SITE CONTEXT

The subject site is located on West 49th Avenue in the Langara Neighbourhood. Its proximity to Langara College and the Langara-49th Skytrain station makes it an ideal location for a mixed-use development. The proposal seeks to rezone 131 – 163 West 49th Avenue from RS-1 to CD-1 to permit the development of a new four-storey mixed-use building with two levels of underground parking.

The proposal follows the guidelines established by the Cambie Corridor Guidelines and contributes to the evolving neighbourhood with a mixture of thoughtfully planned residential units, office space, and retail shops at grade.

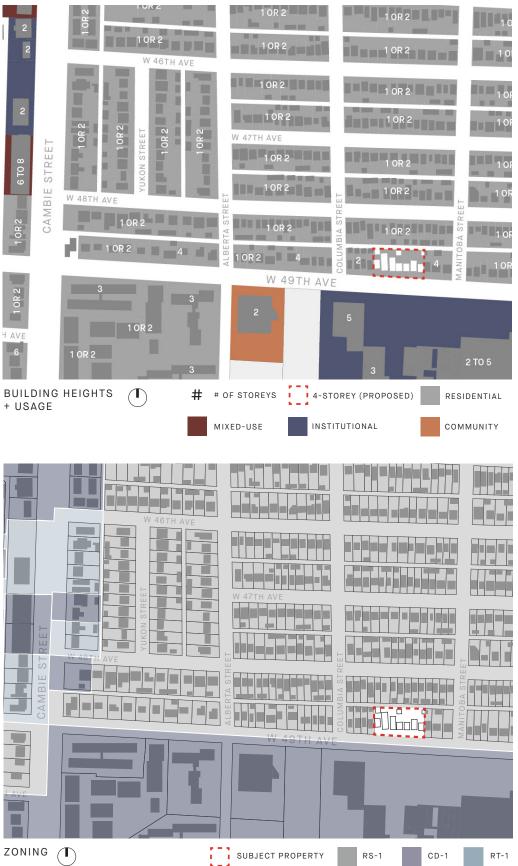
The site is very deep, and as a result, the proposed density is achieved by incorporating office space within two levels tucked into the first retail storey.

The incorporation of office spaces makes this a truly mixed-use building and provides employment opportunities that will serve

the Langara neighbourhood.

The building massing is broken down into a series of smaller, distinct volumes in order to emphasize a pedestrian scale. The site features large trees along its frontage and the southwestern side, and the building footprint has been designed to ensure that these mature trees can remain.





SITE ORGANIZATION PLAN

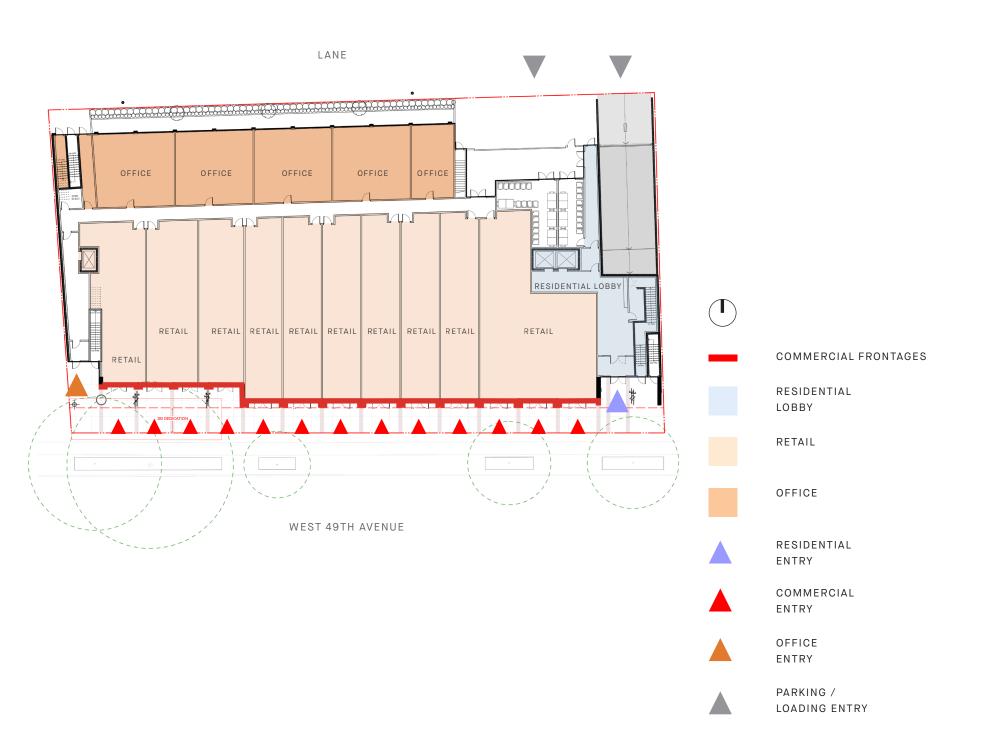
The proposed design is four storeys and is set back along West 49th Avenue in order to facilitate road widening and an enhanced pedestrian realm. Additional setbacks are provided at the southwest corner to ensure preservation of street trees, and at the southeast corner to provide space in front of the residential lobby. These corner setbacks help the building transition to the existing single-family homes.

Commercial space is proposed along the entire West 49th Ave frontage, with the western portion set back to accommodate the trees and provide variety along the streetscape. The southeastern residential entry lobby is emphasized by a prominent canopy In addition to the generous exterior space in front.

Two levels of offices face the rear lane with access from the commercial lobby fronting West 49th Avenue. These offices look out onto a planted strip that creates greenery and privacy along the lane.

All parking and loading access have been provided from the rear lane. Covered, stairfree access is provided from the loading area for garbage, recycling, and loading to all commercial units and to the residential lobby. Three Class B Loading spaces are provided with access from the lane. An indoor amenity space is located in the center of the building on level 2, adjacent to a communal outdoor amenity space. The indoor amenity space provides an accessible washroom and kitchenette, so that the room could be used for birthday parties or other small gatherings.

Access to bike parking is provided from the lane via the parkade ramp, and all bikes are located on level P1.



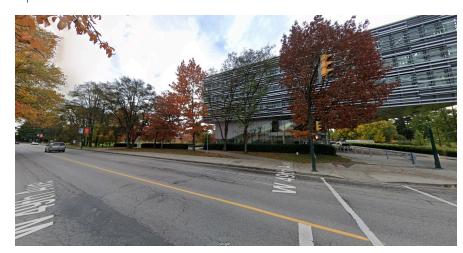
SITE PHOTOS



1 | WEST 49TH AVE - SOUTHWEST CORNER OF SITE



4 | LANEWAY - NORTHWEST CORNER OF SITE



7 | WEST 49TH AVE TOWARDS YMCA



2 | WEST 49TH AVE - SOUTHEAST CORNER OF SITE



5 | WEST 49TH AVE AND COLUMBIA STREET INTERSECTION



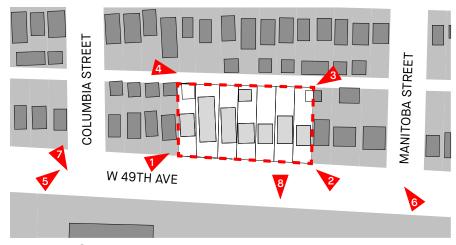
8 | WEST 49TH AVE TOWARDS SOUTH



3 | LANEWAY - NORTHEAST CORNER OF SITE

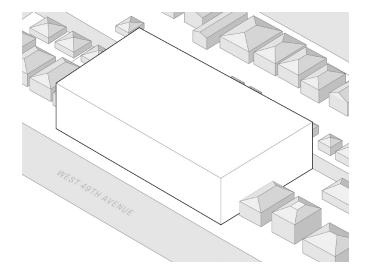


6 | WEST 49TH AVE AND MANITOBA STREET INTERSECTION

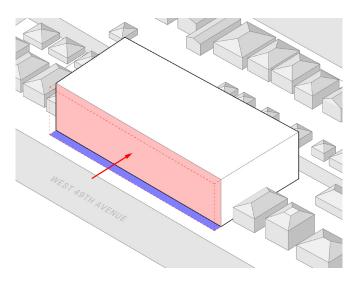


KEY PLAN (T)

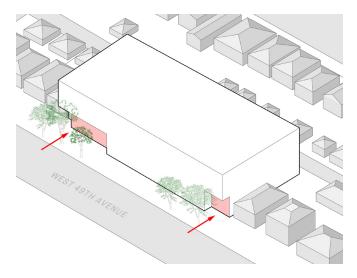
CONCEPT MASSING



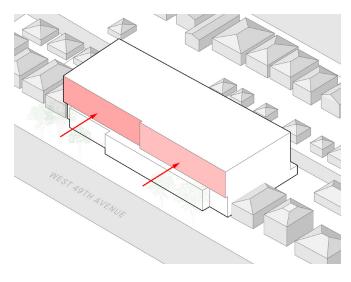
BASIC 4 STOREY VOLUME



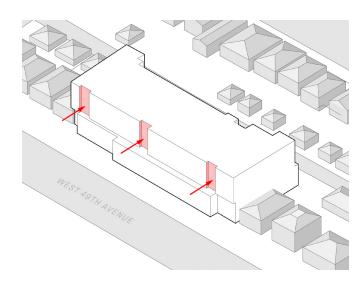
SETBACK TO ACCOMMODATE 3.0M DEDICATION FOR ROAD-WIDENING



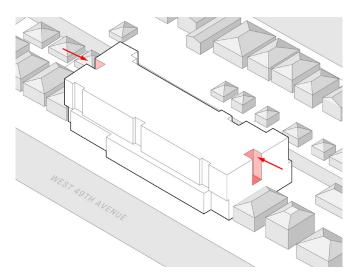
BUILDING PUSHED IN TO ACCOMODATE TREES AT SOUTHWEST AND SOUTHEAST RESIDENTIAL LOBBY



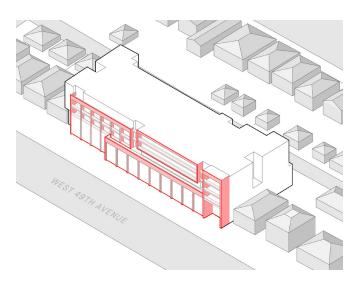
BUILDING PUSHED IN VARYING AMOUNTS ON UPPER LEVELS TO BREAK DOWN MASSING



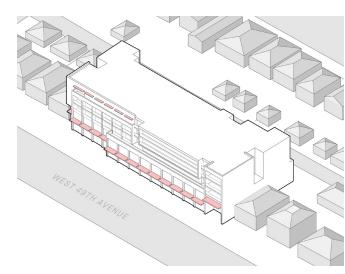
RECESSED BAYS TO DEFINE INDIVIDUAL VOLUMES



RECESSED AREAS PROVIDE NATURAL LIGHT TO EAST WEST UNIT SECONDARY BEDROOMS, AND CREATE RELIEF WITHIN THE LOT-LINE WALLS

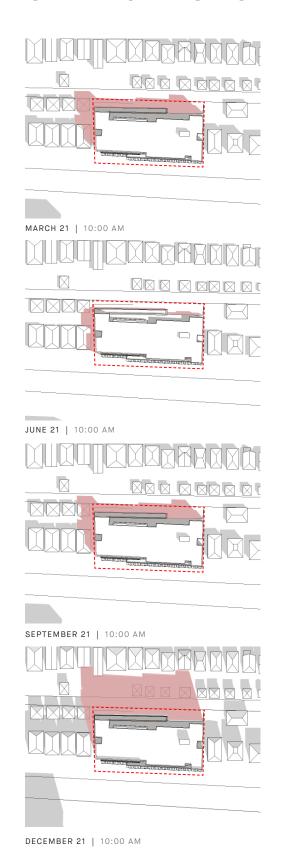


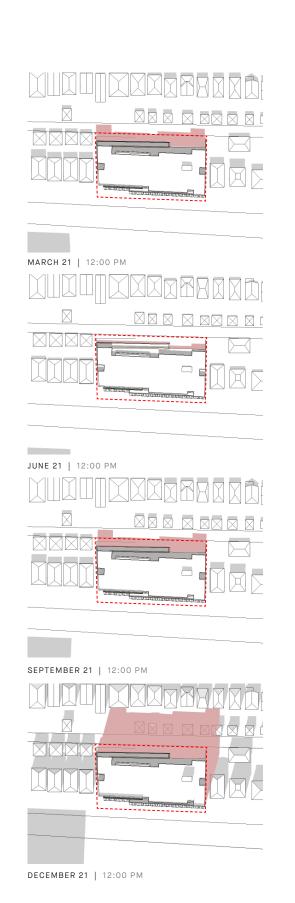
BALCONIES AND PIERS EMPHASIZE INDIVIDUAL MASSING ELEMENTS AND CREATE A RHYTHM ALONG THE STREETSCAPE

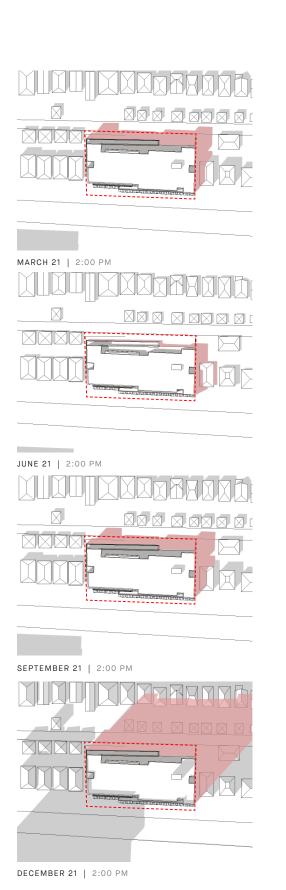


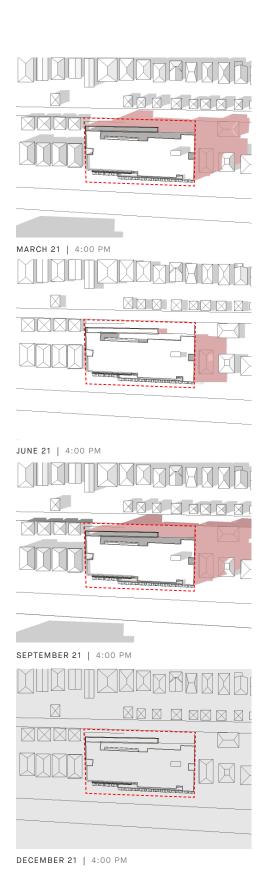
CANOPIES PROVIDED FOR CONTINUOUS WEATHER PROTECTION

SHADOW STUDY











MATERIAL PALETTE

The proposed massing along West 49th Ave is comprised of four components. Along the west, a three story element is characterized by a series of piers that connect the ground level retail with the residential balconies above. Along the central portion of the frontage, over-height retail space is delineated by a simple volume with brick piers defining the glazed storefronts of individual shops. Above the central retail volume, a cantilevered balcony element gathers balconies on levels 3 and 4, and separates this volume from the retail base below. At the eastern edge of the site, the residential lobby is marked by a four-storey framed element that incorporates residential balconies above.

Brick cladding is proposed for the brick and pier elements, and metal panel cladding is proposed for secondary elements. By providing different massing components characterized by differing widths and heights, the building is broken down into distinct but related components, reducing the overall scale of the building and creating a more varied streetscape. Glass balconies provide reflection and a material contrast to the brick and metal cladding. A continuous steel and glass canopy provides weather protection along the frontage, and opportunities for retail signage to be prominently hung below the canopy edge.

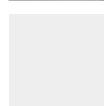




WARM COLOURED BRICK WITH TEXTURAL VARIATIONS



GUARDRAILS



METAL PANELS



WINDOWS
VINYL WINDOWS - CHARCOAL



LOUVERS
CHARCOAL HORIZONTAL METAL
LOUVERS



CANOPY
CHARCOAL METAL FRAME AND
EDGE



STOREFRONT WINDOWS CHARCOAL

SUSTAINABILTY MEASURES

Subject: SUSTAINABLE DESIGN STRATEGY – REZONING

BC Building Science (BCBS) has been retained as the Building Envelope, Energy, and Commissioning Consultant for this project. On behalf of the Client, Alabaster Homes, we are providing a strategy for consideration in meeting the requirements of the City of Vancouver Green Building Policy for Rezoning (CoV-GRPR)

The following summarizes the proposed Sustainable Design Strategy (SDS) that includes project-specific approaches confirming how the design intends on meeting each requirement of the CoV-GBPR – Low Emissions Green Buildings – Sections B.1.1 to B.1.11:

B.1.1 LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN (LEED)

This requirement is not applicable to the project with 50+% residential occupancy proportion.

B.1.2 PERFORMANCE LIMITS

The BCBS Energy Team has prepared a preliminary Zero Emissions Building Plan (ZEBP) energy checklist and a summary of detailed energy model inputs. These are attached to the Rezoning Application.

The following are the preliminary strategies implemented into the design to comply with the applicable energy targets of the CoV-GBPR:

- Connection of the building to a Low Carbon Energy System (LCES) in accordance with the City of Vancouver LCES Policy (type 3, user-owned, on-site LCES system).
- Optimized window-to-wall ratio (~35%) with major emphasis on the south elevation creating balance between daylight usage, advantageous winter solar gain, disadvantageous summer solar gain, and conductive / radiative heat exchanges.
- Enhanced solar shading and mitigated overheating from extensive balconies and shades around the building.
- High efficiency envelope with enhanced thermal insulation.
- High efficiency heat recovery ventilators for suites, commercial, office, and amenity areas.
- Significant reduction of Greenhouse Gas Emissions from the LCES equipped with high efficiency air source heat pumps for space and service water heating.

Note that these strategies may adjust as the project progresses, depending upon the detailed design of architectural, envelope, mechanical, and electrical systems in the building. Inputs to the energy model were provided by the Design Team including thermal bridging calculations by BCBS Envelope Team.

The Design Team will manage the energy parameters and correspond with BCBS for alignment with the energy model inputs throughout the next phases of the project. Planned energy model milestones include updates at full building permit and at occupancy permit.

The BCBS Energy Team will assist the Client in setting up an EnergyStar Portfolio Manager account, collect the annual energy benchmarking data, and report to the City for a period of at least three years after occupancy.

B.1.6 CALCULATING REFRIGERANT AND EMBODIED EMISSIONS

B.1.6.1. Refrigerant Emission

The BCBS Energy Team will perform calculations and report the life-cycle equivalent annual carbon dioxide emissions of the building from the refrigerants. BCBS will acquire the type and capacity of refrigerants in all the installed cooling and heating equipment containing refrigerants in the building in collaboration with the mechanical consultant and will perform and document the related calculations. Planned refrigerant emissions milestones include calculation at full building permit and update at occupancy permit.

B.1.6.2. Embodied Emission

The BCBS Energy Team calculates and reports embodied emissions from all envelope and structural elements using the Canadian-based Athena Impact Estimator as a whole-building life-cycle assessment software tool.

The preliminary embodied emissions calculation summary is included in the Rezoning Application. The preliminary results will be updated by BCBS at later stages of the design using the completed architectural and structural designs. Planned embodied emissions milestones include updates at full building permit and at occurancy permit

B.1.7 VERIFIED DIRECT VENTILATION

The BCBS Energy Team will complete enhanced commissioning of the building ventilation system through the design and construction phases with respect to direct ventilation based on VBBL and ASHRAE 62 standard.

BCBS will work with the mechanical consultant, perform design reviews of the ventilation system during design and construction phases, verify the direct ventilation rates during and at the end of the construction based on the testing, adjusting, and balancing performed by a qualified contractor, and include the documents in the final commissioning report.

B.1.8 LOW-EMITTING MATERIALS

The Client will coordinate with all consultants to ensure that all requirements for low-emitting materials are met. Design and construction of the building with acceptable low-emitting materials is within the scope of most consultants in the project. The Client will ensure that urea-formaldehyde resins are not used at all, and the emissions from interior materials containing volatile organic compounds (VOCs) or added urea-formaldehyde are minimized by meeting the content requirements of Green Seal, Green Label, Green Label Plus, FloorScore, or South Coast Air Quality Management District (SCAQMD) Rules.

B.1.3 AIRTIGHTNESS TESTING

The BCBS Envelope Team will perform air barrier commissioning including all testing through the design and construction phases to help ensure successful testing at occupancy. The intent is to achieve an air leakage target of 2.0 L/S/m² at 75 Pa for the whole building as well as achieve 1.2 L/S/m² at 75 Pa for the whole building as well as achieve 1.2 L/S/m² at 75 Pa for the whole building as well as achieve 1.2 L/S/m² at 75 Pa for the whole building as well as achieve 1.0 L/S/m² at 75 Pa for the whole surface.

The commissioning of the air barrier through the design phase will include design review of architectural drawings and specifications to help ensure continuity of the air control layers. During construction, on-site field reviews specific to air barrier installation are planned. Further, sample suites are planned to be pretested for airtightness during the construction phase. At occupancy, the whole building and a select number of suites will be tested to the applicable standard (ASTM E779) by BCBS for alignment with the intended targets.

B.1.4 ENHANCED COMMISSIONING

The BCBS Energy Team will complete enhanced commissioning for all energy systems in the buildings in accordance with ASHRAE Guideline 0-2005 and ASHRAE Guideline 1.1-2007. BCBS will assist the Owner in preparation of the Owner's Project Requirements (OPR), and coordinate and review Basis of Design (BOD) developed by the architect, mechanical, and electrical consultants with respect to the sustainable energy design and all applicable green building requirements.

BCBS has been involved since the early stage design phase of the project, taking the lead on the energy efficiency design development. BCBS will develop the project commissioning plan in collaboration with the Client, architect, mechanical, and electrical design teams.

BCBS will develop commissioning reports throughout the project based on the commissioning plan and by performing 1) design reviews of energy systems during design and construction phases with respect to energy efficiency, 2) field verification of energy systems during construction, 3) energy efficiency test verification and documentation during and at the end of construction, and 4) reviewing the training record / documents and operation and maintenance manuals prepared by the corresponding consultants and contractors.

B.1.5 ENERGY SYSTEM SUB-METERING AND REPORTING

B.1.5.1 Energy System Sub-metering

The BCBS Energy Team will coordinate with the architect, mechanical, and electrical consultants to ensure master meters are designed and installed for each energy utility and each building usage, and sub-meters are installed for all major energy end-uses and major space uses within each building to provide the basic tools for energy audit and benchmarking.

B.1.5.2 Energy Reporting

B.1.9 INDOOR AIR QUALITY TESTING

The Client will ensure a qualified contractor is retained to perform indoor air quality testing regarding concentrations of formaldehyde, particulates, ozone, total volatile organic compounds, and carbon monoxide prior to occupancy, and report the results to the City as compared to acceptable target concentration levels and standards listed in the CoV-GBPR.

B.1.10 INTEGRATED RAINWATER MANAGEMENT AND GREEN INFRASTRUCTURE

The applicable members of the design team will implement the Integrated Rainwater Management and Green Infrastructure and ensure that the appropriate treatment and safe conveyance of rainwater are considered in the site design and all related measures are aligned with the City-Wide Integrated Rainwater Management Plan (IRMP) requirements. A preliminary Integrated Rainwater Management plan (IRMP) is included in the Rezoning Application.

B.1.11 RESILIENT DRINKING WATER ACCESS

The Client will coordinate with the architect and mechanical consultants to ensure that at least one drinking water fixture capable of operating on city water pressure with no electricity requirement is provided and easily accessible for occupants in the building.

CLOSING

We are submitting this letter on behalf of the Client, Alabaster Homes, for the above noted project.

Fulfilment of all the commitments in this letter are deemed within the ultimate control and responsibility of the Client throughout the design, construction, and post-occupancy phases of the project. A letter of commitment by the Client is attached in support of the Rezoning Application.

Should you require any additional information, please contact our office.

Respectfully Submitted, BC Building Science

P.Eng., Ph.D., EA, CBCP

Prepared b



Zero Zero	Emissions	Building Plar	Energy Ch	ecklist			
VANCOUVER Large Build	lings (Resider	ntial >3 Storey	s, Mixed-Use	, Commercial)			
Please complete all fields that apply to the project, using information yet, please enter "N/A". Refer to the lat	information that	t represents the	current stage o	f design. For fields that do not	t apply or for	which there	is no
illionnation yet, please enter TWA . Neler to the late		ormation (enter		pplementary bulletin) at vand	J00V61.C8/20	iroemission.	2
Project Address							
Secondary Address			ancouver				
Project Working Title Gross Floor Area indicated on Arch. Drawings (m²)	Mixed-Use Buil 7,524	ding					
Parkade Area (m²)	5,192						
	Building Infor	mation and Per		its			
For building types with Performance Limits, enter this			Rezoning or VBBL only?	City-Recognized Low		Limits	
Building Type(s) Residential <7 storeys (Group C except Hotel)	Modelled Floor 5.103	Area (m²)	Rezoning	Carbon Energy System? Yes	TEUI 110	TEDI 25	GHGI 5
Retail (Group D & E except Office)	1,276		Rezoning	Yes	170	21	3
Office Total	1,180 7,559		Rezoning TEDI limit	Yes for this portion of building	110	27 24.6	3
For other building types, create a baseline energy model		ts. and enter this					
Building Type	Modelled Floor		Rezoning?				
Enter Other Building Type Baseline Model Performance	Energy (kWh)	Em Footos	Emissions (kg	0000)	TEUI	TEDI	GHGI
Total Annual Electricity Use		0.011		Baseline:	0	0	0
Total Annual Natural Gas Use		0.185	-	Target:	0	0	0
Total Annual District Energy Use Total	-	0.070					
Total Annual Heat Demand - for TEDI							
Tabel Mandallad Floor Assa (co?)	7.550		William B.	ulden Brodennen i Inda	TEUI	TEDI	GHGI
Total Modelled Floor Area (m²) Modelled Floor Area within 5% of Gross Floor Area?	7,559 Yes		Whole-Br	illding Performance Limits	120.1	24.6	4.4
	Modelle	ed Building Per	formance				
	Energy (kWh)			Emissions (kgCO2e)	TEUI		GHGI
Interior Lighting Exterior Lighting	269,557 4,253	Electricity Electricity	0.011 0.011	2965.1281 46.7775	35.7 0.6		0.4 0.0
Heating	137,649	Electricity	0.011	1514.1335	18.2		0.2
Cooling Pumps	52,174 1,454	Electricity Electricity	0.011 0.011	573.9173 15.9885	6.9 0.2		0.1
Fans	91,524	Electricity	0.011	1006.7629	12.1		0.1
Domestic Hot Water Plug Loads		Electricity Electricity	0.011	962.4505 1776.1733	11.6 21.4		0.1
Plug Loads	101,470	Liectricity	0.011	1.70.1733	21.4		0.2
Enter other end use here							
Enter other end use here							
Total Annual Electricity Use	805,576	0.011	8,861				
Total Annual Natural Gas Use Total Annual District Energy Use		0.185					
Total			8,861				
Total Electricity Generated On-Site (kWh)	-	% of Use					
Total Purchased Renewable Electricity (kWh) Total Purchased Renewable Natural Gas (kWh)		% of Use % of Use	0.0%				
Note: purchaes renewables used to demonstrate	compliance mus	st be secured to		AHJ			
Adjusted Electricity Emissions Factor (kgCO2e/kWh) Adjusted Natural Gas Emissions Factor (kgCO2e/kWh)	0.011 0.185						
Annual Heat Demand of portions with Perf. Limits (kWh) Total Annual Heat Demand - for TEDI (kWh)	215,468 215,468					28.5	
Total Annual Cooling Demand - for info only (kWh)		18.4	kWh/m²				
			Modelled Wi	nole-Building Performance	TEUI 106.6	TEDI 28.5	GHGI 1.2
Corridor Pressurization Heating Degree Days							
Number of Suite Doors Pressurized	68						
Airflow for Pressurization per Door (L/s/door)							
Area of Corridors Pressurized (m²) Make-Up Air Fuel Type	Electricity				TEUI	TEDI	GHGI
Make-Up Air Emissions Factor Suite-level Metering for Space Heating	0.011	A el	Adjustment	s for Corridor Pressurization uite Submetering of Heating	5.7	5.7	0.1
Note: select yes if the energy				dute Submetering of Heating	2.1		
				see of Dortions with Limits		22.0	
				nce of Portions with Limits rformance for Compliance	103.6	22.8 22.8	1.1
Does this building have full mechanical cooling?		(if yes, this sect					
Does this building house vulnerable populations?	100			mit is 20hrs rather than 200hr	s)		
If yes, please describe							
		Overheated	Peak				
	Critical Zone #1	Hours	Temp.(°C)				
	Critical Zone #2						
	Critical Zone #3 Critical Zone #4						
	Critical Zone #5						
		Modelled Input	ts				
Modelled Above-Ground Wall Area (m²)				Vertical facade-to-Flo			0.52
Window-to-Wall Area Ratio (WWR)				Wind	ow-to-Floor	Area Ratio	0.18
Infiltration Rate (L/s/m² _{fac})			(621-0F-0-	A.,	D	- 0414 015	
Wall Effective R-Value - incl. thermal bridging (m²K/W) Roof Effective R-Value - incl. thermal bridging (m²K/W)	1.5		(ft°hr°F/Btu) (ft°hr°F/Btu)	Average Floor Ed Avg. Window Transiti	ion Psi-Valu	e (W/m°K)	0.17 0.12
Average Window Effective U-Value (W/m²°K)	1.70	0.30	(Btu/ft²hr°F)	Window Solar	r Heat Gain	Coefficient	0.32
Average Suite Occupant Density (m²/pers) Average Suite Ventilation Rate (L/s/m²)	24.2			D. III	Average Ligh Low-Flow Si	nting W/m²	7.4 0
Average Suite Ventilation Rate (DS/m²) Average HRV Effectiveness	81%			DHW Drain Heat R			0%
Heating System Type (fuel, plant, distribution, etc.)	Air Source Hea	t Pump System					
Cooling System Type (fuel, plant, distribution, etc.) DHW System Type (fuel, plant, distribution, etc.)	Air Source Hea	t Pump Water H	eater				
Solar Shading Strategies (type, location, operation, etc.)	Distributed Bald	onies and Shad	es at Each Floo	or			
		odeller Informa	tion				
Modeller Name	Farshid Bagher	ri, P.Eng	heen created in	sing the COV Energy Modellii	na Guideline	s version:	2
Company	BC Building Sc	ience Ltd.	ureated u	OO . Energy modelli	Guidenille	10/3/0//.	2
	604 520 6456 I	Ext 133 dingscience.com					
Email	iaisiiiu@DCDUII	umgacænce.com			ZEBP Energy	Checklist v1.7	- 2019-08-10

AERIAL PERSPECTIVES



SOUTHEAST







NORTHEAST

RENDERING



PROPOSED BUILDING | WEST 49TH AVENUE

STATISTICS:

CIVIC ADDRESS: 131 - 163 WEST 49TH AVENUE, VANCOUVER, BC

LEGAL DESCRIPTION: LOTS 15-20 AND LOT A, BLOCK 1163 & 1000, DISTRICT LOT 526 NWD, PLAN 4757 & 21840

ZONING: REZONING - CD-1

TOTAL SITE AREA: 2,867.8 SQ.M. = (30,869.0 SQ.FT.) (0.709 ACRES)

BUILDING HEIGHT EXISTING ZONING / ALLOWABLE PROPOSED

5 STOREYS (58.82')

(17.93 M)

 SETBACKS
 PROVIDED

 WEST 49TH AVE
 3.0 M

 WEST
 0.0 M

 LANE
 0.6 M

 EAST
 0.0 M

FLOOR SPACE RATIO EXISTING ZONING / ALLOWABLE PROPOSED

4.7.1(a) - FSR 77,172.0 SQ.FT.

	2.50 FSR	

PROPOSED FLOOR AREA:		NET AREA:			GROSS AREA:
1ST FLOOR COM.	1,223.9 SQ.M.	(13,174.	SQ.FT.) +	31.0 SQ.FT. (WALL EXCLUSION)	13,205.0 SQ.FT.
1ST FLOOR OFFICE	581.8 SQ.M.	(6,263.	SQ.FT.) +	26.0 SQ.FT. (WALL EXCLUSION)	6,289.0 SQ.FT.
1ST FLOOR RES.	148.6 SQ.M.	(1,599.	SQ.FT.) +	7.0 SQ.FT. (WALL EXCLUSION)	1,606.0 SQ.FT.
MEZZANINE FLOOR OFFICE	647.9 SQ.M.	(6,974.	SQ.FT.) +	24.0 SQ.FT. (WALL EXCLUSION)	6,998.0 SQ.FT.
MEZZANINE FLOOR RES.	68.9 SQ.M.	(742.	SQ.FT.) +	0.0 SQ.FT. (WALL EXCLUSION)	742.0 SQ.FT.
2ND FLOOR :	1,442.1 SQ.M.	(15,523.	SQ.FT.) +	775.0 SQ.FT. (STORAGE)	17,331.0 SQ.FT.
				50.0 SQ.FT. (RESTAURANT SHA	FT EXCLUSION)
				115.0 SQ.FT. (WALL EXCLUSION)	
				868.0 SQ.FT. (AMENITY)	
3RD FLOOR:	1,520.2 SQ.M.	(16,363.	SQ.FT.) +	815.0 SQ.FT. (STORAGE)	17,346.0 SQ.FT.
				118.0 SQ.FT. (WALL EXCLUSION)	
				50.0 SQ.FT. (RESTAURANT SHA	FT EXCLUSION)
4TH FLOOR :	1,518.6 SQ.M.	(16,346.	SQ.FT.) +	815.0 SQ.FT. (STORAGE)	17,304.0 SQ.FT.
				93.0 SQ.FT. (WALL EXCLUSION)	
				50.0 SQ.FT. (RESTAURANT SHA	FT EXCLUSION)
ROOF FLOOR:	17.5 SQ.M.	(188.	SQ.FT.) +		238.0 SQ.FT.
				50.0 SQ.FT. (RESTAURANT SHA	FT EXCLUSION)
TOTAL:	7,169.5 SQ.M.	(77,172.0	SQ.FT.)+	3,887.0 SQ.FT.	81,059.0 SQ.FT.
				6 UNITS WITHOUT STORAG	SE .
GFA:	7,530.6 SQ.M.	(81,059.	SQ.FT.)	* INCLUDING 868 SF AMENITY	
LEASABLE RESIDENTIAL:	4,211.2 SQ.M.	(45,329.	SQ.FT.)	84.09%	
LEASABLE COMMERCIAL:	2,117.8 SQ.M.	(22,796.	SQ.FT.)	86.05%	
APARTMENT UNIT BREAKDOWN:			ACTUAL	AVERAGE:	
	IDIO LINITE	#DIV 01	OFLINITS	422 SO FT	

APARTMENT UNIT BREAKDOWN:	ACTUAL	AVERAGE:
42 STUDIO UNITS	#DIV 0! OF UNITS	433 SQ.FT.
0 ONE BEDROOM UNITS	#DIV 0! OF UNITS	0 SQ.FT.
17 TWO BEDROOM UNITS	#DIV 0! OF UNITS	766 SQ.FT.
9 THREE BEDROOM UNITS	#DIV 0! OF UNITS	908 SQ.FT.

68 UNITS TOTAL

THE AVERAGE AREAS STATED ABOVE ARE CALCULATED BASED ON COV REQUIREMENTS AND DO NOT INCLUDE EXCLUDABLE INTERIOR STORAGE

131-163 W 49TH AVE : FLOOR AREA SUMMARY

NAME	GROUND FLOOR	MEZZANINE	2ND FLOOR	3RD FLOOR	4TH FLOOR	ROOF FLOOR	TOTAL
Commercial Area sq ft	13,205.0 sq ft	0.0 sq ft	0.0 sq ft	0.0 sq ft	0.0 sq ft	0.0 sq ft	13,205.0 sq ft
Office Area sq ft	6,289.0 sq ft	6998.0 sq ft	0.0 sq ft	0.0 sq ft	0.0 sq ft	0.0 sq ft	13,287.0 sq ft
Residential Area	1,606.0 sq ft	742.0 sq ft	17,331.0 sq ft	17,346.0 sq ft	17,304.0 sq ft	238.0 sq ft	54,567.0 sq ft
Amenity area exclusion	0.0 sq ft	0.0 sq ft	868.0 sq ft	0.0 sq ft	0.0 sq ft	0.0 sq ft	868.0 sq ft
Storage area exclusion	0.0 sq ft	0.0 sq ft	775.0 sq ft	815.0 sq ft	815.0 sq ft	0.0 sq ft	2,405.0 sq ft
Shaft exclusion	0.0 sq ft	0.0 sq ft	50.0 sq ft	50.0 sq ft	50.0 sq ft	50.0 sq ft	200.0 sq ft
Wall Exclusion RES.	7.0 sq ft	0.0 sq ft	115.0 sq ft	118.0 sq ft	93.0 sq ft	0.0 sq ft	333.0 sq ft
Wall Exclusion COM.	57.0 sq ft	24.0 sq ft	0.0 sq ft	0.0 sq ft	0.0 sq ft	0.0 sq ft	81.0 sq ft
Net area	21,036.0 sq ft	7,716.0 sq ft	15,523.0 sq ft	16,363.0 sq ft	16,346.0 sq ft	188.0 sq ft	77,172.0 sq ft
Balcony area exclusion			179.0 sq ft	1,968.0 sq ft	1,936.0 sq ft	0.0 sq ft	4 083 0 sq ft

VEHICLE PARKING:

PESIDENTIAL	PARKING BYI	AM/A	21	12

5069 SQ. M		506	9 SQ.M	
RESIDENTIAL STALLS REQUIRED (MINIMUM)		300	3 5Q.W	
0.5 SPACE PER UNIT <50 SQ.M. GFA	RESIDENTIAL SPACES	=	21 SPACES	
0.6 SPACE PER UNIT >50 SQ.M. GFA		-	16 SPACES	
1 SPACE FOR EACH 200 SQ.M. OF GFA		-	25 SPACES	
	TOTAL RESIDENT PARKING:		62 SPACES	
.05 SPACES PER UNIT	VISITOR SPACES	+	3 SPACES	
	TOTAL RESIDENT + VISITOR PARKING :	=	65 SPACES	(MINIMUM)
2461 SQ.M.				
OFFICE/RETAIL STALLS REQUIRED				
OFFICE/RETAIL AS PER 4.2.5.1: 3 SPACES FOR 1ST 30	0 :1 SPACE / 50 SM ADDITIONAL	=	46 SPACES	
	TOTAL RETAIL REQUIRED :		46 SPACES	
ACCESSIBLE STALLS REQUIRED				
	+ 0.034 SPACES / EACH ADDITIONAL UNIT:	=	3 SPACES	
COMMERCIAL AS PER 4.8.4(b):	1 + 0.4 SPACES/1000 SM:	=	2 SPACES	
	TOTAL ACCESSIBLE REQUIRED :		5 SPACES	
	TOTAL PARKING (MINIMUM):	=	111 SPACES	
RESIDENT. SMALL PARK'G SPACES ALLOWED AS PER 4.1.		=		F TOTAL (MAXIMUM)
COMM. SMALL PARK'G SPACES ALLOWED AS PER 4.1.8:	25% OF TOTAL COMM. PROVIDED:	=	12 SPACES OF	F TOTAL (MAXIMUM)
MINI ELECTRIC VELHOLE CHAROINO CTALLO	4000/ OF PROVIDED CRACES	=	400 004050 0	TOTAL (MAINIMALIMA)
MIN. ELECTRIC VEHICLE CHARGING STALLS	100% OF PROVIDED SPACES	=	136 SPACES OF	F TOTAL (MINIMUM)
PASSENGER SPACES REQUIRED				
RESIDENTIAL AS PER 7.2.1: 1 FOR FIRST 50 - 125 UN	ITS		1 SPACE	
REGIDENTIAL FOT EICH. 2.1. TOTAL INC. 100 120 010			TOTAGE	
PARKING PROVIDED				
RESIDENTIAL STALLS			84 SPACES	
VISITOR STALLS			3 SPACES	
COMMERCIAL STALLS			49 SPACES	
OOMMER OF THE O	TOTAL PARKING PROVIDED:		136 SPACES	
	TO THE TANK MINOT HOVED BY		100 0171020	
RESIDENTIA	AL SMALL PARKING SPACES PROVIDED:	=	17 SPACES	20 % OF ALLOWED
	AL SMALL PARKING SPACES PROVIDED:	=	11 SPACES	22 % OF ALLOWED
	ELECTRIC VEHICLE SPACES PROVIDED:	=	136 SPACES	100 % OF SPACES
RESIDENTIAL RESIDE	AL ACCESSIBLE SPACES PROVIDED:	=	3 SPACES	
COMMERICA	AL ACCESSIBLE SPACES PROVIDED:	=	2 SPACES	
PASSENGER SPACES PROVIDED				
			1 SPACE	

68 UNITS

LOADING:

			REQUIRED	PROVIDED	
DWELLING USE					
CLASS A AS PER 5.2.1:	NO REQUIREMENT	=	0 SPACES	0 SPACES	
CLASS B AS PER 5.2.1:	NONE FOR LESS THAN 100 UNITS	=	0 SPACES	0 SPACES	
CLASS C AS PER 5.2.1:	NO REQUIREMENT	=	0 SPACES	0 SPACES	
	TOTAL:		0 SPACES	0 SPACES	
1231 SQ.M.					
COMMERCIAL (RETAIL)					
CLASS A AS PER 5.2.5:	NO REQUIREMENT	=	0 SPACES	0 SPACES	
CLASS B AS PER 5.2.5:	1 SPACE FOR FIRST 465 SQ.M.	=	2 SPACES	3 SPACES	
	+ 1 SPACE FOR PORTION OF NEXT 1,8	60 SQ.M.			
CLASS C AS PER 5.2.5:	1 SPACE FOR 2,000 - 5,000 SQ.M.	=	0 SPACES	0 SPACES	
	TOTAL:		2 SPACES	3 SPACES	

BICYCLE PARKING:

			REQUIR	RED	PROVIDED
RESIDENTIAL					
CLASS A AS PER 6.2.1.2	1.5 SPACES PER UNIT < 700 SF		=	63 SPACES	
	2.5 SPACES PER UNIT > 700 SF < 1130 SF			65 SPACES	
	3 SPACES PER UNIT > 1130 SF			0 SPACES	
				128 SPACES	
	BIKE SPACE IN STORAGE LOCKER (HORIZ.) (MIN	10%)	=	13 OF TOTAL	16 SPACES
	HORIZONTAL SPACES IN BIKE ROOMS	.0,0,	=	.000	62 SPACES
	(TOTAL HORIZONTAL SPACES)		=		78 SPACES
CLASS A AS PER 6.3.13	STACKED SPACES (UP TO 60% OF TOTAL)		=	77	60 SPACES
02/1007/7/07/27/0/0/70	OVERSIZED SPACES (MIN 5%)		=	6	7 SPACES
	VERTICAL SPACES IN BIKE ROOMS (MAX 30%)		=	38 OF TOTAL	
	TOTAL:		=		145 SPACES
	TOTAL W/ ELECTRICAL OUTLET (50%)		=	73 OF TOTAL	
	(,				
CLASS B AS PER 6.2.1.2	O FOR ACT OO LINITO A REP ARRITONIAL CO		=	5 SPACES	5 SPACES
CLASS B AS PER 6.2.1.2	2 FOR 1ST 20 UNITS, 1 PER ADDITIONAL 20		-	3 SPACES	(BIKE RACKS AT GRADE)
					(BIKE RACKS AT GRADE)
RETAIL/OFFICE					
CLASS A AS PER 6.2.5.1:	1 SPACE PER 340 SQ.M.		=	4 SPACES	4 SPACES
CLASS A AS PER 6.2.4.1:	1 SPACE PER 170 SQ.M.		=	7 SPACES	7 SPACES
CLASS B AS PER 6.2.5.1:	6 SPACES PER DEVELOPMENT		=	6 SPACES	6 SPACES
02/100 2 / 10 / 2/1 0:2:0:1:	0 0171020 1 211 B2 12201 INEI11			0 0.7.020	(BIKE RACKS AT GRADE)
END OF TRIP FACILITIES					
TABLE 6.5A PER 6.5.4	REQ'D # CLASS A MIN. NUMBER OF FIXT				
OFFICE AND RETAIL AND	BICYCLE SPACES WATER CLOSETS	WASH	H BASINS		IOWERS
SERVICES:	0-10	0		0	
		1			

o –	DATE —	ISSUE -				
Repr This the a	Copyright. All rights reserved. Reproduction in whole or in part is prohibited. This drawing as an instrument of service is the property of the architect and may not be used in any way without the written permission of this office.					
	YAMAMOTO ARCHITECTURE					
-						
Van	2 - 33 East 8th couver, BC V5 604 731 1127					
PRO.	JECT —					
MD	KED - USE DE	EVELOPMENT				
-						

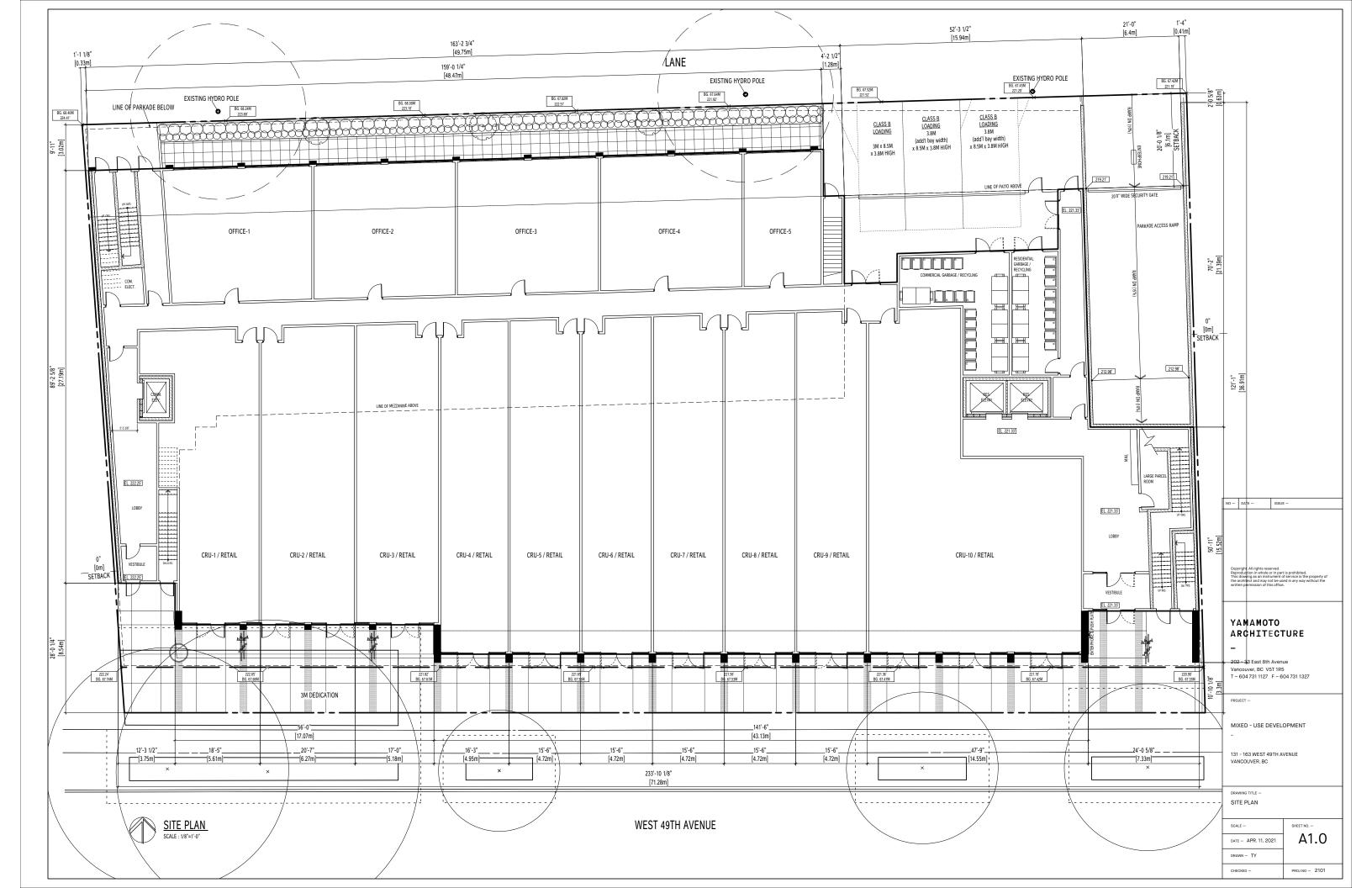
131 - 163 WEST 49TH AVENUE VANCOUVER, BC

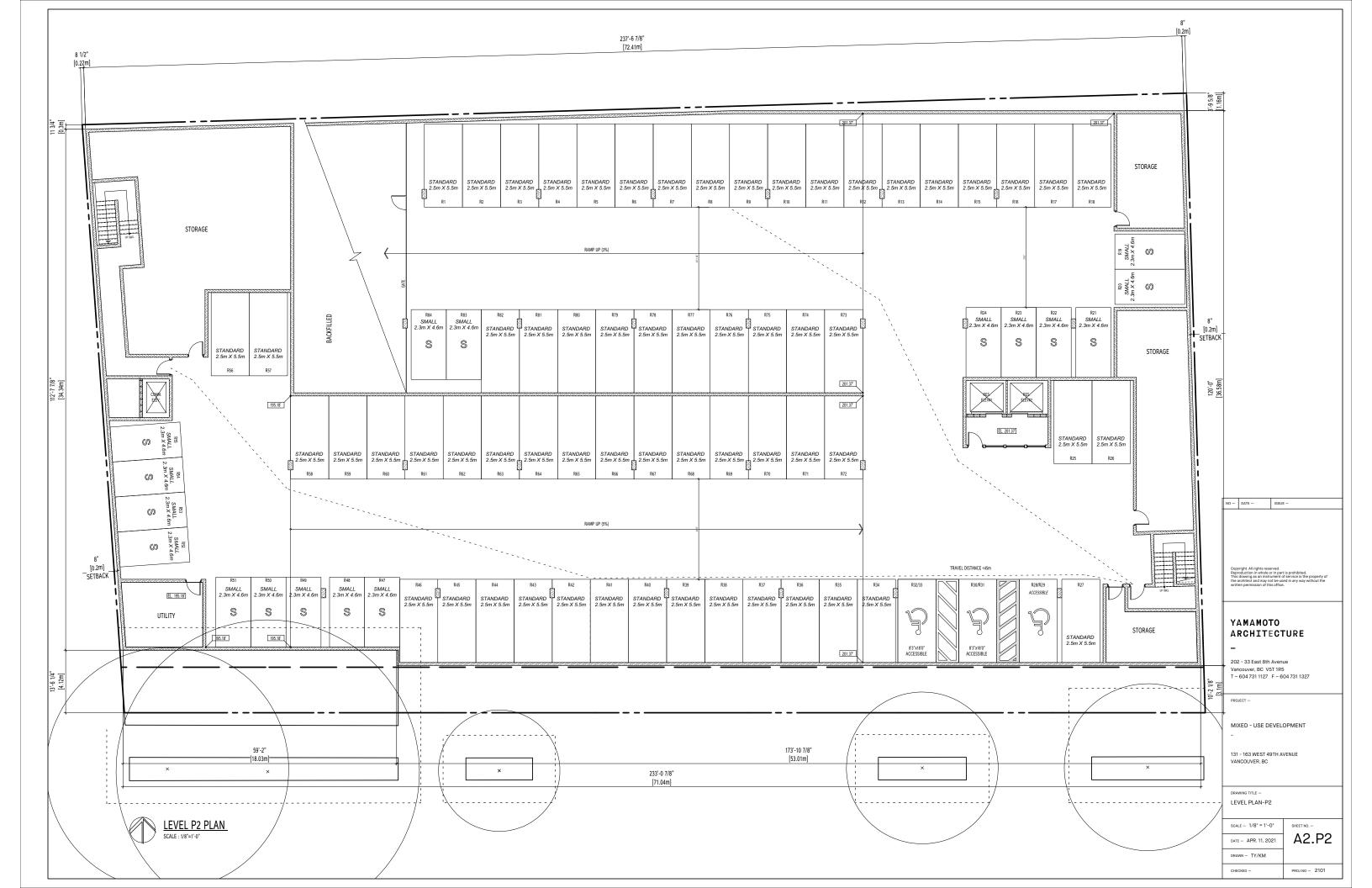
A0.1

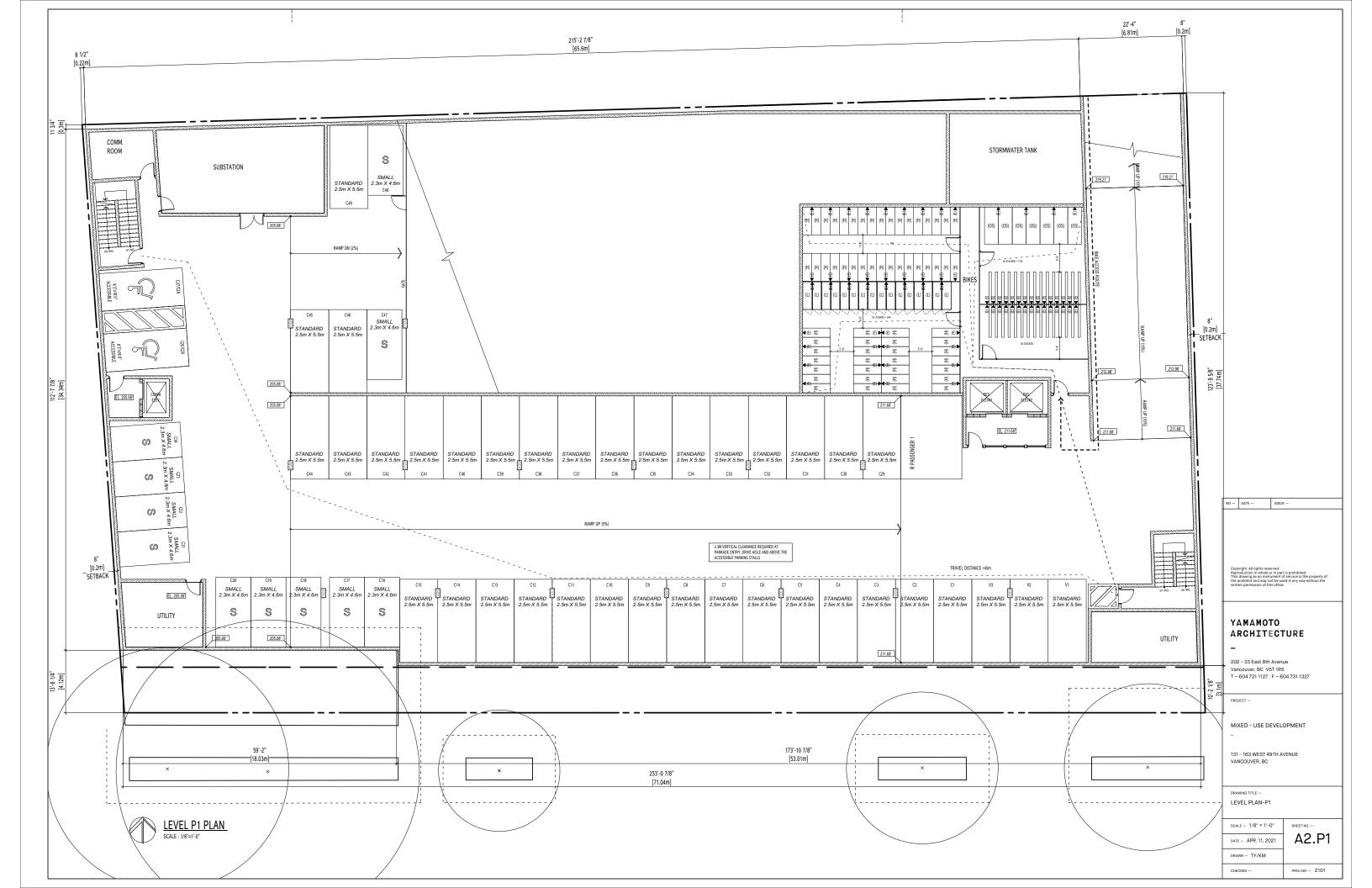
STATISTICS

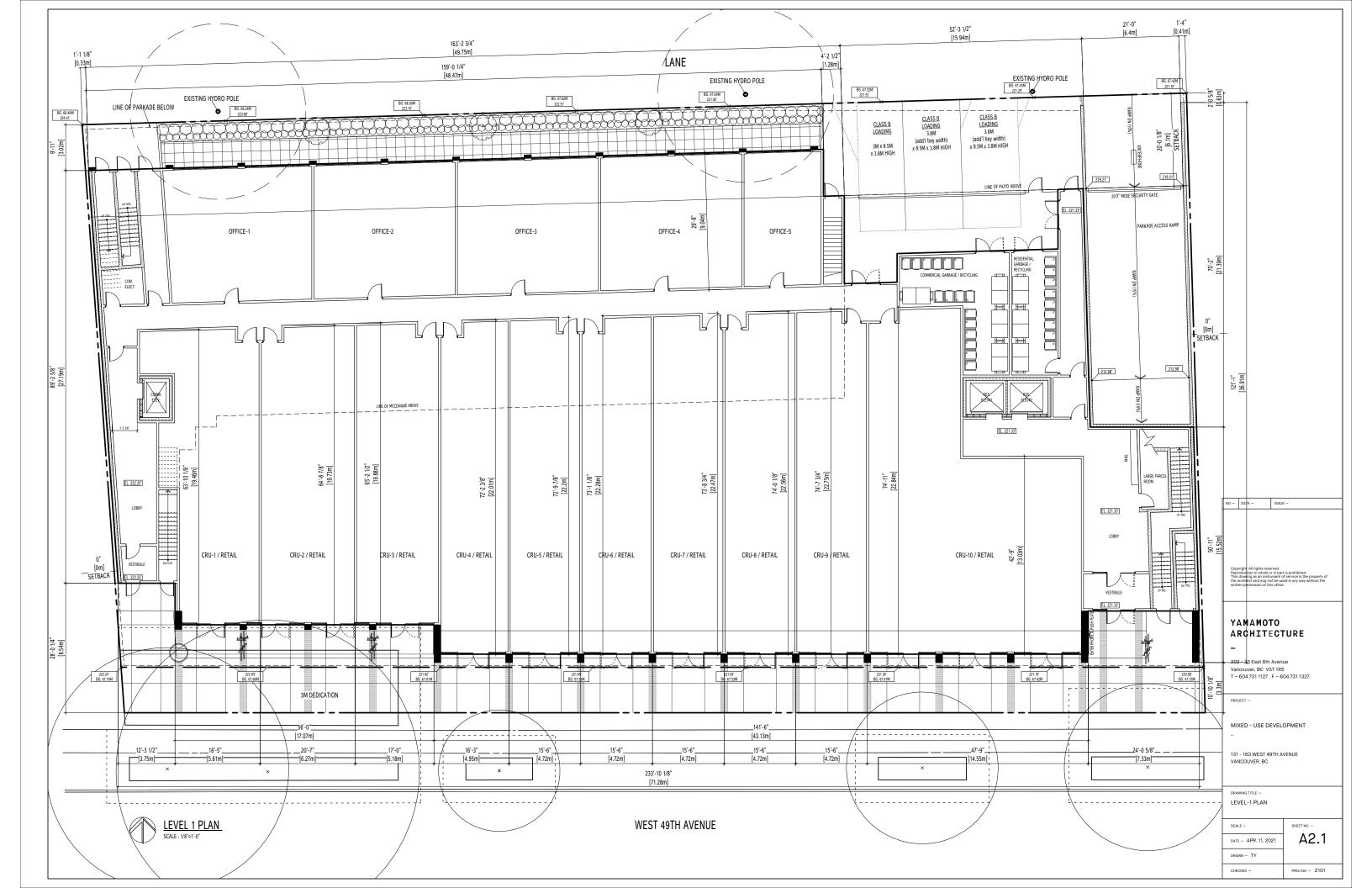
SCALE - N.T.S.

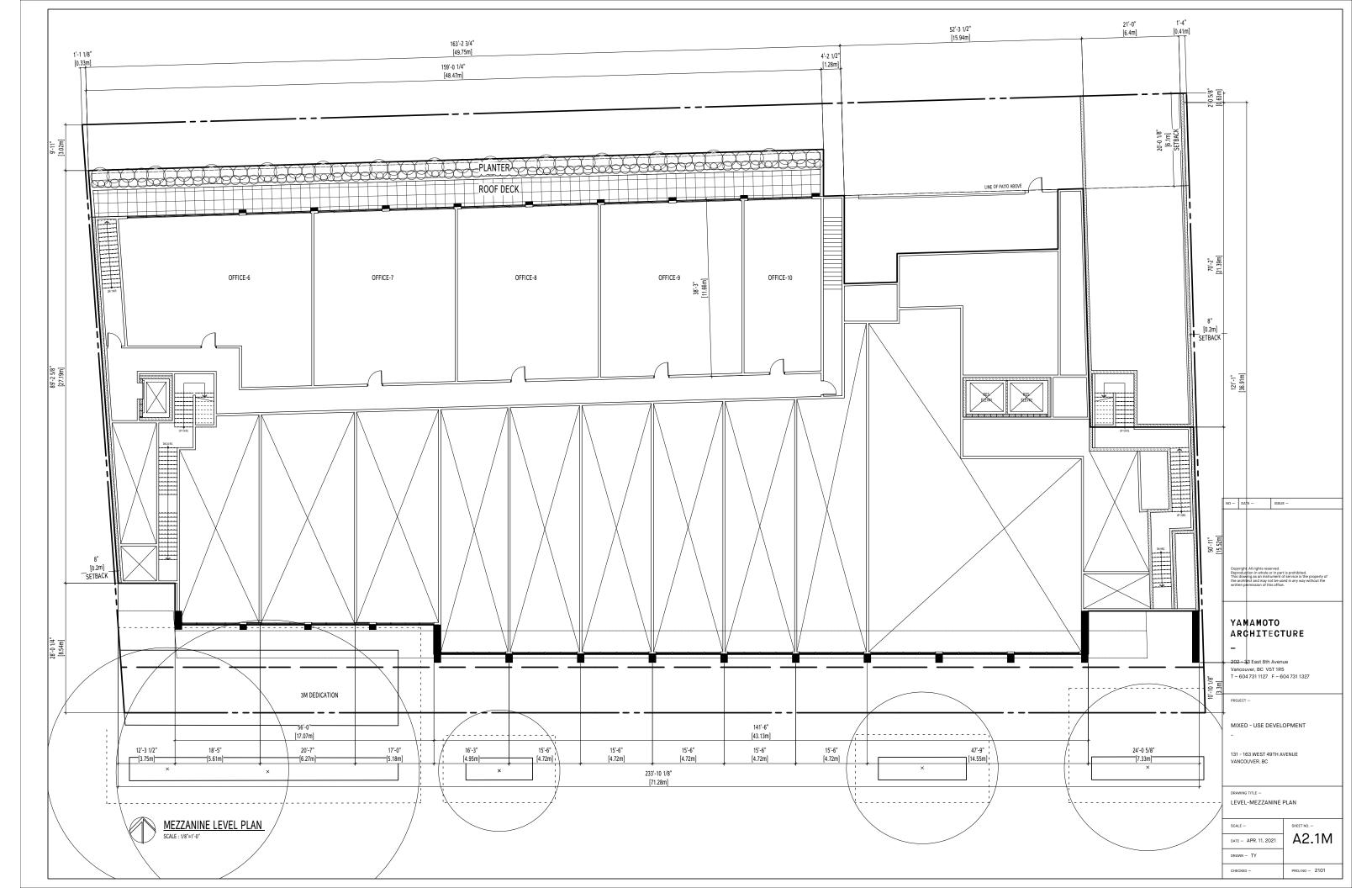
DATE - APR. 11, 2021

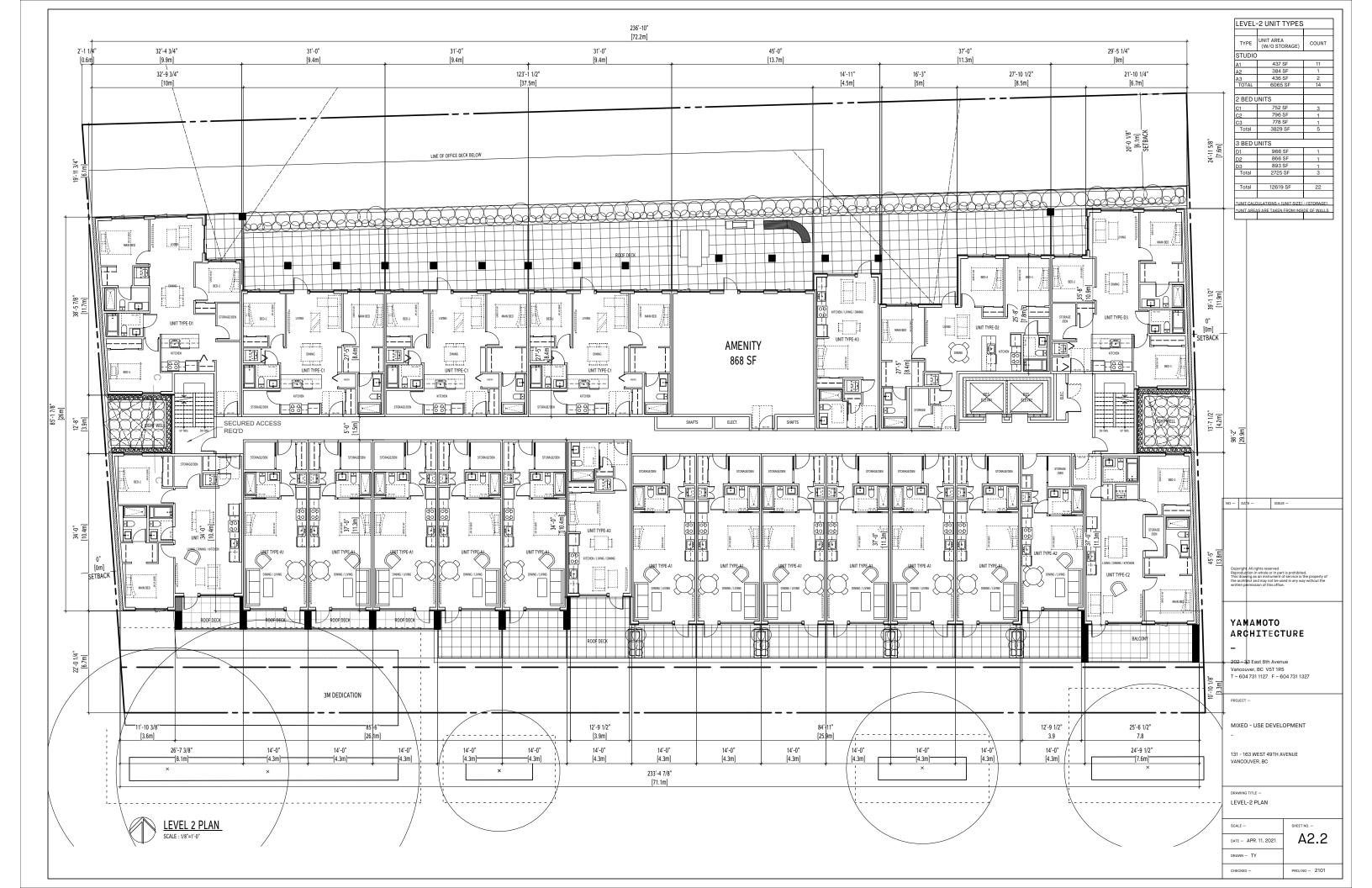


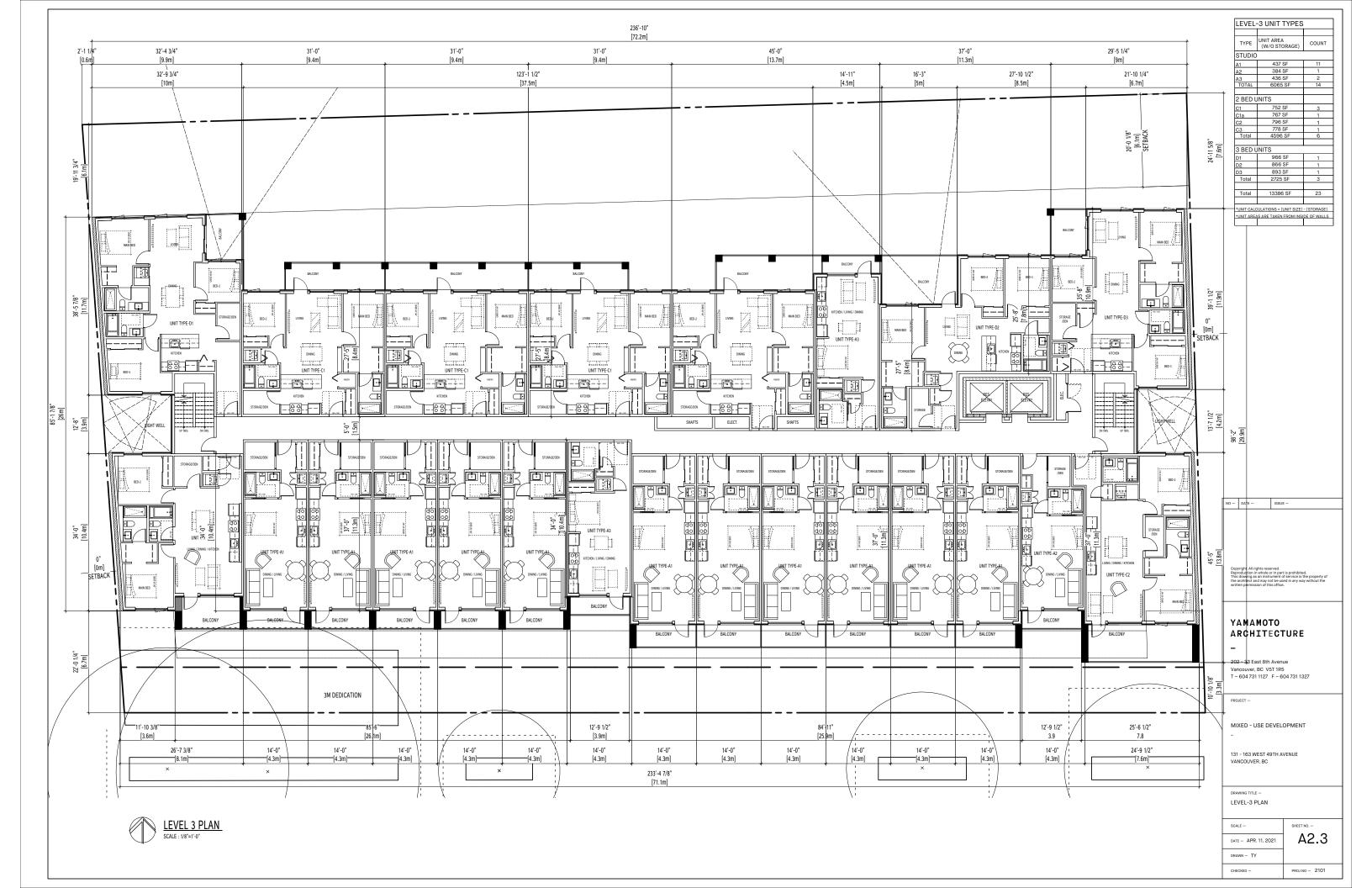


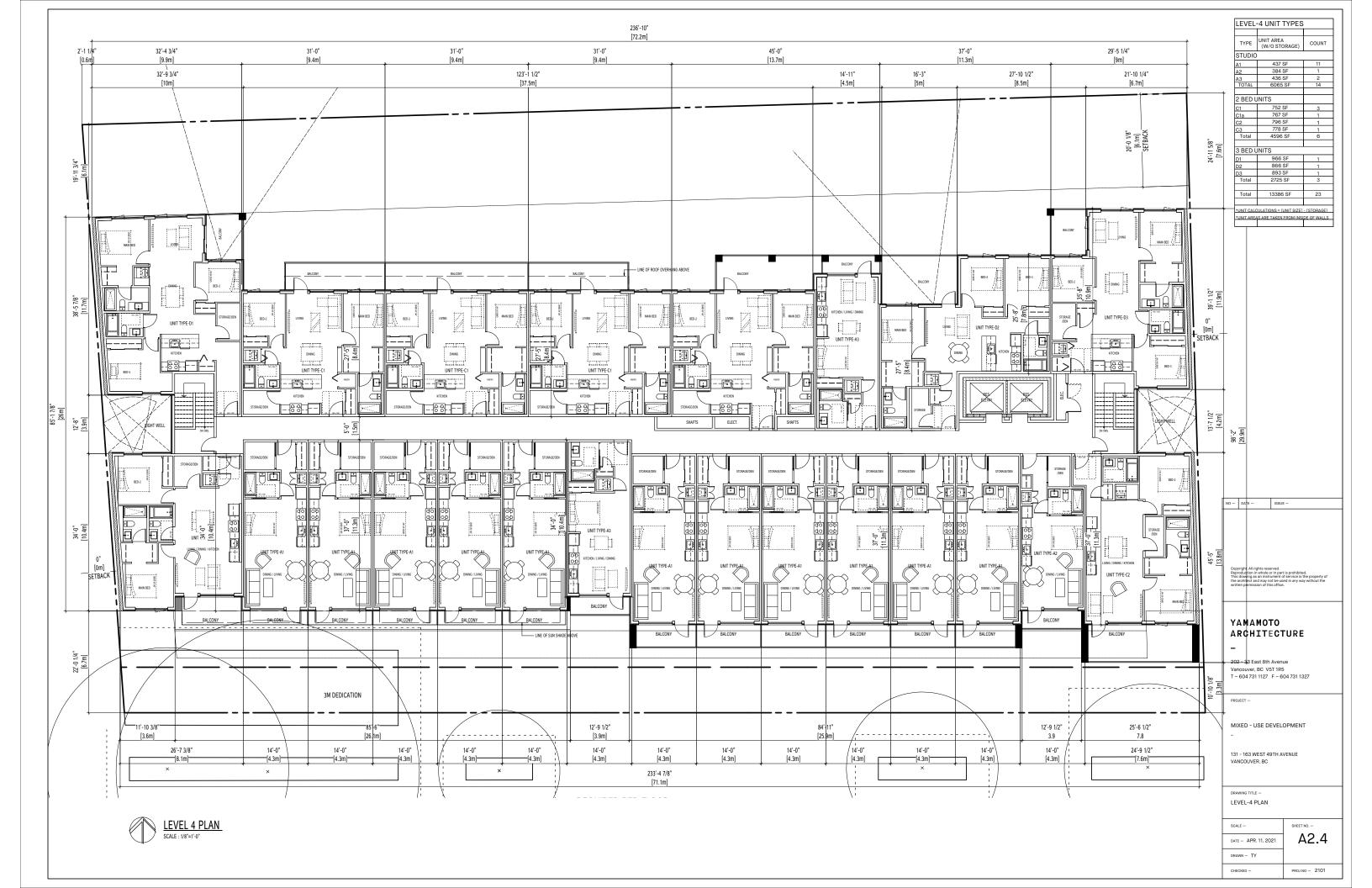


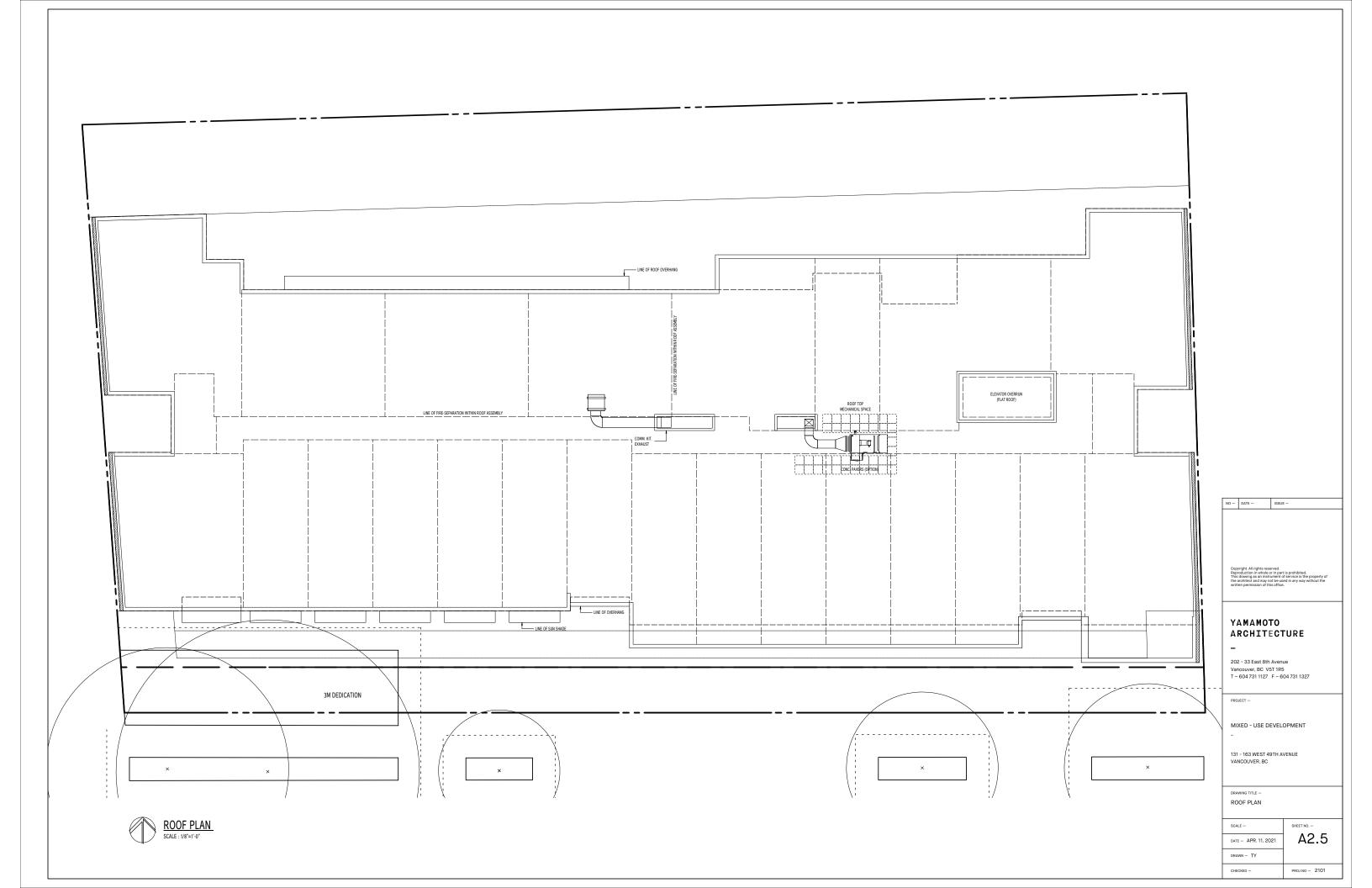








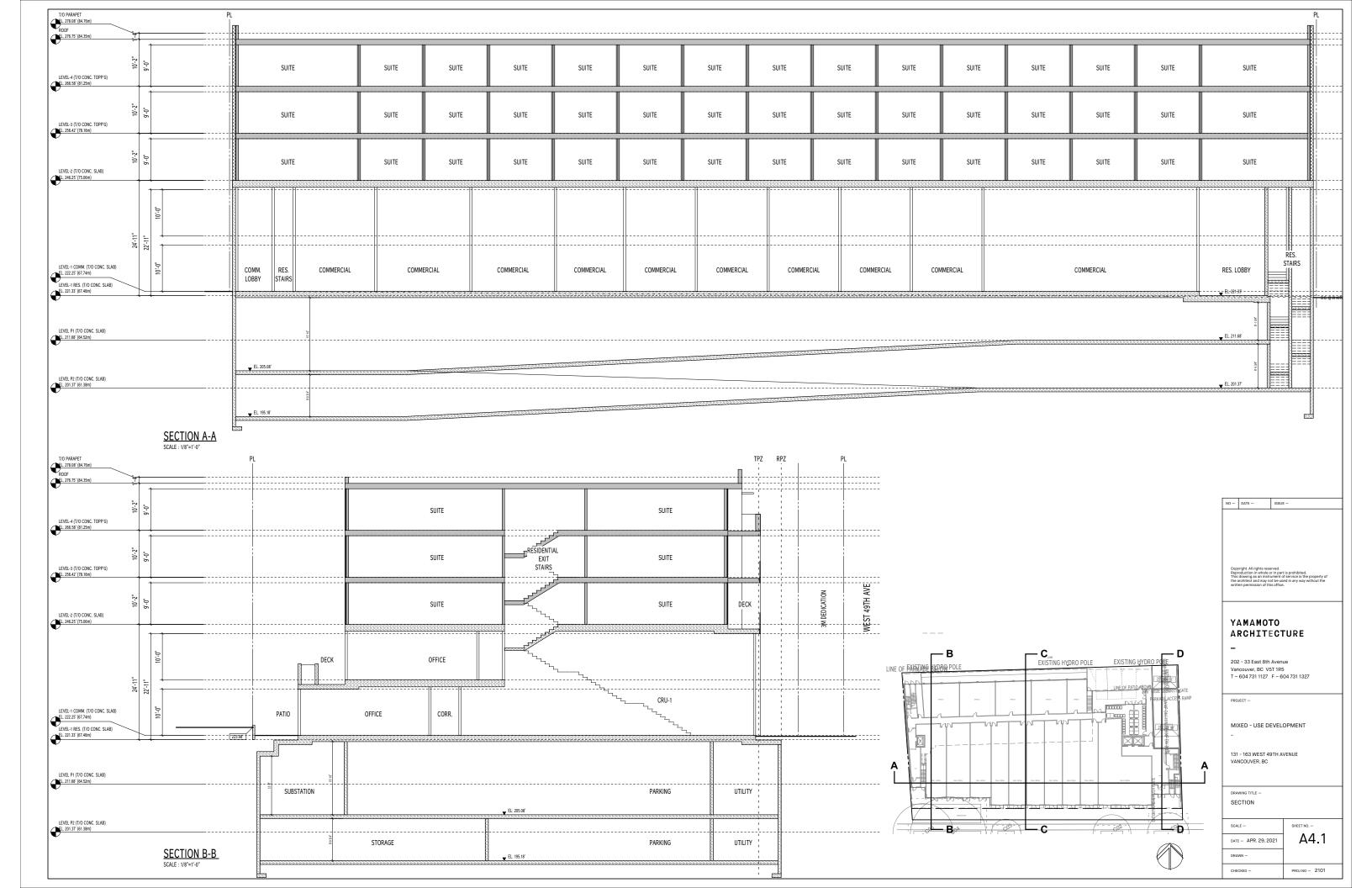


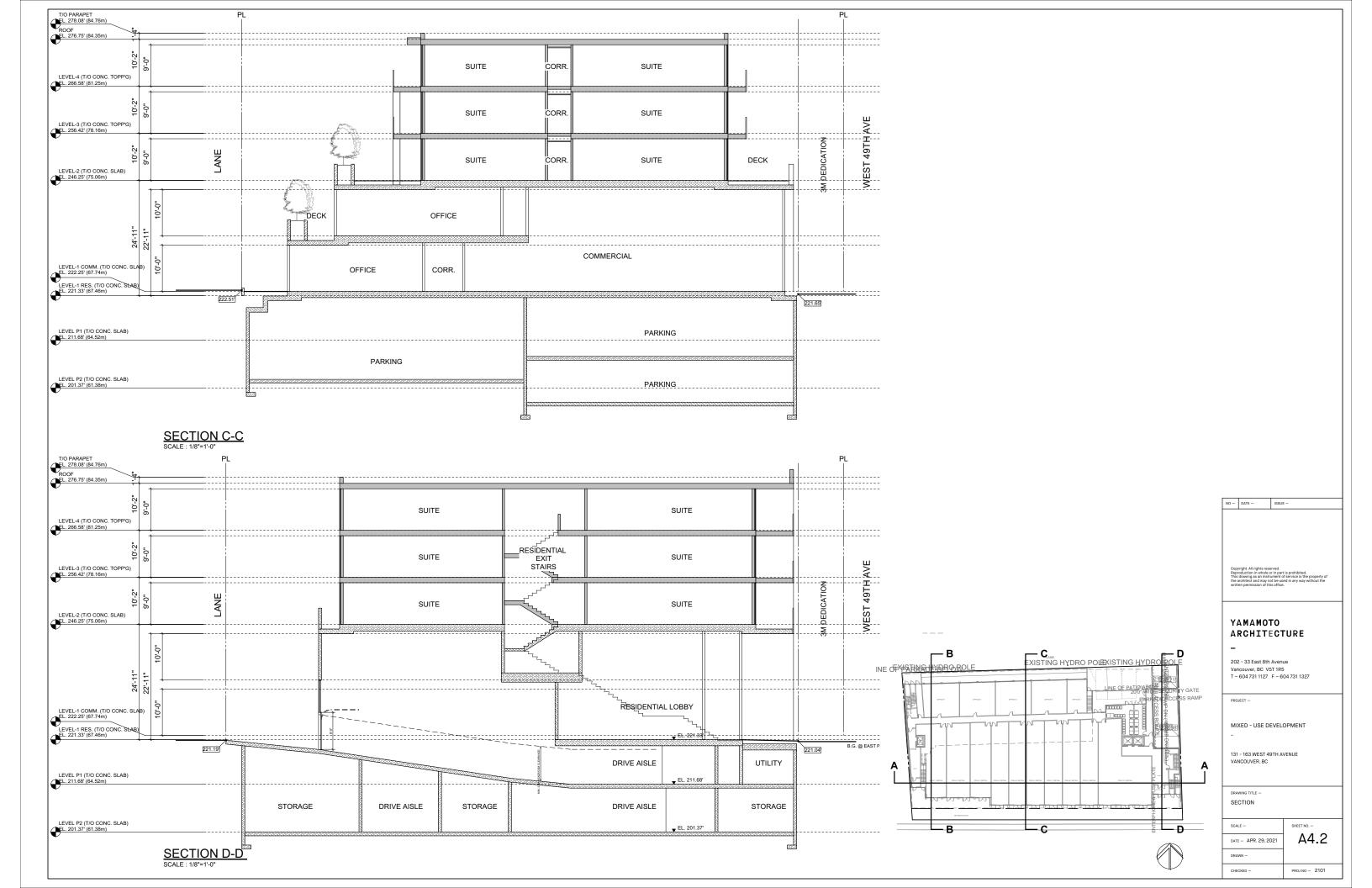










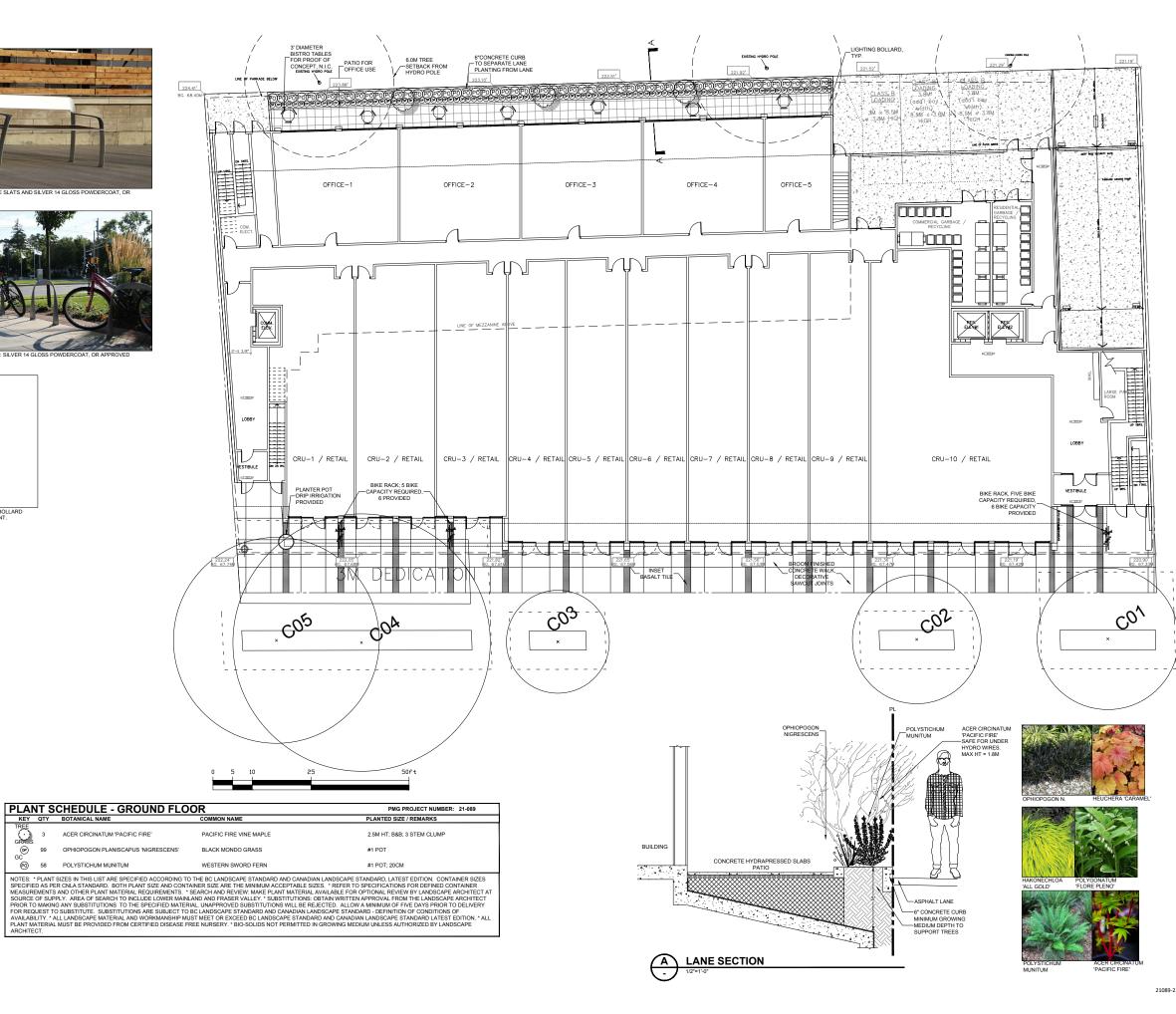






. GC





©Copyright reserved. This drawing and design is the property of PMG Landscape Architects and may not be reproduced or used for other projects without their



Suite C100 - 4185 Still Creek Drive Burnaby, British Columbia, V5C 6G9 p: 604 294-0011 ; f: 604 294-0022

SEAL:



2 21.JUL.09 UPDATE PER NEW SITE PLAN 1 21.JUN.28 UPDATE PER COMMENTS

NO. DATE REVISION DESCRIPTION

CLIENT:

PROJECT:

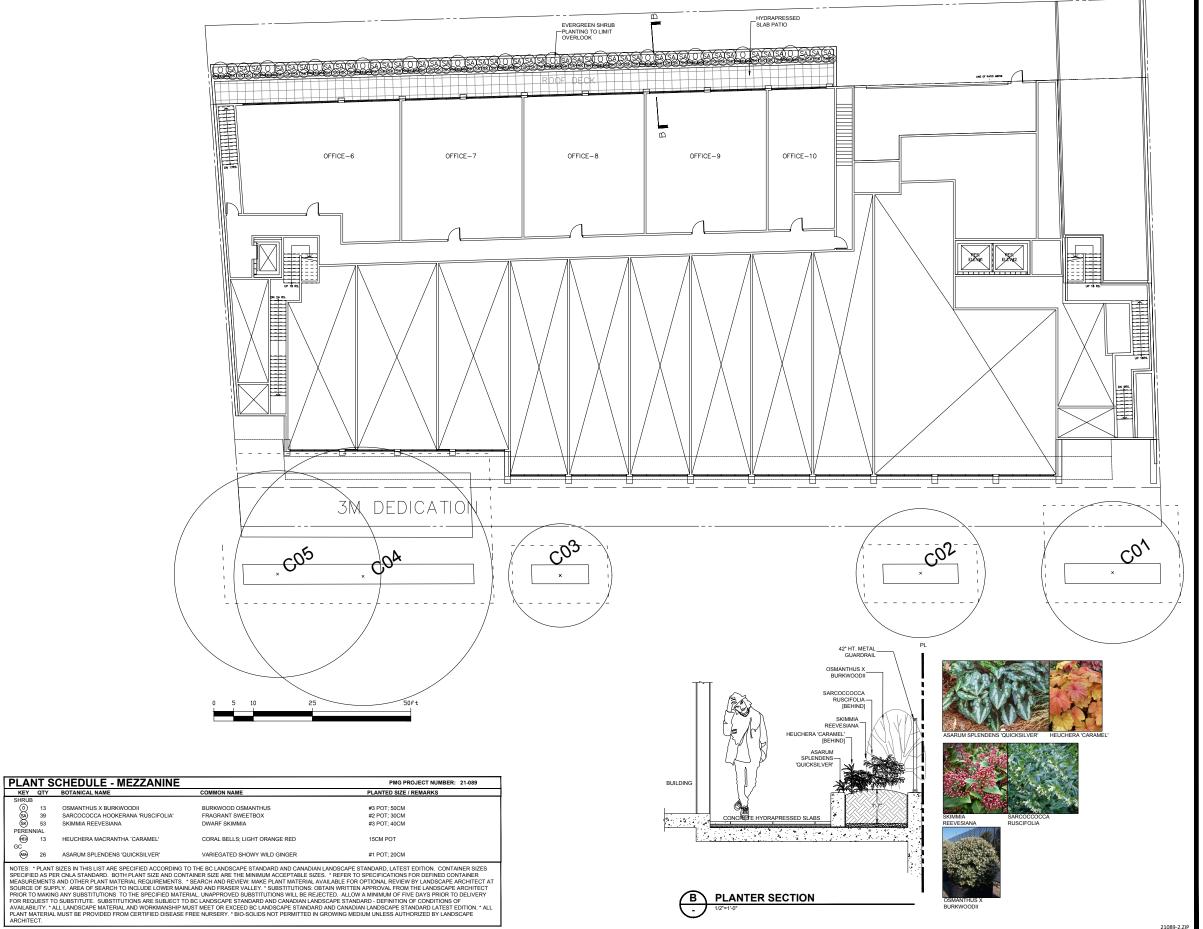
MIXED-USE BUILDING OFFICE SCHEME

131-163 WEST 49TH AVENUE VANCOUVER

DRAWING TITLE:

LANDSCAPE PLAN

DRAWING NUMBER:	21.JUN.18	DATE:	ı
	3/32" = 1'-0"	SCALE:	ı
L1	CLG	DRAWN:	ı
	CLG	DESIGN:	ı
OF 4	PC	CHK'D:	ı



OSMANTHUS X BURKWOODII

©Copyright reserved. This drawing and design is the property of PMG Landscape Architects and may not be reproduced or used for other projects without their permission.



Suite C100 - 4185 Still Creek Drive Burnaby, British Columbia, V5C 6G9 p: 604 294-0011 ; f: 604 294-0022

SEAL:



3	21.JUL.14	ADD PATIOS TO END UNITS	CL
2	21.JUL.09	UPDATE PER NEW SITE PLAN	CL
1	21.JUN.28	UPDATE PER COMMENTS	CL
NO.	DATE	REVISION DESCRIPTION	D

CLIENT:

PROJECT:

MIXED-USE BUILDING OFFICE SCHEME

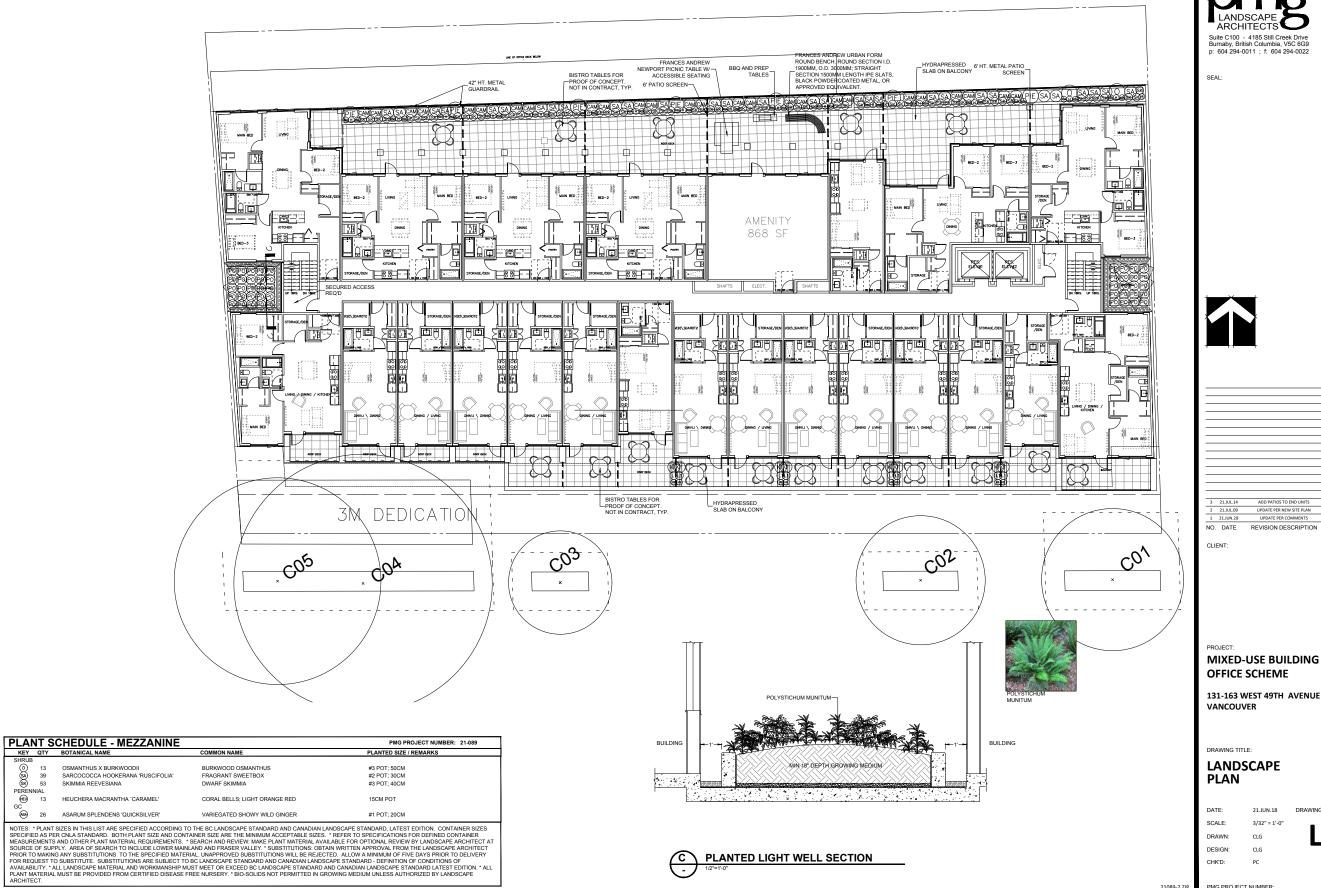
131-163 WEST 49TH AVENUE VANCOUVER

DRAWING TITLE:

MEZZANINE **SHRUB PLAN**

DATE:	21.JUN.18	DRAWING NUMBER:
SCALE:	3/32" = 1'-0"	
DRAWN:	CLG	LZ
DESIGN:	CLG	
CHK'D:	PC	OF 4

21089-2.ZIP PMG PROJECT NUMBER:



KEY QTY BOTANICAL NAME

OSMANTHUS X BURKWOODII

PERENNIAL

13 HEUCHERA MACRANTHA 'CARAMEL'

26 ASARUM SPLENDENS 'QUICKSILVER'

©Copyright reserved. This drawing and design is the property of PMG Landscape Architects and may not be reproduced or used for other projects without their



Suite C100 - 4185 Still Creek Drive Burnaby, British Columbia, V5C 6G9 p: 604 294-0011 ; f: 604 294-0022

SEAL:



3	21.JUL.14	ADD PATIOS TO END UNITS	CL
2	21.JUL.09	UPDATE PER NEW SITE PLAN	CL
1	21.JUN.28	UPDATE PER COMMENTS	CL

CLIENT

PROJECT:

MIXED-USE BUILDING OFFICE SCHEME

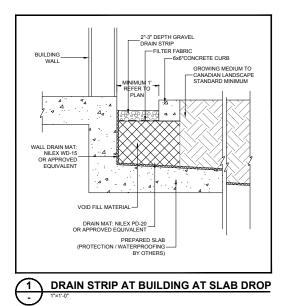
131-163 WEST 49TH AVENUE VANCOUVER

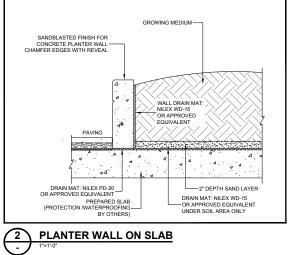
DRAWING TITLE:

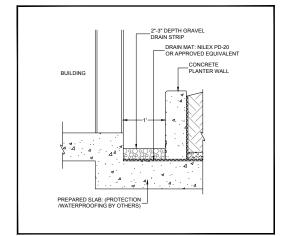
LANDSCAPE PLAN

DRAWING NUMBER:	21.JUN.18	DATE:	
	3/32" = 1'-0"	SCALE:	
L3	CLG	DRAWN:	
	CLG	DESIGN:	
OF 4	PC	CHK'D:	
21-089	21089-2.ZIP PMG PROJECT NUMBER:		

21-089







3 DRAIN ROCK STRIP AT BUILDING ON SLAB

D BK CO CON HOUSEKI

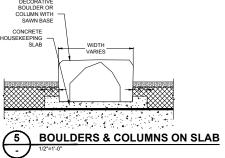
GROWING MEDIUM
& MULCH MAX. 2"
BELOW POT LIP
GROWING MEDIUM
MEETS OR EXCEEDS
ANADIAN LANDSCAPE
STANDARD:
1P WELL-GROWIED
PLANTING AREA

PLANTING IN POTS

1/2"=1-0"

2" DEPTH
EARTHOPOSTED
BARK MULCH
LIGHTWEIGHT FILL
LIGHTWEIGHT FILL
LYER, 2" DRAIN
ROCK
ENSURE DRAIN
IS CLEAR

PLANTING IN POTS



©Copyright reserved. This drawing and design is the property of PMG Landscape Architects and may not be reproduced or used for other projects without their permission.



Suite C100 - 4185 Still Creek Drive Burnaby, British Columbia, V5C 6G9 p: 604 294-0011 ; f: 604 294-0022

SEAL:

3 21.JUL.14 ADD PATIOS TO END UNITS C
2 21.JUL.29 UPDATE PER NEW SITE PLAN
1 21.JUL.28 UPDATE PER COMMENTS C
NO. DATE REVISION DESCRIPTION D

CLIENT:

PROJECT:

MIXED-USE BUILDING OFFICE SCHEME

131-163 WEST 49TH AVENUE VANCOUVER

DRAWING TITLE:

LANDSCAPE DETAILS

AWING NUMBER:	21.JUN.18	DATE:	
	AS NOTED	SCALE:	
14	CLG	DRAWN:	
	CLG	DESIGN:	
OF 4	PC	CHK'D:	