
CITY OF VANCOUVER
COMMUNITY SERVICES GROUP

DEVELOPMENT PERMIT STAFF COMMITTEE REPORT
AUGUST 13, 2014

FOR THE DEVELOPMENT PERMIT BOARD
SEPTEMBER 8, 2014

1710 EAST BROADWAY
DE418037 - ZONE C-3A / CD-1

AM/PC/DA/LH

DEVELOPMENT PERMIT STAFF COMMITTEE MEMBERS

Present:

J. Greer (Chair), Development Services
M. Holm, Engineering Services
D. Naundorf, Social Infrastructure
W. Mendes, Social Infrastructure

Also Present:

A. Molaro, Urban Design & Development Planning
J. Bosnjak, Development Services
D. Autiero, Development Services
K. Trafford, Development Services
U. Arajs, Development Services
C. Robertson, Engineering Services

APPLICANT:

TransLink
Attention: David Beckley
400 - 287 Nelson's Court
New Westminster, BC
V3L 0E7

PROPERTY OWNER:

TransLink
Attention: David Beckley
400 - 287 Nelson's Court
New Westminster, BC
V3L 0E7

EXECUTIVE SUMMARY

- **Proposal:** Interior and exterior alterations to the existing Transit Station, work includes the upgrading the pedestrian connections by creating new platforms and a passerelle (pedestrian bridge) over Broadway Street and upgrading of the ticket hall entrance, a bike storage facility and provisions for a future retail areas.

See Appendix A Standard Conditions

Appendix B Standard Notes and Conditions of Development Permit

Appendix C Plans and Elevations

Appendix D Applicant's Design Objectives

Appendix E Executive Summary of TransLink's Stakeholder and Public Engagement Report

Appendix F UDP Booklet Reference Pages

• **Issues:**

1. Station Design

- **Urban Design Panel: SUPPORT**
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DEVELOPMENT PERMIT STAFF COMMITTEE RECOMMENDATION: SUPPORT

THAT the Board SUPPORT interior and exterior alterations to the existing Transit Station, as proposed in the development submission DE418037, including the upgrading of pedestrian connections by creating new platforms and a passerelle (pedestrian bridge) over Broadway Street; upgrading of the ticket hall entrance; a bike storage facility; and provisions for a future retail areas, subject to the following conditions:

- 1.0 Prior to the issuance of the development permit, revised drawings and information shall be submitted to the satisfaction of the Director of Planning, clearly indicating:

Station Design and Public Realm Interface:

- 1.1 design development to achieve a more cohesive architectural statement for this prominent station by better integrating all of the new station components with a simple dynamic expression;
- 1.2 design development to provide high quality materials and detailing;
- 1.3 provision of a design to accommodate future passenger queuing and shelter design for the 99 B-line station;

Note to applicant: A separate development application is required.

- 1.4 provision of a way-finding plan for the station and the 99 B-line functions;

Note to Applicant: Way-finding should be provided at both street level and platform level to direct passengers to and from station platforms.

- 1.5 provision of a tree mitigation plan detailing how trees impacted by station upgrades will be replaced;

Note to Applicant: The number, species, planting layout and a timetable for tree replacement must be provided to the satisfaction of the Director of Planning in consultation with General Manager of Engineering Services and Park Board.

Future expansion/integration:

- 1.6 design development to identify future connections into the south station concourse level for both the east side and west side of the station;

Note to applicant: Provide confirmation that the provision of the retail area and the Electrical Equipment Room (EER) expansion in the mid concourse level will not negatively impact future circulation and legibility.

- 1.7 provision of a concept plan illustrating the ability to integrate a station entry at/from Grandview north to the existing Commercial Station concourse/platform (Millennium Line);

Note to Applicant: A future station entry from Grandview north for Evergreen Line and Millennium Line connections may make a direct neighbourhood connection more desirable and with the Millennium Line Extension to Arbutus, eliminates conflicts with 99 B-Line layover space.

- 1.8 provision of a queuing study detailing bus stop and station operations to the satisfaction of the General Manager of Engineering Services;

Note to Applicant: Particular attention should be paid to detailing how the 99 B-Line stops interact with the station and the adjoining public realm.

North Station and Passerelle Component:

- 1.9 Provision of the following information and modifications to legal agreement(s) for the following;
- a) arrangements to the satisfaction of the General Manager of Engineering Services and the Director of Legal Services for modification to the Millennium and Expo Line access agreements to accommodate the additional use of City Street (e.g. 99 B-Line queuing and shelter facilities, columns, passerelle over Broadway, and canopies) is required;
 - b) arrangements to the satisfaction of the General Manager of Engineering Services and the Director of Legal Services for modification to the Millennium Line Access Agreement to accommodate the additional use of City Air Space Parcels 2 & 3, Air Space Plan 2721;

Note to Applicant: Additional drawings are required, prepared by a BC Land Surveyor, in plan view, sections and isometrics to clearly depict the encroachments into Air Space Parcels 2 & 3. The encroachments consist of footings, structural piles and temporary lock-block retaining walls.

- c) arrangements to the satisfaction of the General Manager of Engineering Services and the Director of Legal Services to secure rights for public access over the sidewalk portion of Lot J adjacent to the queuing area;
- d) confirmation of arrangements between Translink and BNSF for the encroachment of a footing onto the remainder of Lot H, Plan LMP2717 is required;

South Station Component:

- 1.10 provision of separate development applications for proposed retail uses;
- Note to applicant:** A loading space may be required for these propose uses.
- 1.11 provision of a subdivision or other satisfactory arrangements for Translink to secure tenure over the westerly 8 metres of Lot I, Plan 20377 (1780 E Broadway) is required;
- 1.12 consideration of modifications to improve pedestrian circulation by the following:
- a) relocation of the placement of the west fare gates at the north entrance of the south station to align these with new east fare gates to provide additional circulation space in front of escalators across the width of the station;
 - b) removal of the proposed retail space immediately south of the ticket alcove to ensure adequate pedestrian circulation
- 2.0 That the conditions set out in Appendix A be met prior to the issuance of the Development Permit.
- 3.0 That the Notes to Applicant and Conditions of the Development Permit set out in Appendix B be approved by the Board.

3.0 • Technical Analysis:

	PERMITTED (MAXIMUM)	EXISTING	PROPOSED
Site Size	-		Irregular
Site Area ¹	-		Irregular
Floor Area ²	-	<div>Commercial Station & Platform 858 m2</div> <div>Ticket Hall 692 m2</div> <div>Grandview Cut Bridge 196 m2</div> <div>Passerelle 293 m2</div> <div>Broadway Platform 750 m2</div> <div>Broadway Concourse 1105 m2</div> <div>Total 3894 m2</div>	<div>Commercial Station & Platform 858 m2</div> <div>Ticket Hall 692 m2</div> <div>Grandview Cut Bridge 416 m2</div> <div>Passerelle 903 m2</div> <div>Broadway Platform 1490 m2</div> <div>Broadway Concourse 1710 m2</div> <div>Total 6069 m2</div>
Height	C-3A Site 9.2m CD-1 Site 18.3m		Top of Roof Truss 13.84 m

¹ **Note on Site Area:** Site area is comprised of an Existing Commercial Station and Existing Broadway Station. Commercial station is situated at 2460 Commercial Drive and Broadway Station is situated at 1710 East Broadway. The Commercial Station is regulated by the CD-1 (250) By-law, which includes the area fronting Grandview Highway North, Commercial Drive and Broadway. The East Station is under the C-3A District Schedule of the Zoning and Development Bylaw.

² **Note on Floor Area:** Transit Station is excluded from the computation of the floor area for the portion that falls within the area that falls within the CD-1 bylaw. The remaining floor area meets the overall floor space.

Note on Future Retail Space: A separate development permit will be required for any future Retail Space.

Note on Loading Requirements: Loading spaces are required where retail spaces exceed 1,000 square feet of floor area. This proposal contains no retail spaces greater than 1,000 square feet.

- **Legal Description**

North Station

Lot J, Except Portions in Plan LMP50743 and LMP50744, Block 153 DL 264A Group 1 Plan LMP2717;
Lot H, Except Part in Airspace Plans LMP2719, and LMP2721, Block 153 DL264A Plan LMP2717;
Airspace Parcel 1 Block 153 District Lot 264A Airspace Plan LMP 2719;
Airspace Parcels 2 and 3 Block 153 DL264A Airspace Plan LMP2721; and,

South Station

Lot I Block 162 DL264A Plan 20377;
Lot E of Lots 1 to 3, Blocks A and B, of Block 162 DL 264A Plan 1818;
That part of Lot F in Statutory Right of Way Plan 16908 Block 162 DL 264A, Plan 12508;

And Adjacent portions of City street.

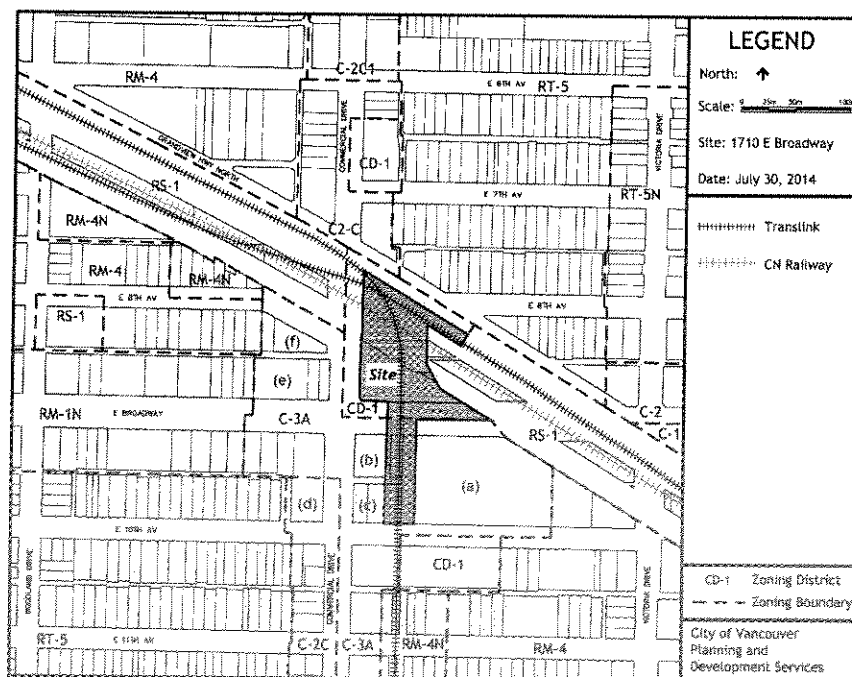
- **History of Application:**

2014 06 03	Complete DE submitted
2014 07 16	Urban Design Panel
2014 08 13	Development Permit Staff Committee

- **Site:** The site is located at the intersection of Broadway and Commercial Drive and includes a mid-block elevated guideway and passerelle over Broadway connecting to a platform and guideway on the south side of Broadway. Bus routes utilize both the Broadway and Commercial Drive frontages. East 10th Avenue serves as a designated bike route.

- **Context:** Significant adjacent development includes:

- | | |
|---|---|
| (a) 1 storey, Safeway | (e) 4 storey, Family Community Health Centre |
| (b) 1 storey, CIBC | (f) 4 storey, commercial retail and residential |
| (c) 1 storey, various commercial retail | (g) 1 storey, Shoppers Drug Mart |
| (d) 3 storey, various commercial retail | |



• **Background:** In 2012, City staff were advised that Translink intended to retrofit the existing Broadway-Commercial SkyTrain Station. The proposed work would include a new outboard platform on the east side of the station, retention and integration of the trusses over the existing Broadway Platform from the new platform structure and an enclosure to new outboard platform and passerelle over the Broadway Street and Shoppers Drug Mart from the new outboard platform, widening of the existing bridge, replacement of the mesh on the west side of the station, upgrade to the north ticket hall entrance, bike storage facility, and provisions for future retail spaces.

Through these discussions, staff recommended to Translink that, given the complexity of jurisdictions and the importance of this Expo Line Station within the city's built form context, that the proposal follow a similar process (DAP) undertaken by the Canada Line Stations. The Design Advisory Process (DAP) is the process by which the City of Vancouver provides advice to Translink on the design and integration of the transit station. Any proposed uses such as retail, within the station either on zoned land or city street, requires City approval.

Review of this project involves a number of jurisdictions and ownership including:

- General Manager of Planning and Development Services (Director of Planning) with regard to zoned lands;
- General Manager of Engineering Services, with regard to use of City streets;
- Translink, existing right-of-way provisions
- Integrated property owners
 - Burlington Northern Railway (BNSF)
 - Hub Station Development Ltd.

The existing Broadway-Commercial Station, was designed as an integrated structure with other buildings, and as such may require additional city permits to address changes to these existing buildings and/or streets and modifications to existing legal agreements. Where possible staff have noted and identified these requirements for the application team to ensure that they are addressed.

While the advice provided by the Development Permit Board on the specific transit use facility does not constitute formal conditions, it is the City's understanding the Translink is participating in this process in good faith, intending to include, where reasonably possible the comments and recommendations of the Development Permit Board.

• **Applicable By-laws and Guidelines:**

- CD-1 By-law (250), 1990
- Commercial Station CD-1 Guidelines, 1990
- C-3A District Schedule
- Broadway Commercial C-3A Guidelines, 2001

The sites owned by Burlington Northern Railway and Hub Development Ltd. located on the north side of Broadway are governed by the CD-1 By-law (250) and Commercial Station CD-1 Guidelines. In general the By-law allows for retail and services use and public authority uses within a maximum height of 60 ft. The intent of the guidelines is to achieve a high quality, safe and vibrant station and transit interchange and to strengthen Commercial Drive as a core shopping and business area, providing continuity of retail development, integrated pedestrian spaces and enhanced streetscapes.

The midblock sites south of Broadway, owned by Translink, are governed by the C-3A District Schedule and Guidelines. In general, the District Schedule allows for a number of uses, including commercial and residential as well as public authority use. The guidelines for this area are to strengthen the node with a continuity of retail, supplemented with office, service and residential uses above grade with high quality architecture.

The revised station is comprised of three components. The north station component, the new passerelle over Broadway and the south station component.

The application proposes a significant retrofit to the station that includes:

North Station Component and Passerelle:

- an enclosure connecting to new passerelle over Shoppers Drug Mart
- new vertical circulation including stairs, escalator and elevator between the Grandview Cut Bridge and the passerelle
- provision of a new pedestrian connection and enclosure over Broadway on the east side of the existing guideway

South Station Component:

- a new outboard platform and enclosure on the east side of the station,
- retention and integration of the trusses over the existing Broadway Platform
- replacement of the mesh on the west side of the station,
- expansion and upgrade to the Broadway ticket hall entrance
- bike storage facility at E. 10th Avenue entrance
- provision of new washroom(s) within the fare paid zone
- provision for future retail

• **Station Design and Public Realm Interface:** The retrofit and addition to the station is an important improvement to this significant transit interchange providing enhanced access and improved circulation within. The design concept presented indicates a change in expression between the passerelle over Broadway and the south station east side platform. However, staff and the Urban Design Panel recommend that further design development be strongly considered to achieve a more cohesive architectural statement for this prominent station by better integrating all of the elements with a simple dynamic expression to avoid awkward transitions between the various station components. (see Recommended Condition 1.1)

The new east side platform design incorporates and integrates the hoop truss structure of the original station architecture offering a spatial experience within expanded steel structure. Key to the success of the design is the detailed resolution of the components. Staff are recommending design development to provide high quality materials and detailing as this will be crucial to the success of the design solution. (see Recommended Condition 1.2)

Given the complexity of the Commercial-Broadway station, the high volume of transit activity and the need to accommodate a large number of pedestrians and businesses and transit access, TransLink retained Nelson Nygaard to review queue management options for the 99 B-line transit stop. This work was completed earlier this year and TransLink is proposing to further study the recommended option for the 99 B-line station by installing paint lines and pedestrian railings on City sidewalk as part of a pilot program. This pilot will last approximately one year and will assess the function and help to identify issues prior to installation of the final queuing approach. The final queuing installation will be coordinated with the construction of the Commercial-Broadway station improvements and will include a new shelter and way-finding for the station and the 99 B-line functions. Staff are requesting that TransLink continue to assess the queue management scheme and provide further detail on the design of the new shelter and transit way-finding (see Recommended Conditions 1.4 and 1.8)

North Station Component and Passerelle: The proposed new vertical circulation elements linking to/from the new passerelle will require new structural columns into the Grandview Cut and a new column located within the sidewalk (street right-of-way) alongside the Shopper Drug Mart frontage.

Further information and clarification of the arrangements associated with the encroachments that include new columns, structural piles, and retention walls proposed within the Grandview Cut, and if any

modifications to the Millennium Line Access agreement are needed to confirm the arrangement with the owner of the property, BNSF. (see Recommended Condition 1.9) In addition, more information is needed to confirm what impact these structure(s) will have on landscape including trees in this area. (see Recommended Condition 1.5).

The column supporting the passerelle along the Broadway frontage has been shaped to minimize its impact to the pedestrian movement and transit bus queuing that occurs along this frontage. Further detailed information is requested to ensure that the Broadway B-line queuing and shelter design will be appropriate integrated along this frontage. Terms to secure the adjacent sidewalk width will be required. (see Recommended Condition 1.9)

The provision of the passerelle will also require the removal of an existing tree along the Broadway frontage. Clarification is required as to whether this tree is on private property or on the City street. (see Engineering Condition A.2.6 and A.2.7)

In addition, as part of the future 99 B-line queuing configuration two more trees are anticipated to be removed along this same frontage. This proposed modification will be part of a future separate development application.

South Station Component: The new east side platform design requires additional land from the adjacent Safeway site. Further information is required to clarify this land use. (see Recommended Condition 1.11)

Future expansion/integration opportunities: The Broadway Commercial Station is located in the Grandview Woodland neighbourhood which is currently undergoing a neighbourhood planning program. The existing development immediately adjacent to the south portion of the station has not optimized its development capacity under its current zoning provisions. In order to anticipate for future change and to ensure that the station design is flexible for future integration the applicant has indicated that a pedestrian entry could be accommodated on the east side of the concourse level. In addition staff want to ensure that the west side of the station will have the same flexibility. Staff request that these locations be identified on the drawings provided. Staff are concerned that the proposed retail area indicated in the middle portion of the concourse level may present conflicts with these future connections. (See Recommended Condition 1.6)

In order to ensure that the station can be expanded further in the future, the applicant has provided concept(s) for a new west platform. Both of these concepts would remove the remaining hoops trusses on the west side, with one option providing a new passerelle on the west side over Broadway and the other providing the additional vertical circulation only on the south side.

Given the limitations of pedestrian access to/from the station north of the Grandview cut, a future station entry from Grandview North for Evergreen Line and Millennium Line may make a direct neighbourhood connection more desirable. A Millennium Line extension to Arbutus is expected to eliminate the 99 B-Line looping at Grandview North and therefore would also eliminate conflicts with current 99 B- line layover space. Staff are requesting a concept plan illustrating the ability to integrate a station entry at /from Grandview North to the existing Commercial station concourse/platform (Millenium Line). (see Recommended Condition 1.7)

• **Conclusion:** The upgrade and architectural enhancement of the station is an important component to the overall transit system and civic infrastructure, particularly at this prominent transit exchange. Given the importance of this station, the proposed station expansion an opportunity to achieve a cohesive architectural statement to highlight the importance of transit and strongly encourage the application to strengthen the architectural and public realm aspects of the proposal. Staff recommend approval of the zoning aspects of the applications and support for the transit related aspects, subject to the conditions and recommendations contained within this report.

URBAN DESIGN PANEL

The Urban Design Panel reviewed this application on July 16, 2014, and provided the following comments:

EVALUATION: SUPPORT (4-3)

- **Introduction:** Anita Molaro, Development Planner, introduced the proposal and mentioned that the Panel had reviewed the proposal at a Workshop last year. She added that the applicant team has addressed the concerns and issues raised by the Panel in this submission. Ms. Molaro gave some background on the proposal and described the context for the surrounding area noting the current zoning. The neighbourhood area is being reviewed by the Grandview-Woodlands Plan. At this time there are no conceptual ideas around what the future planning of the area might entail so it is not possible to align the station design with a future context since TransLink has a deadline that they need to move forward with in order to renovate the station. However staff and the applicant team want to make sure the station design will be flexible enough that doesn't impeded with future integrated development around the station.

Advice from the Panel on this application is sought on the following:

1. Urban Design/architectural aspects:

- Overall station building expression and retrofit strategy with existing station components including the proposed expansion of the east side platform;
- Overall station building design strategy that accommodates for a potential future expansion for an additional west side platform;
- High quality architectural and materiality that also highlights access and openness;
- Overall station design and built form interface/relationships with (including setbacks/proximity and visual access);
 - Existing (Shoppers Drug Mart) and
 - Future development sites:
 - Safeway site
 - West side of Station fronting Commercial Drive between Broadway and East 10th Avenue.

2. Public Realm:

- Achieving good connectivity/accessibility for transit users, pedestrians and cyclists;
- Public realm interface with active edges providing interest and weather protection;
- Achieving a safe environment both within and around the station.

Ms. Molaro took questions from the Panel.

- **Applicant's Introductory Comments:** Bryan Shaw, Architect, further described the proposal with a PowerPoint presentation. He mentioned that the proposal is about expanding the capacity of the station which is now at a point where the level of service is unacceptable. With TransLink's future ridership projections this will only get worse particularly with the Evergreen Line coming into service in 2016. The other interesting challenge was to take the separate pieces in the structure and try and create a cohesive interchange station. As well it was important to recognize the Expo Line's cultural heritage and find a way to integrate it within the new architecture so that it is not completely lost. He noted that they wanted to optimize the level of service as well as improve pedestrian access with wayfinding and lighting.
- **Panel's Consensus on Key Aspects Needing Improvement:**
 - Design development to improve the architecture as one cohesive design;
 - Design development to simplify the design language to unify the station;
 - Consider increasing the width of the passerelle;
 - Design development to better announce the entries;
 - Design development to improve the termination of the station ends;
 - Consider an art piece or other elements in the large open space;
 - Consider adding shading devices on the glass.

- **Related Commentary:** The Panel supported the proposal, thought it represented a significant progress in terms of what was seen at the workshop, but felt the design needed significant design development.

The Panel thought it was important to have the architectural language carried through from one side of the station to the other to make a simple, unified identity for the entire station. They noted that the station seemed to be an assemblage of parts rather than a cohesive piece. One Panel member suggested an alternative might be to express the three components as three distinct components that are knitted together with the connectors. They also thought the passerelle seemed a bit narrow and that the points of entry hadn't been addressed very well. They wanted to see a sense of upgrading or celebration at the primary entrances rather than just a blue strip announcing the entry. These entries should be considered within the overall architectural language.

The Panel noted that it was important how the station mixed with the surrounding context. One Panel member asked the applicant to consider how they would design the station if all the buildings weren't there. Some Panel members were concerned with what would happen to the station if the site next to the station built to the maximum height as a blank wall would be up against the station. It appeared to the Panel that the context had not been well considered and should be prior to the end of the design development.

The Panel thought the applicant should pick one structure system and take it through the whole station. They also thought that where the design gets weak is at the ends of the station and reads like two or more buildings.

A couple of Panel members mentioned that the moment when you come down the escalator to the bridge is an opportunity that hasn't been taken into consideration. It is a large space and perhaps could use an art piece or other elements.

Regarding sustainability, the Panel noted that there aren't any sustainability features expressed in the proposal. There were some concerns regarding how the passerelle would be ventilated being that it would get hot since it is mostly a glass box. As well they wanted to see some shading devices on all the glass.

- **Applicant's Response:** Mr. Shaw said they appreciated the Panel's comments and that they had brought some good ideas. He mentioned that some they have already thought about but might have discarded too hastily.

ENGINEERING SERVICES

In 2009, as part of the showcase project, Translink installed improvements adjacent to the station including widened crosswalks and improved sidewalks. Currently a pilot is underway to examine improved passenger queue management at street-level for the westbound 99 B-Line. As a part of this application, staff are recommending improved way-finding and long term queuing for both the SkyTrain and B-Line functions (See recommended conditions 1.4 and 1.8). As part of the long term queue management and transit shelter installation, interactions with the current garbage/recycling operations for the adjacent drug store and pedestrian movements will need to be examined.

The proposal contemplates upgrades to the connection to the Millennium Line platform which include footing encroachments into City corridors. Engineering supports the minimal encroachment into the affected air-space parcel.

The recommendations of Engineering Services are contained in the prior-to conditions noted in Appendix A attached to this report.

LANDSCAPE

Staff are seeking clarification regarding the safety of the south slope from the excavation required for the proposed construction. Clarification is needed by a geotechnical engineer's report to address mitigation measures to be incorporated as part of the construction proposal.

PROCESSING CENTRE - BUILDING

This Development Application submission has not been fully reviewed for compliance with the Building By-law. The applicant is responsible for ensuring that the design of the building meets the Building By-law requirements. The options available to assure Building By-law compliance at an early stage of development should be considered by the applicant in consultation with Processing Centre-Building staff.

To ensure that the project does not conflict in any substantial manner with the Building By-law, the designer should know and take into account, at the Development Application stage, the Building By-law requirements which may affect the building design and internal layout. These would generally include: spatial separation, fire separation, exiting, access for physically disabled persons, type of construction materials used, fire fighting access and energy utilization requirements.

NOTIFICATION

TransLink undertook their own notification process whereby they sought both in-person and online feedback through a series of stakeholder and public engagement sessions. This engagement exercise took place between December 2 and December 16, 2013 and the executive summary of this work has been provided in Appendix "E" of this report.

On July 25, 379 notification postcards were sent to neighbouring property owners advising them of the application, and offering additional information on the city's website.

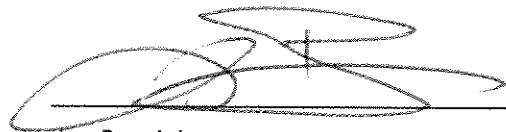
There has been no response to the notification to date.

DEVELOPMENT PERMIT STAFF COMMITTEE COMMENTS:

The Staff Committee has considered the approval sought by this application and concluded that with respect to the Zoning and Development By-law [and Official Development Plan *(if applicable)*] it requires decisions by both the Development Permit Board and the Director of Planning.


FOR: J. Greer
Chair, Development Permit Staff Committee


A. Molaro, Architect.AIBC
Assistant Director of Planning


Joe Bosnjak,
Project Coordinator

Project Facilitator: D. Autiero

DEVELOPMENT PERMIT STAFF COMMITTEE RECOMMENDATIONS

The following is a list of conditions that must also be met prior to issuance of the Development Permit.

A.1 Standard Conditions

- A.1.1 design development to locate, integrate and fully screen any emergency generator, exhaust or intake ventilation, electrical substation and gas meters in a manner that minimizes their visual and acoustic impacts on the building's open space and the Public Realm;
- A.1.2 an acoustical consultant's report shall be submitted which assesses noise impacts on the site and recommends noise mitigation measures in order to achieve noise criteria;
- A.1.3 written confirmation shall be submitted by the applicant that:
- the acoustical measures will be incorporated into the final design and construction, based on the consultant's recommendations;
 - adequate and effective acoustic separation will be provided between the commercial and residential portions of the building; and
 - mechanical (ventilators, generators, compactors and exhaust systems) will be designed and located to minimize the noise impact on the neighbourhood and to comply with Noise By-law #6555;
- A.1.4 any modifications to private lands will require the property owner to file a minor amendment to the original development permit approval;

Standard Landscape Conditions

- A.1.5 submission of fully illustrated Landscape Plans and section drawing to illustrate existing and proposed hard and soft landscaped areas, grading, drainage, lighting, and demonstrate special measures required for slope stabilization treatment to ensure safety, as recommended by the arborist and geotechnical engineer's report;

Note to Applicant: Plan details to illustrate location of existing vegetation and small trees to be removed, revegetation, cut and fill, and retaining wall structures within context of south slope Grandview Cut. Provide section drawing to illustrate treatment of south slope with overlay of proposed design over existing condition. Drawings must confirm that hydrology issues and slope stability issues have been addressed.

- A.1.6 design development of the public realm to provide three new large caliper deciduous trees on private property;

Note to Applicant: New trees to replace 3 existing trees proposed to be removed to facilitate the installation of Translink bus shelter along East Broadway. Trees may be clustered within a larger and shared tree root trench to optimize growing conditions within limited sidewalk space.

- A.1.7 submission of geotechnical engineer's report to evaluate slope stability at temporary laydown area, retaining wall and crash wall along the south slope, with special focus on impacts to trees at the top of the embankment (south slope), and to include hydrology assessment and recommendations;

A.2 Standard Engineering Conditions

- A.2.1 a canopy application is required for all portions of proposed canopies over City street;
- A.2.2 provision of a Construction Management Plan to the satisfaction of the General Manager of Engineering Services;

Note to Applicant: the Plan should include details on how existing station operations will function while the improvements are constructed. The Plan should also detail how disruption to Broadway will be minimized during the construction/placement of the Passerelle.

Note to Applicant: the Plan will include a single point-of-contact for all enquiries related to the proposed improvements.

- A.2.3 confirmation that the proposed number and configuration of fare gates at the East 10th Avenue entrance - (2 standard & 1 accessible) is adequate to accommodate future neighbourhood and transit ridership growth or that the design allows for more fare gates to be added easily;
- A.2.4 confirmation that the designed passenger capacity meets the anticipated demand on the circulation infrastructure (e.g. stairs, escalator & elevator) to and from the station platform and the concourse/passerelle over cut at Commercial station (Millennium Line);
- A.2.5 provision of details to demonstrate how circulation from the station platform to the concourse/passerelle can be improved if needed in the future;
- A.2.6 confirmation that the 4 trees in front of Shopper's Drug Mart are on private property and not City Street;

Note to Applicant: Trees on private property are subject to the City's Tree Bylaw, whereas trees on the city street require approval of the General Manager of Engineering.

- A.2.7 provision of a visual impact assessment for the trees in the Grandview Cut to show trees impacted temporarily by construction and permanently by structure in a format suitable for public to understand is required;
- A.2.8 consideration of modifications to improve pedestrian circulation;

A.3 Standard Licenses & Inspections (Environmental Protection Branch) Conditions:

- A.3.1 arrangements to be made the satisfaction of the Manager, Environmental Contamination Team, the General Manager of Engineering Services and the Director of Legal Services for a remediation agreement for the remediation of the site and any contaminants which have migrated off-site.

Note to Applicant: There will be no occupancy of any buildings or improvements on the site constructed pursuant to this development, until the proponent has obtained one of the following contaminated sites legal instruments, as applicable:

- Determination that the site is not a contaminated site; or
- Certificate of Compliance confirming the satisfactory remediation of the site to the applicable land use (Contaminated Sites Regulation - Commercial Land Use standards).

B.1 Standard Notes to Applicant

- B.1.1 The applicant is advised to note the comments of the Processing Centre-Building, Vancouver Coastal Health Authority and Fire and Rescue Services Departments contained in the Staff Committee Report dated August 13, 2014. Further, confirmation that these comments have been acknowledged and understood, is required to be submitted in writing as part of the "prior-to" response.
- B.1.2 It should be noted that if conditions 1.0 and 2.0 have not been complied with on or before **February 1, 2015**, this Development Application shall be deemed to be refused, unless the date for compliance is first extended by the Director of Planning.
- B.1.3 This approval is subject to any change in the Official Development Plan and the Zoning and Development Bylaw or other regulations affecting the development that occurs before the permit is issuable. No permit that contravenes the bylaw or regulations can be issued.
- B.1.4 Revised drawings will not be accepted unless they fulfill all conditions noted above. Further, written explanation describing point-by-point how conditions have been met, must accompany revised drawings. An appointment should be made with the Project Facilitator when the revised drawings are ready for submission.
- B.1.5 A new development application will be required for any significant changes other than those required by the above-noted conditions.
- B.1.6 All Building Permit applications submitted on or after January 1, 2014, will be reviewed for compliance to the 2014 Vancouver Building By-law. Submission of most Building Permit applications now requires an appointment. When your Building Permit application is ready, please phone 604.873.7611 to book an appointment for an application intake with the Project Coordinator who will manage your application. Only full and complete applications will be accepted. If you need advice in preparing your application, you may book an enquiry appointment (604.873.7611), or walk into our Consolidated Service Centre, 1st floor, West Annex.

B.2 Conditions of Development Permit:

- B.2.1 All approved off-street vehicle parking, loading and unloading spaces, and bicycle parking spaces shall be provided in accordance with the relevant requirements of the Parking By-law prior to the issuance of any required occupancy permit or any use or occupancy of the proposed development not requiring an occupancy permit and thereafter permanently maintained in good condition.
 - B.2.2 All landscaping and treatment of the open portions of the site shall be completed in accordance with the approved drawings prior to the issuance of any required occupancy permit or any use or occupancy of the proposed development not requiring an occupancy permit and thereafter permanently maintained in good condition.
 - B.2.3 Any phasing of the development, other than that specifically approved, that results in an interruption of continuous construction to completion of the development, will require application to amend the development to determine the interim treatment of the incomplete portions of the site to ensure that the phased development functions are as set out in the approved plans, all to the satisfaction of the Director of Planning.
 - B.2.4 The issuance of this permit does not warrant compliance with the relevant provisions of the Provincial Health and Community Care and Assisted Living Acts. The owner is responsible for
-

obtaining any approvals required under the Health Acts. For more information on required approvals and how to obtain these, please contact Vancouver Coastal Health at 604-675-3800 or visit their offices located on the 12th floor of 601 West Broadway. Should compliance with the health Acts necessitate changes to this permit and/or approved plans, the owner is responsible for obtaining approval for the changes prior to commencement of any work under this permit. Additional fees may be required to change the plans.

- B.2.5 "TransLink to provide information and contact lines that allows for members of the surrounding community to contact TransLink regarding possible concerns during construction. This contact line is to be operational during times of constructions and regular business hours."
 - B.2.6 This site is affected by a Development Cost Levy By-law and levies will be required to be paid prior to issuance of Building Permits.
-

COMMERCIAL BROADWAY STATION UPGRADE

COMMERCIAL DRIVE AND EAST BROADWAY

VANCOUVER, BC

SHEET No.	DAP DRAWING LIST	SHEET NAME
A001	DAP DRAWING LIST	
A002	CONCEPT PLAN	CONCEPT PLAN
A003	OVERALL SITE PLAN	OVERALL SITE PLAN
A004	ROOF PLAN - SOUTH AREA	ROOF PLAN - SOUTH AREA
A005	ROOF PLAN - NORTH AREA	ROOF PLAN - NORTH AREA
A006	BROADWAY STN CONCOURSE & PLATFORM OVERALL PLAN	BROADWAY STN CONCOURSE & PLATFORM OVERALL PLAN
A007	PASSERELLE LEVEL OVERALL PLAN	PASSERELLE LEVEL OVERALL PLAN
A008	OVERALL ELEVATIONS - BROADWAY STN	OVERALL ELEVATIONS - BROADWAY STN
A009	BROADWAY EAST ELEVATION	BROADWAY EAST ELEVATION
A010	BROADWAY NORTH AND SOUTH ELEVATIONS	BROADWAY NORTH AND SOUTH ELEVATIONS
A011	OVERALL PASSERELLE ELEVATIONS	OVERALL PASSERELLE ELEVATIONS
A012	PASSERELLE WEST ELEVATION	PASSERELLE WEST ELEVATION
A013	OVERALL LONGITUDINAL SECTION - BROADWAY STN	OVERALL LONGITUDINAL SECTION - BROADWAY STN
A014	BROADWAY LONGITUDINAL SECTION	BROADWAY LONGITUDINAL SECTION
A015	BROADWAY CROSS SECTIONS 1	BROADWAY CROSS SECTIONS 1
A016	BROADWAY CROSS SECTIONS 2	BROADWAY CROSS SECTIONS 2
A017	SECTIONS THROUGH MEZZANINE	SECTIONS THROUGH MEZZANINE
A018	CROSS SECTION THROUGH PASSERELLE 1	CROSS SECTION THROUGH PASSERELLE 1
A019	CROSS SECTION THROUGH PASSERELLE 2	CROSS SECTION THROUGH PASSERELLE 2
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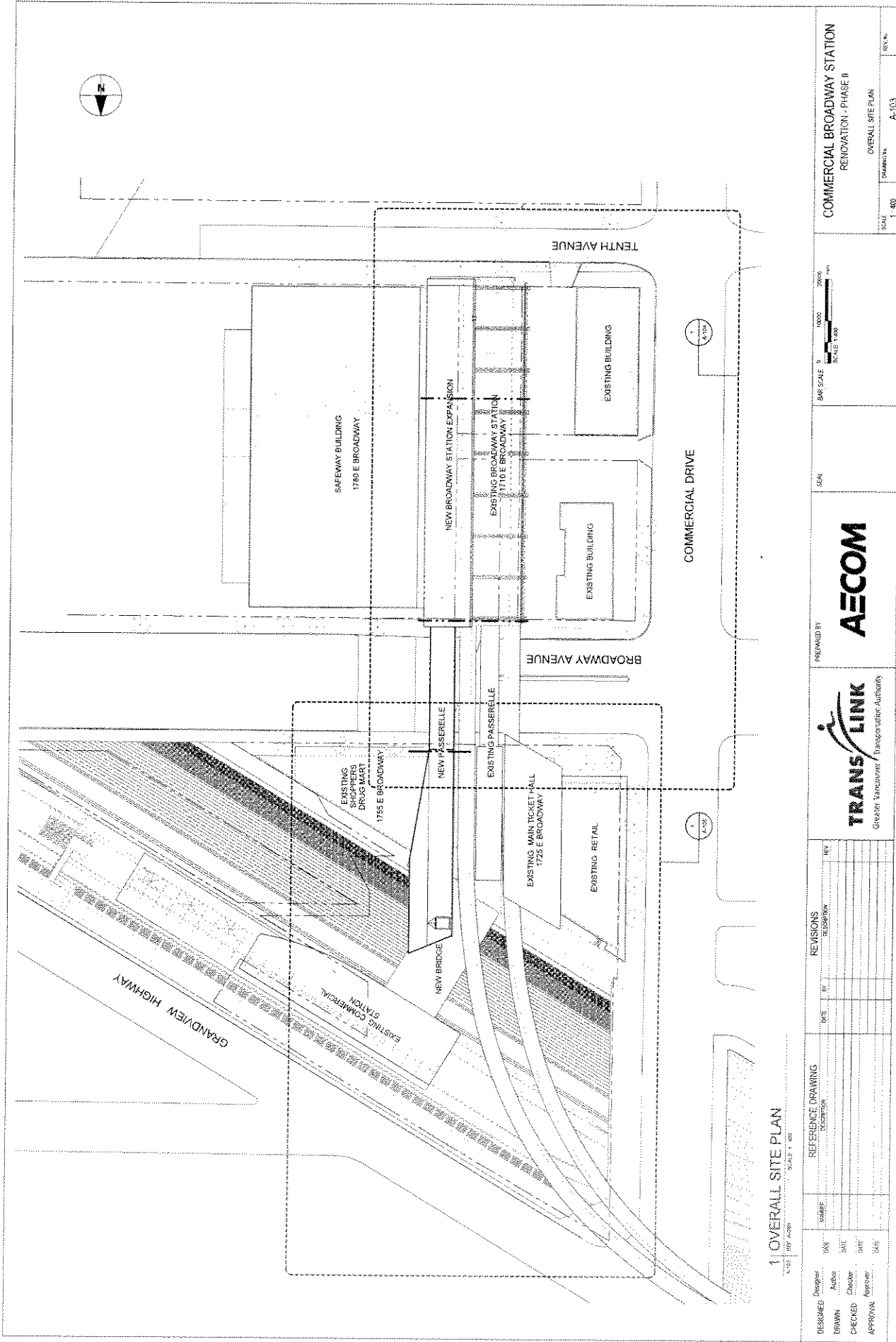
STATISTICS (BROADWAY STATION):

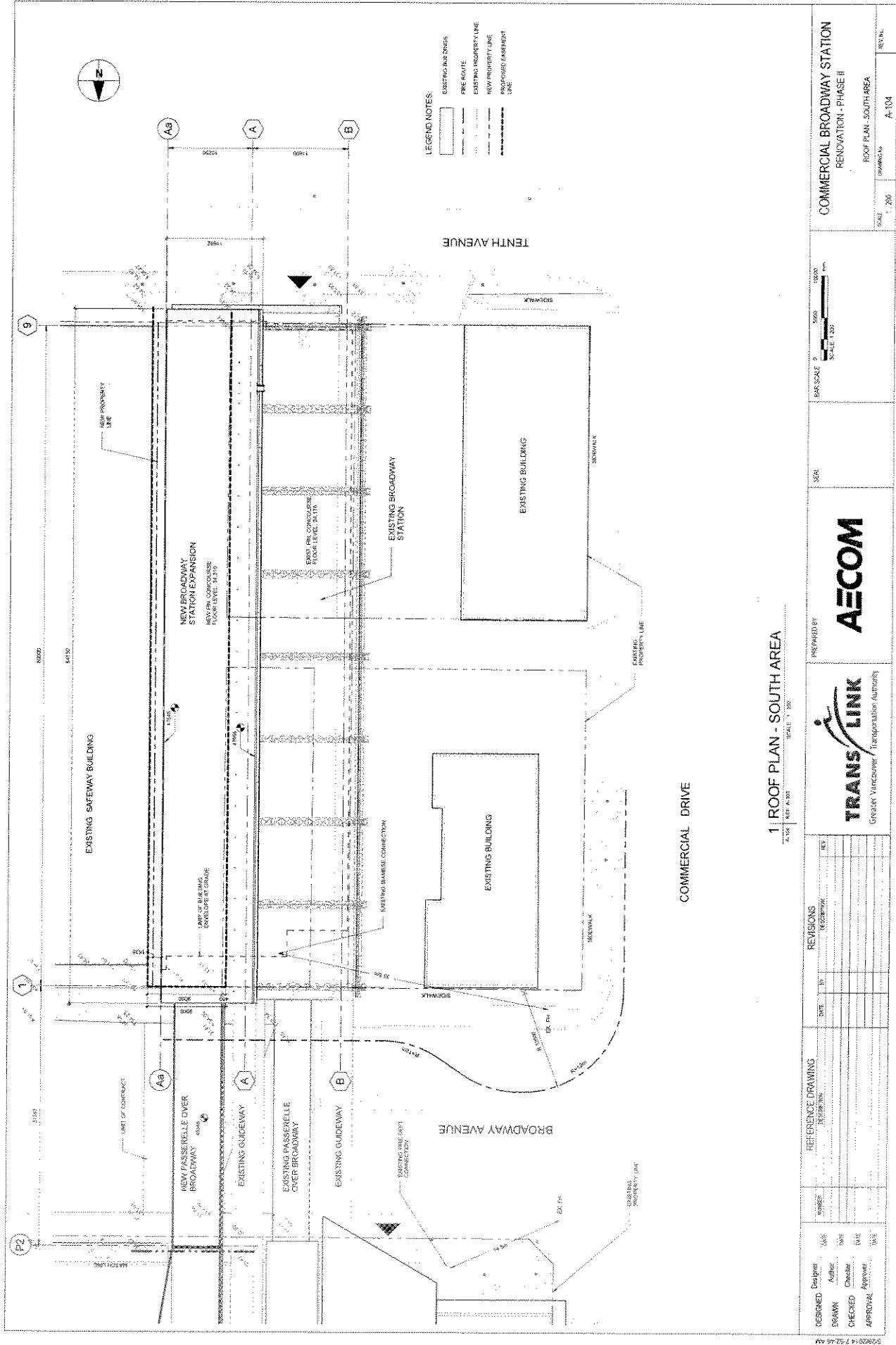
	REQUIRED	PROPOSED
ZONING DISTRICT		
TOTAL SITE AREA	120,018 sq ft	120,167 sq ft
TOTAL FLOOR AREA		202,100 sq ft
SITE COVERAGE		
BUILDING HEIGHT		Height of street wall should not exceed 17.25 m; no stories taller than 17.25 m; no stories taller than 17.25 m in order to reflect the neighborhood character.
REQUIREMENT FOR NON-INSURANCE SETBACK	3.75 m	6.25 m
REQUIREMENT FOR NON-INSURANCE SETBACK	0 m	0 m
REQUIREMENT FOR NON-INSURANCE SETBACK	9.1 m	9.1 m
REQUIREMENT FOR NON-INSURANCE SETBACK	3.75 m	3.75 m
REQUIREMENT FOR NON-INSURANCE SETBACK		7.25 m (height)

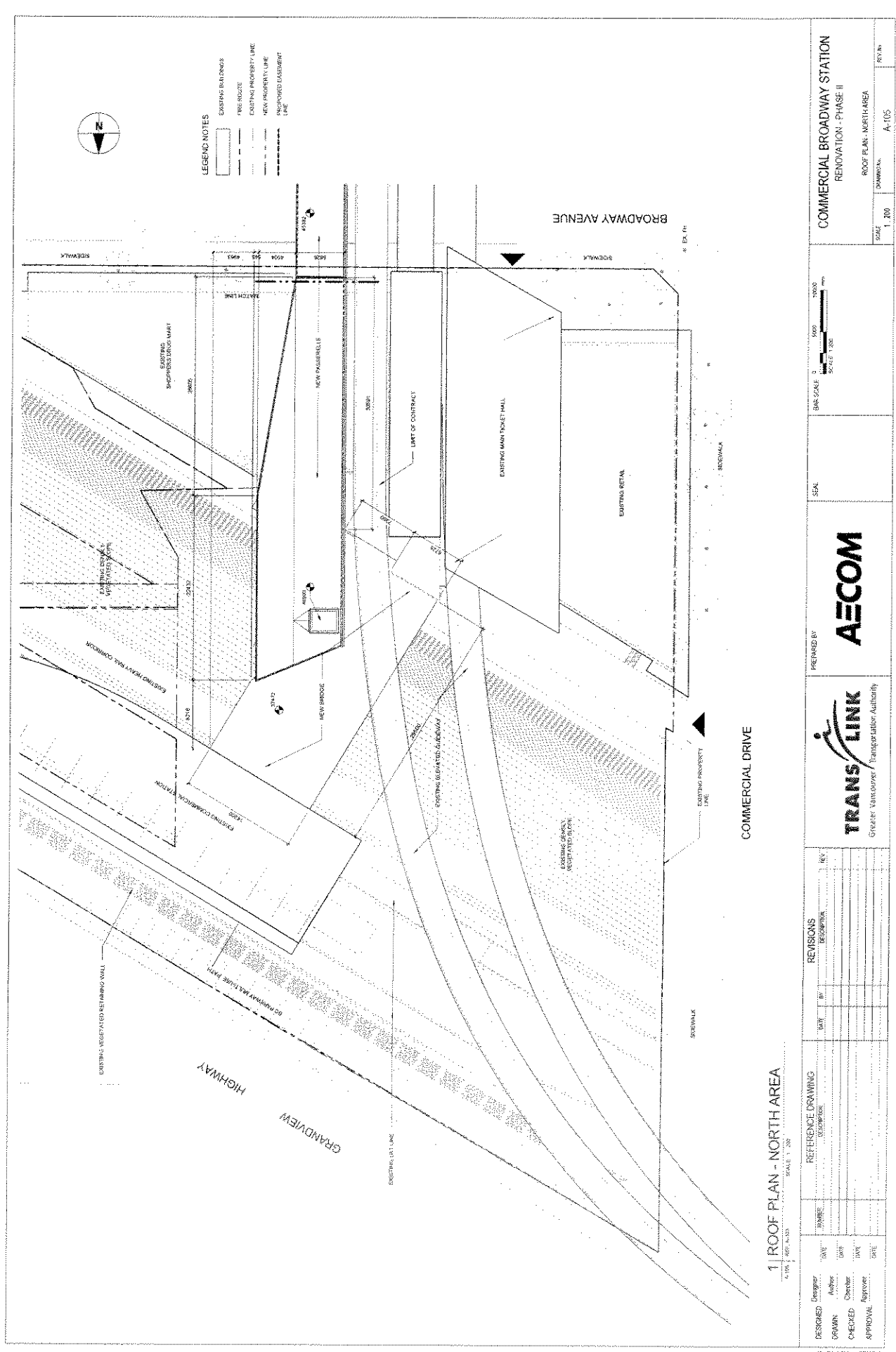
BREAK DOWN AREA CALCULATION:

AREA	AREA
NEW BROADWAY CONCOURSE AREA	605 sq ft
NEW BROADWAY PLATFORM AREA	743 sq ft
NEW PASSERELLE AREA	533 sq ft
NEW GRANVILLE CUT BRIDGE	230 sq ft
EXISTING BROADWAY CONCOURSE	1,050 sq ft
EXISTING BROADWAY PLATFORM	750 sq ft
EXISTING PASSERELLE	280 sq ft
EXISTING GRANVILLE CUT BRIDGE	196 sq ft
EXISTING TICKET HALL	802 sq ft
EXISTING TRANSFER STATION PLATFORM AND CONCOURSE	656 sq ft

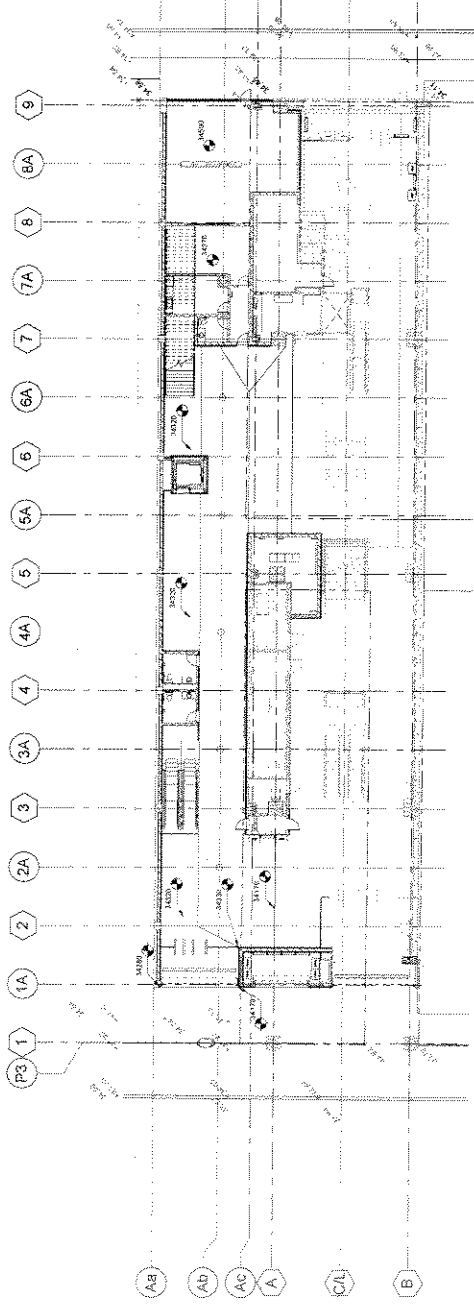
DESIGNED		REFERENCE DRAWING		REVISIONS		PREPARED BY		SEAL	BAR SCALE	COMMERCIAL BROADWAY STATION RENOVATION - PHASE II CONTEXT PLAN SCALE: 1"=50'-0" REV. NO. A-102
DATE	AUTHOR	ISSUED BY	DATE	NO.	DATE	BY	DESCRIPTION			







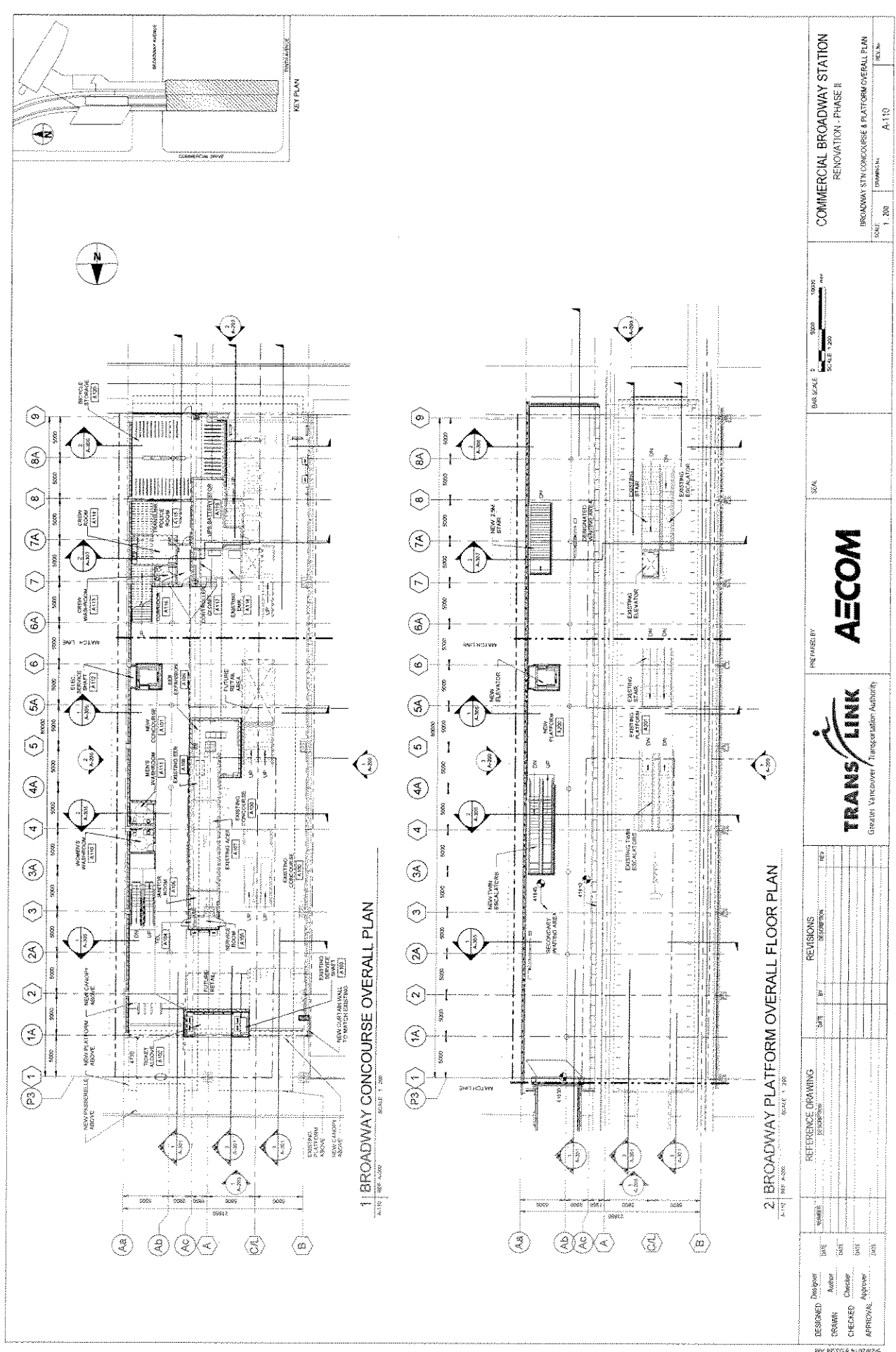
DESIGNED Designer Date Drawn Checked Approval										REFERENCE DRAWING Drawing Date Drawn Checked Approval										REVISIONS Rev By Description Rev										TRANS LINK Greater Vancouver Transportation Authority										PREPARED BY AECOM										SEAL										BAC SCALE 0 5000 10000 SCALE 1:200										COMMERCIAL BROADWAY STATION RENOVATION - PHASE II ROOF PLAN - NORTH AREA SCALE 1:200 DRAWING No. A-105 REV No.									
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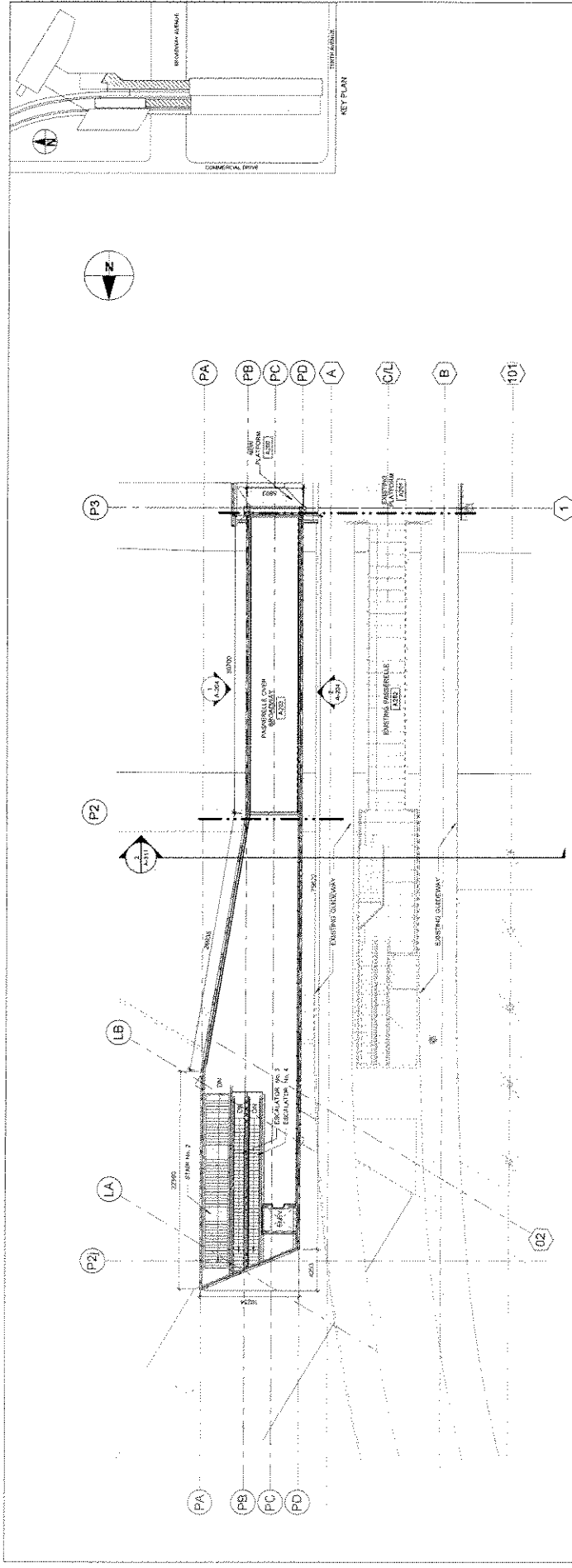


1: BROADWAY STN GRADE PLAN

4,000 REF. (200) SCALE: 1" = 50'

DESIGNED DATE: _____ BY: _____		DRAWN DATE: _____ BY: _____		CHECKED DATE: _____ BY: _____		APPROVED DATE: _____ BY: _____		 TRANS LINK Greater Vancouver Transportation Authority		PREPARED BY AECOM		SCALE 1" = 200'		COMMERCIAL BROADWAY STATION RENOVATION - PHASE II BROADWAY STN GRADE PLAN DRAWING NO. A-106 REV. NO.	
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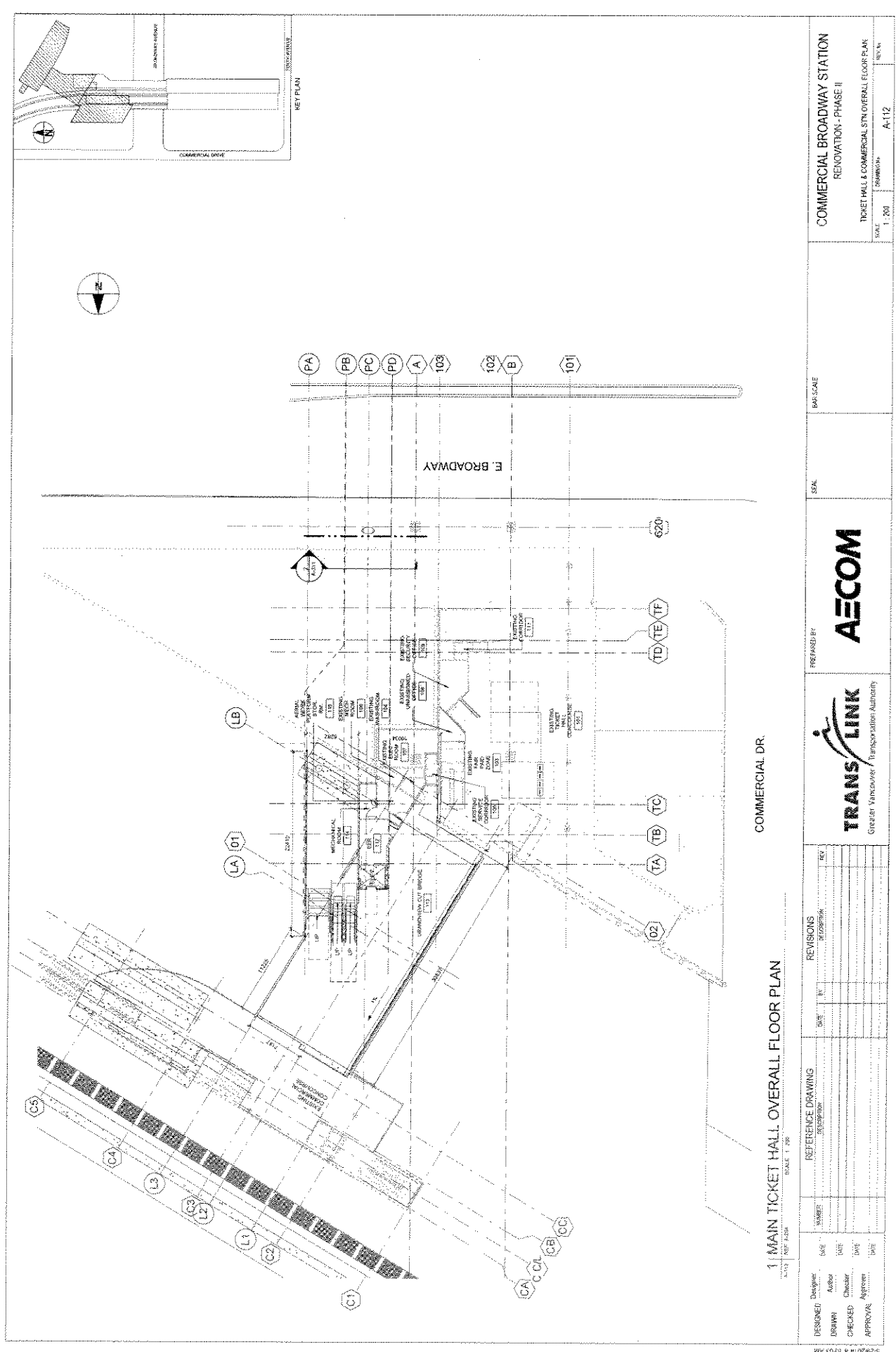




1 PASSERELLE LEVEL OVERALL PLAN

A-111 SEP 2004 SCALE 1:200

DESIGNED DRAWN CHECKED APPROVAL	DATE DATE DATE DATE	REVISIONS NO. DESCRIPTION 1 2 3 4 5	 Greater Vancouver Transportation Authority	PREPARED BY AECOM	SEAL	BAR SCALE	COMMERCIAL BROADWAY STATION RENOVATION - PHASE II PASSERELLE LEVEL OVERALL PLAN	
							SCALE 1:200	SHEET No. A-111

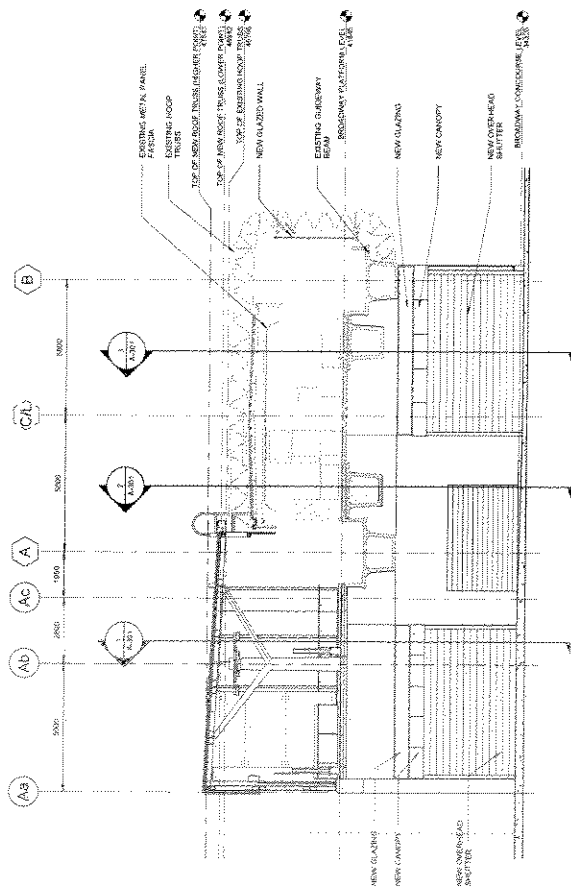


1 MAIN TICKET HALL OVERALL FLOOR PLAN

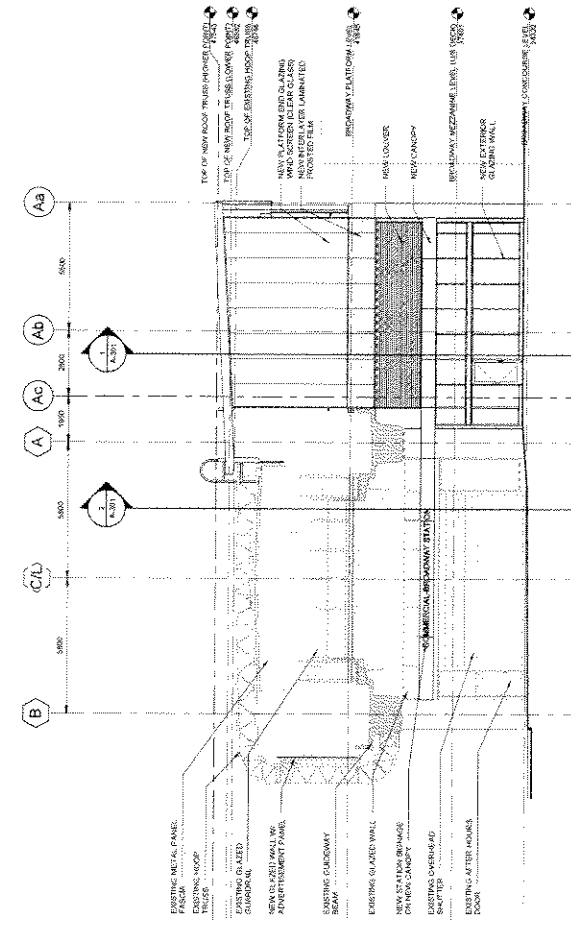
COMMERCIAL DR.

DESIGNED DRAWN CHECKED APPROVAL	DATE DATE DATE DATE	NAME NAME NAME NAME	REFERENCE DRAWING REFERENCE DRAWING REFERENCE DRAWING REFERENCE DRAWING	REVISIONS REVISIONS REVISIONS REVISIONS	REV REV REV REV	PREPARED BY PREPARED BY PREPARED BY PREPARED BY	SEAL SEAL SEAL SEAL	BAR SCALE BAR SCALE BAR SCALE BAR SCALE	COMMERCIAL BROADWAY STATION RENOVATION - PHASE II TICKET HALL & COMMERCIAL STN OVERALL FLOOR PLAN	
									SCALE 1:200	SHEET NO. A-112



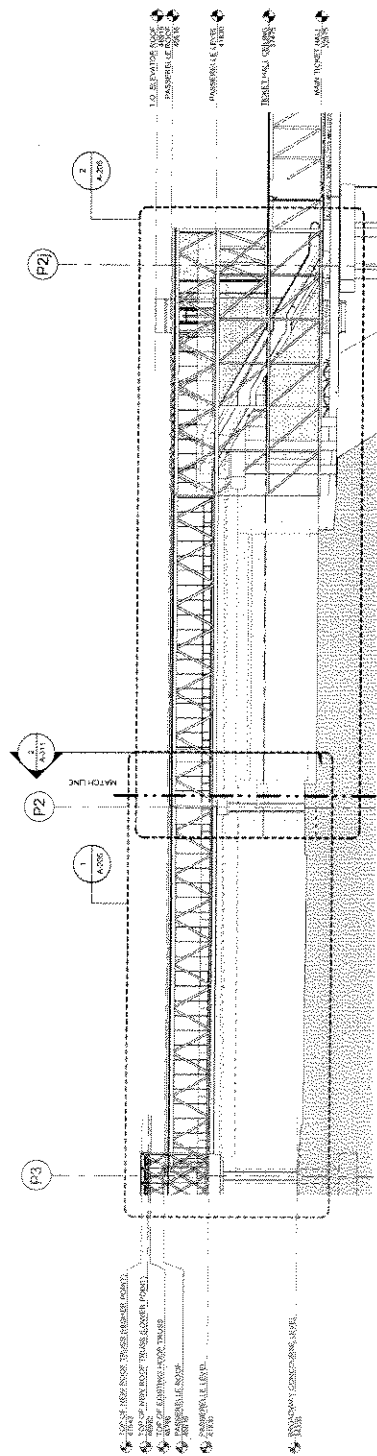


1 | BROADWAY NORTH ELEVATION
A-203 REF A-110 SCALE 1/8"

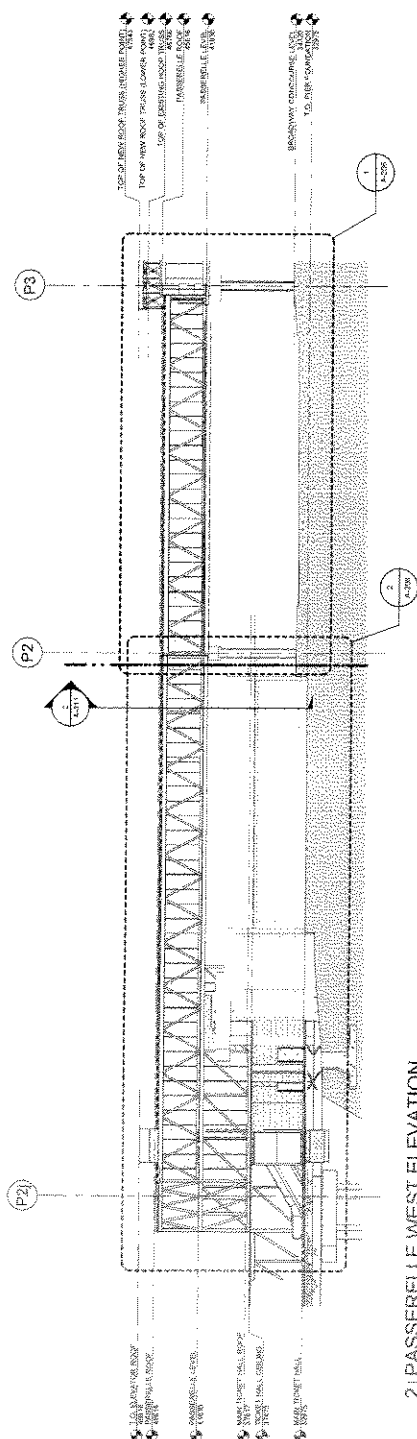


2 | BROADWAY SOUTH ELEVATION
A-203 REF A-110 SCALE 1/8"

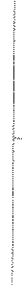
DESIGNED		DATE	REFERENCE DRAWING		REVISIONS		KEY	
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CHECKED		DATE	A-203		A-203		A-203	
APPROVAL		DATE	A-203		A-203		A-203	
DESIGNED BY		AECOM		AECOM		AECOM		AECOM
PROJECT NAME		COMMERCIAL BROADWAY STATION		RENOVATION - PHASE II		BROADWAY NORTH AND SOUTH ELEVATIONS		A-203
SCALE		1/8"		1/8"		1/8"		1/8"
SHEET NO.		A-203		A-203		A-203		A-203

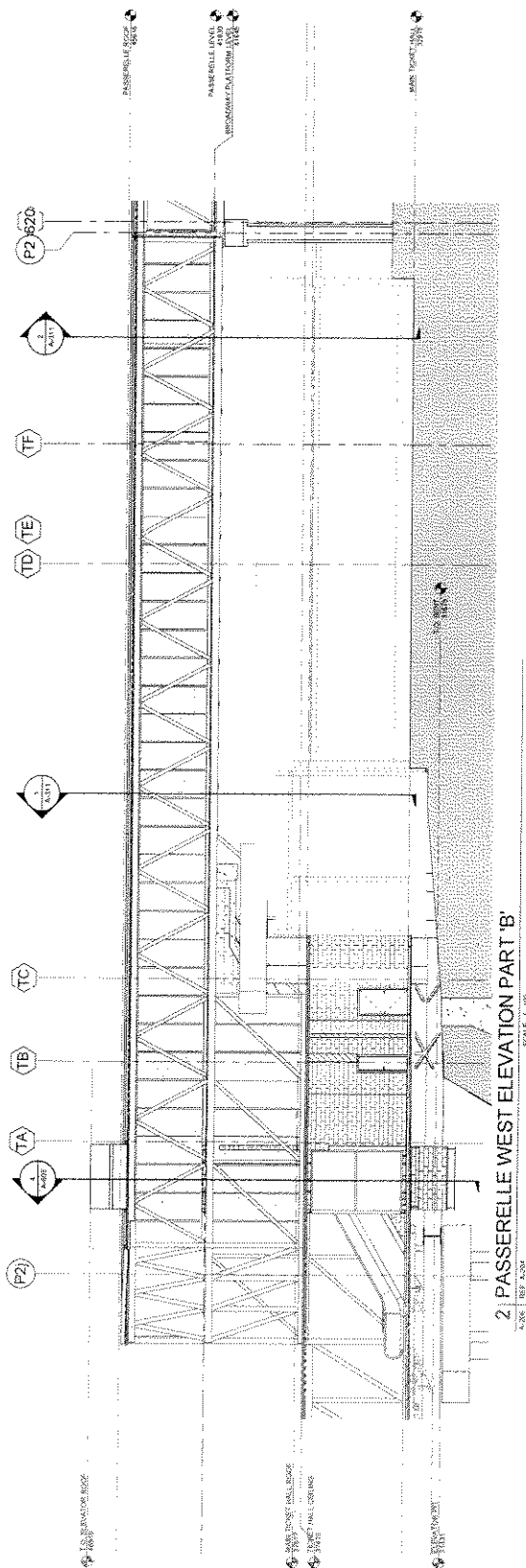
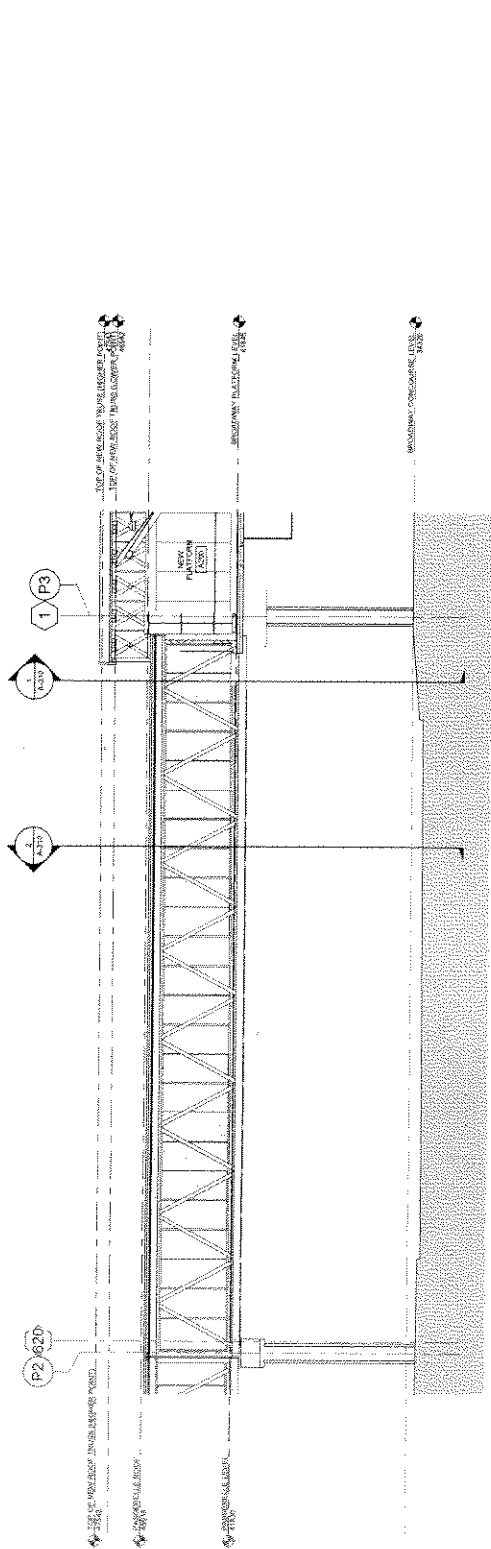



1 PASSERELLE EAST ELEVATION

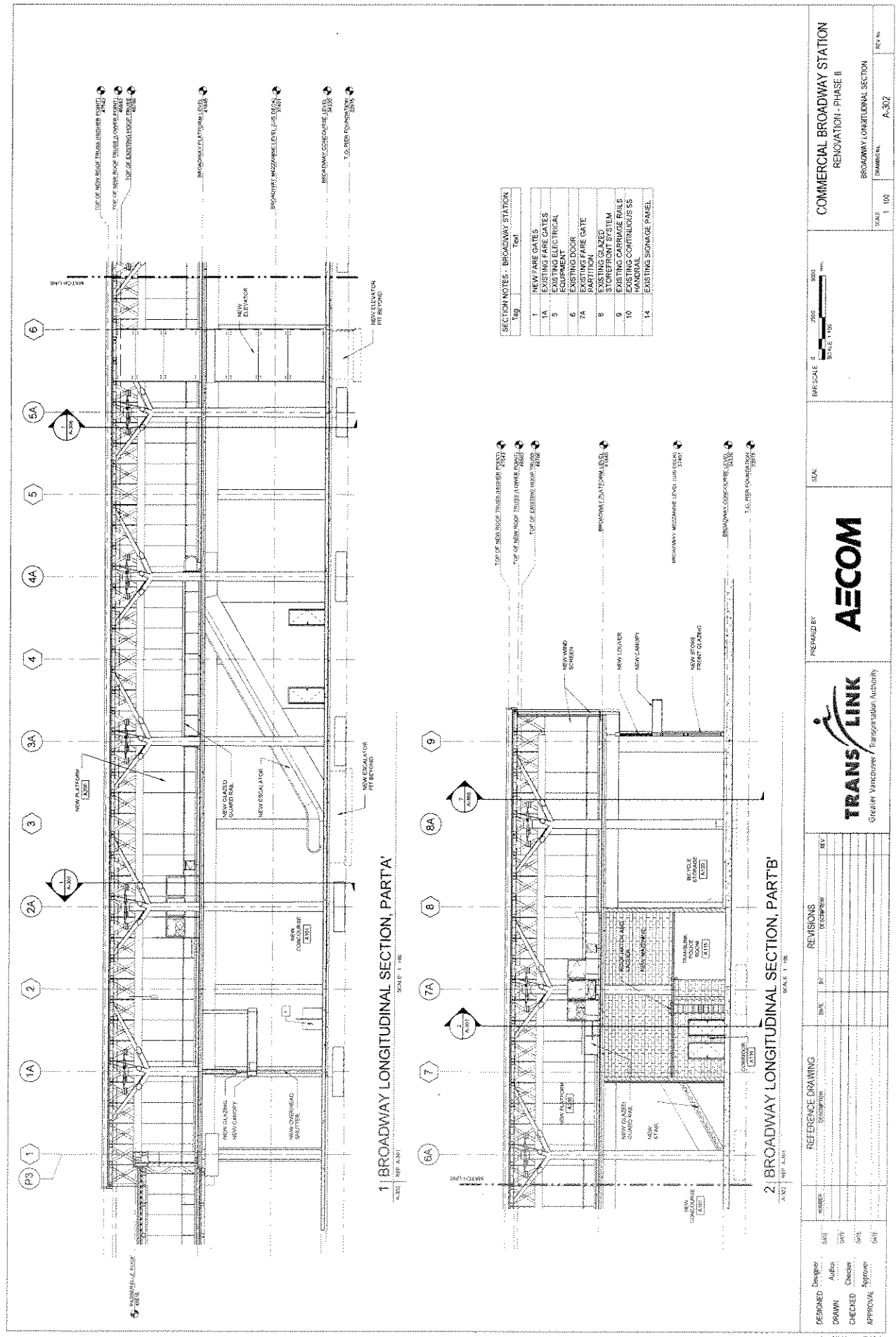


2 | PASSERELLE WEST ELEVATION

 TRANS LINK Greater Vancouver Transportation Authority	PREPARED BY:		BAS SCALE		SHEET		OVERALL PASSENGER ELEVATIONS		SCALE: 1" = 200'		REV. No. A-70/4	
	REFERENCE DRAWING		REVISIONS		DATE		BY		NO.		COMMENCE DATE	
DESIGNED	DATE											
DRAWN	DATE											
CHECKED	DATE											
APPROVAL	DATE											



DESIGNED		Designer		DATE		DRAWN		Author		DATE		CHECKED		Checker		DATE		APPROVAL		Approver		DATE	
REFERENCE DRAWING		NAME		NUMBER		DATE		REVISIONS		REASON		DATE		BY		BY		BY		BY		BY	
 TRANS LINK Greater Vancouver Transportation Authority		 AECOM		PREPARED BY		SEAL		BAS SCALE		COMMERCIAL BROADWAY STATION RENOVATION - PHASE II		SCALE 1" = 160' COMMERCIAL		PASSERELLE WEST ELEVATION		80' x 4"		A-205		80' x 4"		80' x 4"	



DESIGNED: [Signature]

DRAWN: [Signature]

CHECKED: [Signature]

APPROVAL: [Signature]

REFERENCE DRAWING

NO. 100

REV. 100

TRANS LINK

Greater Vancouver Transportation Authority

PREPARED BY: AECOM

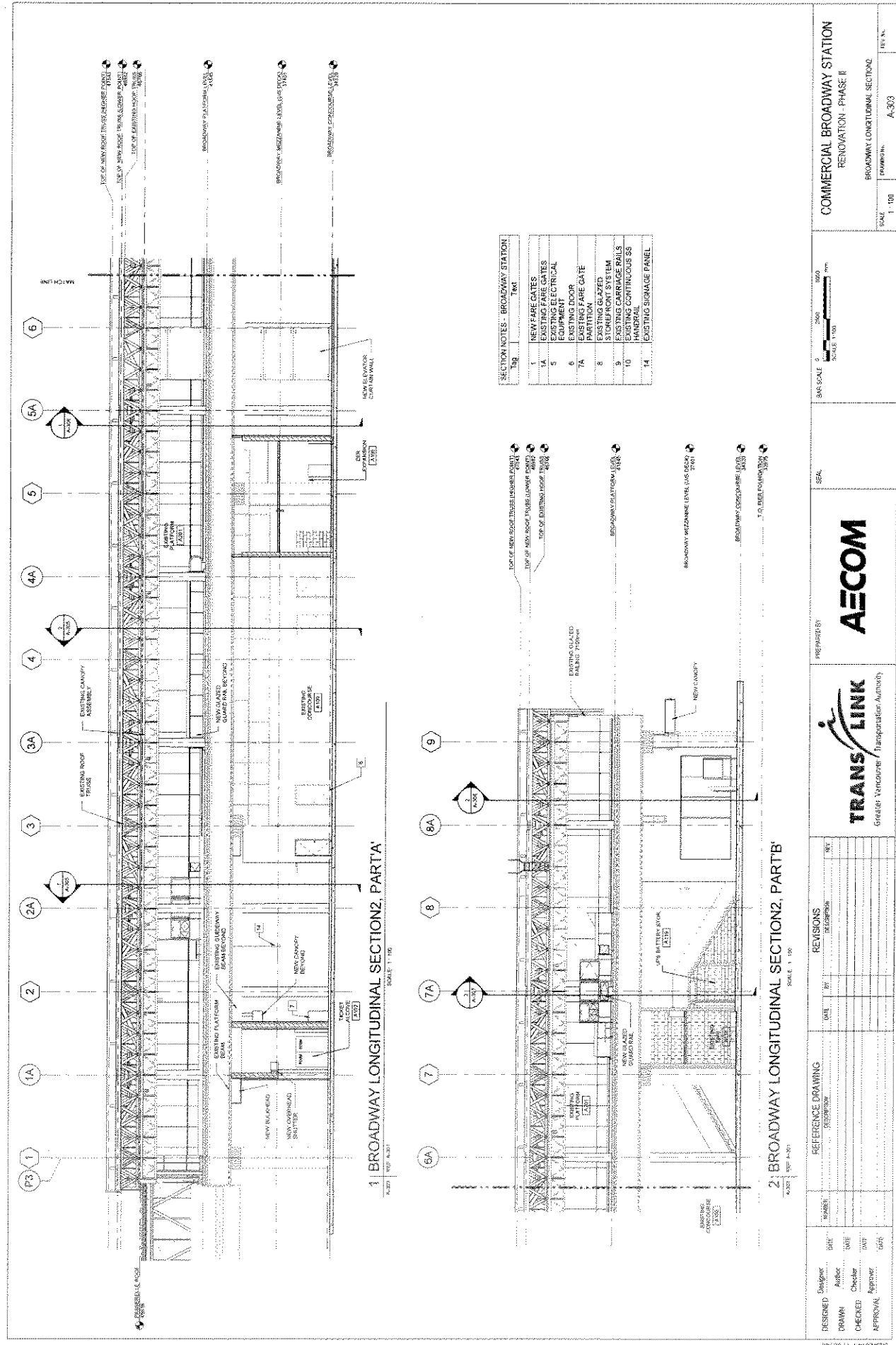
COMMERCIAL BROADWAY STATION

RENOVATION - PHASE II

BROADWAY LONGITUDINAL SECTION

SCALE: 1/8" = 1'-0"

DATE: 10/20/14



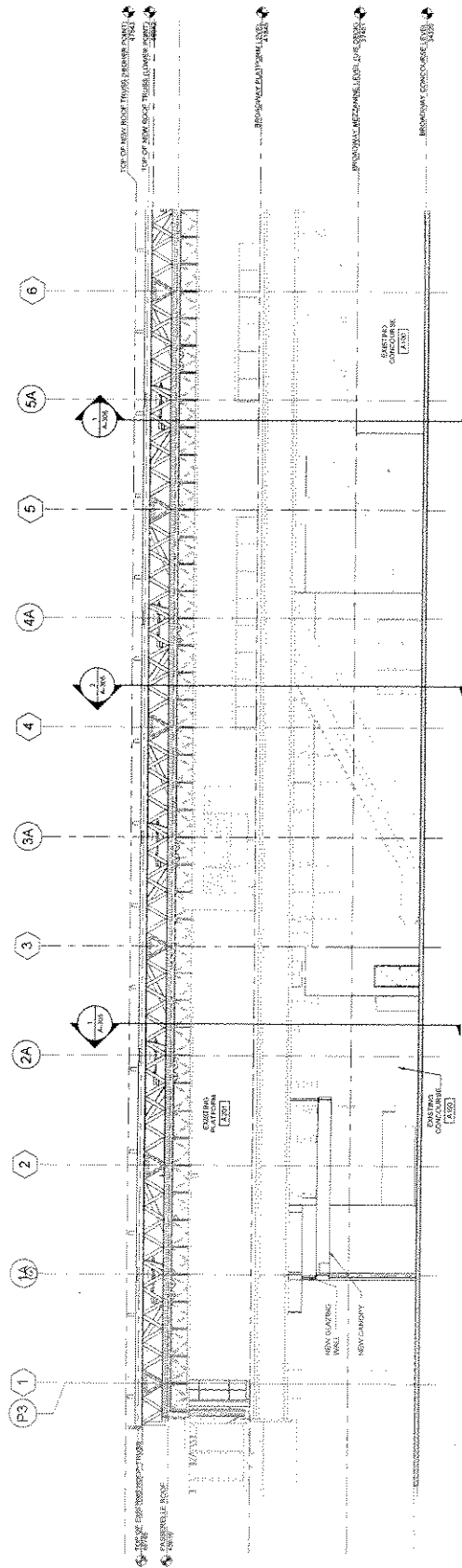
COMMERCIAL BROADWAY STATION
RENOVATION - PHASE II
BROADWAY LONGITUDINAL SECTION 2
SCALE: 1" = 10'
SHEET NO. A-303

BAR SCALE: 0 2500 5000
SCALE: 1" = 10'

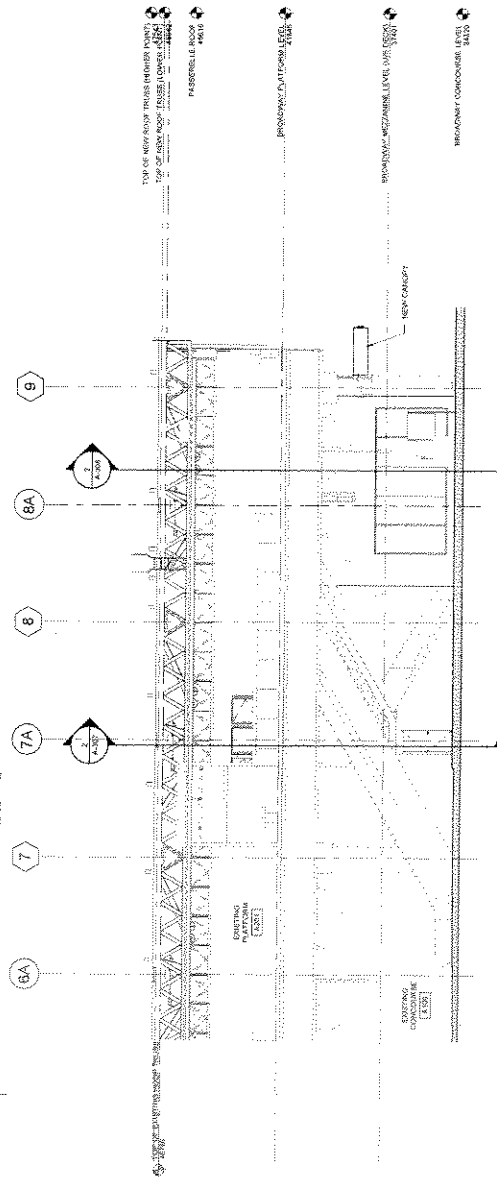
PREPARED BY
AECOM

TRANS LINK
Greater Vancouver Transportation Authority

DESIGNED	DRAWN	CHECKED	APPROVED	DATE	DATE	DATE	DATE
DESIGNER	DRAWN	CHECKER	APPROVER	DATE	DATE	DATE	DATE
REVISIONS	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE

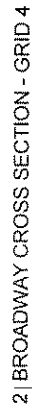


1 | BROADWAY LONGITUDINAL SECTION 3, PART A'



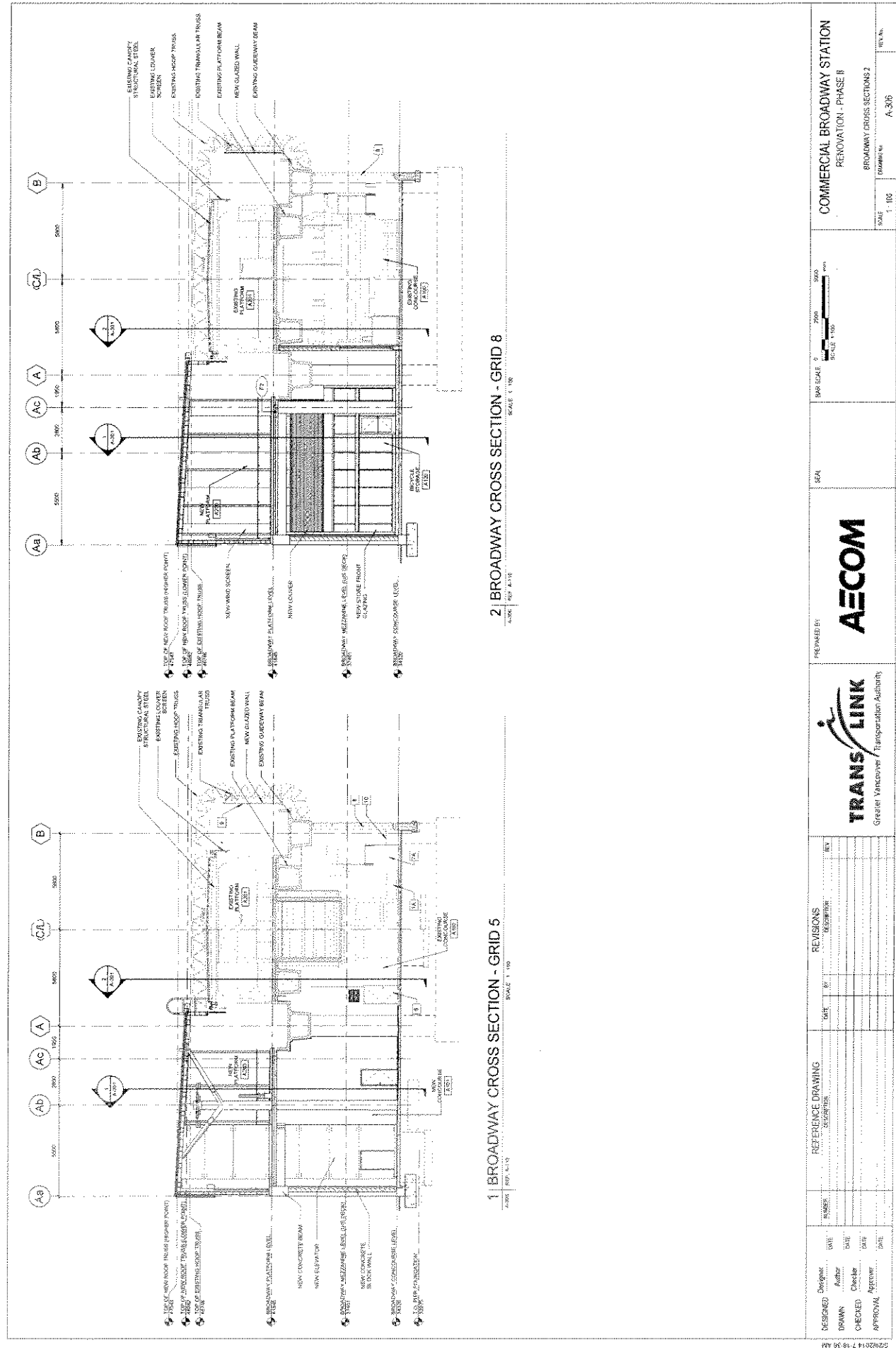
2 | BROADWAY LONGITUDINAL SECTION 3. PART 'B'

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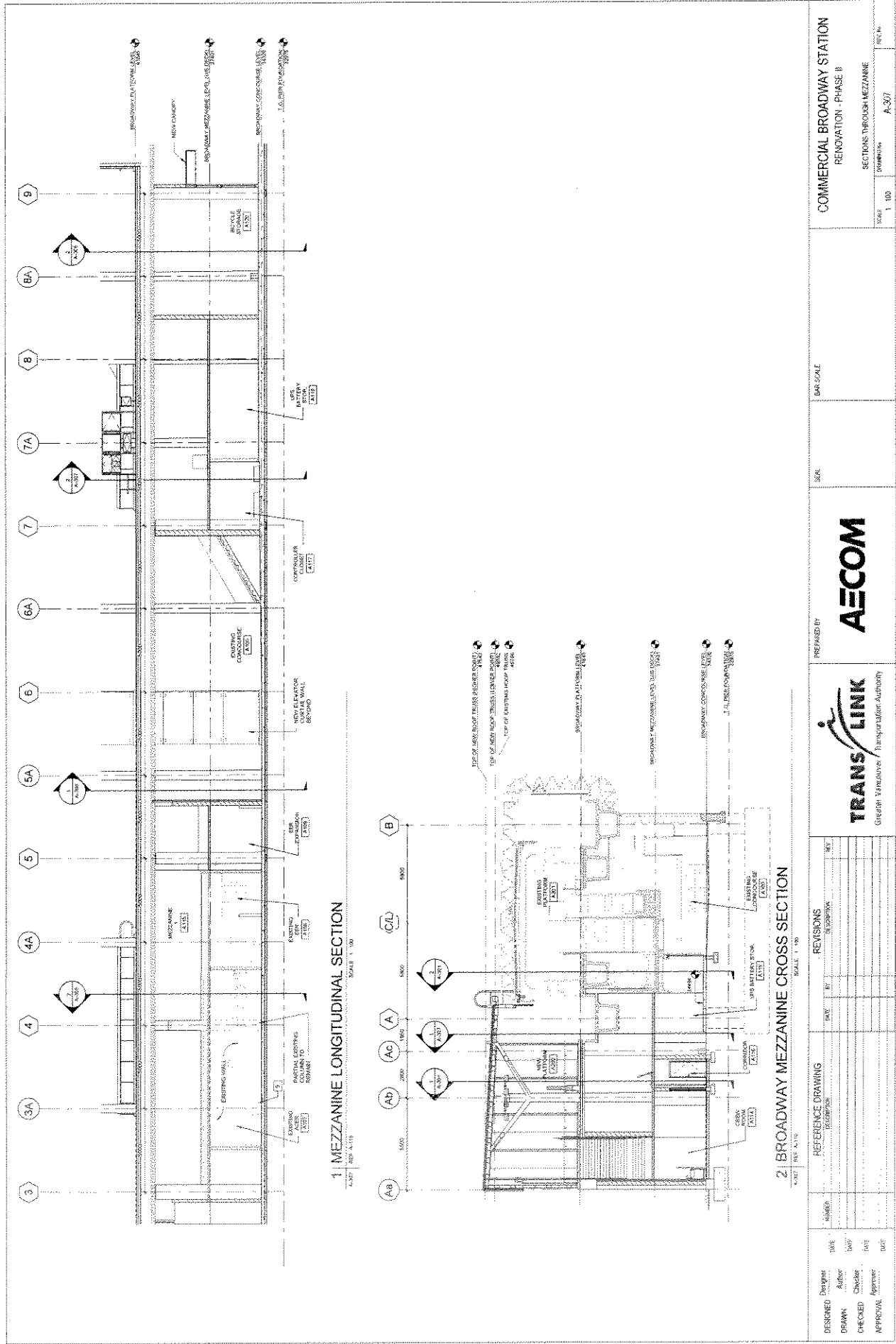


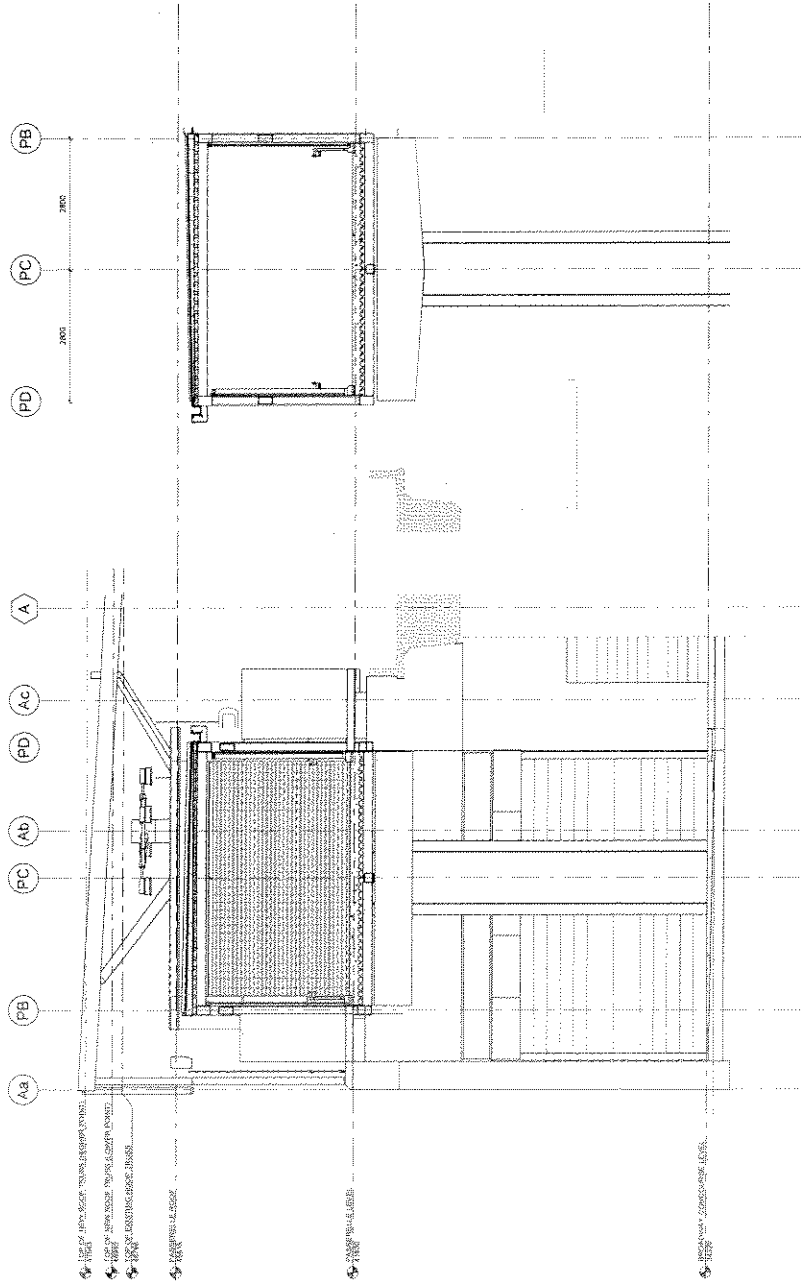
2 | BROADWAY CROSS SECTION - GRID 4

DESIGNED		DATE	REVISIONS		<div>TRANS LINK Greater Vancouver Transportation Authority</div> <div>PREPARED BY <div>AECOM</div></div> <div>SEA</div> <div><div>BAR SCALE</div><div>0 2000 5000</div><div>SCALE 1/50</div><div>0 2000 5000</div><div>SCALE 1/50</div></div> <div>COMMERCIAL BOARDWALK STATION RENOVATION - PHASE II</div> <div>ROADWAY CROSS SECTIONS 1</div> <div>SCALE 1" = 100'</div> <div>1" = 100'</div> <div>REVISIONS A, 30%</div>
DRAWN		DATE	DATE	DATE	
CHECKED		DATE	DATE	DATE	
APPROVAL		DATE	DATE	DATE	
DESIGNED		DATE	DATE	DATE	



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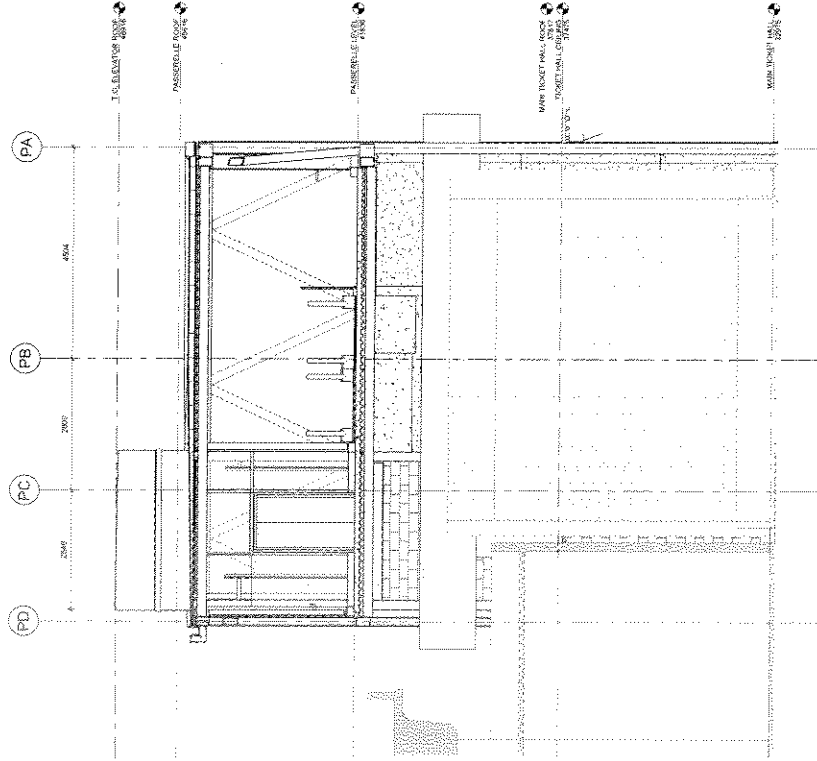
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4.200 REF 4.118 SCALE 1:50

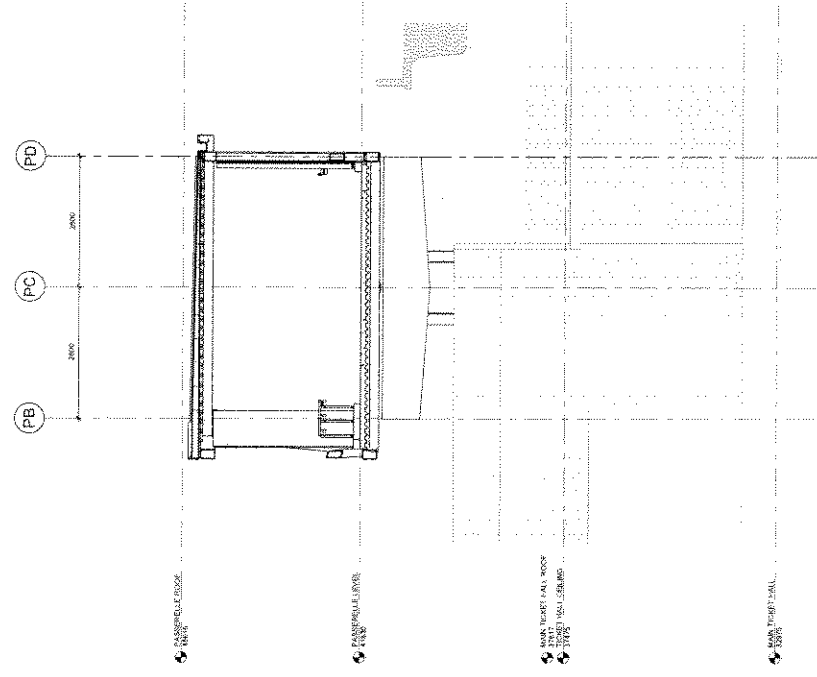
1 | PASSERELLE CROSS SECTION 1

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DESIGNED: Designer		DATE: 10/10/2019		DRAWN: Author		DATE: 10/10/2019		CHECKED: Checker		DATE: 10/10/2019		APPROVAL: Approver		DATE: 10/10/2019	
REFERENCE DRAWING		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019	
REVISIONS		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019	
PREPARED BY		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019	
AECOM		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019	
TRANS LINK		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019	
Greater Vancouver Transportation Authority		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019	
COMMERCIAL BROADWAY STATION		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019	
RENOVATION - PHASE II		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019	
CROSS SECTION THROUGH PASSERELLE 1		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019	
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A-310		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019		DATE: 10/10/2019	



1 PASSERELLE CROSS SECTION 4
SCALE 1/50
REF A-111



2 PASSERELLE CROSS SECTION 5
SCALE 1/50
REF A-111

DESIGNED DATE DRAWN DATE CHECKED DATE APPROVED DATE				REFERENCE DRAWING DRAWN DATE CHECKED DATE APPROVED DATE				REVISIONS NO. DATE BY REVISION				TRANS LINK Greater Vancouver Transportation Authority				AECOM				PREPARED BY SEAL BAR SCALE				COMMERCIAL BROADWAY STATION RENOVATION - PHASE II CROSS SECTION THROUGH PASSERELLE 2 SCALE 1/50 DRAWING A-311 REV. NO.			
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Design Objectives

Commercial-Broadway Station upgrades are primarily intended to ensure that passenger circulation and capacity are increased to meet future ridership in a streamlined and logical fashion. The project seeks cohesion with existing station legacy and system elements: the hoop trusses, structural tree forms and the continued use of the bridge truss aesthetic.

AECOM's design objective is to create a coherent architectural image for the entire station complex that will provide a strong presence for this key interchange station within the local context. Together with improved pedestrian spaces, access and linkages, a well-integrated facility will evoke a strong sense of place within the emerging transit village context of the neighborhood.

Towards that end, several design objectives have been identified as important considerations:

1. Optimize current and projected passenger circulation, enhance ease and comfort of interchange and overall Level of service (LOS) throughout the station complex.
2. Improve pedestrian access, wayfinding, lighting, and advertising methodologies.
3. Enhance station integration into the local urban environment.
4. Upgrade and unify the disparate building elements into a coherent single station identity through appropriate architectural massing, material selection and quality of detail.
5. Streamline bus circulation patterns to minimize traffic disruption around the station precinct.
6. Optimize phasing and constructibility options due to scarcity of available land and uninterrupted station operations.

Commercial–Broadway Station Phase 2 Upgrades

Stakeholder and Public Engagement Report:
Conceptual Design Round
December 2 to 16, 2013

The public engagement was designed to gather input on the Commercial–Broadway Station Phase 2 Upgrades. This consultation is not market research or a statistically-based analysis. The information presented reflects what was heard during engagement activities from December 2 to 16, 2013. TransLink will consider all input received during this period as they continue to refine the Commercial–Broadway Station design.

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1. Executive Summary

Overview

Commercial–Broadway Station is the busiest station on the transit network and lacks the capacity to accommodate current ridership. Overcrowding is expected to increase as station ridership increases, particularly with the opening of the Evergreen Line in 2016. The upcoming Phase 2 upgrades at Commercial–Broadway Station will increase capacity, and provide opportunities to make improvements to customer safety and comfort inside the station. From Dec. 2 to 16, 2013, TransLink sought feedback in–person and online regarding the upgrade through a series of stakeholder and public engagement activities. All feedback will be considered by TransLink’s Design Team as the station design is refined.

The Commercial–Broadway Station is one of seven planned SkyTrain station and exchange upgrade projects along the Expo Line, which is supported by the *Building Canada Fund*, to ensure the transit network will meet the needs of passengers and the growing region for years to come.

Engagement Objectives

The Phase 2 engagement activities aimed to:

1. inform station customers, area residents and businesses, and other directly impacted persons about the station upgrade features and project timeline
2. build awareness about why the upgrades are necessary to increase capacity, and how the upgrades provide opportunity to improve customer safety and comfort
3. obtain feedback about viable refinements to the station design features
4. listen to and address issues and concerns.

The level of engagement was aimed at providing both TransLink and stakeholders an opportunity to listen and learn about each other’s views, plans, concerns and expectations for the station upgrades. The Phase 2 engagement objectives were measured by the results of the questionnaire and comment sheets that were submitted in–person and online during the engagement period.

Notifications

The following communications activities took place to raise awareness about the project and encourage members of the public to get involved:

- 61 email invitations to community groups
- Phone invitation to three stakeholder groups
- 12,100 invitation cards distributed by:
 - mail drop via Canada Post Unaddressed Admail to houses, apartments, and businesses within a two block radius of the station.
 - street teams at Commercial–Broadway Station on three dates for four hours, at various times and days of the week.
- Project webpage and subpages (Overview, Get Involved, FAQ)
- One TransLink Buzzer blog post

Engagement Methods

A questionnaire and comment sheet was presented as the primary method to collect stakeholder and public feedback on viable topics related to the Phase 2 upgrades. TransLink held three public information sessions, and met with three stakeholder groups for information sessions. Furthermore, the contact information for the project's Community Relations Coordinator was provided to accommodate phone and email inquiries.

Engagement Participation

A total of 169 questionnaire and comment sheets were submitted online, and in-person at a stakeholder or public information session. At the three stakeholder information sessions, a total of twenty participants attended. At the Trout Lake Community Centre public information session, approximately 25 people signed the sign-in sheet. While sign-in was not requested at the University of British Columbia Student Union Building and Commercial–Broadway Station North Station House street level public information sessions, it is estimated that TransLink staff interacted with 350 people. The total page views for the project webpage and Overview, Get Involved, and FAQ subpages was 3,368.

What We Heard

The following are key findings of what we heard from the questionnaire and comment sheet.

1. Notification Method

The leading notification method through which respondents heard about the Phase 2 upgrades was the through an "Other" method not listed as an option in the survey (25%), followed by the TransLink website (23%). The "Other" methods were primarily emails from community organizations.

2. Neighbourhood Connection

The majority of respondents described their connection with the neighborhood surrounding the station as *live in the area* (39%) or *shop or use services in the area* (31%).

3. Frequency of Use

The majority of respondents (54%) use Commercial–Broadway Station more than once per week.

4. Considerations for the Design Team

Respondents identified 27 themes as important for TransLink's Design Team to consider, the most frequently occurring themes being safety, passenger flow, and customer experience.

5. Inclusion of Retail Space

Generally, respondents felt it was somewhat important to include retail space in the station (34%).

6. Retail Preferences

Of the 15 options provided, respondents preferred that potential retail at Commercial–Broadway Station be either a coffee shop (17%) or convenience store (14%).

7. Opportunity to Provide Feedback

Generally, respondents were neutral when asked if they had the opportunity to provide their feedback (36%). Respondents were more likely to agree or completely agree that they had opportunity to provide their feedback if they attended an in–person session (90%), compared to respondents who completed the questionnaire and comment sheet online (28%). The most frequently occurring suggestion from respondents on how to improve the opportunity to provide feedback was for TransLink to inform people through a mail drop.

8. Information to Provide Feedback

Generally, respondents were neutral when asked if they had enough information to be able to provide their feedback (33%). Respondents were more likely to agree or completely agree that they had enough information to be able to provide their feedback if they attended an in–person session (83%), compared to respondents who completed the questionnaire and comment sheet online (29%). The most frequently occurring suggestion from respondents on how to improve the amount of information to provide feedback was to include even more information and visuals.

9. Preferences to be Informed About Construction Updates

Respondents indicated that their preferred methods to stay informed about future construction updates are by email updates (22%) and through the TransLink website (21%).

10. Other Comments

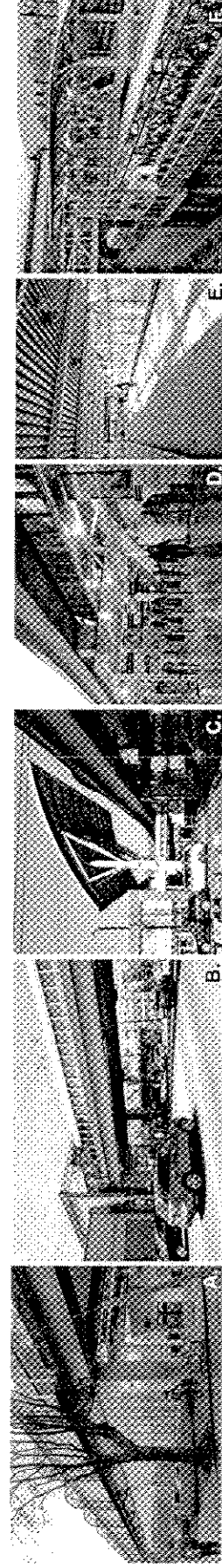
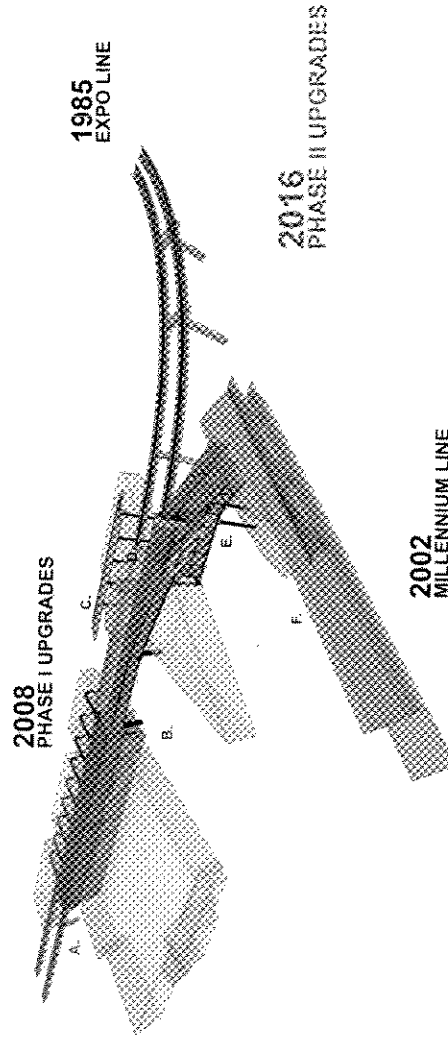
From the 82 other comments provided, the three most frequently occurring themes were appreciation for the public engagement effort, recommendations to build a transit line to UBC, and suggestions to improve TransLink's public engagement process and Phase 2 questionnaire and comment sheet.

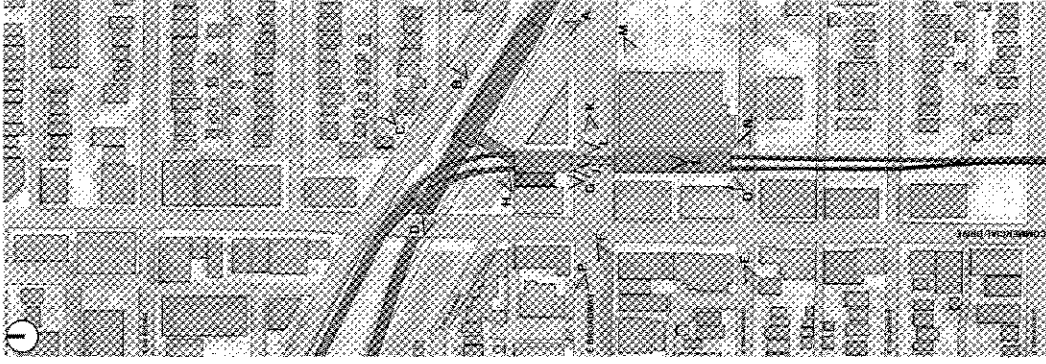
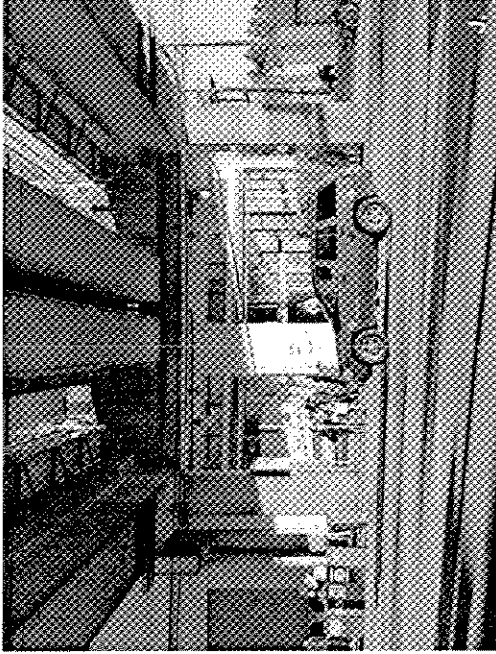
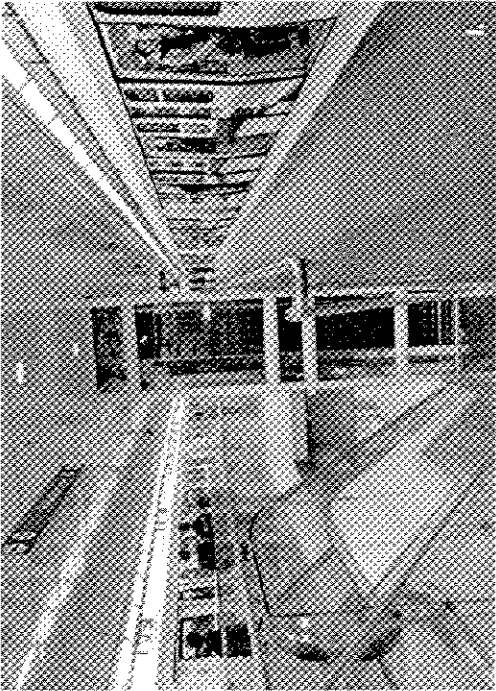
At the three stakeholder information sessions, TransLink heard 17 themes that were important to one or more groups, the most frequently occurring theme being safety and security.

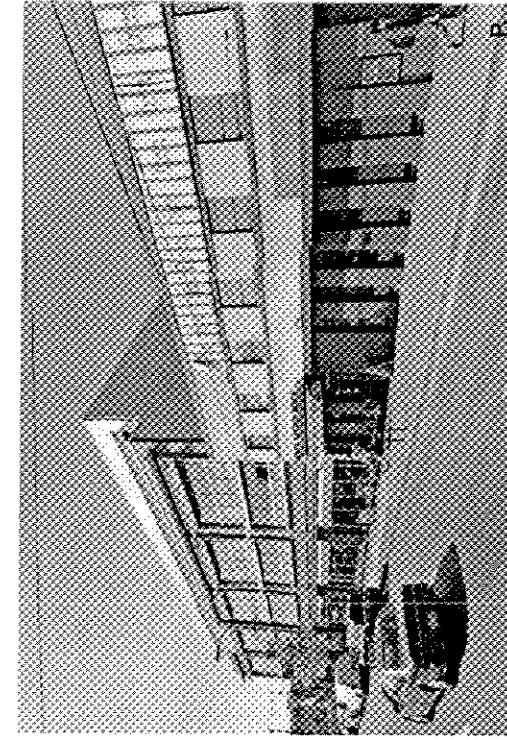
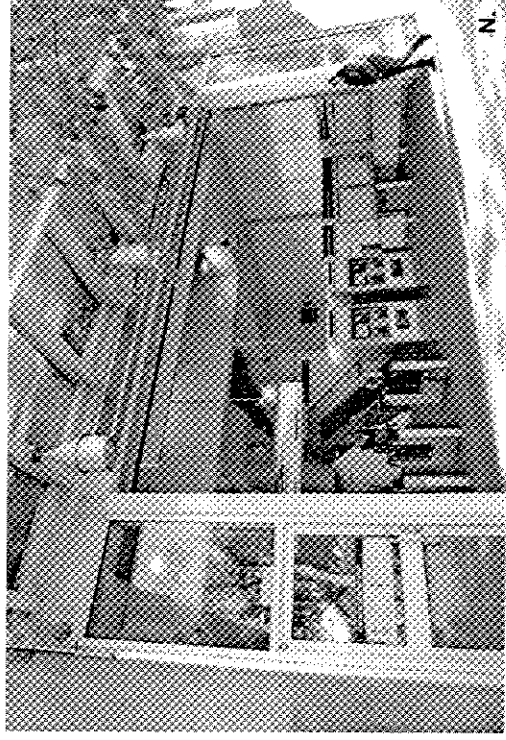
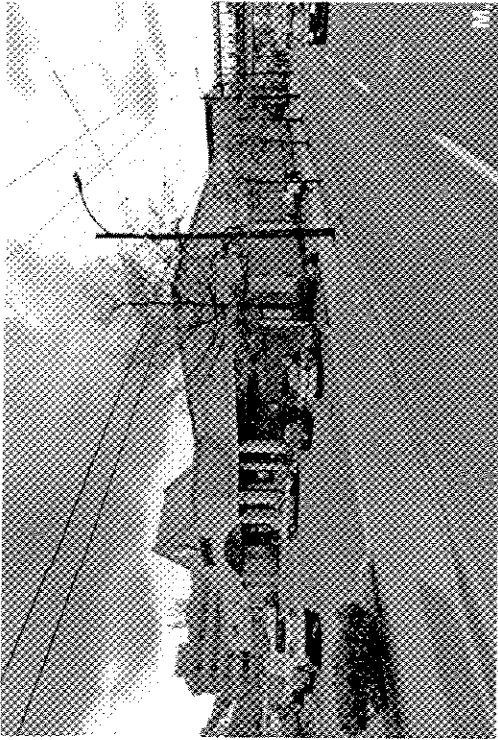
Existing Conditions

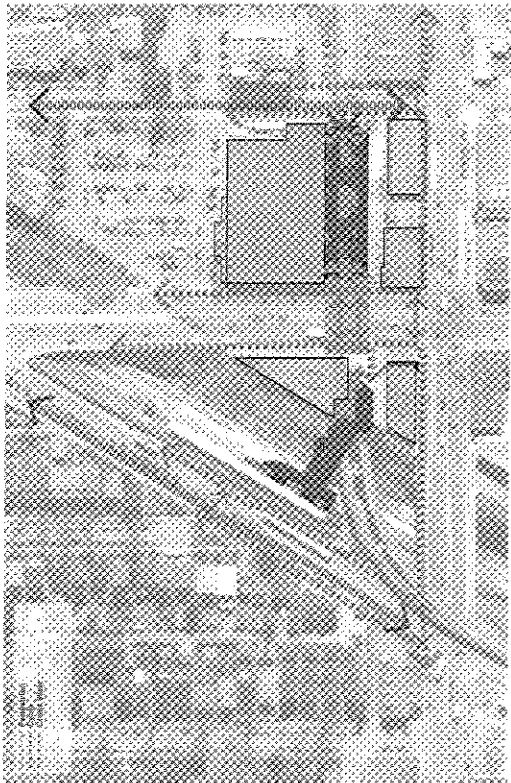
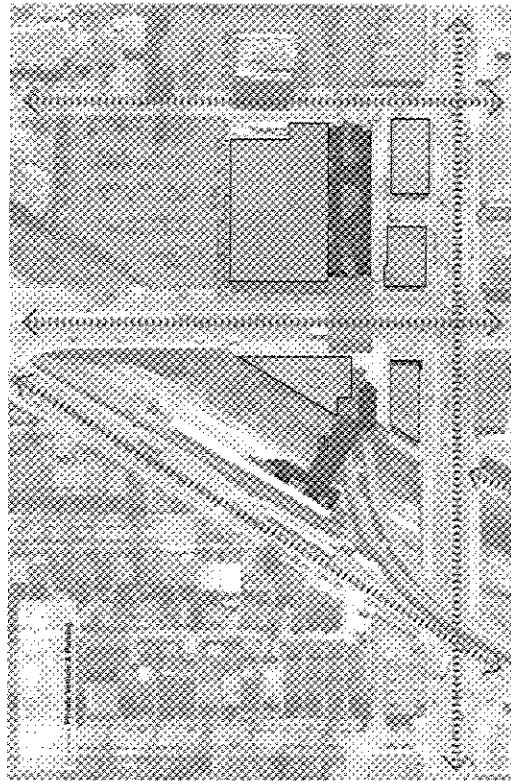
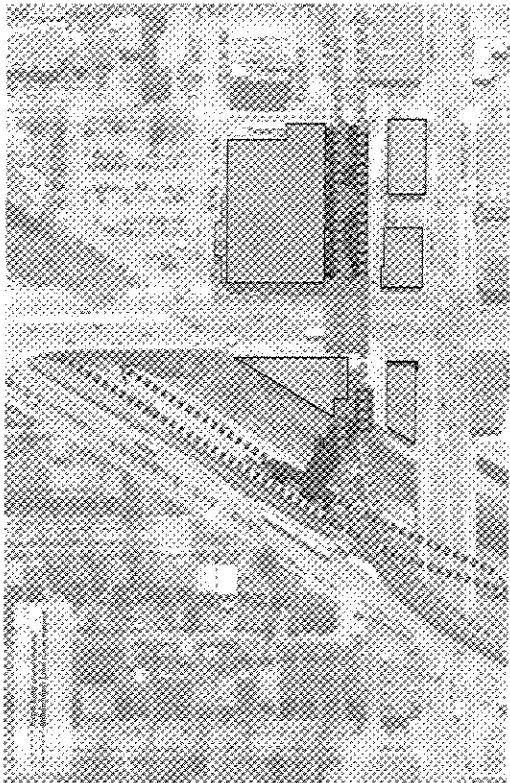
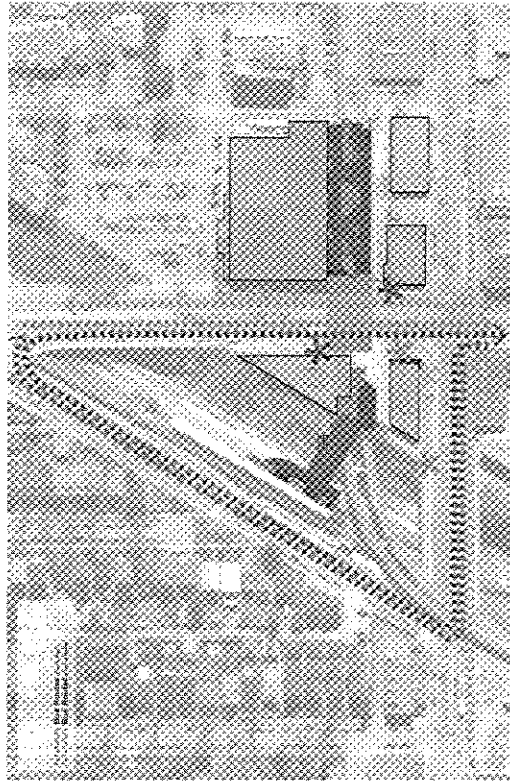
Commercial-Broadway Station is a major transit hub for Metro Vancouver, and serves the highest number of passenger boardings in the SkyTrain system. The region's busiest bus route (the 99 B-Line) also starts and terminates its route here. As station ridership grows, exacerbated by the completion of the Evergreen Line, improvements are required to accommodate both existing and projected ridership. The project will also serve to unite the two stations through the architecture of the new works that fosters a cohesive and identifiable interchange station.

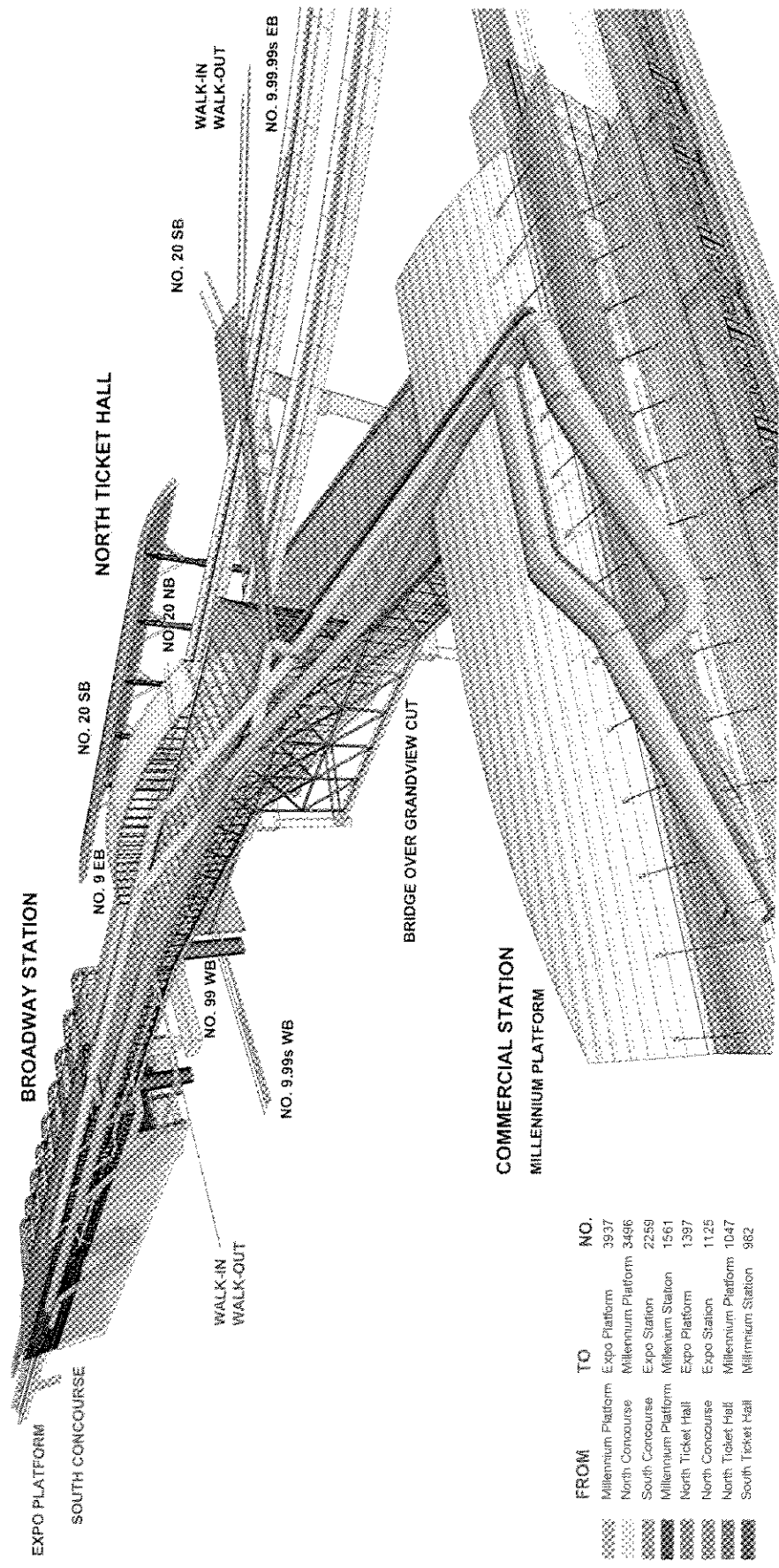
The Broadway Station is part of the original Expo Line, extending from Waterfront Station to New Westminster Station and was conceived as a legacy project of Expo 86. It remains an important architectural marker and legacy of a significant period of transformation in the history of the Lower Mainland. Conserving and developing a relationship with the Broadway Station hoop trusses and other key elements through this station renovation represents an important component in the overall vision for the opportunity to speak to the Commercial Station constructed later, thus creating the "Hub" condition and the disparate architecture.



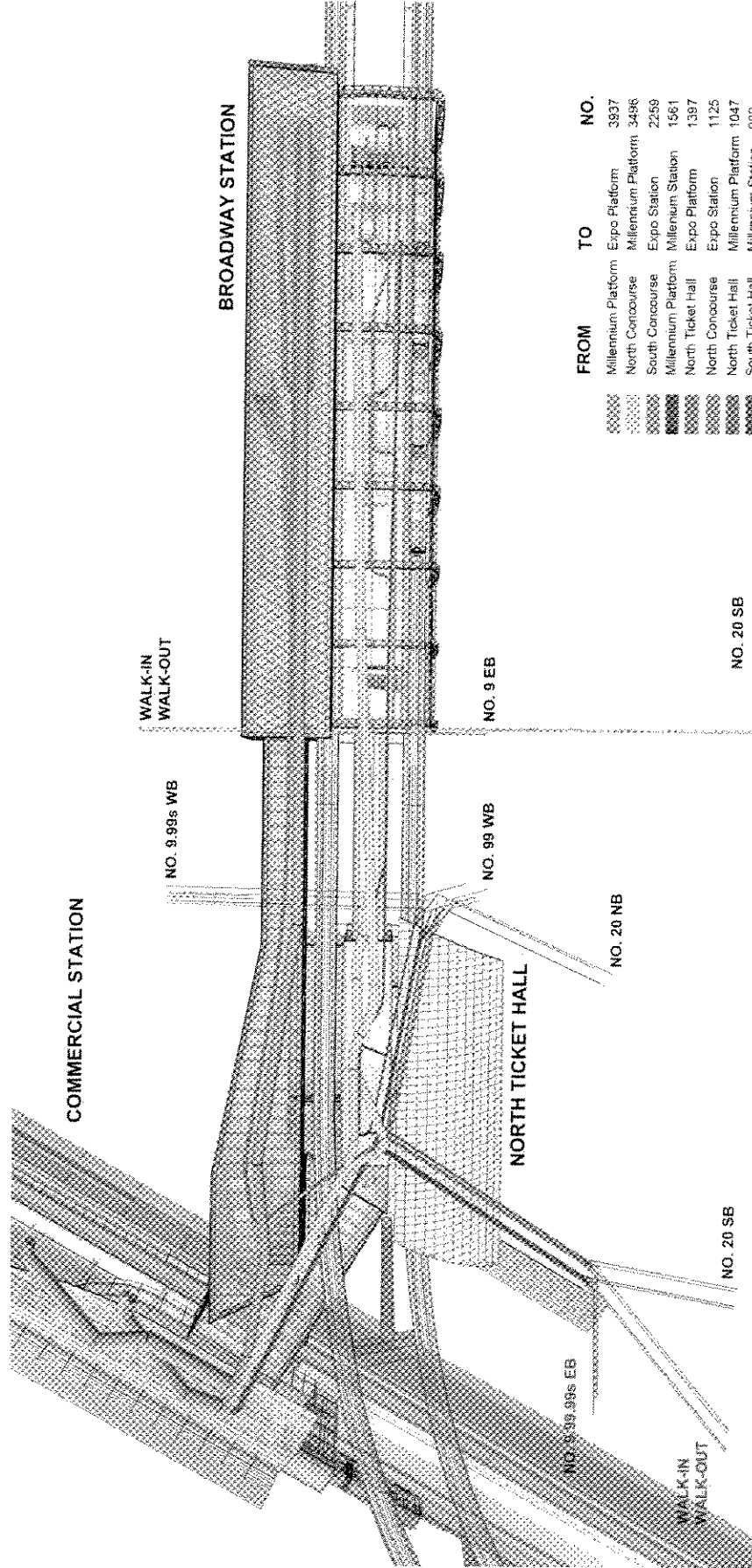




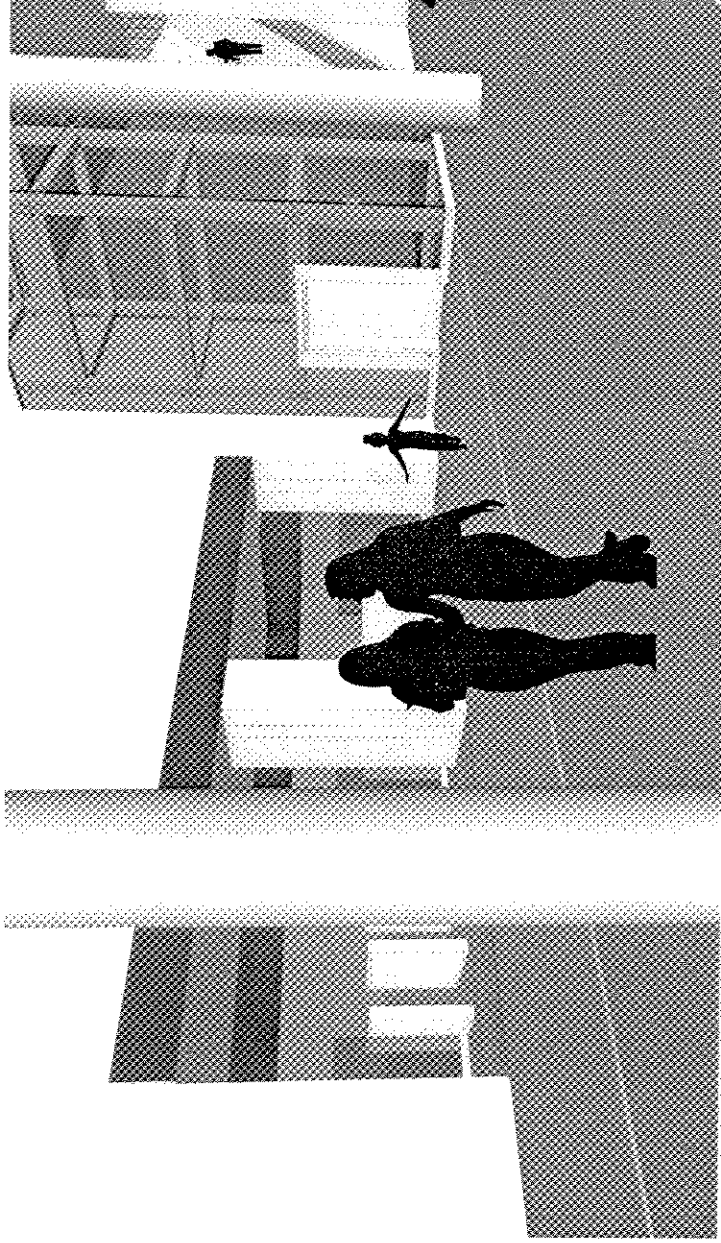




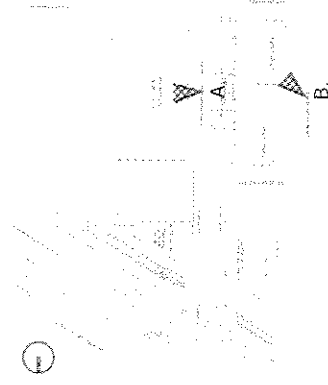
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North Concourse	Millennium Platform	3496
South Concourse	Expo Station	2259
Millennium Platform	Millennium Station	1561
North Ticket Hall	Expo Platform	1397
North Concourse	Expo Station	1125
North Ticket Hall	Millennium Platform	1047
South Ticket Hall	Millennium Station	982

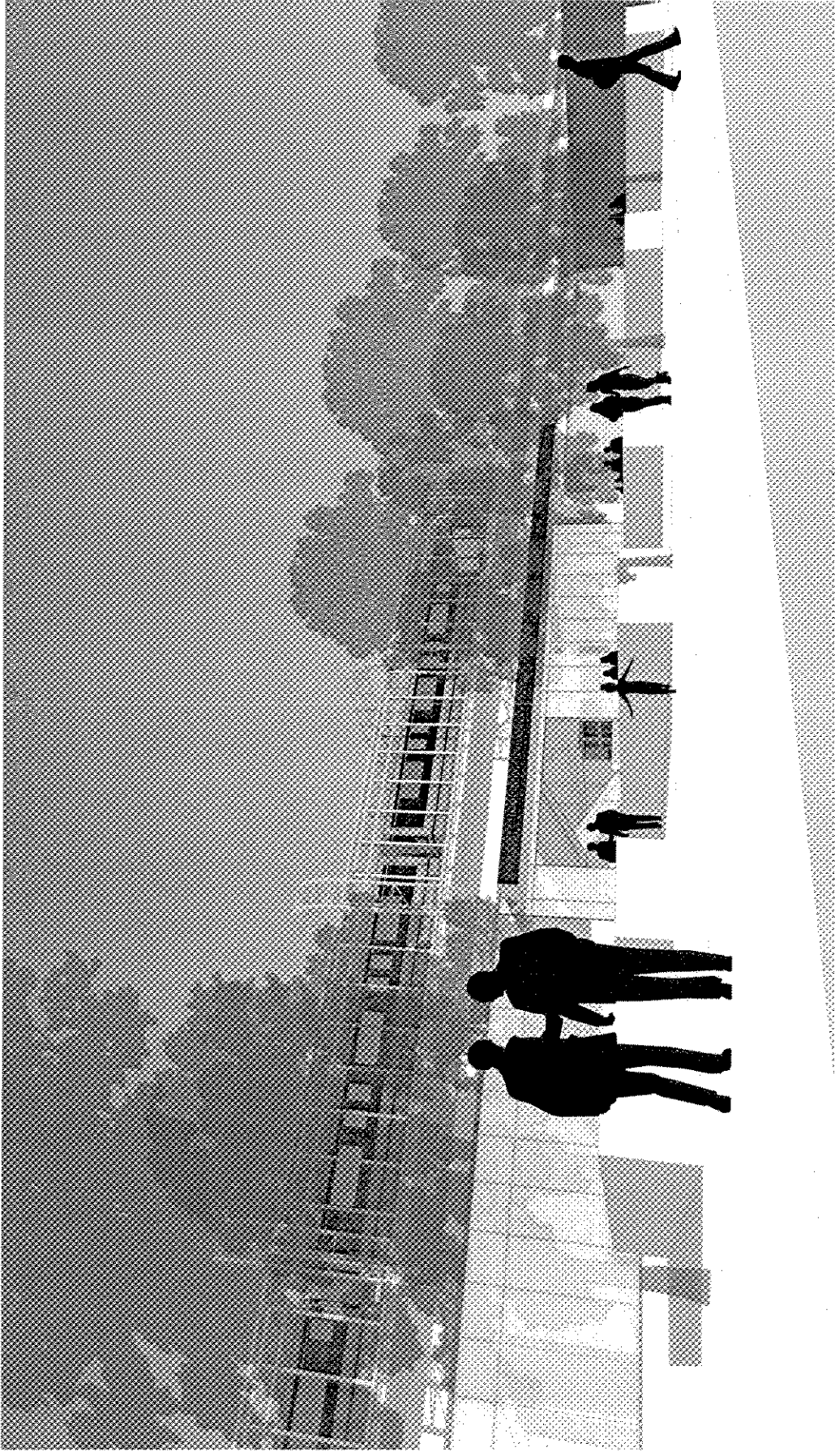


FROM	TO	NO.
Millennium Platform	Expo Platform	3937
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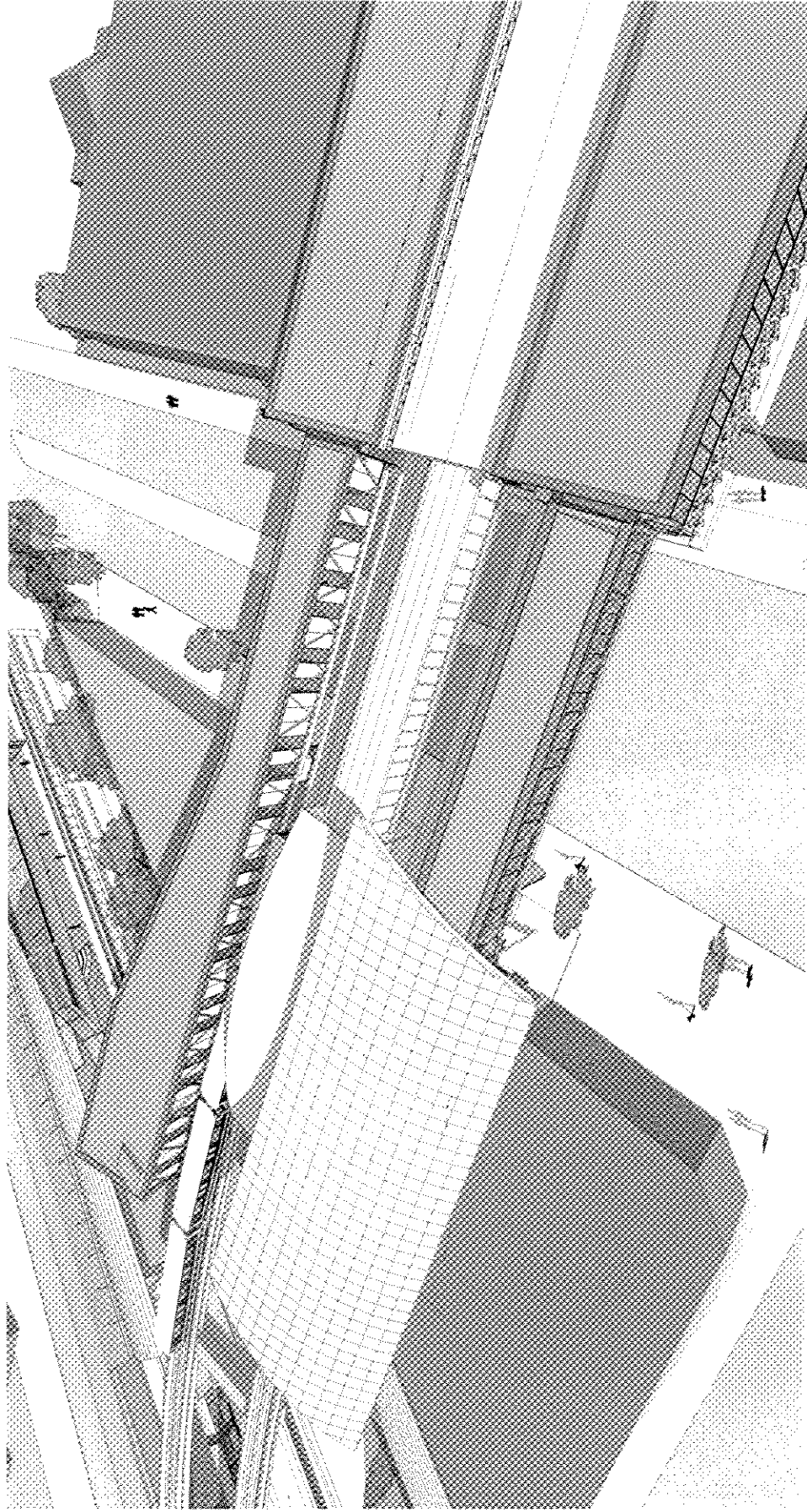


A. Safeway Entrance





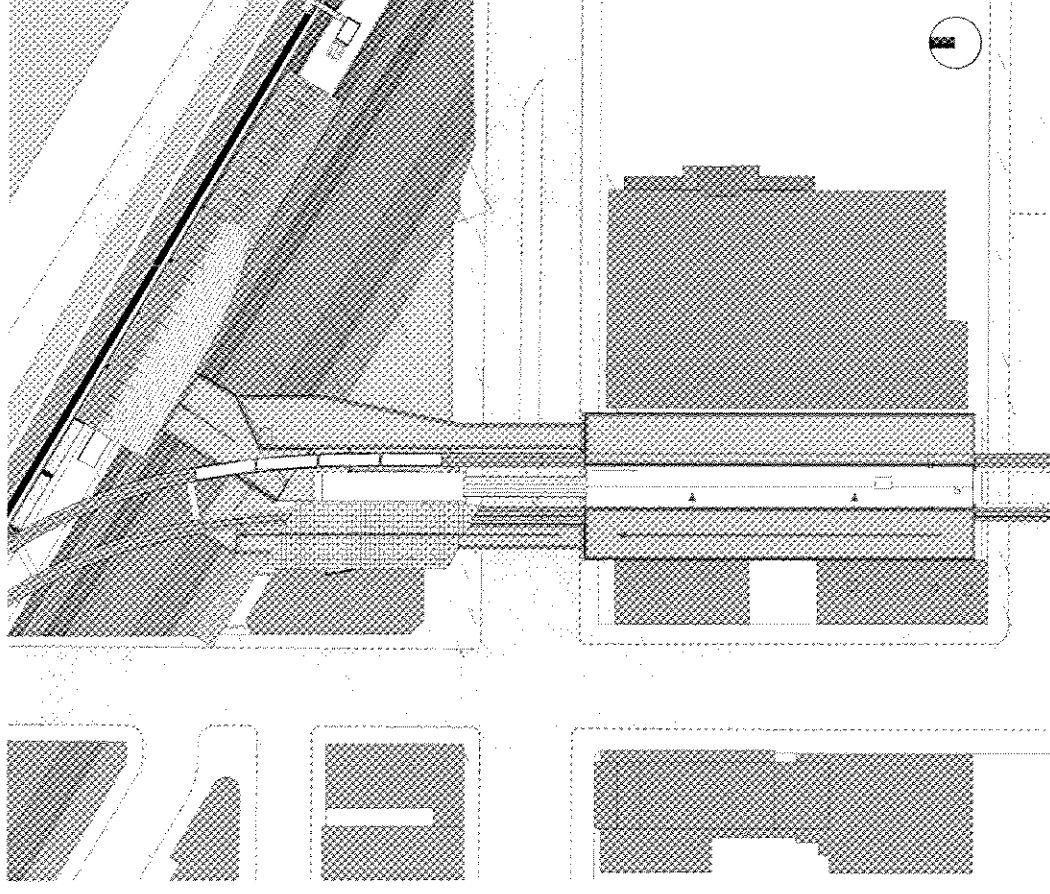
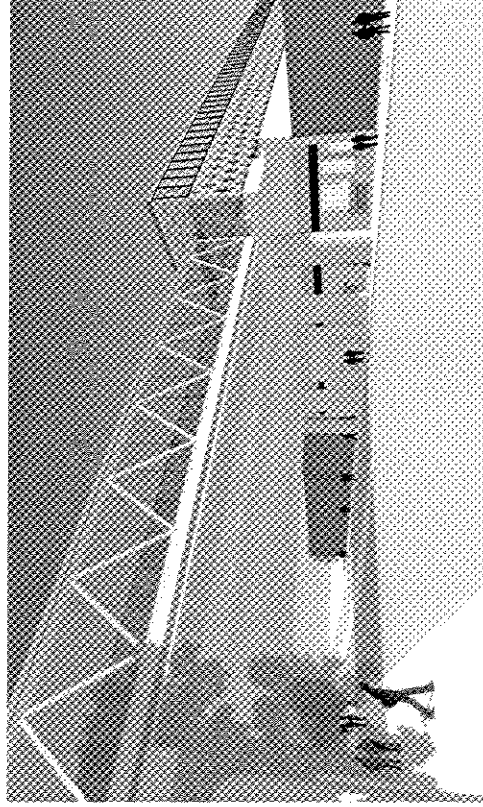
B. South Plaza

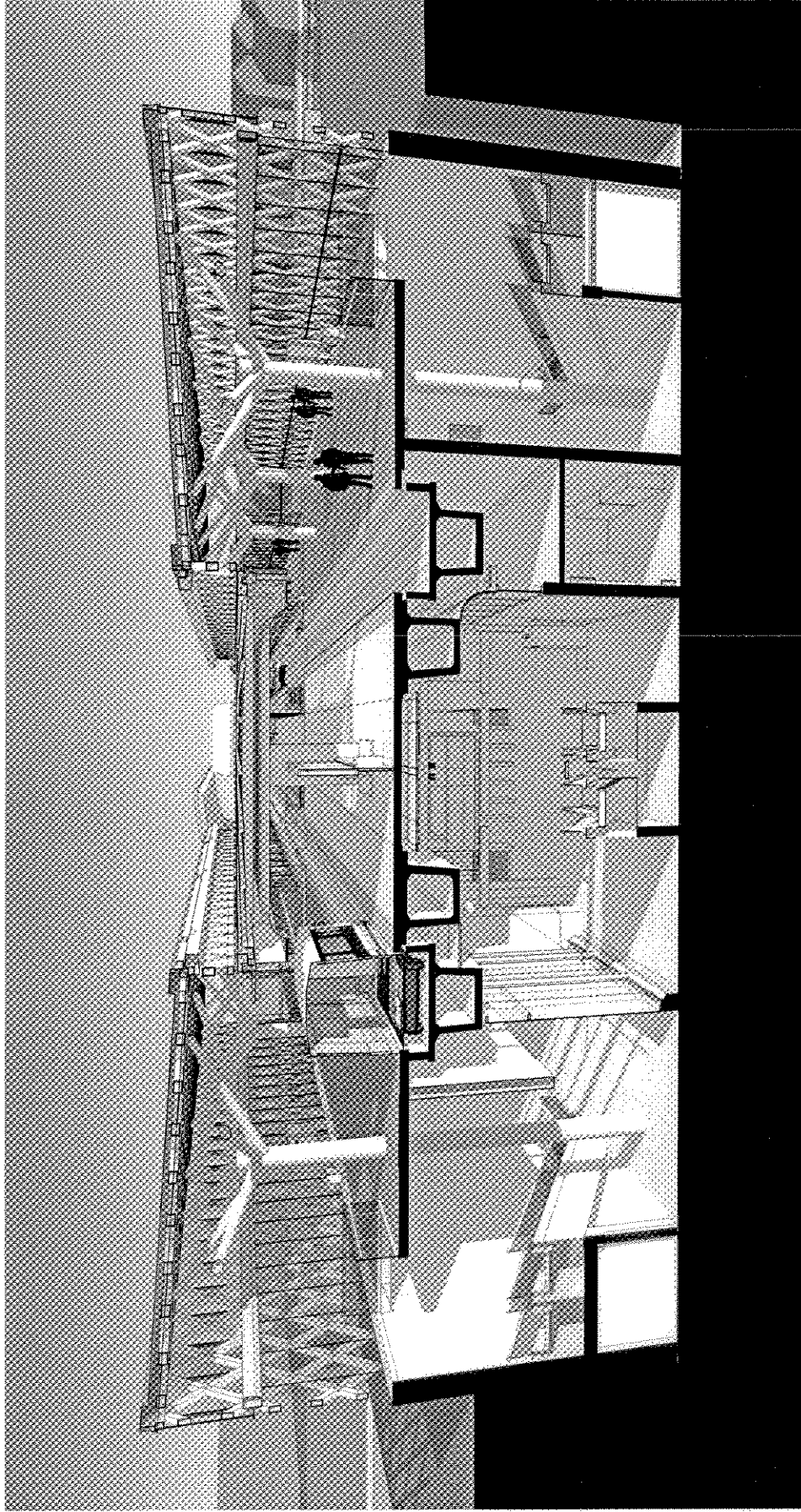


West Platform Study

Option 1

In this scheme a new platform would be added on to the west side of the existing Broadway Station. Vertical circulation connects the new platform directly down to concourse level. Additionally, a new passerelle over Broadway street will pass through Commercial Station main ticket hall with vertical circulation down to a further expanded bridge over Grandview Cut. This would connect the new west platform to Commercial station and Millennium Line.





Option 2

Similar to the first option, this scheme also includes a new west platform with vertical circulation down to Broadway concourse level, with the exclusion of a passerelle over Broadway street connecting to Commercial station. In this scheme it is assumed that through the implementation of wayfinding strategies, passengers are directed down to the concourse level and subsequently up to the new east platform and passerelle for connection to Commercial station and Millennium Line.

