mcCallumSather

Cultural Heritage Impact Assessment Report

CITY OF KITCHENER // 10 DUKE STREET WEST

Revision #3: January 2024
Revision #2: April 2023
November 22nd 2021

Table of Contents

Executive Summary

mcCallumSather (''mCs') was retained by VanMar Developments Inc. to prepare this Cultural Heritage Impact Assessment report ('CHIA') for the property municipally known as 10 Duke Street West, Kitchener, Ontario to guide and evaluate design during the development process. Prior to submission, mcCallumSather and the design team worked together to form a strategy and approach for the conservation and adaptation of the cultural resource on the site. Historical analysis, design recommendations and coordination are required to address both the existing property and the resulting impact of the proposed alteration, and construction following the City of Kitchener's planning requirements and the Ontario Heritage Act.

This report was submitted to (former) City Staff Victoria Grohn and the Heritage Committee for their review in November 2021, which a positive response was received from both the Staff and the Heritage Committee to move forward with the proposed development. This proposal was subsequently reviewed by the Site Plan Review Committee (SPRC) in July 2022 (application - SP22/104/D/AP – SPRC meeting date July 27, 2022) and was shared by Heritage Staff Jessica Vieira that further comments on the November 2021 CHIA Draft will be provided by Staff under a separate cover. These comments were provided by Staff on December 9, 2022, and subsequently addressed in a revised CHIA Draft dated April 2023 submitted as part of a second Site Plan application submission on April 17, 2023. To date, no comments have been received on the April 2023 draft CHIA.

This revised January 2024 CHIA Draft corresponds to the draft Heritage Conservation Plan (HCP) of the same date and provides the most recent design drawings. Recommendations contained in this report are based on a thorough understanding of the significance and heritage attributes of the building on the development site. It identifies the impacts of the proposed development on its status as a cultural heritage resource. In the report, both conservation and mitigation measures are considered, where appropriate, in order to propose a development which appropriately conserves, adapts and adds to its existing cultural resources.

The adaptation strategy applies conservation principles balanced with new construction techniques to mitigate any potential negative impacts to both the original structure and any unique or decorative features. A balanced approach to conservation and adaptation has guided the development design in all areas and will continue to do so in future phases. The rehabilitation strategy described in the CHIA will provide a conservation strategy reflecting the level of detail required to move through the site plan approval process while the Conservation Plan provides more information with respect to short-term, mid-term and long-term conservation measures.

This CHIA concludes:

- The proposed development will retain the complete front (along Duke Street) and side (along Queen Street) facades and three bays of the west facade of the existing heritage property in-situ. Removal of the rear facade (north), the three rear bays of the west facade and the partial roof slab component will result in minimal impact to the heritage building and its surrounding context as the proposed demolition will not result in loss of the listed and proposed heritage attributes at 10 Duke Street West. The heritage building will be rehabilitated.
- 10 Duke Street West is recognized for its design, contextual, historical and associative values. We recommend designation of the proposed retained facades of the Economical Insurance building built in 1949, as it satisfies the criteria for designation as per Ontario Regulation 9/06.
- Documentation of the existing on-site heritage resource in dimensioned drawings and photographs has been made to mitigate loss of the elements that are proposed to be demolished. This documentation will be a valuable resource for a future proposed commemorative feature or should rehabilitation/restoration of a heritage attribute is required in the future.
- Recommendations on incorporating compatible yet distinguishable building materials, design features, architectural proportions, facade rhythms have been made and incorporated into the proposed development to mitigate any issues of transition between the existing heritage building and the proposed new tower. The development proposal is clearly legible as a new piece of architecture, that includes sympathetic setbacks and stepbacks to maintain the prominence of the heritage building. It is a compatible contemporary addition to the heritage building.

1.0 Introduction to the Report

1.1 Contact Information

VanMar Developments Inc. // Owner
145 Goddard Crescent, Cambridge, ON N3E 0B1
Mauricio Miranda (mauricio.miranda@vanmardevelopments.com)

mcCallumSather Architects Inc. // Heritage
286 Sanford Ave North
Hamilton, Ontario, L8L 6A1
T. 905.526.6700
F. 905.526.0906
Drew Hauser (drewh@mccallumsather.com)
Nathalie Desrosiers (nathalied@mccallumsather.com)
Sinclair Jeejeebhoy (sinclairj@mccallumsather.com)

Turner Fleischer Architects // Architect
67 Lesmill Road, Toronto, ON M3B 2T8
T. 905.568.8888
Michael Mackenzie (michael.mackenzie@turnerfleischer.com)

Kirkor Architects and Planners // Architect
400 - 20 De Boers Drive, Toronto, ON M3J0H1
T. 905.568.8888
Clifford Korman (ckorman@kirkorarchitects.com)
Varun-Preet Singh (vsingh@kirkorarchitects.com)

1.2 Purpose

The purpose of this report is to first establish and affirm the historic value of the existing building at 10 Duke Street West, and to evaluate the impacts of the proposed changes for its rehabilitation. If there are any negative impacts, the report will also provide recommendations for mitigation strategies.

In our research, both archival and primary, we have concluded that the building at 10 Duke Street W, constructed in 1948-1952, is significant to Kitchener's cultural heritage.

In this report, we reviewed the building to identify the features that would be recommended for designation. Once the characteristics of the building's existing value has been established, design guidelines are provided to meaningfully incorporate into a rehabilitation project. This approach balances the desire to respect history, with the need to address contemporary concerns such as sustainability, urban design, accessibility and compliance with the building code.

The CHIA will establish the cultural heritage value and significance of the subject property; identify heritage resources and attributes; and advise if the identified cultural heritage resources meet the criteria for heritage designation as per Regulation 9/06 of the Ontario Heritage Act. The CHIA assesses the potential impacts of the subject applications and the proposed development on the identified cultural heritage resources. As per Info Sheet No. 5 of the Ministry of Culture, Tourism and Sport Heritage Tool kit publication: *Heritage Resources in the Land use Planning Process*, potential negative impacts to cultural heritage resources include but are not limited to:

- Destruction of any, or part of any, significant heritage attributes or features;
- Alteration that is not sympathetic, or is incompatible, with the historic fabric, appearance and context;
- Shadows created that alter the appearance of a heritage attribute;
- Isolation of a heritage attribute from its surrounding environment, context, or a significant relationship; and
- Direct or indirect obstruction of significant views or vistas within, from, or of built heritage resources.

Measures to mitigate potential impacts consistent with recognized conservation principles, including the Standards and Guidelines for the Conservation of Historic Places in Canada (Parks Canada) and the Eight Guiding Principles in the Conservation of Built Heritage Properties (Ontario Ministry of Tourism, Culture and Sport) include:

- Maintain appropriate contextual relationships and visual settings that contribute to the cultural significance of the complex.
- Preserve the historic physical character of the building at 10 Duke Street West and do not over-repair or over-restore.
- Respect the uniqueness of the building in its materials and detailing.
- Allow for new construction that relates to and conserves the essential form and integrity of the building at 10 Duke Street West.
- Conserve the exterior elements that are important to defining the overall heritage value of the buildings such as the material and composition of existing facades.
- Maintain sightlines to the adjacent heritage and note-worthy buildings along Duke Street.

New development should maintain an appropriate visual separation from the original building while referencing its materiality and geometric composition.

1.3 Methodology

This CHIA was prepared based on the City of Kitchener's Heritage Impact Assessment - Terms of Reference as well as provincial policy framework. The scope of this CHIA report involves the identification and evaluation of known and potential cultural heritage resources and the potential impacts resulting from the proposed development. This report will also make recommendations towards mitigation strategies and alternatives in order to minimize any negative impacts.

Archival research, site and building investigations were also incorporated as part of mCs' comprehensive heritage consulting services. Representatives of mCs visited the subject site on July 7, 2021, January 20, 2022 and September 6th, 2023 to conduct a visual inspection and photograph the subject property and its surroundings. The research methodology gathers relevant data from the city archives (maps, photos, publications, primary source etc), and first hand analysis of the site from all relevant stakeholders and consultants.

This CHIA is being submitted in compliance with the requirements of the *Ontario Heritage Act* ('OHA'), and by Council through the Municipal Register. It also references technical drawings, heritage policies, historical documents and applicable references of the municipality associated with the subject property, other provincial and municipal heritage standards and guidelines, as well as archive documents from various sources. Evaluation of cultural heritage value for the subject property has been executed using the criteria as stated in Ontario Regulation 9/06.

The next stage of the project included the completion of a Heritage Conservation Plan ('HCP' - January 2024). The HCP report explores the short, medium and long term scope of work for the building and gives direction with respect to material specifications, methodology of construction, maintenance and monitoring strategy after the development is complete. **A Conservation Plan was submitted as part of the first Site Plan application submission (SP22/104/D/AP) in April 2022.** Both CHIA and HCP are to receive approval prior to full site plan approval.

Figure 1. Aerial View Image showing the location of 10 Duke Street W at the corner of Queen and Duke in Downtown Kitchener, ON. (Source: Google Earth). Annotated by mCs to show the subject site.

2.0 Introduction to the Subject Site

2.1 Description of Property

The subject property is municipally known as 10 Duke Street West, in the City Centre District in Kitchener, ON. The site consists of an existing listed heritage building, built c.1949 in the Colonial Revival style, which sits on the south half of the property as well as a parking lot on the north (rear) half and a driveway along the east. The building is 37,480 sf and situated on a 0.55 acre parcel of land, located on the North West corner of Duke Street West and Queen Street North in the Urban Growth Centre (Downtown).

The building is rectangular in plan and is made of red Flemish brick construction. The windows are 8/12, and feature flat arched brick voussoirs and limestone sills. The eleven bays along the South and north facade of the building and six bays along the East and West, are equally spaced and expressed through the use of brick columns with limestone capitals and bases. There is a horizontal limestone band between the second and third floors. Despite the identical 8/12 configuration, the third floor windows are slightly shorter than those on the first two floors.

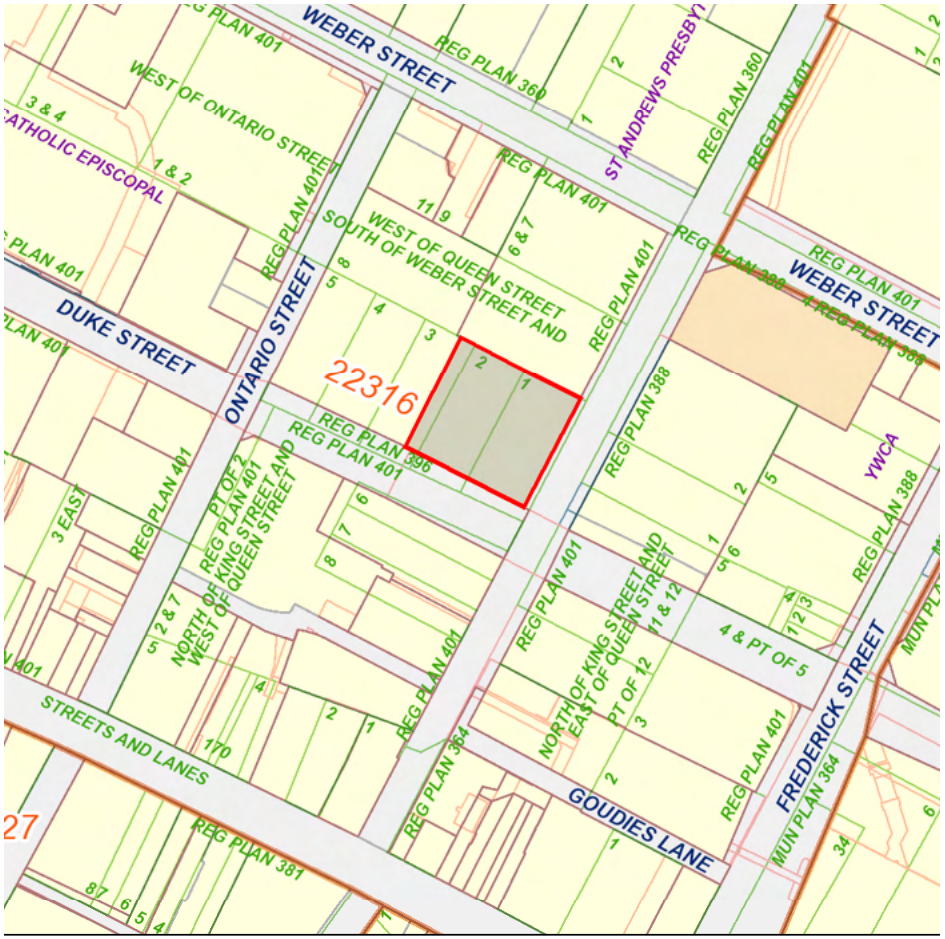


Figure 2. Property Index Map showing the approximate extents, lot number, block number of the development site 10 Duke Street West (Source: Ontario Land Registry 2021, retrieved online from: https://www.onland.ca/api/cmv/export/_ags_WebMap_8ddae95e-3025-11ec-b21f-0050568fa01d.pdf)

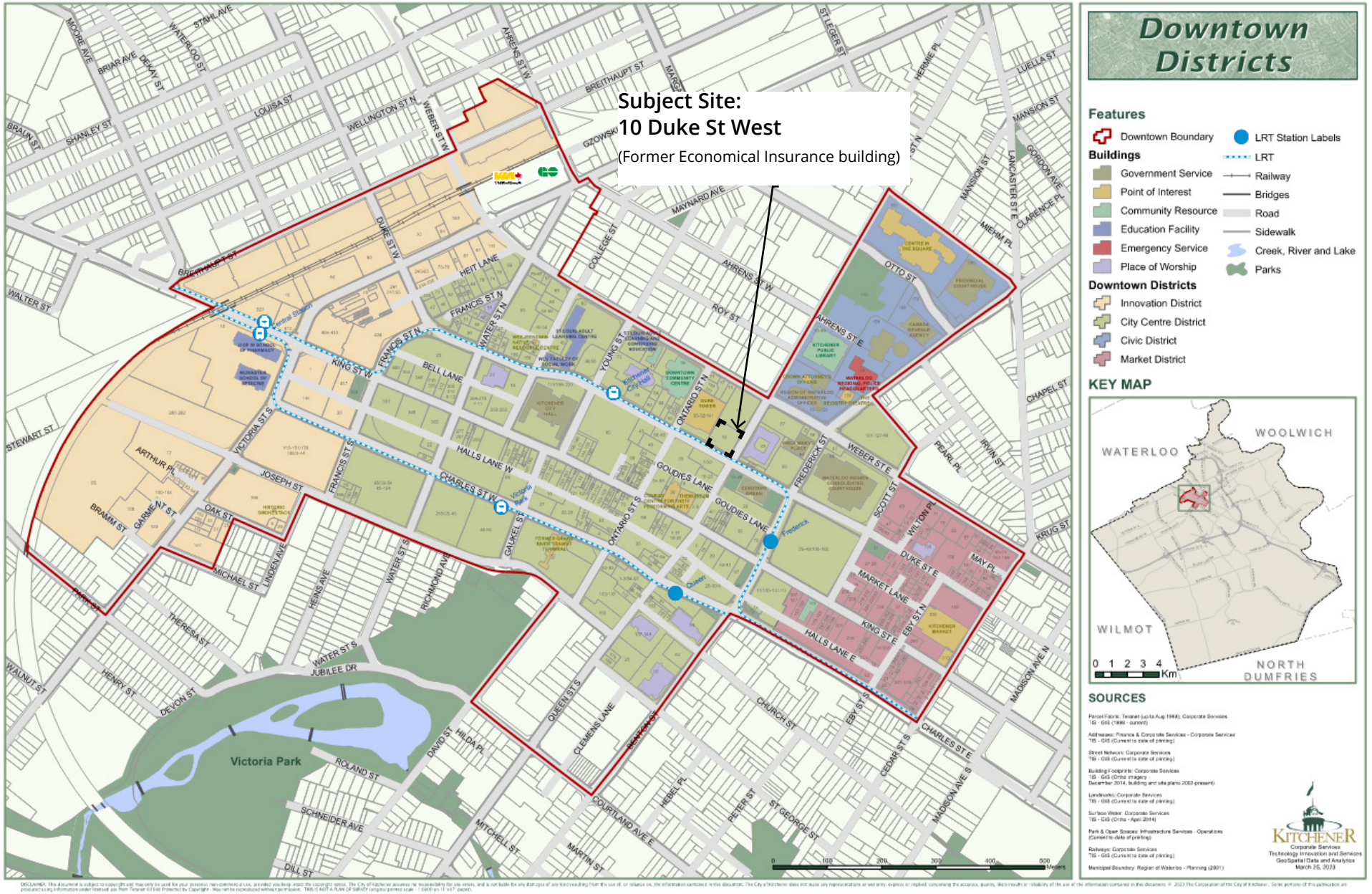


Figure 3. Kitchener Downtown District Map, March 2023. Retrieved online from: https://app2.kitchener.ca/appdocs/GISImages/GIS_Web_External/Standard_Maps/Downtown_Districts.pdf

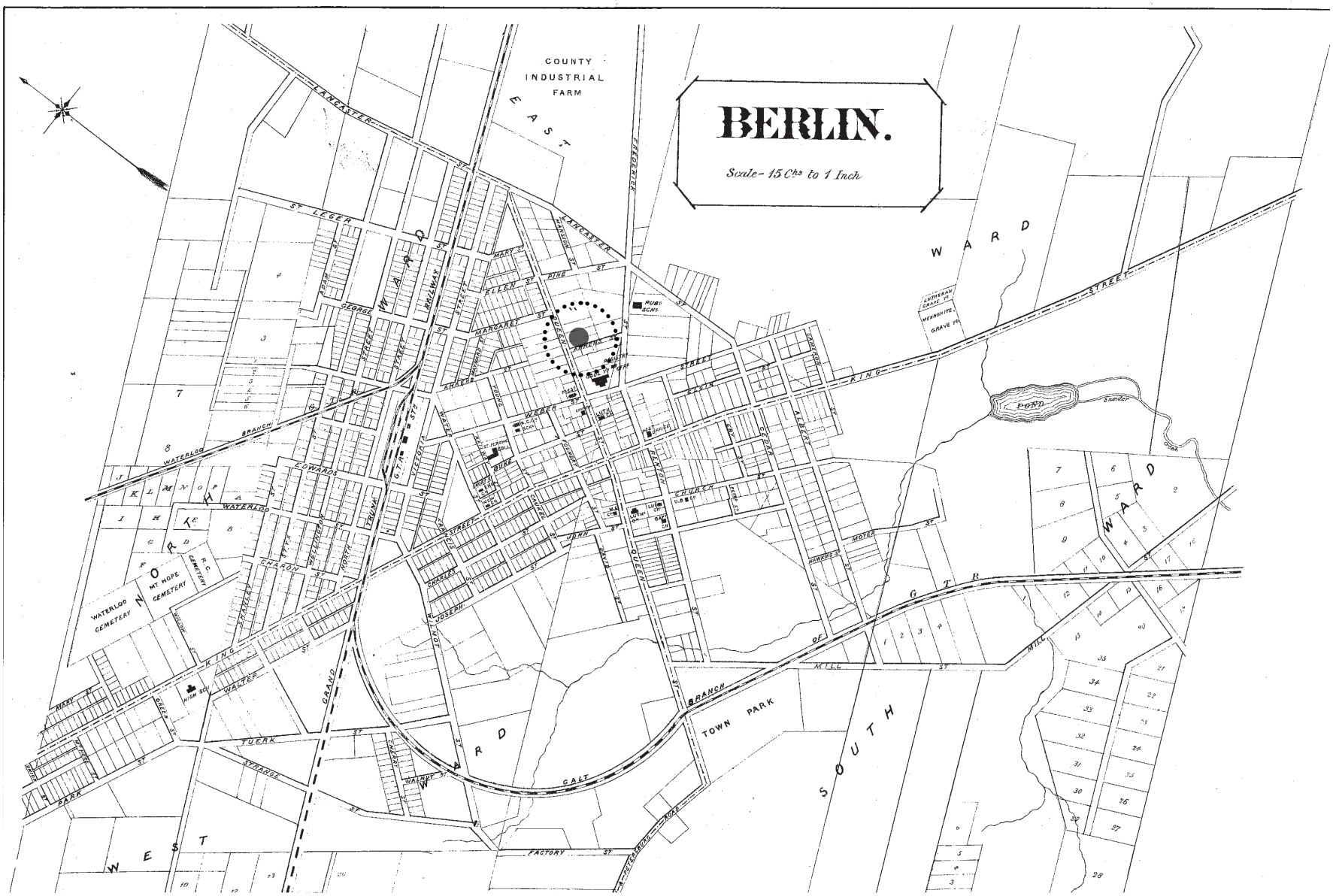


Figure 4. Historic Map of Kitchener, formerly Berlin. Source: www.kitchener.ca

2.2 Historic Context & Evolution

Kitchener's history dates back to 1784, when the land was given to the Six Nations by the British as a gift for their allegiance during the American Revolution. From 1796 and 1798, the Six Nations sold 38,000 hectares of this land to a Loyalist, Col. Richard Beasley.

The portion of land Beasley purchased was remote but it was of great interest to German Mennonite farming families from Pennsylvania. They wanted to live in an area that would allow them to practise their beliefs without persecution.

Eventually, the Mennonites purchased all of Beasley's unsold land, creating 160 farm tracts. By 1800, the first buildings were built; and over the next decade, several families moved north to what was then known as the Sand Hills. One of those families, arriving in 1807, was the Schneiders, whose restored 1816 home - the oldest building in the city - is now a downtown museum.

In 1816, the Government of Upper Canada designated the settlement the Township of Waterloo. Much of the land, made up of moraines and swampland interspersed with rivers and streams, was converted to farmland and roads.

Immigration to the town increased considerably from 1816 until the 1870s - many of the newcomers being of German (particularly Mennonite) extraction. In 1833, the area was renamed Berlin (see Fig. 4); and in 1853 Berlin became the County Seat of the newly created County of Waterloo, elevating it to the status of village.

The extension of the Grand Trunk Railway from Sarnia to Toronto - and hence through Berlin - in July 1856 was a major boom to the community, helping to improve industrialization in the area. On June 9, 1912, Berlin was officially designated a city. However, with the outbreak of the First World War in 1914 came anti-German sentiment and an internal conflict ensued as the city was forced to confront its cultural distinctiveness.

There was pressure for the city to change its name from Berlin; and in 1916 - following much debate and controversy - the name of the city was changed to Kitchener after Herbert Kitchener, 1st Earl Kitchener, who died that year while serving as the Secretary of State for War of the United Kingdom.

The Beginnings of Economical Mutual Fire Insurance Company

The first insurance companies were developed in the U.K. and in America, and the protection afforded by insurance against the peril of fire first became available in Canada when the Phoenix Assurance Company of London, England, began operations in this country in 1804. The Halifax Insurance Company was founded in 1809. The Aetna Insurance Company was the first American company to commence business in Canada in 1821.

The Economical Mutual Fire Insurance Company of Berlin, Ontario, was founded in 1871, when it issued its first policy on a house and barn, on November 25th, 1871. At the time, the small town had a population of 2,743 persons. As the name implies, Berlin was a settlement established by colonists of German extraction from Pennsylvania in an area within Waterloo Township first dubbed as the Sand Hills, later as Ebytown, and named Berlin in 1825. The founders were motivated by the fear of fire which was always present through knowledge of the great fires such as, St.John's, Newfoundland, in 1816, the fires of Quebec City in 1845 and 1866, Ottawa and Hull in 1900 and the Toronto fire of 1904, to name only a few. The fear was also fueled by the potential danger to their individual properties.

Fire insurance in small centres such as Berlin was expensive and difficult to obtain. There were examples of other local fire insurance companies in the area - The Gore District Mutual Fire Insurance Company (1839); County of Wellington Mutual Fire Insurance Company (1840); The County of Perth Mutual Fire Insurance Company (1863); The Waterloo County Mutual Fire Insurance Company (1863). There was vigorous rivalry, jealousy and competition between these communities in industry and

sports; Berlin had been made capital of Waterloo County in 1852 and was not to be outdone by its neighbors in fire insurance.

It was the Town Hall of Berlin, Ontario where some forty residents assembled to give their support to the formation of a mutual fire insurance company. Joseph Jackson became the first President of Economical. The first office was located on Queen Street North in Berlin, ON.


Figure 5. Senator William D. Euler, 1875 - 1961 (Source: Kitchener Public Library)

From 1871-1948, Economical had 6 presidents, and had occupied 4 different office buildings in Berlin. In 1948, Board of Directors member Senator William D Euler was elected to be President, after having served on the board since 1926. Senator Euler was one of Waterloo County's most distinguished citizens in both public and private life; he taught public school for six years, established a business college, acquired an interest in Kitchener News Record (of which he became president), served as Mayor of Berlin (1913-14), and was elected as a Member of Parliament in 1917. Eulers distinguished political career was also marked by appointments as Minister of National Revenue, Minister of Trade and Commerce, and to the Senate of Canada in 1935.

Eulers tenure at Economical coincided with the rapid expansion of the Canadian economy following the Second World War. As such, the company expanded rapidly, with premium volume reaching $5,020,378 during 1955.

The rapid growth of the company post-World War II resulted in the need for larger and more modern premises. In 1948, the present site at Duke and Queen Streets, Kitchener was acquired, and the Toronto-based architecture firm of Messrs. Mathers & Haldenby were commissioned to design a new head office on the site.

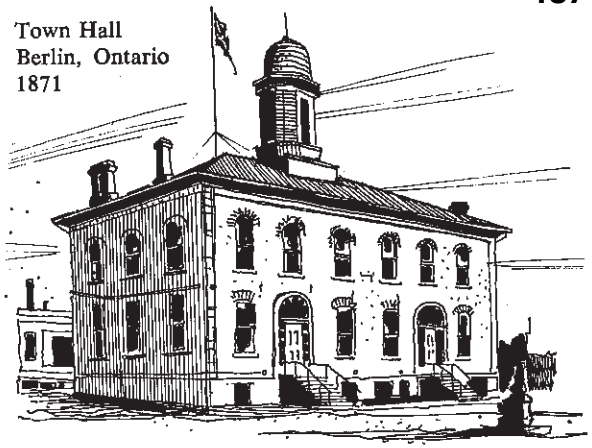
Mathers & Haldenby Architects are well known for their work on a number of notable buildings in Toronto, including the Robarts Library at University of Toronto Campus, Queen's Park Complex, Roy Thompson Hall, as well as the Public Archives and National Library Building in Ottawa.

Economical Mutual Fire Insurance occupied the building from it's opening on February 22, 1952 until 1989. The building was featured in the “1854-1954 City of Talent Kitchener Centennial” publication as Kitchener’s oldest financial institution serving its citizens continuously for eighty-three years.

It has and continues to be occupied in recent years by various commercial and private offices, such as:

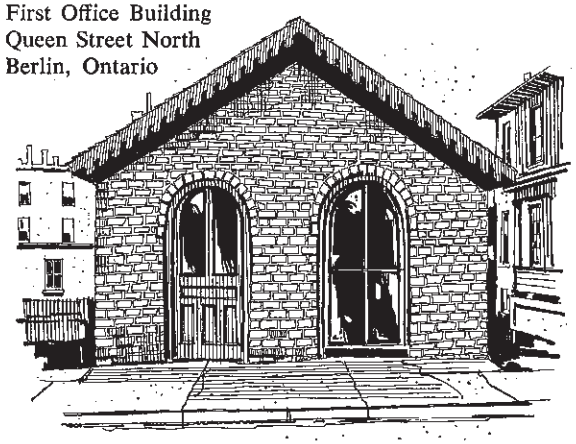
- Paquette Travers Lawyers
- Deutchmann Law
- MNP Ltd.
- Cunha & Skervin LLP Lawyers & Notaries
- CSB-System

1871



Town Hall
Berlin, Ontario
1871

1871



First Office Building
Queen Street North
Berlin, Ontario

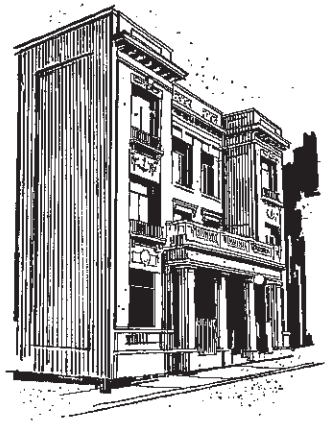
c.1880

Second Office Building
King Street East
Berlin, Ontario

1890

Third Office Building
King and Ontario Streets
Berlin, Ontario

1915



Fourth Office Building
20 Queen Street North
Berlin - Kitchener

1949

Fifth Office Building, 10 Duke Street West, Kitchener

GROWTH OF THE ECONOMICAL MUTUAL INSURANCE COMPANY[1]

1 Economical Mutual Insurance Company, One hundred economical years 1871-1971. Kitchener Public Library, Rare 368.971345 Econo

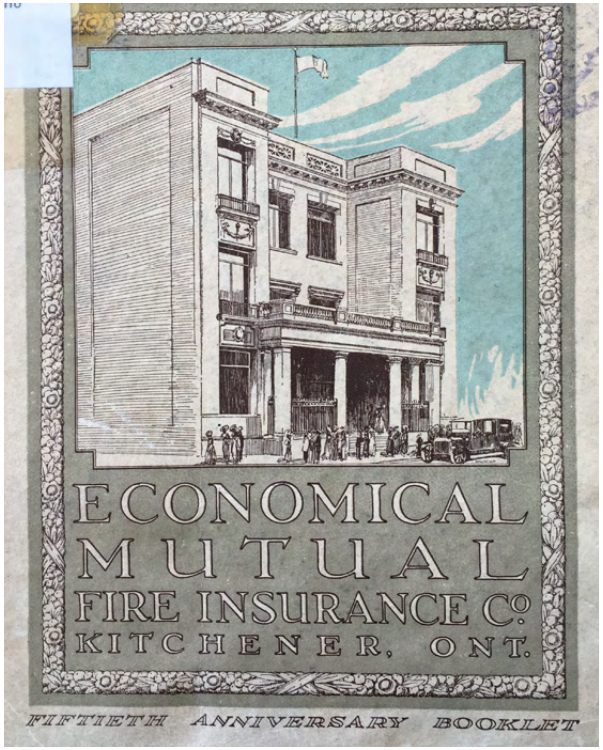


Figure 6. Drawing of the previous Economical Mutual Fire Insurance Company, Kitchener, Waterloo. Date unknown. Source: Kitchener Public Library

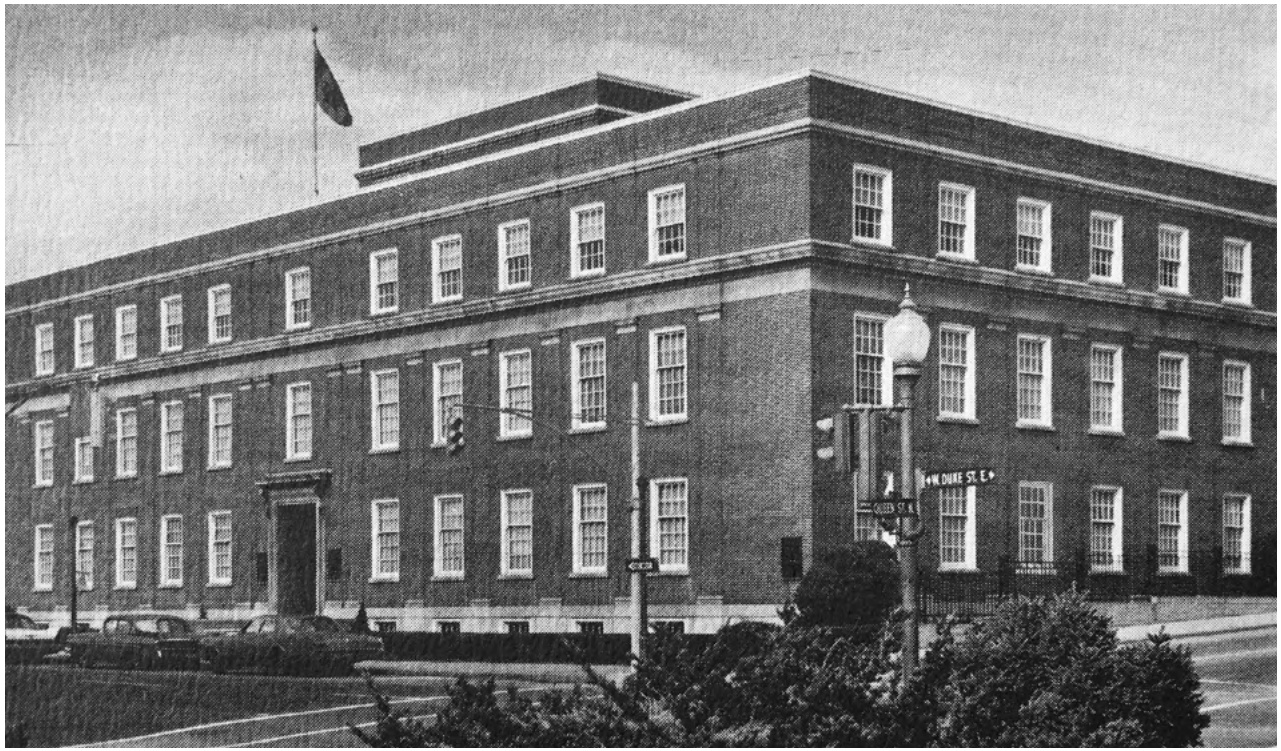


Figure 7. Head Office at Duke and Queen, Economical Mutual Fire Insurance Company, Kitchener, Waterloo. Date of photo unknown. Source: Economical Mutual Insurance Co., Annual Financial Statement, Dec... 31, 1976. Source: Kitchener Public Library

2.3 Identification & Description of Adjacent & Neighbouring Heritage Properties

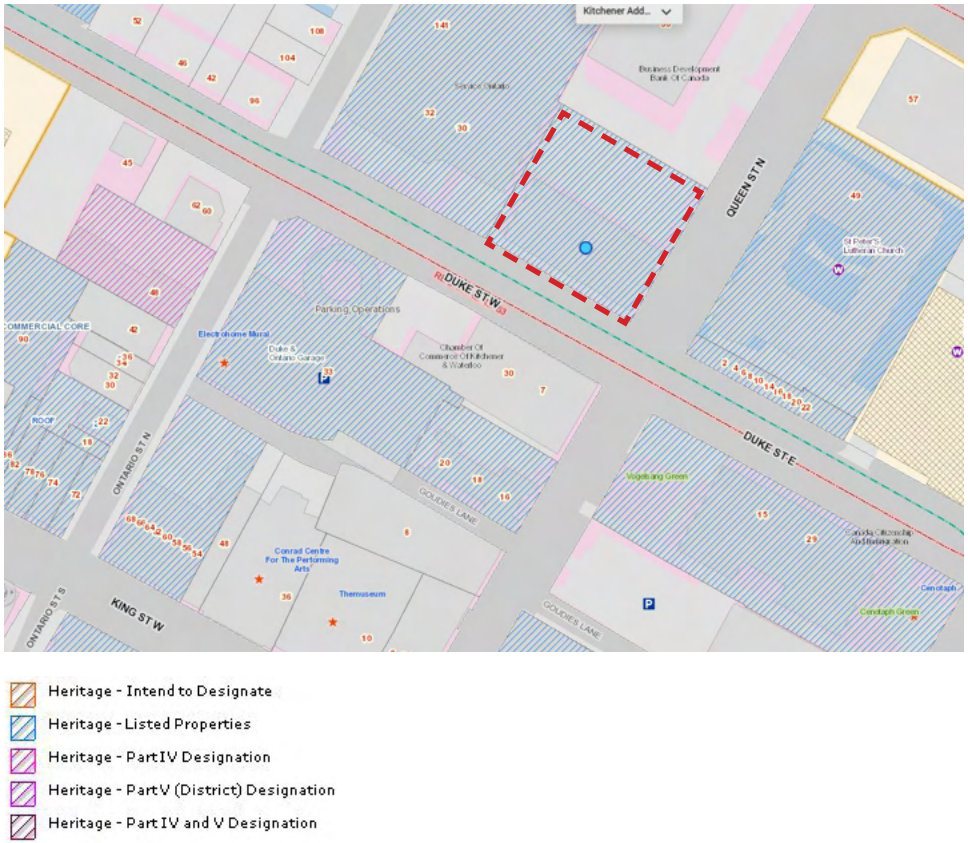


Figure 8. Adjacent and Neighboring Heritage Resources, January 2023 annotated by mCs to show the subject site. Source: City of Kitchener Interactive Mapping, retrieved from: https://maps.kitchener.ca/OnPointExternal/RMap/Default.aspx#

With respect to adjacency, the City of Kitchener Official Plan provides the following definition of adjacent properties and adjacent lands.

- *Adjacent - lands, buildings and/or structures that are contiguous or that are directly opposite to other lands, buildings and/or structures, separated only by a laneway, municipal road or other right-of-way.*

Policies apply differently to each property and, similarly, the impacts assessed will differ. The immediate concerns will potentially be shadowing, visual impact on the continuity of the streetscape, and maintaining the prominence of adjacent landmark buildings.

The subject property is located **adjacent** to the following properties included in the City's Municipal Heritage Register (Figure 8):

- 30-32 Duke Street West - Listed, Non-designated
- 2-22 Duke Street East - Listed, Non-designated
- 49 Queen Street N - Listed, Non-designated

The subject property is located near to, as per the above definition of adjacency, the following properties included in the City's Municipal Heritage Register (Figure 8):

- 15 -29 Duke Street E- Listed, Non-designated
- 16-20 Queen Street N - Designated - Designation By-Law 2022-077 on June 28th, 2022 (per update provided by City Staff - City Map shows the building as listed)

The intent of this section is to provide a written and visual description of each property. An assessment of the compatibility of the proposed design in relation to the adjacent cultural heritage resources will be detailed in section 3.

See Appendix 4 for site visit photos of the adjacent resources from the subject property.

2-22 DUKE STREET EAST

The property municipally known as 2-22 Duke Street W is listed under the City of Kitchener's Municipal Heritage Register. The subject building was listed because of its significant architectural heritage.

Description of Property:
2-22 Duke Street East is a two storey early 20th century brick commercial building built in the Art Deco architectural style. The building is situated on a 0.09 acre parcel of land located on the north side of Duke Street East between Queen Street North and Frederick Street in the City Commercial Core Planning Community of the City of Kitchener within the Region of Waterloo. The principal resource that contributes to the heritage value is the commercial building.

Statement of Cultural Heritage Value or Interest:
2-22 Duke Street East is recognized for its design, physical and historic values.

The building is a notable and unique example of the Art Deco architectural style. The building is in good condition with many intact original elements. The building features:
- two central brick pilasters topped with finials; a two-storey semi-circular opening that serves as the central entrance; stone work above the central entrance with the Breithaupt family grant of arms; stepped roofline; brick pilasters between bays; and, decorative elements with floral motifs.

The building was built by W.H. Breithaupt in 1931. The first tenant was tailor Herman Ahrens. Other early shops included Freddie and Jack's Sporting Goods, Grip Tite Roofing, and the Sheehy Brothers

Heritage Attributes:
The heritage value of 2-22 Duke Street East resides in the following heritage attributes:

All elements related to the construction and Art Deco architectural style of the building, including:

- o Roof and roofline
- o Windows and window openings;
- o Door openings;
- o Concrete sills;
- o Two central brick pilasters topped with finials;
- o Two-storey semi-circular opening;
- o Breithaupt Family Grant of Arms;
- o Brick pilasters; and,
- o Decorative elements, including floral motif at the main entrance

15-29 DUKE STREET EAST

The property municipally known as 15-29 Duke Street E is listed under the City of Kitchener's Municipal Heritage Register. The subject building was listed because of its significant architectural heritage.

Description of Property:
15-29 Duke Street East is a two storey mid 20th century concrete building built in the Modern Classical architectural style. The building is situated on a 0.93 acre parcel of land located on the south side of Duke Street East between Queen Street North and Frederick Street in the City Commercial Core Planning Community of the City of Kitchener within the Region of Waterloo. The principal resource that contributes to the heritage value is the public building.

Statement of Cultural Heritage Value or Interest:
15-29 Duke Street East is recognized for its design, physical, contextual, historical and associative values.

The public building is a notable, rare and unique example of the Modern Classical architectural style. The building is in good condition with many intact original elements. The building features: a two storey building that extends 176 feet along Duke Street and 96 feet along both Frederick and Queen Streets; rectangular ground level plan; 'u'-shaped second level plan; Duke Street façade with a series of strong verticals capped by a strong horizontal; projecting cornice; band of geometrical motifs; stone around window openings and main entrance; bronze light fixtures and sculpted bronze panels; coat of arms; and, granite and limestone on the Queen, Duke and Frederick Street facades. The public building contributes to the continuity and character of the streetscape due to its orientation and close proximity to the sidewalk and road at the intersection of Duke Street and Queen Street. The public building is recognized as both a neighbourhood and City landmark. Additional context is provided by the two park spaces, at each end of the public building.

The building was built in 1937-38 as part of the Department of Public Works cross-Canada building program that resulted from the enactment of the Public Works Construction Act of 1934. Construction began in late 1937, and the building officially opened in 1938

Heritage Attributes:
The heritage value of 15-29 Duke Street East resides in the following heritage attributes:

All elements related to the construction and Modern Classical architectural style of the building, including:

- o Rectangular ground level plan;
- o 'U'-shaped second level plan;
- o Window and window openings;
- o Door and door openings;
- o Roof and roofline;
- o Duke Street façade with a series of strong verticals capped by a strong horizontal;
- o Projecting cornice;
- o Band of geometrical motifs;
- o Stone around window openings and main entrance;
- o Bronze light fixtures and sculpted bronze panels;
- o Coat of arms; and,
- o Granite and limestone on the Queen, Duke and Frederick Street facades.

16-20 QUEEN STREET NORTH

The property municipally known as 16-20 Queen Street N is designated under part IV of the Ontario Heritage Act. The subject building was designated in 2022 because of its significant architectural heritage (Designation By-Law 2022-077).

Description of Property:
16-20 Queen Street North is a early 19th century building built in the Classic Revival architectural style. The building is situated on a 0.23 acre parcel of land located on the west side of Queen Street North between King Street and Duke Street in the City Commercial Core Planning Community of the City of Kitchener within the Region of Waterloo. The principal resource that contributes to the heritage value is the commercial building.

Statement of Cultural Heritage Value or Interest:
16-20 Queen Street North is recognized for its design, physical, historical and associative values. The design and physical values relate to the Classic Revival architectural style that is in good condition with many intact original elements. The building features: an 'H' plan; brick construction; concrete cornice with block dentils; first story concrete portico with entablature; decorative brick details; concrete columns; concrete balustrade; front door and opening with concrete decorative door surround reading "1871 – 1916"; windows and window openings with decorative concrete headers and sills; concrete cartouches above the first floor windows; and, decorative iron work.

The historic and associative values relate to the original owner and use of the building. The Economical Mutual Fire Insurance Company was founded in 1871 by Hugo Kranz and other businessmen in Berlin (now Kitchener) in order to protect against the devastating hardships caused by fire and lighting. The company issued its first policy on a house and barn on November 25, 1971. The first president was Henry Fletcher Jackson. Later presidents included: George Lang, Henry Knell, Senator W.D. Euler, Henry Krug, W.W. Foot, and J.T. Hill. The name of the company was changed in 1937 dropping the fire designation when the directors decided to enter the casualty field, giving its agents a complete portfolio including automobile, plate glass, accident and health. Over the years, the Kitchener head office moved five times to progressively larger quarters. The company started in the law office of Alexander Millar, one of Berlin's pioneer barristers. The first office was at the southwest corner of King Street and Ontario Street while the second office was on Queen Street North between King Street and Duke Street – 16-20 Queen Street North. This building was the head office for 38 years between 1916 and 1954. The third office was the building at the corner of Queen Street North and Duke Street West - the subject lands.

Heritage Attributes:
The heritage value of 16-20 Queen Street North resides in the following heritage attributes:

All elements related to the construction and Classic Revival architectural style of the building, including:

- o 'H' plan;
- o Brick construction, including decorative brick details.
- o Roof and roofline, including concrete cornice with block dentils;
- o First story concrete portico with entablature, columns, and balustrade;
- o Front door and opening with concrete decorative door surround reading "1871 – 1916";
- o Windows and window openings, including decorative concrete header sills and decorative brick voussoirs;
- o Concrete cartouches above the first floor windows; and, iron work.

30-32 Duke Street West, 141 Ontario Street North

The property municipally known as 30-32 Duke Street West is listed under the City of Kitchener's Municipal Heritage Register. The subject building was listed because of its significant architectural heritage.

Description of Property:
30-32 Duke Street West is a ten story 20th century concrete office building built in the Brutalist architectural style. The building is situated on a 1.07 acre parcel of land located on the corner of Duke Street West and Ontario Street in the City Commercial Core Planning Community of the City of Kitchener within the Region of Waterloo. The principal resource that contributes to the heritage value is the office building.

Statement of Cultural Heritage Value or Interest:
The design value relates to the architecture of the office building. The building is a rare example of the Brutalist architectural style. The building is in good condition. The building features: a ten storey office tower fronting Duke Street West; a five storey office tower fronting Ontario Street; flat roof; concrete construction; horizontal bands of concrete and windows; and, concrete plazas and flower boxes.

The contextual values relate to the contribution that the office building and plazas make to the continuity and character of the Duke Street West and Ontario Street streetscapes.

The associative value relates to the architect of the building. Webb Zefara Menkes Housden Partnership of Toronto designed the building. WZMH was established in 1961 and they are now an award winning international partnership responsible for the design of prominent buildings such as the CN Tower (WZMH Architects, 2014).

To ensure the cultural heritage value of this property is conserved, certain heritage attributes which contribute to its value have been specifically identified and include:

Heritage Attributes:
All elements related to the Brutalist architectural style of the office building, including:

- o Ten storey office tower fronting Duke Street West;
- o Five storey office tower fronting Ontario Street;
- o Flat roof;
- o Concrete construction;
- o Horizontal bands of concrete and windows; and,
- o Concrete plazas and flower boxes.

All elements related to the contextual value, including:

- o Location of the office building and plazas and the contribution they make to the continuity and character of the Duke Street West and Ontario Street streetscapes.

43-49 Queen Street North

The property municipally known as 43-49 King St N is listed under the City of Kitchener's Municipal Heritage Register. The subject building was listed because of its significant architectural heritage.

Description of Property:

43-49 Queen Street North is the original site of Evangelical Lutheran St. Peter's Church congregation. The site is a 0.95 acre parcel of land located on the east side of Queen Street North between Duke Street and Weber Street in the City Commercial Core Planning Community of the City of Kitchener within the Region of Waterloo. The principal resource that contributes to the heritage value is the institutional use.

Statement of Cultural Heritage Value or Interest:

43-49 Queen Street North is recognized for its historical and associative values. The historic and associative values relate to the Evangelical Lutheran St. Peter's Church congregation. The congregation was established on January 1, 1863 and by March of the same year they had purchased land on Queen Street North from Mrs. Augusta Krug for $178.50. The first church building was dedicated on July 19, 1863 and was demolished on March 12, 1877 to make way for a larger church. The second church was dedicated on October 6, 1878. The current church was built c. 1968.

Heritage Attributes:

All elements related to the architectural style of the church, including:

- Distinctive sanctuary with stained-glass windows;
- Floor-to-ceiling (approx. 40ft.) mid-century stained glass windows by Bullas Glass of Kitchener incorporate portions of c.1910 set of Bullas-mase windows from the previous St.Peter's building[1]
- Soaring ceiling
- Slender, tapering columns
- Labyrinth in the chapel modeled on the 13th century labyrinth in the floor of Charles Cathedral in France.
- Free-standing bell tower
- Red brick pattern
- Modernist facade

All elements related to the contextual value, including:

- Location of the property in the heart of downtown Kitchener;
- Orientation that has a strong street presence with a prominent entrance for the pedestrians.

1 Doors Open Waterloo Region

2.4 Architectural Visual Description & Existing conditions

10 Duke Street West is currently vacant and is being monitored and provided with heat. mcCallumSather reviewed the property to assess current conditions from visual observations on July 7th, 2021, and then on January 20th 2022. More detailed condition assessment was undertaken in January 2022 and September 2023 in conjunction with a Conservation Plan that was submitted as part of the first Site Plan application.

The exterior brick which forms the exterior finished face of the building appears to be in very good condition and in need of only minor repairs. The windows are not original but are in good condition. The current owners have continued to monitor and heat the building. As the development of the site moves forward, assessment of the building will be an ongoing process, involving the lead architect, structural, mechanical and electrical engineers and the heritage consultant.

Envelope

- Structure, Brick Masonry: Currently in good overall condition. There are some locations where efflorescence and mortar deterioration has occurred due to water damage (Figure 11). The brick above the top stone masonry band appears to have been replaced (Figure 9).
- Stone sills, stone masonry foundations and detailing in good overall condition. There are some locations where cracking has occurred due to settlement and water damage (Figure 13). There are also a number of areas where the stone has eroded significantly due to water damage.
- Roof Assembly: Appears to be in good condition. There are select areas where flashing is pulling away from the masonry parapet.
- Door and Windows: Windows are not original. It is suspected that the original windows would have been double hung with wood frames and stiles. Replacement windows look similar to the existing but appear to be vinyl; 8/12 divisions (not true muntins) (Figure 12).
- The principal wood entrance door (Figure 10) with transom along Duke St appears to be original and in good condition.
- Walls: Perimeter walls appear to be finished with plaster and/or drywall.

Systems

- Heating / Air Conditioning: Building is conditioned to maintain current conditions. A new system will likely be required to accommodate the proposed usage.
- Electrical / Plumbing: Building is currently serviced but may require updates depending on new programme / use. Similar to above mechanical requirements.

Code Compliance

- Fire Safety: Some building and fire code upgrades may be required such as sprinkler system, fire exit adjustment, and fire alarm systems.
- Barrier Free: Building is currently not universally accessible from the street. A new elevator or ramp could provide access from the street level to level 1.
- Review if hazardous material abatement is required.

Miscellaneous

- Existing Signage at the main entrance is compatible with existing character of the building, The building does not have exterior lighting directly fastened to the building but has floor mounted floor lights to illuminate the exterior.
- The landscape surrounding the building is simple but complements the building.

Interiors

Character defining interiors are concentrated at the building core which includes the existing stairwell, elevator shaft, lobby and washrooms. Floor finishes throughout with stair (5) and lobby (1-3) are two tones of terrazzo flooring with a marble accent at thresholds (7). The washrooms are ceramic tile. The stair railing features black metal spindles and newel posts with a brass railing (6). The vestibule at the front entry features decorative brass grilles on the east and west walls.

- Specialty finishes such as marble floors (3) and walls are found throughout the main entrance lobby but were likely introduced during a major renovation in the 1990s. The ceiling does not appear to be

Figure 9. Detail of the front facade fronting Duke Street West. The parapet brick appears to have been replaced as variation in brick stain was observed. (Source: mCs, July 2021)

Figure 10. Detail of the front facade fronting Duke Street West showing the main entrance door with door surround paneled glass and transom and entablature above. (Source: mCs, July 2021)

Figure 11. Detail of the Queen Street Facade (left) and right side of the rear facade (right) showing locations where efflorescence and mortar deterioration has occurred due to water damage. (Source: mCs, July 2021)

Figure 12. Perspective View of the subject property from Duke St W and Queen St intersection showing the heritage attributes of the building: 11 bays along Duke and 6 bays along Queen, the concrete band between the 2nd and 3rd floors, the parapet at the roofline with red brick on all facades.(Source: mCs, July 2021)

Figure 13. Cracking and deterioration in the sill. The repair is visually intrusive and measures should be taken to rehabilitate the sill to make it visually compatible to its original design. This inspection was undertaken with the naked eye and is not intended to identify any structural issues. (Source: mCs, July 2021)

Figure 14. Poor repairs to masonry and mortar. Bricks should be repointed with mortar that is compatible with existing. (Source: mCs, July 2021)

Source:
mcCallumSather - Site Visit Photos (July 2021)

original.

- Non Character defining interiors are throughout the tenant fit out spaces and include acoustic ceiling tiles, drywall partitions and carpet flooring. Window trims at the interior are drywall and wood painted white.

Proposed repairs to conserve the exterior of the building include:

- Selective cleaning of brick at areas of damage;
- Selective cleaning of exterior masonry where required;
- Selective re-pointing of deteriorated masonry joints;
- Selective repair of deteriorated masonry at sills, horizontal banding and surround;
- Repair of roof parapet in some locations;
- Replace parapet flashing; and,

Other areas under review:

- Facade retention structural review (Appendix 2 Facade Retention Strategy). More details will be incorporated in a subsequent Heritage Conservation Plan);
- Review building envelope, windows, doors, roof and floor assemblies, and foundations for functional upgrades and restoration work to ensure that the restored facades emulate the original construction; and,
- Provide performance specifications for the aforementioned items to ensure good heritage practices are being implemented.

2.5 Statement of Cultural Heritage Value or Interest

DESIGN / PHYSICAL VALUE

10 Duke St. West is a representative example of the Colonial Revival architectural style for commercial buildings. Built in 1949, it is a good example of this restitutory type and features: rectangular plan; red flemish brick; eleven bays along the front Duke Street elevation and rear elevations, and six bays on the short elevations to the East and West separated by shallow brick columns with limestone capitals and base; segmentally flat window openings with brick voussoirs and stone sills; main entrance door with window surround, transom and entablature; limestone band between 2nd and 3rd and the parapet at the roof line. While not particularly rare, unique or early, it is a sturdy handsome building characteristic of commercial buildings designed in the Colonial Revival Style.

Character defining interiors are concentrated at the building core which includes the existing stair railings, newel post caps and wall grilles. The stair railing features black metal spindles and newel posts with a brass railing. Marble ceilings and walls are found throughout the main entrance lobby. Floor finishes throughout with the stair and lobby are two tones of terrazzo flooring with a marble accent at thresholds. The washrooms are ceramic tile.

HISTORIC / ASSOCIATIVE VALUE

The associative and historic values relate to the building's connection to the history of insurance in Kitchener and to the original owner and use of the property. The Economical Mutual Fire Insurance Company was founded in 1871 in order to protect against the devastating hardships caused by fire and lighting. The assembly room in the Town Hall was used as the meeting place by forty resident freeholders to give their support to the formation of a mutual fire insurance company.

Henry Fletcher Joseph Jackson, Esquire, was the first elected President of the Economical Mutual Fire Insurance Company of Berlin in 1871. He retired in 1877. The first office building was located along Queen Street North, Berlin. The second president was William Aelschlager elected from 1876-1880, who also served as a Manager of the Company from 1881 until 1893. Hugo Kranz was one of the founders of the Company and was elected as the third president in 1880s and held office until 1893.

It was during this time that the company experiences a steady growth and established their second office on King Street East and the third office was located on the corner of King and Ontario Street. The fourth president John Fennell acted as the company's president for 30 years with the formation of the fourth office building at 20 Queen Street North that remained head office for 36 years. During the next few decades George C.H. Lang and Henry Knell were elected as the fifth and sixth presidents respectively. Finally in 1948, the subject site was acquired to plan for a new head office which was the fifth office building. The decision to build at this location was led by the company's seventh president, Senator William D. Euler.

Mathers & Haldenby, Architects, Toronto were commissioned to plan a new head office which officially opened on February 22, 1952[1] and was used until 1989[2]. Their team completed projects primarily in Toronto, but also did work both alone and in conjunction with other firms in various locations in Ontario and throughout Canada.

Senator Euler during his long life span of eighty-six years became one of Waterloo County's most distinguished citizens in both public and private life. He taught public school for six years, established a business college, acquired an interest in Kitchener News Record and became President of that important newspaper - all the while he was active in public affairs as Berlin Alderman, Mayor of Berlin in 1913-14, Member of Parliament in 1917 and successful in seven consecutive general elections; his distinguished political career was marked by appointment as Minister of National Revenue, Minister of Trade and Commerce, and to the Senate of Canada in 1935. In 1961 he became the first Chancellor of Waterloo Lutheran University (now Wilfrid Laurier University).

The building has historical value featured in the “1854-1954 City of Talent Kitchener Centennial” publication as Kitchener’s oldest financial institution serving its citizens continuously for eighty-three years.

1 Economical Mutual Insurance Company, One hundred economical years 1871-1971. Kitchener Public Library, Rare 368.971345 Econo

2 Statement of Significance, City of Kitchener, April 2008

CONTEXTUAL VALUE

The building is located in the city centre district of Kitchener and sits prominently on the north side of Duke Street West between Ontario Street North and Queen Street North in the City Commercial Core of the City of Kitchener within the Region of Waterloo. The property is physically linked to the streetscape in scale and material. Because of its location on a prominent street corner and its distinctive Colonial revival characteristics, it could be considered a neighbourhood landmark.

DESCRIPTION OF CULTURAL HERITAGE ATTRIBUTES

10 Duke St. West is a representative example of the Colonial Revival architectural style for commercial buildings. The property contains the following heritage attributes that are related to the Colonial Revival architectural style:

1. Red Flemish brick;
2. Rectangular plan;
3. 11 bays along Duke Street and 6 bays along Queen Street;
4. Segmentally flat windows openings with brick voussoirs;
5. 8/12 windows with limestone sills;
6. Main entrance door with door surround, transom and entablature;
7. The limestone band between 2nd and 3d floors; and
8. The parapet along the roofline.

As well as interior attributes including:

9. Brass elements: Stair railings, newel post caps and wall grilles; and,
10. Roman Travertine tile in vestibule entrance and lobby.

10 Duke St. West has historical associations to the growth of the City of Kitchener in the 20th century as a commercial centre specifically related to the establishment of fire insurance company and rapid expansion of the Canadian economy.

10 Duke St. West has contextual value as a landmark. The property contains the following attributes that reflect this value:

1. Prominent location at intersection of Duke Street West and Queen Street North
2. Balanced front and side facades &
3. Limestone band between 2nd and 3d floors

10 Duke Street West is recognized for its design, contextual, historical and associative values. We have identified that the original Economical Insurance building built in 1949 satisfies the criteria for designation as per Ontario Regulation 9/06.

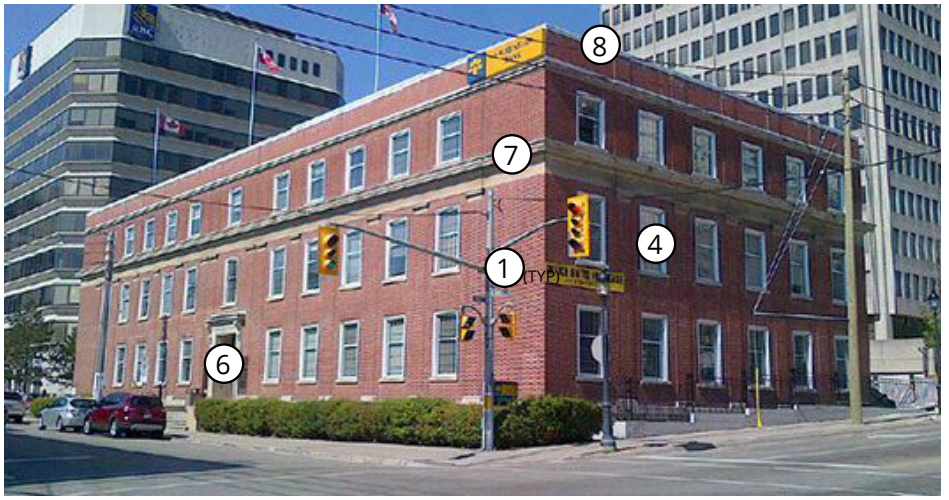


Figure 15. Perspective View of the subject property from Duke St W and Queen St intersection showing the heritage attributes of the building.(Source: mCs, July 2021)

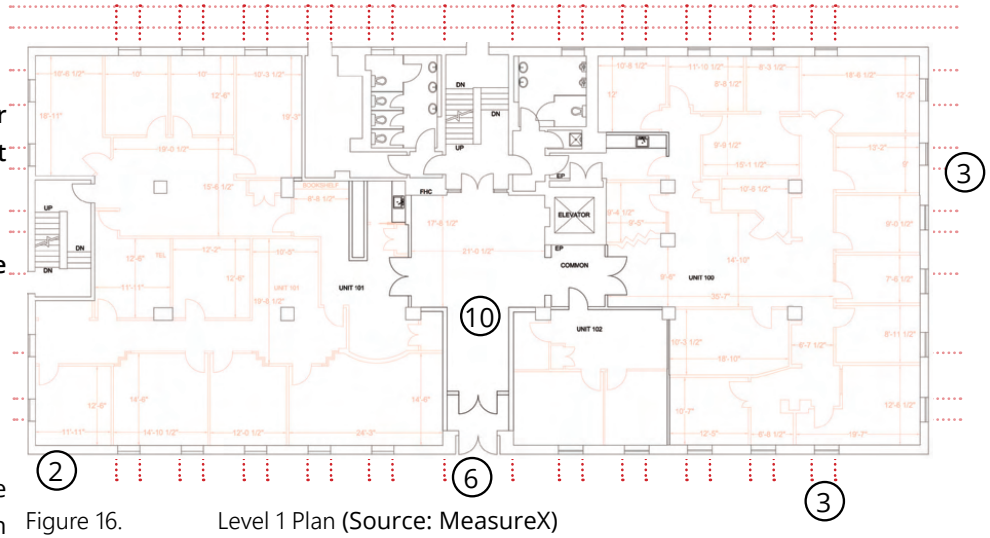


Figure 16. Level 1 Plan (Source: MeasureX)

3.0 Policy Framework

The subject property at 10 Duke Street West, Kitchener, Ontario is subject to several provincial and municipal heritage planning policies. The subject site is located north of the Downtown (L-Com-2) Downtown Cultural Heritage Landscape boundary (Figure 19). Furthermore, the subject site is located within the Centre District (Downtown) (Figure 20).

The Cultural Heritage Landscape Datasheets (2014) provides the following description on the growth of this area[1] - '*This downtown area evolved throughout the 20th century as the City grew and the needs of its citizens changed. Industry moved out of the downtown. Larger buildings were introduced or replaced earlier structures that housed institutions such as the Post Office. During the second half of the 20th century, the downtown area continued to evolve, buildings were demolished and new mid-century modern buildings were introduced. From the 1960s onward, multiple-lot developments (including surface parking lots) began to change the built-form pattern of the area, precipitated by the changes in modern transportation, commerce and living. The modern City Hall completed in 1993, along with highrise office towers, now dominate the formerly low-scale area and reveal the new vision of the City with respect to the downtown area.*'

City of Kitchener Zoning By-law 85-1 (Office Consolidation: June 29, 2009) designates the development site as:

- 'Office District D-4' which permits high density dwelling types and a range of complementary non-residential uses.[2]

1 Cultural Heritage Landscape Datasheets (2014), Appendix 6. Retrieved online from: https://www.kitchener.ca/en/resourcesGeneral/Documents/DSD_PLAN_CHL_Study_Appendix_6_CHL_Data_Sheets.pdf

2 City of Kitchener Zoning By-law 85-1, Section-16, https://app2.kitchener.ca/appdocs/Zonebylaw/PublishedCurrentText/Sections//Section%2016%20-%20Office%20District%20Zone%20(D-4).pdf

3.1 Provincial Heritage Policies

A. PROVINCIAL POLICY STATEMENT ('PPS')

The PPS 2020 identifies conservation of resources of significant architectural, cultural, historical, archaeological, or scientific interest as a provincial interest and it further recognizes that protecting cultural heritage and archaeological resources has economic, environmental, and social benefits, and contributes to the long-term prosperity, environmental health, and social well-being of Ontarians. The 2020 PPS includes a section on context/economic development that is applicable to the subject site:

1.7 Long-Term Economic Prosperity

1.7.1 Long-term economic prosperity should be supported by:

d) maintaining and, where possible, enhancing the vitality and viability of downtowns and mainstreets;

e) encouraging a sense of place, by promoting well-designed built form and cultural planning, and by conserving features that help define character, including built heritage resources and cultural heritage landscapes;

Response: The development proposal conserves the heritage resource in-situ. The proposed tall building and the retained heritage building will together act as a landmark feature for both the Downtown area and the adjacent Cultural Heritage Landscape area. The shallow street setbacks along Queen and Duke Street will preserve existing vitality of mainstreets.

2.6 Cultural Heritage and Archaeology

2.6.1 Significant built heritage resources and significant cultural heritage landscapes shall be conserved.

2.6.3 Planning authorities shall not permit development and site alteration on adjacent lands to protected heritage property except where the proposed development and site alteration has been evaluated and it has been demonstrated that the heritage attributes of the protected heritage property will be conserved.

Response: The development proposal conserves the heritage attributes of the retained

heritage building. Materials from the rear facade that is proposed to be demolished will be salvaged, and stored for future re-use in the development. A commemorative feature easily visible to the public is recommended near the main entrance to mitigate the partial loss of the west and complete loss of the rear (north) facade. This can incorporate the materials salvaged from removal and reused for interpretation.

B. A PLACE TO GROW - GROWTH PLAN FOR THE GREATER GOLDEN HORSESHOE

The Greater Golden Horseshoe (GGH) is one of the North America's fastest growing regions. The GGH includes the City of Toronto and 15 surrounding counties. The subject property is located within the identified 'Urban Growth Centre' in the Schedule 4 of this planning document. Like other provincial plans, this plan builds upon the policy foundation provided by the PPS and provides additional and more specific land use planning policies to address issues facing specific geographic areas in Ontario.

The following policy stated under *Section 4.2.7 Cultural Heritage Resources of the Growth Plan for GGH*[1] (August 2020 Consolidation) is applicable and relevant for the subject property and its associated development:
1. Cultural heritage resources will be conserved in order to foster a sense of place and benefit communities, particularly in strategic growth areas.

Response: The GGH targets 200 residents and jobs combined per hectare in Downtown Kitchener urban growth centre[2]. The proposed development supports this residential intensification while retaining and protecting the adjacent cultural heritage resources.

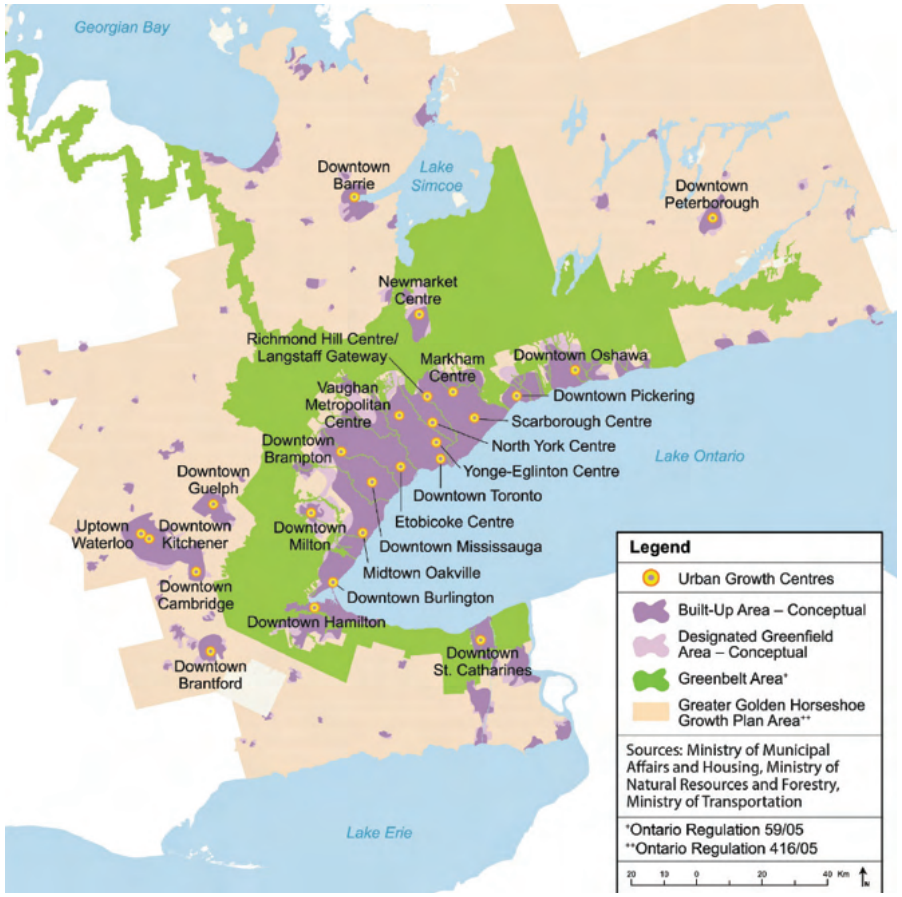


Figure 17. Urban Growth Map - Schedule 4 showing Downtown Kitchener as an Urban Growth Centre (Source: A plan to Grow, Growth Plan for the Greater Golden Horseshoe. Retrieved online from: https://files.ontario.ca/mmah-place-to-grow-office-consolidation-en-2020-08-28.pdf)

1 4.2.7 Cultural Heritage Resources, Place to Grow Growth Plan for The Greater Golden Horseshoe Office Consolidation 2020. Retrieved from https://files.ontario.ca/mmah-place-to-grow-office-consolidation-en-2020-08-28.pdf

2 2.2.3 Urban Growth Centres, Place to Grow Growth Plan for The Greater Golden Horseshoe Office Consolidation 2020. Retrieved from https://files.ontario.ca/mmah-place-to-grow-office-consolidation-en-2020-08-28.pdf

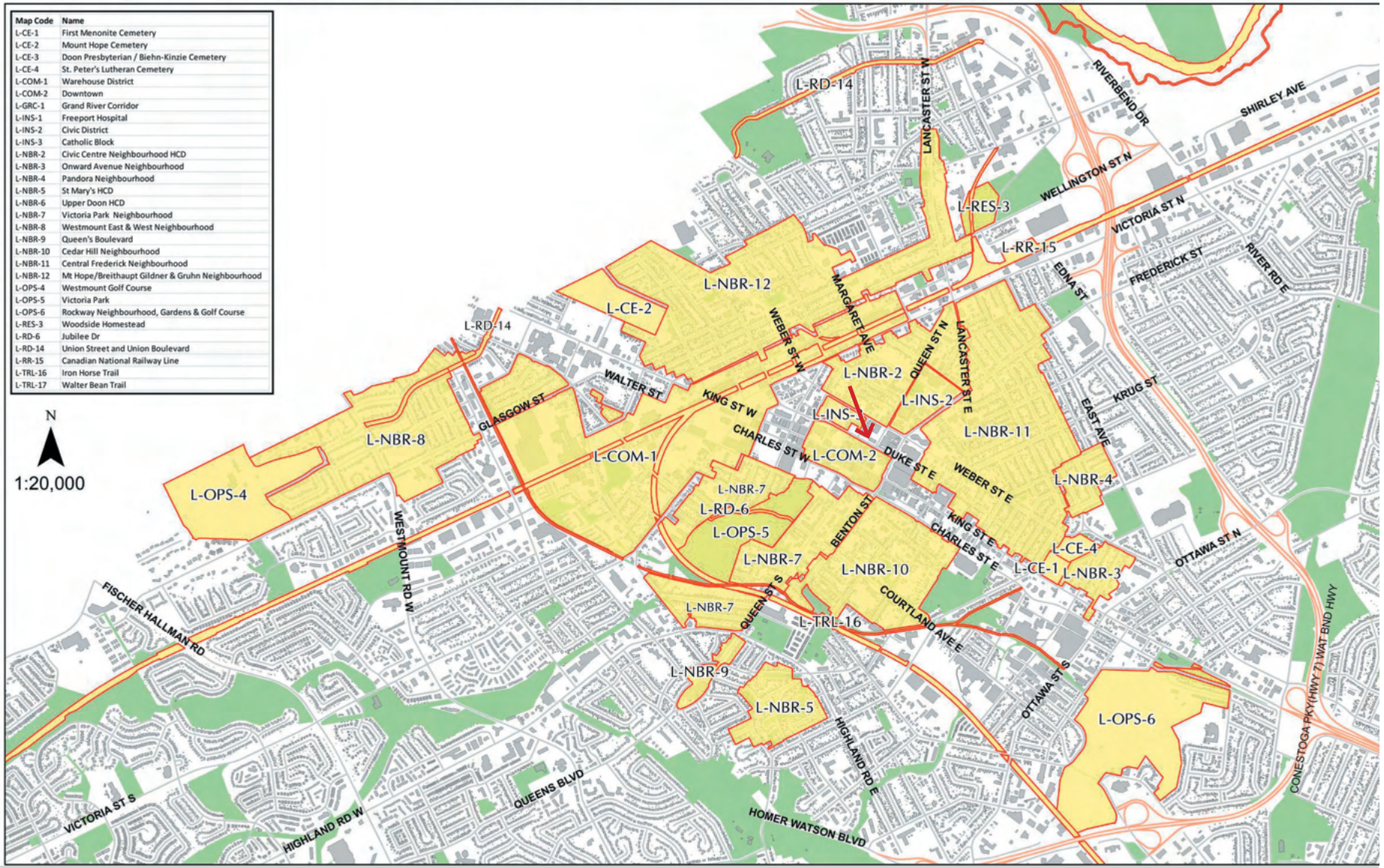
D. REGIONAL OFFICIAL PLAN

The Regional Official Plan includes a section on context/economic development that is applicable to the subject site[1]:

3.G.19 Where it is not feasible to conserve a cultural heritage resource intact in accordance with Policy 3.G.18, the conservation recommendations will:
(a) promote the reuse or adaptive reuse of the resource, building, or building elements to preserve the resource and the handiwork of past artisans; and
(b) require the owner/applicant to provide measured drawings, a land use history, photographs and other available documentation of the cultural heritage resource in its surrounding context.

Response: The proposed development aims to rehabilitate the existing heritage building and conserves the character-defining elements. Measured drawings have been prepared (provided as part of the HCP) along with photographic documentation of the existing building in its surrounding context to mitigate the loss of the elements that are proposed to be demolished as part of the development.

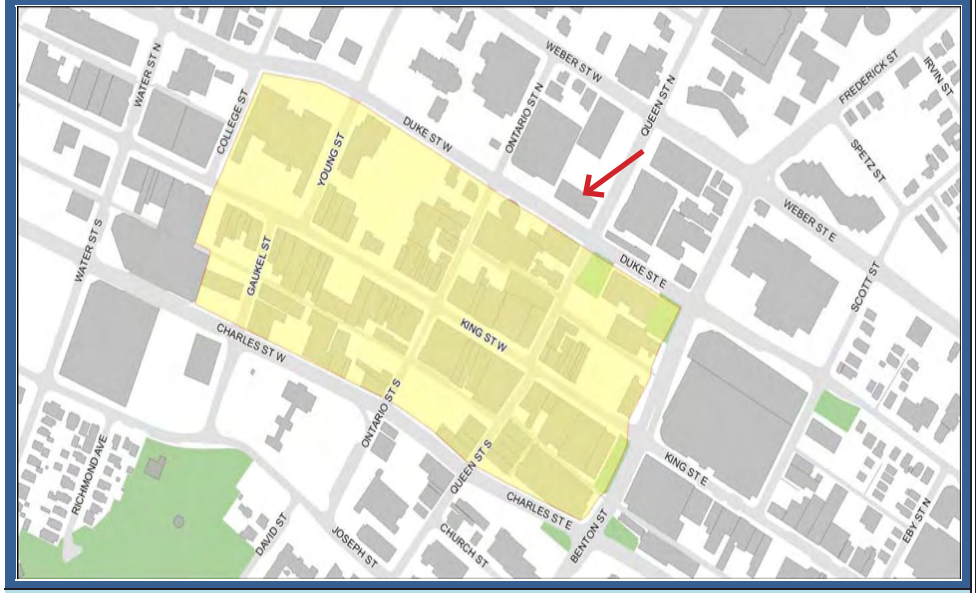
1 Section 3G. Cultural Heritage, Liveability in Waterloo Region, Regional Official Plan. Retrieved online from: https://www.regionofwaterloo.ca/en/resources/Regional-Official-Plan/Chapter_3_consolidated_rop_2015-access.pdf



KITCHENER CULTURAL HERITAGE LANDSCAPE STUDY

Figure 18. Kitchener Cultural Heritage Landscapes in Central Neighbourhoods (Appendix 4). Annotated by mCs to show the subject site. Retrieved online from: https://www.kitchener.ca/en/resourcesGeneral/Documents/DSD_PLAN_CHL_Study_Appendices_1-5.pdf

L-COM-2 Downtown



LOCATION:

Straddles King Street between Benton/Frederick Streets and College Street

HISTORIC THEMES:

Urban Development, Industry and Commerce, Governance and Education

LANDSCAPE TYPE: Commercial

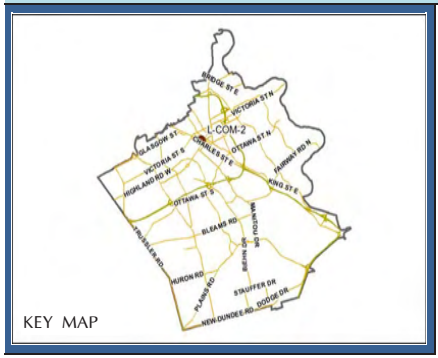
ARCHAEOLOGICAL POTENTIAL: YES

Within the Described boundary, there are:

Designated HCDs:	0
Designated Properties:	7
Listed Properties:	40

DESCRIPTION:

The area roughly bounded by Duke Street, College Street, Charles Street and Frederick Street constitutes the central portion of the larger "City Centre District." Recognized as the heart of the downtown, the City Centre District is filled with a wide-ranging mix of uses. Historically, the downtown has been the focal point of the Region. One of the many uses in the area is commercial, and indeed the defined Downtown CHL area is also part of the "Commercial Core Planning Community." South Queen Street was the main thoroughfare in the city and the junction at King Street became a focal point of the early developments in Berlin. The area radiating out from this important corner is therefore connected with prominent and influential Berlin citizens who contributed to the early prosperity of the City. As is common in mid-to-late 19th century towns and cities throughout the Province, hotels and inns, banks and commercial enterprises of all sorts anchored this commercial core. Many of these late-19th and early-20th century commercial structures exist today, exhibiting a range of architectural styles. Generally brick, with two to four storeys being the norm, most buildings have been in continuous commercial use since their construction. This downtown area evolved throughout the 20th century as the City grew and the needs of its citizens changed. Industry moved out of the downtown. Larger buildings were introduced or replaced earlier structures that housed institutions such as the Post Office. During the second half of the 20th century, the downtown area continued to evolve, buildings were demolished and new mid-century modern buildings were introduced. From the 1960s onward, multiple-lot developments (including surface parking lots) began to change the built-form pattern of the area, precipitated by the changes in modern transportation, commerce and living. The modern City Hall completed in 1993, along with high-rise office towers, now dominate the formerly low-scale area and reveal the new vision of the City with respect to the downtown area.



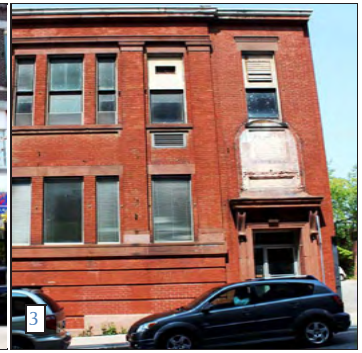


Figure 19. Kitchener Cultural Heritage Landscape - Downtown - Appendix - 6. Annotated by mCs to show the subject site. Retrieved online from: https://www.kitchener.ca/en/resourcesGeneral/Documents/DSD_PLAN_CHL_Study_Appendix_6_CHL_Data_Sheets.pdf

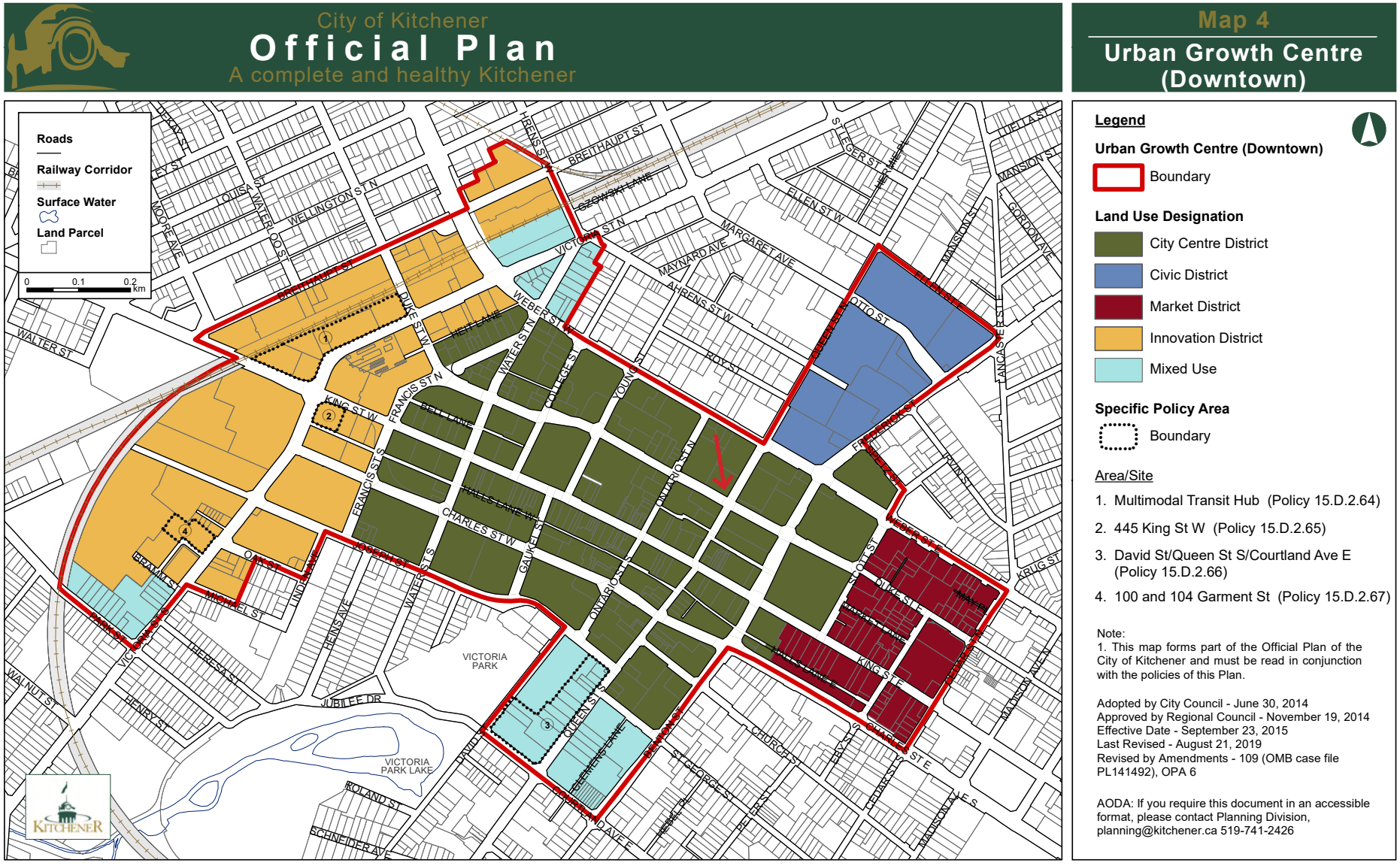


Figure 20. Kitchener Urban Growth Centre (Downtown). Annotated by mCs to show the subject site. Retrieved online from: https://www.kitchener.ca/en/resourcesGeneral/Documents/DSD_PLAN_OP_Map_4_UGC_Downtown.pdf

3.2 Municipal Planning & Heritage Policies

The subject property at 10 Duke Street West is subject to several municipal planning policies, including,the City of Kitchener Official Plan and the City of Kitchener Urban Design Manual (city-wide and downtown). The following section outlines the relevant sections of those policies, and provides responses with regards to the heritage resource and proposed development.

1. CITY OF KITCHENER OFFICIAL PLAN

The official plan lists policies that provide the framework to ensure the conservation of those cultural heritage resources which reflect and contribute to the history, identity and character of Kitchener. Accordingly, the following policies of the Kitchener Official Plan are applicable to the proposed development:

12.C.1.7. Properties that are of cultural heritage value or interest will be considered for designation under the Ontario Heritage Act. The cultural heritage value or interest associated with the cultural heritage resource will be evaluated based on the regulation in the Ontario Heritage Act which provides criteria for determining cultural heritage value or interest.

Response: 10 Duke Street West is recognized for its design, physical, contextual, historical and associative values. It has been identified that the original Economical Insurance building built in 1949 satisfies the criteria for designation as per Ontario Regulation 9/06 . This evaluation will facilitate the consideration of potential impacts to 10 Duke Street from the proposed development on the subject lands.

12.C.1.10. The City will require the conservation of significant cultural heritage landscapes within the city.

Response: The adjacent Downtown CHL is characterized by a mixed-use character with commercial/retail at grade and 2-4 storeys red-brick facades with contemporary high-rise additions to the formerly low-scale fabric. The proposed development is in line with this existing adjacent context as it retains the 3 storey massing along Duke and Queen Street and highlights the balanced red-brick facade of the existing heritage building. No existing views of the CHL were identified as character-defining, no impacts were found to the adjacent CHL.

12.C.1.21. All development, redevelopment and site alteration permitted by the land use designations and other policies of this Plan will conserve Kitchener's significant cultural heritage resources. The conservation of significant cultural heritage resources will be a requirement and/or condition in the processing and approval of applications submitted under the Planning Act.

Response: The proposed development conserves all the character-defining elements of the heritage resource. The new addition will not impair the essential form and integrity of the historic building. This heritage impact assessment assesses all potential impacts of the proposed development and recommends mitigation strategies to address them. A Heritage Conservation Plan has been completed and submitted as part of the first Site Plan application submission on April 25, 2022 which outlines a plan to manage, protect and preserve the heritage attributes and the integrity of the cultural heritage resource. This also includes a long-term plan that will take into consideration future use, potential alterations while protecting and conserving the heritage attributes.

The identified heritage attributes ie. red Flemish brick, rectangular plan, 11 bays along Duke Street and 6 bays along Queen Street, segmentally flat windows openings with brick voussoirs, 8/12 windows with limestone sills, main entrance door with door surround, transom and entablature, the limestone band between 2nd and 3d floors and the parapet along the roofline all are proposed to be retained as part of the Duke and Queen street facades completely and the west facade partially. The heritage building's historical and contextual value will be conserved as the building is not proposed to be relocated to another site and will continue to enjoy a prominent location at Queen and Duke street intersection.

2. CITY OF KITCHENER URBAN DESIGN MANUAL

Part A Urban Structure and Built Form: CITY WIDE
Cultural & Natural Heritage

Section 01.2.8 New development on a site with a cultural heritage resource and additions to cultural heritage resources should integrate new, contrasting building materials in ways

which respect the integrity of the cultural heritage resource. Conserve heritage value by being physically and visually compatible with, subordinate to, and distinguishable from the cultural heritage resource.

Response: The proposed works being done in order to accommodate the new podium and tower addition are significant, however the majority of the historic fabric and appearance of the existing building will be conserved. The proposed design maintains the existing floor levels and window and door openings along Queen and Duke Street. The datum lines of the proposed podium addition align with the existing building's levels to preserve sightlines. The new addition will incorporate step backs and contrasting exterior cladding to offer a subtle backdrop to the existing red-brick heritage building, thereby making it contemporary yet distinguish-able from the historic building.

Part A Urban Structure & Built Form: Downtown Cultural & Natural Heritage

The following design guidelines are applicable for the proposed development as it sits within the City Centre District adjacent to the Downtown CHL boundary.

Section 05.2.7
Conserving cultural and natural heritage resources within Kitchener's Downtown is of critical importance, as doing so gives variety to the urban fabric, perpetuates the cultural history of DTK and encourages exploration, sustainability, and a sense of living history.

Response: The heritage resource is a 'heritage character' building, important to the visual continuity of the downtown streetscape. The development project conserves the heritage resource (partially) in-situ and will act as a precedent for future development in the downtown area. The chosen conservation strategy is based on a clear understanding of the building, the removal / impact on heritage attributes is avoided, and where they cannot be avoided, mitigation measures will be implemented including building documentation, salvage and interpretation.

The new development conserves the heritage value by being physically and visually compatible with, and distinguishable from, the heritage resource. Furthermore, it ensures inclusive usability while preserving the buildings heritage attributes. Finally, the proposed development provides a high quality of architectural and urban design to the growing streetscape of Downtown Kitchener.

Section 05.1.1 Urban Design Manual - Affecting Positive Change
Change is occurring quickly in Downtown Kitchener, from significant new residential, mixed use and office buildings, to new restaurants and services popping up in the central core. Its buildings and streets are an eclectic mix of sizes, styles and eras, from 19th century brick and beam factory buildings to modernist office complexes. Heights range from 1 storey to 30 and above. Some buildings occupy entire blocks, others are just a few metres wide.

As of the publication of this Manual, Downtown Kitchener is undergoing change at an unprecedented rate. We are likely to build as many significant projects in the next 5 years as we did over the previous 50. Within the next two years, the height of DTK's tallest building will more than double, from 19 storeys to 39. Thousands of new residential units are being created along with space for thousands of new workers.

While this change is exciting, and represents a new era of highly intense, transit supportive development, it is important to preserve the existing mix of lively, heterogeneous streetscapes and built forms. Diversity of people, places and experiences and a commitment to design excellence are key to the ongoing success of Downtown Kitchener.

Response: The proposed development will retain the on-site heritage resource partially conserving all its heritage attributes. The heritage building will be adaptively reused as an office space, amenity space and above grade parking and will be integrated with the proposed residential tower. This unique project will be a landmark building that will support residential intensification and provide employment opportunities to new workers. The proposed design program will conserve the heritage value and character-defining elements and ensure that the new construction is physically and visually compatible and distinguishable from the heritage building[1].

1 General Standards for Preservation, Rehabilitation and Restoration (11), Standards and Guidelines for the Conservation of Historic Places in Canada, pg 23). Retrieved online from: https://www.historicplaces.ca/media/18072/81468-parks-s+g-eng-web2.pdf)

Section 05.2.1 Urban Design Manual - Inclusive Design
Universal Design
Kitchener's Downtown consists of heritage buildings and other older buildings which may not be universally accessible. Owners or tenants of these buildings should explore opportunities to integrate universal design measures such as ramps, handrails and other barrier free measures into the architectural expression of the building, providing equitable use to all.

Response: The building is currently not universally accessible from the street. A ramp is proposed along the Duke Street frontage as part of the proposed development.

Section 05.2.2 Urban Design Manual - Design for Sustainability
It includes cultural sustainability, to protect our natural and built heritage resources and to welcome and accommodate both old and new cultural traditions and celebrations.

Response: Further design development and building envelope investigations are required before proceeding with resource-saving measures involving energy, water or materials. The environmental benefits of these measures is weighed against their impact on heritage value. Solutions should be found that take advantage of the inherent durability and adaptability of most historic places.[1]

Both heritage conservation and sustainability aim to conserve. In the case of heritage buildings, this includes considering the inherent performance and durability of their character-defining assemblies, systems and materials, and the minimal interventions required to achieve the most effective sustainability improvements. For example, it may be possible to improve the energy efficiency of an historic building character-defining assemblies, systems and materials, and the minimal interventions required to achieve the most effective sustainability improvements. For example, it may be possible to improve the energy efficiency of an historic building by insulating the attic and basement rather than removing or concealing character-defining brick or plaster to insulate the walls.[2]

Section 05.3.1 Urban Design Manual - Built Form - Massing
Adaptive reuse of-- and additions to-- existing buildings should respect and enhance the established character of the building, its streetscape, and any surrounding open areas. This is the case regardless of a building's cultural heritage status.

Additions to existing buildings must demonstrate a coherent design overall, with thoughtful interplay between old and new that is complementary, visually appealing, and reflective of high contemporary design standards for massing, materials and detailing.

Response: The development proposal is clearly legible as a new piece of architecture, that includes sympathetic setbacks and stepbacks to maintain the prominence of the heritage building, and has related proportions / massing. It is compatible with the heritage building. With respect to the Statement of Significance for 10 Duke Street, the proposal conserves the identified heritage attributes - red brick, the bays on both Duke and Queen Streets along with windows with limestone sills, parapet roofline, window and door openings. The building is retained at its original location reinforcing its contextual and associative value as a landmark building. In addition, the retained bays at the return on the laneway (RBC side) provides more visual continuity at the pedestrian level.

1 Sustainability. General Standards for Preservation, Rehabilitation and Restoration, Standards and Guidelines for the Conservation of Historic Places in Canada, pg 43). Retrieved online from: https://www.historicplaces.ca/media/18072/81468-parks-s+g-eng-web2.pdf)

2 Balancing conservation principles and Sustainability Objectives, Section 4.3 Guidelines for Buildings. Standards and Guidelines for the Conservation of Historic Places in Canada, pg 127). Retrieved online from: https://www.historicplaces.ca/media/18072/81468-parks-s+g-eng-web2.pdf)

The proposed residential tower is set back from the podium to again defer to the scale of the existing and address the pedestrian scale of the immediate context. The design both physically and visually places the existing building ahead of the new construction (Figure 22 & 24).

Section 05.3.1 Urban Design Manual - Built Form - Materials & Articulation
Where there is potential for a large, sculptural architectural expression, it must be pursued without sacrificing streetscape quality or pedestrian comfort.

Concentrate the most prominent architectural expressions towards major street corners and buildings directly adjacent to ION stops. Landmark architectural forms should encourage exploration of the downtown and aide pedestrian and transit user wayfinding.

Response: The proposed addition is clearly legible from the original red brick building and is clad in glass and metal to provide a contrast between old and new. The property is physically linked to the streetscape in scale and material. Because of its location on a prominent street corner and its distinctive Colonial revival characteristics and the playfulness in the new construction (balcony design), it could be considered a neighbourhood landmark that would aide pedestrian and transit user wayfinding.

Section 05.4.2 Urban Design Manual - City Centre District (UGC-1)
The City Centre District is a compact mix of high-rise residential, office and historical low and mid-rise buildings[1]. The subject site is located within the City Centre District. The following area specific guidelines apply to the subject site:

New development is to contribute positively to the eclectic character of the City Centre District through visionary design that is contemporary, represents the greatest possible mix of uses, and provides a variety of built forms including heights, massing, formal expressions, materials, and colours.

Response: The City Centre District was historically developed as a pedestrian–oriented environment characterized by ground floor commercial uses in narrow store fronts, providing frequent entrances for pedestrians. The proposed commercial use within the existing heritage building will help maintain the pedestrian appeal as the development evolves into a mixed-use setting with a tall contemporary building with residential, retail and amenity spaces. A new color palette is proposed for the new building that contributes to the eclectic character of the City Centre District. Light to dark grey color metal panels are proposed in the podium design. the proportion of these panels are intended to emulate the proportions of the existing heritage building windows.

The proposed building is informed by, but distinct from the historic street character of Duke Street West, maintaining a strong and continuous street presence. The podium massing provides transition from the heritage building to the proposed tower by providing a step-back buffer establishing an adequate separation between the two distinct building forms. The design is intended to preserve street views and streetscape character along Duke Street West and Queen Street North. The proposed tower is set back from the podium to create a clear break and address the pedestrian scale of the immediate context. This unique project will adaptively reuse a historic landmark building in the neighbourhood which will be integrated with a tower adding a sculptural quality to the overall development.

1 UGC-1 City Centre District, City of Kitchener Urban Design Manual - Part A Downtown. pg 10. Retrieved from: https://www.kitchener.ca/en/resourcesGeneral/Documents/DSD_PLAN_UDM_05_Downtown.pdf

Figure 21. UGC-1 City Centre District, City of Kitchener Urban Design Manual - Part A Downtown, annotated by mCs to show the subject site. Retrieved online from: https://www.kitchener.ca/en/resourcesGeneral/Documents/DSD_PLAN_UDM_05_Downtown.pdf

City of Kitchener Urban Design Manual

Part B: Design for Tall Buildings

Heritage[1]
Locate and design tall buildings to respect and complement the scale, character, form and siting of on-site and surrounding cultural heritage resources.

Conserve and integrate built heritage resources into tall building developments in a manner that conforms with heritage conservation policies, principles, standards and guidelines.

Conserve the integrity of the cultural heritage values, attributes, character, and three-dimensional form of an on-site built heritage resource. Facade retention alone is not an acceptable method of heritage conservation.

Response: The proposed development conserves the existing built heritage resource three-dimensionally by retaining and rehabilitating all of the South and East facades (fronting Duke and Queen respectively) and partially retaining the West facade (3 bays). The heritage building will thus continue to enjoy its existing original corner location. The retained portion incorporates all the heritage attributes of the building, including reuse of the interior attributes. The principal entrance will remain in the same location which will preserve the function and street presence of the South facade as well as showcase some of the original interior finishes such as the brass elements and marble.

Tall building proposals containing heritage properties on or adjacent to the development site may be required to provide a Heritage Impact Assessment and Conservation Plan as part of the application review process, to evaluate the impact the proposed development or site alteration will have on the heritage property and to recommend an overall approach to conservation of these resources and mitigate negative impact upon them.

Response: This CHIA assesses the impacts of the proposed development and and forms part of a Site Plan application submission (SP22/104/D/AP). It was reviewed by Heritage Planning Staff prior to being considered by the Kitchener Heritage Committee on December 7, 2021.

1 Urban Design Manual, Part B: Design for Tall Buildings, pg 16. Retrieved online from: https://www.kitchener.ca/en/resourcesGeneral/Documents/DSD_PLAN_Tall_Building_Urban_Design_Guidelines.pdf

3.3 Heritage Conservation Principles

As per the HIA Terms of Reference for the City of Kitchener, considering the cultural heritage value and interest identified at 10 Duke St W, it is recommended that the design approach be guided by the Standards and Guidelines for the Conservation of Historic Places in Canada and the Ministry of Tourism, Culture and Sport's "Eight Guiding Principles in the Conservation of Built Heritage Properties".

In order to protect the heritage resources of the 10 Duke Street West building, the following conservation strategy and analysis has been prepared to specifically address the cultural heritage value and heritage attributes based on design, historic, and contextual criteria outlined in the Statement of Significance of Section 2.5.

- Maintain appropriate physical relationships and visual settings that contribute to the cultural significance of the complex such as its frontage on 10 Duke St. W. and Queen Street. The red brick masonry ties this building to other historic red brick structures in the area, and the shallow buttressing and window openings form a rhythm and pattern on the street;
- Preserve the historic character of 10 Duke St. W. do not over repair or restore;
- Respect the Economical Insurance building in its materials and detailing as they relate to the Colonial Revival style;
- Allow for new construction that relates to and conserves the essential form and integrity of the original building;
- Conserve the exterior elements that are important to defining the overall heritage value of the buildings such as the material and composition of existing facades in the vernacular;
- Maintain significant sight lines to the building from Duke and Queen Street;
- New development should be differentiated from the original building. It is recommended that the frontage on Duke Street West and Queen Street, remain connected to the street;
- Any new building adjacent to the Economical Insurance building should be contemporary as per Conservation Principle 7 - Legibility 1. We would recommend that any new work be distinguishable from original fabric, contrasting in style.

Review of Applicable Standards and Guidelines for the Conservation of Historic Places in Canada

Conservation Treatment - Rehabilitation: The appropriate conservation treatment being followed in the case of an adaptation of the building to fit new standards while keeping the heritage cultural value of the property is Rehabilitation.

General Standards for Preservation, Rehabilitation and Restoration:

1. Conserve the heritage value of an historic place. Do not remove, replace or substantially alter its intact or repairable character defining elements. Do not move a part of an historic place if its current location is a character-defining element.

Response: The building will remain in situ and will remain largely intact. The proposed design retains all of the South and East facades, those fronting onto Duke St W and Queen St N, and is proposing partial demolition of the West facade and full demolition of the North facade. Due to the location of the building on the site, sitting on the south half of the property, the North facade is located in the middle between where the retained building joins with the new podium addition. As a result, the facade would be enclosed within the proposed building if it were retained therefore making it unfeasible. The proposed retention strategy maintains key sightlines of the building along Duke St W and Queen St N while allowing for infill of the under utilized northern part of the site. The identified exterior attributes are mirrored across both axes of the building therefore, despite the removal of the character defining elements of the West and North facades, the overall character of the building is maintained.

The identified interior attributes are located within the building core, both at the principal entrance off Duke St W and at the rear of the existing building, feature the same materials as described in previous sections. The rear stairwell is to be demolished but the principal entrance will remain in the same location which will preserve

the function and street presence of the South facade as well as showcase some of the original interior finishes seen throughout.

2. Conserve changes to an historic place that, over time, have become character-defining elements in their own right.

Response: The character defining elements in this building have been identified in the Statement of Significance and have been considered in the impact evaluation.

3. Conserve heritage value by adopting an approach calling for minimal intervention.

Response: The densification of this site and size of the overall project is a considerable shift from the current conditions and as such will result in significant intervention of the existing building in order to accommodate the new building. With this being said, the proposal takes the principal of minimal intervention into consideration as much as possible and where the impacts are unavoidable, they have been minimized using various mitigation measures and design principles discussed in this report. The new podium and tower addition is strategically placed at the rear of the property and utilizes a reduced and simple massing at the base to minimize intersection with the existing building. The location of the primary entrance, openings and structure (namely the existing floor levels) are being maintained in order to minimize the potential negative impacts on the integrity or heritage value of the existing building.

4. Recognize each historic place as a physical record of its time, place and use. Do not create a false sense of historical development by adding elements from other historic places or other properties, or by combining features of the same property that never coexisted.

Response: The proposal is distinct and of its time so as not to create a false sense of historical development. It features contemporary design aesthetics and materials whilst not competing with the existing building.

5. Find a use for an historic place that requires minimal or no change to its character-defining elements.

Response: The proposed development will be mixed-use and incorporate office, amenity and parking/service spaces within the existing building and podium levels. The design acknowledges the strengths of the existing building and by continuing its use as office space along the front (South) of the building it guarantees the building will continue to contribute to the streetscape and thrive as an active, prominent building.

6. Protect and, if necessary, stabilize an historic place until any subsequent intervention is undertaken. Protect and preserve archaeological resources in place. Where there is potential for disturbing archaeological resources, take mitigation measures to limit damage and loss of information.

Response: The project team has provided a document, appended to this report, illustrating the facade retention and stabilization strategy for the existing building throughout the course of demolition and construction. The building should be carefully monitored for the entire duration of the project to ensure the strategy is sufficient in preventing any damage to the existing building.

7. Evaluate the existing condition of character-defining elements to determine the appropriate intervention needed. Use the gentlest means possible for any intervention. Respect heritage value when undertaking an intervention.

Response: A preliminary visual analysis of the existing condition has been described in section 2.4 of this report and found the building to be in good overall condition. A detailed condition assessment of any affected heritage attributes and heritage conservation drawings for construction should be prepared by a qualified consultant reflecting construction methodology in accordance with these conservation standards.

8. Maintain character-defining elements on an ongoing basis. Repair character-defining elements by reinforcing their materials using recognized conservation methods. Replace in kind any extensively deteriorated or missing parts of character-defining elements, where there are surviving prototypes.

Response: Refer to response above. In addition, should any damage occur to the existing building at any point in the project, a qualified consultant should be engaged to advise on the proper materials and methodology used for the repair.

9. Make any intervention needed to preserve character-defining elements physically and visually compatible with the historic place and identifiable on close inspection. Document any intervention for future reference.

Response: Refer to response above.

10. Repair rather than replace character-defining elements. Where character-defining elements are too severely deteriorated to repair, and where sufficient physical evidence exists, replace them with new elements that match the forms, materials and detailing of sound versions of the same elements. Where there is insufficient physical evidence, make the form, material and detailing of the new elements compatible with the character of the historic place.

Response: Refer to previous response. In addition, the building should be thoroughly documented prior to any work beginning in order to serve as evidence should any repair or replacement work need to be done.

11. Conserve the heritage value and character-defining elements when creating any new additions to an historic place or any related new construction. Make the new work physically and visually compatible with, subordinate to and distinguishable from the historic place.

Response: The proposed podium and tower addition, although much larger in scale, than the three storey heritage building, have been designed to be visually compatible with yet subordinate to the existing. The podium massing provides transition from the heritage building to the proposed tower and makes use of set backs and material, a fully glazed wall system, to create a reveal between the 'old' and the 'new'. The proposed residential tower is set back from the podium to again defer to the scale of the existing and address the pedestrian scale of the immediate context. The design both physically and visually places the existing building ahead of the new construction.

The proposed design interprets the features of the heritage building in a contemporary design solution that fits the site. The south elevation along Duke Street W illustrates the compositional pattern and scale that is carried through the design of the new podium and tower. Additionally, the selection of tactile, familiar materials such as brick, metal, and screens create a relatable and dynamic streetscape.

12. Create any new additions or related new construction so that the essential form and integrity of an historic place will not be impaired if the new work is removed in the future.

Response: Due to the nature of constructing a large tower on top of an existing building, the structure being proposed will need to be integrated or designed in conjunction with that of the existing building to some extent. A structural engineer has been engaged to develop a facade retention and stabilization strategy during both the demolition and construction phases of the project. Wherever structurally feasible, the new construction should be reversible without altering the integrity of the historic building.

4.0 Description of Proposed Development

The proposed development expands the existing commercial use of the property by adding stepped back podium floors to the top of the heritage building, with an additional residential floors above that. The new building will be mixed-use, with commercial, office, amenity and parking on the lower (podium) levels and 499 residential units on the remaining levels. The total proposed height is 45 storeys.

Site Statistics

New Site Area: 2,226 sq.m.
Gross Floor Area: 36,235.1 sq.m
Proposed Building Height: 45 storeys
Proposed No. of Units: 499

Parking required: 161
Parking Provided: 168

The Proposed Development retains the entire principal (south) facade, the entire east facade, and a portion of the west facade in situ (Figure 22). The rear (north) facade is proposed to be demolished to accommodate the proposed programming. Due to the location of the building on the site, sitting on the south half of the property, the North facade is located in the middle between where the retained building joins with the new podium addition and as a result would be enclosed within the proposed building if it were retained.

The proposed retention strategy maintains key sightlines of the building along Duke St W and Queen St N while allowing for infill of the under utilized northern part of the site. The identified exterior attributes are mirrored across both axes of the building therefore, despite the removal of the character defining elements of the West and North facades, the overall character of the building is maintained. In-situ retention of the building will preserve the streetscape context and the building's relationship with Duke and Queen Street.

The proposed development retains all of the character defining features as described in section 2.5 'Statement of Cultural Heritage Value or Interest' including:

- Red Flemish brick;
- Rectangular plan;
- 11 bays along Duke Street and 6 bays along Queen Street;
- Segmentally flat windows openings with brick voussoirs;
- 8/12 windows with limestone sills;
- Main entrance door with door surround, transom and entablature;
- The limestone band between 2nd and 3d floors; and
- The parapet along the roofline.

The described interior attributes will be also retained for reuse in the building.

Figure 22. View of the Proposed Development as seen from Duke Street West and Queen Street North intersection with the retained heritage building at grade. (Source: Design Package, Turner Fleischer Architects, May 2023)

4.1 Design Principles

The following design principles will be utilized to guide the development towards a contextual and sensitive response to this significant location:

- Maintain appropriate physical relationships and visual settings.
- Maintain rhythms in massing and fenestration along the Duke Street to preserve contextual relationships.
- Integrate the south, east and west historic facades as part of the new development in order to maintain the historical landscape along Duke St W.
- Establish a height transition between historic and adjacent buildings through the stepped-back design of the podium.
- Set back tower from main streets to minimize visual and shadow impacts and preserve the historic streetscape.
- New development designed to be contemporary as per Conservation Principle 7 - Legibility. The proposed addition is clearly legible from the original building and is clad in glass and metal to provide a contrast between old and new.

The proposed design interprets the features of the heritage building in a contemporary design solution that fits the site. The south elevation along Duke Street W illustrates the compositional pattern and scale that is carried through the design of the new podium and tower. The proposed design amplifies the corner of Queen and Duke St through the modern interpretation of a podium and tower.

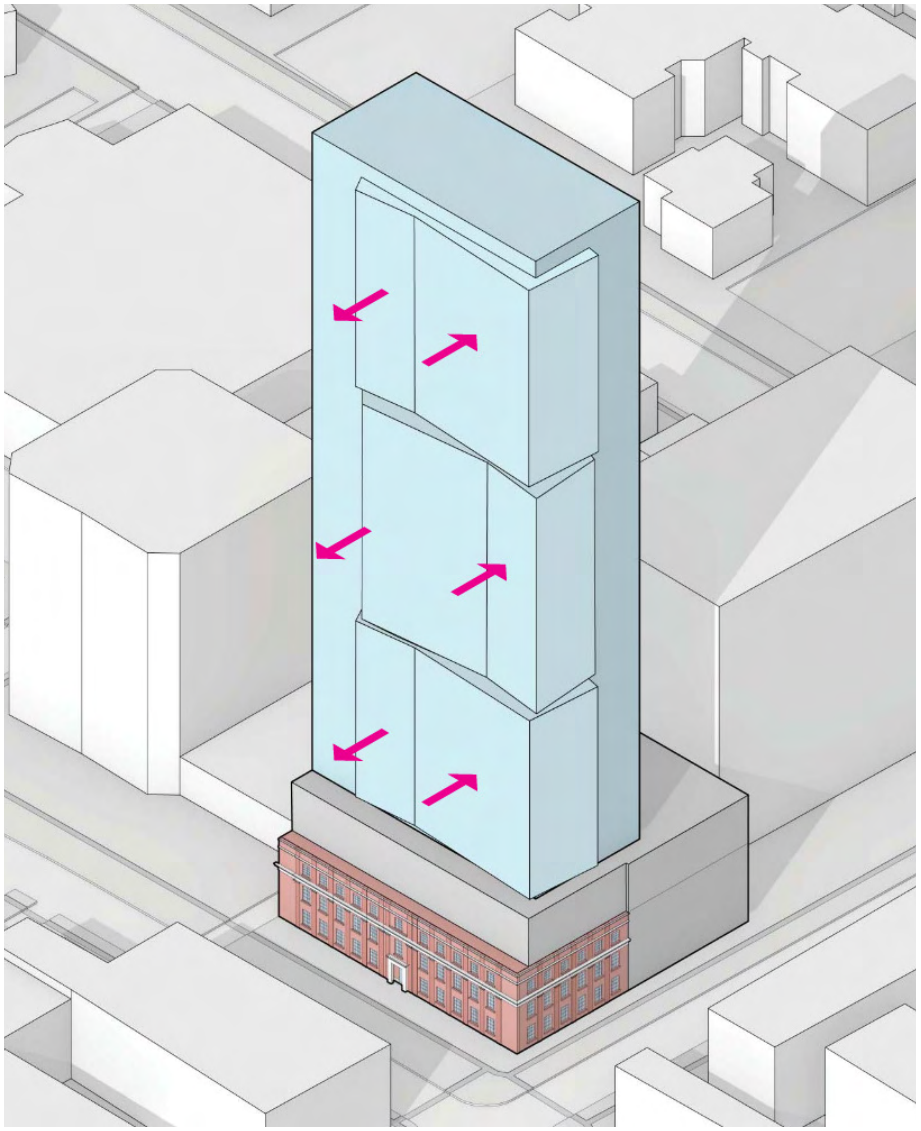


Figure 23. Conceptual massing of the Proposed Development as seen from Duke Street West and Queen Street North intersection with the retained heritage building at grade. (Source: Design Package, Kirkor Architects, September 2021)

4.2 Scale, Form & Massing

The proposed building is informed by, integrates but distinct from, the historic street character of Duke St W, maintaining a strong and continuous street presence which is consistent with the pattern set by the applicable design guidelines and planning policies.

The form and composition of the design works well with the surrounding existing neighbourhood character and the future planned intensification in Downtown Kitchener.

The podium massing provides transition from the heritage building to the proposed tower by providing a set-back buffer and which establishes an adequate separation between the two distinct masses. This exhibits a gradual neighbourhood transition thereby preserving street views and streetscape character along Duke Street. The proposed residential tower is set back from the podium to create a clear break and address the pedestrian scale of the immediate context. Additionally, the selection of tactile, familiar materials such as brick, metal, and screens create a relatable environment.

4.3 Site Layout

The site has a lot area of 2,226 sq.m. The proposed development contemplates a mix of uses including 499 residential units, office space, amenity spaces and 168 parking spaces.

Vehicular access to the proposed residential parking is planned exclusively from Queen Street North, located at the north edge of the site (Figure 25). The parking will entail 5.5 levels of levels of above grade parking, within the heritage building and proposed podium levels. This proposal will be providing an adequate amount of parking with regards to the relatable parking ratio. The proposed parking will not be visible through

Figure 24. Perspective View of the Proposed Development as seen from Duke Street West and Queen Street North intersection with the retained heritage building at grade. Source: Design Package, Turner Fleischer Architects, May, 2023.

the Duke St W facade, as it will be concealed from the street by proposed office space.

Pedestrians will be able to access the building through the preserved principal entrance on Duke St W to maintain ease of pedestrian access from the street.

The loading for this design proposal will enter from the same location off of Queen St. (Figure 25).

4.4 Urban Design & Context

The proposal will accommodate growth through compact development that makes efficient use of land resources and will support the objective of creating complete communities through the residential intensification of a growing urban context in an area that provides for ease of access to transit, jobs and recreation.

The proposed development:

- is transit-supportive as it is located on Duke St W, which is an LRT corridor;
- facilitates a compact, efficient, and more transit-supportive built form and development pattern;
- conforms to the policies of the Kitchener Official Plan as it supports a range of uses while maintaining the character of the surrounding area;
- contributes to a well-balanced community through a range of residential unit types, and promotes the use of public transit and other modes of transportation; and
- is pedestrian-friendly as it will be connected to the municipal sidewalk system.

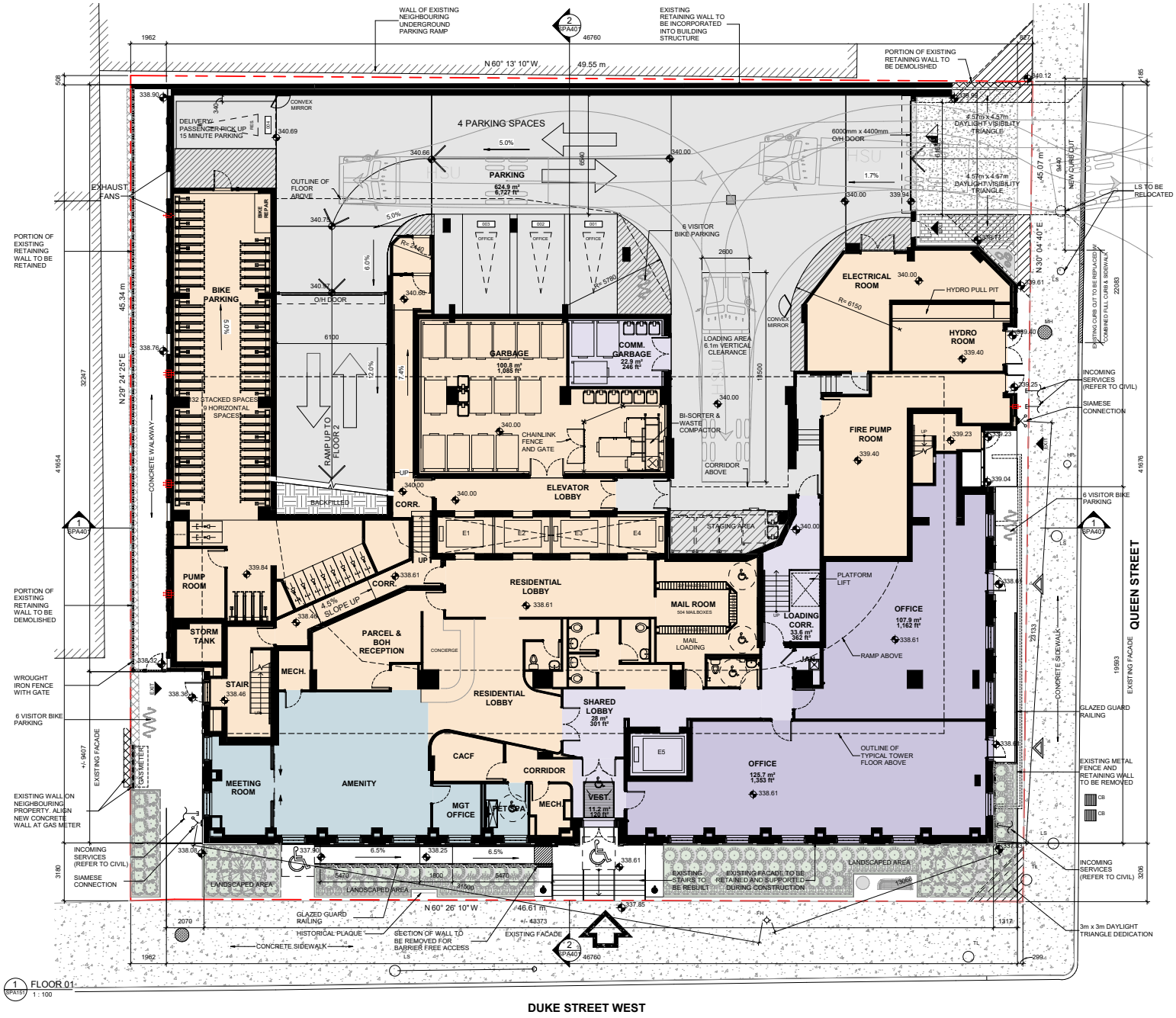


Figure 25. Level 1 Plan showing the retained portion of the Heritage Building along Duke and Queen Streets and new rear addition. Source: Design Package, Turner Fleischer Architects, May 2023.

5.0 Impact of Proposed Development

The following assessment has determined that the proposed redevelopment will not result in significant direct and/or indirect impacts to the heritage resource's identified attributes. Where unavoidable, any impact will be minimized and monitored through the proper mitigation measures and recommendations as described in the following sections.

The proposed design balances the need for intensification of the downtown area with the desire to conserve the rich historic fabric of the area. The street facing, south and west, facades are being retained along with a portion of the east facade, while the north facade is being demolished in order to accommodate the new podium addition. All identified heritage attributes and the overall character of the building are being conserved, and reused in the case of the interior attributes. Through set backs, materiality, form and proportions, the new building is distinguishable from yet complimentary to the existing building.

In bringing new life to the site, the development will ensure the ongoing use and maintenance of the heritage features as well as continue to contribute to the streetscape of the surrounding area.

All of the potential impacts on the existing building as a result of the proposed development, based on those identified in Ontario Heritage Tool Kit, Info Sheet #5, have been assessed and are described in the table on the following page.

Potential direct and/or indirect adverse impact	Assessment	Summary of Impact with Mitigation
1. ***Destruction*** of any, or part of any significant heritage attributes or features.	The proposed development involves partial demolition of the existing building in order to allow for the construction of a new podium and tower addition. The identified heritage attributes to be retained include: Exterior envelope - on the south, east, and a large portion of the west facade, the existing brick, limestone sills, cornice, parapet and window & doors openings. As part of the building's retrofit, the north and part of the west facade, the elevator overrun, chimney(s), a portion the roof as well as the interior will be demolished. Despite the demolition of parts of the building, the retention of the majority of the exterior features will help to maintain the overall historic character of the building and continue to be a prominent part of the historic streetscape along both Duke St W and Queen St N.	Minor impacts to the exterior, major impacts to the interior but no significant impacts to the overall heritage character. For the entirety of the north facade, portion of the west facade and rooftop that are to be demolished, the significant heritage attributes will be salvaged and stored for potential future use - commemoration/interpretation. For the interiors to be demolished, we recommend the interior heritage attributes (brass elements) wherever possible, be documented, salvaged and stored for reuse in the new construction. These elements when reused should be incorporated in visible public areas including, but not limited to, exterior and/or interior side of entryways, vestibules, lobby and amenity spaces. If a heritage attribute cannot be salvaged, the documentation can be referenced to inform design elements as part of the new design.
2. ***Alteration*** that is not sympathetic, or is incompatible, with the historic fabric and appearance.	The works being done in order to accommodate the new podium and tower addition are significant, however the majority of the historic fabric and appearance of the existing building will be conserved. The most significant changes will be on the interior of the building, whereby demolition will occur to allow for new uses/spaces to be introduced within the existing walls. The proposed design maintains the existing floor levels and window and door openings. The new addition to the current building form will be contemporary and compatible with yet distinguishable from the historic building.	Minor impacts. The proposed development incorporates an appropriate step back between the existing building and new development, which will provide visual separation as per guidance from Canada's Historic Places (Section 4.3.1: Exterior Form). The proposed development will provide distinguishability and legibility of 'new' from 'old' and make use of compatible materials and massing. Any repair or replacement of heritage attributes should be done using best practices and under the advisement of a qualified professional.

Potential direct and/or indirect adverse impact	Assessment	Summary of Impact with Mitigation
3. ***Shadows*** created that alter the appearance of the heritage attribute or change the viability of an associated natural feature or plantings, such as a garden. The Design for Tall Buildings section of the Urban Design Manual states that buildings should 'Maintain daily access to at least 5 hours of cumulative direct sunlight to nearby sidewalks and open spaces under equinox conditions'.	A shadow impact analysis has been done and found that there are some shadows cast on the adjacent properties at 49 Queen St N and 30-32 Duke St W. 141 Ontario St N. The building at 30-32 Duke St W. 141 Ontario St N receives shadows for a 2-hour period of time from 10am to 12pm. The building at 49 Queen St N receives shadows for a 2-hour period of time from 4pm to 6pm except for June 21, when it receives some shadows starting at 2pm. In December, shadows extend into the Civic Centre Neighbourhood HCD. With regards to the building itself, being that the tower addition sits directly on top of the existing building, the east facade is partially shadowed for a 2-hour period of time from 10am to 12pm; the west facade for 4-hour period of time from 2pm to 6pm; and the south facade is not shadowed at any point.	Minor impacts. The sun shadow study concluded that although there are some shadows cast on the adjacent properties at 49 Queen St N and 30-32 Duke St W. 141 Ontario St N, each of the building are only shadowed for 2 hours, with the exception of 49 Queen St N in June when it is shadowed for 4 hours. Shadow impacts have been mitigated using set backs and reduction of the tower floor plate, while balancing efficiency, to minimize any shadows created. The proposed development maintains daily access of cumulative direct sunlight to nearby sidewalks and open spaces. The South (principal) facade and adjacent Duke St. sidewalk is at no point affected by shadows.
4. ***Isolation of a heritage attribute*** from its surrounding environment, context or a significant relationship.	There are no negative impacts from isolation as the heritage building will remain at its original location. The two street facing facades, west and south, and partial east facade are being retained as such maintaining the access, approach and relationship from the building to the street.	No impact. The proposal and retention of the street facing facades will activate the site by giving a use to the existing building while continuing to contribute to the historic streetscape and character of the surrounding area.
5. ***Direct or indirect obstruction of significant views*** or vistas with, from, or of built and natural features.	N/A - No significant views or vistas have been identified within, to, or from the subject property. It is however possible to view the cultural heritage resource from Duke and Queen Street, this view would be preserved as part of the proposed development.	No impact. The proposed development include a podium, set back from the existing building, above which sits the tower, which is set back once again. The approach and relationship from the building to the street will remain the same and due to the setbacks, the new tower allows the existing building to be the most prominent feature.

Potential direct and/or indirect adverse impact	Assessment	Summary of Impact with Mitigation
6. ***A change in land use*** (such as rezoning a church to a multi-unit residence) where the change in use affects the property's cultural heritage value.	The proposed development will be combination of office, residential and amenity/support spaces for the residential units. The lower levels will be where the existing building, lower portion of the site, and the new podium, upper portion of the site, will join to form the new proposed building footprint. The office and amenity spaces will be located along the perimeter of the existing building, which aligns with the historic use and prevents the need to alter the facade to suit the new use. The new amenity and support spaces will be located towards the back or center of the existing building, but the majority of which will be contained within the new podium.	No impact. The proposed mix of uses and location of the office spaces within the existing building both pays tribute to the site's history and supports the continued active use of the site.
7. ***Land disturbances*** such as a change in grade that alters soils, and drainage patterns that adversely affect a cultural heritage resource, including archeological resources.	The upper portion of the site where the new buildings will be constructed currently contains a parking lot with the only landscaping being located along Queen St N. There are no proposed changes in grade level. During demolition and construction, the existing building will be stabilized and the works will be phased accordingly to ensure the existing building is properly supported at all times. Land disturbances during construction phase can be monitored if mitigation measures such as standard drainage, site grading and vibration monitoring are implemented. There are no anticipated changes in grade that would impact the on-site or adjacent Heritage resources.	Potential impact. With the proper stabilization and monitoring throughout all phases of the project, there should be no impact on the integrity of the existing building. As a precaution, vibration monitoring and regular inspections should take place prior to, during and post construction. If any unexpected situation or damage does occur, a discussion with a qualified professional should occur prior to any decisions being made. The intensified use will have less of an impact as the new construction will be located to the rear of CHR. The added parking will be added within the existing structure and will not be visible from the street.

6.0 Considered Alternatives & Mitigation Strategies

Considered Alternatives

Various iterations were explored as part of the design process which tested out options for siting, massing, layout and materiality against efficiency and desired development outcomes. The site as a whole was evaluated to see where various programmatic spaces would fit best, working around the existing footprint. Unfortunately, due to the size and amount of support spaces required to make the residential use feasible, the decision was made to demolish part of the existing building. In doing so, the connection between the 'new' and the 'old' was able to be better integrated.

Various mitigation options are evaluated in this section, to determine how the proposed development can lessen its impacts on the subject heritage resource. Mitigation options are defined by the Provincial Policy Statement 2020 ('PPS 2020') as development initiatives that permit the preservation of a heritage resource. ***This PPS provision is incorporated municipally through Section 12.C.1.26.e 'consideration of alternatives, mitigation and conservation methods' outlined in Section 12 Part C of the City of Kitchener Official Plan 2014.***

In line with this policy, this HIA evaluates the following mitigation options, as recommended by the OP in the following order of priority:
(i) On-site retention of the subject heritage resource in the original use and integration with the surrounding or new development;
(ii) Relocation of the heritage resource to another site and building the proposed development on the subject site;
(iii) Retaining the existing heritage resource partially and proposing the addition on top and rear and
(iv) Do nothing approach

The following description provides analysis of each option:

ANALYSIS OF OPTIONS FOR CONSIDERED ALTERNATIVES

OPTION 1: On-site retention of the subject heritage resource in the original use and integration with the surrounding or new development.

ANALYSIS:

- The building was designed as a three storey office building of which the structure was not designed to support any significant additional storeys.
- Due to the size of the site, an addition of any significance at the rear of the existing building is not feasible and would eliminate all of the existing surface parking.
- In order to advance a redevelopment of any significance that recognizes the location of the subject lands within a strategic location within the Downtown and a Major Transit Station Area (MTSA), the only feasible option requires the partial demolition of the west façade and the full demolition of the north façade.
- Constructing a 45-storey tower above the existing building presents significant structural challenges, including the need for extensive cut-throughs of the floor slabs for the foundation, structural columns, and elevator core. These alterations are both economically challenging and could potentially compromise the stability of the existing structure. To mitigate these challenges, it is best advisable to retain only the heritage façades of the building through shoring while replacing the interior with a modern and efficient structure.

FEASIBILITY:

This option is not feasible because of:

- It may compromise the structural integrity and stability of the existing structure;
- Potential elimination of all of the existing surface parking;
- It would not allow the new support spaces for the residential program to fit; and,
- Reduction in economic and commercial viability of the property.

ANALYSIS OF OPTIONS FOR CONSIDERED ALTERNATIVES

OPTION 2: Relocation of the heritage resource to another site and building the proposed development on the subject site.

ANALYSIS:

- The contextual values of the CHR relate to the contribution that the CHR makes to the continuity and character of the Duke Street West and Queen Street streetscapes. The location of the CHR at this prominent intersection of Duke and Queen Street within Downtown Kitchener adds to its contextual value. The property is physically linked to the streetscape in scale and material. Because of its location on a prominent street corner and its distinctive Colonial revival characteristics, it could be considered a neighbourhood landmark. Relocation is not recommended as it would result in the loss of its contextual value.
- Relocation may result in permanent damage to the structure.
- New foundations will be required at the site where the building is proposed to be relocated.
- The CHR may have to be dismantled brick by brick and rebuilt if the structure is not in a condition to be transported to a new site moving through downtown Kitchener.

FEASIBILITY:

This option is not feasible because of:

- It would result in the loss of its contextual value of the CHR;
- It may compromise the structural integrity and stability of the existing structure during the relocation process;
- It may result in the loss of a landmark building.

ANALYSIS OF OPTIONS FOR CONSIDERED ALTERNATIVES

OPTION 3: Retaining the existing heritage resource partially and proposing the addition on top and rear.

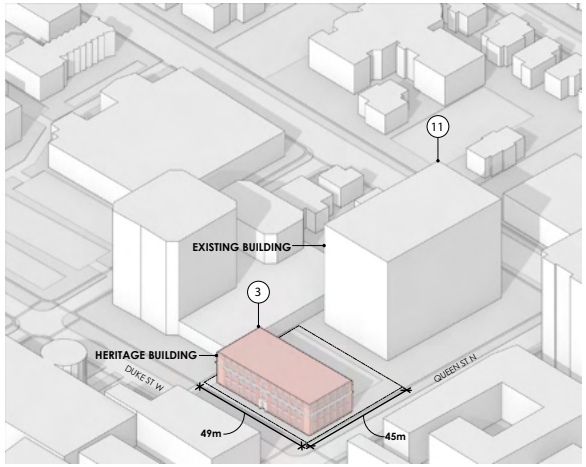
ANALYSIS:

- Due to the location of the existing building on the site, sitting on the south half of the property, the North facade is located in the middle between where the retained building joins with the new podium addition. As such, if the north facade were to be retained, it would be enclosed within the proposed building;
- Structural considerations, balanced with the desire for scale meant that in order for the required amount of parking (and access to parking) be achieved, an above ground podium was an ideal solution;
- An underground structure could have compromised the structural integrity of the existing building and the retention of the north facade would have meant a smaller footprint for parking, therefore increased podium height;
- The facade articulation and massing of the podium and tower addition has undergone several adjustments to end up with a design that was complimentary to the heritage building and character of the surrounding area. The design team conducted a contextual analysis of the neighbourhood in order to establish a baseline from which to pull inspiration from;
- The proposal uses a shift in the axis of the balconies while still providing transparency to the more rigid grid pattern seen on the main tower facade;
- Materiality and the use of a specific material for each space was also considered as a strategy to ensure the addition was visually sympathetic to yet distinguishable from the existing building;
- The window style and rhythm on the lower level of the podium are intended to mimic the style of the existing CHR. The latest iteration showcases a simplified podium facade design which is less busy and more consistent in terms of number of panel widths and is more sympathetic to the existing heritage building window widths.

FEASIBILITY:

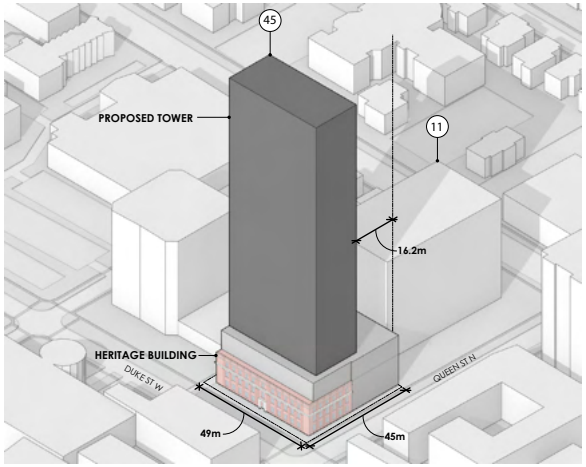
This option is feasible because:

- It would result in the protection and conservation of the heritage attributes of the heritage resource and maintain its design, historical and contextual value;
- The overlap zone between the retained heritage building and the proposed tower core (see figure 26) offers an efficient integration into the newly required parking - only as a single ramp between the core and the structure;
- The existing heritage building will be adaptively reused commercially and for parking and will activate the street promoting pedestrian engagement;
- The proposed stabilization strategy will not compromise the structural integrity and stability of the retained existing structure during the construction process;
- The CHR will be conserved in-situ partially and will enjoy a prominent position at the intersection of Duke Street and Queen Street at a corner location, ensuring visibility from the public right-of-way.



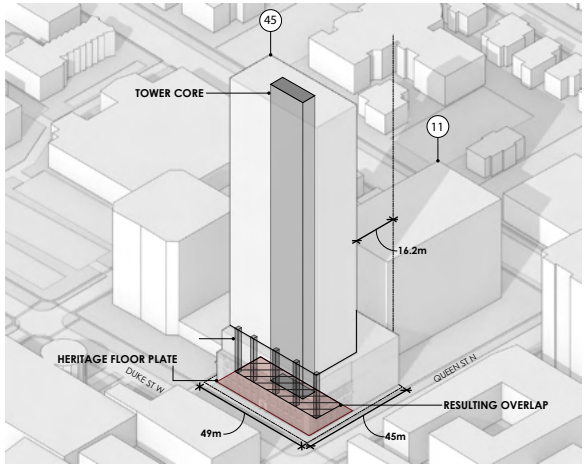
EXISTING CONTEXT

The existing site contains the Heritage Building and an 11 story adjacent building.



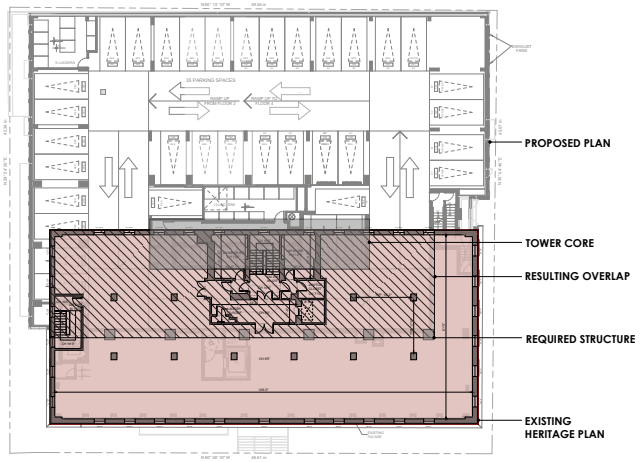
TOWER POSITIONING

Given the site constraints the Tower location would need to sit over the existing Heritage Building.



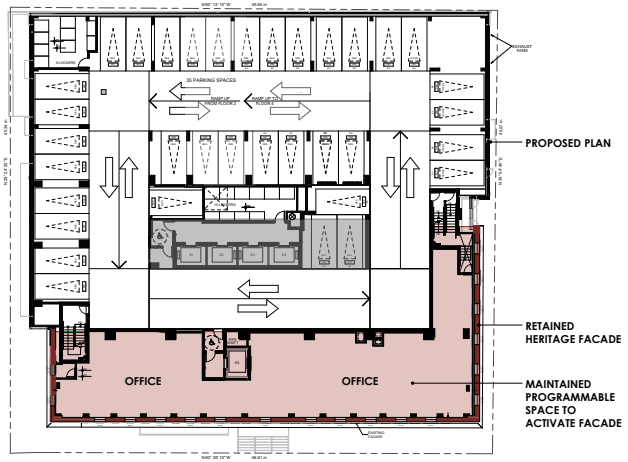
REQUIRED INFRASTRUCTURE

The core and structure needed for the tower result in an overlap to the existing Heritage floor plate.



OVERLAPPING CONDITIONS

The overlap zone offers an efficient integration into the newly required parking - only as a single ramp between the core and structure.



PROPOSED PLAN

The resulting plan is a harmonious meeting of the new tower requirements that still maintains the existing Heritage facade, while also activating the interior space with an office.

Figure 26. Proposed conservation strategy showing the existing context and the retained portion of the Heritage Building along Duke and Queen Streets and new top and rear addition. Source: Kirkor Architects, February 2023.

Recommended Mitigation Strategy:

This CHIA recommends for all structures to be commemorated, rehabilitated, replicated or preserved in-situ no demolition will commence until dimensional as-existing drawings (building plans and elevations) have been developed for all attributes/structure commemorated, rehabilitated, replicated or preserved in-situ. Photographic documentation of the heritage building and details of its heritage attributes should also be undertaken. This has been undertaken as part of the HCP.

Massing

The podium and tower massing make use of adequate step backs from the facade of the heritage building to physically and visually allow it to stand in front of the new construction. These set backs also help to create a transition in scale to the adjacent built heritage and create a welcoming streetscape for pedestrians.

Masonry

The walls of the existing masonry will be conserved through cleaning, selective repointing, repairs to cracked/deteriorated masonry and removal of any visually incompatible materials or elements.

Windows

The existing windows and openings will be restored to emulate their original 8/12 window design. The limestone sills will be conserved.

Entrance

The existing principal entrance with the wood door and transom above is a heritage attribute and will be conserved. A commemorative feature easily visible to the public is proposed near this entrance to mitigate the partial loss of the west and complete loss of the rear (north) facade. This can incorporate the materials salvaged from removal and reused for interpretation.

One of the ideas that the applicant would like to explore is an interactive digital kiosk mounted outside the Duke Street entrance detailing the history and architectural significance of the building. This is recommended as Duke Street entrance is the more appropriate of the two entrances for the commemoration as it is the principle façade and main entrance.

This second submission is required in order to obtain Approval in Principle following which will be racing towards the final submission satisfying all the conditions required for final Site Plan approval prior to August, 2023 one of which will be the Commemoration/Interpretation Plan/Brief.

7.0 Recommendations & Conclusion

The proposal will result in some impacts due to destruction or alteration, yet the overall character of the building is conserved and showcased. These impacts have been minimized wherever possible and localized to the less significant areas of the building as previously described in section 5. To mitigate and/or avoid some of these impacts, the following strategies were recommended and have been incorporated in the proposed design:

- The new building setbacks on the East facade at ground level to give a clear buffer and more visual prominence to the existing building.
- Measured drawings and detailed photographs locating each existing heritage attribute on all elevations has been prepared as part of the submitted HCP so that appropriate documentation is complete for the building prior to alterations commencing. The measured drawings are to be used as a basis to determine sympathetic repair areas and interventions which take existing conditions into account.

Further Recommendations:

- A condition assessment of any affected heritage attributes and heritage conservation drawings for construction prepared by a qualified consultant reflecting construction methodology in accordance with the conservation standards outlined in Section 3.3.
- Continued monitoring of the existing building throughout the entire project should be done by a qualified professional in order to proactively address unforeseen damage or complications.
- Repairs to the original building, if needed, are to be completed with compatible materials and methods as per best practices.
- Alterations should be completed in such a way that it does not cause irreparable loss of original fabric and in the future, alterations can be taken down or changed back without negative impact to the original.
- Salvage and store any demolished heritage attributes for reuse in the new construction wherever possible. These elements should be incorporated in visible areas including, but not limited to, exterior and/or interior side of entryways, vestibules, lobby and amenity spaces.
- 10 Duke Street West is recognized for its design, contextual, historical and associative values. We recommend designation of the proposed retained facades of the Economical Insurance building built in 1949 as it satisfies the criteria for designation as per Ontario Regulation 9/06.

The subject property municipally known as 10 Duke Street West includes an existing heritage building which is listed on the Municipal Heritage Register and is adjacent to recognized heritage properties. These heritage properties make up the historic streetscape and should be protected against any adverse impacts associated with the proposed development. The owner has proposed to construct a mixed-use development consisting of a 6-storey podium, which is integrated with the existing heritage building, and a 45-storey tower housing 499 residential units.

This CHIA concludes:

- The proposed development will retain the complete front (along Duke Street) and side (along Queen Street) facades and three bays of the west facade of the existing heritage property in-situ. Removal of the rear facade (north), the three rear bays of the west facade and the partial roof slab component will result in minimal impact to the heritage building and its surrounding context as the proposed demolition will not result in loss of the listed and proposed heritage attributes at 10 Duke Street West. The heritage building will be rehabilitated.
- Documentation of the existing on-site heritage resource in dimensioned drawings and photographs has been made to mitigate loss of the elements that are proposed to be demolished. This documentation will be a valuable resource for future proposed commemorative feature or should rehabilitation/restoration of a heritage attribute is required in the future.
- Recommendations on incorporating compatible yet distinguishable building materials, design features, architectural proportions, facade rhythms have been made and incorporated into the proposed development to mitigate any issues of transition between the existing heritage building and the proposed new tower. The development proposal is clearly legible as a new piece of architecture, that includes sympathetic setbacks and stepbacks to maintain the prominence of the heritage building. It is a compatible contemporary addition to the heritage building.

8.0 References

Government of Canada
2010 Standards and Guidelines for the Conservation of Historic Places in Canada. Second Addition. Electronic Document: https://www.historicplaces.ca/media/18072/81468-parks-s+g-eng-web2.pdf

City of Kitchener

2008 Statement of Significance 10 Duke Street West

Statement of Significance 30-32 Duke Street West

Statement of Significance 49 Queen Street N

Statement of Significance 2-22 Duke Street East

Statement of Significance 15 -29 Duke Street W

Statement of Significance 16-20 Queen Street N

2014 Downtown Built Inventory List. Retrieved from: https://www.Kitchener.ca/sites/default/files/media/browser/2014-12-16/downtown-built-heritage-inventory-list.pdf

2014 Official Plan. Electronic Document: https://www.kitchener.ca/en/development-and-construction/official-plan.aspx

2017 Urban Design Manual PART B Design for Tall Buildings. Electronic Document: https://www.kitchener.ca/en/resourcesGeneral/Documents/DSD_PLAN_Tall_Building_Urban_Design_Guidelines.pdf

2019 Urban Design Manual PART A Urban Structure and Built Form. Electronic Document: https://www.kitchener.ca/en/resourcesGeneral/Documents/DSD_PLAN_

2019 Urban Design Manual PART A Urban Structure and Built Form. Electronic Document: https://www.kitchener.ca/en/resourcesGeneral/Documents/DSD_PLAN_DSD_PLAN_UDM_05_Downtown.pdf

2021 Interactive Zoning Map. Retrieved Online from: https://www.Kitchener.ca/city-planning/official-plan-zoning-by-law/interactive-zoning-mapping

2021 Terms of Reference Heritage Impact Assessment. Government of Ontario

1990 Ontario Heritage Act. Electronic Document: https://www.ontario.ca/laws/statute/90o18?search=heritage+act
Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI)

2006 Ontario Regulation 9/06, Criteria for Determining Cultural Heritage Value or Interest, Under the Ontario Heritage Act. Electronic Document: http://www.elaws.gov.on.ca/html/regs/english/elaws_regs_060009_e.htm
Last accessed August 2, 2017.

2006 Ontario Heritage Tool Kit ('OHTK'), Ontario Ministry of Culture (now Ministry of Heritage, Sport, Tourism, Culture Industries)

2007 Infosheet: Eight Guiding Principles in the Conservation of Built Heritage Properties: Ministry of Tourism, Culture and Sport, Toronto.

2014 Standards and Guidelines for the Conservation of Provincial Heritage Properties – Heritage Identification and Evaluation Process. Ministry of Tourism, Culture and Sport, Toronto.

2020 Provincial Planning Statement. Electronic Document: https://files.ontario.ca/mmahprovincial-policy-statement-2020-accessible-final-en-2020-02-14.pdf

9.0 Appendices

Appendix A - Design Package, Turner Fleischer Architects, May, 2023
Appendix B - Existing Façade Retention Structural Assessment Report, December 4th, 2023 & Existing Façade Retention Vibration Monitoring Plan, John G. Cooke & Associates, December 15th, 2023
Appendix C - Site Visit Photos
Appendix D - D. S. Shoemaker's Survey - Land Registry Record

Appendix A: Design Package, Turner Feischer Architects May, 2023

VanMar Constructors
145 Goddard Crescent
Cambridge, ON N3E 0B1
Contact Name: Jordan Zekveld
519-740-6800 x126
jordan.zekveld@vanmaron.com

PROPOSED MIXED USE DEVELOPMENT

10 DUKE STREET WEST, KITCHENER, ON

21.167CS

TURNER FLEISCHER
67 Lesmill Rd
Toronto, ON, M3B 2T8
Matthew Young
416-425-2222 ext 381
matthew.young@turnerfleischer.com

RE-ISSUED FOR SITE PLAN APPLICATION
MAY 30, 2023

RWDI
Wind Engineer
600 South Gt Drive
Guelph, Ontario
Jessica Confalone
519-823-1311
jessica.confalone@rwdi.com

MHBC
Landscape Architect
540 Bingermans Ct Dr Suite 200
Kitchener, Ontario
Eliza Oprescu
519-576-0121
eoprescu@mhbcplan.com

Arrow Fire
Fire Protection Engineer
231 Labrador Drive
Waterloo, Ontario
Siobhan Macfarlane
519-576-7399 x 444
siobhan@arrowfire.ca

WalterFedy
Civil Engineer
675 Queen St. S., Suite 111
Kitchener, Ontario
Rushin Khakharia
519-576-2150 x 469
rkhakharia@walterfedy.com

SNC-Lavalin
Electrical Engineer
235 Lesmill Road
Toronto, Ontario
Hoa Phuong
416-445-8255 x 341
Hoa.Phuong@snclavalin.com

SNC-Lavalin
Mechanical Engineer
235-247 Lesmill Road
Toronto, Ontario
Kevin Song
416-445-8255 x 217
Kevin.Song@snclavalin.com

Jablonsky, Ast And Partners
Structural Engineer
3 Concorde Gate, 4th Floor
Toronto, Ontario
Craig Slama
416-447-7405
cslama@astint.on.ca

Kirkor Architects
Design Architect
20 De Boers Dr. Suite 400
Toronto Ontario
Varunpreet Singh
516-665-6060
vsingh@kirkorarchitects.com

21167CS - 10 DUKE STREET WEST
KITCHENER, ONTARIO

PROJECT SUMMARY

PROJECT SITE AREA	m²	ft²
TOTAL NET SITE AREA	2,226.0	23,960
PROPOSED BUILDING FLOOR AREA	43,242.0	465,453
FLOOR SPACE RATIO	19.4	x SITE AREA

GROSS FLOOR AREA SUMMARY

USE	GFA	
	m²	ft²
OFFICE	1,361.9	14,659
TOTAL NON-RESIDENTIAL	**1,361.9**	**14,659**
RESIDENTIAL	34,232.5	368,475
INDOOR AMENITY	632.4	6,807
TOTAL RESIDENTIAL	**34,864.8**	**375,282**
TOTAL	**36,226.7**	**389,941**

DEFINITIONS
CITY OF KITCHENER ZONING BYLAW 85-1

"Gross Floor Area" means the aggregate horizontal area measured from the exterior faces of the exterior walls of all floors of a building (excluding any floor area having a ceiling height of 2.0 metres or less or devoted exclusively to parking) within all buildings on a lot. (By-law 92-232, S.3[d])

"Building Floor Area" means the aggregate horizontal floor area measured from the exterior walls of all floors or storeys of a building excluding any floor area located totally below grade or within an uninhabitable attic. The mid-point of a common wall shall be considered the face of the exterior in the case of common walls located on a...

GROSS FLOOR AREA (GFA) BREAKDOWN

GROSS...										TOTAL GROSS FLOOR AREA		PARKING (EXCLUSION)	
FLOOR	# OF UNITS	OFFICE		RESIDENTIAL				INDOOR AMENITY					
				SALEABLE		NON-SALEABLE							
	#	m²	ft²	m²	ft²	m²	ft²	m²	ft²	m²	ft²	m²	ft²
1		339.5	3,654			771.1	8,300.2	98.2	1,057	1,208.8	13,011	627.0	6,749
2		502.6	5,410			687.3	7,398.1			1,190.0	12,809	170.3	1,833
2 MID.		416.7	4,485			123.9	1,333.6			540.6	5,818	545.9	5,876
3		18.8	202			190.0	2,044.8			208.8	2,247	1,264.6	13,612
4		47.9	515			191.0	2,056.2			238.9	2,572	1,516.6	16,325
5		21.1	227			249.8	2,688.8			270.9	2,916	1,580.8	17,016
6		15.3	165			509.1	5,480.1			524.4	5,645	1,035.6	11,147
7	5			293.7	3,161.0	163.3	1,757.6	534.2	5,750	991.2	10,669		
8	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
9	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
10	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
11	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
12	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
13	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
14	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
15	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
16	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
17	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
18	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
19	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
20	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
21	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
22	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
23	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
24	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
25	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
26	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
27	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
28	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
29	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
30	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
31	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
32	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
33	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
34	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
35	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
36	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
37	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
38	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
39	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
40	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
41	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
42	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
43	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
44	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
45	13			671.7	7,229.6	130.5	1,404.4			802.1	8,634		
MPH						572.7	6,164.4			572.7	6,164		
TOTAL	**499**	**1,361.9**	**14,659**	**25,816.4**	**277,885**	**8,416.1**	**90,590**	**632.4**	**6,807**	**36,226.7**	**389,941**	**6,740.8**	**72,558**

UNIT TYPE

FLOOR	UNIT TYPE		TOTAL
	1B	2B	
1	-	-	-
2	-	-	-
2 MID.	-	-	-
3	-	-	-
3	-	-	-
5	-	-	-
6	-	-	-
7	3	2	**5**
8	11	2	**13**
9	11	2	**13**
19	11	2	**13**
11	11	2	**13**
12	11	2	**13**
13	11	2	**13**
14	11	2	**13**
15	11	2	**13**
16	11	2	**13**
17	11	2	**13**
18	11	2	**13**
19	11	2	**13**
20	11	2	**13**
21	11	2	**13**
22	11	2	**13**
23	11	2	**13**
24	11	2	**13**
25	11	2	**13**
26	11	2	**13**
27	11	2	**13**
28	11	2	**13**
29	11	2	**13**
30	11	2	**13**
31	11	2	**13**
32	11	2	**13**
33	11	2	**13**
34	11	2	**13**
35	11	2	**13**
36	11	2	**13**
37	11	2	**13**
38	11	2	**13**
39	11	2	**13**
40	11	2	**13**
41	11	2	**13**
42	11	2	**13**
43	11	2	**13**
44	11	2	**13**
45	11	2	**13**
TOTAL	**421**	**78**	**499**

UNIT SIZE

<51m²	>51m²
-	-
-	-
-	-
-	-
-	-
-	-
-	-
3	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
11	2
421	**78**

BARRIER FREE UNITS - PROVIDED

FLOOR	1B	2B	TOTAL
1	-	-	-
2	-	-	-
2 MID.	-	-	-
3	-	-	-
4	-	-	-
5	-	-	-
6	-	-	-
7	1	-	**1**
8	2	1	**3**
9	2	1	**3**
10	2	1	**3**
11	2	1	**3**
12	2	1	**3**
13	2	1	**3**
14	2	1	**3**
15	2	1	**3**
16	2	1	**3**
17	2	1	**3**
18	2	1	**3**
19	2	1	**3**
20	2	1	**3**
21	2	1	**3**
22	2	1	**3**
23	2	1	**3**
24	2	1	**3**
25	2	1	**3**
26	2	1	**3**
27	2	-	**2**
28	2	-	**2**
29	2	-	**2**
30	2	-	**2**
31	2	-	**2**
32	2	-	**2**
33	2	-	**2**
34	2	-	**2**
35	2	-	**2**
36	2	-	**2**
37	1	-	**1**
38	1	-	**1**
39	1	-	**1**
40	1	-	**1**
41	1	-	**1**
42	1	-	**1**
43	1	-	**1**
44	1	-	**1**
45	1	-	**1**
TOTAL PROVIDED	**68**	**19**	**87**
RATIO PROVIDED	**16.2%**	**24.4%**	
TOTAL REQUIRED	**64**	**12**	**76**

VEHICULAR PARKING - REQUIRED

USE	RATIO	UNITS	AREA	TOTAL
RESIDENTIAL (UNITS <51m²)	0.165/UNIT	421	-	70
RESIDENTIAL (UNITS >51m²)	1/UNIT	78	-	78
OFFICE**	AREA -465 X 1 SPACE PER 69m²	-	897	13
TOTAL REQUIRED				**161**

VEHICULAR PARKING RATIOS AS PER CITY OF KITCHENER ZONING BY-LAW 85-1

***OFFICE PARKING CALCULATION INCLUDES ONE TIME EXEMPTION AS PER SECTION 6.1.2(b)(viii)B): FOR EACH LOT EXISTING ON THE DAY OF THE PASSING OF BY-LAW 96-36, A ONE TIME ONLY EXEMPTION FROM PARKING REQUIREMENTS SHALL APPLY TO THE FIRST 465 SQUARE METRES OF GROSS FLOOR AREA CONSTRUCTED AFTER THE DAY OF THE PASSING OF BY-LAW 96-36.*

ACCESSIBLE VEHICULAR PARKING- REQUIRED

101-200 OFF STREET PARKING SPACES REQ'D	1+ 3% OF TOTAL REQ'D PARKING
162 X .03 = 5.0 + 1 = 6 TOTAL SPACES REQUIRED	

*ACCESSIBLE VEHICULAR PARKING RATIOS AS PER CITY OF KITCHENER ZONING BY-LAW 85-1

BICYCLE PARKING - PROVIDED

FLOOR	COUNT
FLOOR 1	148
FLOOR 2	92
TOTAL PROVIDED	**240**

VEHICULAR PARKING - PROVIDED

FLOOR	USE		TOTAL
	RESIDENTIAL	OFFICE	
FLOOR 1	1	3	4
FLOOR 2	-	12	12
FLOOR 3	30	5	35
FLOOR 4	44	-	44
FLOOR 5	46	-	46
FLOOR 6	27	-	27
TOTAL PROVIDED	**148**	**20**	**168**

ACCESSIBLE VEHICULAR PARKING - PROVIDED

FLOOR	TYPE		TOTAL
	TYPE A	TYPE B	
FLOOR 1	-	-	-
FLOOR 2	-	-	-
FLOOR 3	-	-	-
FLOOR 4	1	1	2
FLOOR 5	1	1	2
FLOOR 6	1	1	2
TOTAL	**3**	**3**	**6**

ELECTRICAL VEHICLE PARKING - PROVIDED

FLOOR	COUNT
FLOOR 1	-
FLOOR 2	12
FLOOR 3	18
FLOOR 4	4
FLOOR 5	-
FLOOR 6	-
TOTAL	**34**

AMENITY AREAS PROVIDED

FLOOR	TYPE	
	INDOOR...	OUTDOOR (m²)
FLOOR 1	98.2	-
FLOOR 7	534.2	542.6
TOTAL	**632.4**	**542.6**

LOCKERS PROVIDED

FLOOR	COUNT
FLOOR 1	-
FLOOR 2+MID	67
FLOOR 3	19
FLOOR 4	20
FLOOR 5	43
FLOOR 6	70
TOTAL	**219**

DRAWING LIST

DRAWING NUMBER	DRAWING NAME	CURRENT REVISION DATE	REVISION ISSUANCE
SPA000	COVER SHEET	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA001	STATISTICS	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA002	SURVEY	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA003	SURVEY	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA004	SITE PLAN	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA151	FLOOR 01	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA152	FLOOR 02	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA153	FLOOR 02 MID LEVEL	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA154	FLOOR 03	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA155	FLOOR 04	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA156	FLOOR 05	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA157	FLOOR 06	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA158	FLOOR 07	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA159	FLOOR 08 - 45	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA160	MECHANICAL PENTHOUSE PLAN	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA301	ELEVATIONS	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA302	ELEVATIONS	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA311	SOUTH AND EAST PODIUM ELEVATION	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA312	NORTH AND WEST PODIUM ELEVATION	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA401	BUILDING SECTIONS	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA801	3D PERSPECTIVES	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA811	SHADOW STUDIES	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA812	SHADOW STUDIES	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA813	SHADOW STUDIES	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA814	SHADOW STUDIES	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA815	SHADOW STUDIES	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION
SPA816	SHADOW STUDIES	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION

TURNER FLEISCHER

Turner Fleischer Architects Inc.

67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

#	DATE	DESCRIPTION	BY
8	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
7	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
6	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
5	2022-03-25	ISSUED FOR 100% DD	MY
4	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY
3	2022-01-14	ISSUED FOR 50% DD	MY
2	2021-12-06	ISSUED FOR 100% SD	MY
1	2021-10-15	ISSUED FOR 50% SD	MY

VanMar
CONSTRUCTORS INC.

PROJECT
PROPOSED MIXED USE DEVELOPMENT
10 DUKE STREET WEST, KITCHENER, ON

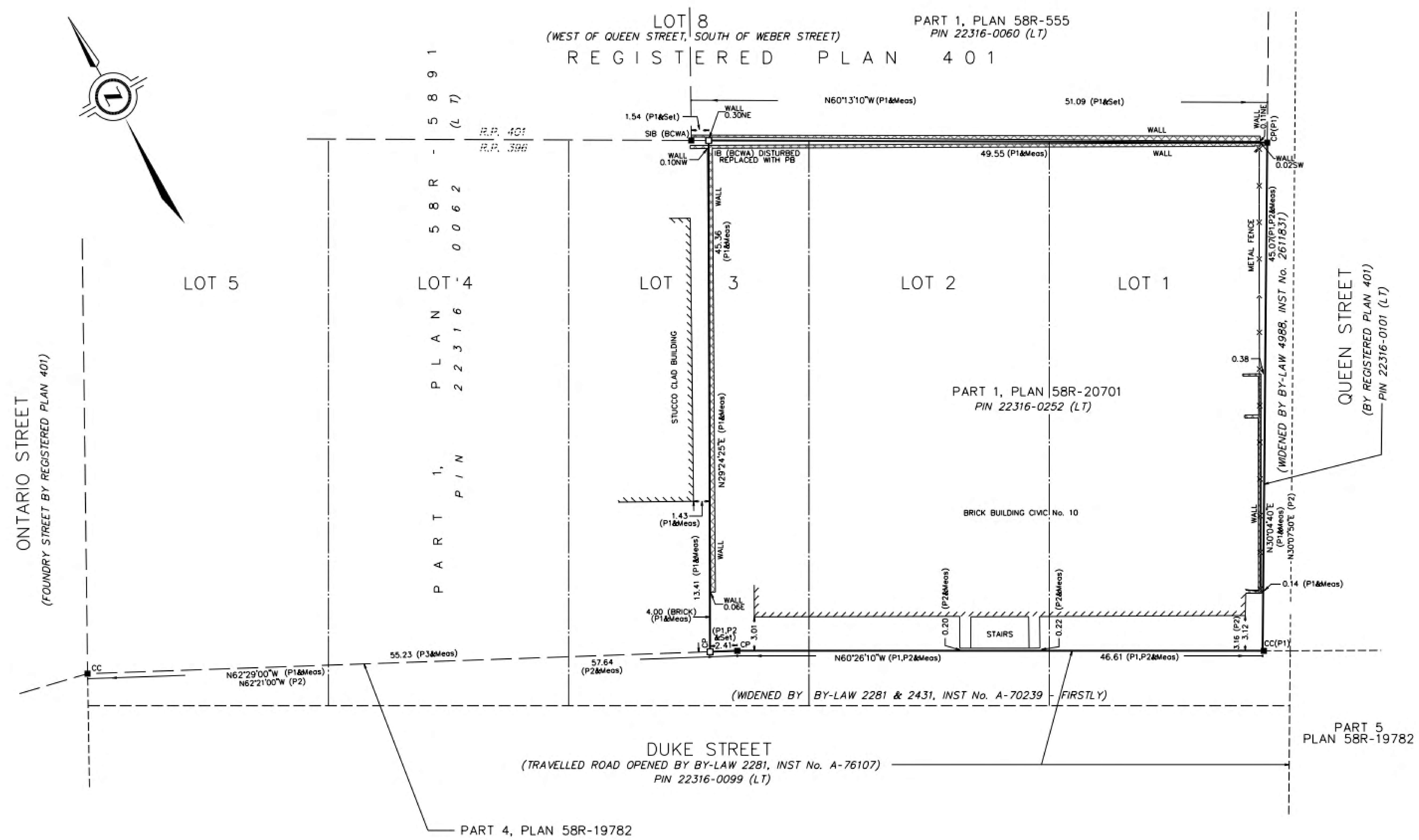
DRAWING
STATISTICS

PROJECT NO.
21.167CS
PROJECT DATE
2021-10-07
DRAWN BY
MJM
CHECKED BY
MYG
SCALE

ONTARIO ASSOCIATION OF ARCHITECTS
RUSSELL L.FLEISCHER
LICENCE
5004

DRAWING NO.
SPA001
REV.
8

2023-05-30 4:00:59 PM



PLAN OF SURVEY OF

PART OF LOTS 1, 2 & 3 REGISTERED PLAN 396

D.S. SHOEMAKER'S SURVEY

CITY OF KITCHENER

REGIONAL MUNICIPALITY OF WATERLOO

SCALE 1 : 250

5 0 5 10 15 metres

BLACK, SHOEMAKER, ROBINSON & DONALDSON,
A WHOLLY OWNED SUBSIDIARY OF J.D. BARNES LIMITED

METRIC DISTANCES AND/OR COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

NOTES

BEARINGS ARE UTM GRID, DERIVED FROM THE NORTHERNLY LIMIT OF DUKE STREET, HAVING A BEARING OF N60°26'10"W REFERRED TO THE CENTRAL MERIDIAN OF UTM ZONE 17 (81° WEST LONGITUDE) NAD 83 (CSRS 2010).

DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.999573.

FOR BEARING COMPARISONS, A ROTATION OF 0°03'00" COUNTER-CLOCKWISE WAS APPLIED TO P2 TO CONVERT TO GRID BEARINGS.

LEGEND

■	DENOTES	SURVEY MONUMENT FOUND (375 UNLESS NOTED OTHERWISE)
□	DENOTES	SURVEY MONUMENT SET
SIB	DENOTES	STANDARD IRON BAR
CC	DENOTES	CUT CROSS
IB	DENOTES	IRON BAR
CP	DENOTES	CONCRETE PIN
WIT	DENOTES	WITNESS
MEAS	DENOTES	MEASURED
375	DENOTES	BLACK, SHOEMAKER, ROBINSON & DONALDSON LTD
BCWA	DENOTES	BRUBACHER, CAMPBELL, WYMAN AND AUER LIMITED
OU	DENOTES	ORIGIN UNKNOWN
P1	DENOTES	PLAN 58R-20701
P2	DENOTES	PLAN 58R-19782
P3	DENOTES	PLAN 58R-5891

ALL SET SSIB AND PB MONUMENTS WERE USED DUE TO LACK OF OVERBURDEN AND/OR PROXIMITY OF UNDERGROUND UTILITIES IN ACCORDANCE WITH SECTION 11 (4) OF O.REG. 525/91.

SURVEYOR'S CERTIFICATE

I CERTIFY THAT:

1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT AND THE REGULATIONS MADE UNDER THEM.
2. THE SURVEY WAS COMPLETED ON THE 7th DAY OF JULY, 2021.

13 JULY, 2021
DATE

LEO LIU
ONTARIO LAND SURVEYOR

BSR&D
ONTARIO LAND SURVEYORS
URBAN & RURAL PLANNERS
A wholly owned subsidiary of J.D. Barnes Ltd.
SURVEYING MAPPING GIS
257 WOODLAWN ROAD WEST, UNIT 101, GUELPH, ON N1H 8J1
T: (519) 822-4031 F: (519) 822-1220 www.jdbarnes.com

DRAWN BY: RPA	CHECKED BY: LL	REFERENCE NO.: 21-14-490-00
PLOTTED: 7/13/2021		DATED: JULY 12, 2021

FILE: G:\21-14-490\00\Drawing\21-14-490-00 RPlan.dgn

TURNER FLEISCHER

Turner Fleischer Architects Inc.

67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

#	DATE	DESCRIPTION	BY
8	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
7	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
6	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
5	2022-03-25	ISSUED FOR 100% DD	MY
4	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY
3	2022-01-14	ISSUED FOR 50% DD	MY
2	2021-12-06	ISSUED FOR 100% SD	MY
1	2021-10-15	ISSUED FOR 50% SD	MY

VanMar CONSTRUCTORS INC.

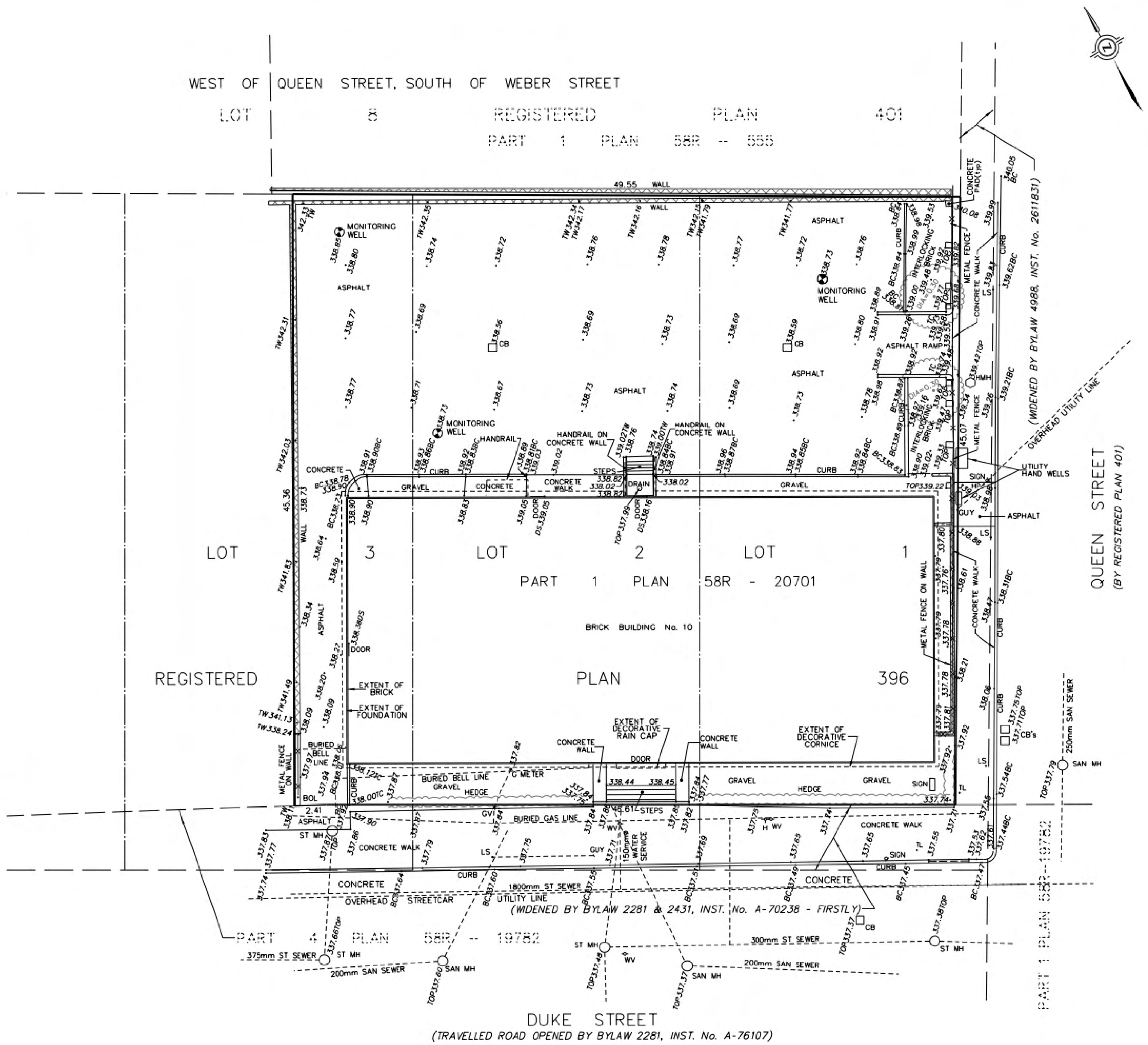
PROJECT
PROPOSED MIXED USE DEVELOPMENT
10 DUKE STREET WEST, KITCHENER, ON

DRAWING
SURVEY

PROJECT NO. 21.167CS
PROJECT DATE 2021-10-07
DRAWN BY MJM
CHECKED BY MYG
SCALE

DRAWING NO. SPA002
REV. 8

2023-05-30 4:01:01 PM



PARTIAL TOPOGRAPHIC PLAN OF
PART OF LOTS 1, 2 & 3 REGISTERED PLAN 396
D.S. SHOEMAKER'S SURVEY
CITY OF KITCHENER
REGIONAL MUNICIPALITY OF WATERLOO

BLACK, SHOEMAKER, ROBINSON & DONALDSON,
A WHOLLY OWNED SUBSIDIARY OF J.D. BARNES LIMITED

SCALE 1 : 200

5 0 5 10 metres

METRIC DISTANCES AND/OR COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

NOTES & LEGEND

CB	DENOTES CATCHBASIN
GV	DENOTES GAS VALVE
G METER	DENOTES GAS METER
HMH	DENOTES HYDRO MANHOLE
SAN MH	DENOTES SANITARY MANHOLE
BOL	DENOTES BOLLARD
HP	DENOTES HYDRO POLE
LS	DENOTES LIGHT STANDARD
TL	DENOTES TRAFFIC SIGNAL
H	DENOTES FIRE HYDRANT
WV	DENOTES WATER VALVE
BC	DENOTES BOTTOM OF CURB
TC	DENOTES TOP OF CURB
TW	DENOTES TOP OF WALL
DS	DENOTES DOOR SILL
	DENOTES DECIDUOUS TREE (CANOPY TO SCALE)
	DENOTES EXISTING ELEVATION (AUGUST, 2021)

THIS PLAN WAS PREPARED FOR VANMAR DEVELOPMENTS.

THIS IS NOT A PLAN OF SURVEY AND SHALL NOT BE USED FOR TRANSACTION OR MORTGAGE PURPOSES.

THE POSITION OF ALL POLE LINES, CONDUITS, WATER MAINS, SEWERS AND OTHER UNDERGROUND AND OVERHEAD UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THIS PLAN, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

ELEVATIONS SHOWN HEREON ARE GEODETIC (CGVD-1928: 78) AND ARE DERIVED FROM GNSS OBSERVATIONS USING NATURAL RESOURCES CANADA'S GEOID MODEL HT2_0-ON.

THE FIELD SURVEY PORTION OF THIS PLAN WAS COMPLETED ON SEPT. 10, 2021.

BSR&D
ONTARIO LAND SURVEYORS
URBAN & RURAL PLANNERS
A wholly owned subsidiary of J.D. Barnes Ltd.
SURVEYING MAPPING GIS
257 WOODLAWN ROAD WEST, UNIT 101, GUELPH, ON N1H 8J1
T: (519) 822-4031 F: (519) 822-1220 www.jdbarnes.com

DRAWN BY:	CHECKED BY:	REFERENCE NO.:
DM	LL	21-14-490-00
PLOTTED: 9/14/2021		DATED: SEPTEMBER 14, 2021

FILE: G:\21-14-490\00\Drawing\SEPT 13 2021 TOPO.dgn

TURNER FLEISCHER
Turner Fleischer Architects Inc.
67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

#	DATE	DESCRIPTION	BY
8	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
7	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
6	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
5	2022-03-25	ISSUED FOR 100% DD	MY
4	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY
3	2022-01-14	ISSUED FOR 50% DD	MY
2	2021-12-06	ISSUED FOR 100% SD	MY
1	2021-10-15	ISSUED FOR 50% SD	MY

VanMar CONSTRUCTORS INC.

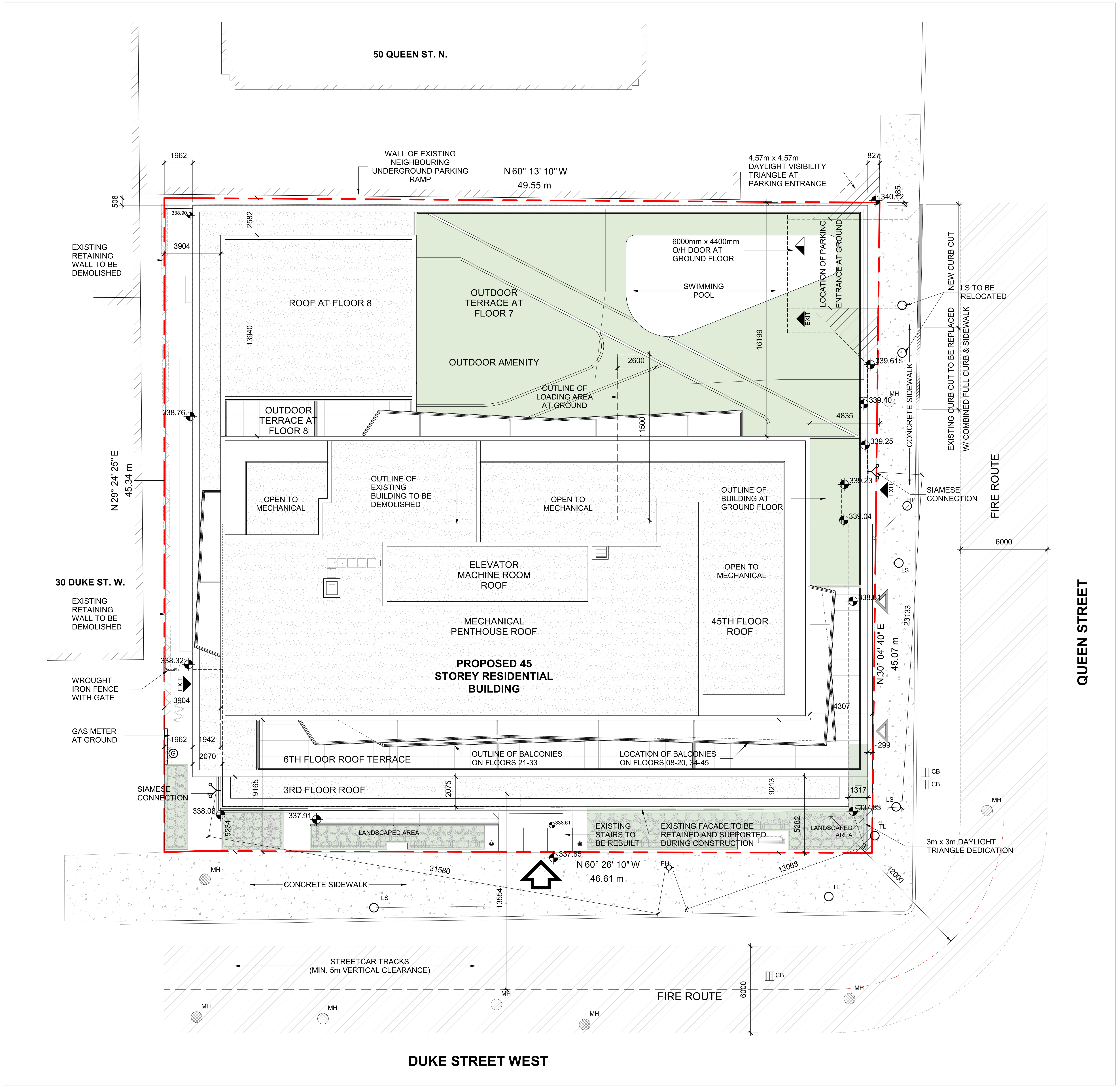
PROJECT
PROPOSED MIXED USE DEVELOPMENT
10 DUKE STREET WEST, KITCHENER, ON

DRAWING
SURVEY

PROJECT NO. 21.167CS
PROJECT DATE 2021-10-07
DRAWN BY MJM
CHECKED BY MYG
SCALE

DRAWING NO. SPA003
REV. 8

2023-05-30 4:01:03 PM



1 SITE PLAN
SPA004
1 : 150

CONTEXT PLAN
N.T.S

TURNER FLEISCHER

Turner Fleischer Architects Inc.
67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

LEGAL DESCRIPTION

BOUNDARY INFORMATION BASED ON PLAN OF SURVEY

PART OF LOTS 1, 2 & 3
REGISTERED PLAN 396

CITY OF KITCHENER

SURVEY COMPILED BY:
BSR&D
257 WOODLAWN ROAD, UNIT 101
GUELPH, ONTARIO N1H 8J1
DATED: SEPTEMBER 14, 2021

LEGEND

- PRIMARY ENTRANCE
- OFFICE ENTRANCE
- LOADING/ VEHICULAR ENTRANCE
- EXIT
- FIRE HYDRANT
- SIAMESE CONNECTION
- CONVEX MIRROR
- FIRE ROUTE SIGN
- 000.00 SPOT ELEVATION
- GAS/HYDRO METER

#	DATE	DESCRIPTION	BY
7	2023-10-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
6	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
5	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
4	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
3	2022-03-25	ISSUED FOR 100% DD	MY
2	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY
1	2022-01-14	ISSUED FOR 50% DD	MY

VanMar CONSTRUCTORS INC.

PROJECT
PROPOSED MIXED USE DEVELOPMENT
10 DUKE STREET WEST, KITCHENER, ON

DRAWING
SITE PLAN

PROJECT NO. 21.167CS
PROJECT DATE 2021-10-07
DRAWN BY MJM
CHECKED BY MYG
SCALE As indicated

ONTARIO ASSOCIATION OF ARCHITECTS
RUSSELL L.FLEISCHER
LICENCE
5004

DRAWING NO. SPA004
REV. 7

2023-10-31 4:58:25 PM

1 FLOOR 01
SPA151 1 : 100

DUKE STREET WEST

2023-10-31 4:58:37 PM

TURNER FLEISCHER

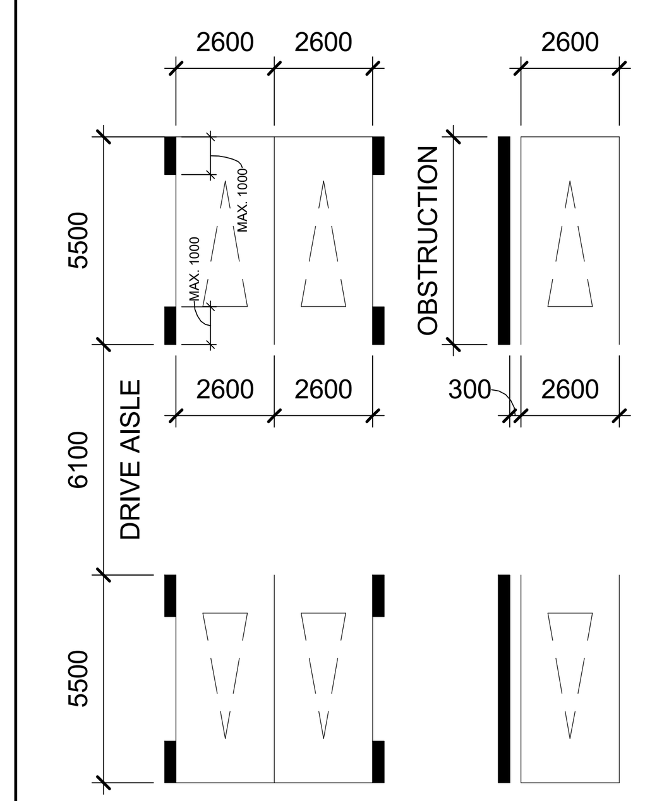
Turner Fleischer Architects Inc.

67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

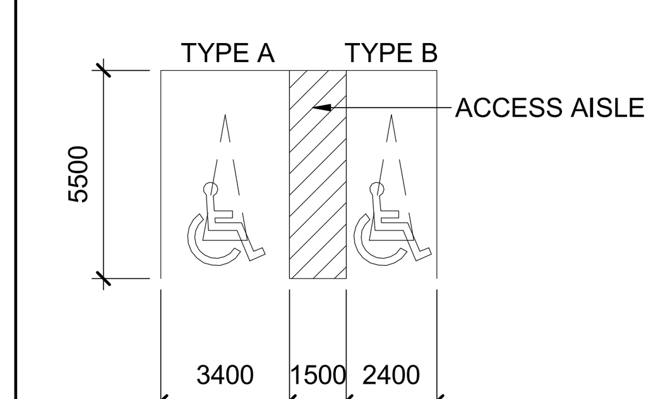
TYPICAL PARKING DIMENSIONS

AISLE WIDTH: MIN 6.1m

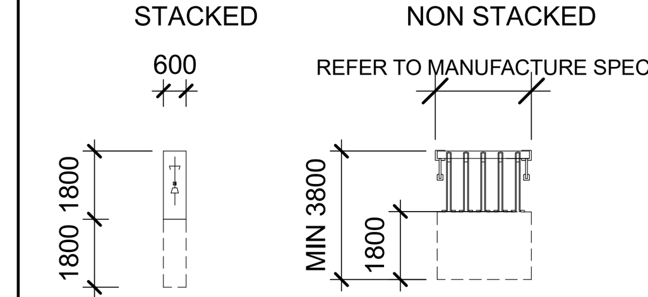
TYPICAL PARKING SPACE:
MIN. 2.6 x 5.5 x 2.0m HIGH



TYPICAL BARRIER-FREE PARKING DIMENSIONS
TYPE (A) : MIN 3.4 x 5.5 x 2.1m HIGH
TYPE (B) : MIN 2.4 x 5.5 x 2.1m HIGH



TYPICAL HORIZONTAL BIKE PARKING DIMENSIONS
STACKED : MIN .6 x 1.8 x 1.9m HIGH
NON STACKED: MIN 1.9m HIGH



#	DATE	DESCRIPTION	BY
9	2023-10-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
8	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
7	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
6	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
5	2022-03-25	ISSUED FOR 100% DD	MY
4	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY
3	2022-01-14	ISSUED FOR 50% DD	MY
2	2021-12-06	ISSUED FOR 100% SD	MY
1	2021-10-15	ISSUED FOR 50% SD	MY

VanMar CONSTRUCTORS INC.

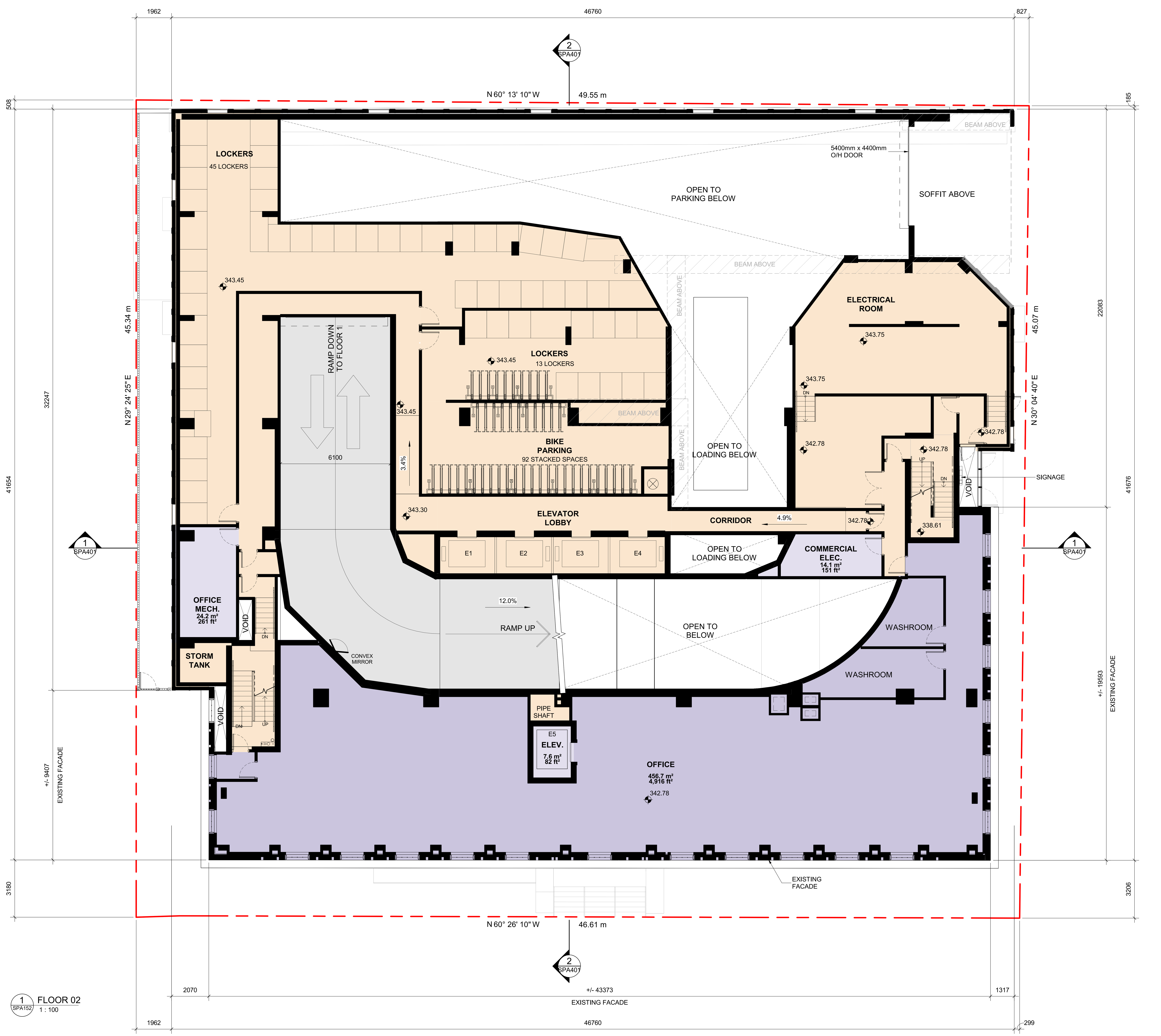
PROJECT
PROPOSED MIXED USE DEVELOPMENT
10 DUKE STREET WEST, KITCHENER, ON

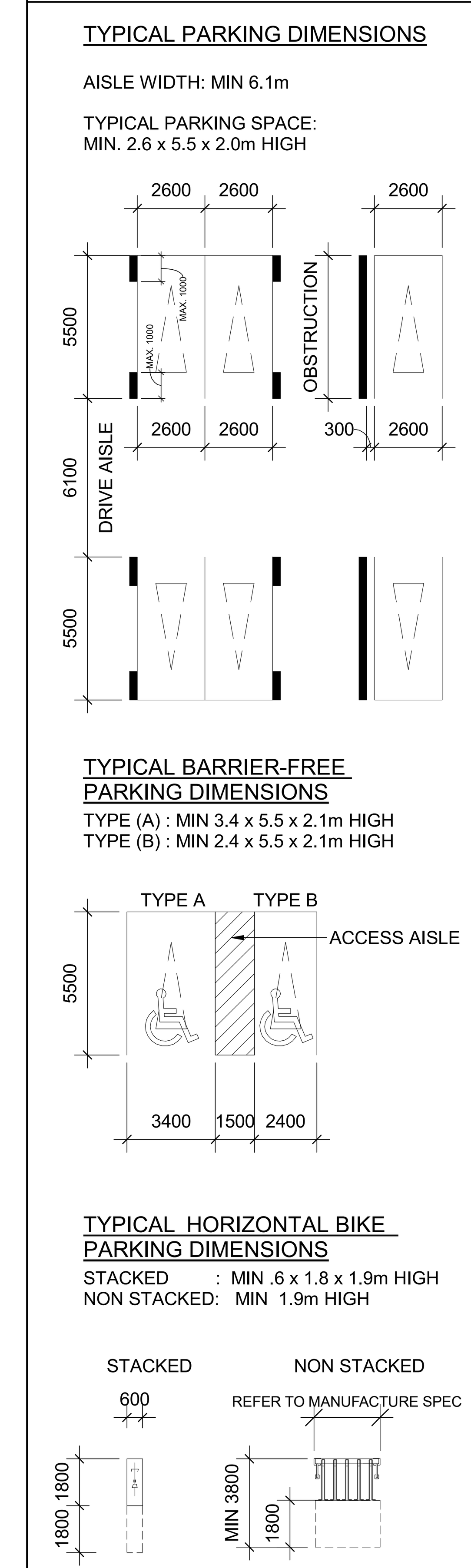
DRAWING
FLOOR 01

PROJECT NO. 21.167CS
PROJECT DATE 2021-10-07
DRAWN BY MJM
CHECKED BY MYG
SCALE AS NOTED

ONTARIO ASSOCIATION OF ARCHITECTS
RUSSELL L.FLEISCHER
LICENCE
5004

DRAWING NO. SPA151
REV. 9





TURNER FLEISCHER

Turner Fleischer Architects Inc.
67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

#	DATE	DESCRIPTION	BY
8	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
7	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
6	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
5	2022-03-25	ISSUED FOR 100% DD	MY
4	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY
3	2022-01-14	ISSUED FOR 50% DD	MY
2	2021-12-06	ISSUED FOR 100% SD	MY
1	2021-10-15	ISSUED FOR 50% SD	MY

VanMar CONSTRUCTORS INC.

PROJECT

PROPOSED MIXED USE DEVELOPMENT

10 DUKE STREET WEST, KITCHENER, ON

DRAWING

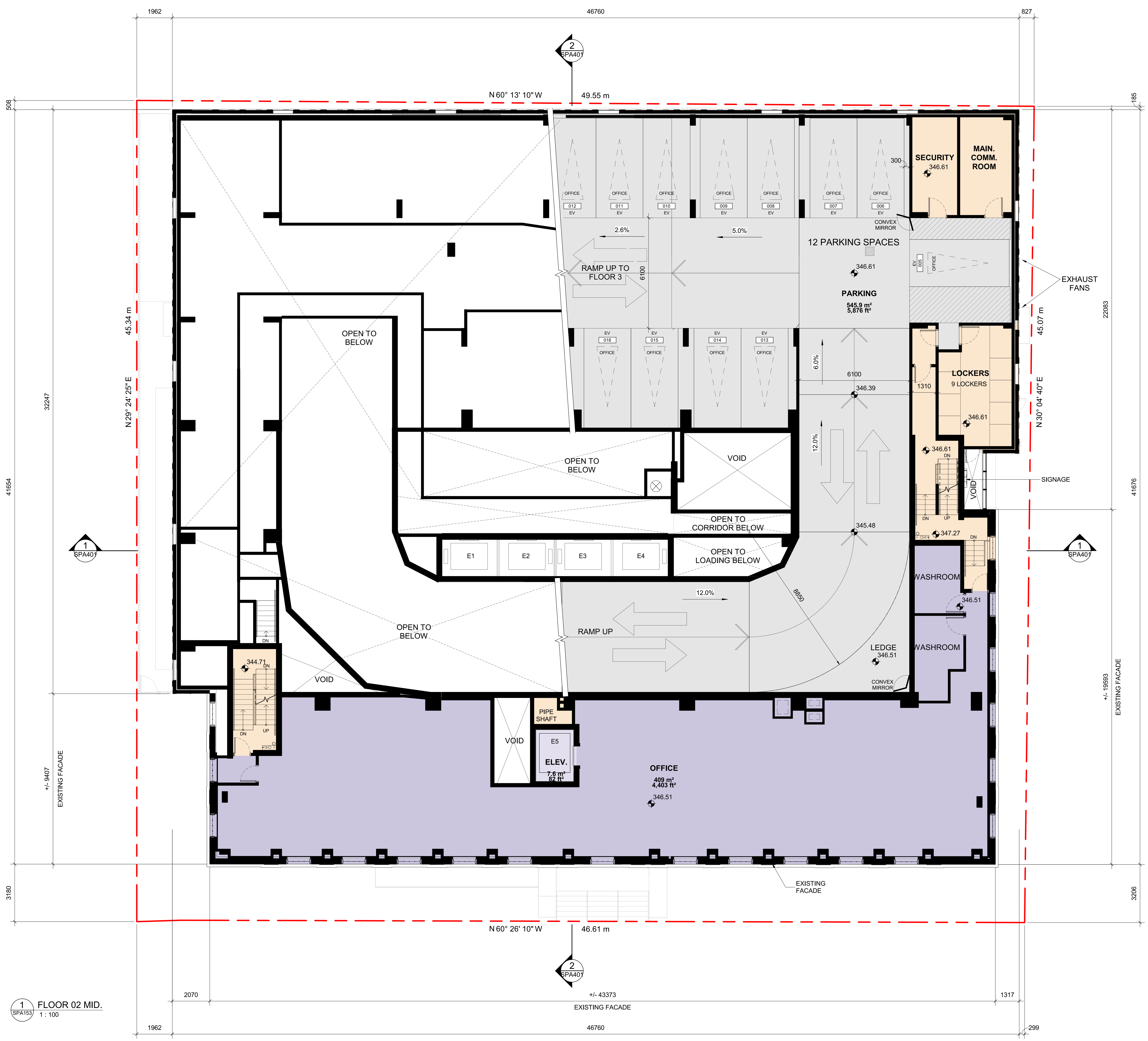
FLOOR 02

PROJECT NO. 21.167CS
PROJECT DATE 2021-10-07
DRAWN BY MJM
CHECKED BY MYG
SCALE AS NOTED

ONTARIO ASSOCIATION OF ARCHITECTS
RUSSELL L.FLEISCHER
LICENCE
5004

DRAWING NO. SPA152
REV. 8

2023-05-30 4:01:19 PM



1 SPA153 FLOOR 02 MID.
1 : 100

TURNER FLEISCHER

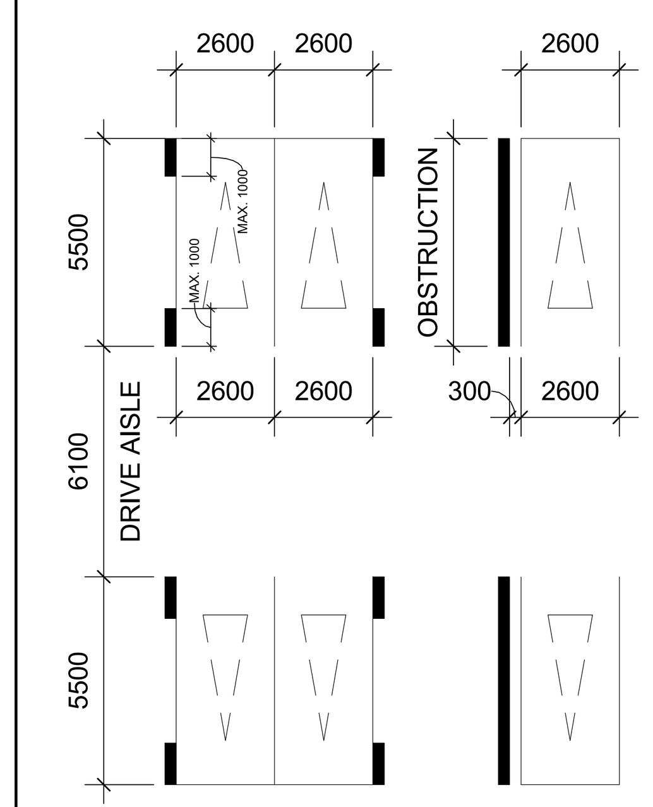
Turner Fleischer Architects Inc.

67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

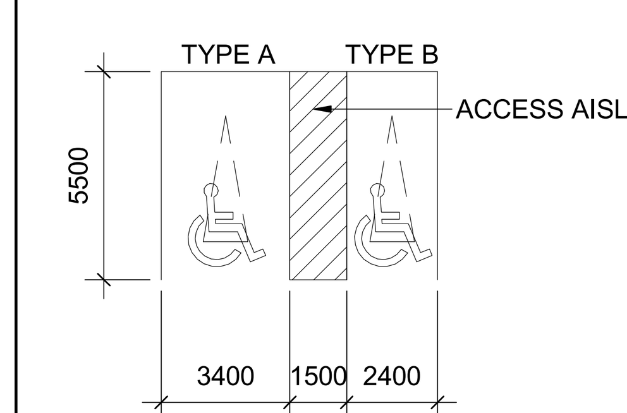
TYPICAL PARKING DIMENSIONS

AISLE WIDTH: MIN 6.1m

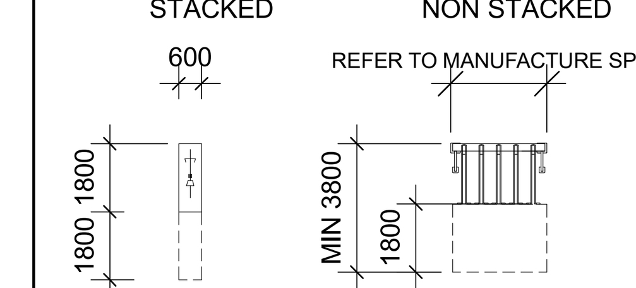
TYPICAL PARKING SPACE:
MIN. 2.6 x 5.5 x 2.0m HIGH



TYPICAL BARRIER-FREE PARKING DIMENSIONS
TYPE (A) : MIN 3.4 x 5.5 x 2.1m HIGH
TYPE (B) : MIN 2.4 x 5.5 x 2.1m HIGH



TYPICAL HORIZONTAL BIKE PARKING DIMENSIONS
STACKED : MIN .6 x 1.8 x 1.9m HIGH
NON STACKED: MIN 1.9m HIGH



#	DATE	DESCRIPTION	BY
7	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
6	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
5	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
4	2022-03-25	ISSUED FOR 100% DD	MY
3	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY
2	2022-01-14	ISSUED FOR 50% DD	MY
1	2021-12-06	ISSUED FOR 100% SD	MY

VanMar CONSTRUCTORS INC.

PROJECT

PROPOSED MIXED USE DEVELOPMENT

10 DUKE STREET WEST, KITCHENER, ON

DRAWING

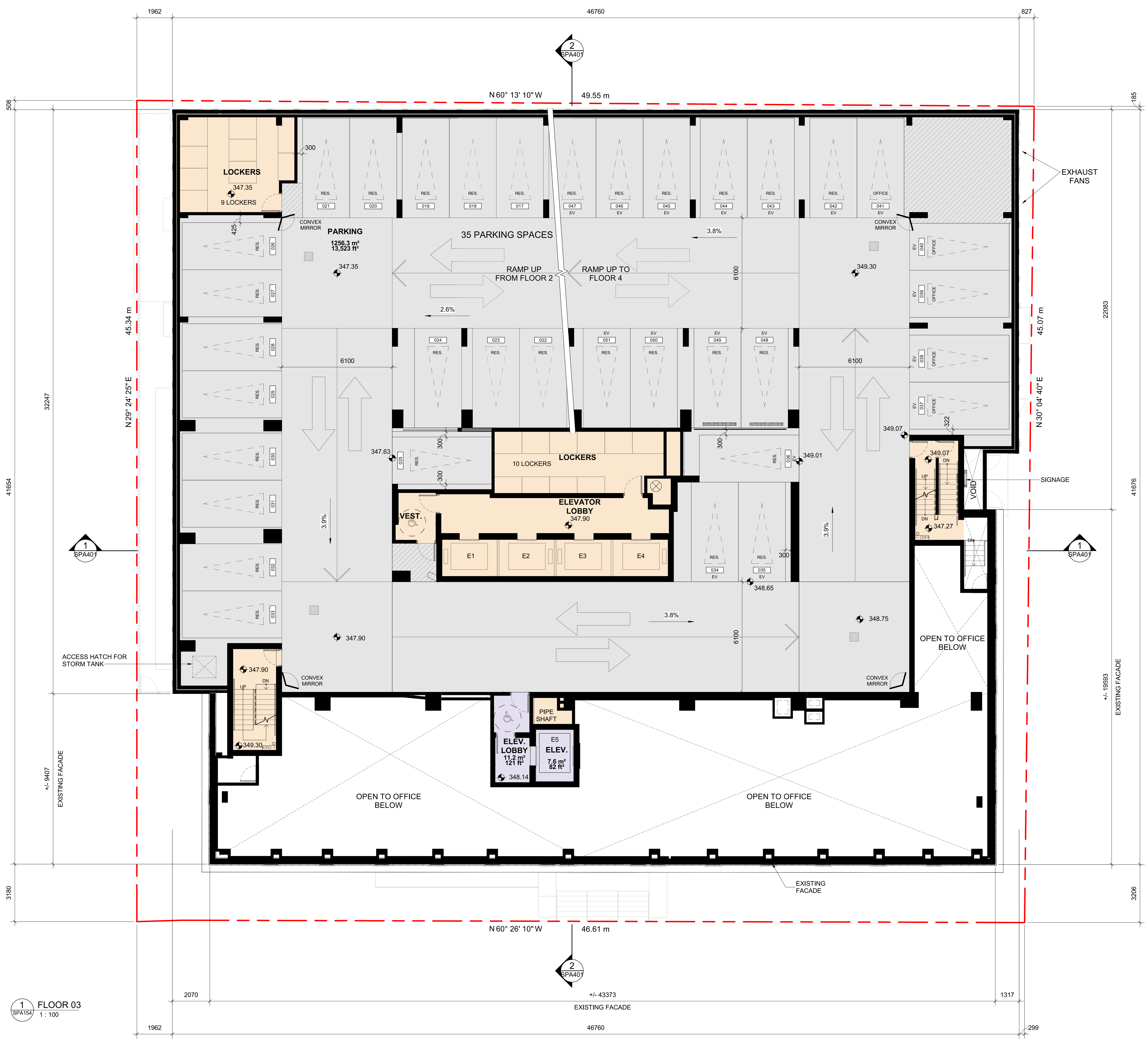
FLOOR 02 MID LEVEL

PROJECT NO.
21.167CS
PROJECT DATE
2021-10-07
DRAWN BY
MJM
CHECKED BY
MYG
SCALE
AS NOTED

ONTARIO ASSOCIATION OF ARCHITECTS
RUSSELL L.FLEISCHER
LICENCE
5004

DRAWING NO.
SPA153
REV.
7

2023-05-30 4:01:20 PM



1 FLOOR 03
SPA154 1 : 100

TURNER FLEISCHER

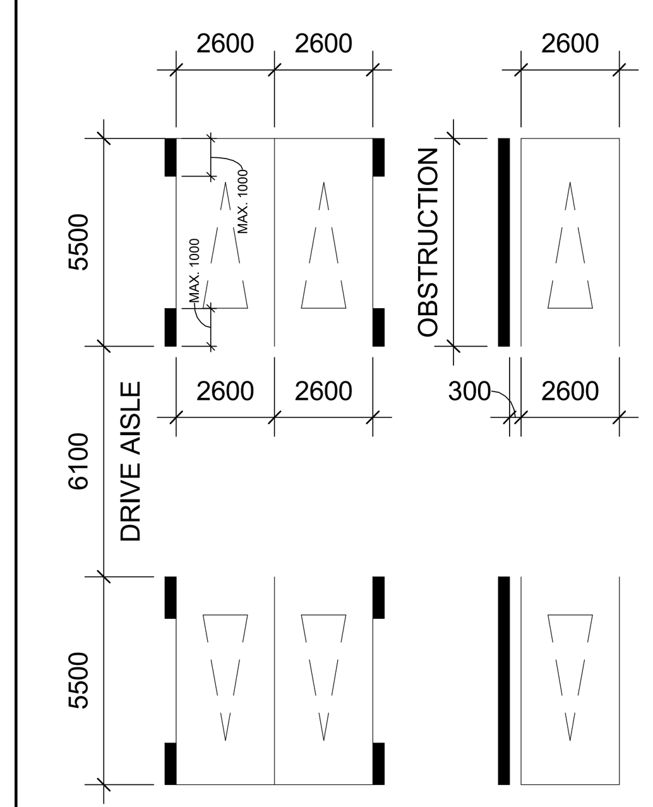
Turner Fleischer Architects Inc.

67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

TYPICAL PARKING DIMENSIONS

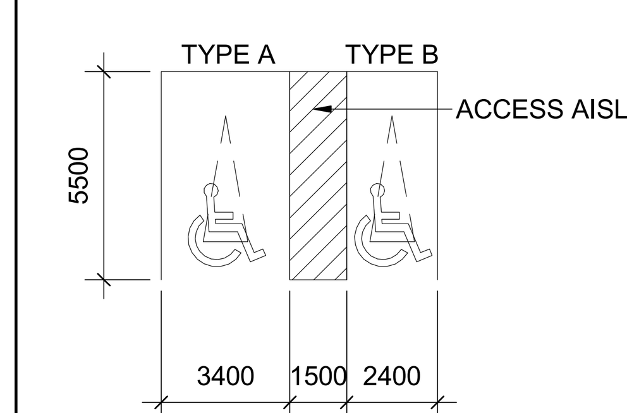
AISLE WIDTH: MIN 6.1m

TYPICAL PARKING SPACE:
MIN. 2.6 x 5.5 x 2.0m HIGH



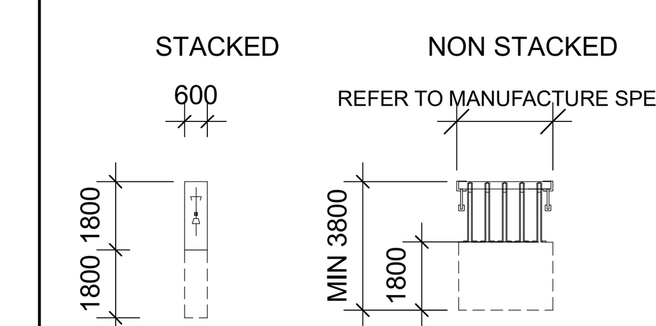
TYPICAL BARRIER-FREE PARKING DIMENSIONS

TYPE (A) : MIN 3.4 x 5.5 x 2.1m HIGH
TYPE (B) : MIN 2.4 x 5.5 x 2.1m HIGH



TYPICAL HORIZONTAL BIKE PARKING DIMENSIONS

STACKED : MIN .6 x 1.8 x 1.9m HIGH
NON STACKED: MIN 1.9m HIGH



#	DATE	DESCRIPTION	BY
8	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
7	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
6	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
5	2022-03-25	ISSUED FOR 100% DD	MY
4	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY
3	2022-01-14	ISSUED FOR 50% DD	MY
2	2021-12-06	ISSUED FOR 100% SD	MY
1	2021-10-15	ISSUED FOR 50% SD	MY

VanMar CONSTRUCTORS INC.

PROJECT

PROPOSED MIXED USE DEVELOPMENT

10 DUKE STREET WEST, KITCHENER, ON

DRAWING

FLOOR 03

PROJECT NO. 21.167CS
PROJECT DATE 2021-10-07
DRAWN BY MJM
CHECKED BY MYG
SCALE AS NOTED

ONTARIO ASSOCIATION OF ARCHITECTS
RUSSELL L.FLEISCHER
LICENCE 5004

DRAWING NO. SPA154
REV. 8

2023-05-30 4:01:21 PM

TURNER FLEISCHER

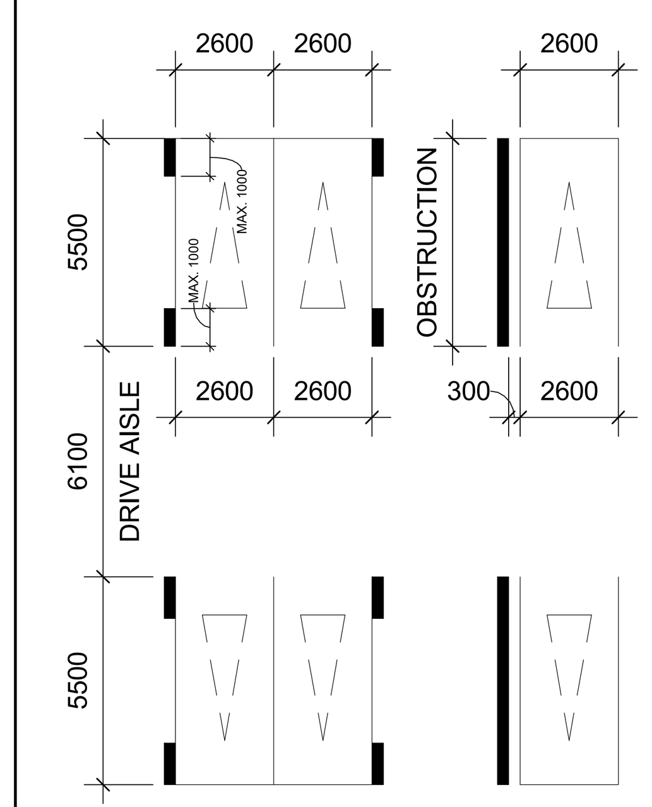
Turner Fleischer Architects Inc.

67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

TYPICAL PARKING DIMENSIONS

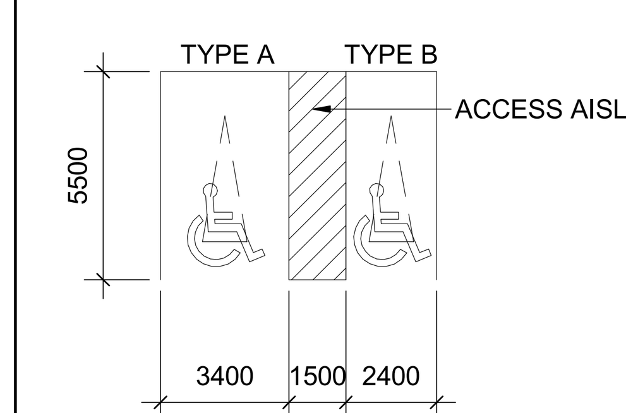
AISLE WIDTH: MIN 6.1m

TYPICAL PARKING SPACE:
MIN. 2.6 x 5.5 x 2.0m HIGH



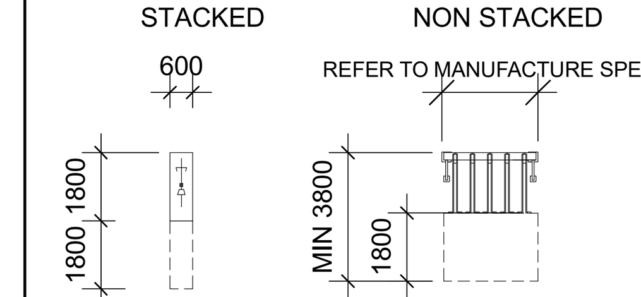
TYPICAL BARRIER-FREE PARKING DIMENSIONS

TYPE (A) : MIN 3.4 x 5.5 x 2.1m HIGH
TYPE (B) : MIN 2.4 x 5.5 x 2.1m HIGH



TYPICAL HORIZONTAL BIKE PARKING DIMENSIONS

STACKED: MIN .6 x 1.8 x 1.9m HIGH
NON STACKED: MIN 1.9m HIGH



#	DATE	DESCRIPTION	BY
8	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
7	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
6	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
5	2022-03-25	ISSUED FOR 100% DD	MY
4	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY
3	2022-01-14	ISSUED FOR 50% DD	MY
2	2021-12-06	ISSUED FOR 100% SD	MY
1	2021-10-15	ISSUED FOR 50% SD	MY

VanMar CONSTRUCTORS INC.

PROJECT
PROPOSED MIXED USE DEVELOPMENT
10 DUKE STREET WEST, KITCHENER, ON

DRAWING
FLOOR 04

PROJECT NO. 21.167CS
PROJECT DATE 2021-10-07
DRAWN BY MJM
CHECKED BY MYG
SCALE AS NOTED

ONTARIO ASSOCIATION OF ARCHITECTS
RUSSELL L.FLEISCHER
LICENCE
5004

DRAWING NO. SPA155
REV. 8

2023-05-30 4:01:22 PM

1
SPA156
FLOOR 05
1 : 100

2023-05-30 4:01:23 PM

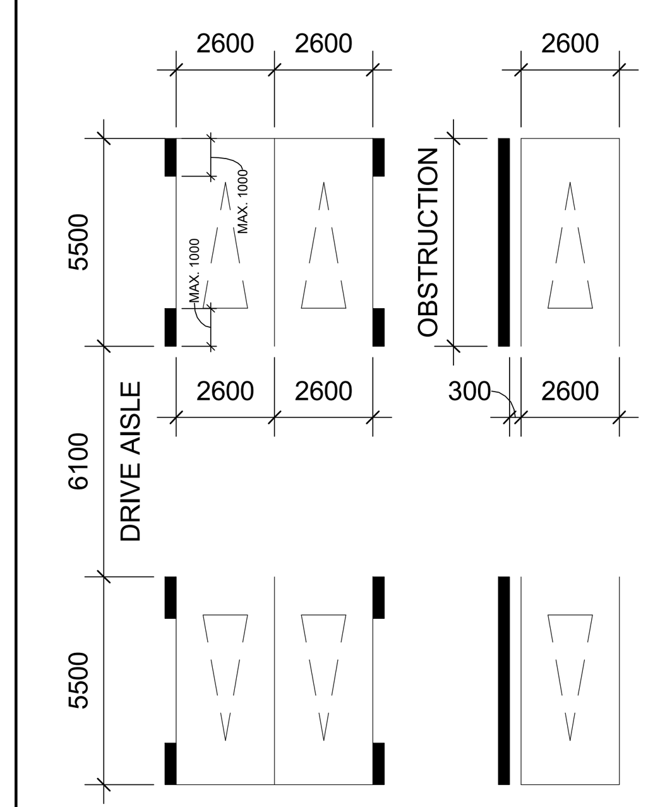
TURNER FLEISCHER

Turner Fleischer Architects Inc.
67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

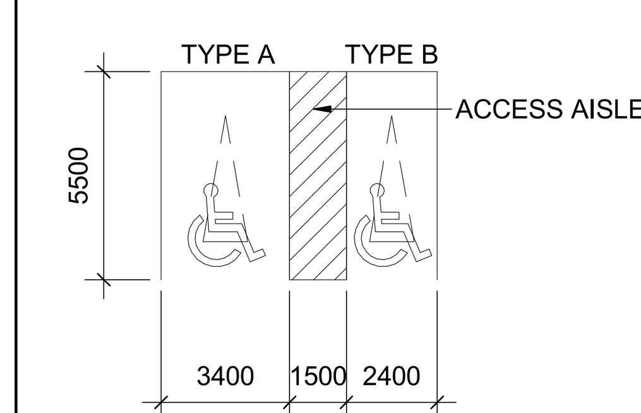
TYPICAL PARKING DIMENSIONS

AISLE WIDTH: MIN 6.1m

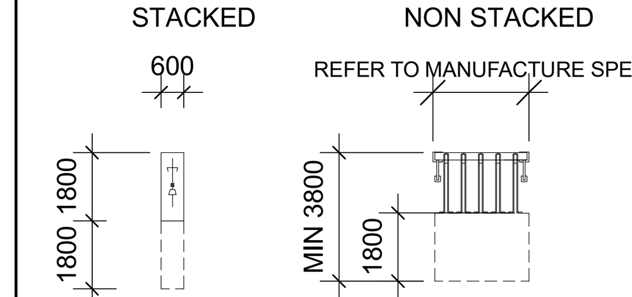
TYPICAL PARKING SPACE:
MIN. 2.6 x 5.5 x 2.0m HIGH



TYPICAL BARRIER-FREE PARKING DIMENSIONS
TYPE (A) : MIN 3.4 x 5.5 x 2.1m HIGH
TYPE (B) : MIN 2.4 x 5.5 x 2.1m HIGH



TYPICAL HORIZONTAL BIKE PARKING DIMENSIONS
STACKED : MIN .6 x 1.8 x 1.9m HIGH
NON STACKED: MIN 1.9m HIGH



#	DATE	DESCRIPTION	BY
8	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
7	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
6	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
5	2022-03-25	ISSUED FOR 100% DD	MY
4	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY
3	2022-01-14	ISSUED FOR 50% DD	MY
2	2021-12-06	ISSUED FOR 100% SD	MY
1	2021-10-15	ISSUED FOR 50% SD	MY

VanMar CONSTRUCTORS INC.

PROJECT
PROPOSED MIXED USE DEVELOPMENT
10 DUKE STREET WEST, KITCHENER, ON

DRAWING
FLOOR 05

PROJECT NO.
21.167CS
PROJECT DATE
2021-10-07
DRAWN BY
MJM
CHECKED BY
MYG
SCALE
AS NOTED

ONTARIO ASSOCIATION OF ARCHITECTS
RUSSELL L.FLEISCHER
LICENCE
5004

DRAWING NO.
SPA156
REV.
8

1 FLOOR 06
SPA157 1 : 100

TURNER FLEISCHER

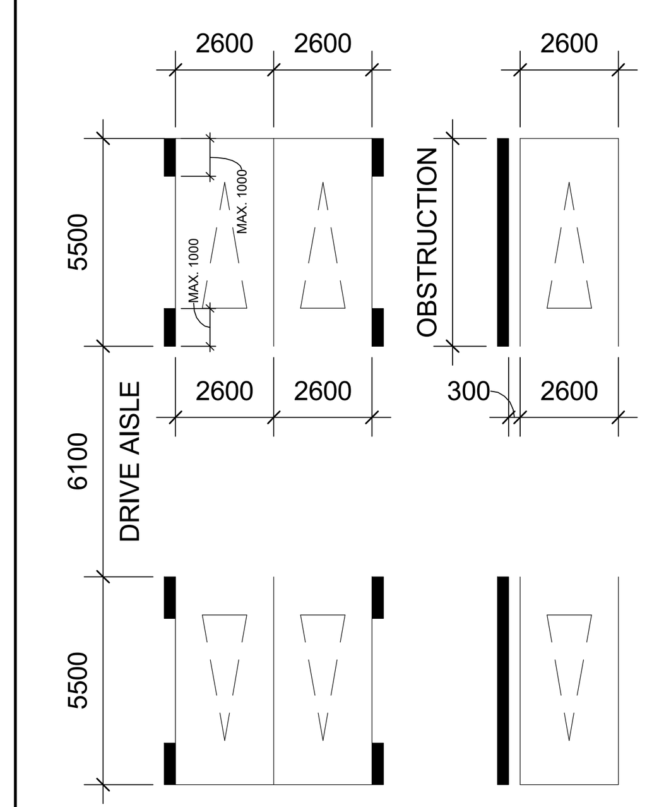
Turner Fleischer Architects Inc.

67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

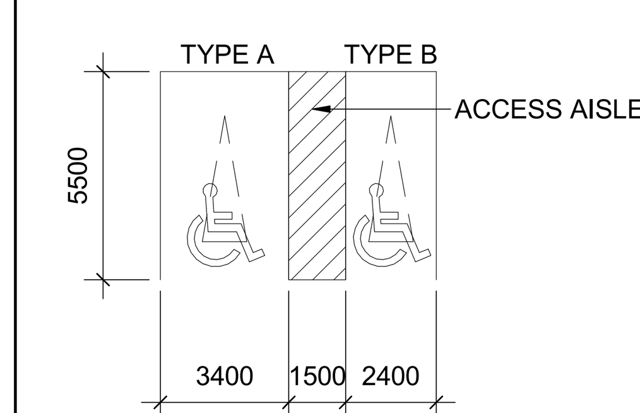
TYPICAL PARKING DIMENSIONS

AISLE WIDTH: MIN 6.1m

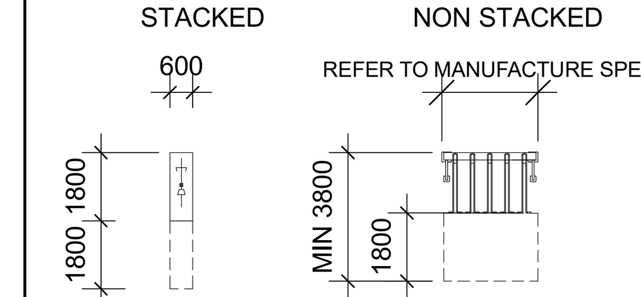
TYPICAL PARKING SPACE:
MIN. 2.6 x 5.5 x 2.0m HIGH



TYPICAL BARRIER-FREE PARKING DIMENSIONS
TYPE (A) : MIN 3.4 x 5.5 x 2.1m HIGH
TYPE (B) : MIN 2.4 x 5.5 x 2.1m HIGH



TYPICAL HORIZONTAL BIKE PARKING DIMENSIONS
STACKED : MIN .6 x 1.8 x 1.9m HIGH
NON STACKED: MIN 1.9m HIGH



#	DATE	DESCRIPTION	BY
8	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
7	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
6	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
5	2022-03-25	ISSUED FOR 100% DD	MY
4	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY
3	2022-01-14	ISSUED FOR 50% DD	MY
2	2021-12-06	ISSUED FOR 100% SD	MY
1	2021-10-15	ISSUED FOR 50% SD	MY

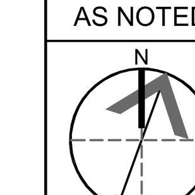
VanMar CONSTRUCTORS INC.

PROJECT
PROPOSED MIXED USE DEVELOPMENT
10 DUKE STREET WEST, KITCHENER, ON

DRAWING
FLOOR 06

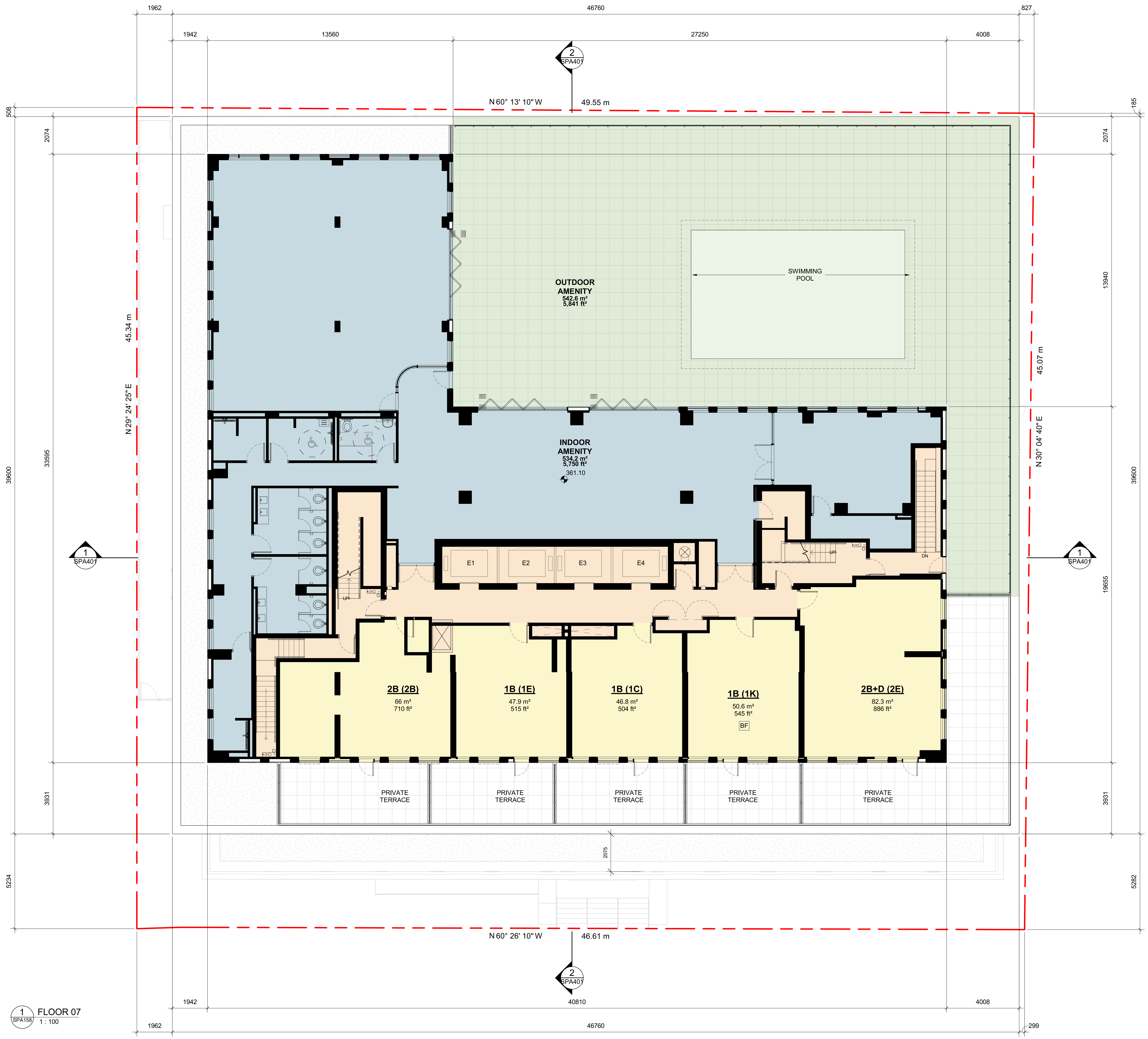
PROJECT NO. 21.167CS
PROJECT DATE 2021-10-07
DRAWN BY MJM
CHECKED BY MYG
SCALE AS NOTED

ONTARIO ASSOCIATION OF ARCHITECTS
RUSSELL L.FLEISCHER
LICENCE
5004



DRAWING NO. SPA157
REV. 8

2023-05-30 4:01:24 PM



1 FLOOR 07
SPA158 1 : 100

TURNER FLEISCHER

Turner Fleischer Architects Inc.

67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

#	DATE	DESCRIPTION	BY
8	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
7	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
6	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
5	2022-03-25	ISSUED FOR 100% DD	MY
4	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY
3	2022-01-14	ISSUED FOR 50% DD	MY
2	2021-12-06	ISSUED FOR 100% SD	MY
1	2021-10-15	ISSUED FOR 50% SD	MY

VanMar CONSTRUCTORS INC.

PROJECT

PROPOSED MIXED USE DEVELOPMENT

10 DUKE STREET WEST, KITCHENER, ON

DRAWING

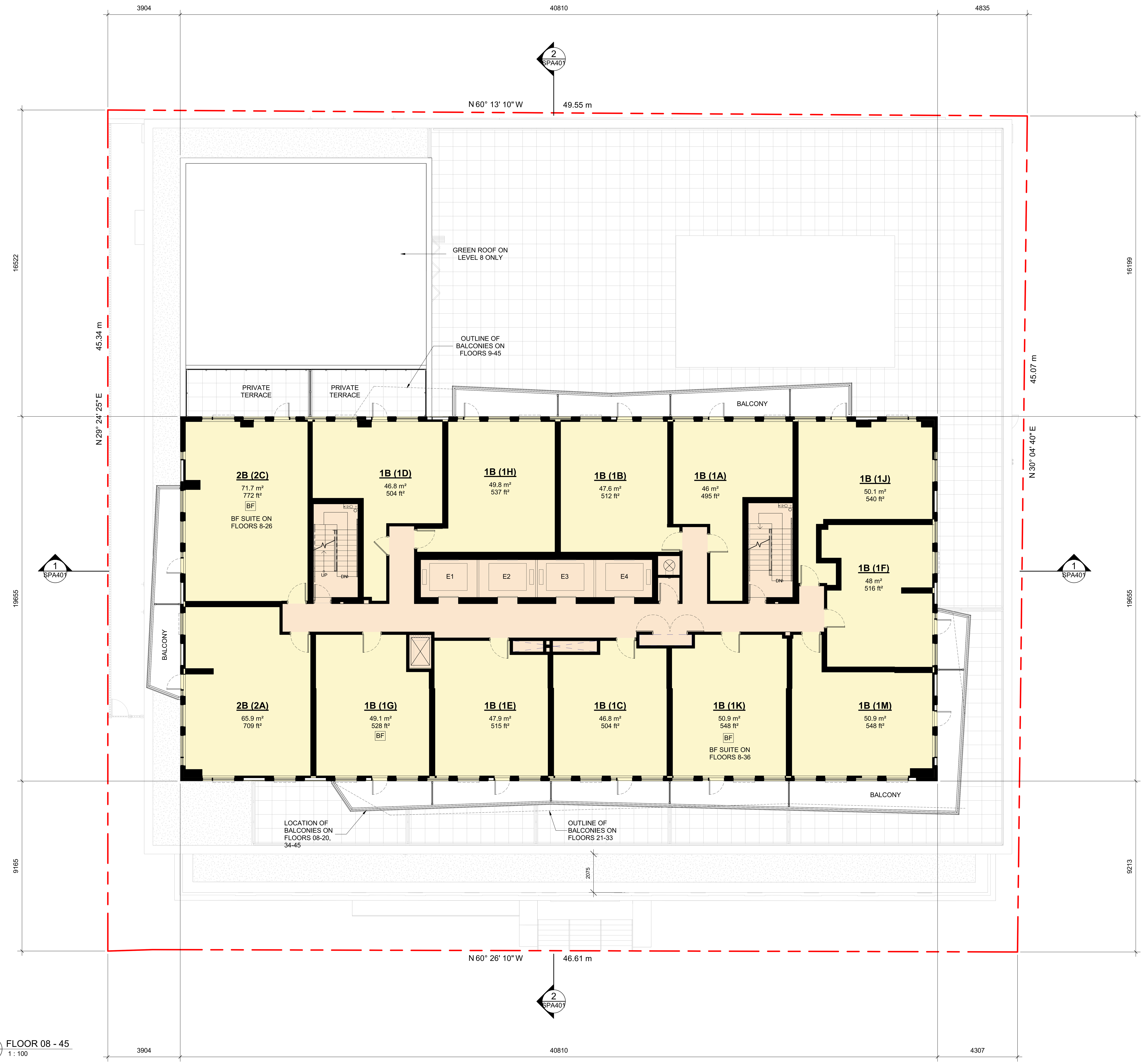
FLOOR 07

PROJECT NO. 21.167CS
PROJECT DATE 2021-10-07
DRAWN BY MJM
CHECKED BY MYG
SCALE 1 : 100

ONTARIO ASSOCIATION OF ARCHITECTS
RUSSELL L.FLEISCHER
LICENCE
5004

DRAWING NO. SPA158
REV. 8

2023-05-30 4:01:26 PM



1 FLOOR 08 - 45
SPA159 1 : 100

TURNER FLEISCHER

Turner Fleischer Architects Inc.

67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

#	DATE	DESCRIPTION	BY
8	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
7	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
6	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
5	2022-03-25	ISSUED FOR 100% DD	MY
4	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY
3	2022-01-14	ISSUED FOR 50% DD	MY
2	2021-12-06	ISSUED FOR 100% SD	MY
1	2021-10-15	ISSUED FOR 50% SD	MY

VanMar CONSTRUCTORS INC.

PROJECT

PROPOSED MIXED USE DEVELOPMENT

10 DUKE STREET WEST, KITCHENER, ON

DRAWING

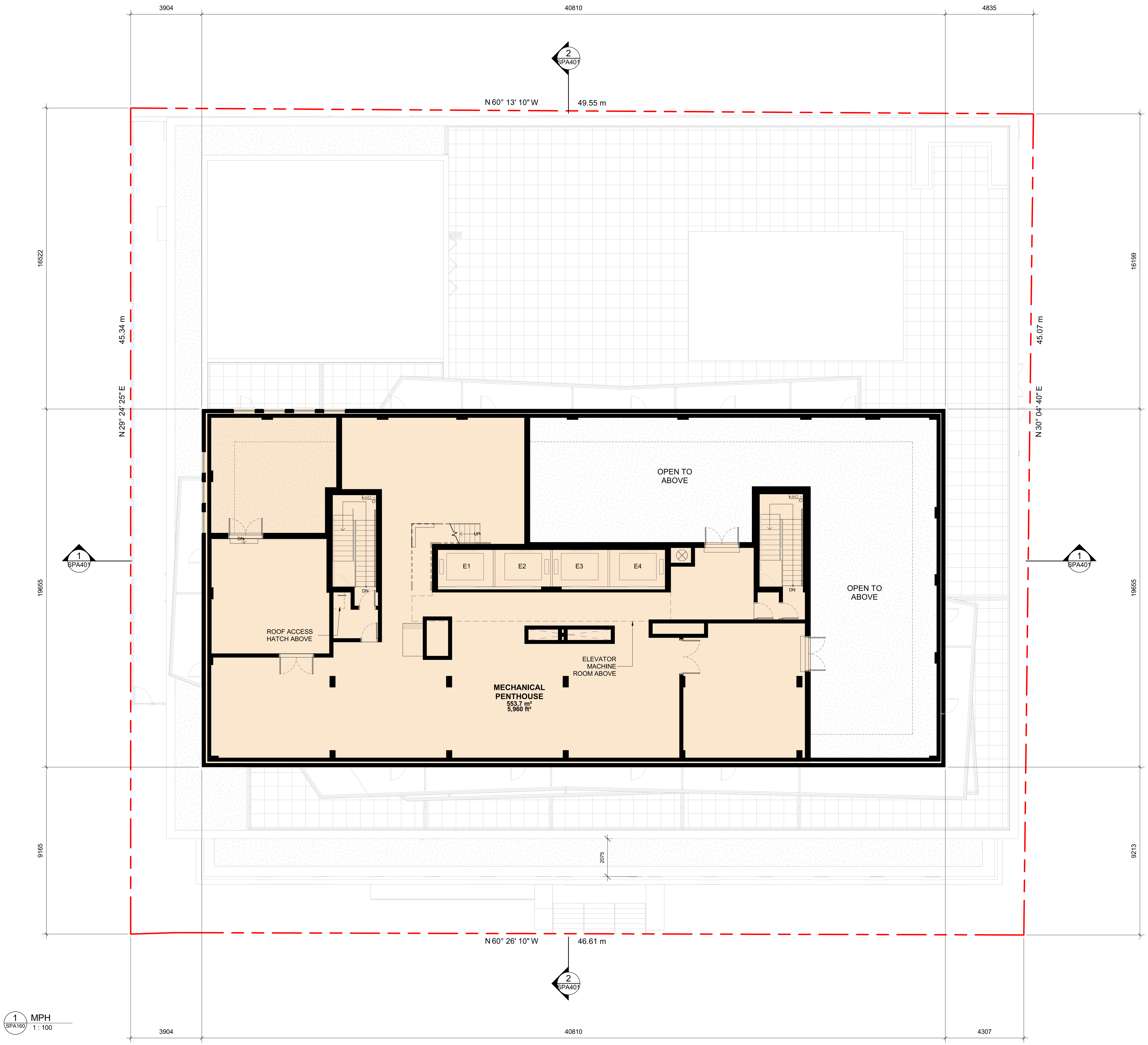
FLOOR 08 - 45

PROJECT NO. 21.167CS
PROJECT DATE 2021-10-07
DRAWN BY MJM
CHECKED BY MYG
SCALE 1 : 100

ONTARIO ASSOCIATION OF ARCHITECTS
RUSSELL L. FLEISCHER
LICENCE
5004

DRAWING NO. SPA159
REV. 8

2023-05-30 4:01:31 PM



1 MPH
SPA160 1 : 100

TURNER FLEISCHER

Turner Fleischer Architects Inc.

67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

#	DATE	DESCRIPTION	BY
7	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
6	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
5	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
4	2022-03-25	ISSUED FOR 100% DD	MY
3	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY
2	2022-01-14	ISSUED FOR 50% DD	MY
1	2021-12-06	ISSUED FOR 100% SD	MY

VanMar
CONSTRUCTORS INC.

PROJECT
PROPOSED MIXED USE DEVELOPMENT
10 DUKE STREET WEST, KITCHENER, ON

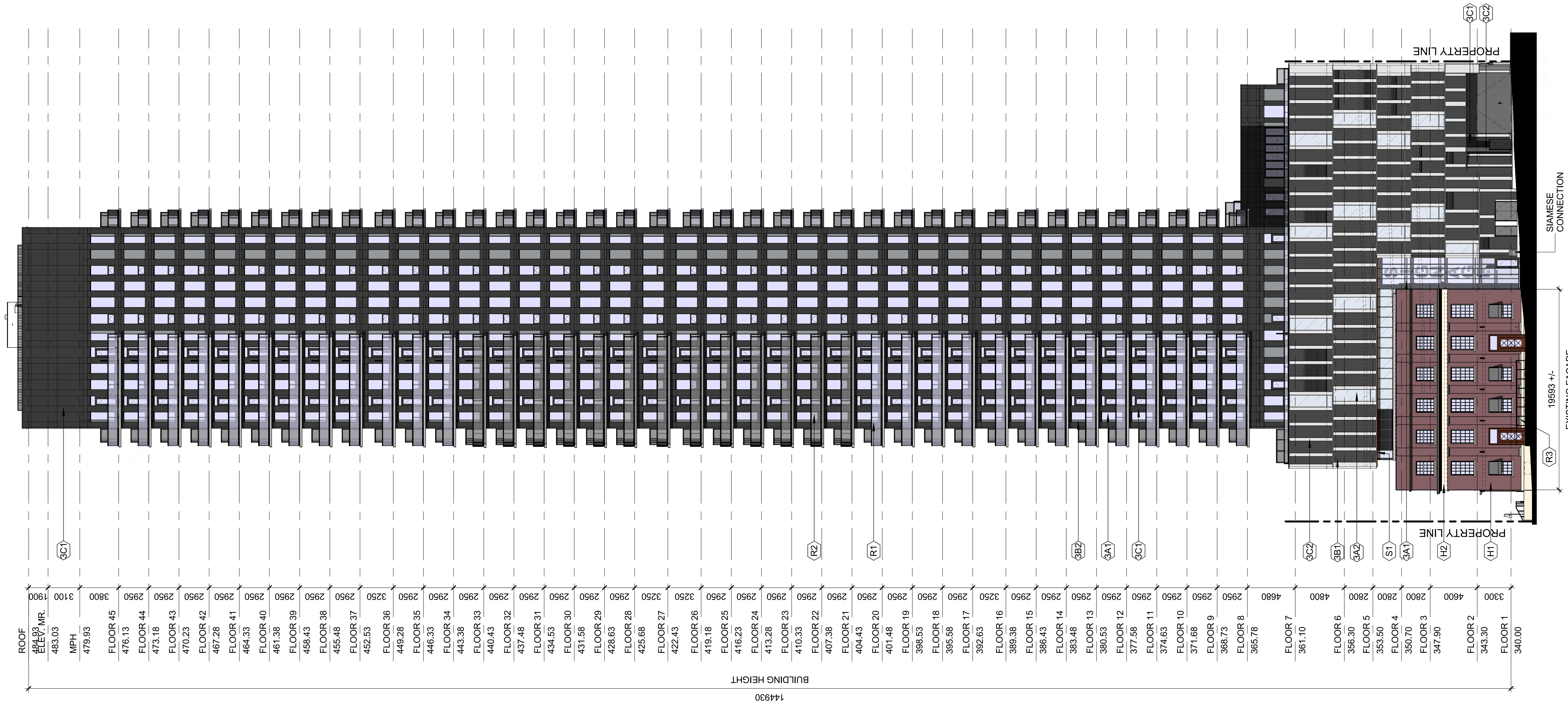
DRAWING
MECHANICAL PENTHOUSE PLAN

PROJECT NO. 21.167CS
PROJECT DATE 2021-10-07
DRAWN BY Author
CHECKED BY Checker
SCALE 1 : 100

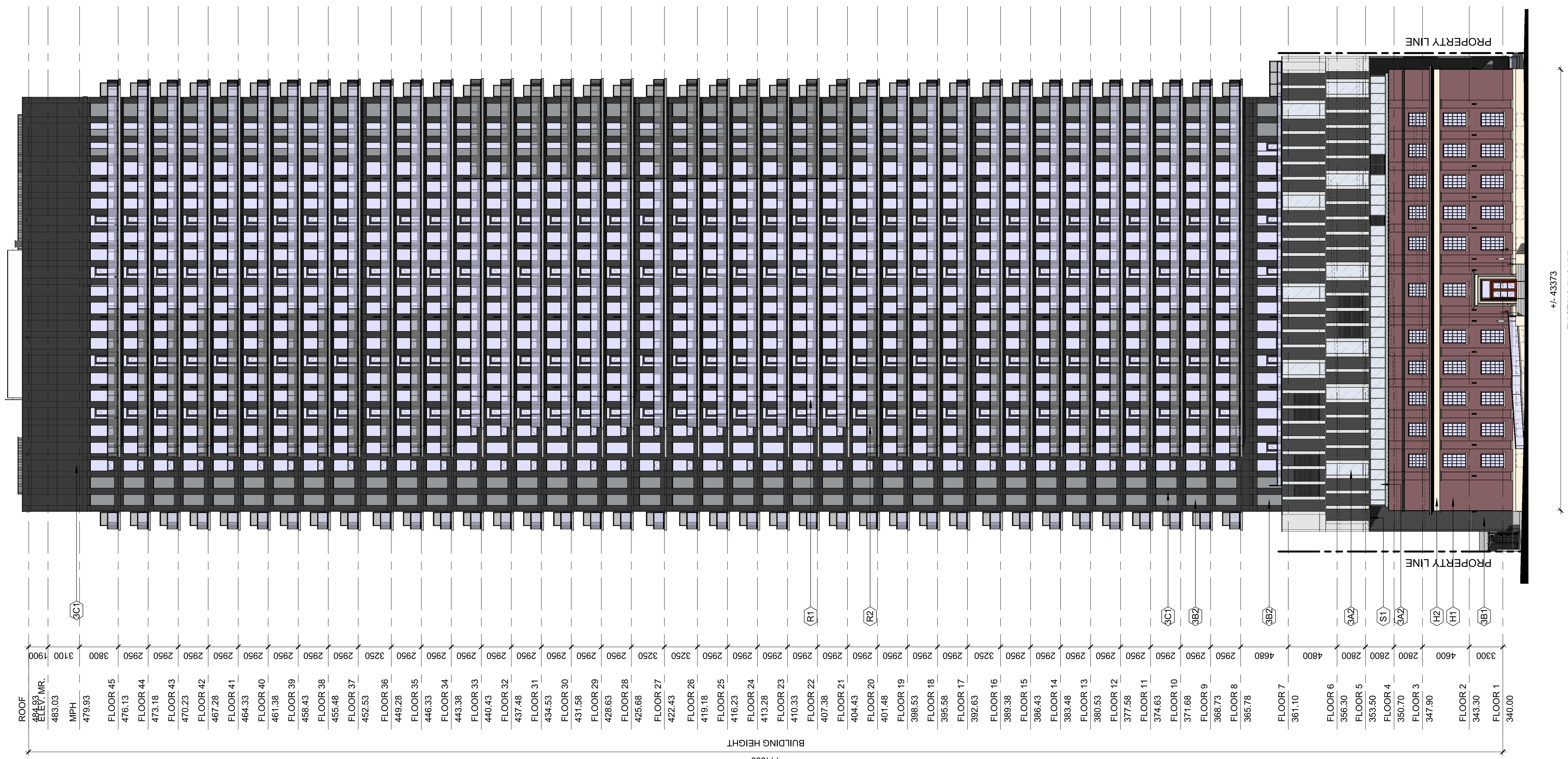
ONTARIO ASSOCIATION OF ARCHITECTS
RUSSELL L.FLEISCHER
LICENCE
5004

DRAWING NO. SPA160
REV. 7

2023-05-30 4:01:44 PM



2 SPA301 EAST ELEVATION 1 : 250



1 SPA301 SOUTH ELEVATION 1 : 250

City of Kitchener
Planning Division
BUILDING ELEVATION PLAN APPROVED
Rojan Mohammadi
Signature: RojanM
Date: 12/15/2023

Pages 1 to 4, Revision # 9

TURNER FLEISCHER

Turner Fleischer Architects Inc.
67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

EXTERIOR FINISHES LEGEND

DEVELOPER RESERVES THE RIGHT TO SUBSTITUTE EQUIVALENT ALTERNATE FINISHES DURING CONSTRUCTION

WINDOW WALL / CURTAIN WALL GLAZING SYSTEM

- 3A1 — VISION PANEL IN WINDOW WALL / CURTAIN WALL
  GLASS: GUARDIAN SUN-GUARD 'SNR 50' ON CLEAR
- 3A2 — DOUBLE GLAZED SPANDREL UNIT IN CURTAIN WALL
  GLASS: GUARDIAN SUN-GUARD 'SNR 35' ON CLEAR
  SPANDREL: OPACI-COAT #3-5185 SILENT NIGHT ON CLEAR
- 3B1 — SPANDREL PANEL IN CURTAIN WALL
  COLOUR: OPACI-COAT #1-0334 SPACE BLACK ON CLEAR
- 3B2 — SPANDREL PANEL IN WINDOW WALL
  COLOUR: OPACI-COAT #3-0770 WARM GREY ON CLEAR
- 3C1 — PROJECTED METAL PANEL IN WINDOW WALL
  COLOUR: DURANAR UC131816 - SOLAR REFLECTIVE BLACK
- 3C2 — PROJECTED METAL PANEL IN CURTAIN WALL
  COLOUR: DURANAR UC72638 - GRAHAM WHITE

GLAZED GUARDS

- R1 — PRE-FINISHED GLAZED ALUMINUM RAILING
  GLASS: CLEAR GLASS
- R2 — PRE-FINISHED GLAZED ALUMINUM RAILING
  GLASS: DARK GREY TINTED GLASS
- R3 — PRE-FINISHED GLAZED POWDER COATED BLACK ALUMINUM RAILING
  GLASS: CLEAR CLASS

STONE VENEER / HERITAGE FACADE

- H2 — EXISTING LIMESTONE (OR NEW TO MATCH EXISTING)
- H1 — EXISTING RESTORED / RECLAIMED BRICK

MISCELLANEOUS

- S1 — PRE-FINISHED METAL SOFFIT
  COLOUR: DURANAR UC131816 - SOLAR REFLECTIVE BLACK

#	DATE	DESCRIPTION	BY
9	2023-12-07	RE-ISSUED FOR SITE PLAN APPLICATION	MY
8	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
7	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
6	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
5	2022-03-25	ISSUED FOR 100% DD	MY
4	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY
3	2022-01-14	ISSUED FOR 50% DD	MY
2	2021-12-06	ISSUED FOR 100% SD	MY
1	2021-10-15	ISSUED FOR 50% SD	MY

VanMar CONSTRUCTORS INC.

PROJECT
PROPOSED MIXED USE DEVELOPMENT
10 DUKE STREET WEST, KITCHENER, ON

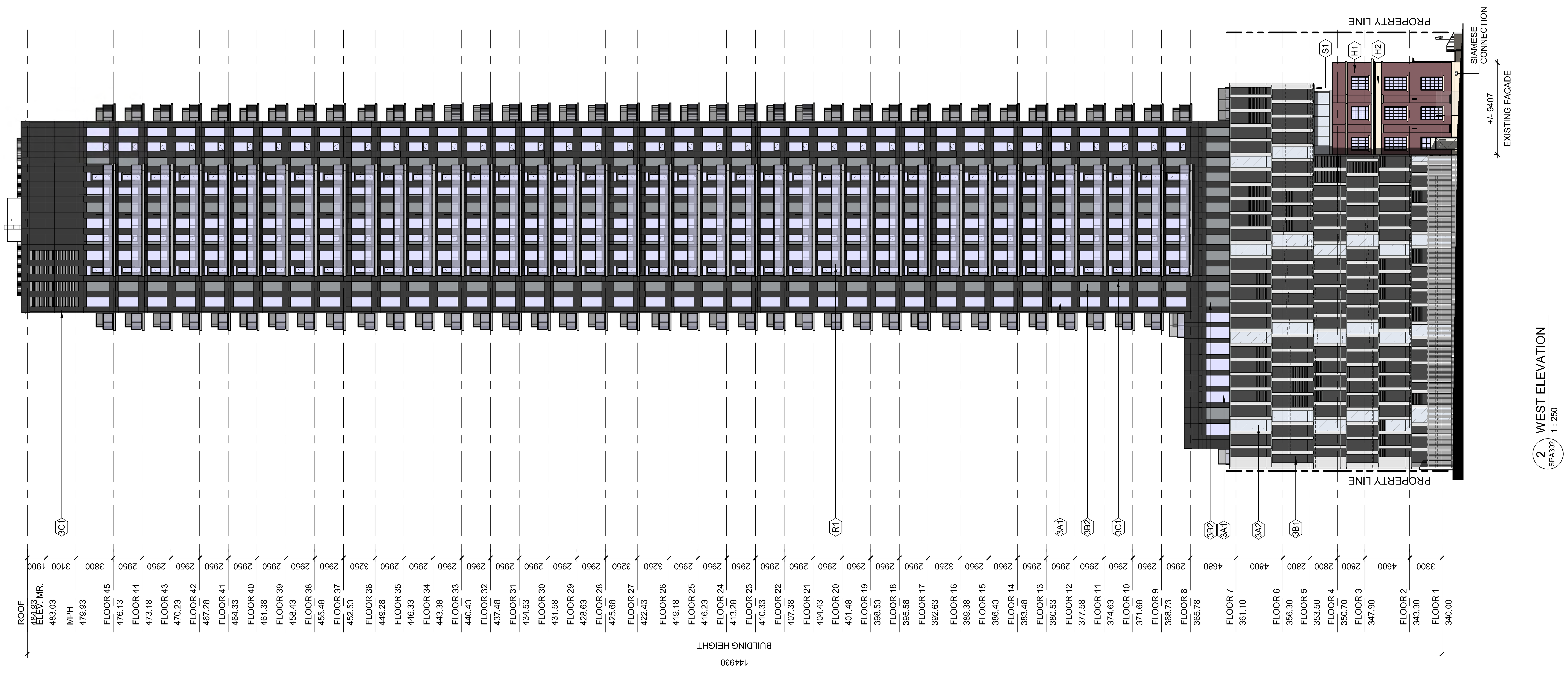
DRAWING
ELEVATIONS

PROJECT NO.	21.167CS
PROJECT DATE	2021-10-07
DRAWN BY	MJM
CHECKED BY	MYG
SCALE	As indicated

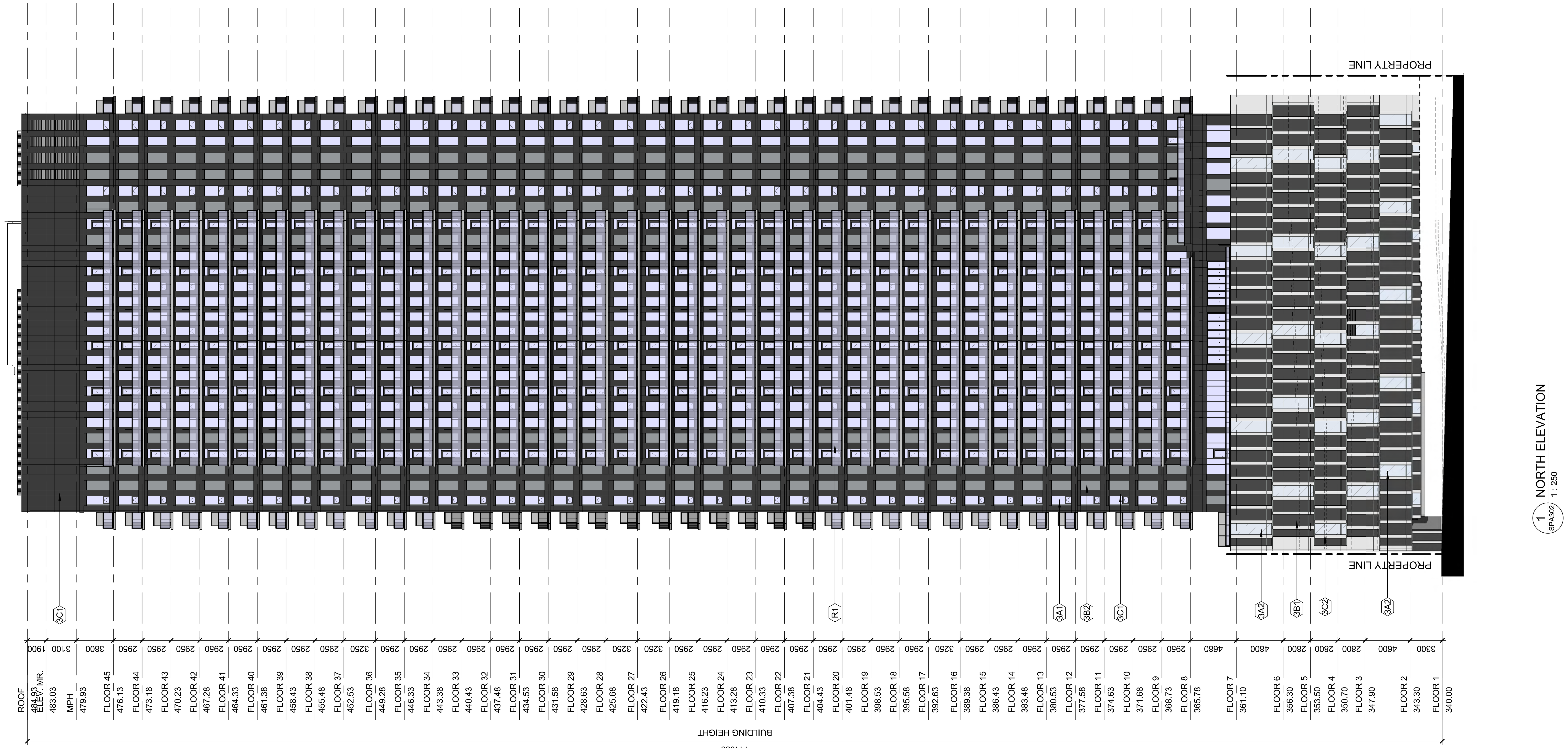
ONTARIO ASSOCIATION OF ARCHITECTS
RUSSELL L.FLEISCHER
LICENCE
5004

DRAWING NO. SPA301 REV. 9

2023-12-07 2:14:58 PM



2 WEST ELEVATION
SPA302 1 : 250



1 NORTH ELEVATION
SPA302 1 : 250

2023-12-07 2:16:50 PM

TURNER FLEISCHER

Turner Fleischer Architects Inc.

67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

EXTERIOR FINISHES LEGEND

DEVELOPER RESERVES THE RIGHT TO SUBSTITUTE EQUIVALENT ALTERNATE FINISHES DURING CONSTRUCTION

WINDOW WALL / CURTAIN WALL GLAZING SYSTEM

- 3A1 — VISION PANEL IN WINDOW WALL / CURTAIN WALL
  GLASS: GUARDIAN SUN-GUARD 'SNR 50' ON CLEAR
- 3A2 — DOUBLE GLAZED SPANDREL UNIT IN CURTAIN WALL
  GLASS: GUARDIAN SUN-GUARD 'SNR 35' ON CLEAR
  SPANDREL: OPACI-COAT #3-5185 SILENT NIGHT ON CLEAR
- 3B1 — SPANDREL PANEL IN CURTAIN WALL
  COLOUR: OPACI-COAT #1-0334 SPACE BLACK ON CLEAR
- 3B2 — SPANDREL PANEL IN WINDOW WALL
  COLOUR: OPACI-COAT #3-0770 WARM GREY ON CLEAR
- 3C1 — PROJECTED METAL PANEL IN WINDOW WALL
  COLOUR: DURANAR UC131816 - SOLAR REFLECTIVE BLACK
- 3C2 — PROJECTED METAL PANEL IN CURTAIN WALL
  COLOUR: DURANAR UC72638 - GRAHAM WHITE

GLAZED GUARDS

- R1 — PRE-FINISHED GLAZED ALUMINUM RAILING
  GLASS: CLEAR GLASS
- R2 — PRE-FINISHED GLAZED ALUMINUM RAILING
  GLASS: DARK GREY TINTED GLASS
- R3 — PRE-FINISHED GLAZED POWDER COATED BLACK ALUMINUM RAILING
  GLASS: CLEAR CLASS

STONE VENEER / HERITAGE FACADE

- H2 — EXISTING LIMESTONE (OR NEW TO MATCH EXISTING)
- H1 — EXISTING RESTORED / RECLAIMED BRICK

MISCELLANEOUS

- S1 — PRE-FINISHED METAL SOFFIT
  COLOUR: DURANAR UC131816 - SOLAR REFLECTIVE BLACK

#	DATE	DESCRIPTION	BY
9	2023-12-07	RE-ISSUED FOR SITE PLAN APPLICATION	MY
8	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
7	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
6	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
5	2022-03-25	ISSUED FOR 100% DD	MY
4	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY
3	2022-01-14	ISSUED FOR 50% DD	MY
2	2021-12-06	ISSUED FOR 100% SD	MY
1	2021-10-15	ISSUED FOR 50% SD	MY

VanMar CONSTRUCTORS INC.

PROJECT

PROPOSED MIXED USE DEVELOPMENT

10 DUKE STREET WEST, KITCHENER, ON

DRAWING

ELEVATIONS

PROJECT NO. 21.167CS
PROJECT DATE 2021-10-07
DRAWN BY MJM
CHECKED BY MYG
SCALE As indicated

ONTARIO ASSOCIATION OF ARCHITECTS
RUSSELL L.FLEISCHER
LICENCE
5004

DRAWING NO. SPA302
REV. 9

2 EAST PODIUM ELEVATION
SPA311 1 : 100

1 SOUTH PODIUM ELEVATION
SPA311 1 : 100

TURNER FLEISCHER

Turner Fleischer Architects Inc.
67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

EXTERIOR FINISHES LEGEND

DEVELOPER RESERVES THE RIGHT TO SUBSTITUTE EQUIVALENT ALTERNATE FINISHES DURING CONSTRUCTION

WINDOW WALL / CURTAIN WALL GLAZING SYSTEM

- 3A1 VISION PANEL IN WINDOW WALL / CURTAIN WALL GLASS: GUARDIAN SUN-GUARD 'SNR 50' ON CLEAR
- 3A2 DOUBLE GLAZED SPANDREL UNIT IN CURTAIN WALL GLASS: GUARDIAN SUN-GUARD 'SNR 35' ON CLEAR SPANDREL: OPACI-COAT #3-5185 SILENT NIGHT ON CLEAR
- 3B1 SPANDREL PANEL IN CURTAIN WALL COLOUR: OPACI-COAT #1-0334 SPACE BLACK ON CLEAR
- 3B2 SPANDREL PANEL IN WINDOW WALL COLOUR: OPACI-COAT #3-0770 WARM GREY ON CLEAR
- 3C1 PROJECTED METAL PANEL IN WINDOW WALL COLOUR: DURANAR UC131816 - SOLAR REFLECTIVE BLACK
- 3C2 PROJECTED METAL PANEL IN CURTAIN WALL COLOUR: DURANAR UC72638 - GRAHAM WHITE

GLAZED GUARDS

- R1 PRE-FINISHED GLAZED ALUMINUM RAILING GLASS: CLEAR GLASS
- R2 PRE-FINISHED GLAZED ALUMINUM RAILING GLASS: DARK GREY TINTED GLASS
- R3 PRE-FINISHED GLAZED POWDER COATED BLACK ALUMINUM RAILING GLASS: CLEAR CLASS

STONE VENEER / HERITAGE FACADE

- H2 EXISTING LIMESTONE (OR NEW TO MATCH EXISTING)
- H1 EXISTING RESTORED / RECLAIMED BRICK

MISCELLANEOUS

- S1 PRE-FINISHED METAL SOFFIT COLOUR: DURANAR UC131816 - SOLAR REFLECTIVE BLACK

#	DATE	DESCRIPTION	BY
7	2023-12-07	RE-ISSUED FOR SITE PLAN APPLICATION	MY
6	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
5	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
4	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
3	2022-03-25	ISSUED FOR 100% DD	MY
2	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY
1	2022-01-14	ISSUED FOR 50% DD	MY

VanMar CONSTRUCTORS INC.

PROJECT
PROPOSED MIXED USE DEVELOPMENT
10 DUKE STREET WEST, KITCHENER, ON

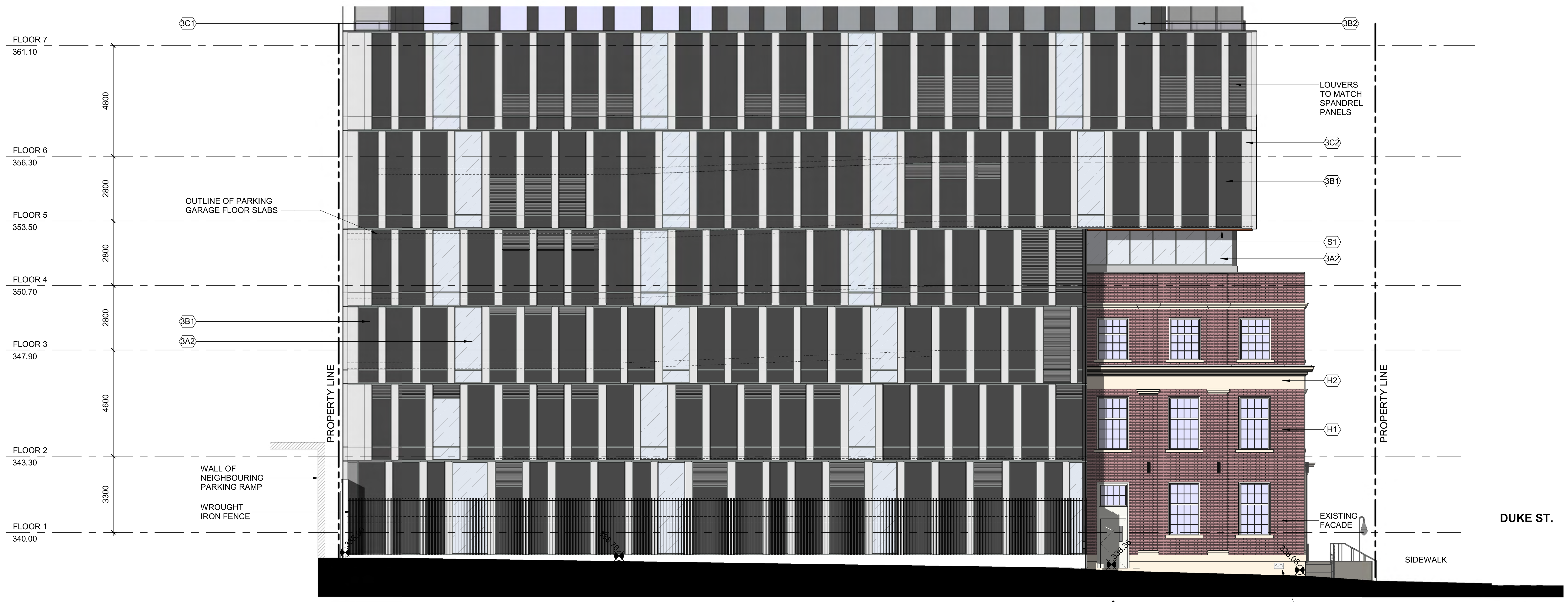
DRAWING
SOUTH AND EAST PODIUM ELEVATION

PROJECT NO.
21.167CS
PROJECT DATE
2021-10-07
DRAWN BY
MJM
CHECKED BY
MYG
SCALE
As indicated

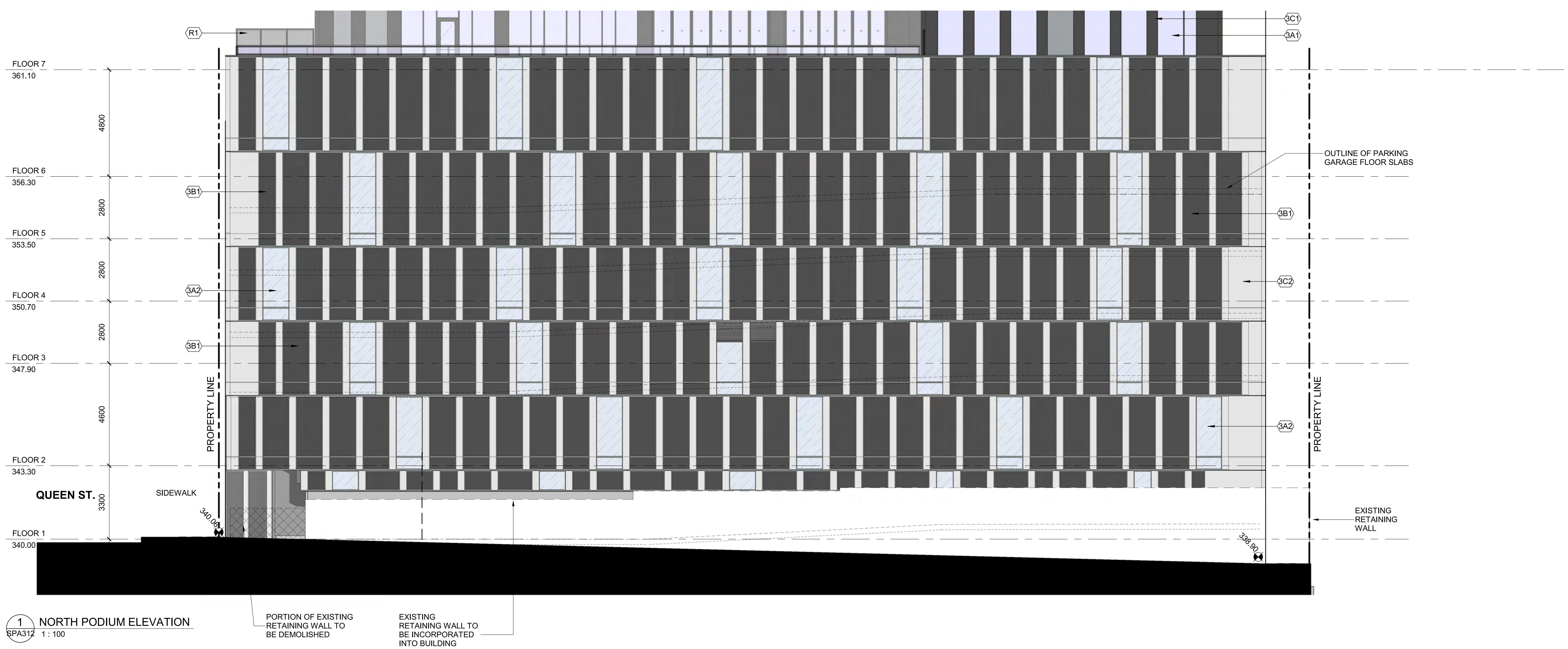
ONTARIO ASSOCIATION OF ARCHITECTS
RUSSELL L.FLEISCHER
LICENCE
5004

DRAWING NO.
SPA311
REV.
7

2023-12-07 2:18:26 PM



2 WEST PODIUM ELEVATION
SPA312 1 : 100



1 NORTH PODIUM ELEVATION
SPA312 1 : 100

2023-12-07 2:19:28 PM

TURNER FLEISCHER

Turner Fleischer Architects Inc.

67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

EXTERIOR FINISHES LEGEND

DEVELOPER RESERVES THE RIGHT TO SUBSTITUTE EQUIVALENT ALTERNATE FINISHES DURING CONSTRUCTION

WINDOW WALL / CURTAIN WALL GLAZING SYSTEM

- 3A1 VISION PANEL IN WINDOW WALL / CURTAIN WALL GLASS: GUARDIAN SUN-GUARD 'SNR 50' ON CLEAR
- 3A2 DOUBLE GLAZED SPANDREL UNIT IN CURTAIN WALL GLASS: GUARDIAN SUN-GUARD 'SNR 35' ON CLEAR SPANDREL: OPACI-COAT #3-5185 SILENT NIGHT ON CLEAR
- 3B1 SPANDREL PANEL IN CURTAIN WALL COLOUR: OPACI-COAT #1-0334 SPACE BLACK ON CLEAR
- 3B2 SPANDREL PANEL IN WINDOW WALL COLOUR: OPACI-COAT #3-0770 WARM GREY ON CLEAR
- 3C1 PROJECTED METAL PANEL IN WINDOW WALL COLOUR: DURANAR UC131816 - SOLAR REFLECTIVE BLACK
- 3C2 PROJECTED METAL PANEL IN CURTAIN WALL COLOUR: DURANAR UC72638 - GRAHAM WHITE

GLAZED GUARDS

- R1 PRE-FINISHED GLAZED ALUMINUM RAILING GLASS: CLEAR GLASS
- R2 PRE-FINISHED GLAZED ALUMINUM RAILING GLASS: DARK GREY TINTED GLASS
- R3 PRE-FINISHED GLAZED POWDER COATED BLACK ALUMINUM RAILING GLASS: CLEAR CLASS

STONE VENEER / HERITAGE FACADE

- H2 EXISTING LIMESTONE (OR NEW TO MATCH EXISTING)
- H1 EXISTING RESTORED / RECLAIMED BRICK

MISCELLANEOUS

- S1 PRE-FINISHED METAL SOFFIT COLOUR: DURANAR UC131816 - SOLAR REFLECTIVE BLACK

#	DATE	DESCRIPTION	BY
7	2023-12-07	RE-ISSUED FOR SITE PLAN APPLICATION	MY
6	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
5	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
4	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
3	2022-03-25	ISSUED FOR 100% DD	MY
2	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY
1	2022-01-14	ISSUED FOR 50% DD	MY

VanMar CONSTRUCTORS INC.

PROJECT

PROPOSED MIXED USE DEVELOPMENT

10 DUKE STREET WEST, KITCHENER, ON

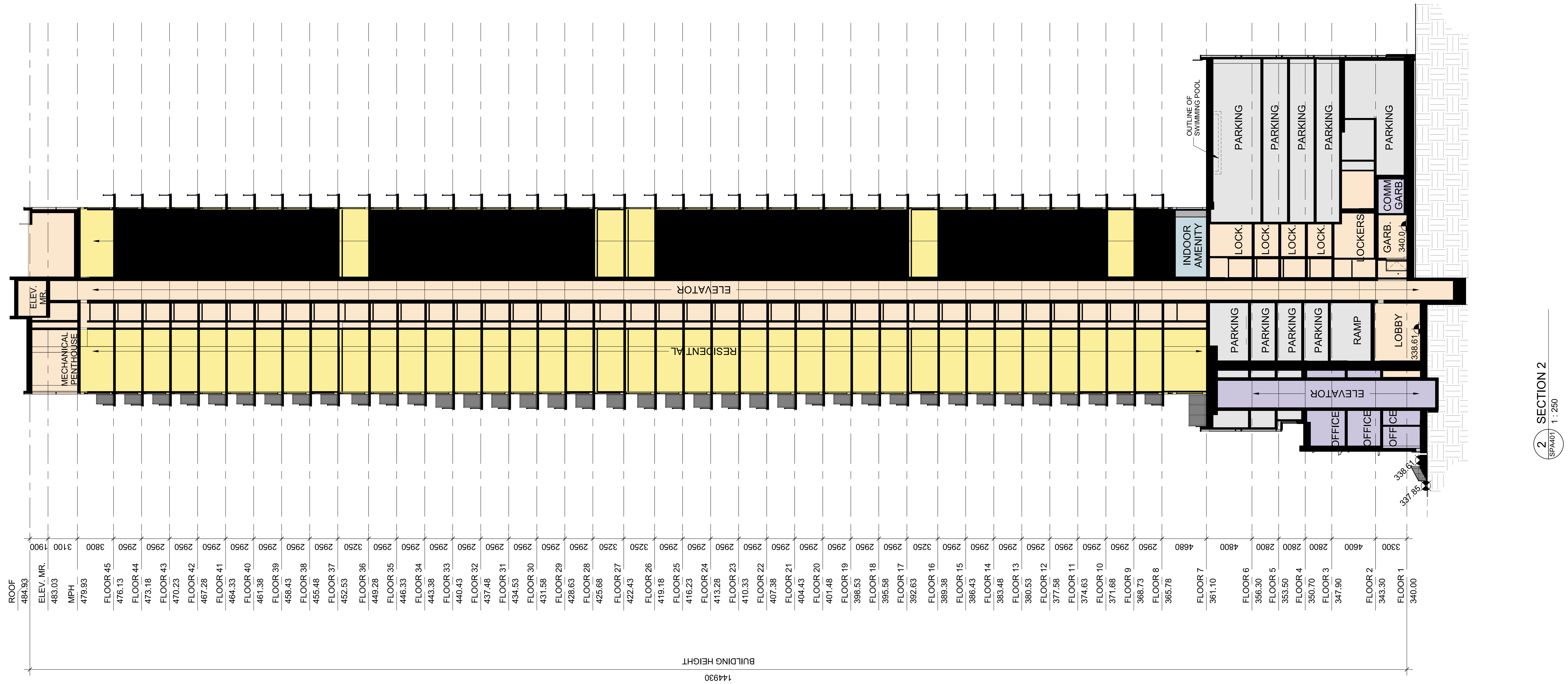
DRAWING

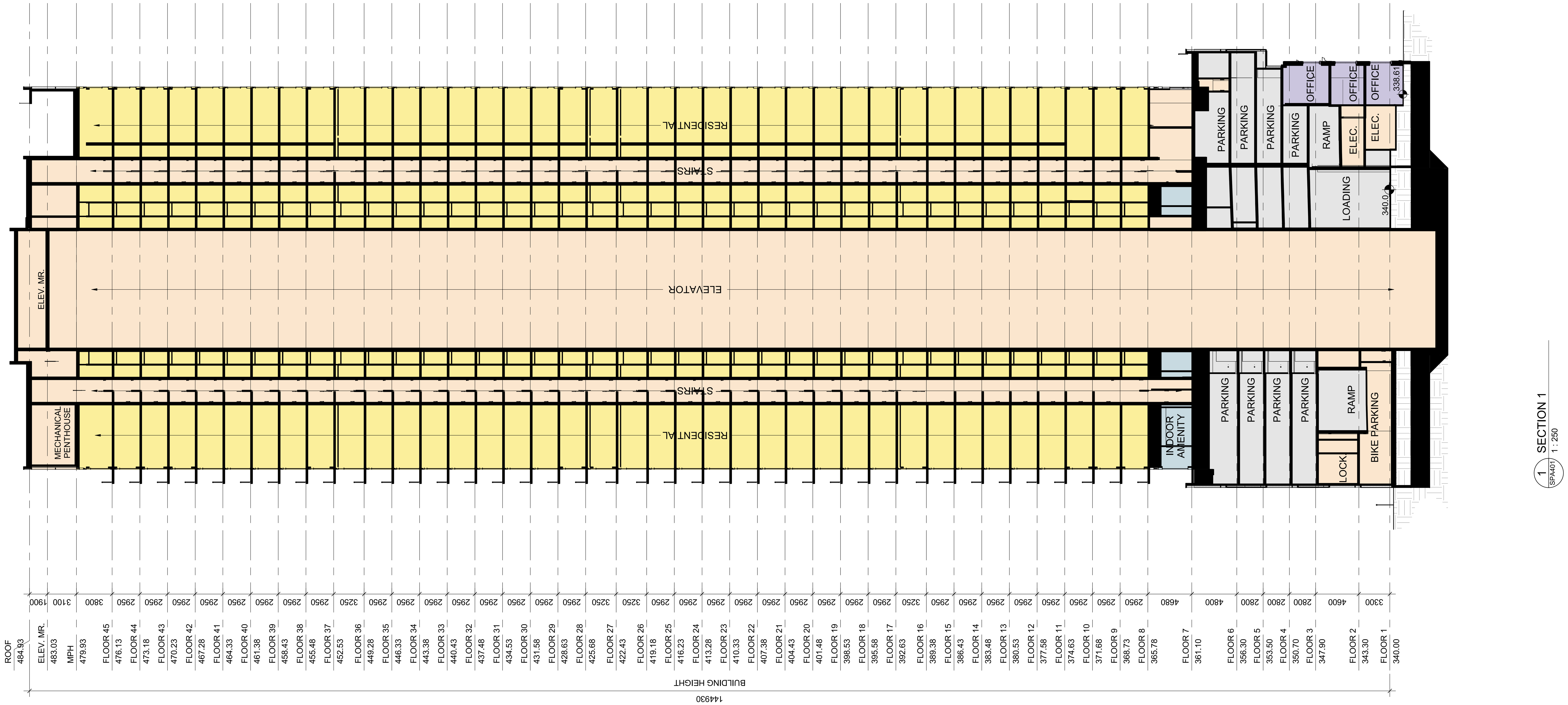
NORTH AND WEST PODIUM ELEVATION

PROJECT NO. 21.167CS
PROJECT DATE 2021-10-07
DRAWN BY MJM
CHECKED BY MYG
SCALE As indicated

ONTARIO ASSOCIATION OF ARCHITECTS
RUSSELL L.FLEISCHER
LICENCE
5004

DRAWING NO. SPA312
REV. 7





TURNER FLEISCHER

Turner Fleischer Architects Inc.

67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

#	DATE	DESCRIPTION	BY
8	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
7	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
6	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
5	2022-03-25	ISSUED FOR 100% DD	MY
4	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY
3	2022-01-14	ISSUED FOR 50% DD	MY
2	2021-12-06	ISSUED FOR 100% SD	MY
1	2021-10-15	ISSUED FOR 50% SD	MY

VanMar
CONSTRUCTORS INC.

PROJECT

PROPOSED MIXED USE DEVELOPMENT

10 DUKE STREET WEST, KITCHENER, ON

DRAWING

BUILDING SECTIONS

PROJECT NO.
21.167CS

PROJECT DATE
2021-10-07

DRAWN BY
MJM

CHECKED BY
MYG

SCALE
1 : 250

ONTARIO ASSOCIATION OF ARCHITECTS
RUSSELL L.FLEISCHER
LICENCE
5004

DRAWING NO.
SPA401

REV.
8

2023-05-30 4:09:10 PM

VIEW FROM VOGELSANG GREEN

VIEW FROM QUEEN STREET NORTH

TURNER
FLEISCHER

Turner Fleischer Architects Inc.

67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

#	DATE	DESCRIPTION	BY
5	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
4	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
3	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
2	2022-03-25	ISSUED FOR 100% DD	MY
1	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY

VanMar
CONSTRUCTORS INC.

PROJECT

PROPOSED MIXED USE DEVELOPMENT

10 DUKE STREET WEST, KITCHENER, ON

DRAWING

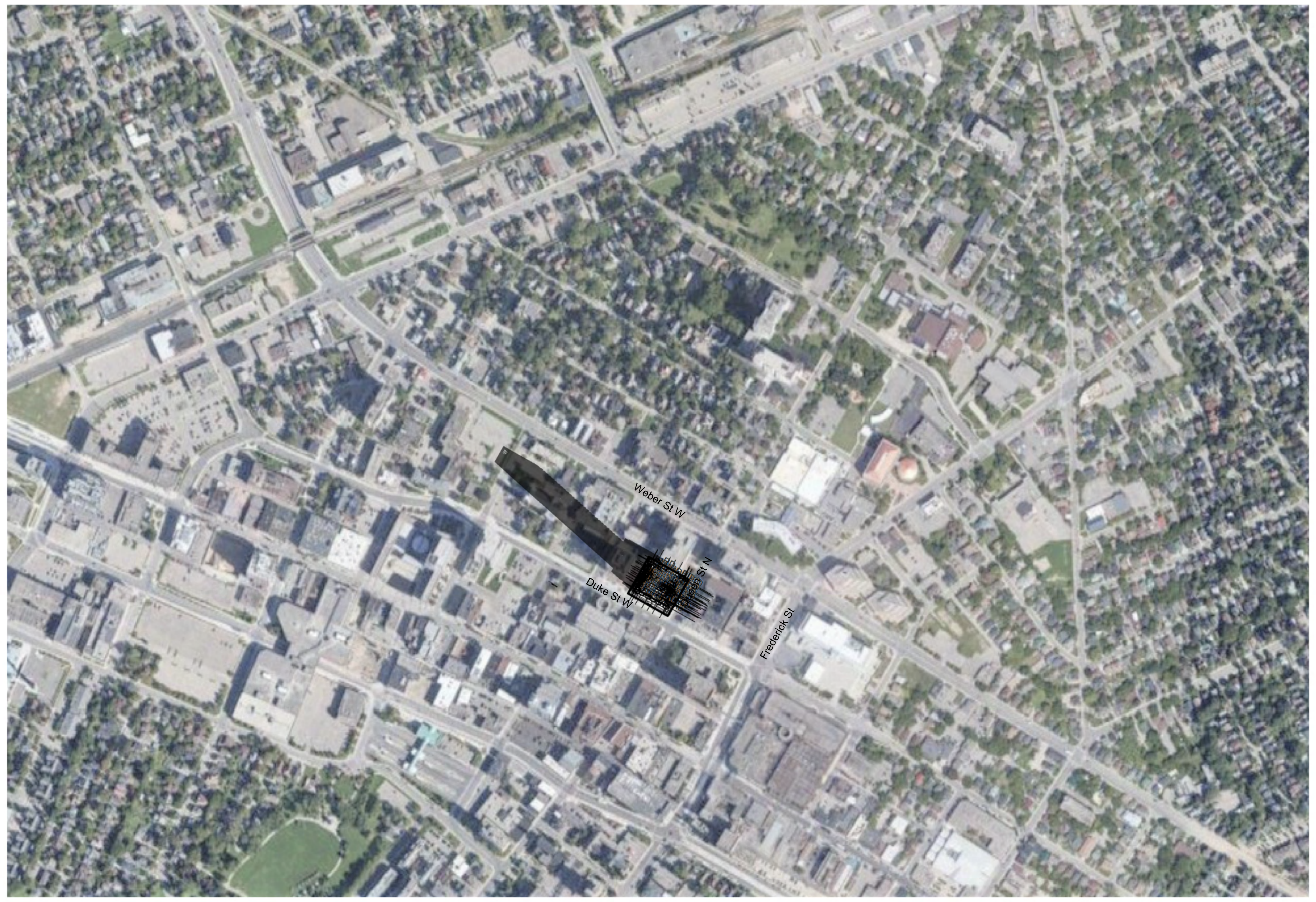
3D PERSPECTIVES

PROJECT NO.
21.167CS
PROJECT DATE
2021-10-07
DRAWN BY
MJM
CHECKED BY
MYG
SCALE

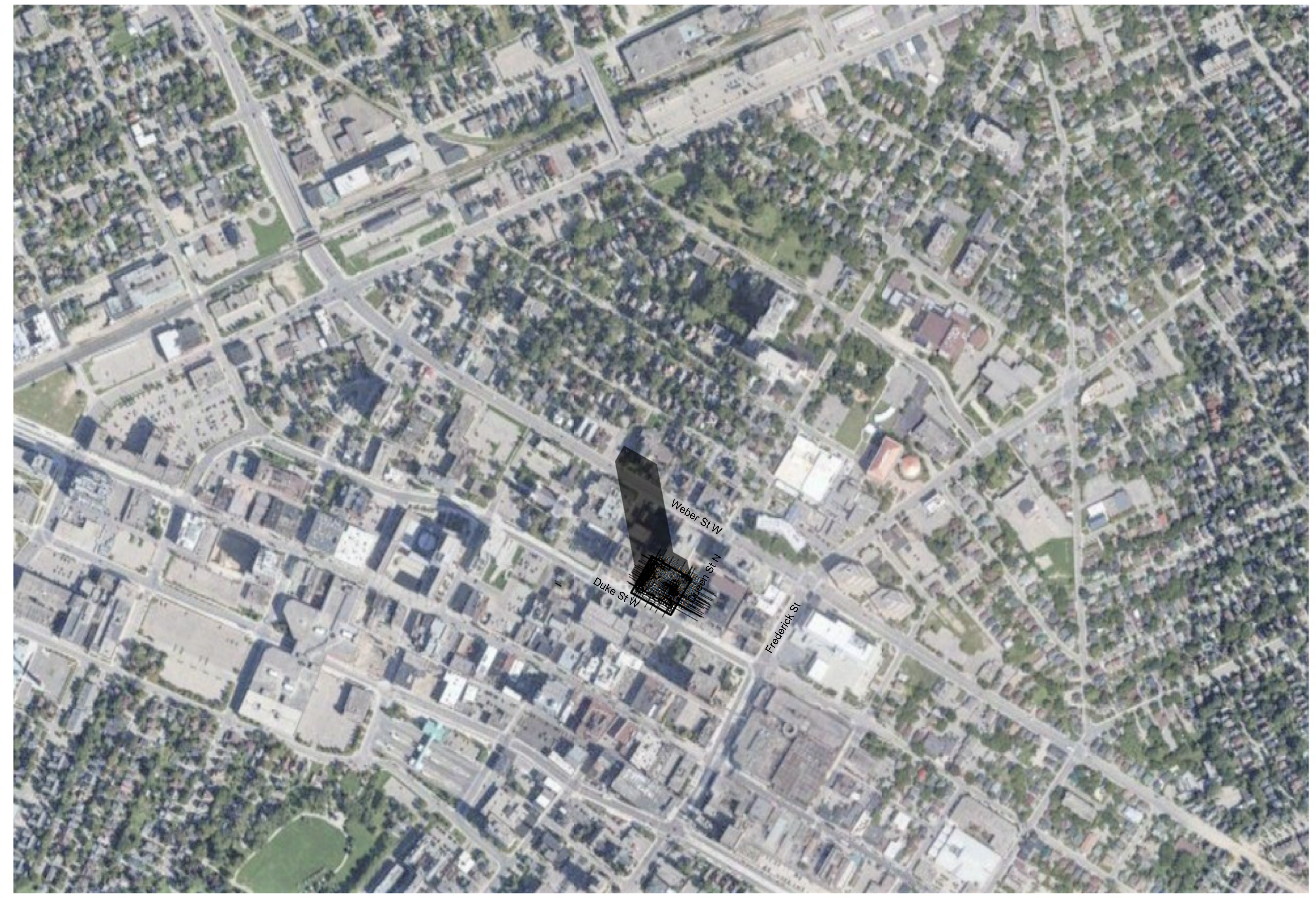
ONTARIO ASSOCIATION OF ARCHITECTS
RUSSELL L.FLEISCHER
LICENCE
5004

DRAWING NO.
SPA801
REV.
5

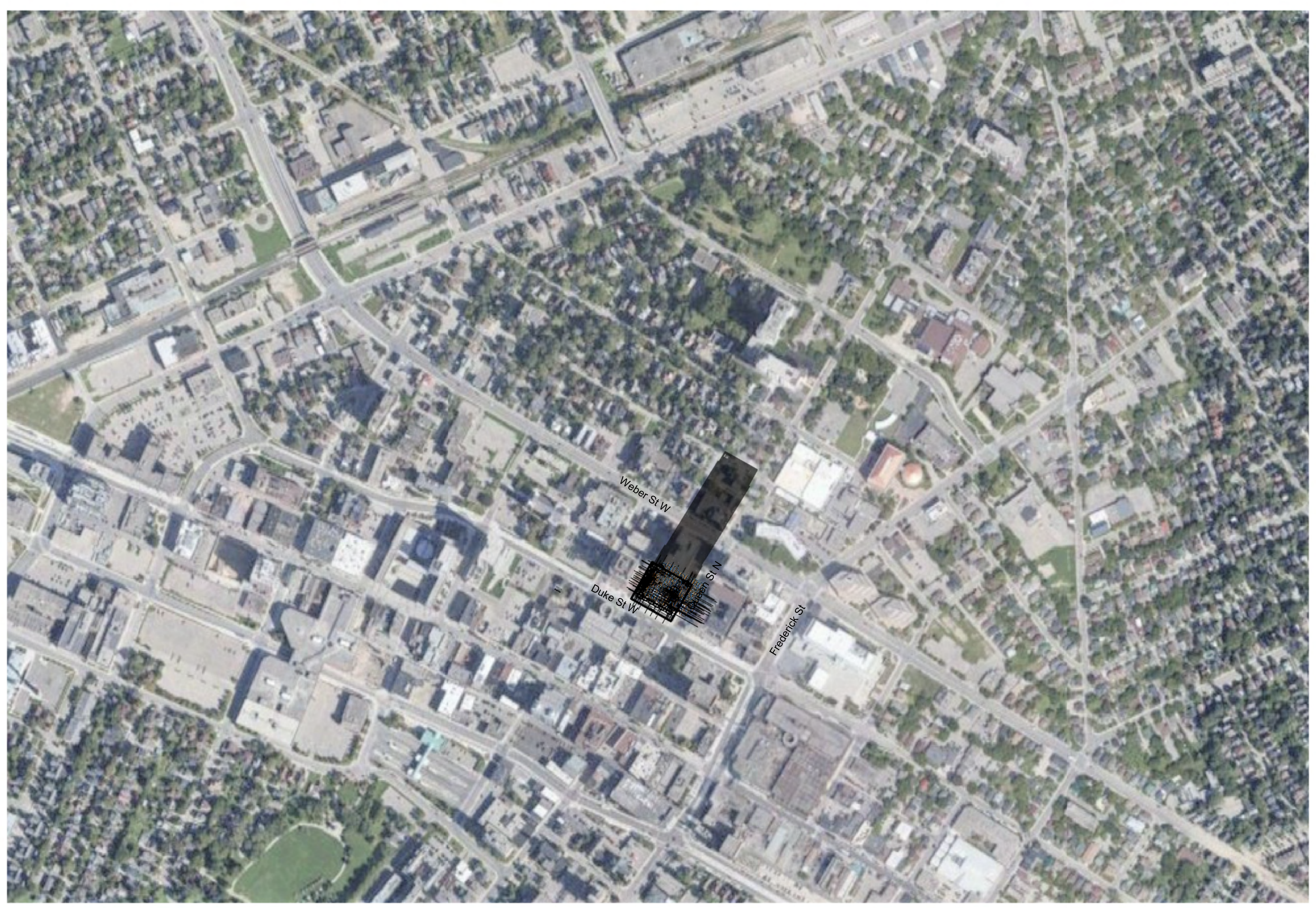
2023-05-30 4:09:11 PM



1 MARCH 21/SEPT 21 - 10:00 AM
SPA811 1 : 4000



2 MARCH 21/SEPT 21 - 12:00 PM
SPA811 1 : 4000



3 MARCH 21/SEPT 21 - 2:00 PM
SPA811 1 : 4000

4 MARCH 21/SEPT 21 - 4:00 PM
SPA811 1 : 4000

TURNER FLEISCHER

Turner Fleischer Architects Inc.

67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

#	DATE	DESCRIPTION	BY
6	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
5	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
4	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
3	2022-03-25	ISSUED FOR 100% DD	MY
2	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY
1	2021-10-07	ISSUED TO HERITAGE COMMITTEE	MY

VanMar
CONSTRUCTORS INC.

PROJECT
PROPOSED MIXED USE DEVELOPMENT
10 DUKE STREET WEST, KITCHENER, ON

DRAWING
SHADOW STUDIES

PROJECT NO. 21.167CS
PROJECT DATE 2021-10-07
DRAWN BY SSZ
CHECKED BY MYG
SCALE 1 : 4000

ONTARIO ASSOCIATION OF ARCHITECTS
RUSSELL L.FLEISCHER
LICENCE
5004

N

DRAWING NO. SPA811
REV. 6

2023-05-30 4:10:00 PM

1 SPA812 MARCH 21/SEPT 21 - 6:00 PM
1 : 4000

TURNER FLEISCHER

Turner Fleischer Architects Inc.

67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

#	DATE	DESCRIPTION	BY
6	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
5	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
4	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
3	2022-03-25	ISSUED FOR 100% DD	MY
2	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY
1	2021-10-07	ISSUED TO HERITAGE COMMITTEE	MY

VanMar CONSTRUCTORS INC.

PROJECT
PROPOSED MIXED USE DEVELOPMENT
10 DUKE STREET WEST, KITCHENER, ON

DRAWING
SHADOW STUDIES

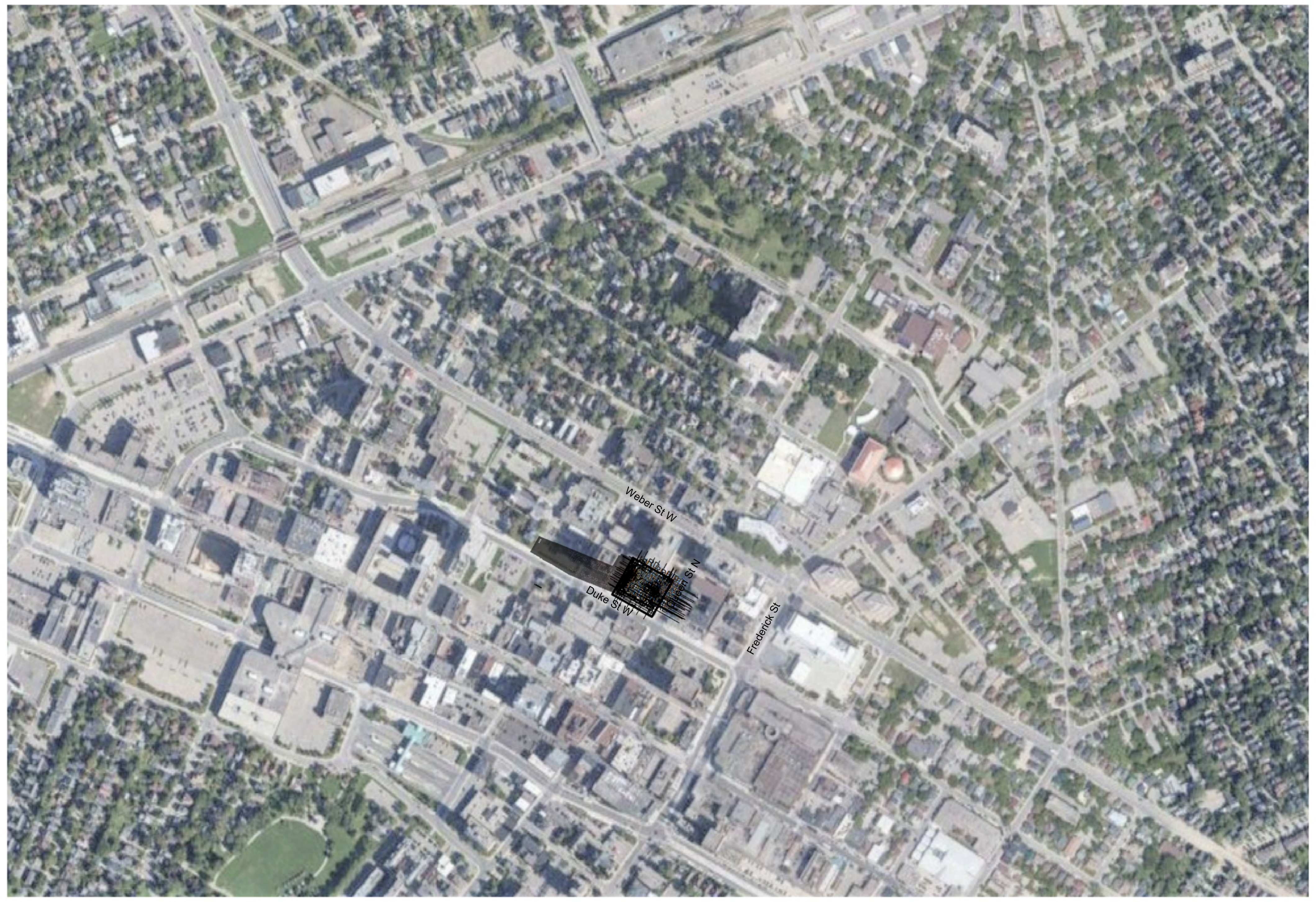
PROJECT NO.
21.167CS
PROJECT DATE
2021-10-07
DRAWN BY
SSZ
CHECKED BY
MYG
SCALE
1 : 4000

ONTARIO ASSOCIATION OF ARCHITECTS
RUSSELL L.FLEISCHER
LICENCE
5004

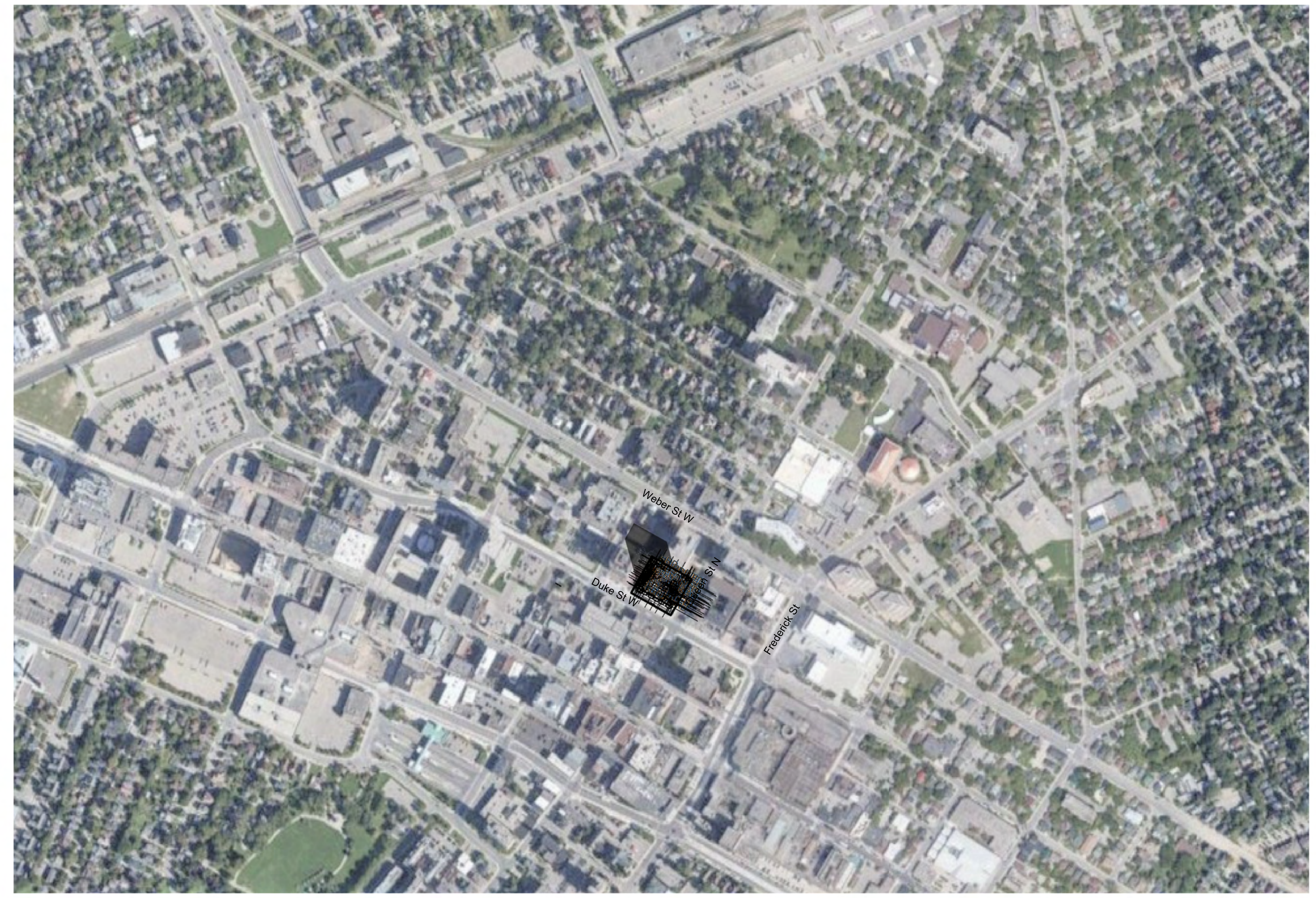
N

DRAWING NO.
SPA812
REV.
6

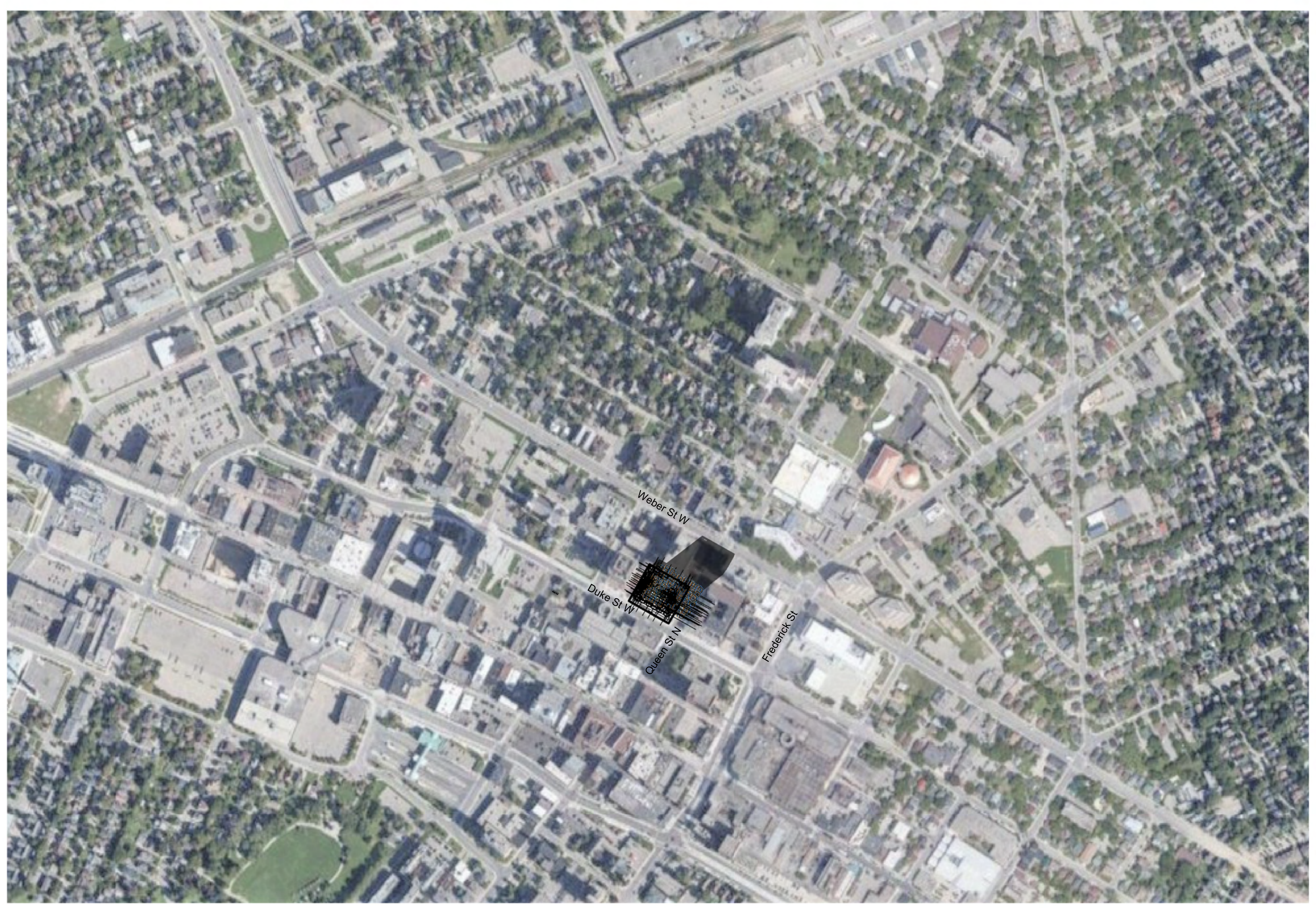
2023-05-30 4:10:40 PM



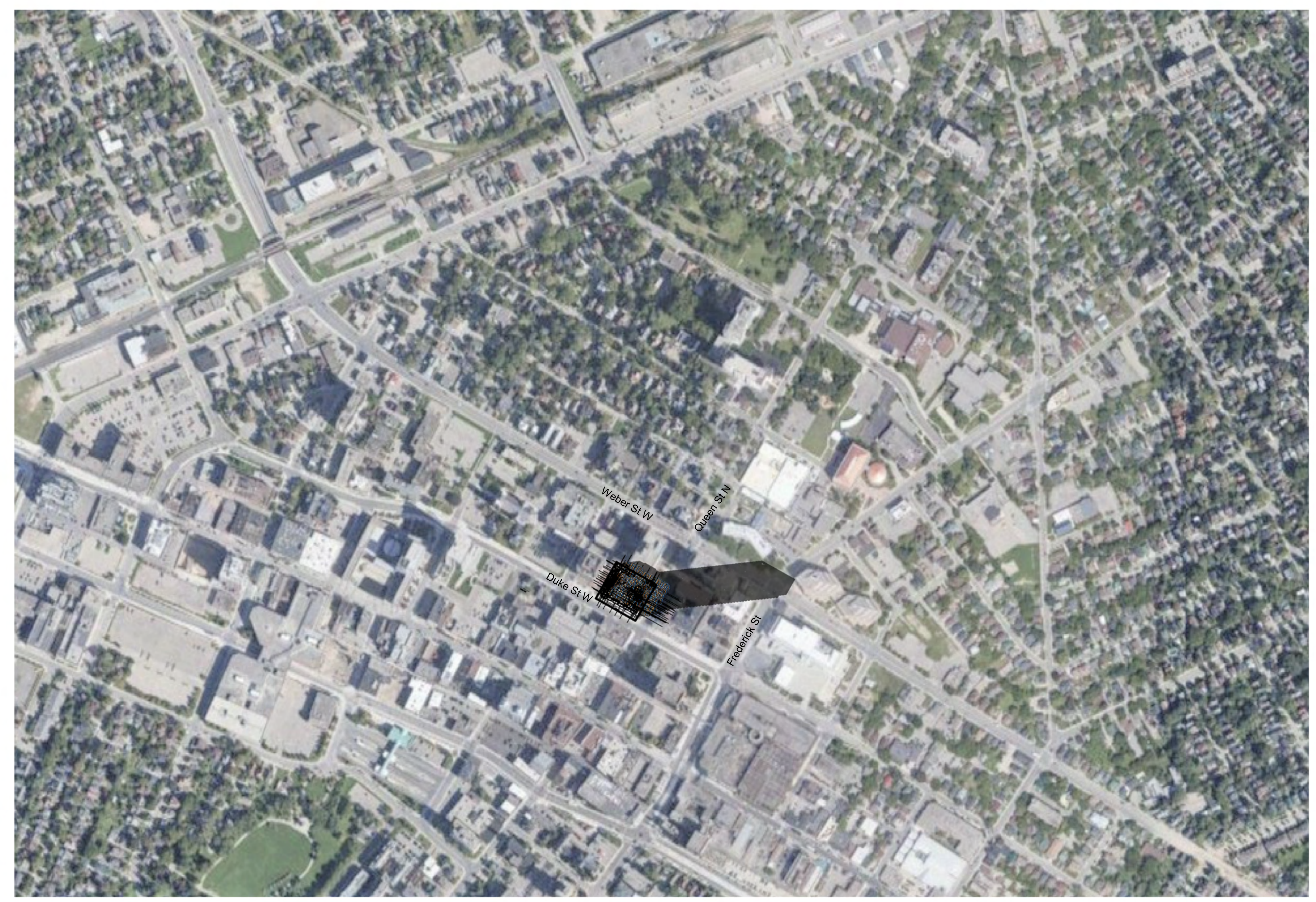
1 SPA813 JUNE 21 - 10:00 AM
1 : 4000



2 SPA813 JUNE 21 - 12:00 PM
1 : 4000



3 SPA813 JUNE 21 - 2:00 PM
1 : 4000



4 SPA813 JUNE 21 - 4:00 PM
1 : 4000

TURNER
FLEISCHER

Turner Fleischer Architects Inc.

67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

#	DATE	DESCRIPTION	BY
6	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
5	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
4	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
3	2022-03-25	ISSUED FOR 100% DD	MY
2	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY
1	2021-10-07	ISSUED TO HERITAGE COMMITTEE	MY

VanMar
CONSTRUCTORS INC.

PROJECT

PROPOSED MIXED USE DEVELOPMENT

10 DUKE STREET WEST, KITCHENER, ON

DRAWING

SHADOW STUDIES

PROJECT NO.
21.167CS
PROJECT DATE
2021-10-07
DRAWN BY
SSZ
CHECKED BY
MYG
SCALE
1 : 4000

ONTARIO ASSOCIATION OF ARCHITECTS
RUSSELL L.FLEISCHER
LICENCE
5004

N

DRAWING NO.
SPA813
REV.
6

2023-05-30 4:11:26 PM

1 SPA814 JUNE 21 - 6:00 PM
1 : 4000

TURNER FLEISCHER

Turner Fleischer Architects Inc.

67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

#	DATE	DESCRIPTION	BY
6	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
5	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
4	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
3	2022-03-25	ISSUED FOR 100% DD	MY
2	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY
1	2021-10-07	ISSUED TO HERITAGE COMMITTEE	MY

VanMar
CONSTRUCTORS INC.

PROJECT

PROPOSED MIXED USE DEVELOPMENT

10 DUKE STREET WEST, KITCHENER, ON

DRAWING

SHADOW STUDIES

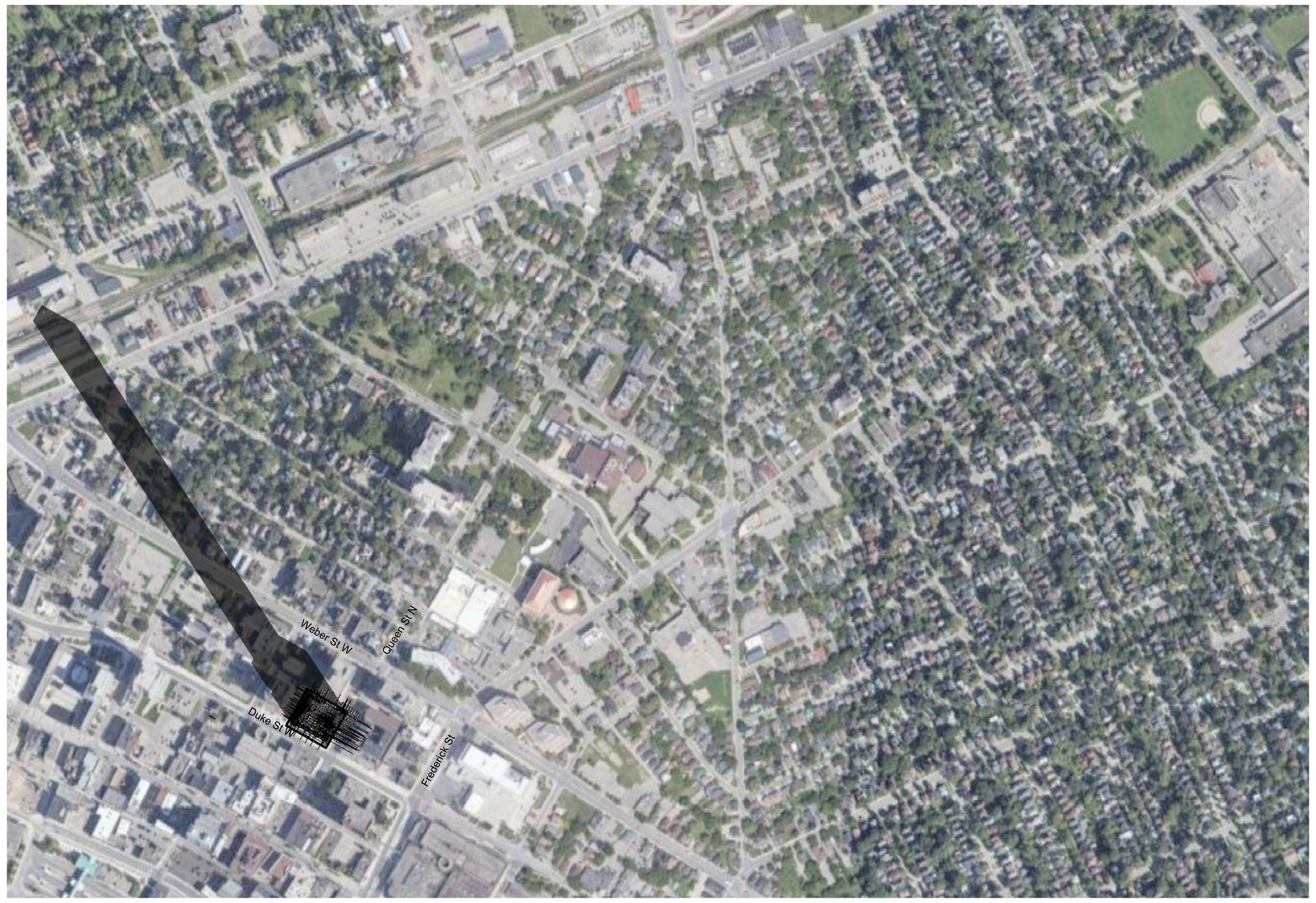
PROJECT NO.
21.167CS
PROJECT DATE
2021-10-07
DRAWN BY
SSZ
CHECKED BY
MYG
SCALE
1 : 4000

N

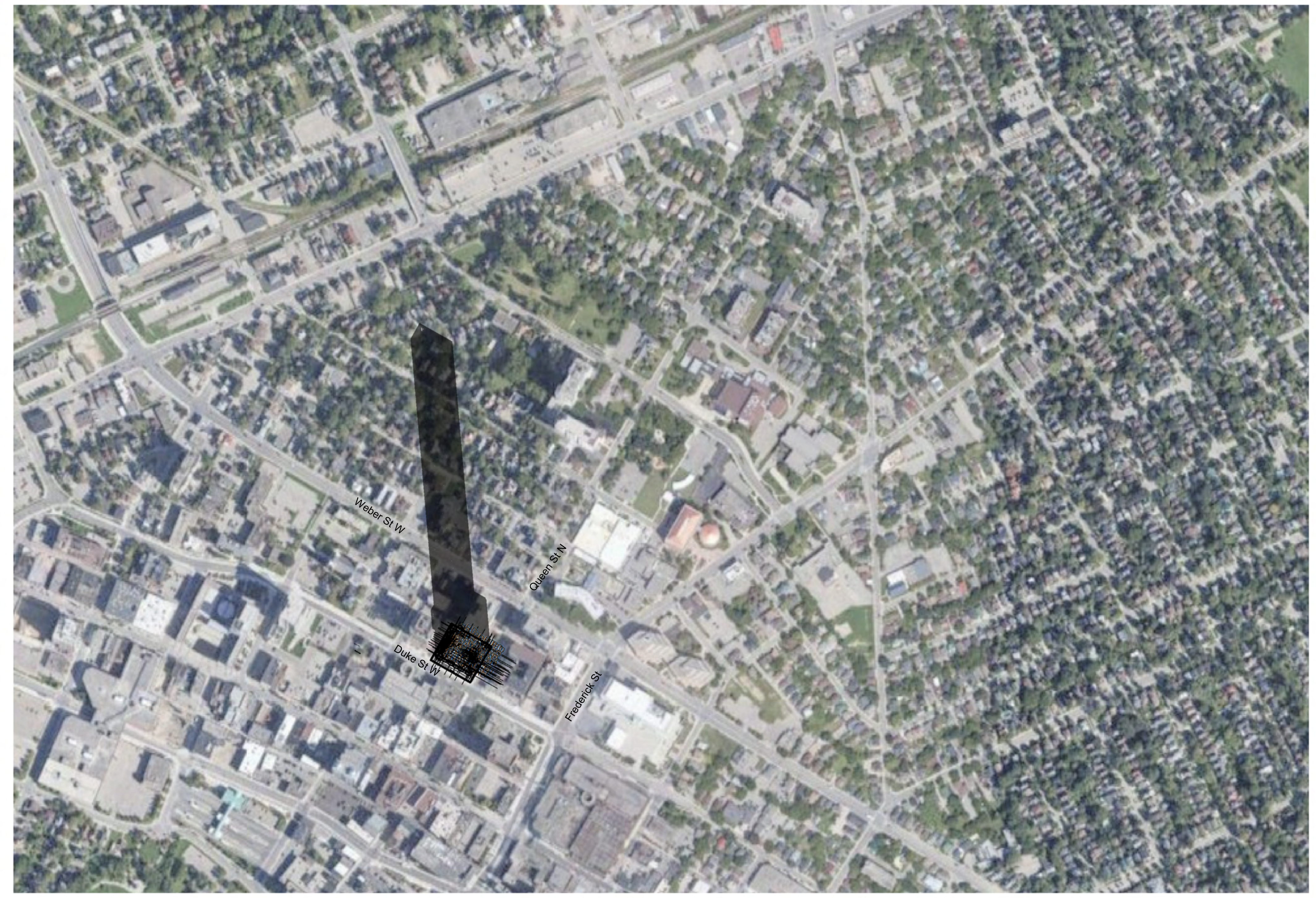
ONTARIO ASSOCIATION OF ARCHITECTS
RUSSELL L.FLEISCHER
LICENCE
5004

DRAWING NO.
SPA814
REV.
6

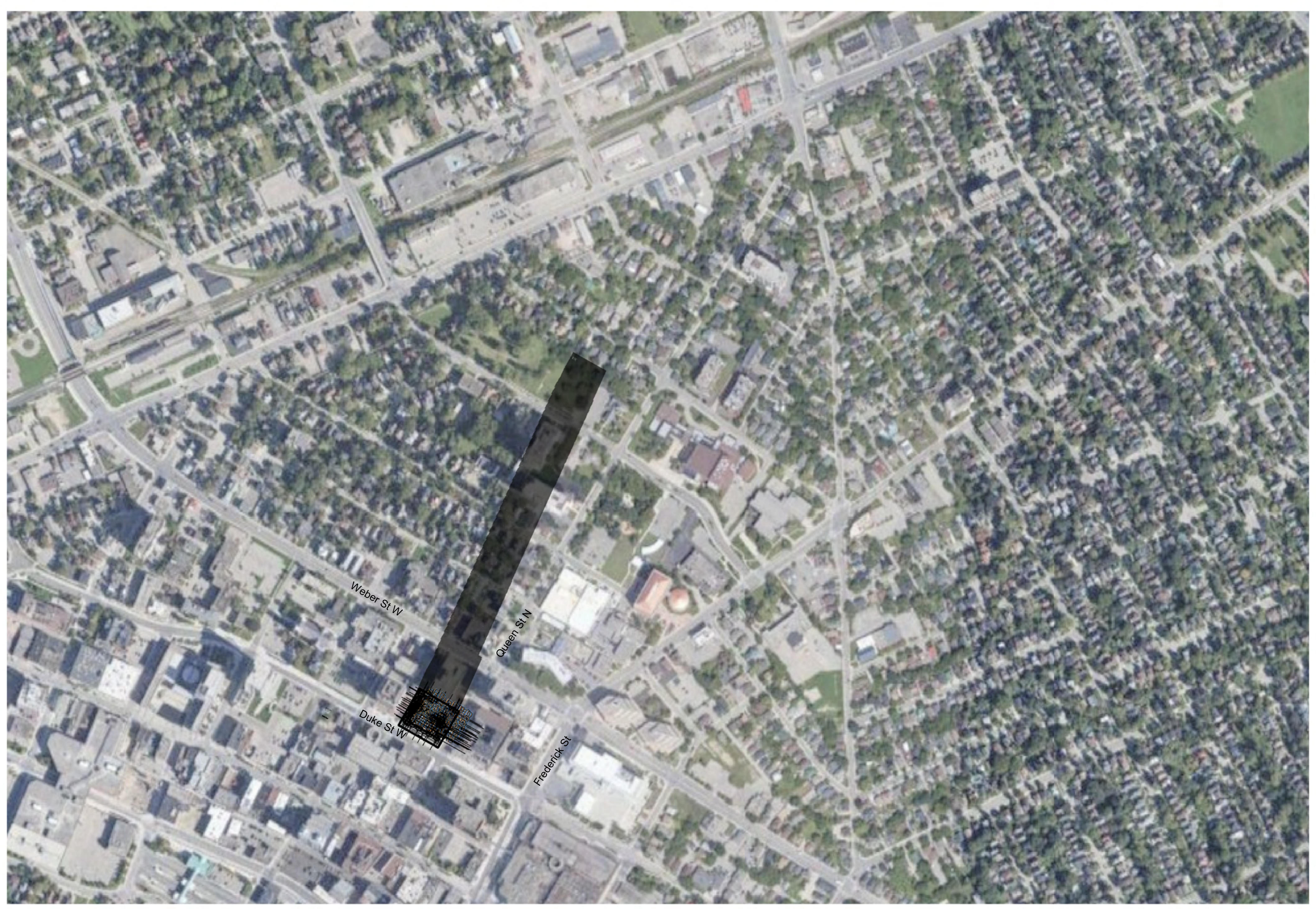
2023-05-30 4:11:44 PM



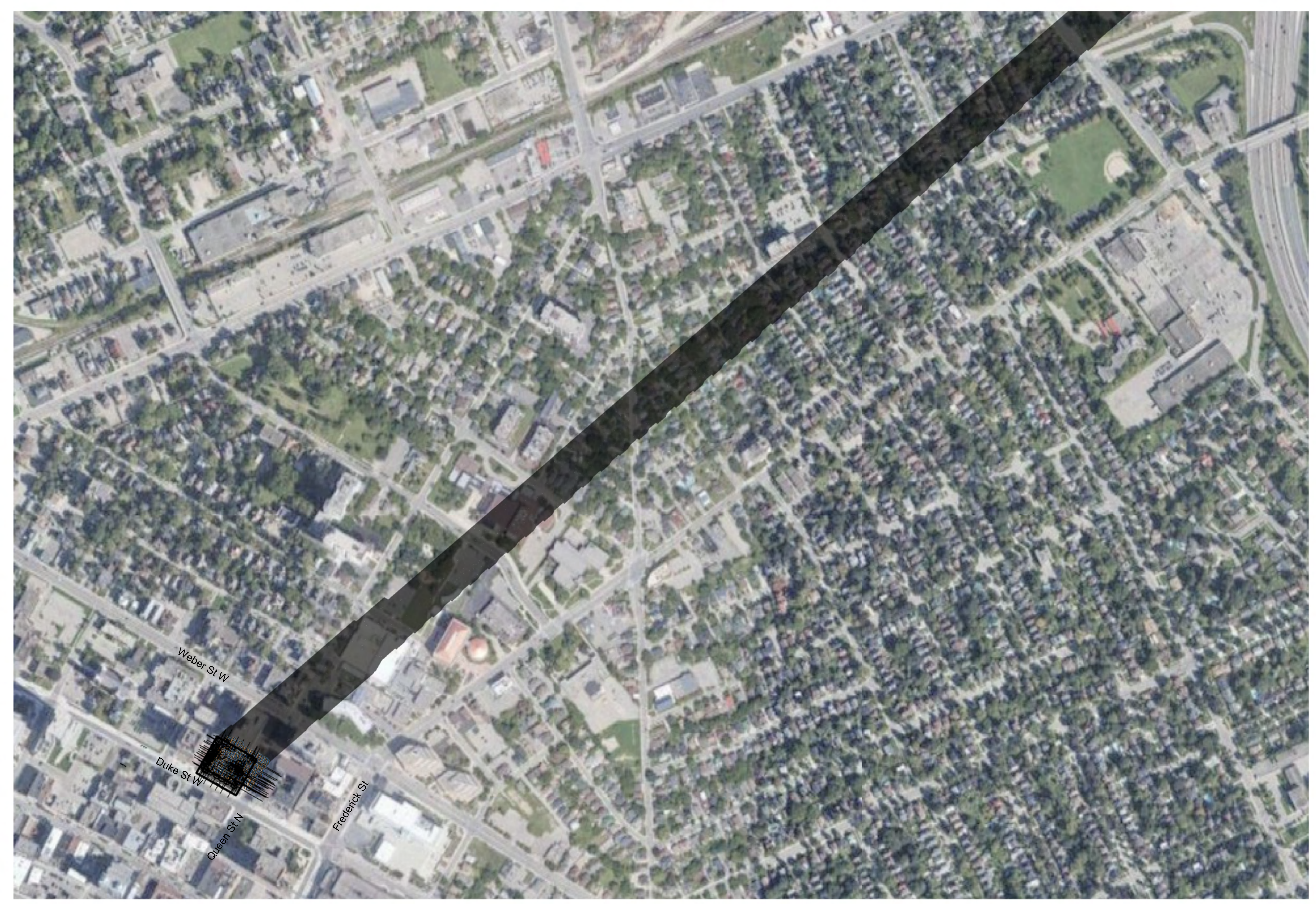
1 DECEMBER 21 - 10:00 AM
SPA815 1 : 4000



2 DECEMBER 21 - 12:00 PM
SPA815 1 : 4000



3 DECEMBER 21 - 2:00 PM
SPA815 1 : 4000



4 DECEMBER 21 - 4:00 PM
SPA815 1 : 4000

TURNER FLEISCHER

Turner Fleischer Architects Inc.

67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

#	DATE	DESCRIPTION	BY
6	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
5	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
4	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
3	2022-03-25	ISSUED FOR 100% DD	MY
2	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY
1	2021-10-07	ISSUED TO HERITAGE COMMITTEE	MY

VanMar CONSTRUCTORS INC.

PROJECT

PROPOSED MIXED USE DEVELOPMENT

10 DUKE STREET WEST, KITCHENER, ON

DRAWING

SHADOW STUDIES

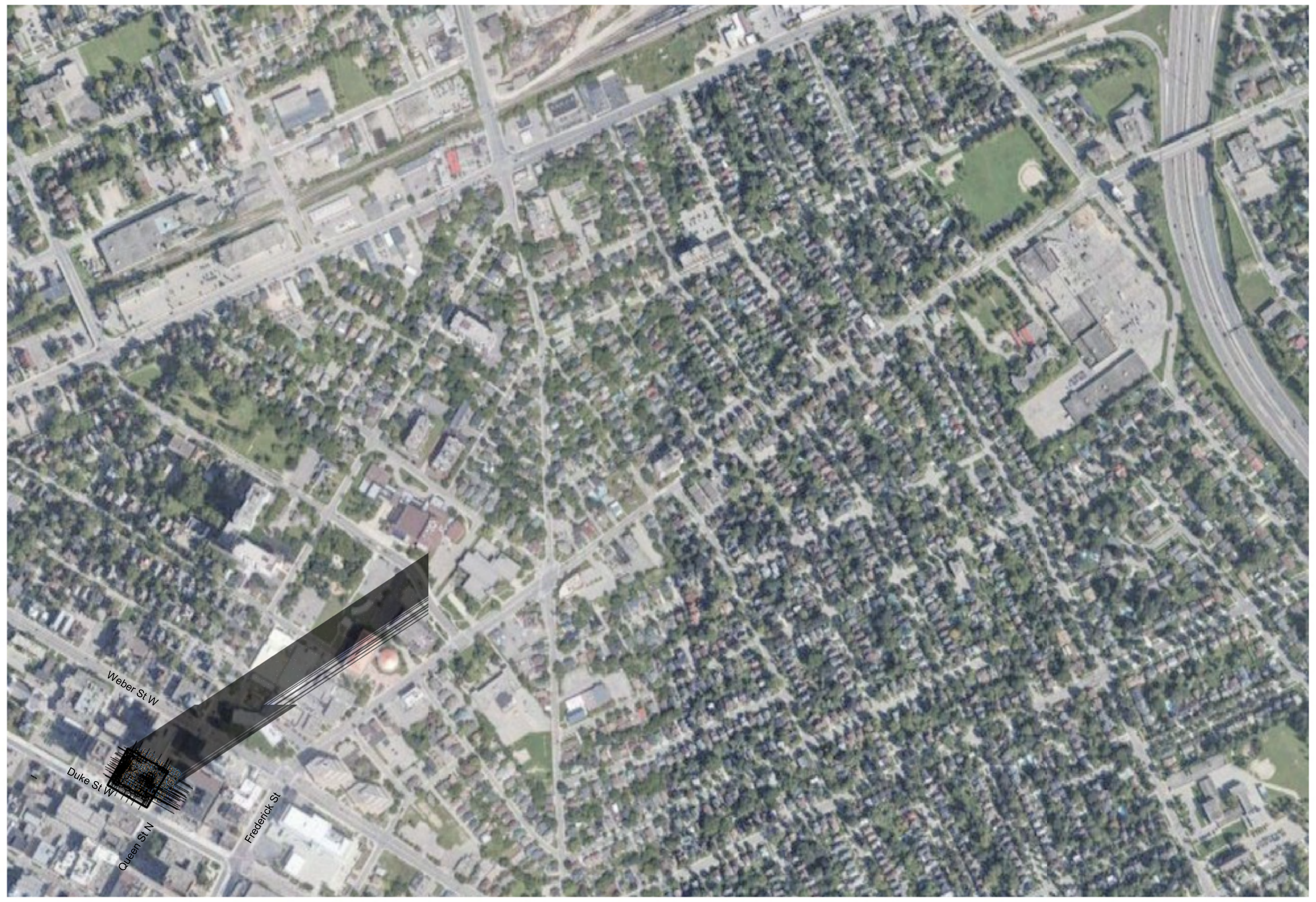
PROJECT NO.
21.167CS
PROJECT DATE
2021-10-07
DRAWN BY
SSZ
CHECKED BY
MYG
SCALE
1 : 4000

ONTARIO ASSOCIATION OF ARCHITECTS
RUSSELL L.FLEISCHER
LICENCE
5004

N

DRAWING NO.
SPA815
REV.
6

2023-05-30 4:13:12 PM



1 DECEMBER 21 - 6:00 PM
SPA816 1 : 4000

TURNER FLEISCHER

Turner Fleischer Architects Inc.

67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

#	DATE	DESCRIPTION	BY
5	2023-05-30	RE-ISSUED FOR SITE PLAN APPLICATION	MY
4	2023-04-06	RE-ISSUED FOR SITE PLAN APPLICATION	MY
3	2023-03-20	RE-ISSUED FOR SITE PLAN APPLICATION	MY
2	2022-03-25	ISSUED FOR 100% DD	MY
1	2022-03-10	ISSUED FOR SITE PLAN APPLICATION	MY

VanMar CONSTRUCTORS INC.

PROJECT

PROPOSED MIXED USE DEVELOPMENT

10 DUKE STREET WEST, KITCHENER, ON

DRAWING

SHADOW STUDIES

PROJECT NO.
21.167CS
PROJECT DATE
2021-10-07
DRAWN BY
SSZ
CHECKED BY
MYG
SCALE
1 : 4000

ONTARIO ASSOCIATION OF ARCHITECTS
RUSSELL L.FLEISCHER
LICENCE
5004

DRAWING NO. SPA816
REV. 5

2023-05-30 4:13:52 PM

Appendix B: Existing Façade Retention, Structural Assessment Report, December 4th, 2023 & Existing Façade Retention, Vibration Monitoring Plan, John G. Cooke, December 15, 2023

10 Duke Steet West
Kitchener, Ontario

Existing Façade Retention
Structural Assessment Report

Project No. 24012

Draft report issued November 17th, 2023

Final report issued December 4th, 2023

Report Prepared by:

JOHN G. COOKE & ASSOCIATES LTD.
CONSULTING ENGINEERS

TABLE OF CONTENTS

1. INTRODUCTION

John G. Cooke & Associates Ltd. (JCAL) was retained by VanMar Developments Inc. (VanMar) to provide consulting structural engineering services as it relates to the retention of portions of the primary façades of the existing building at 10 Duke Street West, in Kitchener, Ontario, for incorporation of these facades with a planned redevelopment on the site. The redevelopment will include the construction of a new tower that occupies much of the footprint of the existing building presently on the site.

VanMar's intent is to retain the existing masonry facades by primarily making use of the steel frame of the existing load-bearing masonry and steel-framed building, supplemented by temporary bracing and supports as necessary, until the façade may be secured to the new permanent structure (designed by other consultants), as construction of the latter progresses.

VanMar received conditional approval of their Site Plan Application - SP22/104/D/AP, the draft version of which, dated June 23, 2023 and available to JCAL, requires "That the Owner's Consulting Engineer … submit a Structural Assessment Report for 10 Duke Street West to be included within the Demolition and Stabilization Plan, … advising on the means and methods to be used to safely remove portions of the existing building and to avoid causing structural damage to the historic portions of the front facades…". This report is intended to satisfy that requirement and be the basis to develop the design further. Designs indicated herein are not for construction but are intended to show concepts and intents that will be developed further and coordinated more closely with the new construction, during production of a set of shoring and sequencing drawings for the purposes of pricing and construction.

JCAL was provided with some photographs of original drawings. These lacked several key details regarding the existing structure and JCAL first undertook an investigation to identify and confirm these details, along with condition of exposed elements that may impact the retention of the facades and the need for any restoration work that might be required in advance. This information was used in developing analytical models and the approach to the retention concept that is discussed herein.

2. TERMS OF REFERENCE

The scope of work for John G. Cooke & Associates Ltd. is based on JCAL proposal P23208, dated September 18, 2023.

3. METHODOLOGY

JCAL completed an investigation of existing conditions, identified applicable codes and standards to be referenced, and completed analysis of the existing and new temporary components to be used in the temporary support of the façade during the course of the new construction and retention.

3.1. Investigation

Jonathan Dee, P.Eng., CAHP of JCAL made an initial visit to the site on September 6, 2023, accompanied by representatives from VanMar and mcCallumSather, the heritage architects who have completed a Heritage Impact Assessment and Conservation Plan for the subject property.

Jonathan Dee and Andrew Azinovic, EIT revisited the site on October 18, 2023. Using hand-tools, investigatory openings were made in several locations where possible. Locations were identified for further investigatory openings, to be made using power tools and with the assistance of VanMar's forces.

These further openings were completed by VanMar at JCAL's direction, and reviewed by Jonathan Dee and Andrew Azinovic, throughout the course of the day on October 30, 2023. The investigation included primarily of the use of a chipper to remove interior terra cotta tile and plaster wall finishes

to view the enclosed structural elements and details, and to remove brick from the interior side of the exterior walls, to determine the construction and condition of the existing wall assembly.

3.2. Applicable Codes and Standards

The primary codes, standards, and guidelines referenced during and applicable to the production of work described in this report and for further development of the retention design are as follows:

- Ontario Building Code 2012, inclusive of latest effective amendments (the OBC)
- Structural Commentaries of the National Building Code of Canada, including Commentary L: Application of NBC Part 4 of Division B for the Structural Evaluation and Upgrading of Existing Buildings
- CSA A23.3-14 - Design of Concrete Structures
- CSA A371-14 - Masonry Construction for Buildings
- CSA S304-14 (R2019) - Design of Masonry Structures
- CSA S16-14 - Design of Steel Structures
- Standards and Guidelines for the Conservation of Historic Places in Canada, published by Parks Canada.

3.3. Analysis

The applicable wind load was calculated to OBC 2012, using a reduced importance factor of 0.75 for calculating loads for serviceability and deflections.

It is our opinion that seismic loading may be neglected during construction, given the brief construction period relative to the 2500-year return period for code-specified seismic loads. However, seismic considerations are relevant in the permanent attachment of the facades to temporary elements that may remain as part of the permanent structure. The applicable seismic load was calculated in accordance with OBC Article 4.1.8.18 for building elements and non-structural components. The applicable seismic loads were calculated, using seismic Site Class C as recommended in the geotechnical report (File no. G21270, Chung & Vander Doelen Engineering Ltd.), and it was determined the above-noted wind forces govern design.

Rigidity and stiffness requirements for the lateral support of the masonry generally governed design, and the limitations stipulated in CSA A371 were followed, of L/600 for unreinforced masonry where flexural stress is perpendicular to the bed joints (i.e., for bending in the vertical direction of the wall) and L/300 for unreinforced masonry where flexural stress is parallel to the bed joints (i.e. for bending in the horizontal direction of the wall).

Analysis of the existing and new temporary components to be used in retaining of the facades was carried out using procedures identified in the above-noted standards documents and using Bentley STAAD structural analysis software.

4. OBSERVATIONS

Observations made during our investigation that relate to the retention of the existing facades are documented below. Sketches of key typical existing details are included in Appendix A.

The building’s structure consists of one-way flat concrete slabs, spanning on steel floor beams. These beams are supported on two interior east-west lines of structural steel columns and, on the load bearing exterior walls at the perimeter of the building. A further general description of the building is otherwise documented in the Heritage Impact Assessment or Conservation Plan and is not repeated here.

4.1. Existing Concrete Slabs

The existing floor slabs were hammer drilled. While only a relatively small drill bit was available, these were measured as accurately as possible and found to be 127 mm (5”) thick and are believed to be overlain with a bonded floor topping for leveling, which is assumed to be on average 25 mm (1”) thick. The floor slabs span in the east-west direction, between floor beams.

These slabs were not scanned for reinforcing steel, but we believe they would contain smooth reinforcing steel bars parallel to the span direction, and temperature steel reinforcement in the opposite direction.

4.2. Existing Structural Steel Framing

4.2.1 Columns

The building’s columns are generally clad with terra cotta tile and plaster. Occasionally this has been overclad with newer drywall and steel studs. Openings were made to expose the structural steel columns within, at

- three locations above the Ground floor level,
- two locations above the 2nd floor level, and
- one location above the 3rd floor level.

The key findings are that the column steel is generally exposed behind the terra cotta tile, with no additional concrete encasing or coatings beyond the grey paint (see Fig. 1). A column splice, suspected to be present but not otherwise documented, was found at both openings made just above the 2nd floor level (see Fig. 2), and not at any of the openings on other floors. This splice location is believed to be typical at all columns and may act as a hinge in the column if not laterally supported in both directions at all times.

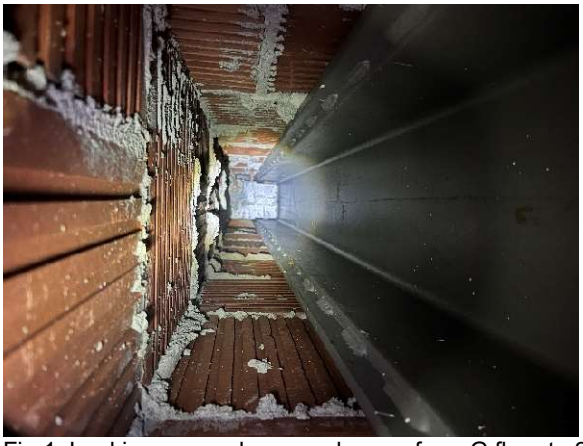


Fig 1: Looking up a column enclosure, from G floor to 2nd

Fig 2: Typical column splice, above 2nd floor

Below the splice, the columns were found to be wide flange profiles with welded top and bottom flange cover plates. The wide flange profile was measured to have a depth of approx. 225 mm and a flange thickness of approx. 19 mm, and the cover plates to be approx. 12 mm thick and 260 mm wide. These may be historic US 8” WF @ 58lbs/ft sections per the 1946 US Steel catalogue. For the purposes of analysis, these were conservatively analysed as modern W200x71 sections, plus the cover plates as measured, which is a similar but conservative selection.

Above the splice, at the 3rd floor opening the upper columns were found to be wide flange profiles with no flange cover plates. The wide flange profile was measured to have a depth of approx. 200 mm and a flange thickness of approx. 12 mm. These may be historic US 8”

WF @ 31 or 35 lbs/ft sections per the 1946 US Steel catalogue. For the purposes of analysis, these were conservatively analysed as modern W200x46 sections, which is a similar but slightly conservative selection.

4.2.2 Beams

The steel floor beams, present interior column lines and with an additional beam at the mid-span of each bay, were understood to bear on the exterior masonry walls. These beams are generally clad in metal lath and plaster with exposed steel beyond.

Openings in the ceiling and wall finishes around a typical beam were made below the 3rd floor beam bearing on the south exterior wall. Lath and plaster was removed and the interior wythes of brick were removed adjacent to the beam (see Fig. 3). As expected based on available documentation, but of significant value to the project to definitively confirm, no steel column within the wall was located. A steel bearing plate is present below the beam, and the beam was found to bear approximately 200 mm (8”), or the full depth of the two interior wythes of backup brick (see Fig. 4). Additionally, the top flanges of the floor beams are noted to be embedded above the soffit of the slab.

Fig 3: Typical beam bearing on brick backup at exterior wall

Fig 4: Typical beam bearing length on exterior wall

4.3. Wall Assembly

4.3.1 Foundation Wall

The foundation wall assembly was investigated at the interior of the basement, toward the east end of the south foundation wall, by removing a portion of the interior plaster and terra cotta (see Fig. 5). The wall assembly was found to consist of, from the interior:

- plaster,
- 76mm (3”) terra cotta tile,
- approx. 13 mm (1/2”) gap, and the
- concrete foundation wall.

Naturally, the removals did not extend through the concrete wall, but the exterior is finished with limestone, which is presumably bearing on a ledge in the concrete foundation wall. Dovetail tracks were noted to be present on the interior face of the concrete foundation wall, and one dovetail anchor was found extending into the terra cotta tile (see Fig. 6). This may suggest that dovetail anchors were used on the exterior stone as well, and future masonry conservation work should be mindful of the fact that dovetail anchors from this period are prone to inconsistent placement and corrosion.


Fig 5: Opening in terra cotta tile at foundation wall, interior


Fig 6: Looking down at opening, dovetail anchor

4.3.2 Above-Grade Masonry Wall

The above-grade load-bearing masonry walls were investigated from the interior, primarily with brick removals completed above the 2nd floor level, near the east end of the north wall, 2nd floor (see Figs. 7 and 8). The interior brick was very difficult to remove and therefore only one opening was made, and conditions were otherwise exposed during investigations of beam pocket and slab-wall interface.

The wall assembly was found to consist of, from the interior:

- plaster,
- 76mm (3") terra cotta tile,
- approx. 13 mm (1/2") gap,
- two wythes of concrete brick backup masonry, laid in common bond, and the
- exterior wythe of clay brick, laid in Flemish bond.

The interior terra cotta tile was noted to be anchored to the backup brick by way of corrugated ties, as one of these was located in the removal area. No ties were noted between backup wythes or to the exterior brick, and the brick wythes are believed to be tied together solely by way of header bricks.


Fig 7: Removals at above-grade masonry wall, interior


Fig 8: Angled view of opening shown in Fig 7.

4.4. Slab-Wall Interface

Determining the slab-wall interface is important to defining a removal methodology that will not impact the integrity of the existing walls and to determining a temporary and permanent approach to laterally securing these walls.

Removal of the interior terra cotta to expose the interior side of the backup brick masonry just above the slab was completed in two locations at the 2nd floor (see Figs. 9 and 10). The interior brick was removed in one location and the slab was noted to extend into the backup masonry. The terra cotta wall tile bears on the slab, and a topping appears to have been placed overtop of the slab. It's likely that the exterior brick wall was built up to the underside of slab level with the slab poured directly onto it.

We do not believe that removing the existing slab from the exterior walls is necessary and that doing so may result in unnecessary damage to heritage fabric.

Fig 9: Removals at slab level, S wall, above 2nd floor

Fig 10: Add'l removals of interior finishes at slab level

4.5. Masonry Condition

The backup brick masonry, consisting of the two interior wythes of concrete brick laid in common bond, where exposed in the above-noted investigatory openings, appeared to be in very good condition. Joints were well filled with mortar, including collar joints, the bricks and mortar were intact, and it was quite difficult to remove individual bricks.

The exterior wythe of brick consists of an extruded clay brick, laid in Flemish bond. The mortar joints are generally intact and in good condition, though there are localized areas of debonding and erosion. No signs of systemic delamination or outward displacement of the exterior wythe was noted, and it appears to be well bonded to the backup brick masonry.

The vertical brick piers in the exterior wythe of brick project slightly towards the exterior. We suspect that this projection is created by simply thickening the collar joint between the exterior and backup wythes. There is also a continuous vertical mortar joint up each side of these piers where they interface with the adjacent brick masonry. While this might be cause for some concern, a header is present at every other course and this is believed to be a true header, tying the wythes together and no systematic separation is noted along these piers. See Figures 11 and 12.

No investigation was carried out of the exterior stone cladding at cornices, foundation level, etc. Given the age of the building, these may be keyed into the backup masonry and/or anchored to the backup brick using strap or cramp anchors. Often in buildings of this age anchorage was only provided to the top of the stones. However, no systemic issues were observed of displacement of the stones, and no special care is believed to be required for these in terms of the retention.


Fig 11: Typical projection at brick pier


Fig 12: Typical continuous vertical joint at brick pier

5. RETENTION APPROACH

The overall approach to retaining the existing facades is to retain these in-situ while the new building is constructed within the footprint of the existing. In order to minimize retention costs and impact to exterior areas along the facades, the retention will make use of the existing structural steel framing along the walls to be retained. This will be supplemented with new temporary steel bracing and lateral support members. The existing floors will then be removed and replaced with new floors, at matching levels, at which point the lateral support of the existing walls may be transferred to these new floors.

5.1. Sequencing

Careful sequencing of the work is a key factor in the successful retention of the existing facades in-situ and is necessary to ensure that overall stability and adequate lateral support of the facades to be retained is maintained at all times. The order of operations is anticipated to proceed generally as follows:

1. Remove existing terra cotta tile and interior finishes to enable access to backup masonry and enclosed structural steel elements that will be part of temporary bracing system.
2. Core or cut holes in the roof and floors at piers and install vertical strongbacks from above, using a crane, at the interior face of the existing walls to be retained, where indicated, with
    a. full-height (spliced) strongbacks at braced bays and
    b. partial-height strongbacks at unbraced bays
3. Install temporary steel framing, including
    a. diagonal bracing within existing structural bays where bracing is identified to be installed,
    b. lateral bracing in both directions at all existing column splices, where existing columns are identified to be retained,
    c. lateral support angles to interior face of backup masonry, above all floor levels, and which angles will ultimately become part of the permanent anchorage for these façades.
4. Create separation cuts in the existing façade walls, at points where the existing facades will no longer be retained.
5. Complete the demolition of the portions of the building not to be retained or temporarily to remain as part of the temporary support system, including the facades (salvaging any stone or other material indicated for such), and following an engineered demolition plan.

6. Construct the raft slab in the basement, encasing the base of the remaining existing columns within the raft slab and securing the raft slab to the exterior foundation wall.
7. Remove and replace floors along the interior of the facades to be retained, one at a time, by:
    a. anchoring the vertical strongback at the unbraced bays to the wall at the position indicated, centered on the slab to be removed,
    b. saw-cutting the existing concrete slab to be demolished to free it from the walls to be retained,
    c. temporarily shoring and then cutting close to the walls the existing steel beams bearing on the walls to be retained,
    d. placing the new structural slab, casting around the columns to be temporarily retained,
    e. securing the new slab to the lateral support angles placed above each floor level, and
    f. repeating at the next floor, above.
8. Remove temporary steel bracing and strongback members, leaving the now-permanently affixed lateral support angles.
9. Cut off existing columns that were temporarily retained above the top of the raft slab, remove the columns, and infill new slab openings around them.

5.2. Temporary Bracing

The lateral support of the facades to remain during construction will make use of the existing structural steel, supplemented with temporary steel framing, as described below.

5.2.1 Bracing Within Existing Structural Bays

The existing column lines inboard of the façade walls to be retained will remain in-situ until the walls are laterally supported by the new permanent structure. Several of these column bays will be braced, in both the north-south and east-west directions, with new diagonal bracing members installed between the 2nd and 3rd levels, and from the 3rd floor to the roof level.

At unbraced bays, the existing and new slabs will act as diaphragms, to transfer lateral forces collected at these bays to the braced bays, noted above.

The bracing approach, developed to minimize the amount of bracing that is required, relies on the column bases to be encased within the raft slab, effectively resulting in a fixed connection.

5.2.2 Vertical Strongbacks

As confirmed during our investigation, there are no existing steel columns within the exterior walls to be retained. Vertical strongbacks, steel members placed against and anchored to the interior face of the walls, will be introduced at each column line along the walls to be retained, in order to serve the following functions:

- resolve axial tension and compression forces at braced bays, especially in order to resist tension forces that would otherwise be induced in the masonry by the diagonal bracing,
- bring forces collected by the lateral support angles at demolished floor levels to the diaphragms above and below the strongback, and
- provide an attachment point for the lateral support members perpendicular to the wall that brace the column splices to permit removal of the 2nd floor slab.

The strongbacks will be installed from above, through vertical pockets cored or cut into existing slabs at the interior face of the exterior walls, directly adjacent to the existing floor beams on column lines.

At braced bays, the strongbacks will be effective for the full height of the walls, with a splice between 2nd and 3rd floor levels. At the base of the strongback, they will be vertically and laterally anchored to the raft slab and/or inside face of the existing foundation wall.

At unbraced bays, the strongbacks will be set and repositioned as required to bridge from a removed floor to remaining and new floor diaphragms above and below, respectively.

5.2.3 Horizontal Lateral Support Angle at Existing Floor Levels

An angle will be placed along the full lengths of the walls to be retained, directly above each existing floor level, and anchored to the interior face of the walls with HILTI HIT-HY 270 or similar adhesive anchors.

The angle will span horizontally between vertical strongbacks on column lines. This angle is anticipated to be fairly large at L203x203x19, in order to meet stiffness requirements for lateral masonry support in this condition when slabs are removed.

Upon completion of each new floor slab, this angle and its anchorage to the wall will remain and be secured to the new floor slab.

5.2.4 Lateral Support at Column Splices

As noted in the observations section above, column splices were found above the 2nd floor level, at roughly the mid-height of the overall column, and this is believed to be typical of all existing columns. These splices will become unbraced upon removal of the 2nd floor.

It is necessary to ensure that lateral support remains in place at these splices, until the new 2nd floor structure is completed and may restrain the column or, if lateral support from the 2nd floor is not possible, until the existing column is no longer required.

The lateral bracing will consist of a horizontal steel member, spanning between all column splices along the column line parallel to the wall, and ultimately supported by a braced bay in that column line. In the direction perpendicular to the wall, the splice will be braced by a member that spans from the splice to the steel strongback at the interior face of the wall.

The bracing member will be sized in accordance with the strength and stiffness requirements in steel handbook's procedure for bracing assemblies, in accordance with CSA S16 clause 9.2.6.2.

5.2.5 Other Conditions, Miscellaneous Framing

There are isolated conditions where the typical bracing pattern may not apply, or may conflict with vertical elements in the new construction, such as stair and elevator shafts. These details will be developed as the concept is pushed into further design and as comprehensive temporary framing drawings are produced.

Further coordination with the overall building consultants will be required. We anticipate providing additional steel framing around these elements, or resizing of specific members to resist intermediate loads, should it not be possible to work around temporary framing, or where these new elements may not be relied upon to provide temporary lateral support.

5.3. Disconnecting Material to be Demolished/Removed

5.3.1 Terra Cotta Tile and Interior Finishes

The terra cotta wall tiles and interior plaster finishes, along with recent steel studs and gypsum board, as well as original and more recent ceiling finishes will need to be removed

from most areas in order to install members needed for the temporary stabilization of the walls to be retained.

These components are not load bearing, and they may be removed without impact to the balance of the wall assemblies or structural systems that must remain temporarily. Care must still be taken to make sure removal is completed safely, and to not leave sections of terra cotta tile vertically unsupported.

5.3.2 Wall Cutting and Demolition

The portions of the existing facades to remain must be separated from those portions that are to be demolished, prior to demolition. We propose to make this separation by way of saw-cutting, at an appropriate mortar joint line in the exterior wythe, in a position that will not leave partial bricks or stone fragments with less than a 1:1 aspect ratio of length to course height. The saw cut will penetrate the full depth of the masonry wall assembly.

Upon completion of the cutting, it will be necessary to consolidate the wall ends, by raking out any loose mortar and filling these and any existing voids with new mortar. Additional anchorage will also be provided to secure the cut ends of any stone units to the backup brick.

Finally, we recommend temporarily capping the wall ends with plywood and a membrane, to mitigate water infiltration and any resulting damage until these ends are permanently tied into the building's wall envelope.

5.3.3 Removal of Slabs and Beams

The portions of floor slabs to be demolished must be separated from those portions that will remain temporarily as part of the bracing system. We propose that this be achieved by saw-cutting, in continuation of the line of cutting in the walls.

As the existing floor slabs and beams are pocketed into the facades to be retained, we propose to cut these free at the appropriate times, by saw-cutting along the slab edge near to the wall, and by cutting the beams free from the walls. The remaining stubs of slabs and beams would remain in the walls.

While the slabs are concrete and pose little concern, the beam ends do carry the potential for future corrosion, causing future corrosion jacking of the masonry to be preserved. However, we note that where exposed, the embedded beam end showed only minimal surface corrosion, we noted no significant evidence of corrosion jacking at present. Additionally, the effort and impact to the heritage fabric from attempting to remove these beam ends now would be similar to the effort required to complete this work in the future, if it ever becomes required. For these reasons, we propose to retain the beam stubs within the walls.

6. DISCLAIMER & LIMITATIONS

This report is based on and limited to information supplied to John G. Cooke & Associates Ltd. by VanMar Developments Inc. personnel and representatives, and by observations made during walk-through inspections of the subject property. Only those items that are capable of being observed and are reasonably obvious to John G. Cooke & Associates Ltd. or have been otherwise identified by other parties and detailed during this investigation can be reported.

The work reflects the Consultant's best judgment in light of the information reviewed by them at the time of preparation. There is no warranty expressed or implied by John G. Cooke & Associates Ltd. that this investigation will uncover all potential deficiencies and risks of liabilities associated with the subject property. John G. Cooke & Associates Ltd. believes, however, that the level of detail carried out in this investigation is appropriate to meet the objectives as outlined in the request. We cannot guarantee the completeness or accuracy of information supplied by any third party.

John G. Cooke & Associates Ltd. is not investigating or providing advice about pollutants, contaminants, or hazardous materials.

This report has been produced for the sole use of VanMar Developments Inc. and cannot be reproduced or otherwise used by any third party unless approval is obtained from John G. Cooke & Associates Ltd. No portion of this report may be used as a separate entity; it is written to be read in its entirety.

We trust this report covers the scope of work as outlined in our Terms of Reference. Should there be any questions regarding this report, or if we can be of any further assistance to you, please contact us.

JOHN G. COOKE & ASSOCIATES LTD.

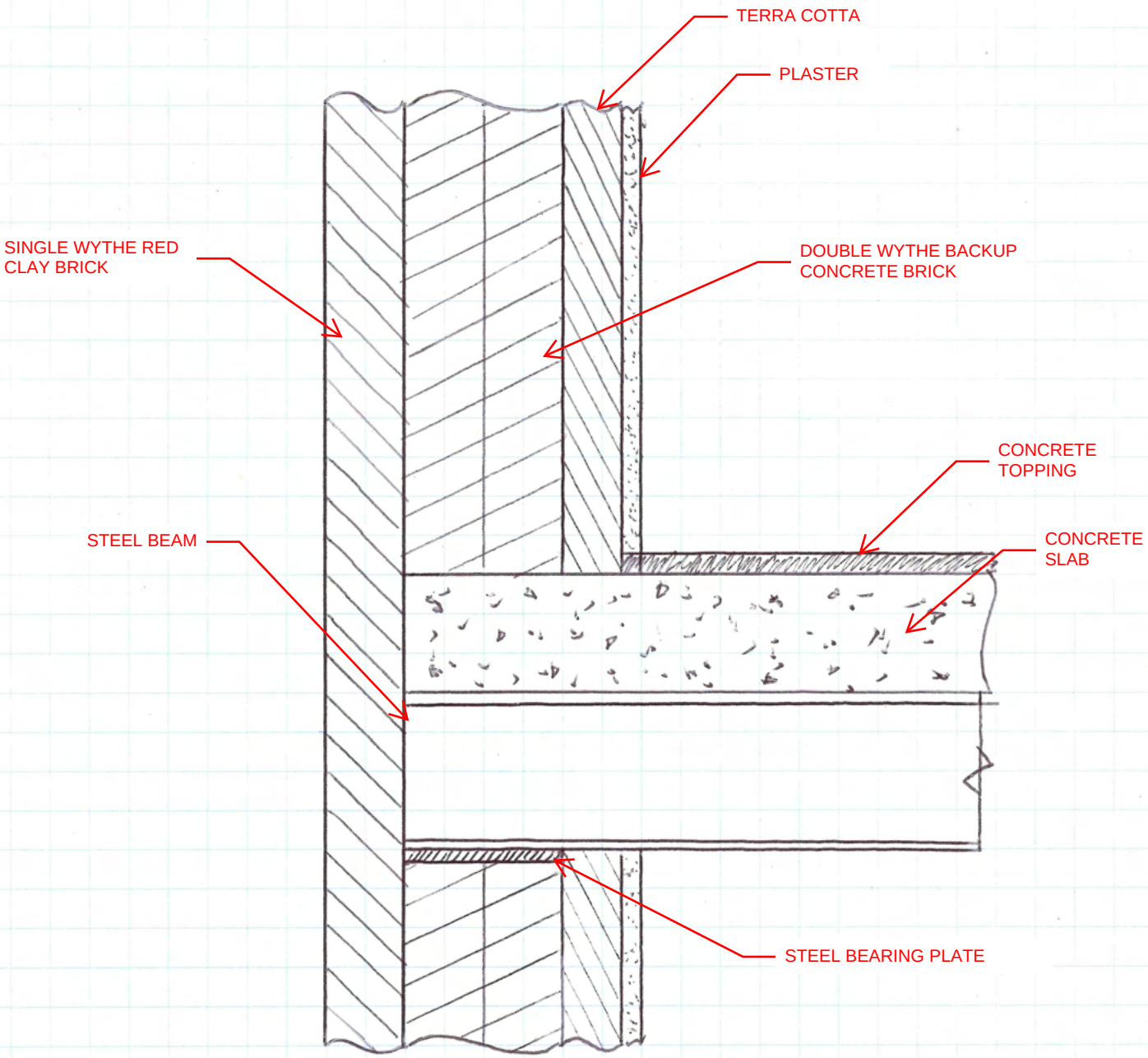
Jonathan Dee, P. Eng., ing., CAHP
Principal

JD/jd
24012/10 Duke - Structural Assessment Report

APPENDIX A

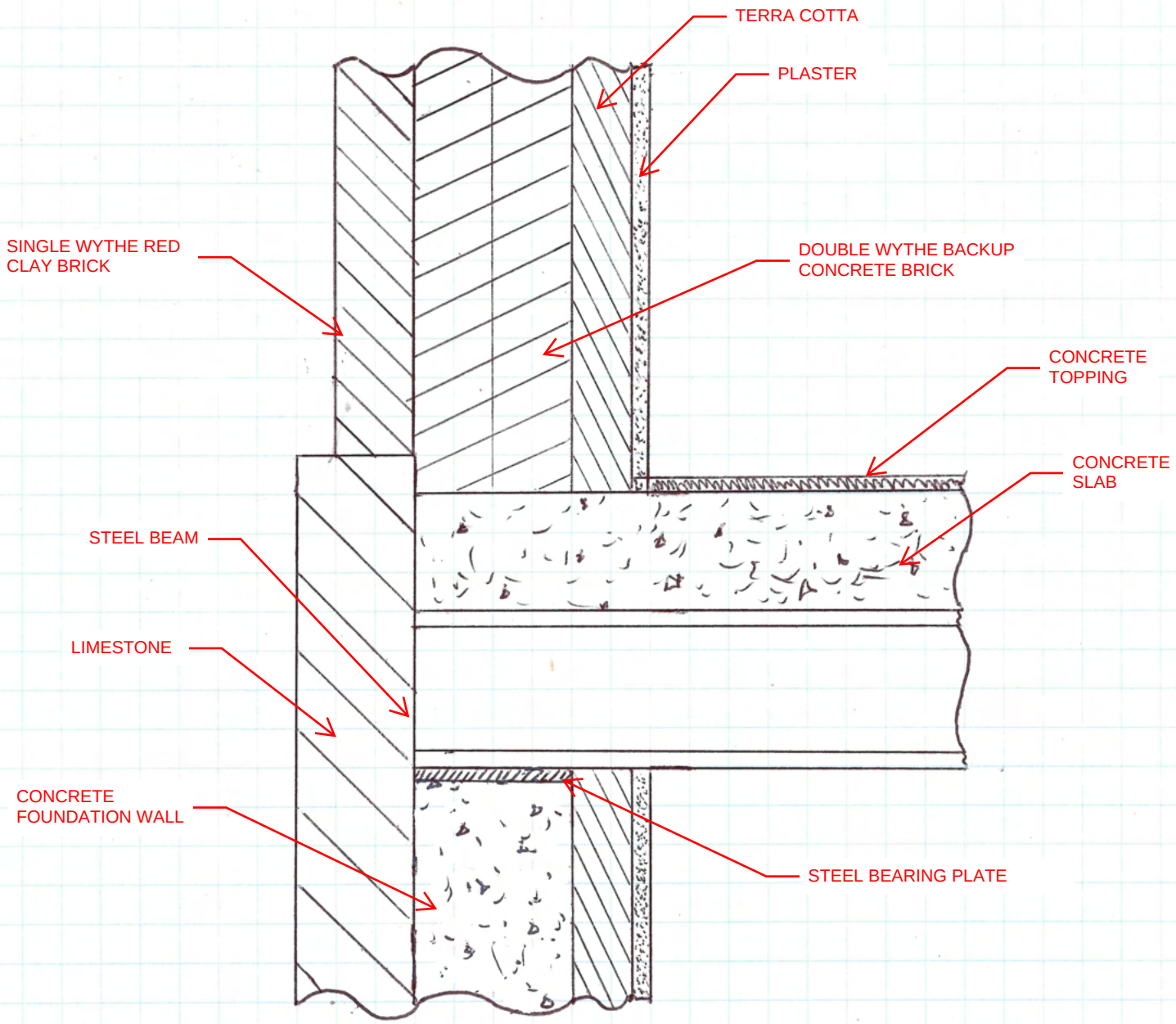
-

SKETCHES OF TYPICAL EXISTING KEY DETAILS



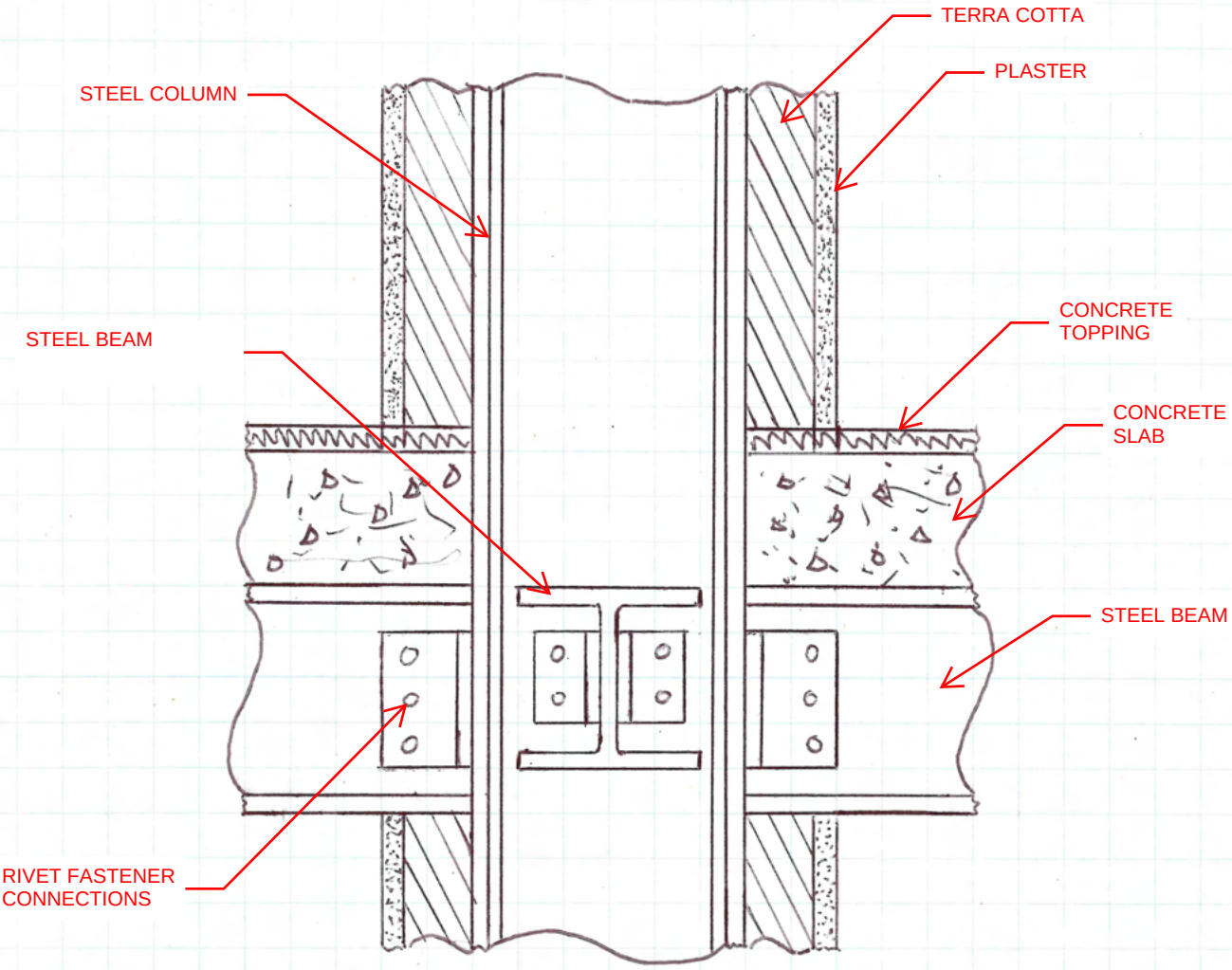
SLAB - WALL CONNECTION - TYP.

24012
Andrew Azimov
Nov. 3/23



SLAB-WALL CONNECTION - BASEMENT

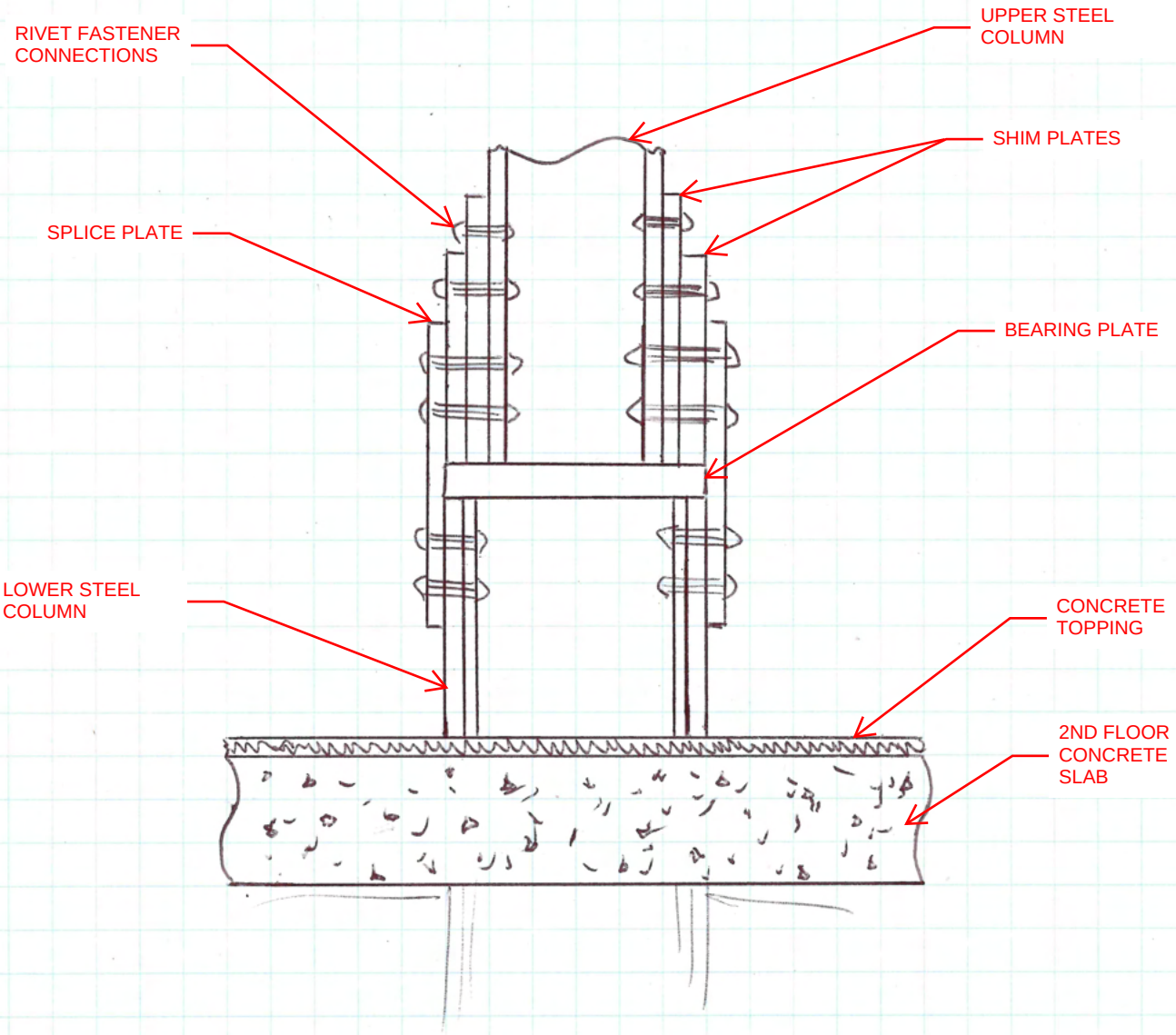
24012
Andrew Azironic
Nov. 3/23



SLAB-COLUMN CONNECTION - TYP.

24012
Andrew Azinovic
Nov. 3/23

NOTE:
TERRA COTTA, PLASTER FINISH, ETC. NOT SHOWN FOR SIMPLICITY.



COLUMN SPLICE - ABOVE 2nd FLOOR

24012
Andrew Azinovic
Nov. 3/23

APPENDIX B

-

RETENTION FRAME CONCEPT SKETCHES

FLOOR 1 PLAN

BACKFILLED
ELEV. E1
ELEV. E2
ELEV. E3
ELEV. E4
ELEVATOR LOBBY
106
ELEVATOR LOBBY
105
PUMP ROOM
130
STORM TANK
131
STAIR A
T01
MECH.
116
PARCEL & BOH RECEPTION
111
CONCIERGE
104
UNISEX WC
112
WC (F)
119
UNISEX WC
120
WC (M)
118
MAIL
113
504 MAILBOXES
207 MAILBOXES
30 MAILBOXES
MAIL LOADING
114
SORTING TABLE
JANITOR
122
FIRE PUMP ROOM
123
VOID
RETAIL #2
133
RETAIL #1
134
BF WASHROOM
121
RESIDENTIAL LOBBY
103
OFFICE ELEVATOR LOBBY
102
ELEV. E5
LOUNGE
107
CACF
115
MEETING ROOM
109
MANAGEMENT OFFICE
108
PET SPA
116
MECH. ROOM
117
VEST.
101
GAS METER
SUMP PIT. REFER TO MECH.
CORRIDOR ABOVE
REMOVABLE RAILING AT PLATFORM LIFT
PLATFORM LIFT
EXTENT OF FIRE RATED CEILING 'CL4a' ABOVE
EMERGENCY GAS LINE IN 2HR RATED ENCLOSURE
CACF ROOM EXHAUST DUCT IN 2HR RATED ENCLOSURE
ARCHED OPENING. REFER TO ID
DUCTS FOR FUTURE KITCHEN FIT OUT. REFER TO MECH.
CABINET HEATER. REFER TO MECH.
ACTIVE DOOR LEAF
SLOPE UP 4.5%
RAMP UP 6.5%
LANDING
RAMP UP 6.5%
WROUGHT IRON FENCE WITH GATE
BIKE RACK (REFER TO LANDSCAPE)
SIAMESE CONNECTION
EXISTING FACADE TO BE RETAINED AND SUPPORTED DURING CONSTRUCTION
PROPERTY LINE
PROPERTY LINE
N 60° 26' 10" W 46.6

COLUMN WEAK AXIS PERPINDICULAR TO WALL, ADDITIONAL BRACING CONSIDERATION.
LATERAL SUPPORT ANGLES BRACING THE WALLS BETWEEN STRONG-BACKS
VERTICAL STRONG-BACKS
VERTICAL STRONG-BACKS, SHIFTED TO AVOID NEW COLUMNS
POURED WALL, POTENTIAL INTERFERENCE WITH BRACING. NOT STURCUTRAL.
NO STEEL IN CORNER, SPECIAL CONSIDERATION POSSIBLY REQUIRED
LATERAL SUPPORT ANGLES BRACING THE WALLS BETWEEN STRONG-BACKS
VERTICAL STRONG-BACKS

2023-10-20 5:33:19 PM

ELEVATOR LOBBY
207
VOID
ELEV. E1
ELEV. E2
ELEV. E3
ELEV. E4
OPEN TO LOADING BELOW
CORRIDOR
206
CORRIDOR
204
COMMERCIAL ELEC.
205
OFFICE MECH.
210
STORM TANK
211
STAIR A
VEST.
213
VOID
RAMP UP
OPEN TO BELOW
PIPE SHAFT
GAS RISER
ELEV. E5
OFFICE
201
WASHROOM
203
WASHROOM
202
AND BELOW
EXTENT OF FIRE RATED CEILING 'CL4a' ABOVE
NO STEEL IN CORNER, SPECIAL CONSIDERATION POSSIBLY REQUIRED
NEW WALL, POTENTIAL INTERFERENCE WITH BRACING.
COLUMN LATERAL SUPPORT BEAM, PLACED AT EXISTING COLUMN SPLICE
SEQUENCE SHORING REMOVAL WITH WALL CONSTRUCTION
LATERAL SUPPORT ANGLES BRACING THE WALLS BETWEEN STRONG-BACKS
VERTICAL STRONG-BACKS
BRACED BAY
LATERAL TIES, SHIFTED TO AVOID NEW COLUMNS
VERTICAL STRONG-BACKS, SHIFTED TO AVOID NEW COLUMNS
BRACED BAY
LATERAL SUPPORT ANGLES BRACING THE WALLS BETWEEN STRONG-BACKS
VERTICAL STRONG-BACKS
EXISTING FACADE TO BE RETAINED AND SUPPORTED DURING CONSTRUCTION
PROPERTY LINE
PROPERTY LINE
PROPERTY LINE
PROPERTY LINE
2023-10-20 5:33:21 PM

FLOOR 2 PLAN

NO STEEL IN CORNER, SPECIAL CONSIDERATION POSSIBLY REQUIRED

NEW WALL, POTENTIAL INTERFERENCE WITH BRACING.

OPEN TO OFFICE BELOW

SEQUENCE SHORING REMOVAL WITH WALL CONSTRUCTION

VERTICAL STRONG-BACKS

LATERAL SUPPORT ANGLES BRACING THE WALLS BETWEEN STRONG-BACKS

VERTICAL STRONG-BACKS

BRACED BAY

VERTICAL STRONG-BACKS, SHIFTED TO AVOID NEW COLUMNS

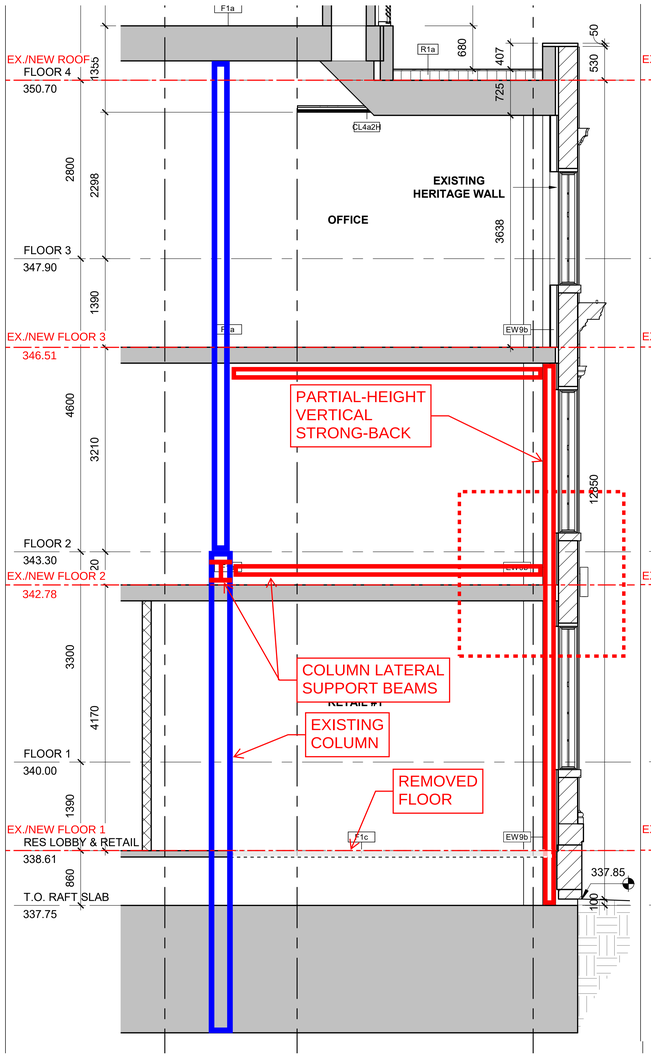
BRACED BAY

LATERAL SUPPORT ANGLES BRACING THE WALLS BETWEEN STRONG-BACKS

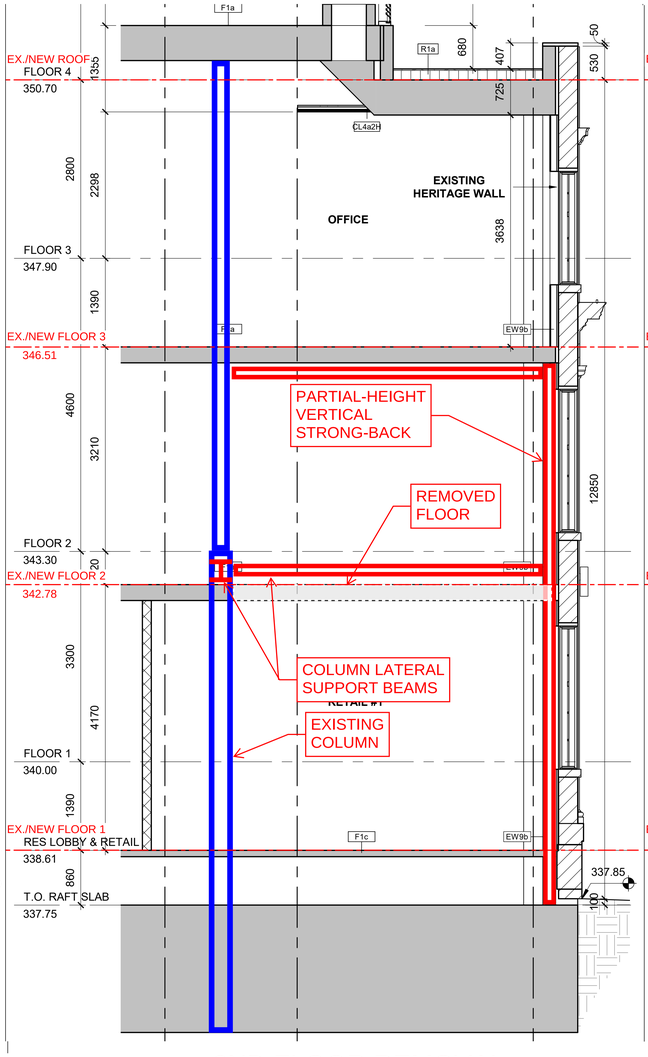
EXISTING FACADE TO BE RETAINED AND SUPPORTED DURING CONSTRUCTION

FLOOR 3 PLAN

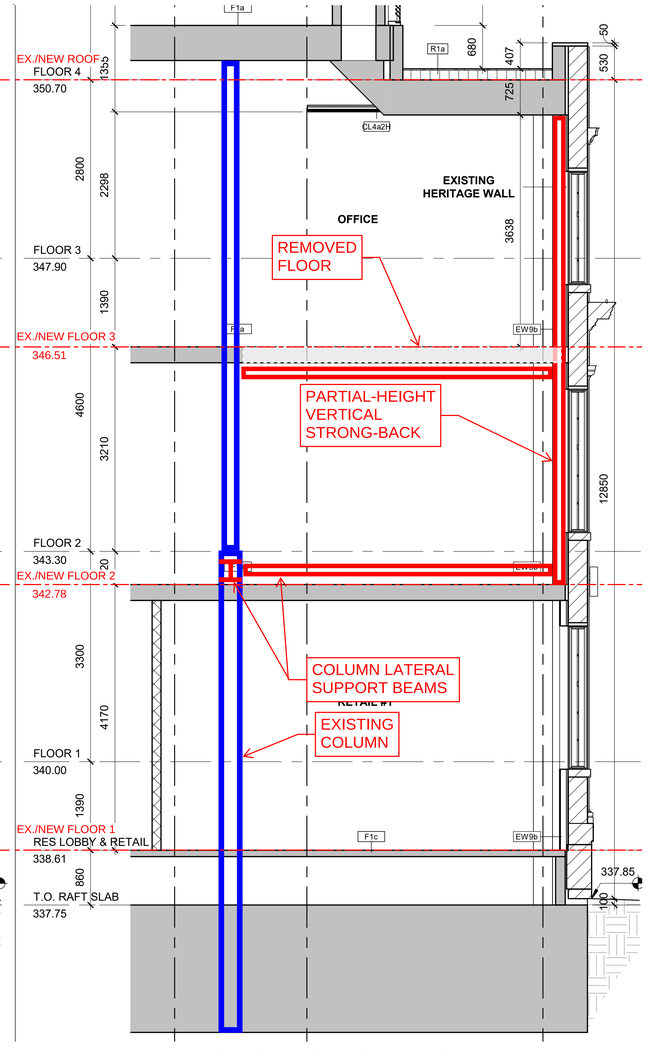
TYPICAL UNBRACED BAY SEQUENCING



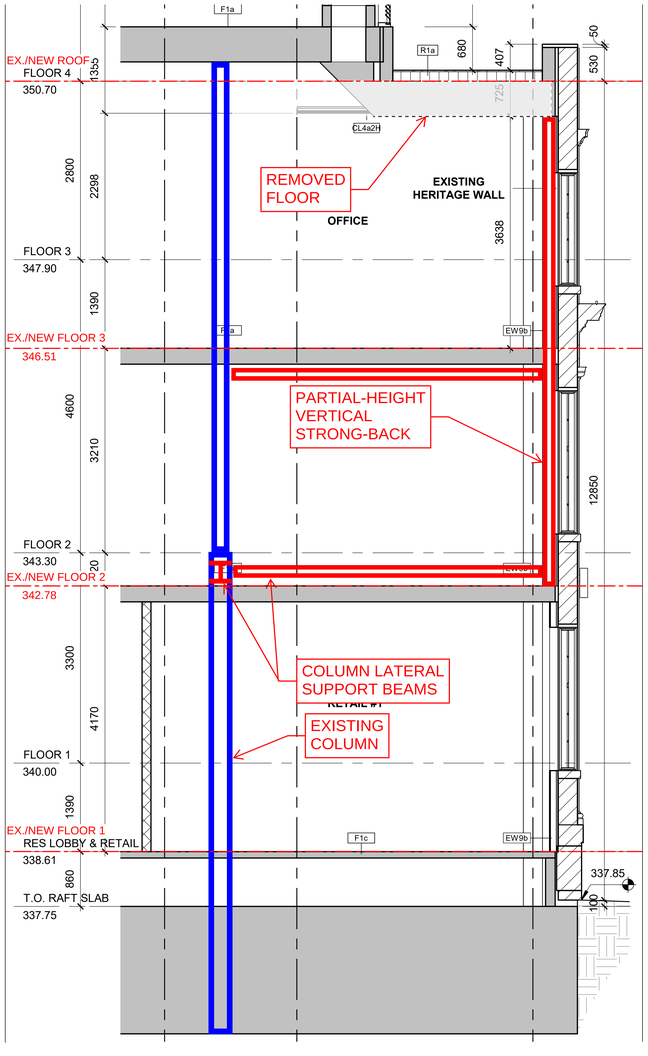
MAIN FLOOR REMOVAL



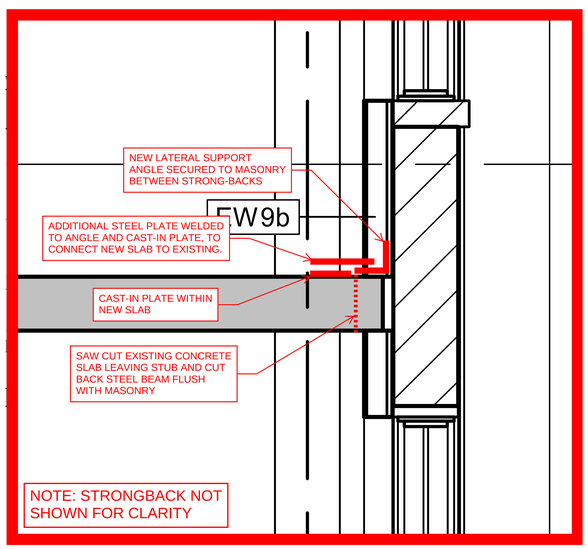
2ND FLOOR REMOVAL



3RD FLOOR REMOVAL

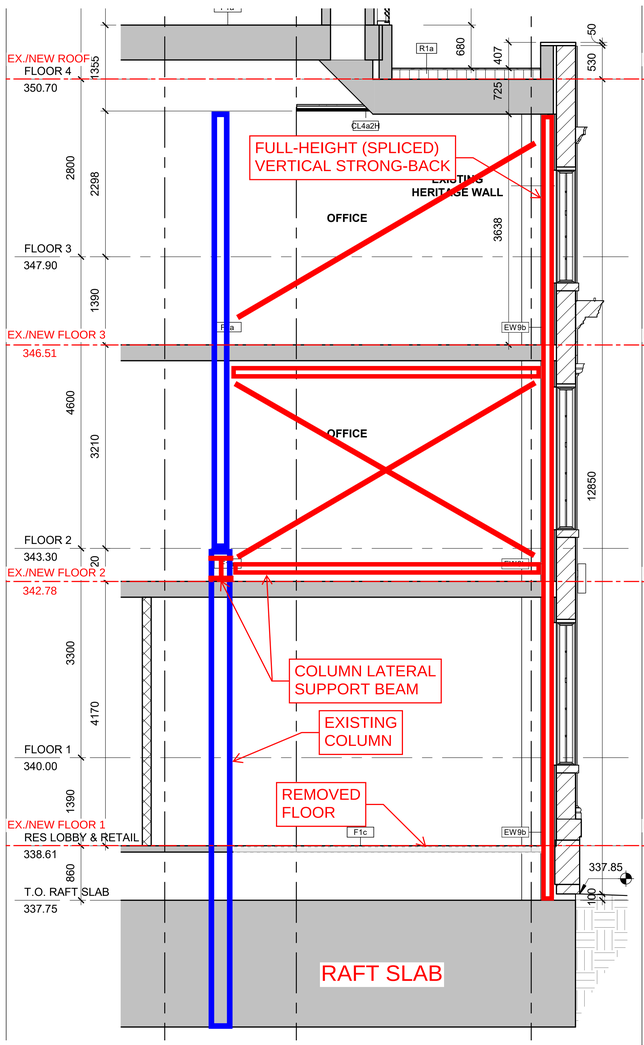


ROOF REMOVAL

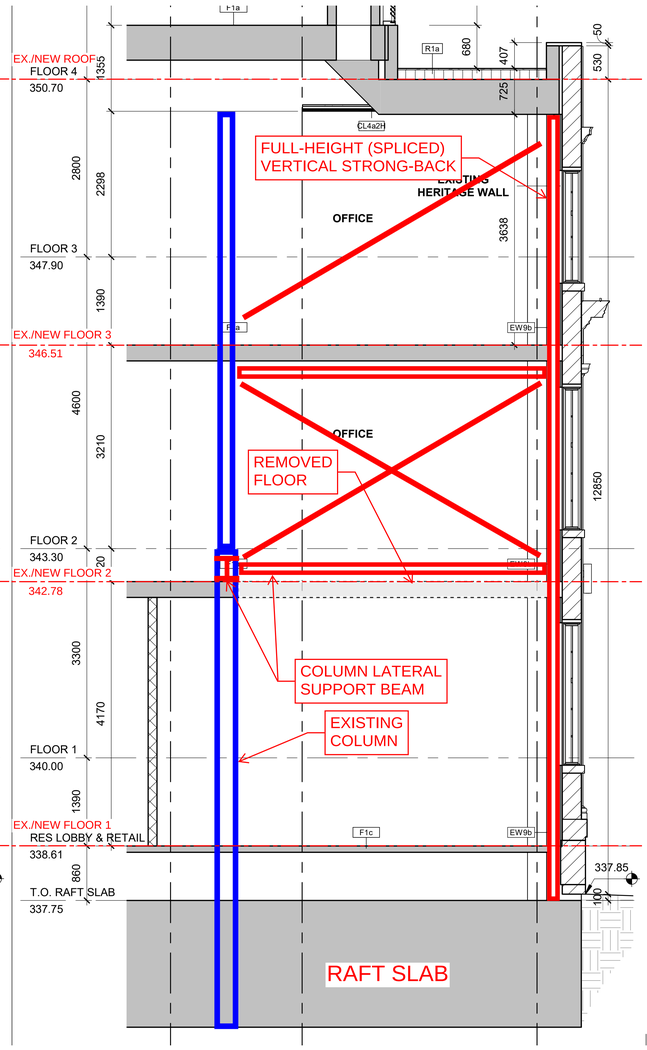


NEW SLAB CONNECTION, TYP.

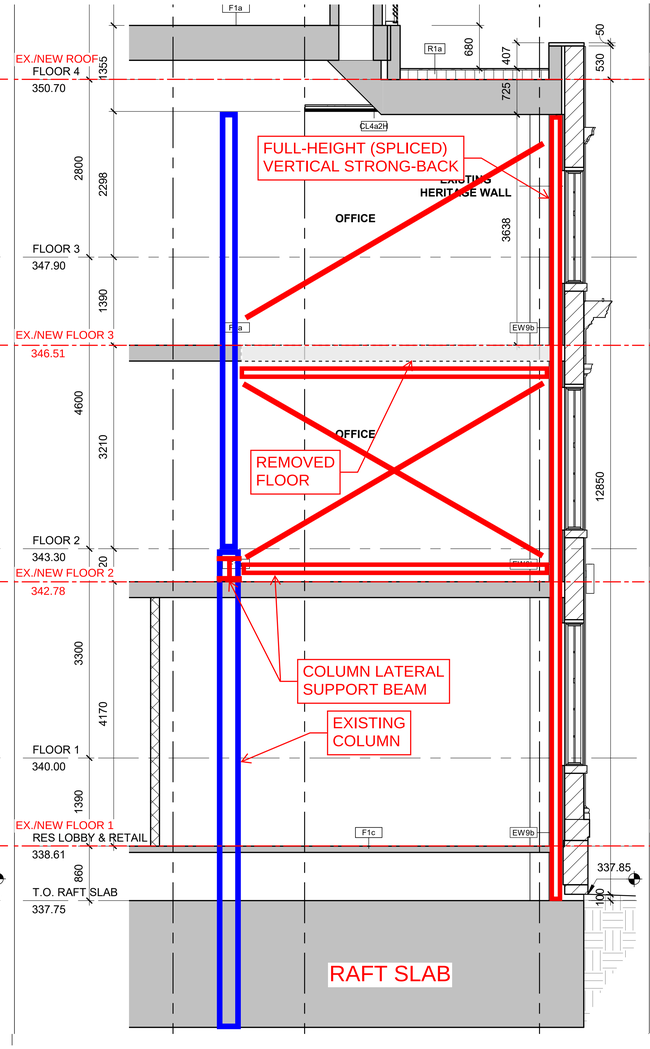
TYPICAL BRACED BAY SEQUENCING



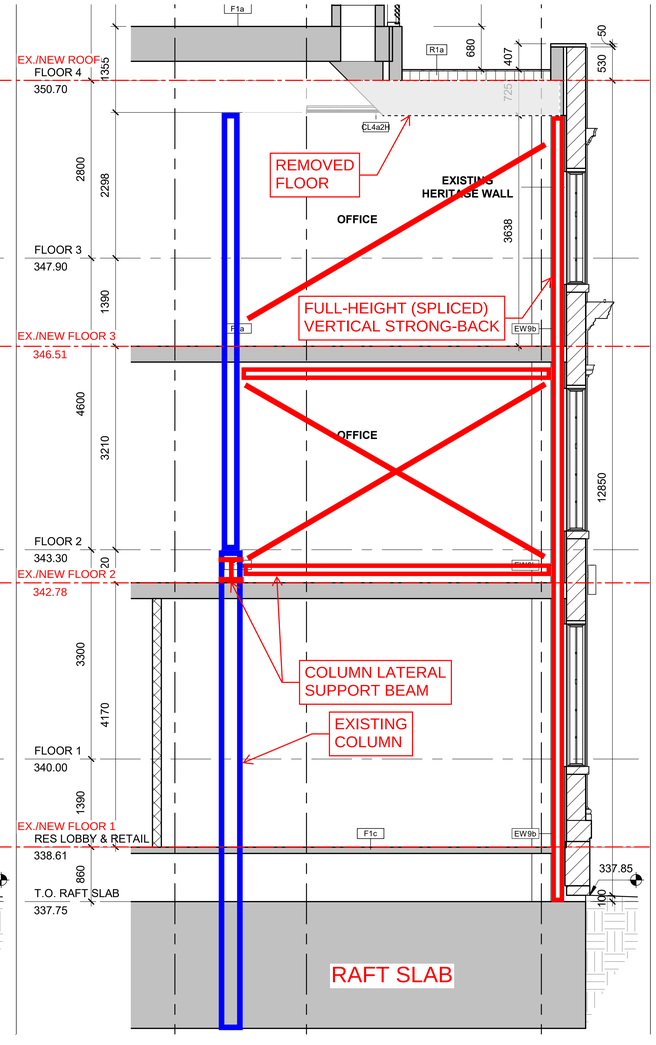
MAIN FLOOR REMOVAL



2ND FLOOR REMOVAL



3RD FLOOR REMOVAL



ROOF REMOVAL

10 Duke Steet West
Kitchener, Ontario

Existing Façade Retention
Vibration Monitoring Plan

Project No. 24012

Draft report issued December 15th, 2023

Final report issued December 15th, 2023

Report Prepared by:

JOHN G.
COOKE
& ASSOCIATES LTD.
CONSULTING ENGINEERS

1. INTRODUCTION

John G. Cooke & Associates Ltd. (JCAL) was retained by VanMar Developments Inc. (VanMar) to provide consulting structural engineering services as it relates to the retention of portions of the primary façades of the existing building at 10 Duke Street West, in Kitchener, Ontario, for incorporation of these facades with a planned redevelopment on the site. The redevelopment will include the construction of a new tower that occupies much of the footprint of the existing building presently on the site.

VanMar received conditional approval of their Site Plan Application - SP22/104/D/AP. The draft version of this approval, dated June 23, 2023 and provided to JCAL, included Heritage Planning Conditions which require

> *[t]hat the Owner submits a Risk Management Plan, including a Vibration Monitoring Plan commenting on the means and methods that shall be used to minimize vibration to 10 Duke Street West during grading, construction, servicing or other site development works to the satisfaction of the Manager of Development Review and the City's Heritage Planner.*

This report is intended to satisfy the requirement for a Vibration Monitoring Plan.

Further to other conditions in the Site Plan Application approval, JCAL has already completed an investigation of the subject site, including destructive exploratory openings, and prepared a Structural Assessment Report, dated December 4th, 2023.

Design progress drawings for the new tower have been completed and reviewed by JCAL, to 75% progress at the time of this writing. A geotechnical report (File no. G21270, Chung & Vander Doelen Engineering Ltd.) has been prepared and also reviewed by JCAL.

2. TERMS OF REFERENCE

The scope of work for John G. Cooke & Associates Ltd. is based on JCAL proposal P23208, dated September 18, 2023.

3. EXISTING CONDITIONS

JCAL completed an investigation of existing conditions at the subject site. Observations made during that investigation are more comprehensively described in our Structural Assessment Report. A summary of the relevant facts are included in the discussion below.

The existing building is constructed predominantly of one-way concrete slabs, supported by steel beams, which are supported by interior steel columns and, at the building perimeter, load-bearing multi-wythe brick masonry exterior walls. The exiting building is a 3-storey building plus a full-height basement level.

The existing exterior walls are in good condition where visible on the exterior, and where exposed during investigatory openings made at the interior. The walls consist of an exterior wythe of clay brick with two backup wythes of concrete brick at the interior. These are bonded together with regular header bricks. Mortar joints remain generally intact, except for localized areas. and openings at the interior revealed a well-constructed wall assembly with solid mortar present in the head and collar joints. Stone masonry is included at details such as bands, sills, and surrounding the main entrance.

Localized repointing and other conservation work will be required as part of the preservation and retention of the relevant portions of the existing facades, including at stone details and throughout the masonry. No bulging, significantly displaced stones, or excessively deteriorated or unstable

masonry was noted that would cause us to consider this building to be especially vulnerable to vibrations. Masonry conservation work is not expected to be required in advance of construction.

One caveat is at the parapet which extends above the roof level. The interior face of the parapet is fully covered with metal flashing. While it was not possible to assess the masonry at arms-length from the exterior, and mortar joints here do appear to be generally intact, there is some efflorescence at the exterior of the parapet. This is an indication of high moisture content and migration, suggesting a higher likelihood of deterioration of masonry within the core of the wall. There is nothing to suggest a deviation from the course of action proposed herein, but the condition of this parapet will be monitored and assessed further, as work is ongoing on this project.

4. PLANNED CONSTRUCTION

As noted in the Introduction section, above, the project includes the planned retention of a portion of the primary facades of the existing building at 10 Duke St W, for integration with a new tower to be constructed on the site. The project's intent is to retain the existing facades by primarily making use of the steel frame of the existing load-bearing masonry and steel-framed building, supplemented by temporary bracing and supports as necessary, until the façade may be secured to the new permanent structure (designed by other consultants), floor by floor, as construction progresses.

The interior finishes in the building are typically applied to a terra cotta tile backup placed with an approximately 25 mm gap to the interior wythe of backup brick. As part of the work to stabilize the façade and to integrate it with new wall assemblies, it is proposed to remove this terra cotta tile and all finishes. As such, impact to plaster or other finishes are not a consideration in determining the vibration susceptibility of the building.

The new tower will be constructed with a raft foundation, the base of which will be set close to the basement level of the current building. The raft will occupy much of the height of the current lower level of the building, and, aside from elevator pits, the occupiable space of the building will generally extend from approximately grade level and above. The geotechnical report indicates that native soil on the site consists generally of fine granular deposits and silty clay till. It is clear that rock will not be encountered for the proposed depth of excavation.

As a result of the foundation and soil conditions, excavation is anticipated to be relatively minimal. It is further understood, as communicated by VanMar, that the limited excavation that will be required will proceed using sloped excavations. Certainly, no blasting or hoe ramming of rock is anticipated to be required.

Currently, there is a basement mechanical/boiler room within the existing building that extends further below grade than typical conditions, approximately an additional floor level below grade. This room is located against the North (rear) wall of the building and extends for approximately 10m in each direction (about 1½ structural bays). The brick chimney which extends up beyond the roof is quite visible and is located at the northeast of this room. It will be necessary to fill and level the subgrade prior to construction of the raft slab, and the geotechnical report provides two potential options for infilling at this room, to bring it flush with the remaining basement. The first is to place lean mix concrete for the height required, and the second is to place heavily compacted granular fill. VanMar have indicated that they will place lean mix concrete to fill this void, which would not result in significant vibrations being induced, as the costs are quite comparable between the options.

Overall, vibration from excavation is expected to be relatively minimal. General vibration from other construction is expected to stem from miscellaneous construction equipment and activities, such truck traffic adjacent to the facades retained in-situ, and no special circumstances are anticipated to apply.

Localized vibration may be induced from demolition and construction activity near the masonry to be retained. The bracing and construction sequencing and the design of temporary lateral support for the existing masonry facades to remain in-situ are also being prepared by JCAL. Provisions for saw or torch cutting of masonry, concrete, and steel elements connecting to the masonry to be retained will be included. Specifically,

- saw cuts will be introduced in masonry walls at the interface with masonry to be retained before demolition is to occur on portions that are not to be retained,
- saw cuts will be introduced in the concrete slabs along the masonry walls to be retained, before those slabs are removed,
- steel beams that are connected with elements to remain will be torch cut prior to removal, and
- the use of chippers on elements that remain connected to the masonry to be retained will be limited to 12 lb. electric models, unless a mock-up demonstrates that alternatives do not risk damaging masonry.

5. VIBRATION LIMITS

Vibration limits are not stipulated in the City's conditions, nor is there a municipal bylaw in effect to limit vibrations. The nearby City of Toronto has placed limits on construction vibrations, in their bylaw No. 514-2008, and those limits are indicated in Figure 1, below.

Table 1.0 "Prohibited Construction Vibrations"	
Frequency of Vibration (hertz)	Vibration Peak Particle Velocity (mm/sec)
Less than 4	8
4 to 10	15
More than 10	25

Fig 1: City of Toronto construction vibration limits

The above-noted vibrations, while a good benchmark, are limits for any construction activity and are not necessarily applicable or appropriate to all projects. For historic buildings we typically recommend following the limits established in the DIN 4150-3 Standard, per line 3 of Table 1, included at Figure 2, below. The limits are

- **3 mm/s for vibrations less than 10 Hz,**
- **3 to 8 mm/s for vibrations between 10 to 50 Hz, to be interpolated linearly,**
- **8 to 10 mm/s for vibrations between 50 to 100 Hz, to be interpolated linearly, and**
- **10 mm/s for vibrations above 100 Hz.**

We recommend proceeding with the limits indicated above in this case.

These limits are quite low, and are intended to mitigate effects of vibration on historic buildings that might include deteriorated materials or sensitive finishes. The masonry facades to be retained on this building can be expected to be more resilient than many more delicate built historic structures.

Though we do not anticipate exceedances even of these values given the understood nature of the adjacent construction, these limits could be re-evaluated should these limits be found to have significant impact on construction.

Table 1: Guideline values for vibration velocity to be used when evaluating the effects of short-term vibration on structures

Line	Type of structure	Guideline values for velocity, v_i, in mm/s			
		Vibration at the foundation at a frequency of			Vibration at horizontal plane of highest floor
		1 Hz to 10 Hz	10 Hz to 50 Hz	50 Hz to 100 Hz *)	at all frequencies
1	Buildings used for commercial purposes, industrial buildings, and buildings of similar design	20	20 to 40	40 to 50	40
2	Dwellings and buildings of similar design and/or occupancy	5	5 to 15	15 to 20	15
3	Structures that, because of their particular sensitivity to vibration, cannot be classified under lines 1 and 2 and are of great intrinsic value (e.g. listed buildings under preservation order)	3	3 to 8	8 to 10	8

*) At frequencies above 100 Hz, the values given in this column may be used as minimum values.

Fig 2: DIN 4150-3 guideline on vibration limits for various structure types

6. VIBRATION MONITORING AND MONITOR PLACEMENT

We recommend that vibration monitoring be implemented with the placement of two tri-directional digital seismographs to be securely affixed to the façade. See Figure 3.

- The first monitor is to be affixed to the interior face of the concrete foundation wall below the façade, just above the level of the raft slab, within the central third of the South (front) elevation wall. See red star in Fig 3.
- The second monitor is to be affixed to the interior face of the façade, immediately above the first monitor, within 600 mm of the underside of the roof level. See blue star in Fig 3.

Existing interior finishes and terra cotta tile are to be removed from the wall prior to installation, such that the monitors can be affixed to the underlying concrete or backup brick masonry.

The monitors and associated reporting are to continue through the course of construction on the project, or until such time as major vibration inducing construction activities have been completed, there are no regular vibration exceedances, any potential for damage from vibration is not anticipated, and the Consultant advises that they may be removed.

The vibration monitors are to be supplied and installed by a specialized firm that has experience providing such monitors for the duration of construction projects.

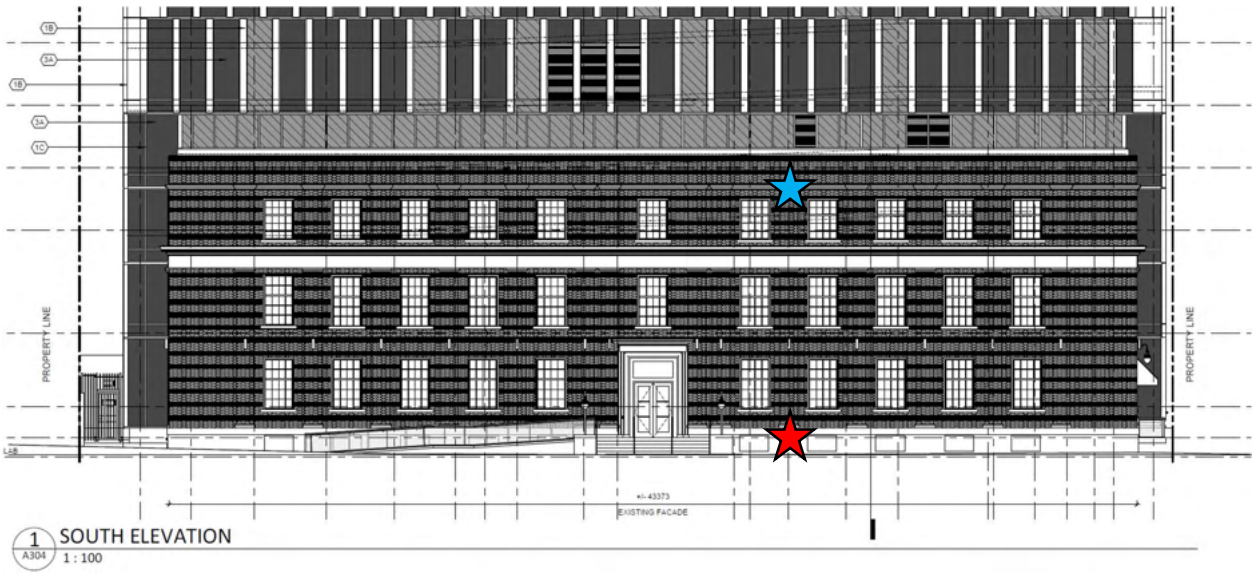


Fig 3: Part South Elevation, indicating proposed locations of vibration monitors.

7. NOTIFICATION AND EXCEEDENCE PROCEDURE

The vibration monitors must be connected for continual reporting of vibration events that result in exceedances of the vibration limits stipulated above. Exceedance events shall be reported by automated email to the Contractor, Owner, and appropriate Consultant(s).

In the event of an exceedance the Consultant is to be contacted. If the exceedance is not the result of disturbing the vibration monitoring equipment or very localized activity around it (both of which are common causes of exceedances), and the Consultant considers the exceedance to be significant, the Consultant shall review on site for any damage that may have resulted from the exceedance.

Future construction activity shall be modified to avoid further exceedances. In cases where this is not possible, and the exceedance was not observed to have had any impact to the structure, the Consultant may advise with respect to increased vibration limits. Note that this approach is intended to be generally consistent with the DIN 4150 standard, which states that "Exceeding the values in table 1 does not necessarily lead to damage; should they be significantly exceeded, however, further investigations are necessary." As noted above, it is our view that this building would likely tolerate vibration limits above those stipulated.

8. DISCLAIMER & LIMITATIONS

This report is based on and limited to information supplied to John G. Cooke & Associates Ltd. by VanMar Developments Inc. personnel and representatives, and by observations made during walk-through inspections of the subject property. Only those items that are capable of being observed and are reasonably obvious to John G. Cooke & Associates Ltd. or have been otherwise identified by other parties and detailed during this investigation can be reported.

The work reflects the Consultant’s best judgment in light of the information reviewed by them at the time of preparation. There is no warranty expressed or implied by John G. Cooke & Associates Ltd. that this investigation will uncover all potential deficiencies and risks of liabilities associated with the subject property. John G. Cooke & Associates Ltd. believes, however, that the level of detail carried out in this investigation is appropriate to meet the objectives as outlined in the request. We cannot guarantee the completeness or accuracy of information supplied by any third party.

John G. Cooke & Associates Ltd. is not investigating or providing advice about pollutants, contaminants, or hazardous materials.

This report has been produced for the sole use of VanMar Developments Inc. and cannot be reproduced or otherwise used by any third party unless approval is obtained from John G. Cooke & Associates Ltd. No portion of this report may be used as a separate entity; it is written to be read in its entirety.

We trust this report covers the scope of work as outlined in our Terms of Reference. Should there be any questions regarding this report, or if we can be of any further assistance to you, please contact us.

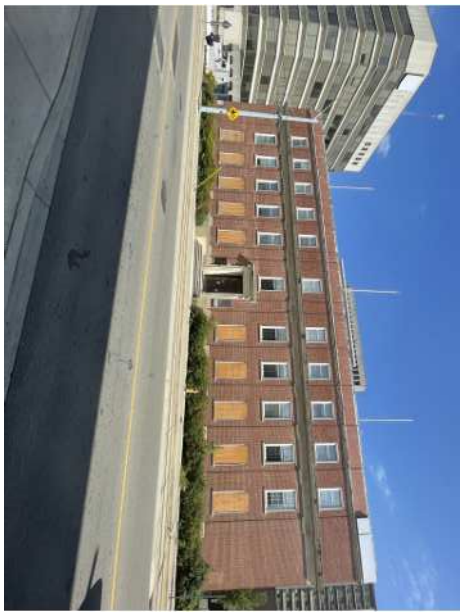
JOHN G. COOKE & ASSOCIATES LTD.

Jonathan Dee, P. Eng., ing., CAHP
Principal

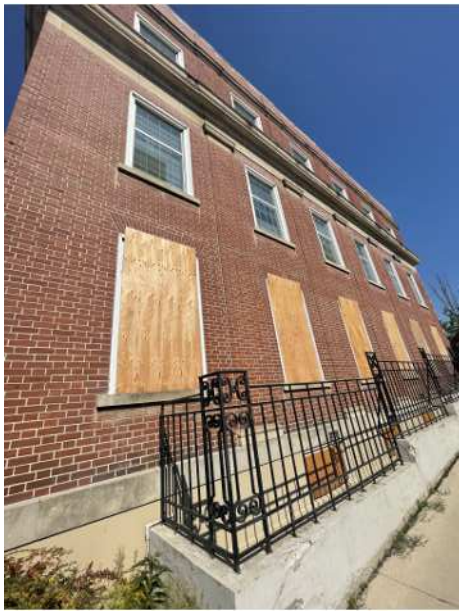
JD/jd
24012/10 Duke – Vibration Monitoring Plan

Appendix C: Site Visit Photos

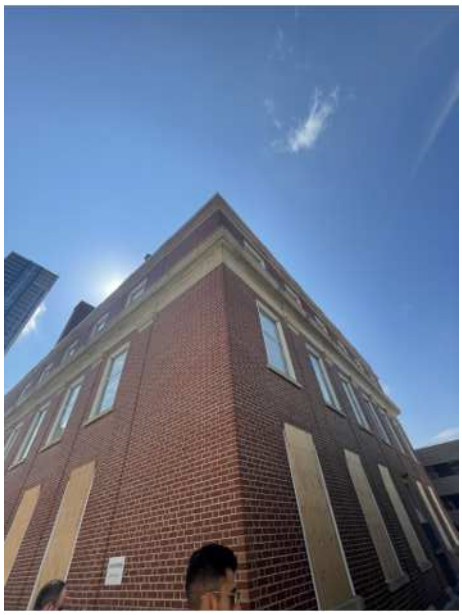
SITE VISIT - SEPTEMBER 2023, mCs



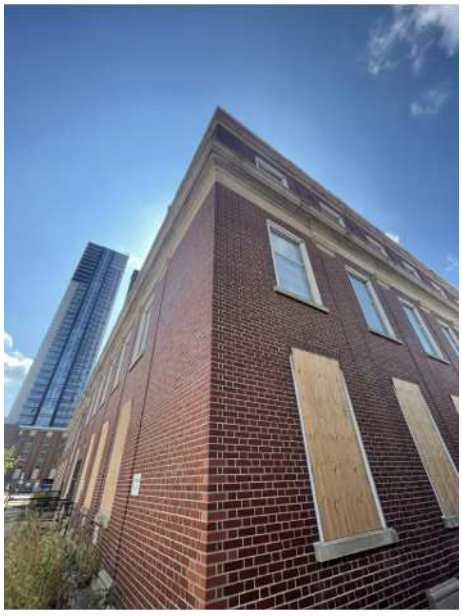




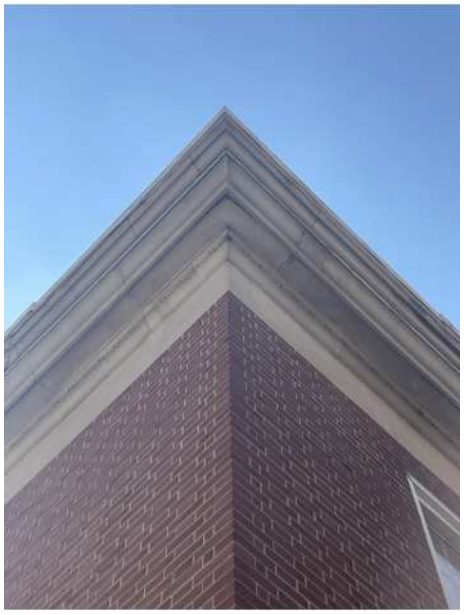



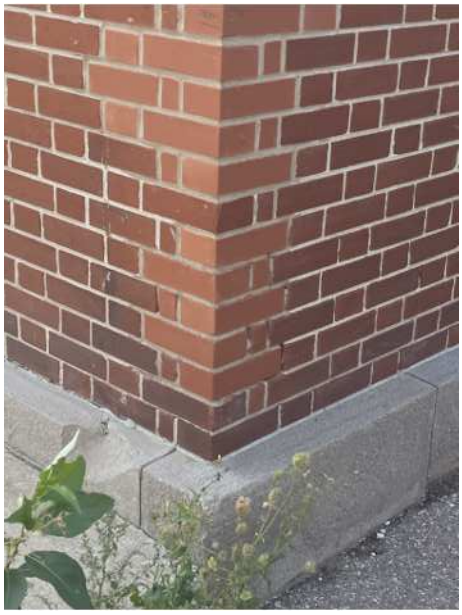






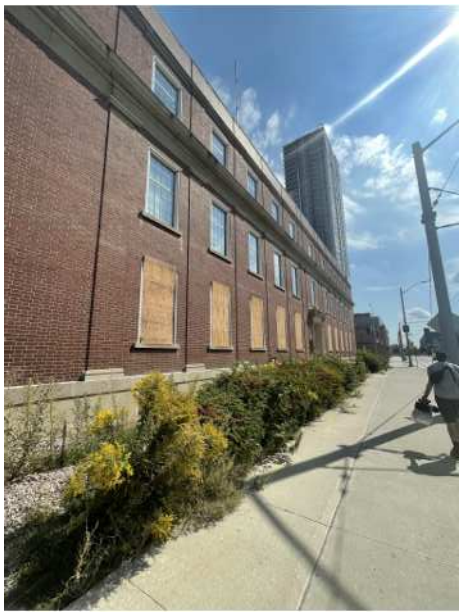

Paquette
Trovers
CLIENT PARKING ONLY






ENFORCED UNDER
BY-LAW 88-170

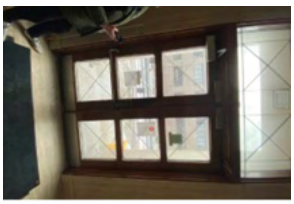

PRIVATE



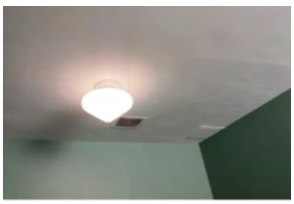





SITE VISIT - JANUARY 2023, mCs


20220120_204210228_iOS


20220120_204322051_iOS


20220120_204420986_iOS


20220120_204456280_iOS


20220120_204726010_iOS


20220120_204727562_iOS


20220120_204728929_iOS


20220120_204736477_iOS

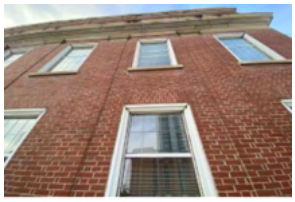

20220120_204740003_iOS


20220120_204744790_iOS


20220120_204754906_iOS


20220120_204800977_iOS


20220120_204814044_iOS


20220120_204820900_iOS


20220120_204822117_iOS


20220120_205651705_iOS


20220120_205655761_iOS


20220120_205658389_iOS


20220120_205659944_iOS


20220120_205704149_iOS


20220120_205711351_iOS


20220120_205719102_iOS


20220120_205729294_iOS


20220120_205731229_iOS

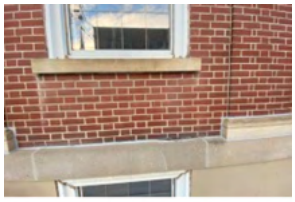

20220120_205736733_iOS


20220120_205738559_iOS


20220120_205929790_iOS


20220120_205936794_iOS

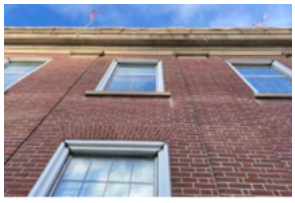

20220120_210006562_iOS

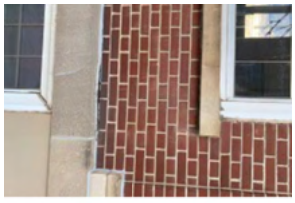

20220120_210009202_iOS

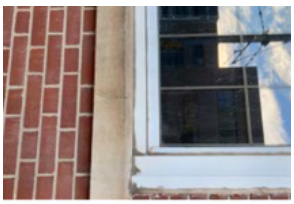

20220120_210011205_iOS

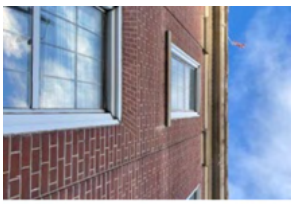

20220120_210013708_iOS


20220120_210014810_iOS

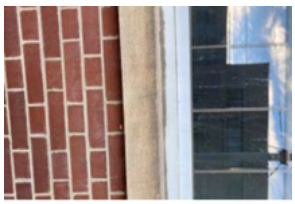

20220120_210016023_iOS

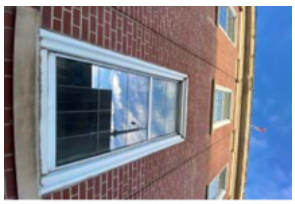

20220120_210018682_iOS

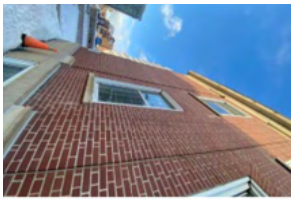

20220120_210021598_iOS


20220120_210023392_iOS

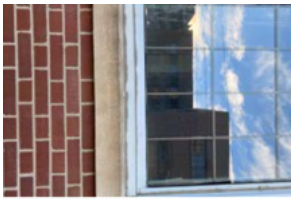

20220120_210055003_iOS


20220120_210057617_iOS


20220120_210103716_iOS


20220120_210104839_iOS


20220120_210109696_iOS


20220120_210111515_iOS


20220120_210115184_iOS

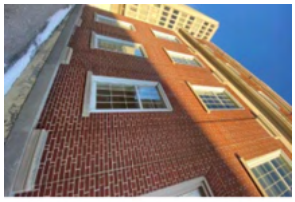

20220120_210140026_iOS

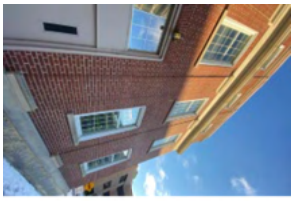

20220120_210142693_iOS


20220120_210242311_iOS


20220120_210243434_iOS


20220120_210245071_iOS


20220120_210248011_iOS

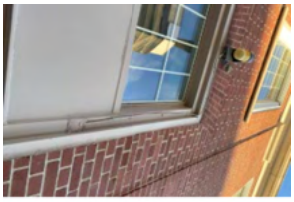

20220120_210249362_iOS

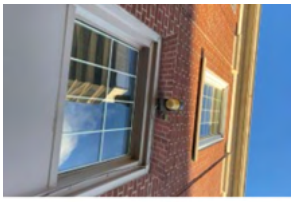

20220120_210250417_iOS

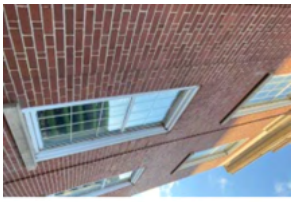

20220120_210251302_iOS

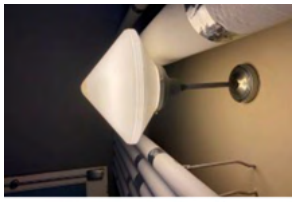

20220120_210252965_iOS

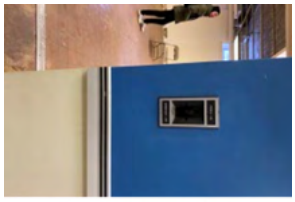

20220120_210253829_iOS


20220120_210255336_iOS


20220120_210256027_iOS


20220120_210257020_iOS


20220120_210402821_iOS


20220120_210439233_iOS


20220120_210441991_iOS


20220120_210444835_iOS


20220120_210447505_iOS


20220120_210509110_iOS


20220120_210517270_iOS


20220120_210522179_iOS

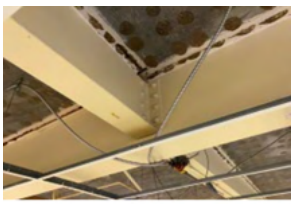

20220120_210531238_iOS


20220120_210536300_iOS


20220120_210608367_iOS


20220120_210623331_iOS


20220120_210624200_iOS


20220120_210627779_iOS


20220120_210630911_iOS


20220120_210634332_iOS


20220120_210640529_iOS


20220120_210643236_iOS


20220120_210645121_iOS


20220120_210646712_iOS


20220120_210648424_iOS


20220120_210701551_iOS


20220120_210736258_iOS


20220120_210744509_iOS


20220120_210753235_iOS


20220120_210754919_iOS


20220120_210831459_iOS


20220120_210914214_iOS


20220120_210915080_iOS


20220120_210920858_iOS


20220120_210929212_iOS


20220120_210941385_iOS


20220120_210944546_iOS


20220120_211011692_iOS


20220120_211013063_iOS


20220120_211014676_iOS


20220120_211020282_iOS

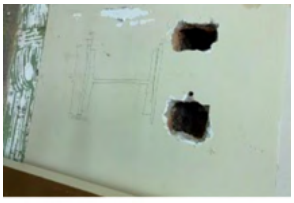

20220120_211040623_iOS


20220120_211048974_iOS

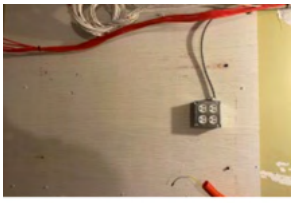

20220120_211055225_iOS


20220120_211056478_iOS


20220120_211058036_iOS


20220120_211110866_iOS


20220120_211146460_iOS


20220120_211158872_iOS


20220120_211203374_iOS


20220120_211214257_iOS


20220120_211216501_iOS


20220120_211226375_iOS


20220120_211438122_iOS

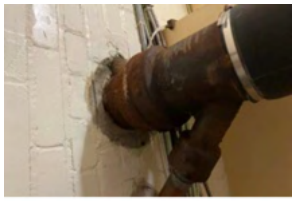

20220120_211451074_iOS

20220120_211527922_iOS


20220120_211529582_iOS


20220120_211535586_iOS


20220120_211535905_iOS


20220120_211539720_iOS

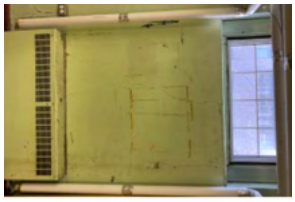

20220120_211543456_iOS


20220120_211548615_iOS


20220120_211555161_iOS


20220120_211559999_iOS


20220120_211605299_iOS


20220120_211620317_iOS


20220120_211627997_iOS


20220120_211634243_iOS

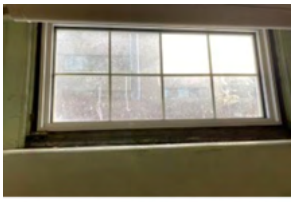

20220120_211639854_iOS

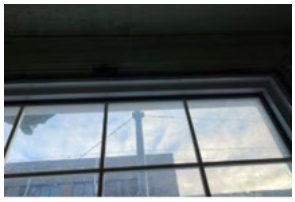

20220120_211741694_iOS

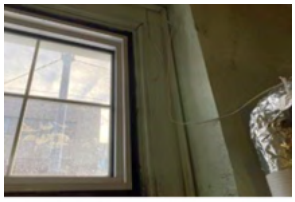

20220120_211902155_iOS


20220120_211930163_iOS


20220120_211931557_iOS


20220120_211932802_iOS


20220120_211936178_iOS


20220120_211937645_iOS


20220120_212015581_iOS


20220120_212017829_iOS


20220120_212129232_iOS


20220120_212131138_iOS


20220120_212132677_iOS


20220120_212144398_iOS


20220120_212200461_iOS


20220120_212209177_iOS


20220120_212218861_iOS

20220120_212229879_iOS


20220120_212237573_iOS


20220120_212243894_iOS

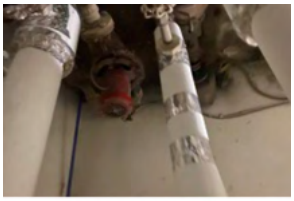

20220120_212258604_iOS


20220120_212259582_iOS


20220120_212300892_iOS


20220120_212304607_iOS


20220120_212304890_iOS


20220120_212309711_iOS

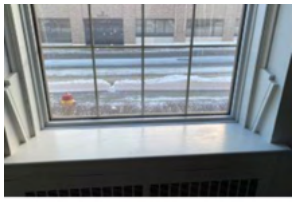

20220120_212315394_iOS


20220120_212329194_iOS

20220120_212331519_iOS


20220120_212337130_iOS

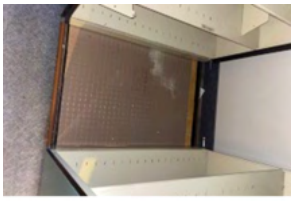

20220120_212349992_iOS


20220120_212834235_iOS


20220120_212839245_iOS


20220120_212925918_iOS


20220120_213634000_iOS


20220120_213719508_iOS


20220120_214718317_iOS


20220120_214959010_iOS


20220120_215003184_iOS


20220120_215011143_iOS

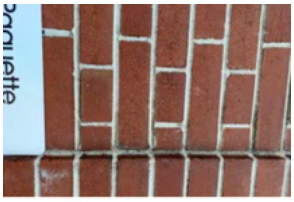

20220120_215015754_iOS


20220120_215642153_iOS

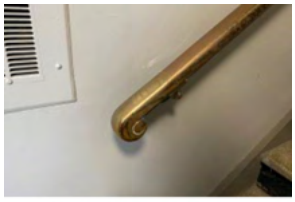

20220120_215649624_iOS


20220120_220011731_iOS


20220120_220331025_iOS


20220120_220347133_iOS


20220125_143502961_iOS


20220120_204114363_iOS

Appendix D: D.S Shoemaker's Survey - Land Registry Record

SHEET NO. (1)

LOT NO.

PLAN NO. A. S. Shoemaker's Survey

CITY OF KITCHENER

SHEET NO.

LOT NO. 1

PLAN NO. 396

S. R. KANT & CO. LIMITED Northfield ONE COLOR SHEET NO N 5233

NUMBER	INSTRUMENT	DATE OF INSTRUMENT	DATE OF REGISTRATION	GRANTOR	GRANTEE	AREA	CONSIDERATION	BOOK	REMARKS
4968	B & Sale	27 May 1881	13 June 1881	Merchants Bank of Canada	William Lackner			A11	Lot 1
4969	Mortgage	1 June 1881	13 June 1881	William Lackner etux	Merchants Bank of Canada		4000 00	A11	Lot 1
5962	Discharge Mort	4 April 1884	8 May 1884	Merchants Bank of Can.	Wm. Lackner			A14	See A11 No 4969
5963	B & Sale	30 Dec. 1884	8 May 1884	William Lackner etux	Henry J. Lackner			A14	Lot 1

CONT'D TO NEXT PAGE

B74

PLAN 396

(2)

TOWN OF BERLIN.

No. of Instrument	Instrument	Its Date.	Date of Registry.	Grantor.	Grantee.	Quantity of Land. Acres	Roods	Per	Consideration or Amt of Mortgage $	cts.	Book.	Folio.	Remarks
				D. S. Shoemaker's Survey									
30358	Lease	1 June 1914	22 June 1914	H. G. Lackner	Bank of Montreal						249	34	Lot N° 1

CONT'D TO NEXT PAGE

SHEET NO. 3

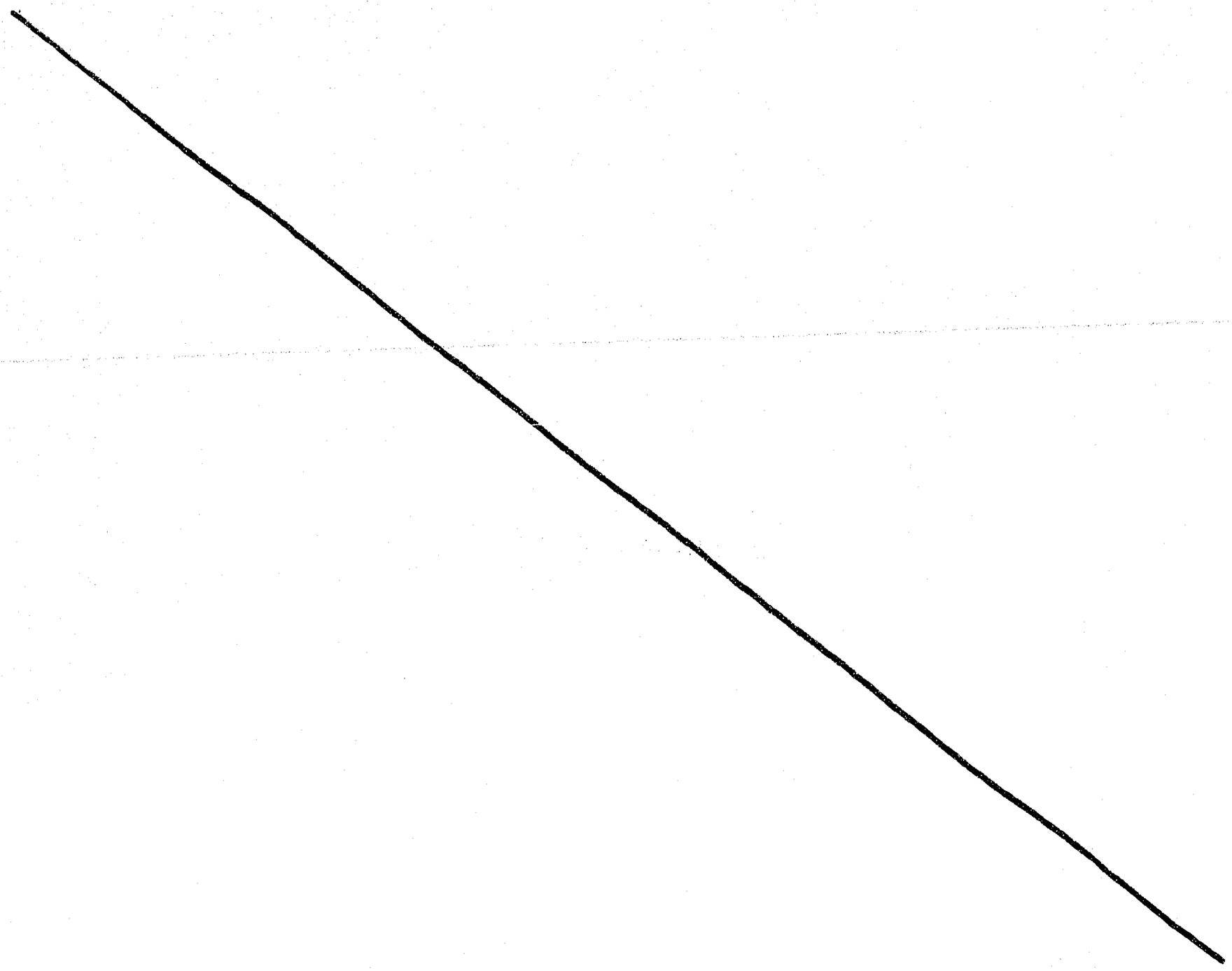
LOT NO. 1, D. S. SHOEMAKER'S SURVEY — CITY OF KITCHENER — LOT NO. 1

PLAN NO. — PLAN NO. 396

S. R. MARY & CO. LIMITED Northfield ONE COLOR SHEET NO N 5253

NUMBER	INSTRUMENT	DATE OF INSTRUMENT	DATE OF REGISTRATION	GRANTOR	GRANTEE	AREA	CONSIDERATION	BOOK	REMARKS
61465	GRANT	28Sept.1928	23Oct.1928	HENRY M. LACKNER, HELEN A. LACKNER, MARY A. MUMFORD EXRS. HENRY G. LACKNER	LANGLEY LIMITED		29000 00	A71	Lot et al.
~~61466~~	~~MORTGAGE~~	~~1 Oct.1928~~	~~23Oct.1928~~	~~LANGLEY'S LIMITED~~	~~HENRY M. & HELEN A. LACKNER~~ LACKNER ~~MARY A. MUMFORD EXRS. HENRY G.~~	~~pe~~	~~24000 00~~	~~A71~~	~~Lot et al. Not rec'd in~~ full.
~~63840~~	~~D. OF M.~~	~~12Nov.1929~~	~~29Nov.1929~~	~~EXRS. OF HENRY G. LACKNER~~	~~LANGLEY'S LIMITED~~	~~pe~~		A72	See A71 No. ~~61466~~
70239	BY LAW	7 Aug.1934	13Aug.1934	BY LAW NO. 2431-RE WIDENING OF DUKE STREET				A76	Pt. Lot et al.
70429	GRANT	7 Aug.1934	9 Oct.1934	LANGLEY'S LIMITED	CORPN. OF CITY OF KITCHENER	.0590	1600 00	A77	Pt. Lot et al.
76107	BY LAW	8 Feb.1932	4 Mch.1939	CITY OF KITCHENER BY LAW NO. 2281 TO WIDEN DUKE ST.				A80	See By Law

CONT'D TO NEXT PAGE



SHEET NO. Pg #14a

LOT NO. SHEET NO. 1

PLAN NO. LOT NO.

D.S. Shoemaker Survey

CITY OF KITCHENER

PLAN NO. 396

S. R. HART & CO. LIMITED Norfolk ONE COLOR SHEET NO N 5233

DAY/MONTH/YEAR

NUMBER	INSTRUMENT	DATE OF INSTRUMENT	DATE OF REGISTRATION	GRANTOR	GRANTEE	AREA	CONSIDERATION	BOOK	REMARKS
89232	Grant	29 Dec. 1930	1 Dec. 1943	Langley's Limited (inc. 1920)	Langley's Limited (inc. 1929)		2 00	A87	Lot etc.
89234	Grant	24 Nov. 1943	1 — 1943	Langley's Limited (inc. 1929)	Economical Mutual Fire Ins. Co.		24,500 00	—	——— Except pt.
105056	Lease	15 — 1950	29 Nov. 1950	The Economical Mutual Fire Ins. Co.	The Bell Telephone Co. of Can.			A94	
105737	Grant	29 June 1950	15 Feb. 1951	The Economical Mutual Fire Ins. Co.	The Corp'n. of the City of Kitchener		1000 00	—	E. 8' Lot.
194220	Lease	21 Sept 1959	4 Nov. 1959	The Economical Mutual Ins. Co.	The Bell Telephone Co. of Canada		22.308.00	A	Lot etc. except Pt.
261183	By-Law	6 Aug 1963	14 Aug 1963	By-Law No- 4988 City of	Kitchener for widening part of				
—	Queen St. as			a public highway in the City of	Kitchener.			A	E 8 ft Lot etc Sketch.
58-R-5595	R-PLAN		01 04 87	———	———		—		Pt. lots 1, 2 + 3. Re: Inst. #A-89234 + A-105677.
898801	Grant		01 06 87	Economical Mutual Insurance Company	Chadwill Coal Company Limited		2,099,000 00		Part Lots 1, 2 + 3 being part 1 on 58R5595.
898802	Mort		01 06 87	Chadwill Coal Company Limited	Economical Mutual Insurance Company		1,575,000		Re in 898801
Discharged by #1002395 A.D.L.R. 31-07-89									
898803	Deposit		01 06 87						Pt Lot etc. Sketch
898804	Deposit		01 06 87						Pt Lot etc
~~1079077~~	~~Charge~~		~~05-06-91~~	~~Chadwill Coal Co. Ltd.~~	~~The Bank of Nova Scotia~~		~~1900000.00~~		~~Pt. lots 1,2,3 Being pt 1 on 58R-5595~~
Discharged by #1006405 A.D.L.R. 15-03-94									
~~1133130~~	~~DEBENTURE~~		~~19 08 92~~	~~CHADWILL COAL COMPANY LIMITED~~	~~978797 ONTARIO INC.~~		~~10,000,000.00~~		~~Pt. Lots 1,2 & 3, Plan 396, being Pt. 1 on 58-R-5595.~~
Discharged by #120384 A.D.L.R. 9402 21									
~~1137878~~	~~Charge~~		~~18 09 92~~	~~CHADWILL COAL COMPANY LIMITED~~	~~ROYAL BANK OF CANADA~~		~~1,500,000.00~~		~~Pt. lots 1,2 & 3 being pt. 1 on 58R-5595.~~
Discharged by #120384 A.D.L.R. 9402 21									
~~1138286~~	~~Postponement of Charge~~		~~23 09 92~~	~~978797 Ontario Inc.~~	Royal Bank of Canada				1133130 postponement of 1137878.
Discharged by #120384 A.D.L.R. 9402 21									

SHEET NO. ~~5~~ 1

LOT NO.

PLAN NO. 396

SHEET NO.

LOT NO.

PLAN NO. 1138286

CITY OF KITCHENER

DAY/MONTH/YEAR

NUMBER	INSTRUMENT	DATE OF INSTRUMENT	DATE OF REGISTRATION	GRANTOR	GRANTEE	AREA	CONSIDERATION	BOOK	REMARKS
~~1184605~~	~~Assignment of Rents~~		~~07 09 93~~	~~CHADWILL COAL COMPANY LIMITED~~ Discharged by #1206405 A.D.L.R. WP 15-08-94	~~THE BANK OF NOVA SCOTIA~~				~~Pt. Lots 1,2 & 3, Plan 396, being Pt. 1 on 58-R-5595. Re: Inst. # 1079077.~~
1203842	Transfer		21 02 94	CHADWILL COAL COMPANY LTD.	PREISENHAMMER INVESTMENTS INC.		2,000,000.00		Pt. Lots 1,2 & 3 Plan 396 being Pt. 1 on 58R-5595. Planning Act statements.

Abstract Index
Répertoire par lot

CITY OF KITCHENER **Lot** 1 **Plan/Concession** 396 Page 6

Ontario

Registration Number Numéro d'enregistrement	Instrument Type Type d'acte	Registration Date Date d'enregistrement YY AA | MM MM | DD JJ	Parties from Parties	Parties to Parties	Consideration Contrepartie	Land/Remarks Bien-fonds/Observations

Continued on/Suite à la page . . . . . .

SHEET NO. ①

LOT NO.

PLAN NO. D. S. Shoemaker's Survey

CITY OF KITCHENER

SHEET NO.

LOT NO. 2

PLAN NO. 396

S. R. HART & CO. LIMITED Northfield ONE COLOR SHEET NO N 5233

NUMBER	INSTRUMENT	DATE OF INSTRUMENT	DATE OF REGISTRATION	GRANTOR	GRANTEE	AREA	CONSIDERATION	BOOK	REMARKS
4968	Bt Sale	27 May 1881	13 June 1881	Merchants Bank of Canada	William Lackner			A11	Lot 2
4969	Mortgage	1 June 1881	13 June 1881	William Lackner etux	Merchants Bank of Canada		4000 00	A11	" — "
5962	Dis. Mort	4 April 1884	8 May 1884	Merchants Bank of Can	Wm. Lackner			A14	See A11 No 4969
5963	Bt Sale	30 Dec. 1891	8 May 1884	William Lackner etux	Hy. J. Lackner			"	Lot 2

CONT'D TO NEXT PAGE

BK

(2)

TOWN OF BERLIN.

PLAN 396

No. of Instrument.	Instrument.	Its Date.	Date of Registry.	Grantor.	Grantee.	Quantity of Land: Acres	Roods	Per	Consideration or Am't of Mortgage: $	cts.	Book.	Folio.	Remarks
27982	B Sale	30 April 1912	11th May 1912	Henry G. Lackner & wife	The Berlin Club Limited				5500	00	75	[illegible]	Lot No 2 aut.
36901	B Sale	7 June 1915	23rd June 1915	The Lancaster Club Ltd. formerly The Berlin Club Ltd.	Henry G. Lackner				1200	00	75	[illegible]	[illegible]

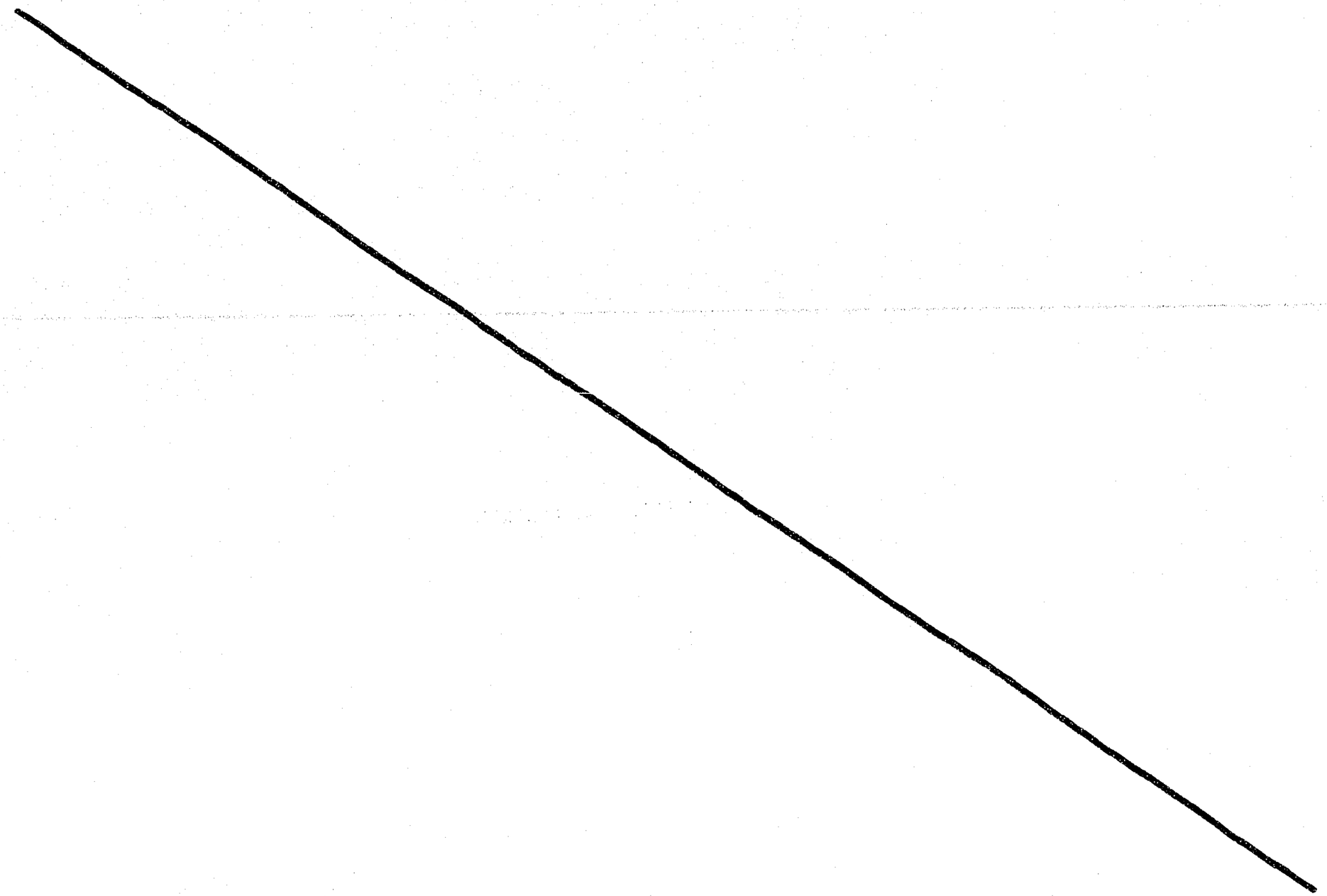
CONT'D TO NEXT PAGE

SHEET NO.
LOT NO. 2, D. S. SHOEMAKER'S SURVEY.
PLAN NO.

SHEET NO. 3
LOT NO. 2
CITY OF KITCHENER
PLAN NO. 396

NUMBER	INSTRUMENT	DATE OF INSTRUMENT	DATE OF REGISTRATION	GRANTOR	GRANTEE	AREA	CONSIDERATION		BOOK	REMARKS
61465	GRANT	28Sept.1928	23Oct.1928	HENRY M. & HELEN A. LACKNER MARY A. MUMFORD, EXRS. HENRY GEO. LACKNER	LANGLEY'S LIMITED		29000	00	A71	Lot et al.
~~61466~~	~~MORTGAGE~~	~~1 Oct.1928~~	~~23Oct.1928~~	~~LANGLEY'S LIMITED~~	~~HENRY M., HELEN A LACKNER, LACKNER MARY A. MUMFORD EXRS. HENRY G.~~	JL	24000	00	A71	Lot et al. ~~Not rec'd in full.~~
~~63840~~	~~D. OF M.~~	~~12Nov.1929~~	~~29Nov.1929~~	~~EXRS. OF HENRY G. LACKNER~~	~~LANGLEY'S LIMITED~~	JL			A72	~~See A71 No. 61466~~
70239	BY LAW	7 Aug.1934	13Aug.1934	BY LAW NO. 2431 RE: WIDENING OF DUKE STREET					A76	Pt. Lot et al.
70429	GRANT	[illegible] Aug.1934	9 Oct.1934	LANGLEY'S LIMITED	CORPN. OF CITY OF KITCHENER	.0590	1600	00	A77	Pt. Lot et al.
76107	BY LAW	8 Feb.1932	4 Mch.1939	CITY OF KITCHENER BY LAW NO. 2281-TO WIDEN DUKE ST.					A80	See By Law

CONT'D TO NEXT PAGE



SHEET NO. 4 cn

LOT NO. 2

PLAN NO. 396

SHEET NO.

LOT NO.

PLAN NO. 76107

CITY OF KITCHENER

DAY/MONTH/YEAR

S. A. HART & CO. LIMITED Northfield ONE COLOR SHEET NO. N 5233

NUMBER	INSTRUMENT	DATE OF INSTRUMENT	DATE OF REGISTRATION	GRANTOR	GRANTEE	AREA	CONSIDERATION	BOOK	REMARKS
89232	Grant	29 Dec. 1930	1 Dec. 1945	Langley's Limited (inc. 1920)	Langley's Limited (inc. 1929)		200	987	Lot etal.
89234	Grant	24 Nov. 1945	1 — 1945	Langley's Limited (inc. 1929)	Economical Mutual Fire Insce. Co		24,500 00	—	Except pt.
105056	Lease	15 — 1950	29 Nov. 1950	The Economical Mutual Fire Insce Co	The Bell Telephone Co of Can.			A94	
194220	Lease	21 Sept. 1959	4 Nov. 1959	The Economical Mutual Ins. Co.	The Bell Telephone Co. of Canada	yearly	22.208 00	A	Lot etc. except Pt.
—									Pts. Lots 1, 2 & 3. Re: Inst.
58-R-5595	R-PLAN		01 04 87					#	A-89234 & A-105677.
—									
898801	Grant		01 06 87	Economical Mutual Insurance Company	Chadwill Coal Company Limited		2,099,00	00	Pt. lot etc. See lot 1
~~898802~~	~~Mort~~		01 06 87	~~Chadwill Coal Company Limited~~	~~Economical Mutual Insurance Company~~		~~1,575,00~~	~~00~~	~~As in 898801~~
	Discharged by #1002395 A.D.L.R. WP 31-07-89								
898803	Deposit		01 06 87						Pt. Lot etc Sketch
898804	Deposit		01 06 87						Pt. Lot etc.
/	Discharged by #1206405 A.D.L.R. WP 15-03-94								
~~1079077~~	~~Charge~~		05 06 91	~~Chadwill Coal Co. Ltd.~~	~~The Bank of Nova Scotia~~		~~1900000.00~~		~~Pt. lot etc See lot 1~~
-									
~~1133130~~	~~DEBENTURE~~		19 08 92	~~CHADWILL COAL COMPANY LIMITED~~	~~978797 ONTARIO INC.~~		~~10,000,000.00~~		~~Pt. Lots 1,2 & 3, Plan 396, being Pt. 1 on 58-R-5595.~~
	Discharged by #1203840 A.D.L.R. RE940221								

~~1137878~~	~~Charge~~		18 09 92	~~CHADWILL COAL COMPANY LIMITED~~	~~ROYAL BANK OF CANADA~~		~~1,500,000.00~~		~~Pt. lots 1,2,3 on being pt. 1 on 58R-5595~~
	Discharged by #1203841 A.D.L.R. RE940221								

~~1138286~~	~~Postponement of Charge~~		23 09 92	~~978797 Ontario Inc.~~	~~Royal Bank of Canada~~				~~1133130 postponed to 1137878.~~
	Discharged by #1203840 A.D.L.R. RE940221								
---	Discharged by #1206405 A.D.L.R. WP 15-03-94								
~~1184605~~	~~Assignment of Rents~~		07 09 93	~~CHADWILL COAL COMPANY LIMITED~~	~~THE BANK OF NOVA SCOTIA~~				~~Pt. Lots 1,2 & 3, Plan 396, being Pt. 1 on 58-R-5595. Re. Inst. # 1079077.~~

SHEET NO. E 5

LOT NO. 2

PLAN NO. 396

SHEET NO.

LOT NO.

PLAN NO. 1184605

CITY OF KITCHENER

DAY/MONTH/YEAR

NUMBER	INSTRUMENT	DATE OF INSTRUMENT	DATE OF REGISTRATION	GRANTOR	GRANTEE	AREA	CONSIDERATION	BOOK	REMARKS
1203842	Transfer		21 02 94	CHADWILL COAL COMPANY LTD.	PREISENHAMMER INVESTMENTS INC.		2,000,000.00		Pt. Lot etc. See 1 Plan 396. Planning Act statements.
