

Station ADA Accessibility Analysis

2017

Station: Broadway
Type: Elevated Station

MST Ref. No.: 4

Line: BMT-Astoria

Borough: Queens

Versions:

<u>Rev</u>	<u>Date</u>	<u>Compiled By</u>	<u>Revision Description</u>
0	12/31/2019	Application Administrator	

NYCT - Transit Station Accessibility Profile

ACCESSIBILITY SOLUTION DESCRIPTION

The Broadway Station on the BMT Astoria Line is an elevated station located in Astoria, Queens providing service on the N&W trains. The station has a full time control fare area located at the mezzanine level, one level above the street level, at the intersection of Broadway and 31st Street. The station is currently accessible via four existing street to mezzanine stairs at Broadway and 31st Street. There is also one street to platform level 'exit' stair at the south end of the NB platform. Four existing platform stairs provide access to the NB and SB side platforms, one level above the mezzanine/fare control area.

The proposed solution requires the installation of two 2-stop elevators at the southern end of the station platforms (south of Broadway) at the location of the existing NB platform 'exit' stair, each providing travel from the street to NB and SB platforms, respectively. The new NB platform elevator will be provided adjacent to the existing NB 'exit' stair landing. New turnstiles will be installed at the platform level elevator opening, providing a new fare control line, thus converting the NB 'exit' stair into an additional access point to the station. The new SB platform elevator will be provided at the same location as the NB platform elevator.

To further improve station capacity and accessibility, the proposed solution calls for the installation of a new street to platform level stair south of the new SB platform elevator, similar in configuration to the NB platform stair. A new landing structure will also be constructed between the elevator and stair structures to provide a new fare control area. New turnstiles will be installed at the platform level for the new stairs and elevator at the SB platform as well.

There will be a separate EMR for each elevator. It is proposed to provide the new EMRs at the underside of the platform level stair landings (adjacent to the elevators) with hatch door access down into the EMRs. Four additional columns from street to platform level will be required to support the EMR (2 new columns for each EMR).

OTHER ALTERNATIVES STUDIED

None

Existing Station Data

MR # 4
 Station Name / Line Broadway / BMT-Astoria
 Borough Queens
 Station Type Elevated Station
 Total No. of Active Platforms 2
 Platform: Mnh Bound Platform Type: Side Width: 11'-10"
 Edge: Edge Type: None or paint
 Platform: Qns Bound Platform Type: Side Width: 11'-10"
 Edge: Edge Type: None or paint

Platform Length and Radii:

<u>MR#</u>	<u>Platform</u>	<u>Track</u>	<u>NB/SB</u>	<u>Level</u>	<u>Side</u>	<u>Length</u>	<u>Radius</u>	<u>Length of Platform in Curve</u>	<u>Curve Side</u>
4	Broadway	1	SB		E	645.00		Tangent	
4	Broadway	2	NB		W	645.00		Tangent	

Accessible Path - Levels Street
 Platform
 Historic (Y/N) No
 Complex (Y/N) No
 Flood Zone (Y/N) No
 All platform boarding areas ADA-compliant (Y/N) No If no, # of non-compliant platform edges: 2
 Existing Electric Service Normal: Not Identified
 Reserve: Not Identified

Recommended Capacity Improvement (from Operations Planning) Add capacity from n/b platform to street; add street stair capacity

Total # of Control Areas 1
 Utility Information in Appendix II ConEd: Yes
 DEP: Yes
 ECS: Yes
 Nat. Grid: No
 Annual Ridership (Year) 4,189,306 (2016)
 NTA Name Astoria

Access-A-Ride Data (2017)
 Destination Count (Rank) 163 (2)
 Origin Count (Rank) 127 (1)
 Population with Ambulatory Disability (Rank) 394 (5)
 Population 70+ in 2020 (Rank) 4119 (5) *
 Population 70+ in 2030 (Rank) 5860 (5) *
 Stair Capacity Constrained (Yes/No) Yes

Notes:

Station Congestion Status Severe (Data from Operations Planning)

* Data from NYC Dept. of City Planning 2010

Station Analysis Summary

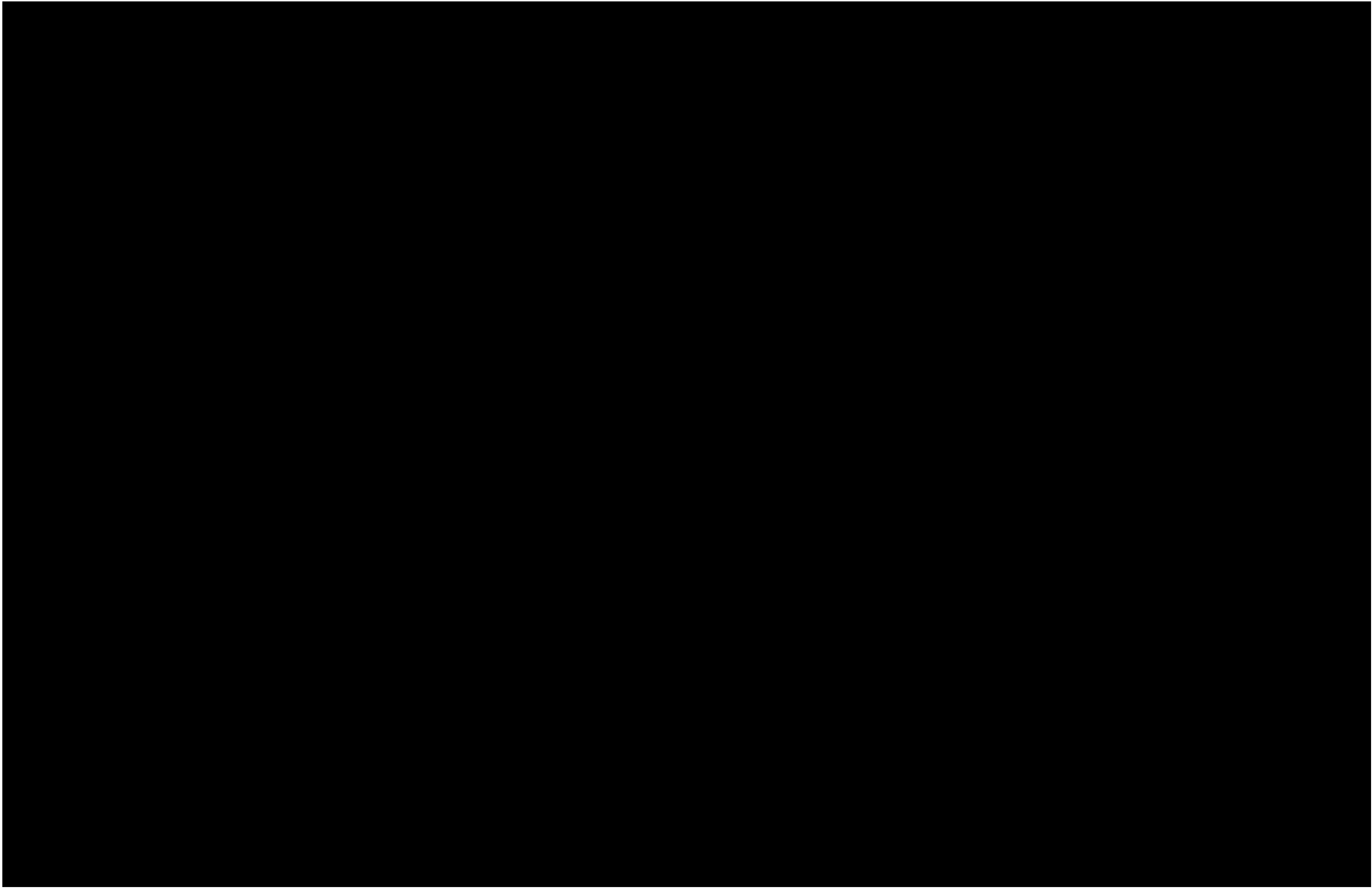
Cost Index Summary	<u>Description</u> Scenario A	<u>Bid</u>	<u>Total</u>
Elevators	Total #: 2	<u>Description</u>	<u>Type</u>
		Street to platform (Manhattan bound)	Holed Hydraulic
		Street to platform (Queens bound)	Holed Hydraulic
Control Area	Accessibility solution requires new control area		
Ramps	Total #: 0		
Congestion Solution	Accessibility solution can incorporate solution to reduce congestion		
Proposed Capacity Improvement	Additional street to platform level stairs constructed to the SB platform, west of the intersection along 31st Street.		
Affected Station Components	Conversion of the NB 'exit' stair into a new access point into the station with installation of turnstiles at NB platform landing, creating an additional fare control area.		

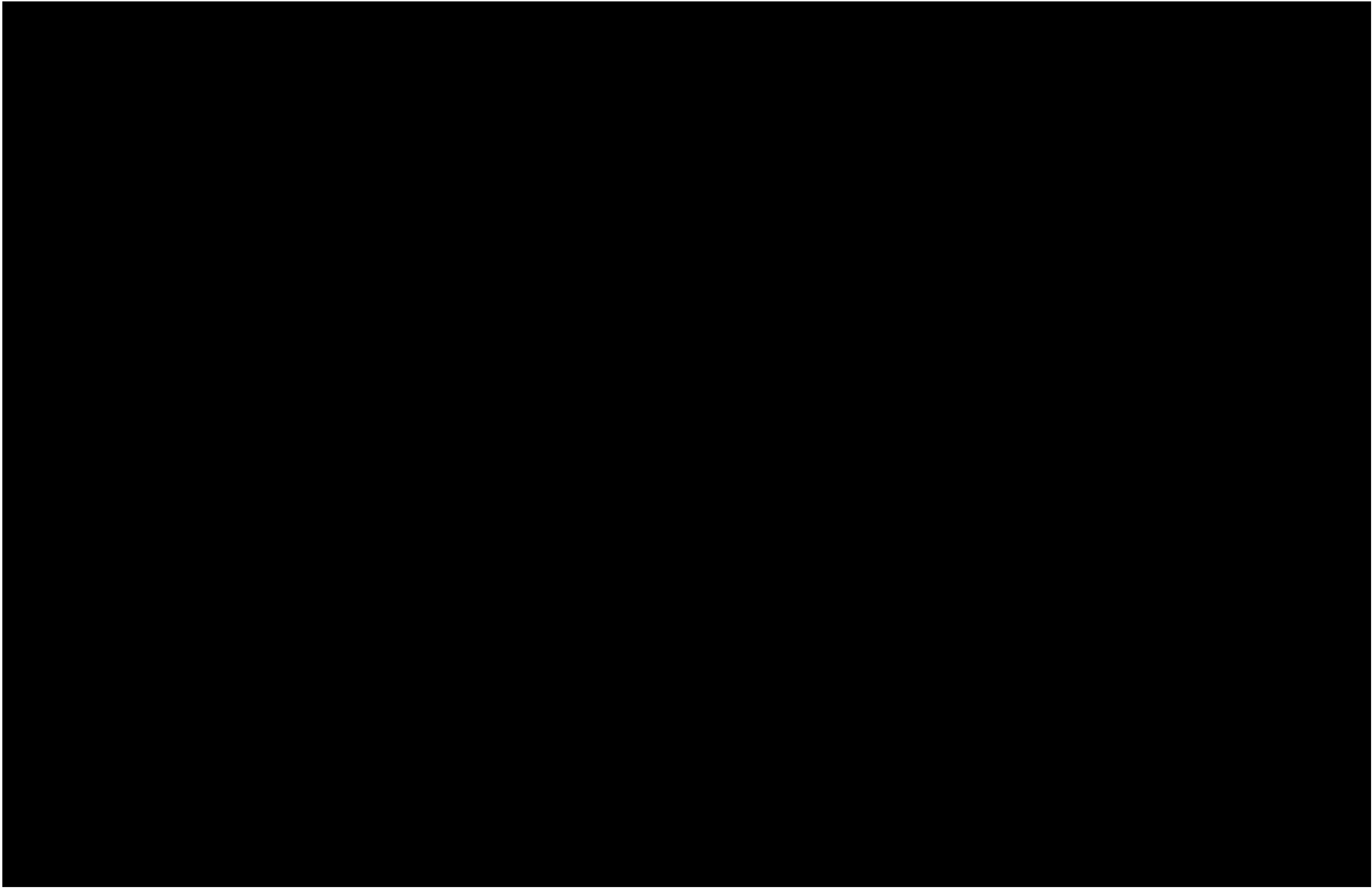
Accessibility Challenges

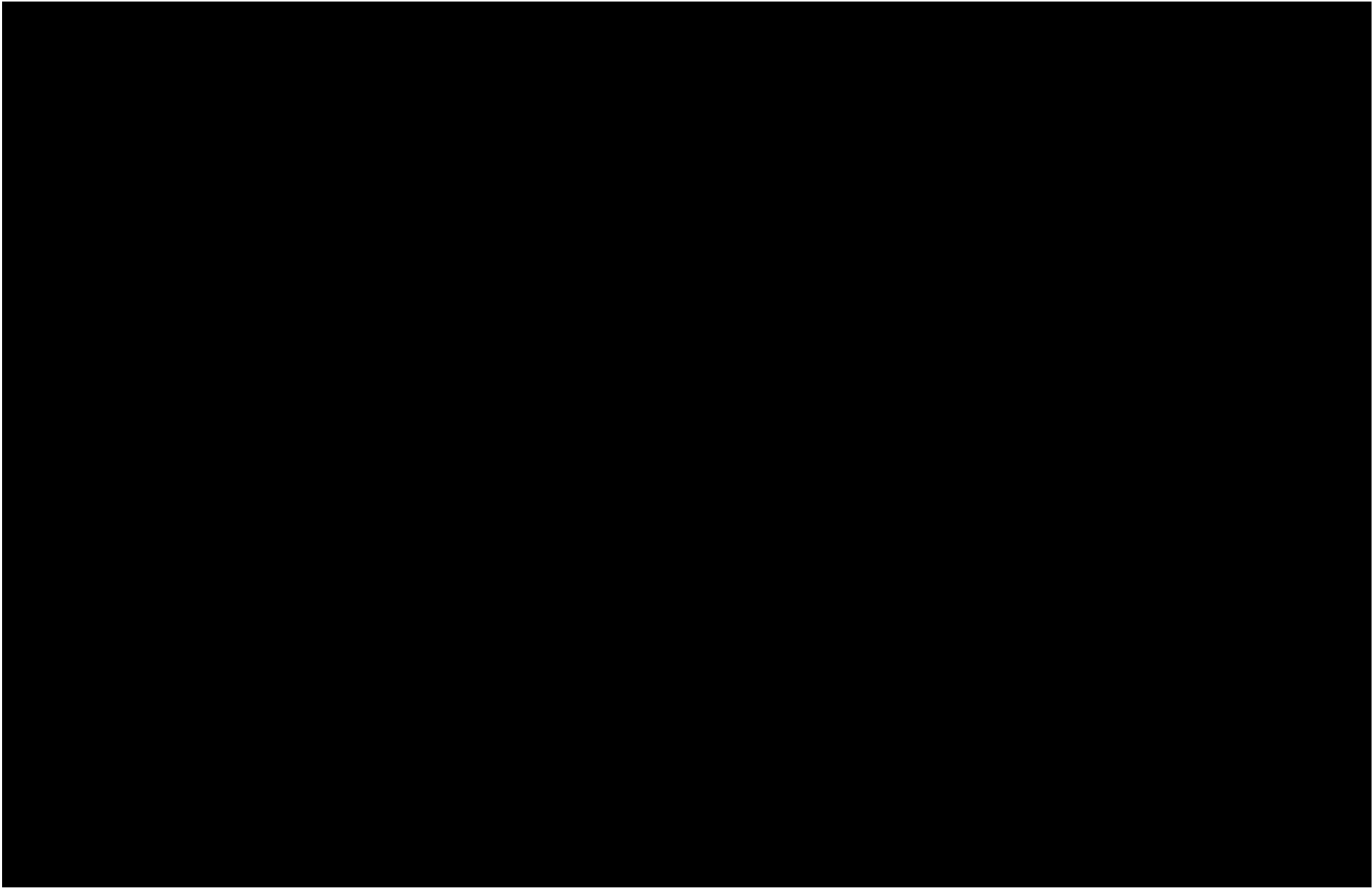
Mezzanine Extension (Y/N)	No
Overpass Structure (Y/N)	No
Real Estate (Y/N)	No
Stakeholders:	<input type="checkbox"/> NYCDOT <input type="checkbox"/> NYC Parks <input type="checkbox"/> Private <input type="checkbox"/> Other
Power Upgrade Required (Y/N)	Yes
Major Utilities Impacted (Y/N)	No
Underpinning Required (Y/N)	No
Other (Y/N)	No

Cost Estimate

Concept Solution Drawings

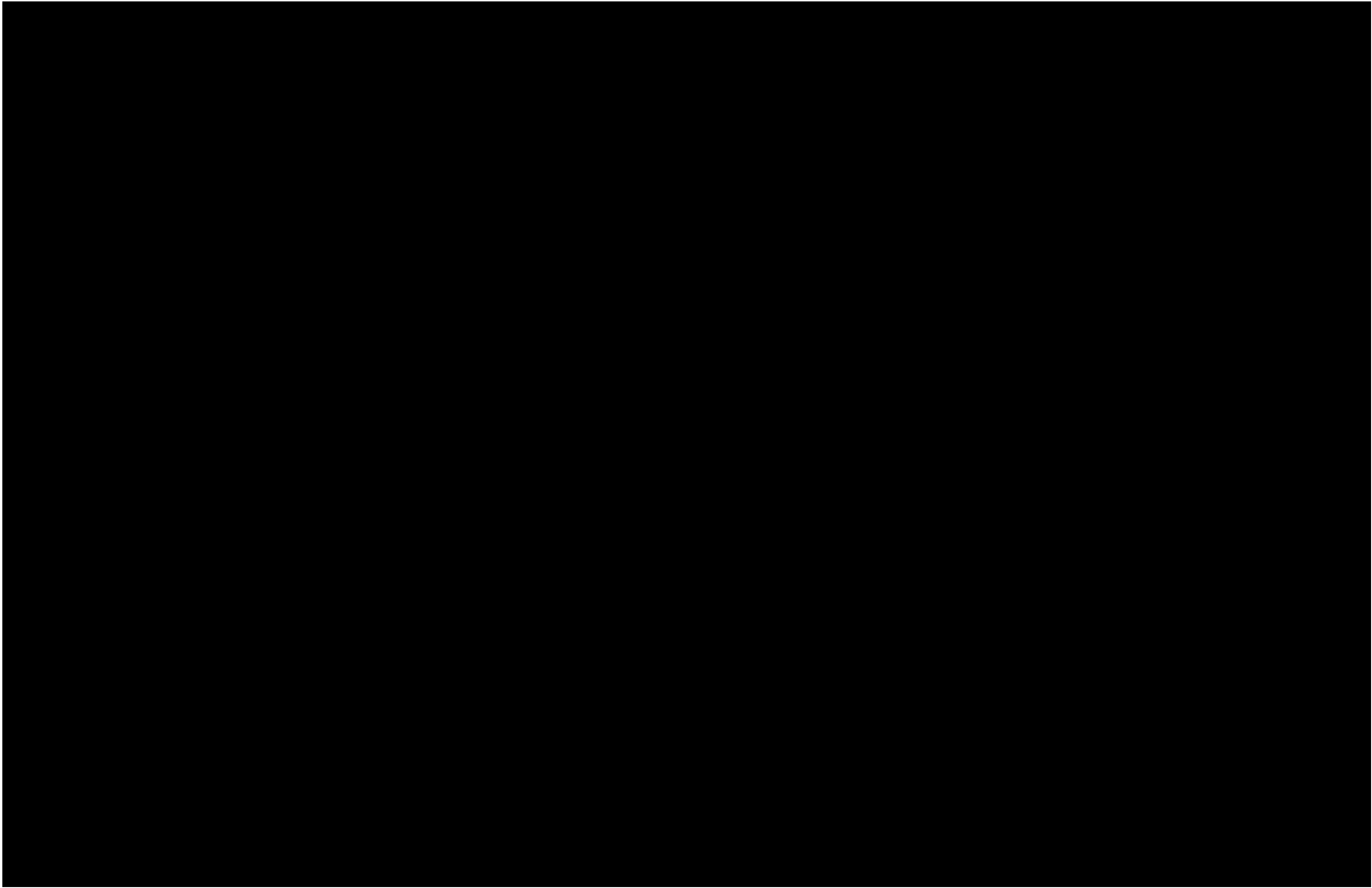


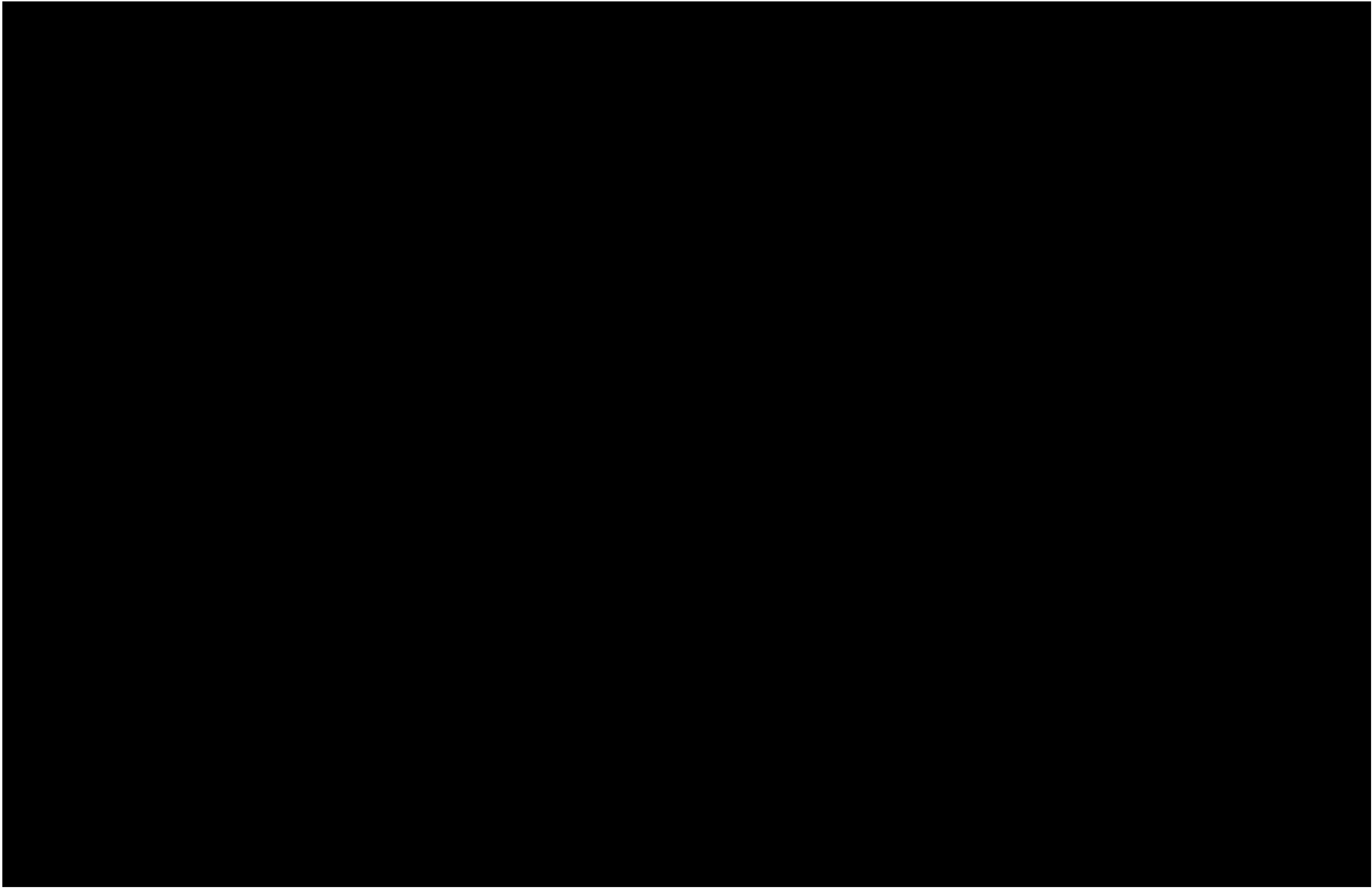


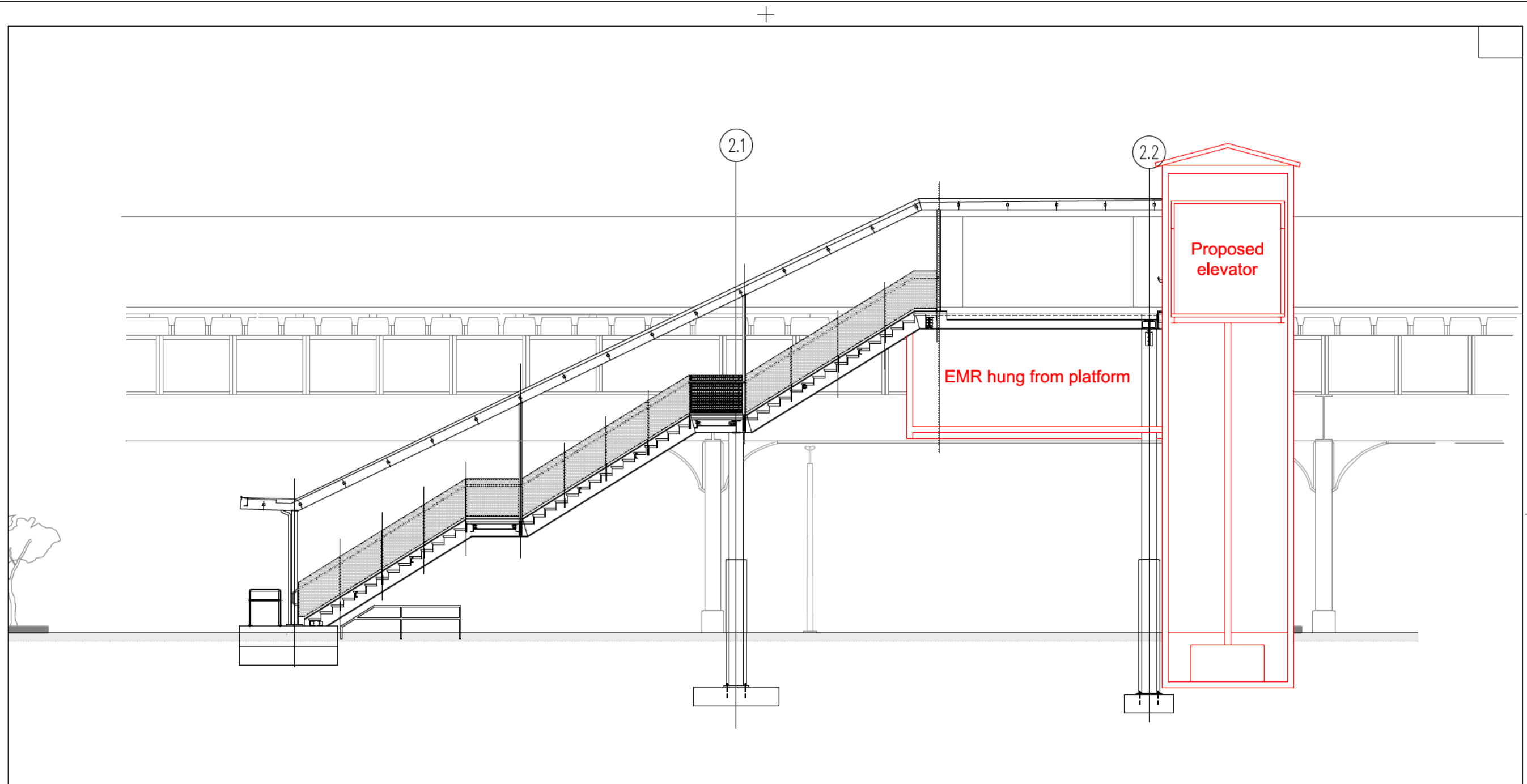








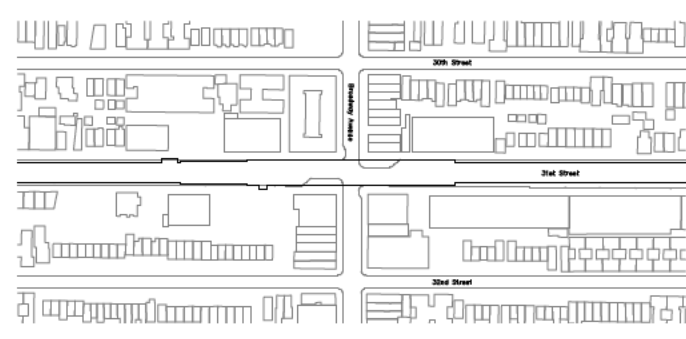




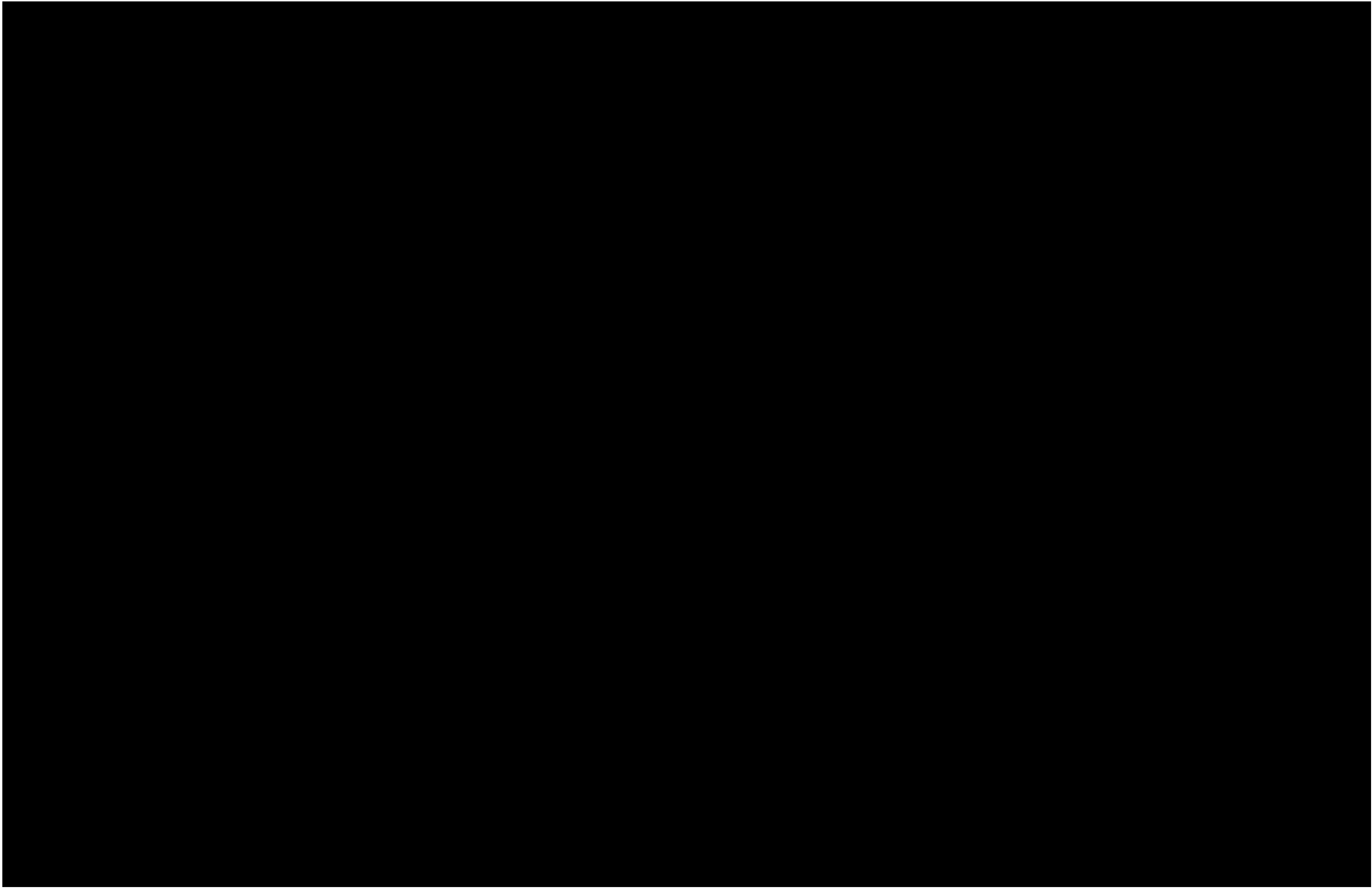
001 EAST ELEVATION
 XXX/XXX 1/8" = 1'-0"

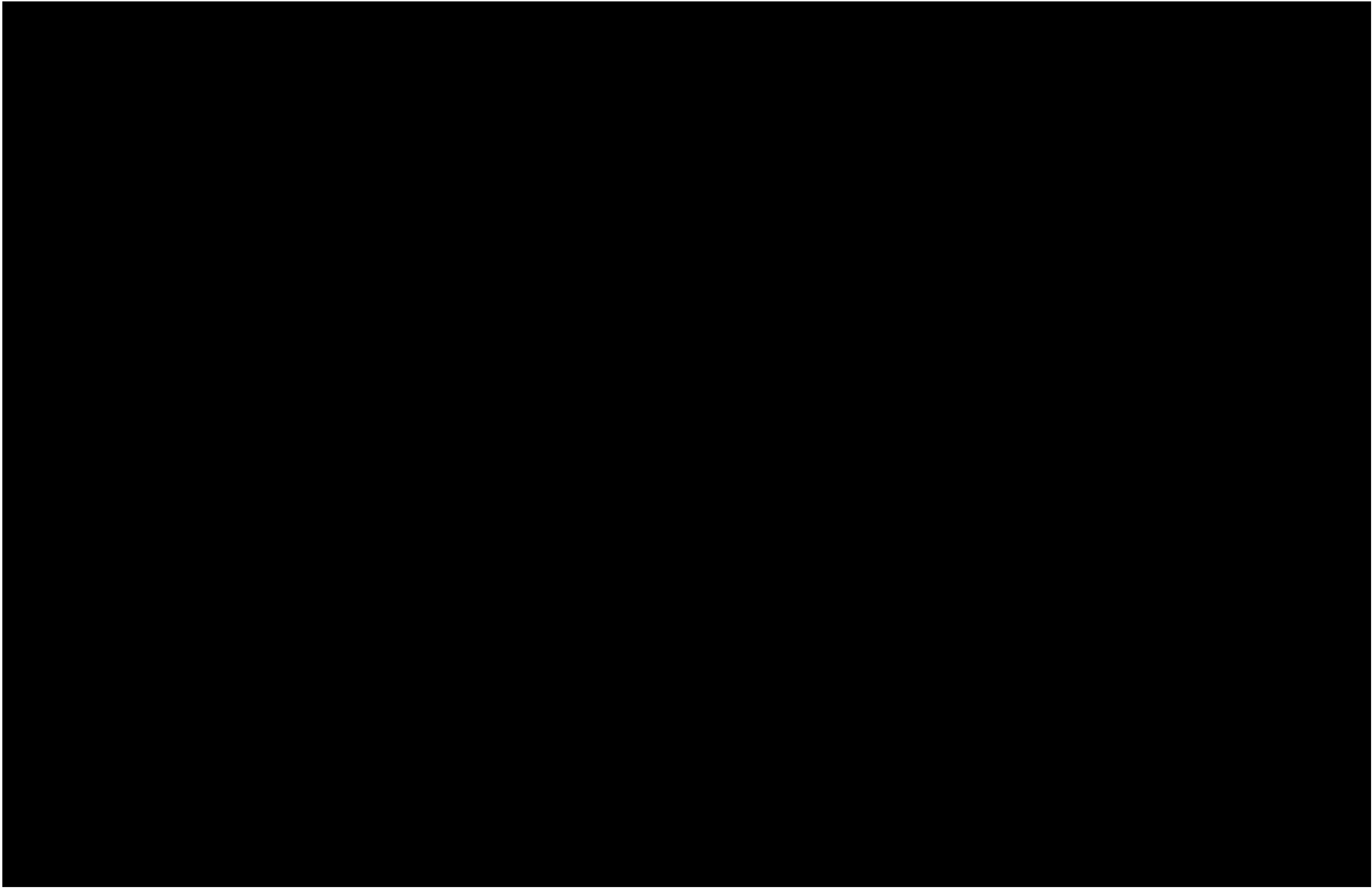


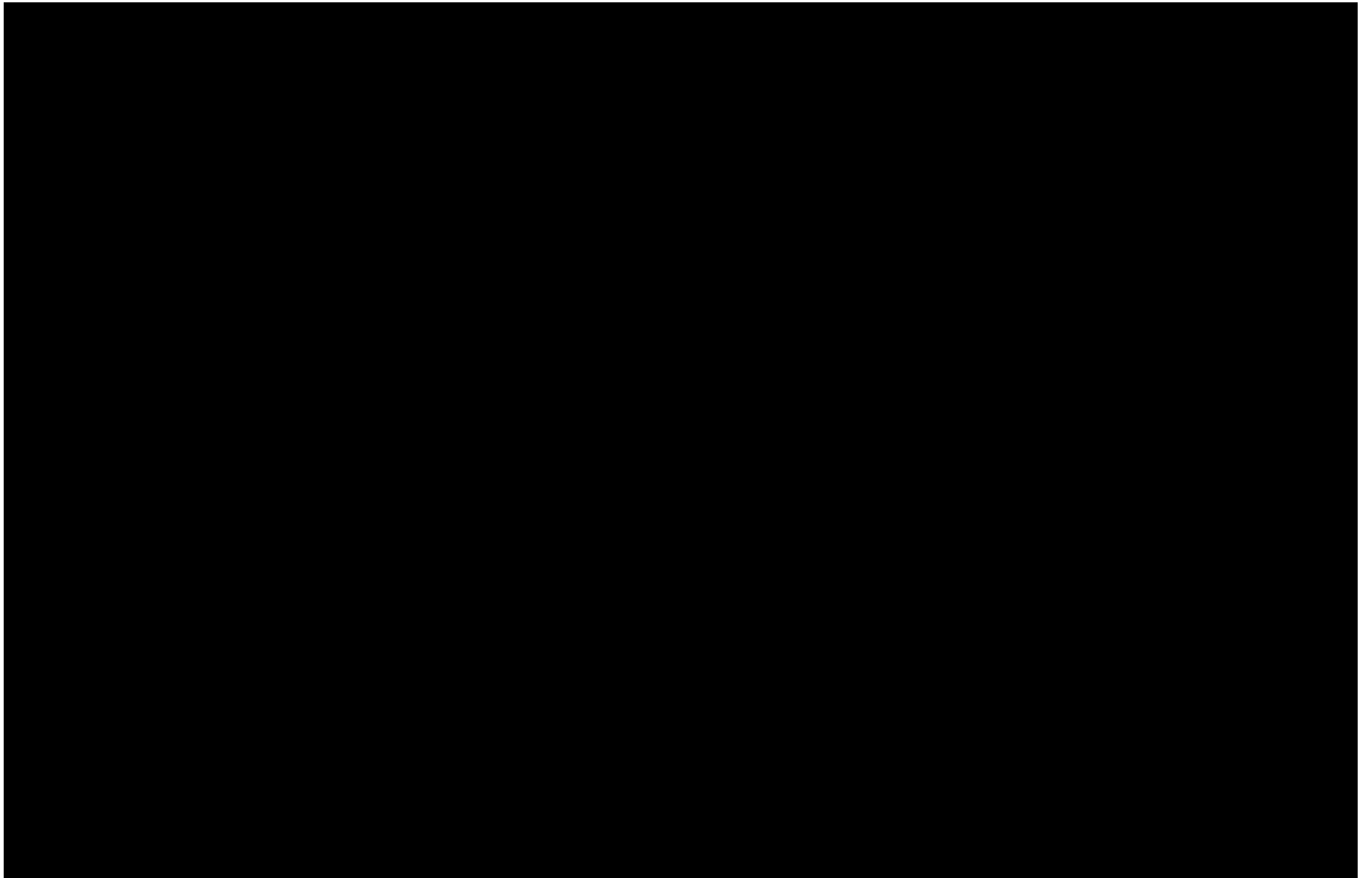
- Proposed Location
- ADA Boarding Area
- Circulation



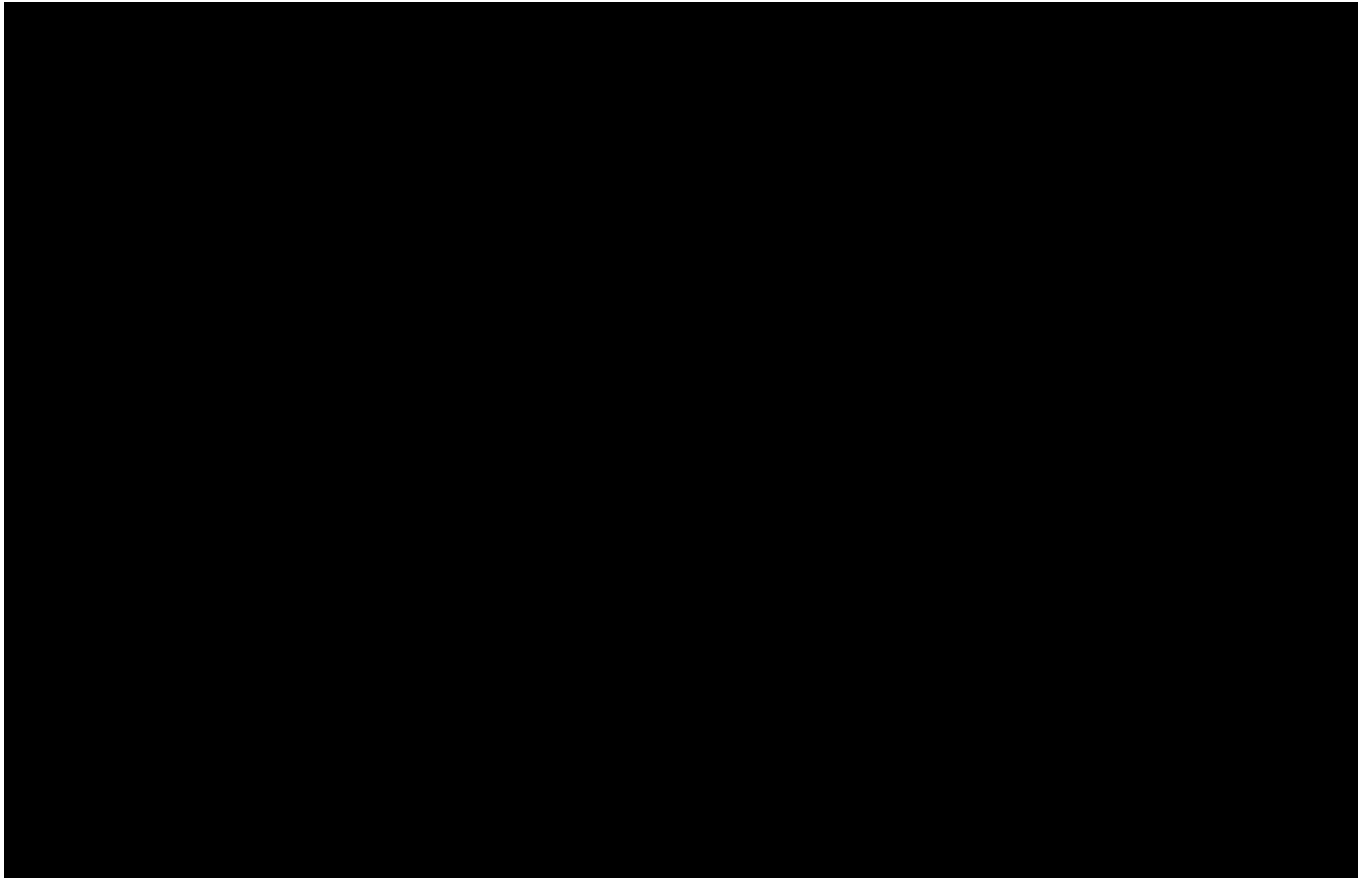
 New York City Transit Authority		CONTRACT CM-1545	
		SYSTEMWIDE STATION ACCESSIBILITY ANALYSIS ROLLOUT PHASE I (STATION ANALYSIS)	
 STANTEC CONSULTING <small>475 5th Ave, 12th Floor New York, NY 10017</small> <small>CIVIL/STRUCTURAL ENGINEERING</small>		Broadway Station (MR 4) N,W Line Proposed Scheme East Elevation	
 <small>di Domenico+Partners 3743 CRESCENT ST., L.L.C., NY 11101</small>			
DRAWN BY		DATE : XX/XX/2017	
DESIGNED BY		DRAWING NO.	A-401
CHECKED BY			
APPROVED BY		REVISION	











Team Review Comments

Appendix II
Existing Utility Information

Appendix III

NYCT Archive Drawings