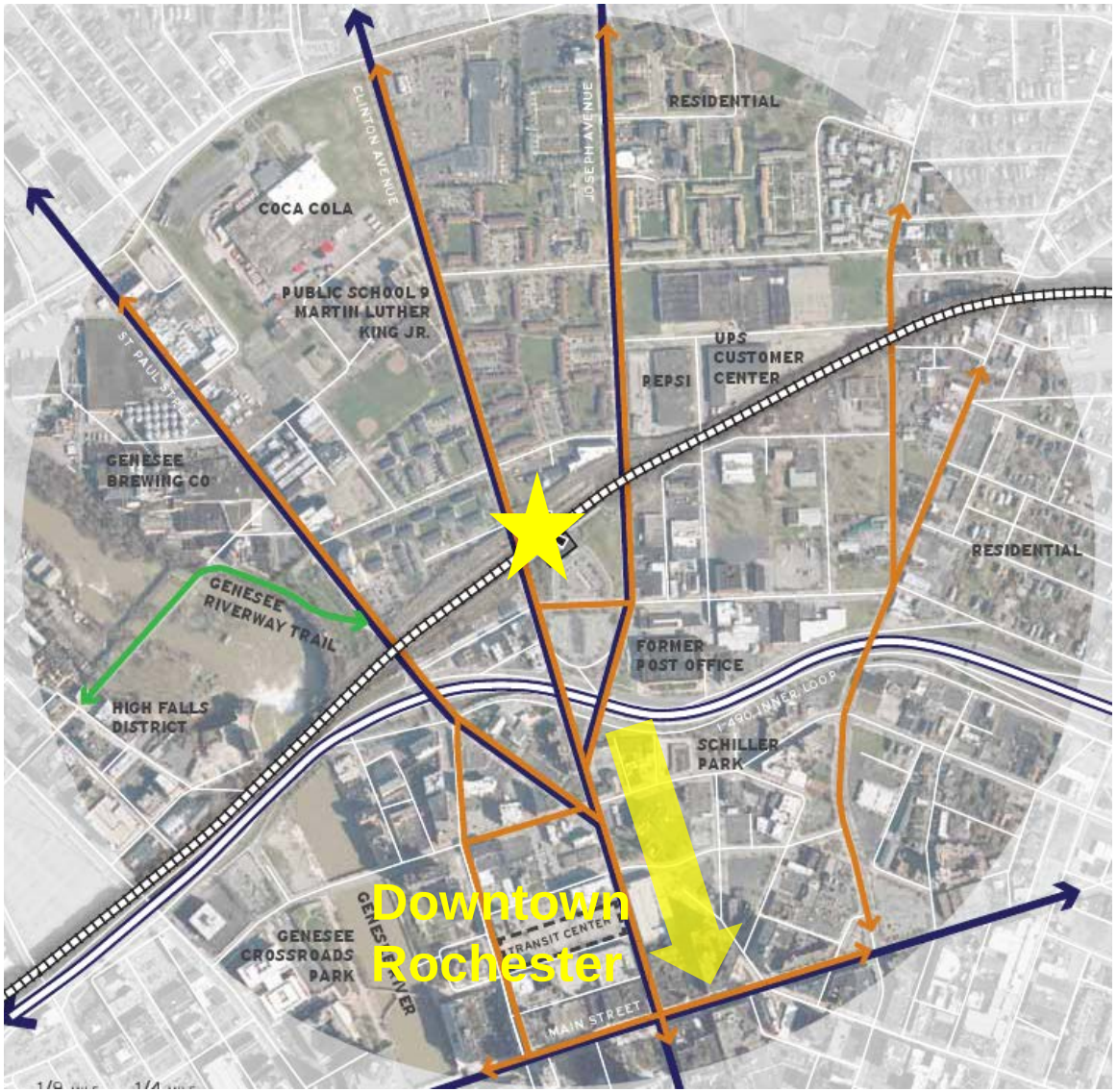
MATTHEW J. DRISCOLL
Commissioner

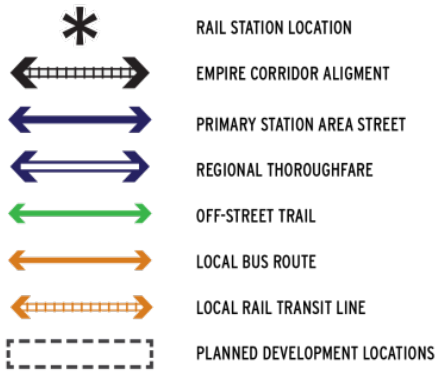
Case Study - Rochester Station – PE/NEPA

Location – Rochester, NY

- Empire Corridor
- 463 miles
- Niagara Falls to New York City
- Shared freight/passenger use

Close to Downtown

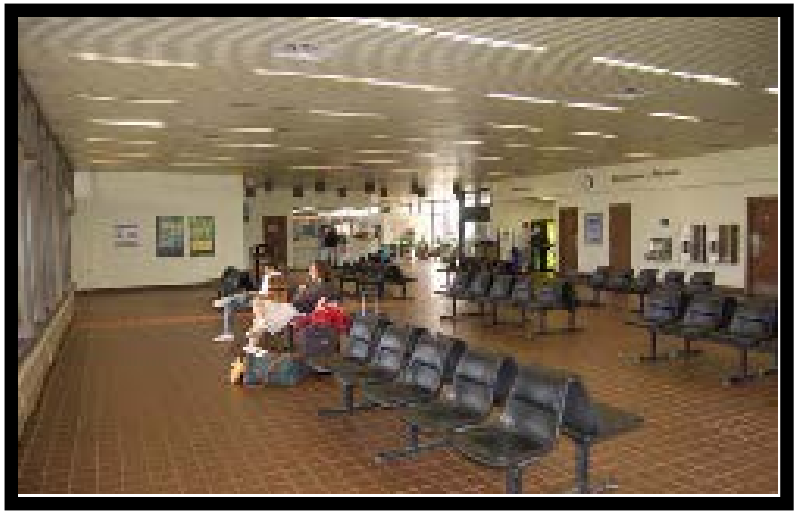




Existing Station

Existing Station - Exterior

Existing Station - Interior



Project Site

Purpose

- **Replace 36-year-old Amtrak station with modern intermodal facility promoting economic development**
- **Improve connectivity to downtown for transit, vehicles, pedestrians, and bicycles**
- **Improve passenger amenities, comfort and safety**
- **Full compliance with the Americans with Disabilities Act**
- **Improve Amtrak's operations, reduce delays with dedicated passenger tracks & double-edged, high-level platform**
- **Improve flow of baggage *(Rochester Station accommodates 40,000 pieces of checked baggage annually!)***

Project Partners

U.S. Department of Transportation
Federal Railroad Administration

AMTRAK

CSX TRANSPORTATION

City of Rochester, NY

Preliminary Engineering and NEPA
Important Steps

For a successful project

- **Scope Development**
- **Public Involvement**
- **Building Consensus**
- **Understanding implications of decisions**
- **Making key decisions**

Scope Development

Scoping began working closely with the City of Rochester and Amtrak

- **City of Rochester hosted several public outreach meetings and worked on the preliminary design for the site and facility**

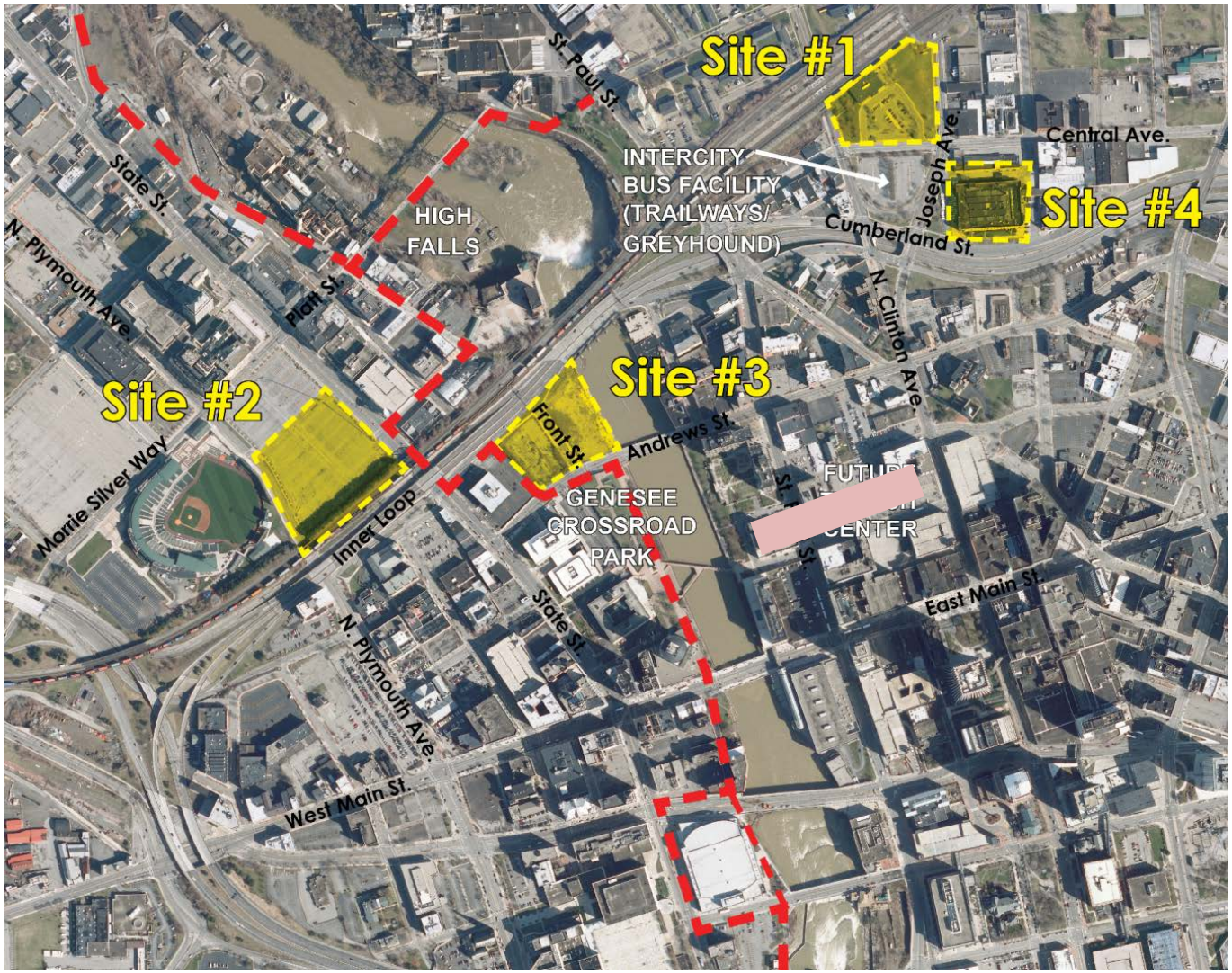
- **Amtrak hosted “Day in the life of Amtrak Operations”**

Scope Development ...Details

- **Site Selection**
- **Public Involvement**
- **Station Configuration**
- **Station - Platform Access**
- **Track and Platform configuration**
- **Operations - Track and Platform**
- **ADA access/ Baggage transfer**

Site Selection

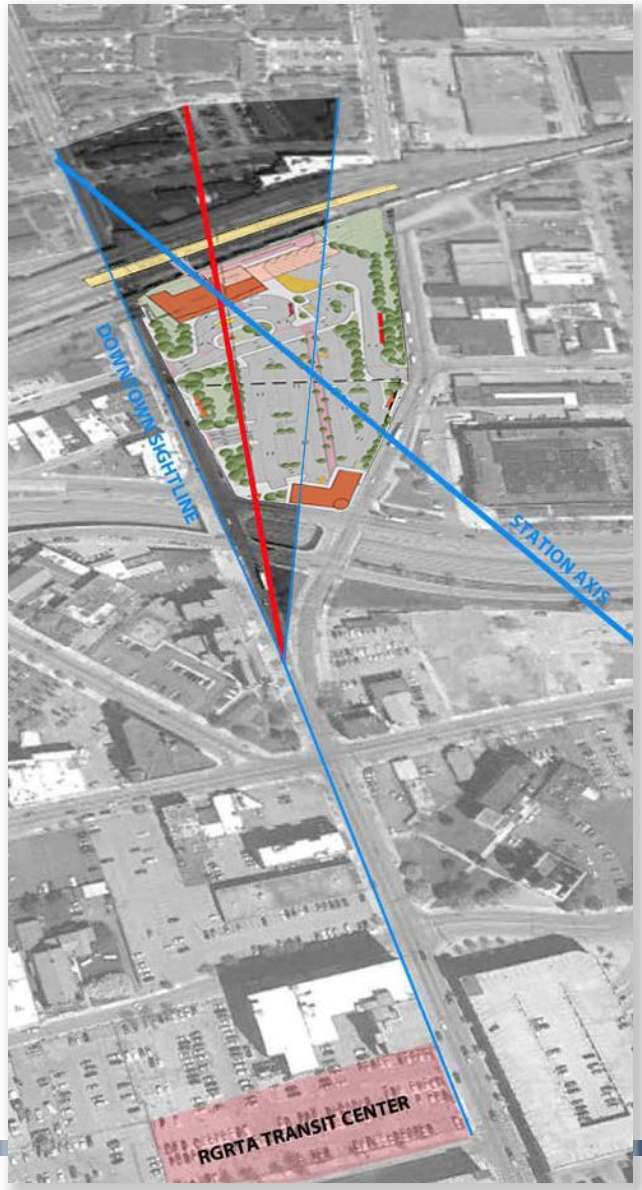
Several possible sites had been suggested in previous studies



Site Selection – Evaluation Criteria

- **Track configuration for passenger & freight operations**
- **ROW/Property availability**
- **Historic and Cultural resource considerations**
- **Constructability**
- **Cost and Schedule**
- **City goals – Smart Growth, bicycle friendly…**
- **Intermodal Connectivity**
- **Parking**
- **Potential infill development**

Site Selection - Ultimately the Existing Site was selected



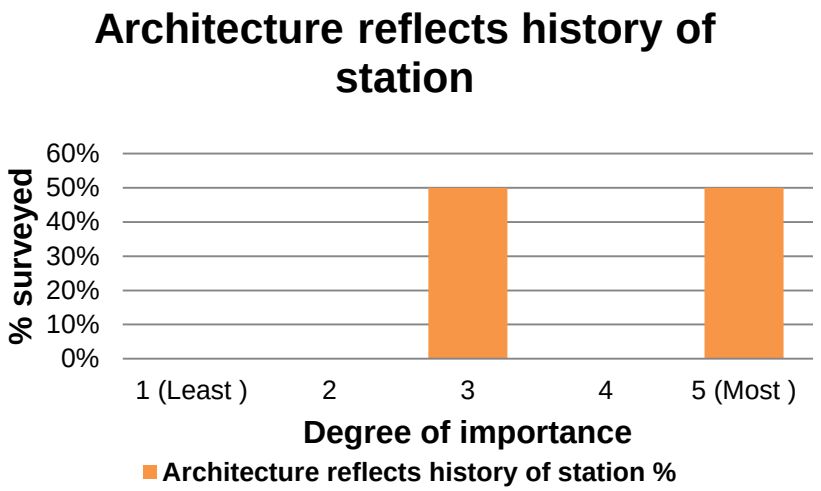
Provides a clear site layout, organized with the following goals:

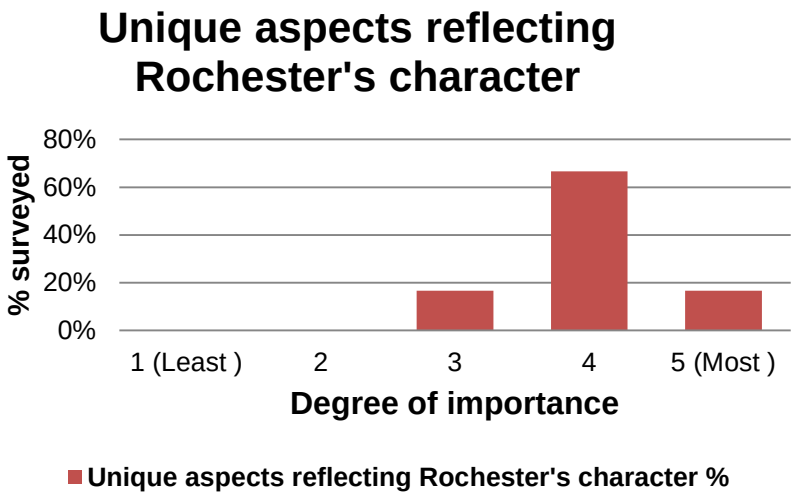
- New station to face and be visible to downtown Rochester to the South via North Clinton Avenue.
- Provide connectivity to the new RGRTA Transit Center and other downtown landmarks.
- Create a clear path of circulation into the site and through the station to the new high level passenger platform.
- Locate Station as close to tracks as possible for shortest passenger and baggage travel distance

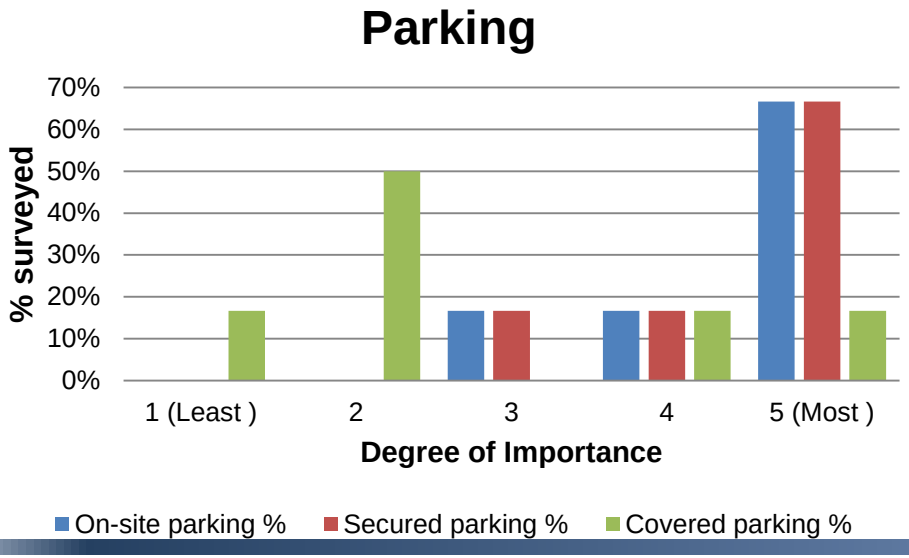
Public Involvement

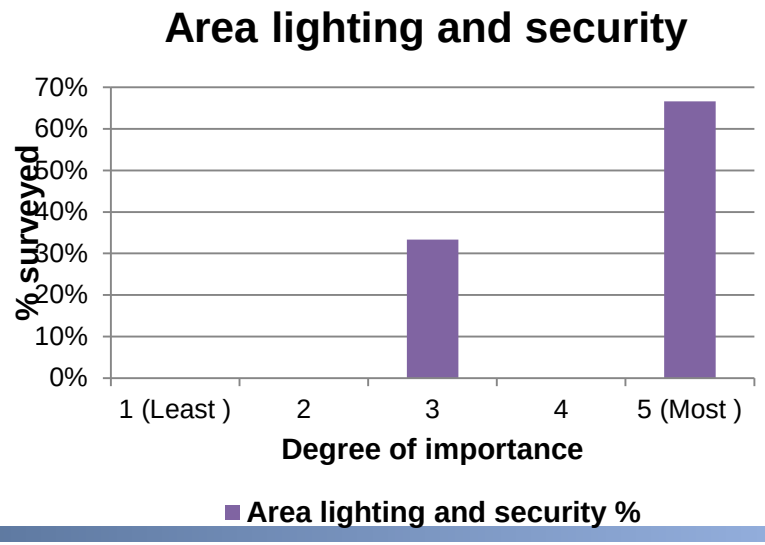
- **Two Public Information Meetings**
- **Several outreach meetings with key stakeholders including**
  - **Council for People with Disabilities**
  - **Reconnect Rochester**
  - **Rochester Cycling Association**
  - **Rochester area museums**
  - **Colleges and Universities**

Input from Public Involvement

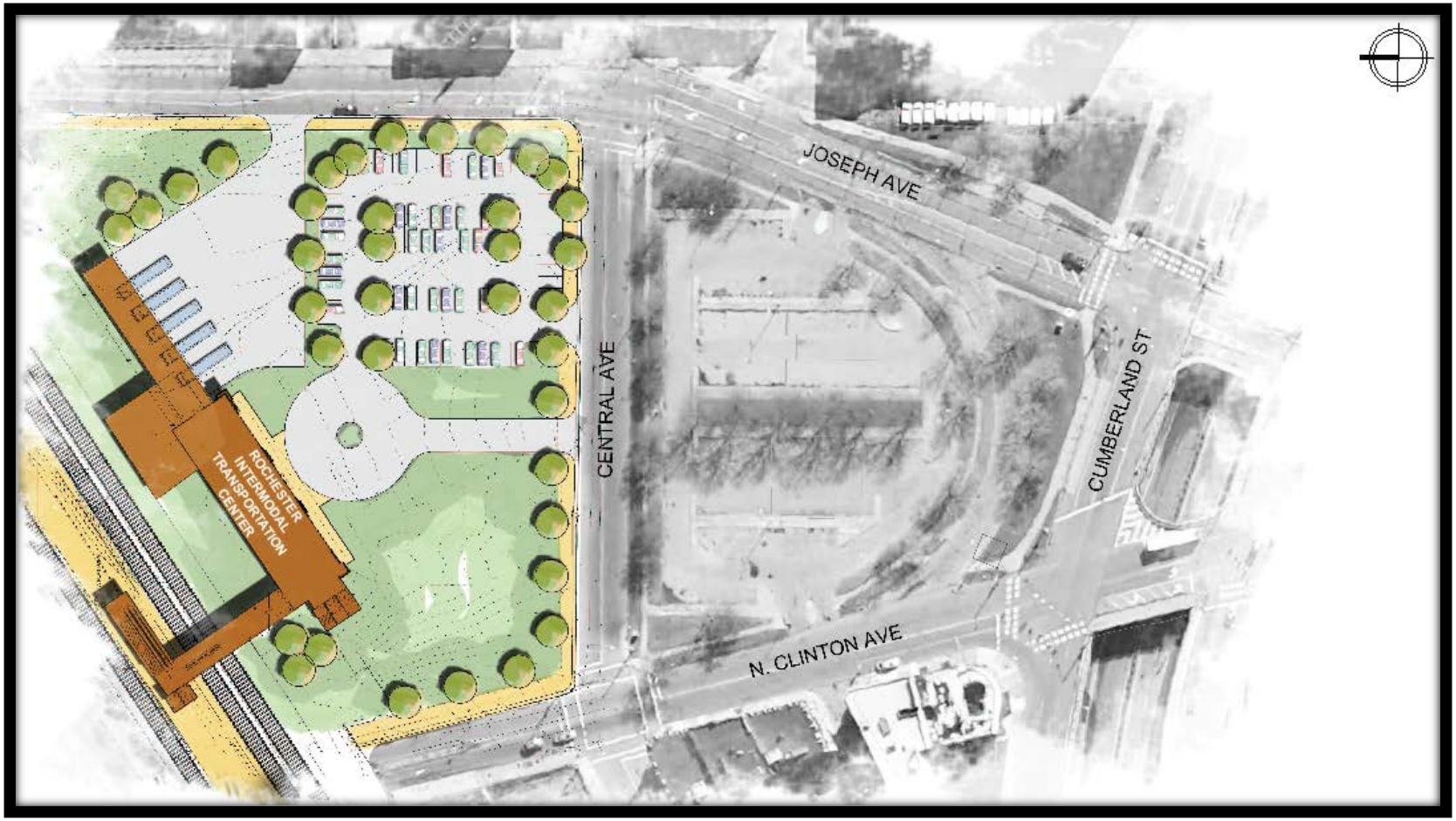




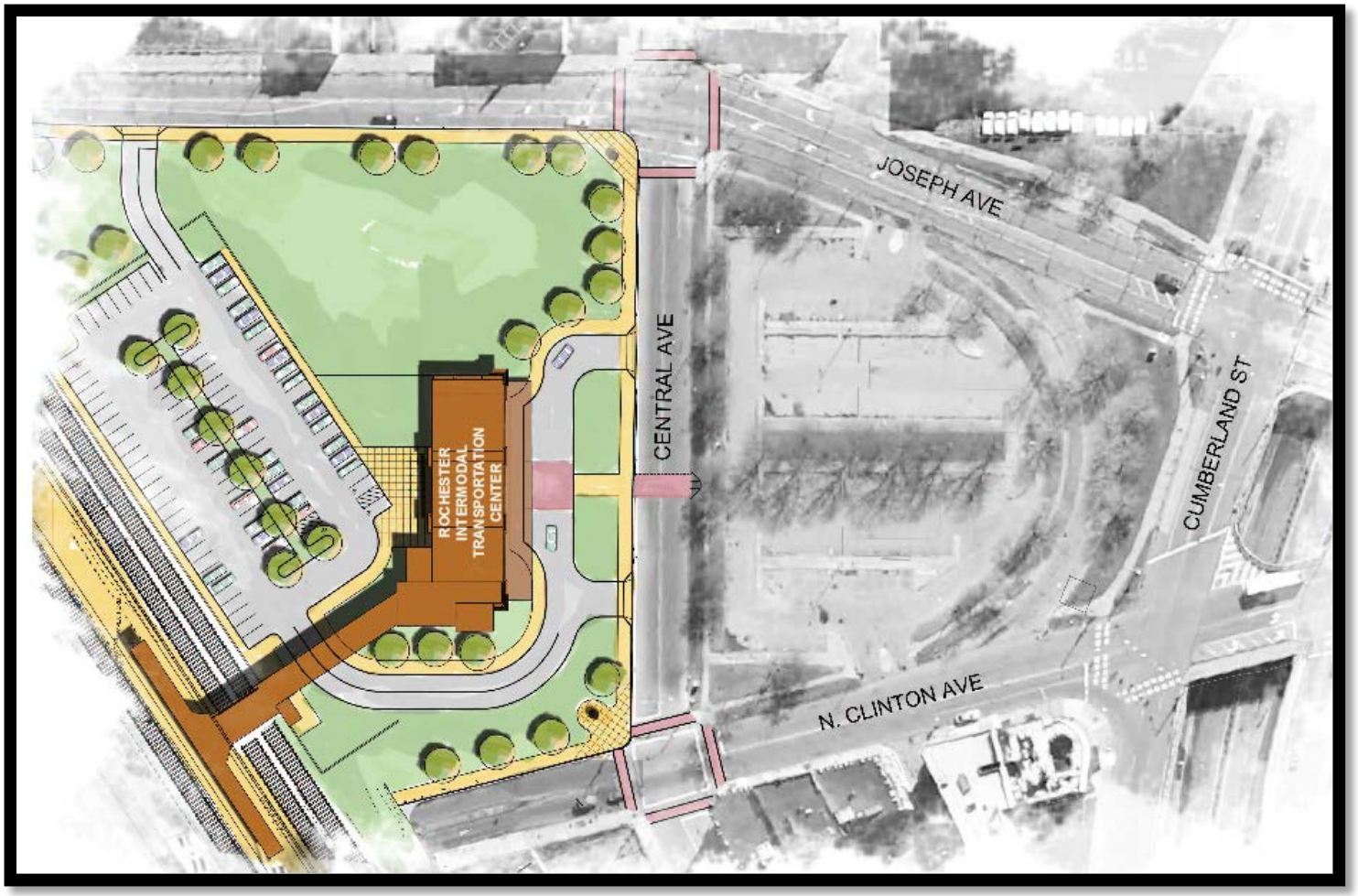




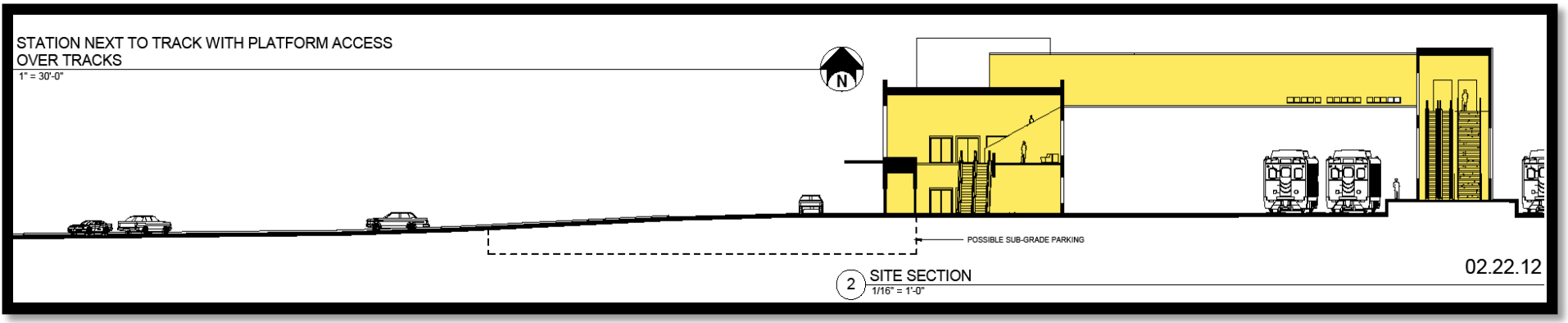
Station Configuration – Trackside

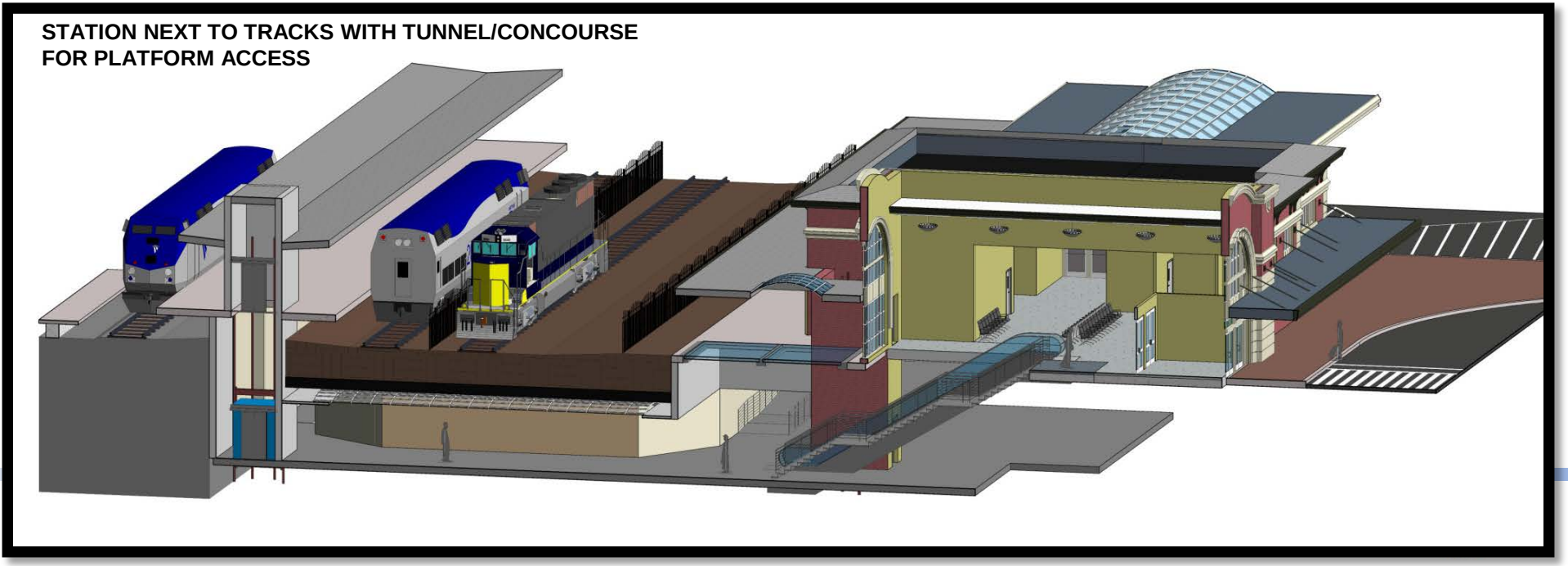


Station Configuration – Streetside

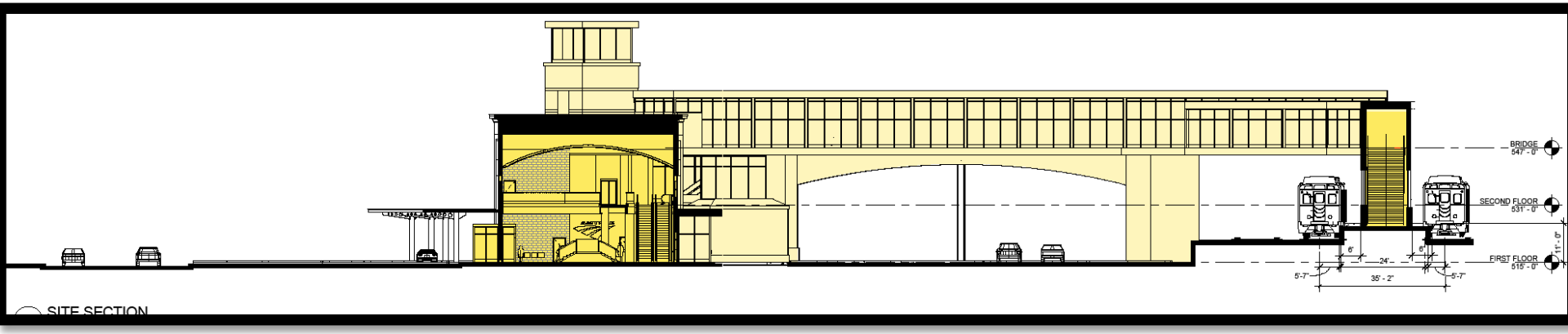


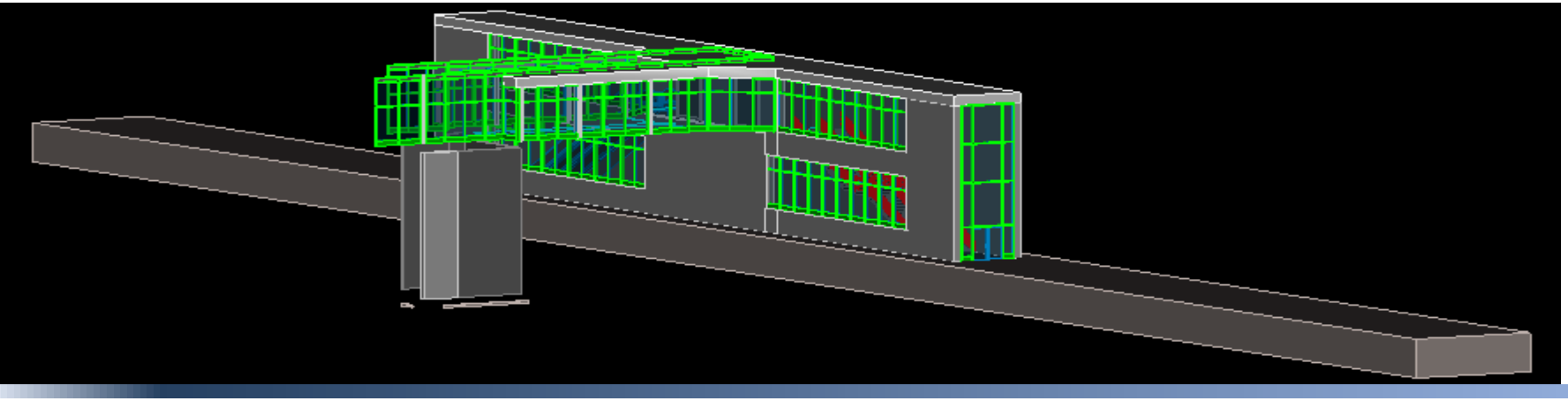
Station – Platform – Access - Trackside





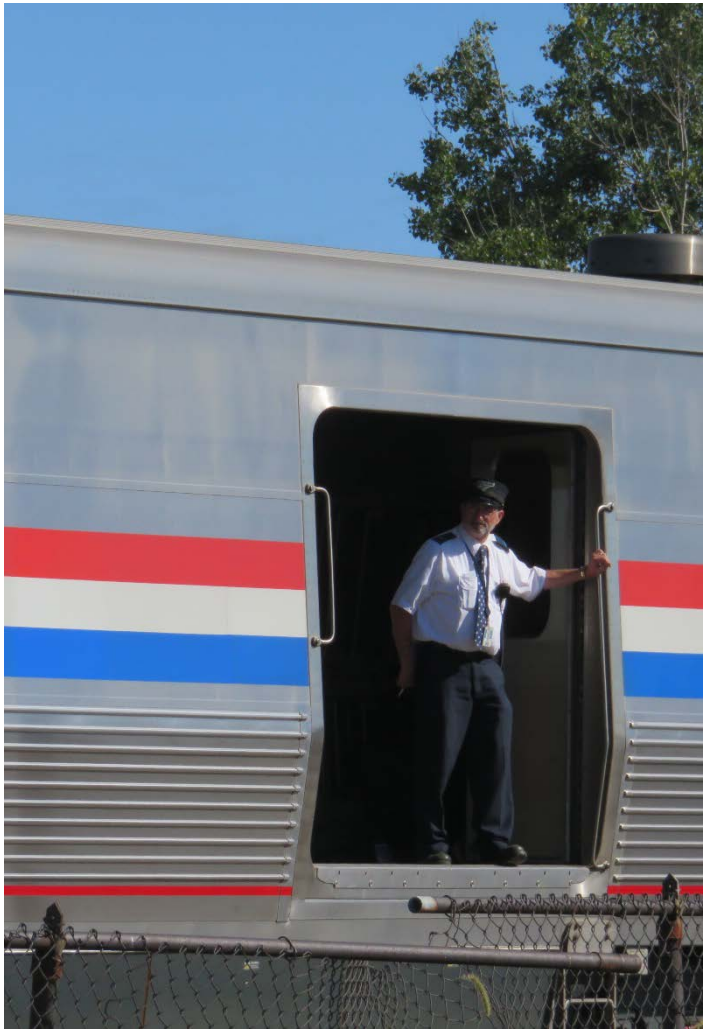
Station –Platform – Access - Streetside





Building Consensus - Working with Amtrak

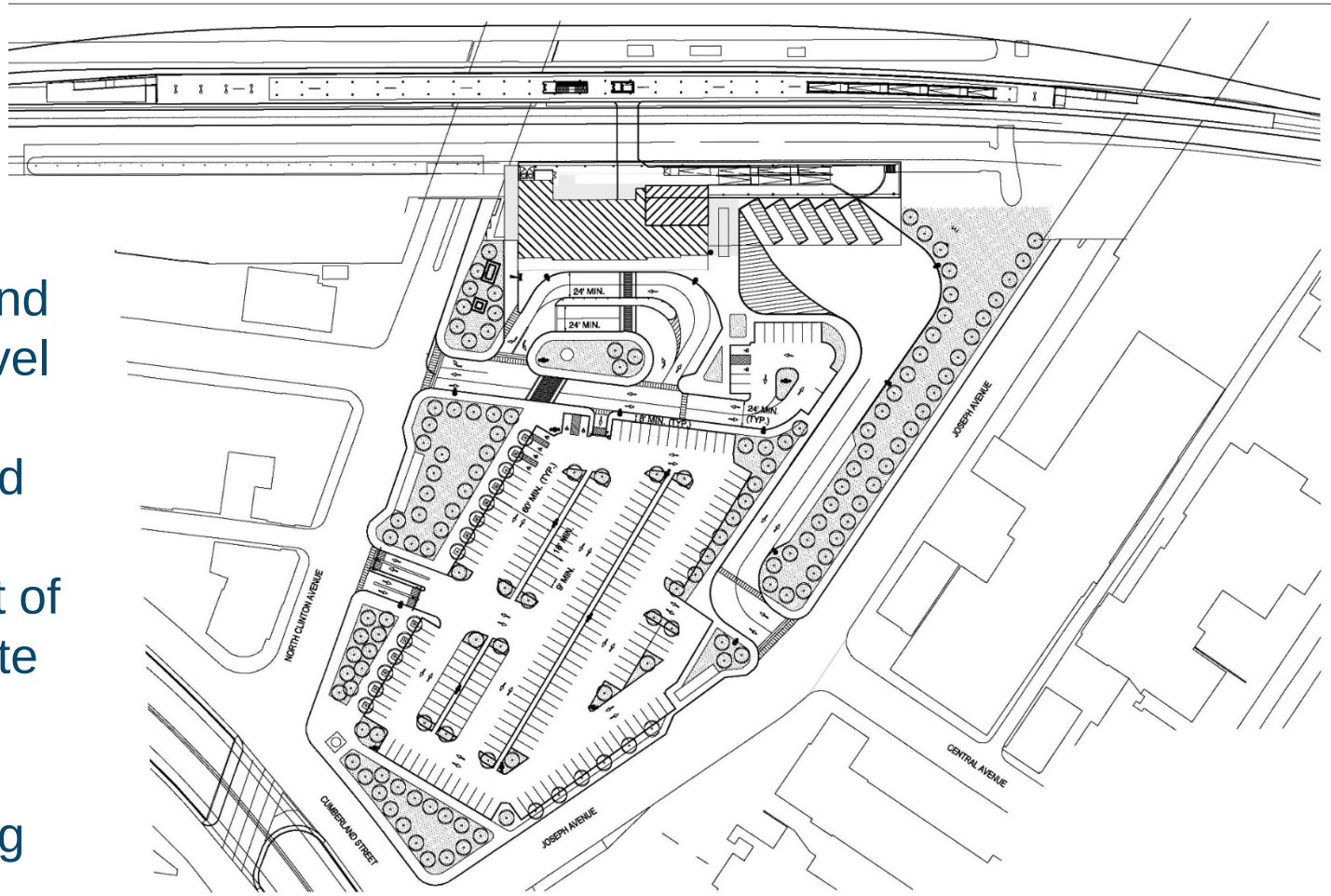
- **Could** accept **streetside** station if a convenient waiting area with restrooms.
- Amount of square footage for proposed station and operation needs.
- Redundant egress routes (stairs, escalators and elevators) recommended.
- Parking spaces to be greater than 90 and with security.
- Prefers Traditional style building.



Trackside station was selected

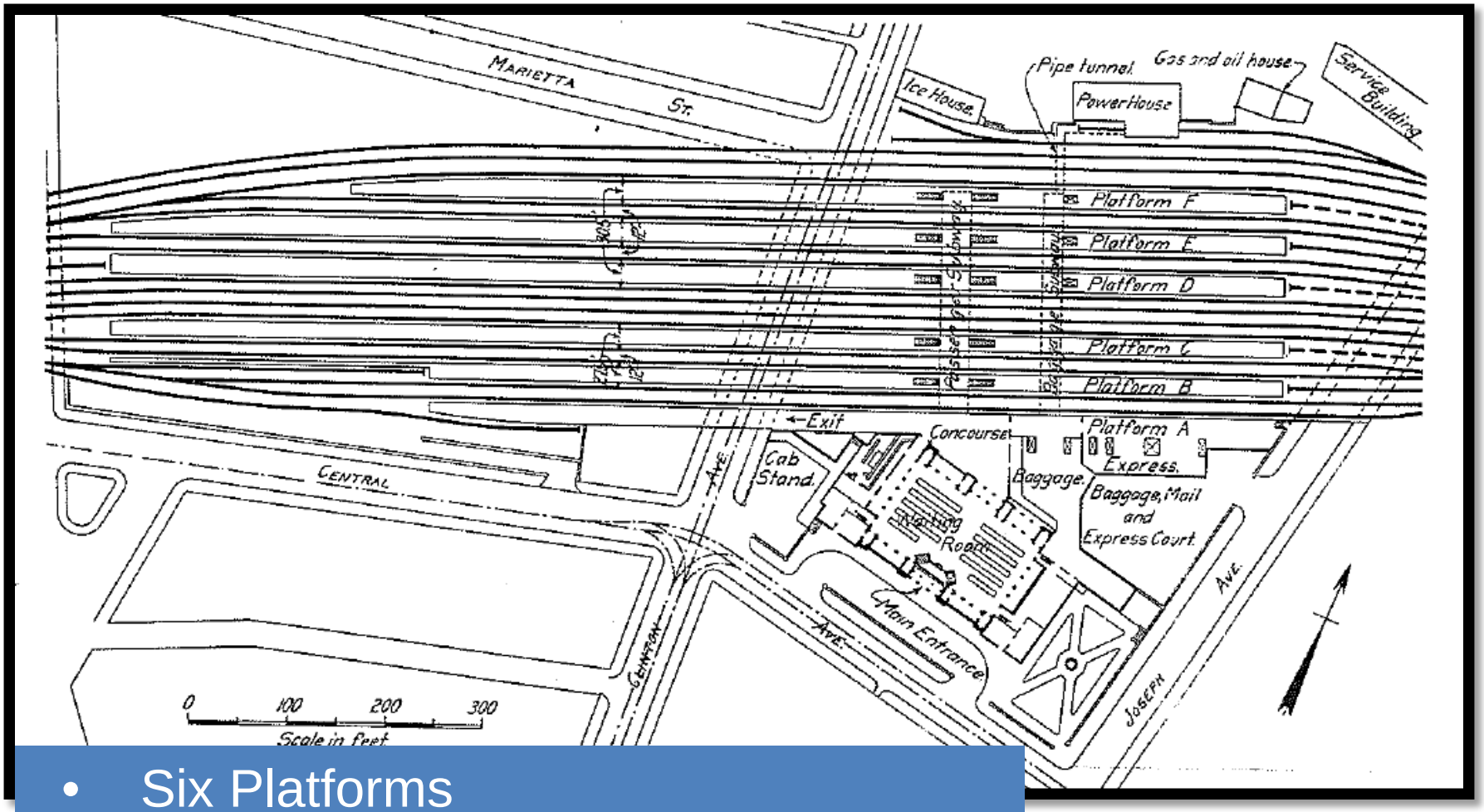
Station close to tracks allowed

- shortest passenger and baggage travel distance
- Best provided for future development of adjacent State owned lot
- Provided for future parking needs



SITE PLAN - PHASE 2

Track and Platform Configuration - Historic

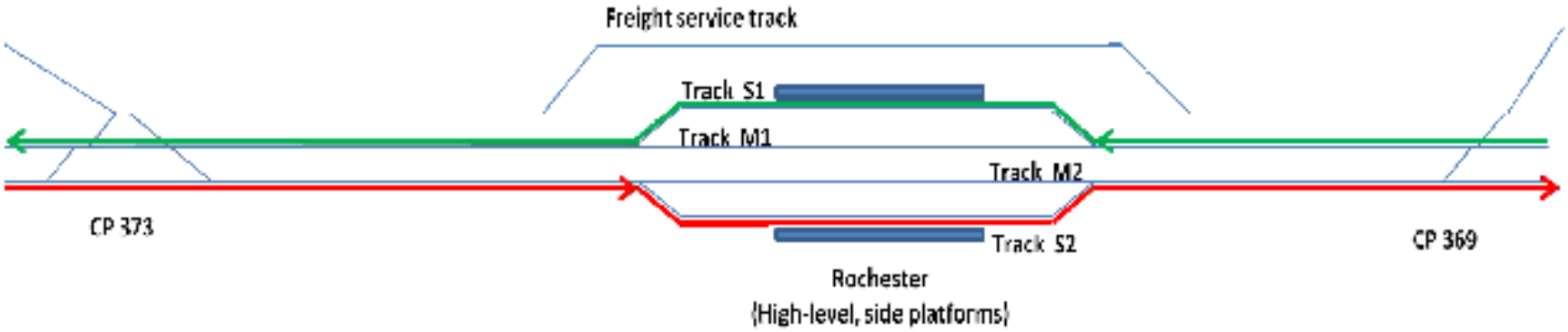


- Six Platforms
- Eleven Platform Tracks
- Two Through Passenger Tracks
- Two Through Freight Tracks

Operations – Track and Platform

Option 1

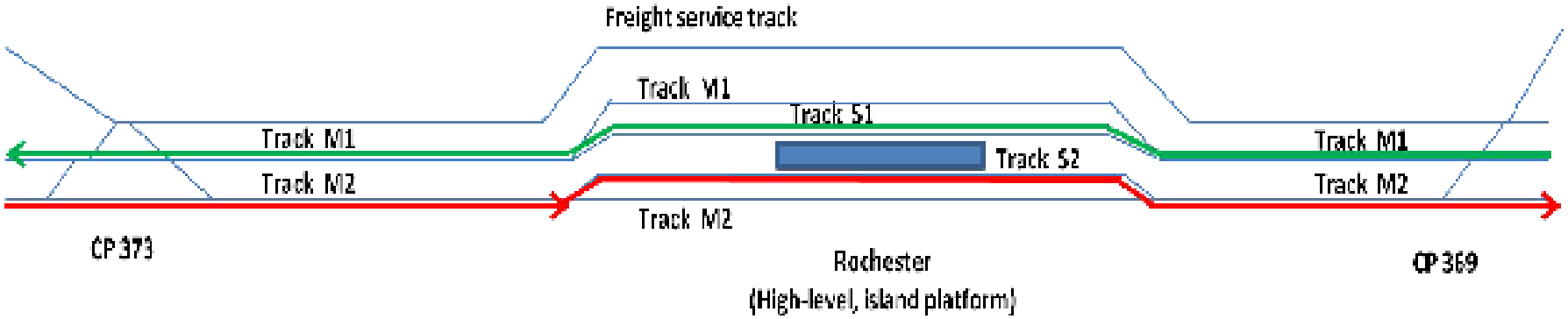
- One of the two options favorable for FRA, Amtrak & CSX movement
- Two high level platforms with one serviceable edge each
- Passenger tracks are located on either side of the two mainline tracks
- Total of four additional switches to be maintained.



Operations – Track and Platform

Option 3

- One of the two options favorable for FRA, Amtrak and CSX movement
- Single platform with two platform edges
- Passenger tracks is located inside of the two mainline tracks
- Total of four additional switches to be maintained.

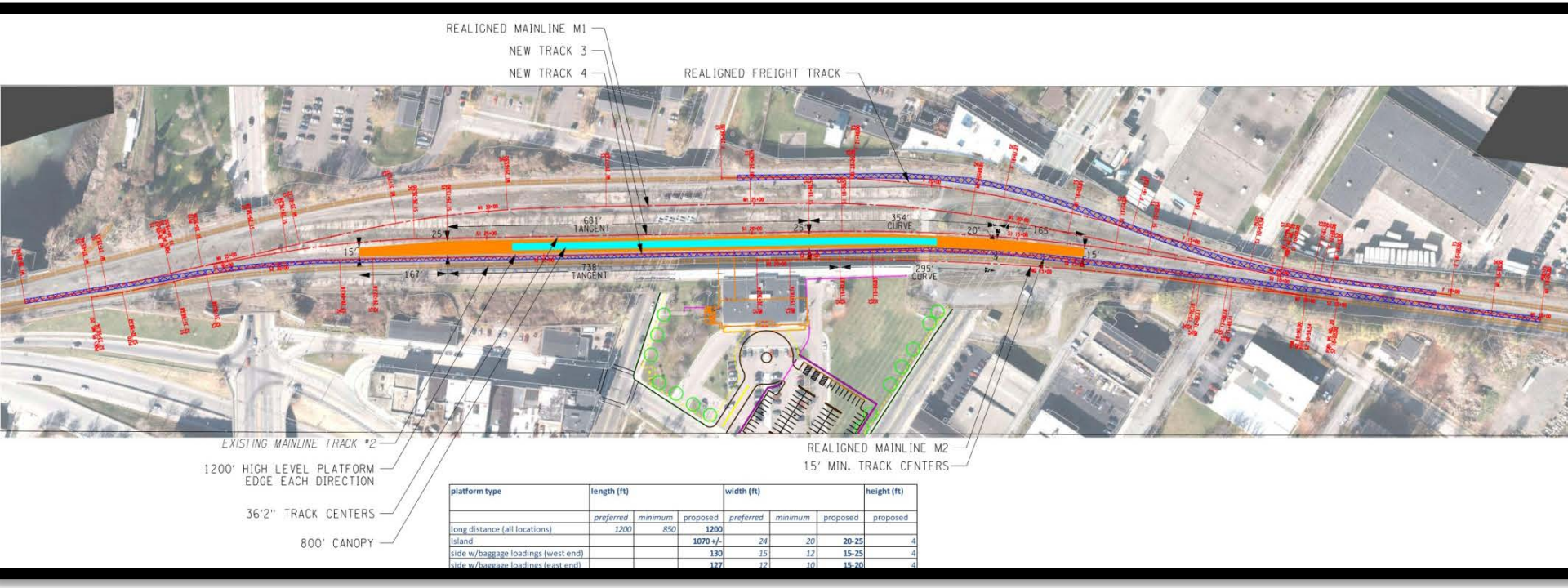


ADA Access/Baggage Transfer - Considerations

- **In addition to looking at the rail operations, ADA and Emergency access and Baggage movements were considered.**
- **A matrix was developed to compare –**
  - Passenger/Baggage routing and conflicts
  - Vertical movements and safety/ease for all concerned
  - Existing vs new tunnel
  - Structural
  - Maintenance
  - Constructability
  - Cost

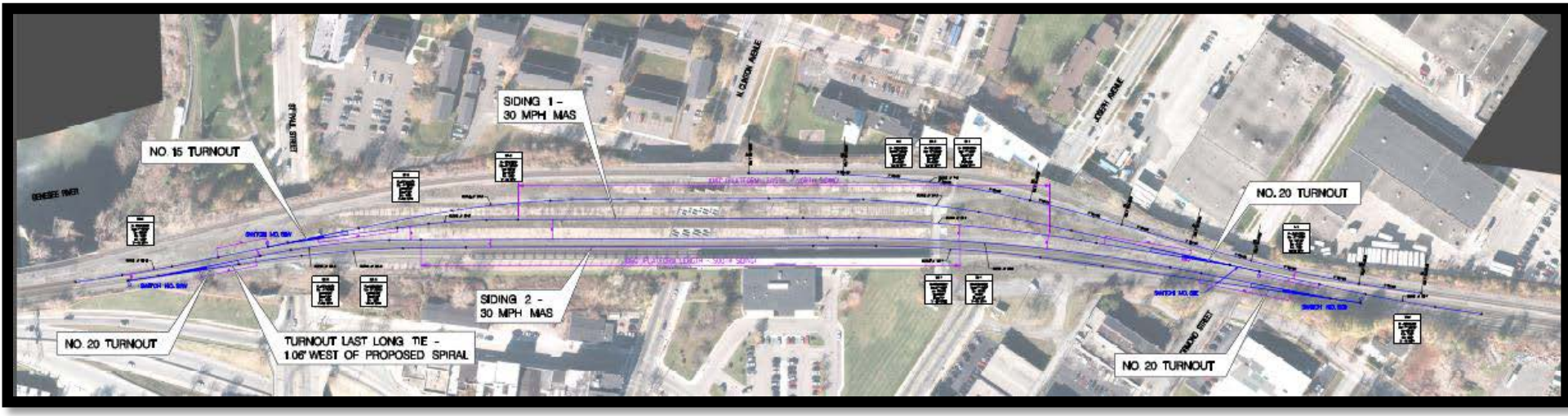
And ultimately …

Ultimately Track Option 3 was selected (Center Island Platform)



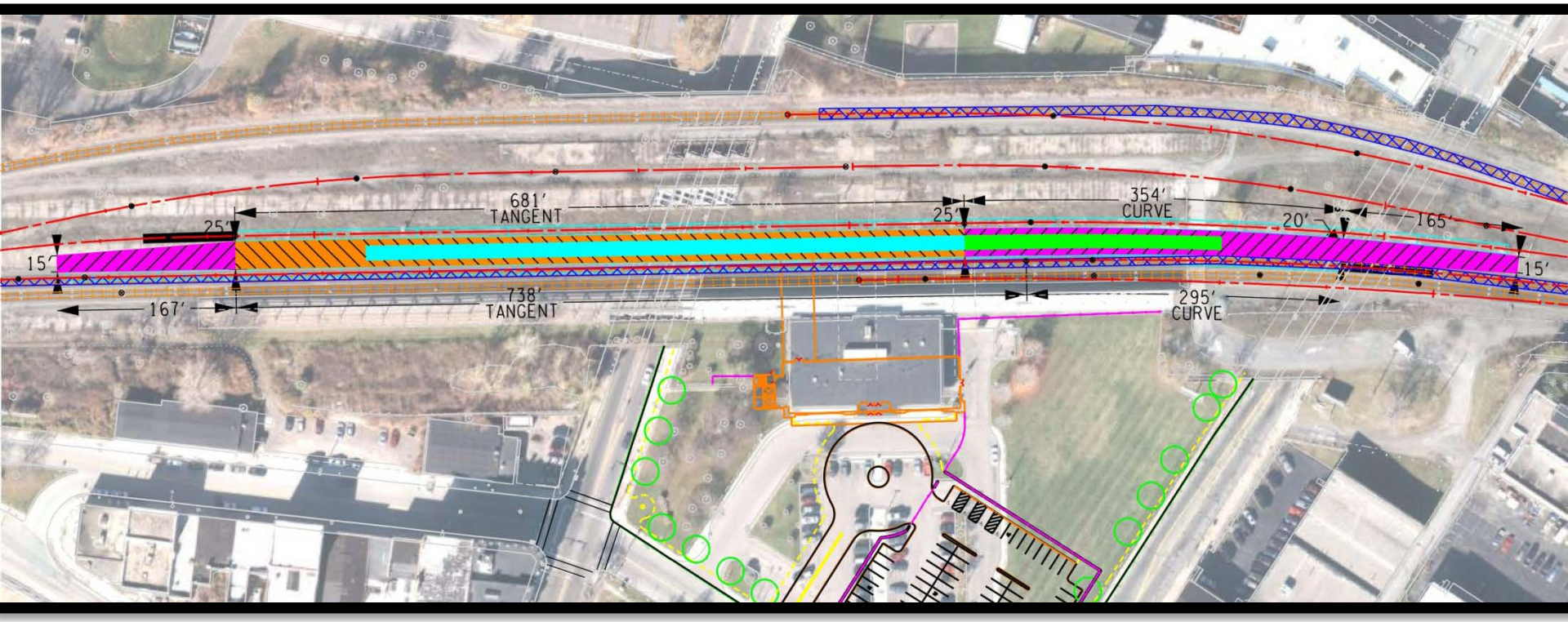
platform type	length (ft)			width (ft)			height (ft)
	preferred	*minimum*	proposed	*preferred*	*minimum*	proposed	proposed
long distance (all locations)	*1200*	*850*	**1200**				
Island			**1070 +/-**	*24*	*20*	**20-25**	4
side w/baggage loadings (west end)			**130**	*15*	*12*	**15-25**	4
side w/baggage loadings (east end)			**127**	*12*	*10*	**15-20**	4

Track and Platform Configuration
Bridge Constraints

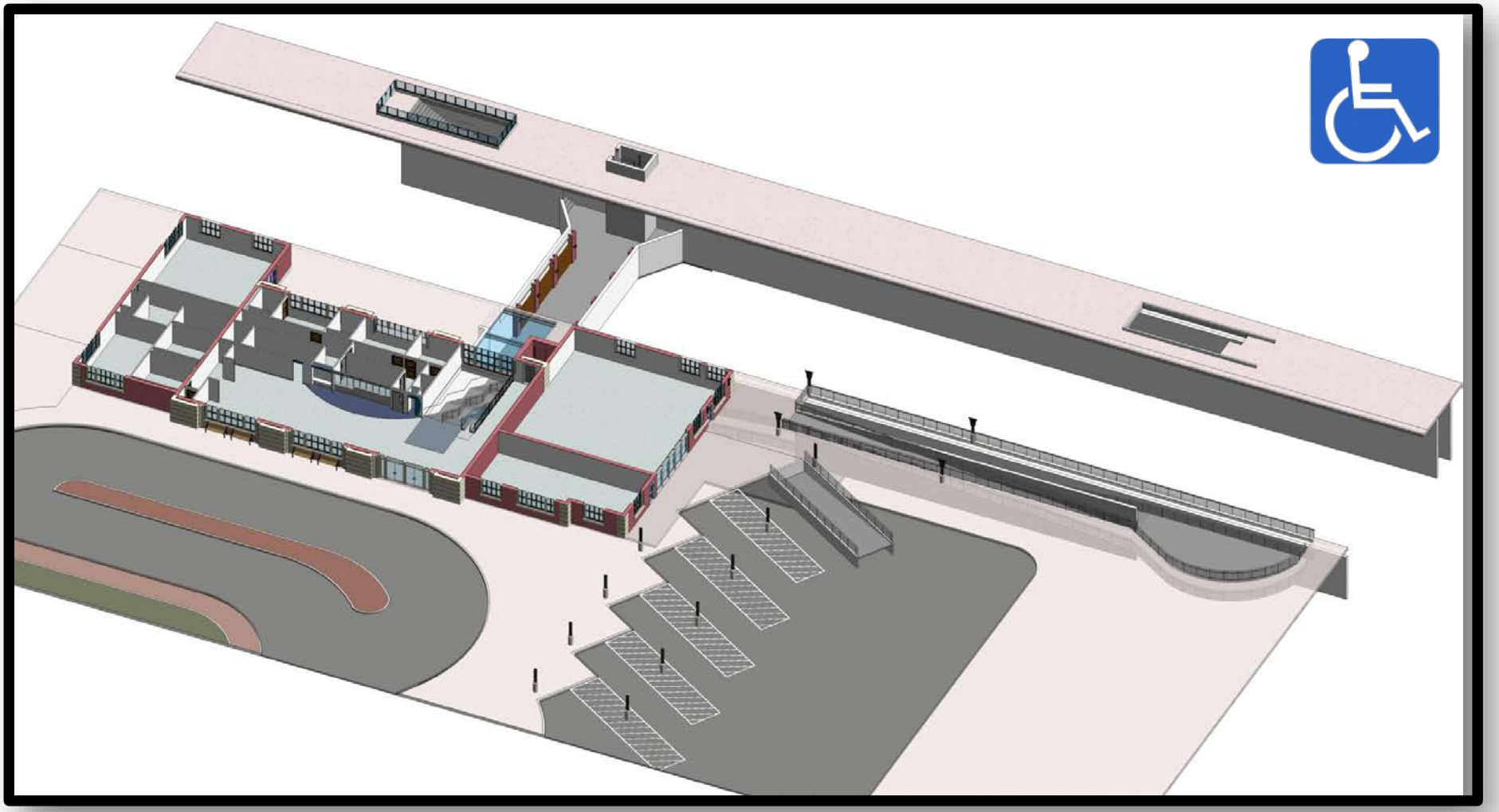


- Five bridges within station limits
- One over a river
- Four over streets
- Tracks needed to use historical alignments
- Keep turnouts off Genesee River Bridge

Platform Configuration

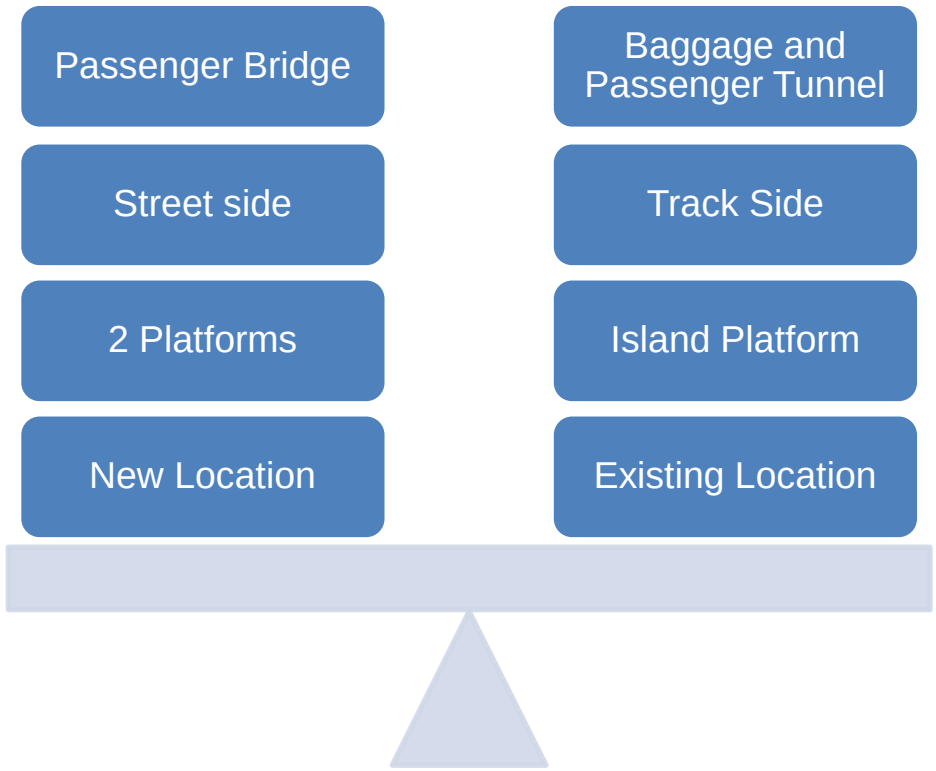


New Pedestrian and Baggage Tunnel Was Selected



- ADA compliant ramps on station and platform designed
- Redundant emergency egress routes

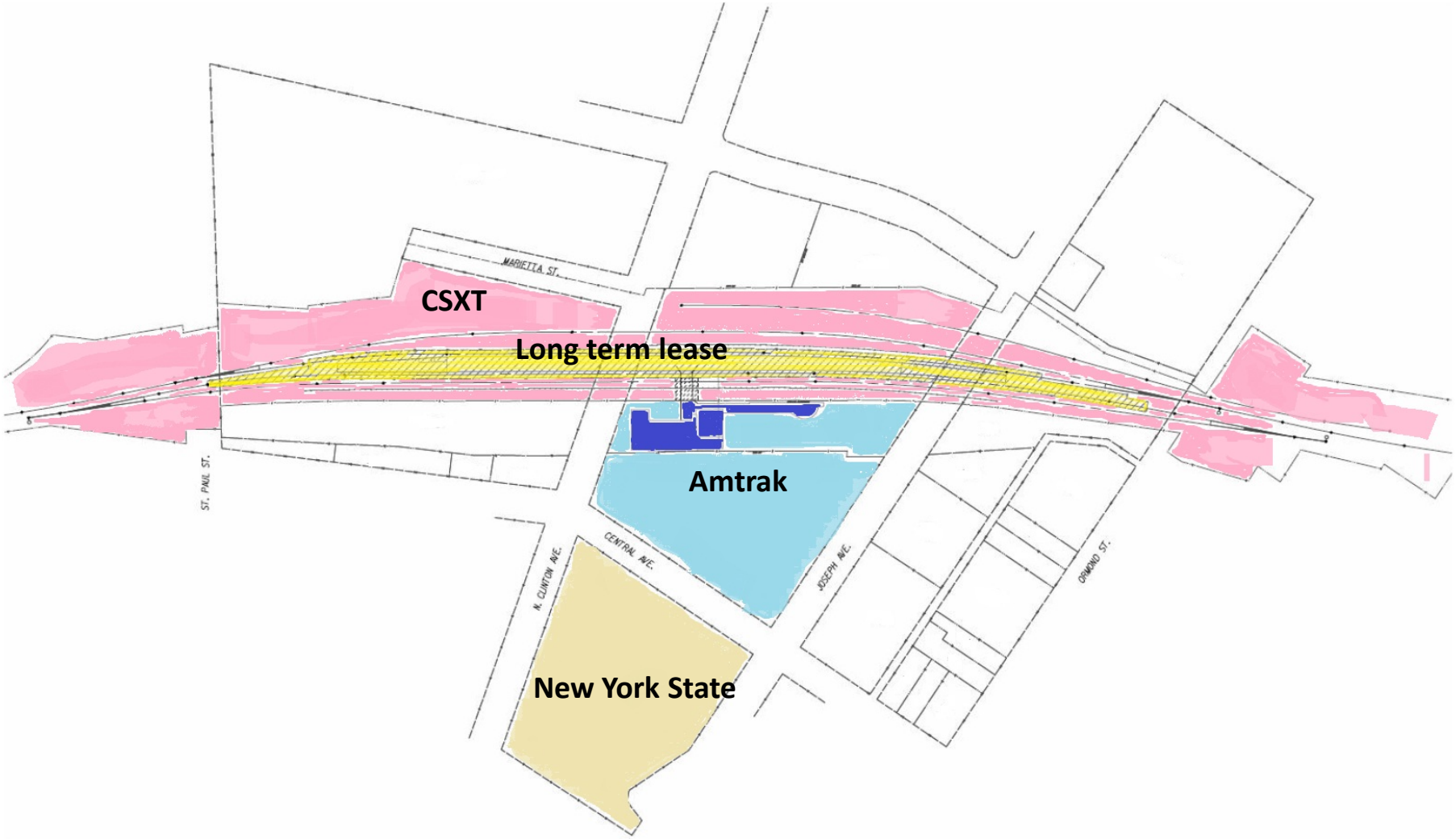
Key Decisions Reached During Preliminary Engineering



Preliminary Engineering and NEPA process – Key Decisions ..... Design

- **Track side station with improved sightlines to downtown**
- **Option 3 track layout that had a configuration of high level island platform with new passenger sidings**
- **Tunnel/Concourse for pedestrian and baggage access**
- **Ramped access for baggage transfer which was also served as redundant ADA compliant emergency egress**
- **Ramps and closed emergency areas of refuge on either side of the high level island platform**

Next Step - Agreements



Project Timeline

2010 through 2011

- **$2.9M to complete Preliminary Engineering and NEPA work**
- **City of Rochester – Lead on Facility**
- **NYSDOT – Lead on the Track and Platform Layout developed project including**
  - Public outreach
  - Alternatives developed
  - Environmental assessment

2011 – Unsuccessful TIGER application

Project Timeline

2012 Applied for and Won TIGER grant

2012 Design Build legislation passed in NYS

2013 RFP issued by NYSDOT for DB construction

2014

- **NYSDOT and CSXT sign a long term lease for the Track and Platform Area**
- **NYSDOT and Amtrak reach agreement for Construction and Maintenance**
- **Best Value Design Builder selected – The Pike Company**
- **Final Design and Construction Begins**

2015 – Construction Continues

Technical Challenges After Preliminary Engineering Was Completed

- Approval of detailed construction sequencing for new track configuration, high level platform and tunnel/concourse.
- Protection and Safety of CSX, Amtrak, Amtrak Passengers and Construction Workers

  (There are 60 – 80 trains that run through Rochester 365 days per year)
- Maintaining Continuity of Rail Service for CSX and Amtrak During Construction.
- Coordination with CSX and Amtrak Operations to Limit Work Stoppages.
- Construction of the High Level Platform that is in close proximity to active RR Tracks.

Technical Challenges

- Reinforcing 4 RR Bridges that were built in the early 1900's to meet current RR Loading
- Geotechnical Analysis, Earth Retention and Deep Foundations
- Managing and Controlling Vibration Generated by Construction
- Existing Tunnel Removal and Asbestos Abatement
- Unknown Subsurface Conditions resulting from Demolition of Original Train Station
- Coordination of CSX Forces RR Track work with Construction Schedule
- Seamless Design and Construction from Phase 1 to Phase 2 (if approved)

Construction - Platform Area

Construction - Trackwork

Construction - Trackwork

A lot of Progress on Site

Construction - Platform

Platform and Baggage Tunnel

Soon to be obsolete

This Project is Going Great!

Bridge Work

Track work

Temporary Station

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Thank You!