CITY OF VANCOUVER

CITY CLERK'S DEPARTMENT
Access to Information & Privacy

File No.: 04-1000-20-2020-098

April 24, 2020

s.22(1)

Dear s.22(1)

Re: **Request for Access to Records under the Freedom of Information and Protection of Privacy Act (the "Act")**

I am responding to your request of February 5, 2020 for:

> **Documentation and plans for 95 East 14th Avenue related to Building Permits BP-2018-05371 and BP-2019-01801. Date range: December 1, 2018 - December 31, 2019.**

All responsive records are attached. Some information in the records has been severed, (blacked out), under s.22(1) of the Act. You can read or download this section here: http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/96165_00

Building permits are routinely available on a fee for service basis from the Property Research branch of the Development, Buildings, and Licensing Department. Please email property.research@vancouver.ca or see the following link for more information: https://vancouver.ca/home-property-development/get-copies-of-your-building-plans.aspx

Under section 52 of the Act, and within 30 business days of receipt of this letter, you may ask the Information & Privacy Commissioner to review any matter related to the City's response to your FOI request by writing to: Office of the Information & Privacy Commissioner, info@oipc.bc.ca or by phoning 250-387-5629.

If you request a review, please provide the Commissioner's office with: 1) the request number (#04-1000-20-2020-098); 2) a copy of this letter; 3) a copy of your original request; and 4) detailed reasons why you are seeking the review.

Yours truly,

Cobi Falconer, FOI Case Manager, for

[Signature on file]

Barbara J. Van Fraassen, BA
Director, Access to Information & Privacy

Barbara.vanfraassen@vancouver.ca
453 W. 12th Avenue Vancouver BC V5Y 1V4

*If you have any questions, please email us at foi@vancouver.ca and we will respond to you as soon as possible. Or you can call the FOI Case Manager at 604.871.6584.

Encl.

:kt

Mahpour, Hamid

From: Mahpour, Hamid
Sent: Wednesday, May 01, 2019 9:06 AM
To: Renter Office; Ellis, Sarah
Subject: 95 E 14 AV, BP-2019-01801

Permit application BP-2019-01801 is opened for renovation to the rental building at 95 E 14 Avenue. Included in the renovation is changes to layout of the units and replacement of exterior windows. BP-2018-05371 was also issued in December 2018 for re-piping of the said building.

Thank you

Hamid Mahpour
Project Coordinator
Building Review Branch
Development, Buildings & Licensing
The City of Vancouver
(604)871-6024

CITY OF VANCOUVER

Energy Checklist for Alterations to Existing Buildings (90.1-2016 & Energy Upgrade Trigger)

Building Address :		95	E 14TH AVENUE	Building Permit Application No.:	BP-2019-01801
Tenancy Address :					

This form is to be completed digitally. For ease of use, drop boxes and pop-up instructions are included.

IMPORTANT - Submission Format and Process:
Effective June 3, 2019, this Alterations checklist is to be completed and submitted at the Permit application stage. Submit as hard copy, and later in digital format via email to the appropriate account (see Intro tab). Include all relevent documents pertaining to scope of work. Subject line to include project address then building permit application number (BP# or DB#).

Space Use, Area & Performance Information

Indicate all that apply: Major Reno | Voluntary Upgrade

Primary Use/Area:	Res (Multifamily-Common Areas)	1,545	100%
Second Use/Area:			
Tertiary Use/Area:			
Total Area (m^2):	Res (Multifamily-Common Areas)	1,545	

TI Space(s)

Non-residential Cond'd Space Area (m^2):	
Resid Cond'd Common Space Area (m^2):	365.2
S miheated Space Area (m^2):	0.0
Is p c access via an outdoor entrance?	Yes
Is existing outdoor entrance being modified?	No

Neighbourhood Energy (N/E) Systems

If within a Neighbourhood Energy area, indicate which system: N/A

Base Building's N/E status: N/A

TI's thermal energy requirement: N/A

VBBL - Part 10 Energy - ASHRAE 90.1 - 2016 Deliverables

Are Reg'd Professionals involved with this project? Yes

Prescriptive Option - Deliverables (Required):

Sect 5) Building Envelope — Info

Yes | Neil Robertson, Stuart Howard Architects — **Applicability:** Applies

- N/A — Building Envelope Compliance Form (Part I) — N/A — Energy Statements on Drawings — Dwg #: N/A
- N/A — Building Envelope Compliance Form (Part II) — N/A — Complies with 5.1.3 Envelope Alterations of 90.1
- or; X — Building Envelope Energy Performance Comparison Calculator

Sect 6) HVAC — Info

No | Carlo Ambito, CADA & Associates Consulting Ltd. — **Applicability:** N/A

- N/A — HVAC Simplified Approach — N/A — Energy Statements on Drawings — Dwg #: N/A
- or **both** of the following; — N/A — Complies with 6.1.1.2 Additions to Existing Buildings
- N/A — Mandatory Provisions — N/A — Complies with 6.1.1.3 Alterations to HVAC in EB
- N/A — Prescriptive Requirements — Source of Ventilation design:

Sect 7) Service Water Heating — Info

No | Carlo Ambito, CADA & Associates Consulting Ltd. — **Applicability:** N/A

- N/A — Service Water Heating Compliance Forms — N/A — Energy Statements on Drawings — Dwg #: N/A
- N/A — Electric/Gas Water Heating System is Allowed — N/A — Complies with 7.1.1.3 Alterations to Existing Buildings

Sect 8) Power

No | Carlo Ambito, CADA & Associates Consulting Ltd. — **Applicability:** N/A

Sect 9) Lighting — Info

No | Carlo Ambito, CADA & Associates Consulting Ltd. — **Applicability:** N/A

- X — Lighting Compliance Forms (pdf) — N/A — Energy Statements on Drawings — Dwg #: N/A
- or the following; — N/A — Drawing: Reflected Ceiling Plan — Dwg #: N/A
- N/A — Lighting Compliance Doc (excel) — N/A — Complies with 9.1.2 Lighting Alterations

VBBL - Part 11 Existing Buildings - Energy Upgrade Mechanism

Exemption: None

Building Status: | TIPs Eligible? Based on scope | BOMA BESt? No | 90.1-2007 or better? No

Categories of Alterations	Path Options
Rehabilitation - Voluntary Upgrade (N/A)	Voluntary Upgrade - No Additional Upgrades Required
Rehabilitation - Major Renovation (E4)	E4 - Retrofit Path: 1 @ L4

Dominant Option: E4 - Retrofit Path: 1 @ L4

Option Chosen and Incorporated into Project Drawings (indicate drawing numbers)

L4 - BEnv - Upgrade all Fenestration/Glazing Performance (per 5.5.4.3 and 5.5.4.4 of ASHRAE 90.1-2016) — Dwg #: A0 01

Other: — Dwg #:

TABLE 9.6.1 Lighting Power Densities Using the Space-by-Space Method

Common Space Types[a]	LPD, W/ft^2	RCR Threshold
Atrium		
First 40 ft in height	0.03 per ft (height)	NA
Height above 40 ft	0.02 per ft (height)	NA
Audience/Seating Area—Permanent		
For auditorium	0.79	6
For Performing Arts Theater	2.43	8
For Motion Picture Theater	1.14	4
Classroom/Lecture/Training	1.24	4
Conference/Meeting/Multipurpose	1.23	6
Corridor/Transition	0.66	Width<8 ft
Dining Area	0.65	4
For Bar Lounge/Leisure Dining	1.31	4
For Family Dining	0.89	4
Dressing/Fitting Room for Performing Arts Theater	0.40	6
Electrical/Mechanical	0.95	6
Food Preparation	0.99	6
Laboratory		
For Classrooms	1.28	6
For Medical/Industrial/Research	1.81	6
Lobby	0.90	4
For Elevator	0.64	6
For Performing Arts Theater	2.00	6
For Motion Picture Theater	0.52	4
Locker Room	0.75	6
Lounge/Recreation	0.73	4
Office		
Enclosed	1.11	8
Open Plan	0.98	4
Restrooms	0.98	8
Sales Area (for accent lighting, see Section 9.6.2(b))	1.68	6
Stairway	0.69	10
Storage	0.63	6
Workshop	1.59	6
Building-Specific Space Types	**LPD, W/ft^2**	**RCR Threshold**
Automotive		
Service/Repair	0.67	4
Bank/Office		
Banking Activity Area	1.38	6
Convention Center		
Audience Seating	0.82	4
Exhibit Space	1.45	4
Courthouse/Police Station/Penitentiary		
Courtroom	1.72	6
Confinement Cells	1.10	6
Judges' Chambers	1.17	8
Penitentiary Audience Seating	0.43	4
Penitentiary Classroom	1.34	4
Penitentiary Dining	1.07	6
Dormitory		
Living Quarters	0.38	8
Fire Stations		
Engine Room	0.56	4
Sleeping Quarters	0.25	6
Gymnasium/Fitness Center		
Fitness Area	0.72	4
Gymnasium Audience Seating	0.43	6
Playing Area	1.20	4
Hospital		
Corridor/Transition	0.89	Width < 8 ft
Emergency	2.26	6
Exam/Treatment	1.66	8
Laundry/Washing	0.60	4
Lounge/Recreation	1.07	6
Medical Supply	1.27	6
Nursery	0.88	6
Nurses' Station	0.87	6
Operating Room	1.89	6
Patient Room	0.62	6
Pharmacy	1.14	6
Physical Therapy	0.91	6
Radiology/Imaging	1.32	6
Recovery	1.15	6
Hotel/Highway Lodging		
Hotel Dining	0.82	4
Hotel Guest Rooms	1.11	6
Hotel Lobby	1.06	4
Highway Lodging Dining	0.88	4
Highway Lodging Guest Rooms	0.75	6
Library		
Card File and Cataloging	0.72	4
Reading Area	0.93	4
Stacks	1.71	4

TABLE 9.6.1 Lighting Power Densities Using the Space-by-Space Method *(continued)*

Building-Specific Space Types	LPD, W/ft^2	RCR Threshold
Manufacturing		
Corridor/Transition	0.41	Width < 8 ft
Detailed Manufacturing	1.29	4
Equipment Room	0.95	6
Extra High Bay (>50 ft Floor to Ceiling Height)	1.05	4
High Bay (25–50 ft Floor to Ceiling Height)	1.23	4
Low Bay (<25 ft Floor to Ceiling Height)	1.19	4
Museum		
General Exhibition	1.05	6
Restoration	1.02	6
Parking Garage		
Garage Area	0.19	4
Post Office		
Sorting Area	0.94	4
Religious Buildings		
Audience Seating	1.53	4
Fellowship Hall	0.64	4
Worship Pulpit, Choir	1.53	4

TABLE 9.6.1 Lighting Power Densities Using the Space-by-Space Method *(continued)*

Building-Specific Space Types	LPD, W/ft^2	RCR Threshold
Retail		
Dressing/Fitting Room	0.87	8
Mall Concourse	1.10	4
Sales Area (for accent lighting, see Section 9.6.3(c))	1.68	6
Sports Arena		
Audience Seating	0.43	4
Court Sports Arena—Class 4	0.72	4
Court Sports Arena—Class 3	1.20	4
Court Sports Arena—Class 2	1.92	4
Court Sports Arena—Class 1	3.01	4
Ring Sports Arena	2.68	4
Transportation		
Air/Train/Bus—Baggage Area	0.76	4
Airport—Concourse	0.36	4
Audience Seating	0.54	4
Terminal—Ticket Counter	1.08	4
Warehouse		
Fine Material Storage	0.95	6
Medium/Bulky Material Storage	0.58	4

[a] In cases where both a common *space* type and a building-specific type are listed, the building specific *space* type shall apply.

TABLE 9.6.2 Control Factors Used in Calculating Additional Interior Lighting Power Allowance

Additional Control Method (in Addition to Mandatory Requirements).	Space Type				
	Open Office	Private Office	Conference Room, Meeting Room, Classroom (Lecture/ Training)	Retail Sales Area	Lobby, Atrium, Dining Area, Corridors/ Stairways, Gym/ Pool, Mall Concourse, Parking Garage
Manual, continuous dimming control or Programmable multi-level dimming control	0.05	0.05	0.10[1]	0.10	0
Programmable multi-level dimming control using programmable time scheduling	0.05	0.05	0.10[1]	0.10	0.10
Multi-level occupancy sensors	0.05	0.05	0.05	0	0
Occupancy sensors controlling the downlight component of workstation specific luminaires with continuous dimming to off capabilities.	0.25[2]	0	0	0	0
Occupancy sensors controlling the downlight component of workstation specific luminaires with continuous dimming to off operation, in combination with personal continuous dimming control of downlight illumination by workstation occupant.	0.30[2,3]	0	0	0	0
Automatic bi-level or multi-level switching in ***primary sidelighted areas*** when ***sidelighting effective aperture*** is greater than 0.15	0	0	0	0.10[4]	0
Automatic bi-level or multi-level switching in ***primary sidelighted areas*** when ***sidelighting effective aperture*** is greater than 0.15 and when ***primary sidelighted area*** is less than 250 ft^2	0.10[4]	0.10[4]	0.10[4]	0.10[4]	0.10[4]
Automatic continuous daylight dimming in ***primary sidelighted areas*** when ***sidelighting effective aperture*** is greater than 0.15 and when ***primary sidelighted area*** is less than 250 ft^2	0.20[4]	0.20[4]	0.20[4]	0.20[4]	0.20[4]
Automatic continuous daylight dimming in ***primary sidelighted areas*** when ***sidelighting effective aperture*** is greater than 0.15 and when ***primary sidelighted area*** is greater than 250 ft^2	0.10[4]	0.10[4]	0.10[4]	0.10[4]	0.10[4]
Automatic continuous daylight dimming in ***secondary sidelighted area***s when ***sidelighting effective aperture*** is greater than 0.3	0.10[4]	0.10[4]	0.10[4]	0.10[4]	0.10[4]
Automatic continuous daylight dimming in ***daylighted areas under skylights*** when the total of those areas is less than 900 ft^2 and when ***skylight effective aperture*** is greater than 0.01	0.20	0.20	0.20	0.20	0.20
Automatic continuous daylight dimming in ***daylighted areas under skylights*** when the total of those areas is greater than 900 ft^2 and when ***skylight effective aperture*** is greater than 0.01	0.10	0.10	0.10	0.10	0.10

[1] These ***control*** factors may only be used if the requirements of section 9 4 1 2 are met using an ***occupancy sensor***

[2] ***Control*** factor is limited to the wattage of workstation-specific ***luminaires*** in partitioned single occupant workspaces contained within an open office environment (i e direct-indirect ***luminaires*** with separately controlled downlight and uplight components, with the downward component providing illumination to a single occupant in an open plan workstation) Within 30 minutes of the occupant leaving the ***space***, the downward component shall continuously dim to off over a minimum of 2 minutes Upon the occupant entering the ***space***, the downward component shall turn on at the minimum level and continuously raise the illumination to a p***reset*** level over a minimum of 30 seconds The uplight component of workstation specific luminaire shall comply with section 9 4 1 1 (***automatic*** shutoff)

[3] In addition to the requirements described in footnote 2, the ***control*** shall allow the occupant to select their preferred light level via a personal computer, handheld device, or similarly accessible device located within the workstation

[4] ***Control*** factors may not be used if ***controls*** are used to satisfy exceptions to Section 5 5 4 2 3

Lighting Compliance Documentation

Project Name: Apartment Building Q14		
Project Address: 95 East 14th Avenue, Vancouver, B.C.		Date: 2019-08-26
Designer of Record: Carlo Ambito, AScT, LEED AP	Email: carlo.ambito@cadaconsultants.com	Telephone: 604.210.0021
Contact Person: Carlo Ambito, AScT, LEED AP	Email: carlo.ambito@cadaconsultants.com	Telephone: 604.210.0021
City: Vancouver, B.C.		Exterior Lighting Zone:

Mandatory Provisions Checklist

- ☒ Lighting Control (9.4.1)
  - ☐ Automatic lighting shutoff controls are provided based on either a scheduling device or an occupant sensor (9.4.1.1)
  - ☒ Each enclosed space has its own control including bilevel or occupancy based where required (9.4.1.2)
  - ☐ Controls for parking garages, including bilevel, transition and perimeter control as required (9.4.1.3)
  - ☐ Automatic daylighting controls for primary sidelighted areas (9.4.1.4)
  - ☐ Automatic daylighting controls for toplighting (9.4.1.5)
  - ☒ Additional controls for display/accent, case, guest room, task, nonvisual and demonstration lighting applications (9.4.1.6)
  - ☐ Exterior lighting controls including automatic shutoff and bilevel as required (9.4.1.7)
- ☒ Exit signs do not exceed 5 W per face (9.4.2)
- ☐ Exterior lighting power (9.4.3) — See worksheet
- ☒ Functional testing completed on specified controls (9.4.4)

Interior Lighting Power Allowance (Building Area Method – 9.5)

Building ID	Building Type (9.5.1)	Lighting Power Density, W/ft² (W/m²)	Building Area, ft² (m²)	Lighting Power Allowance (W)
			Total	

Interior Lighting Power Allowance (Space-by-Space Method – 9.6)

Space ID	Building Type/Space Type (9.6.1)	Lighting Power Density, W/ft² (W/m²)	Room Cavity Ratio	Space Area, ft² (m²)	Lighting Power Allowance (W)
	LIVING QUARTERS	0.38	8	16446 SF	6249.48
				Subtotal	6249.48
				Controls Allowance (9.6.2c)	N/A
				Total	6249.48

Lighting Compliance Documentation

Project Name: Apartment Building Q14		
Contact Person: Carlo Ambito, AScT, LEED AP	Email: carlo ambito@cadaconsultants com	Telephone: 604.210.0021

Interior Connected Lighting Power

ID	Luminaire Description (including number of lamps per fixture, watts per lamp, type of ballast, type of fixture)	Type						Number of Luminaires	Watts/ Luminaire	Total Watts
		Incandescent	Fluorescent	HID	Line-Voltage Track	Low-Voltage Track	Other			
B	UNDERCABINET PUCK LIGHT (LED)	○	○	○	○	○	◉	89	8	712
S1	12" ROUND SURFACE POT LIGHT (LED)	○	○	○	○	○	◉	83	15	1245
S2	6" ROUND SURFACE POT LIGHT (LED)	○	○	○	○	○	◉	75	15	1125
S3	6" ROUND SURFACE POT LIGHT (LED)	○	○	○	○	○	◉	64	15	960
W1	WALL SCONCE LIGHT (LED)	○	○	○	○	○	◉	26	15	390
		○	○	○	○	○	○			
		○	○	○	○	○	○			
		○	○	○	○	○	○			
		○	○	○	○	○	○			
									Total	4432

Additional Interior Lighting Power Allowance—Control Credits

Space ID	Space Name	Control Type (Table 9.6.2)	Control Factor (Table 9.6.2)	Installed Watts (W)	Additional Allowance (W)
				Total	

Additional Interior Lighting Power Allowance – Decorative and Display

Space ID	Space Name	Type		Area, ft² (m²)	Unit Allowance, W/ft² (W/m²)	Allowance (W)	Lumin-aire ID's	Installed Power (W)
		Decorative	Display Lighting					
		○	○					
		○	○					
		○	○					
		○	○					
		○	○					
		○	○					
		○	○					
		○	○					

Lighting Compliance Documentation

Project Name: Apartment Building Q14		
Contact Person: Carlo Ambito, AScT, LEED AP	Email: carlo.ambito@cadaconsultants.com	Telephone: 604.210.0021

Additional Interior Connected Lighting Power

Space ID	Luminaire ID	Luminaire Description (including number of lamps per fixture, watts per lamp, type of ballast, type of fixture)	Type						Number of Luminaires	Watts/ Luminaire	Total Watts
			Incandescent	Fluorescent	HID	Line-Voltage Track	Low-Voltage Track	Other			
			○	○	○	○	○	○			
			○	○	○	○	○	○			
			○	○	○	○	○	○			
			○	○	○	○	○	○			
			○	○	○	○	○	○			
			○	○	○	○	○	○			
			○	○	○	○	○	○			
			○	○	○	○	○	○			
			○	○	○	○	○	○			

Lighting Compliance Documentation

Exterior Building Lighting Power Allowance (Tradable Lighting Applications)

Application	Allowance	Area or Length, ft^2 or ft (m^2 or m)	Tradable Power Allowance
		Tradable Power Allowance	

Exterior Building Lighting Power Allowance (Non-Tradable Lighting Applications)

ID	Application	Allowance per Unit	Area or Length or Quantity	Non-Tradable Power Allowance
			Non-Tradable Power Allowance	

Exterior Connected Lighting Power (Tradable Applications)

ID	Luminaire Description (including number of lamps per fixture, watts per lamp, type of ballast, type of fixture)	Number of Luminaires	Watts/ Luminaire	Total Watts
			Total	

Exterior Connected Lighting Power (Non-Tradable Applications)

ID	Non-Tradable Application	Luminaire Description (including number of lamps per fixture, watts per lamp, type of ballast, type of fixture)	Number of Luminaires	Watts/ Luminaire	Total Watts
				Total	

Exterior Lighting Compliance Test

Tradable Power Allowance (Watts)		Base site allowance		Tradable Connected Lighting Power (Watts)
	+		≥	

Non-Tradable Application	Non-Tradable Power Allowance (Watts)			Non-Tradable Connected Lighting Power (Watts)
		+	≥	
		+	≥	
		+	≥	

Allocated base site allowance		Unallocated base site allowance
	≥	

	AREAS and ITEMS	COMMENTS	REQ'D Y / N	RCV'D √	ACC/RJT A / R
TYPE OF WORK					
	95 E 14 AV, BP-2019-01801		NA	Not applicable	
	Exsting BUILDING ■	3 Storey, (Multidwelling), Does NOT have sprinkler Sys.	NR	Not required	
	Renovation to all 3 storey of dwellings (26 units)	Upgrades >>> Major Reno >>> F2, S2, N3, A3, and E4			
DOCUMENTATION					
	Heritage Alteration permit		N		
	Owner's Undertaking Letter		Y	Y	
	Lessee Undertaking Letter		N		
	Matching Development drawings		NA		
	Schedule A		Y	Y	
	Architectural B	1.25	Y	N	
	Structural B >>> Struct Eng required if under Part 3		Y	Y	
	Structural Concept Review need not be Struct Eng		Y	Y	
	Mechanical B		Y	N	
	Plumbing B		Y	Y	
	Hood Fire Supression Sch B		N		
	Electrical B		Y	Y	
	Geotechnical B		N		
	Building Envelope D1	Building complies with Part 5 of VBBL	Y	N	
	Sprinkler system schedule B and sprinkler permit applied for (otherwise a letter from the professional that sprinkler system is not modified)		NA		
	Energy	Submitted wrong forms + digital	Y	N	
	Energy statement on drawings		N		
	Kitchen Ventilation form		N		
	Duct cleaning letter		N		
	Access for duct maintenance		N		
	Building permit data sheet		Y		A
	Code Report		N		
	Strata letter of approval for the proposal		N		
DOCUMENTATION ON ARCHITECTURAL DRAWINGS					
	Reference to VBBL	Architectural Sch B	Y	Y	
	Upgrade requirements of the project		Y	Y	
	Part 5 design statement	Sch D1 not submitted	Y	N	

	Window schedule		Y	Y	
	Door schedule	It is not completed. Need to include info on all exits and main entrance to dwellings	Y	N	
3.4.1. - 3.4.4. EXITING					
3.4.2.1	**Number of Exits and Remoteness**	exit stais, exit corridor, and lobby details are not provided	Y	N	
3.4.2.4	**Travel Distance to an Exit**		Y	Y	
3.4.3.2	**Required Exit Width based on occupant load:**				
	Storey: 1st 2nd 3rd 4th				
	Occupant Load: **54 PERSON (Dwellings)**		Y	Y	
	Exit Capacity:		Y	Y	
3.4.3.2	**Mimimum Exit Width:**		Y	Y	
3.4.3.2	**Max. 50% capacity per exit**		Y	Y	
3.4.4.1	**FRR of Exit Separations**				
3.4.4.2	**Lobby Exit**				
	15m / Permitted occupancies / FS / FRR		Y	N	
3.4.4.4	**Integrity of Exits**				
	For the suite		Y	N	
	New exit sign		Y	N	
3.4.6. EXITING - TYPES OF EXIT FACILITIES					
	Stair details		Y	N	
	Open: No, this is a part 3 building				
	Width:				
	Rise				
	Run				
	Flight Vertical Rise:				
	Door swing clearance:				
	Direction of door swing:				
	Handrails / Guards		Y	N	
	Climability:				
	Guards:				
	Continuation / Extention				
	Height:				
	Headroom		Y	N	
	Stairs: / Landings / Rooms / Doorways / Parkades / Mezz:				
	Landings:				
	Rooms:				
	Doorways:		Y	N	
	Mezzanines:				
	Parkades: Ambulatory: Y / N Non Ambulatory: Y / N				
3.3.1. SAFETY IN FLOOR AREAS - ALL FLOOR AREAS					

	Separation of Suites	F2 upgrade does not requires upgrading suite separation unless travel distance to exit does not work	**NA**		
3.3.1.1	Suite separation FRR required:				
3.3.1.1	2hr FRR for ground level commercial suites?				
	Corridors:				
	Rating required: Y / N Rating:	Not provided	**Y**	**N**	
	Rating for load bearing walls		**NA**		
	Y / N Rating:				
9.9.8.2	**Travel distance**				
	Length (m):		**Y**	**Y**	
3.7 HEALTH REQUIREMENTS					
	WC number				
	Occupant load: **Dwellings** Male / Female / D/A stalls / Toilet room / Lavatories		**Y**	**Y**	
3.8. ACCESSIBILITY					
A3 upgrade to residential building		For A3 upgrade only the main entrance requires being accessible.	**Y**	**?**	
	Access to building				
	Parking				
	Provided: Y / N Notes:				
	Main entrance accessible to all				
	Provided: Y / N Notes:				
	Signage information and direction				
	Provided: Y / N Notes:				
	Access within building				
	Public facilities and common areas				
	Provided: Y / N Notes:	Detail/cross section of inter connection between 2 parts			
	To elevator				
	Provided: Y / N Notes:				
	To suite				
	Provided: Y / N Notes:				
	Protection areas refuge or zone in lieu of sprinklers				
	Provided: Y / N Notes:				
	Doors				
	Clearances / width / opening hardware / force to open / power operated				
	Specific occupancy				
	RETAIL FOOD				
	WC requirements				
	Occupant load: Male / Female / D/A stalls / Toilet room / Lavatories				
	Ramps				
	Slope / Width / Handrails / Landings				
	Elevator				
	Access / Controls / Size (see Miscellaneous)				
	Corridors and aisles				
	Width / Obstructions / Slope / Stairs preventing access / handrails				
	Counters serving public				
	Counters accessible or adjacent facility accessible: Y / N				

	Viewing positions				
	Provided: Y / N Notes:				
MISCELLANEOUS					
NA					
	Projection over city property				
	Provided: Y / N Engineering Legal agreement				
	Verify construction costs with marshall swift programme				
	Reported cost: Calculated cost: Additional fees: Y / N				
	Awning and canopy construction requirements				
	Review 1A.9.1				
	Garage ramps				
	Interconnected floors				
	Ramp only: Y / N Other openings: Y / N Separation				
DOCUMENTATION ON MECHANICAL DRAWINGS					
NA					
	Kitchen exhaust forms				
	Provided: Y / N Acceptable: Y / N				
	Air balance table				
	Notes:				

Building Inspection Complaint

Case number: 101012245707 Case created: 2018-12-13, 12:32:00 PM

Incident Location

Address: 95 E 14TH AV, Vancouver, V5T 2M4
Address2:
Location name:
Original Address:

Contact Details

Name: s.22(1)
Address: ,
Address2:
Phone: s.22(1) Email:
Alt. Phone: Preferred contact method: Either

Request Details

1.	Type of Complaint:	Work Without Permit
3.	If Work Without Permit selected, is there visible and active work being done?	Yes
4.	Describe complaint in detail (building type e.g. single family or multi-family dwelling, high-rise, commercial building; location and type of work):	Transferred from enq. centre to report work without permit. Work being going on for past 2 weeks. Appartment building, units s.22(1) and s 22(1) having extensive work being done. Removal of asbestos sign put up. Dozens and dozens of black bags removed. Lots of noise and power tools.
5.	(Don't ask, just record - did caller indicate they want a call back?):	No

Additional Details

BP-2018-05371: In Review - Posse - enq centre advised caller this permit does not apply to scope of work being done.
95 E 14th Avenue

Interior alterations to replace domestic waterpiping, provide firestopping, and repair walls in conjunction with repiping in all of the 26 units in this existing 3-storey multiple dwelling building on this site. Scope of work to include installation of new dishwashers, washers and dryers in all units.

OK for SIPS as per C. Yue, October 12, 2018.

Letter of Assurance submitted by:
Plumbing Schedule B, Nehal H. Patel, P. Eng., 604.210.0021

Note:
Energy Upgrade Exempt - Repiping

Map and Photo

- no picture -

EN

FYA to:

FYI to:

CITY OF VANCOUVER

PLANNING AND DEVELOPMENT SERVICES
Building Division
Building Review Branch

BUILDING PERMIT DEFICIENCY LIST

Permit Number: BP-2019-01801
Address: 95 E 14 Avenue
Date: July 9, 2019

Note:

- Project scope:
  Interior and exterior alterations, modifying floor layout, and re-pipe all plumbing system in all 3 storeys of this existing 3-storey multiple dwelling building. Exterior renovation is only to replace all windows and patio/balcony sliding doors. No work is proposed to the basement parking garage.

- The work is considered a Major Renovation Project that requires building upgraded to Fire; Life and Health Safety level of **F2**, Structural level of **S2**, Non- Structural level of **N3**, Accessibility level of **A3**, and Energy upgrade level of **E4** in compliance with V.B.B.L. Part 11.

- For detailed information on ASHRAE 90.1-2010 requirements and tutorials, please refer to vancouver.ca/home-property-development/large-building-energy-requirements-forms-checklists.aspx.

The following comments are to identify any issues that do not comply with Vancouver Building By-law #10908 as amended (VBBL 2014) and to request clarification of information in the submitted documentation and drawings. All items must be addressed before the issuance of the permit.

Documents:

1. Submit:
   a. Architectural schedule B which is also signed off for building envelope item 1.25
   b. Building envelope schedule D1
   c. Mechanical schedule B.
2. Energy upgrade requirement of the project is E4. Please:
   a. Revise residential suite energy checklist showing it would be upgraded to L4 level
   b. Revise common area energy checklist for changes to envelope, lighting, and energy upgrade to L4 level
   c. Submit digital files of the common area energy checklist in excel file and its related attachments (e.g. envelope, lighting, SWH) and also those for the energy compliance of residential suites in PDF.
3. The architect letter that confirms he takes responsibility and will look after all architecturally related works needs being stamped by the architect. Submit a revised stamped letter.

17. Double check information on drawings and correct where required, e.g. first floor kitchens are being identified as new bath.

OK Nov 12

Mechanical, plumbing, and electrical review

18. Update the electrical drawings for the 3rd floor fire detection and alarm system.
19. Show building emergency lighting system complies with current VBBL.
20. Some information on the electrical floor plans is not readable. Please look into modifying the electrical drawings scale or their legend/font size and submit 3 new sets of revised drawings.
21. Exit signs shall be green running man per the City of Vancouver Bulletin 2015-006-BU.
22. Provide mechanical drawings for kitchen and bathroom fan exhausts, venting of dryers in the laundry rooms (if there is any), and venting of dryers in the residential suites. Please also change name of the laundry rooms on floor plans, if it is not being used as a laundry room anymore.

Please note. ✓ done Nov. 12

If you have any questions, please contact me at the phone number or email address below.

Please indicate the address and permit number in the subject line or transmittal of all your correspondence and submissions to the City; hard copy submissions should be addressed to my attention. All resubmitted documents and drawings must include the correct address and/or legal description. The review of your resubmission will be prioritized based on the date it is received.

Hamid Mahpour
(604)871-6024
hamid.mahpour@vancouver.ca

CITY OF VANCOUVER

PLANNING AND DEVELOPMENT SERVICES
Building Division
Building Review Branch

BUILDING PERMIT DEFICIENCY LIST

Permit Number: BP-2019-01801
Address: 95 E 14 Avenue
Date: July 9, 2019

Note:

- Project scope:
  Interior and exterior alterations, modifying floor layout, and re-pipe all plumbing system in all 3 storeys of this existing 3-storey multiple dwelling building. Exterior renovation is only to replace all windows and patio/balcony sliding doors. No work is proposed to the basement parking garage.

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   b. Revise common area energy checklist for changes to envelope, lighting, and energy upgrade to L4 level
   c. Submit digital files of the common area energy checklist in excel file and its related attachments (e.g. envelope, lighting, SWH) and also those for the energy compliance of residential suites in PDF.

oct 28

3. The architect letter that confirms he takes responsibility and will look after all architecturally related works needs being stamped by the architect. Submit a revised stamped letter.

Building Bylaw compliance

4. F2 upgrade requires alarms and detectors, emergency lights, access to exit, exits, exit signs, and exit lights within the project and the public area (leading from project area to an acceptable open space) upgraded to comply with current VBBL. Please:
   a. Provide exit stair details demonstrating compliance with VBBL
   b. Update door schedule to include all related particulars (e.g. fire protection rating , having closer) and demonstrating compliance with VBBL for the main entrance door to dwelling units, main entrance to lobby, door separating first floor exit lobby from public corridor, and all exit doors
   c. Show exit stairs, corridors, and exit lobby are fire separated with assemblies having proper fire resistance rating from the rest of the floor area
   d. Show public corridor and exit lobby are fire separated with assemblies having proper fire resistance rating from other floors including parking garage
   e. Note the fire resistance rating of the assemblies shall either comply with ULC or VBBL Appendix D. Update wall and floor assembly information on drawing A8.02 as required.
5. There seems to be shaft and electric closets in corridors. Please provide name of all spaces on the floor plan. Note that laundry room, service rooms, storage room, vertical and horizontal service spaces shall be separated from the rest of the floor area. Provide details including vertical cross section(s) through the building showing horizontal service spaces (if there is any) are separated with proper fire separation from the public corridor and exits.
6. Residential suite 108 cannot open directly into exit lobby, VBBL 3.4.4.2.
7. Doors of the suite 101 and 102 cannot open directly into exit, VBBL 3.3.1.3.
8. Clarify how exit route on the east is protected from exposure to unprotected openings of the building, VBBL 3.2.3.13.
9. Provide detail demonstrating doors installed in series at entrance to suite 101 and 102 meet VBBL 3.3.1.13(12).
10. Show the main entrance to the building meets H/C access requirements of VBBL including having proper hardware.
11. Update energy information on drawing A0.01 as requested in item 2 above.
12. Update door schedule on drawing A8.01 to relate every door to its type as shown on the same drawings page.
13. Provide bottom of the door/sill installation detail for patio/balcony sliding door. Also provide its head and jamb installation details if different from those shown for window on drawing A9.01. Otherwise clarify on the same drawing that the said details are the same for installation of both, namely windows and patio/balcony doors.
14. Indicate on architectural drawings that the followings shall be restrained to ensure safety from overhead falling hazards as required for N3 upgrade level;
    a. All interior partition walls, ceiling supporting frames, T-bar assemblies, ceiling gypsum wall boards, all overhead mechanical equipment and services, overhead electrical equipment and services
    b. All falling hazards from cladding, veneer, parapets, canopies and ornaments over exit and extended to 5 m on either side of exit.
15. Indicate on architectural drawings that non-structural elements and falling hazards shall be restrained to resist lateral loads due to earthquakes within the project area as required for S2 upgrade level.
16. New sliding doors and windows shall comply with Part 5 of VBBL and energy efficiency requirements of VBBL 10.2.2.7 having maximum thermal transmittance of 1.4 W/(m2K). Indicate it as a statement on architectural drawings. Please also review and clarify the information on drawing A8.01 as single glazing may not provide the required USI values for window and patio doors.

17. Double check information on drawings and correct where required, e.g. first floor kitchens are being identified as new bath.

Mechanical, plumbing, and electrical review

18. Update the electrical drawings for the 3rd floor fire detection and alarm system.
19. Show building emergency lighting system complies with current VBBL.
20. Some information on the electrical floor plans is not readable. Please look into modifying the electrical drawings scale or their legend/font size and submit 3 new sets of revised drawings.
21. Exit signs shall be green running man per the City of Vancouver Bulletin 2015-006-BU.
22. Provide mechanical drawings for kitchen and bathroom fan exhausts, venting of dryers in the laundry rooms (if there is any), and venting of dryers in the residential suites. Please also change name of the laundry rooms on floor plans, if it is not being used as a laundry room anymore.

If you have any questions, please contact me at the phone number or email address below.

Please indicate the address and permit number in the subject line or transmittal of all your correspondence and submissions to the City; hard copy submissions should be addressed to my attention. All resubmitted documents and drawings must include the correct address and/or legal description. The review of your resubmission will be prioritized based on the date it is received.

Hamid Mahpour
(604)871-6024
hamid.mahpour@vancouver.ca

STUART HOWARD ARCHITECTS INC
MEMBERS AIBC - RAIC - AIA
Stuart Howard Architect AIBC SAA FRAIC AIA Principal
W. Neil Robertson Architect AIBC MRAIC AIA Principal

November 28, 2019
SUBJECT: Building Permit Deficiency List (Further)
~~Permit Number: BP-2019-01801~~
Address: 95 E 14th Avenue

...The same item number of the original review comment is used to address the remaining issues.
(black text from original list)
(blue text as added comment from Hamid Mahpour, Nov 27th)
[red text response comment today]

a. Provide exit stair details demonstrating compliance with VBBL
Item 4a- Using VBBL 2019 Article 11.3.5.4 to justify compliance of the existing exit stairs with VBBL requirements is acceptable only when the Generic Alternative Solution to CBO office was accepted. Please note Bulletin 2019-005-BU and have the said Generic AL submitted to CBO office. Contact Boris Turishev of CBO at (604)873-7401 or boris.turishev@vancouver.ca for questions on Alternative Solutions.
[A generic alternative solution for the exit stairs, taken from VBBL 2019 has been submitted to CBO electronically.]

d. Show public corridor and exit lobby are fire separated with assemblies having proper fire resistance rating from other floors including parking garage
Item 4d- Although the fire resistance rating of the existing walls was accepted, however 33min fire resistance rating for floors of exit lobby, exit corridor, and public corridor is not acceptable. Please look into how ratings of the said assemblies could be brought up to comply with VBBL requirements.
[The assembly schedule has been revised to account for an additional layer of 5/8" Type 'X' GWB to be added to Horizontal assembly F-05 universally (not just in the residential suites.]

See also drawing sheet A2.01, Floor Plan L-1. Comment has been added at Door D100-8. The swing of the door appeared to conflict with D100-7, confirmation of location of door is noted as required.
See also drawing sheet A4.01, Section 1. Two assembly tags have been corrected to F-06.

Changed items are clouded in red.

If you have any questions, please contact me at the phone number or email address below.

Regards,

Rob McLean

405 - 375 WEST FIFTH AVENUE • VANCOUVER, B.C. • V5Y 1J6
Telephone: 604 . 688 . 5585 Facsimile: 604 . 688 . 7486

STUART HOWARD ARCHITECTS INC.
MEMBERS AIBC - RAIC - AIA

Stuart Howard Architect AIBC FRAIC AIA Principal
W. Neil Robertson Architect AIBC MRAIC AIA Principal

Date: November 28th, 2019

Mr. Boris Turishev, Building Policy Engineer

Building Policy Branch
City of Vancouver, Development, Buildings and Licensing
Ph: 604.873.7401
email: boris.turishev@vancouver.ca

RE: Generic Alternative Solution
Project Address – 95 East 14th Avenue. Apartment Building Q14.
BP-2019-01801

Brief Building Description and Scope of Project:

This is a three storey walk-up residential rental apartment building. A partial basement and parking area are located below grade.

The BP application is for renovation of 26 residential suites on the 1st, 2nd, and 3rd floor levels.
Interior renovations to the rental units consist of: removal and replacement of all kitchen and bathroom electric and plumbing appliances, fixtures, cabinets and finishes; including addition of in-suite clothes washers/dryers; remove some existing non-rated interior partitions, and construct some new non-rated partitions or portions of, reconfigure kitchen layouts and space, and designate den or storage rooms in each unit; increase size of in-suite doors to meet current VBBL requirements, add smoke detectors within units; replace unit windows and sliding doors with modern units of the same size and operation.

By-Law Edition, References & Summary of Deviations

The building permit application for this project is under VBBL 2014.
The existing exit stairs do not comply with VBBL 2014.
Permitted rise of stairs is between 125mm (4.92") and 180mm (7.0866")
Permitted run of stairs is – minimum run = 280mm (11.0236")

On the three residential levels the observed condition of the exit stairs is:

Observed rise of existing stairs is between 178mm and 190.5mm (7” and 7-1/2”).
Observed run of existing stairs is approximately between 266.7mm and 273.1mm (10.5” and 10.75”) .
The stairs have rectangular treads, in straight flights

On the parking level stairway, the observed condition of the exit stairs is:

Observed rise of existing stairs is between 171.5mm and 177.8mm (6.75” and 7”).
Observed run of existing stairs is approximately 247.7mm (9.75”) .
The stairs have rectangular treads, in straight flights.

Summary of Solutions/ List Mitigating Features.
**(additional design features in excess of literal requirements)

The existing rise and run dimensions comply with VBBL2019, Table 11.3.6.9 (4)

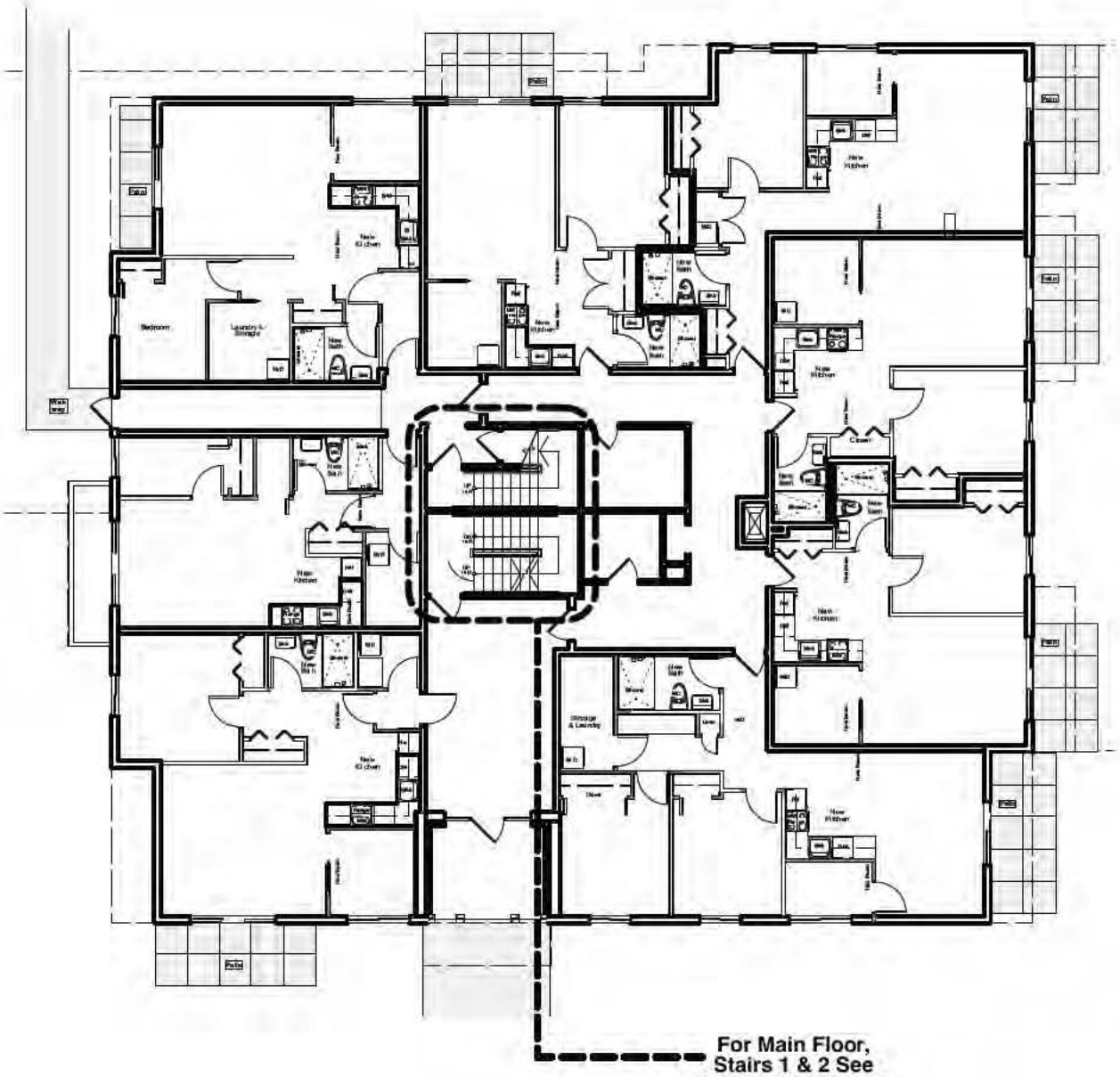
- New slip resistant finish will be installed on treads and landings.
- New nosings with distinct colour contrast for the full width of the leading edge will be installed.
- No projecting nosing, rakeback, or combination thereof shall exceed 38mm or angle of more than 30 degrees from the vertical.
- Lighting shall comply with 11.3.6.9.(4) c); emergency lighting shall comply with 11.3.6.9.(4) d).
- New Handrails shall comply with 3.4.6.5.
- Emergency power will be provided in accordance with 3.2.6.5.

As Registered Professional, I will coordinate design and field reviews of the discussed generic alternative solutions in conformance with requirements in Subsection 2.3.2. of Division C of the 2014 VBBL

Sincerely

STUART HOWARD ARCHITECTS INC.

W. Neil Robertson
Architect AIBC, MRAIC, AIA
PRINCIPAL



For Main Floor, Stairs 1 & 2 See Attachment Page 3

For Level 2, Stairs 1 & 2 See Attachment Page 4

For Level 3, Stairs 1 & 2 See Attachment Page 5

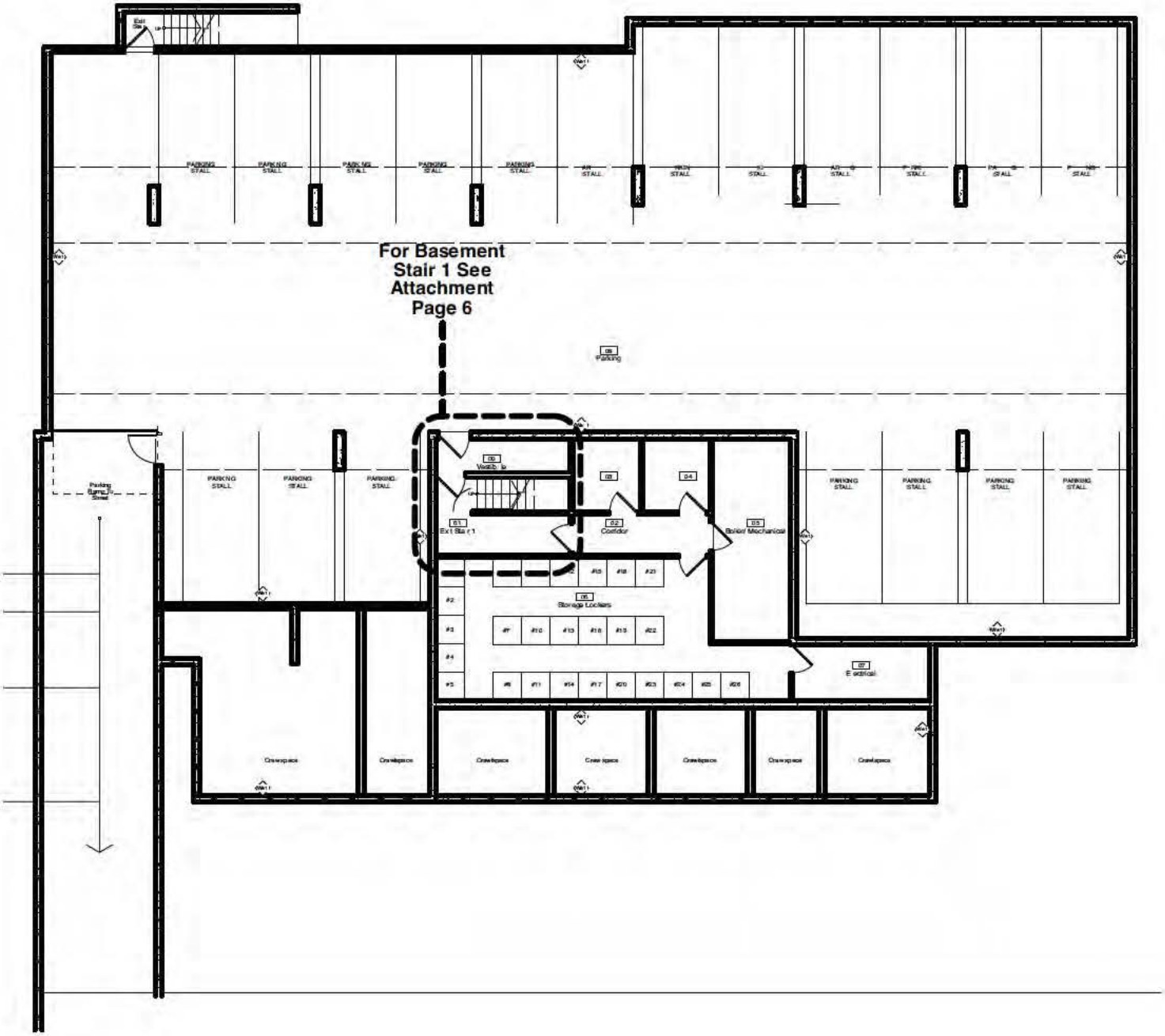
STUART HOWARD ARCHITECTS INC.
MEMBERS AIBC - RAIC - AIA
405 - 375 West 5th Avenue Vancouver B.C. V5Y 1J6
phone - 604.688.5585 fax - 604.688.7486

Project:
Apartment Building Q14
95 East 14th Avenue
Vancouver, B.C.

Title:
Main Floor Key Plan
(Similar Level 2 & Level 3)

Date: 2019.11.28
Project ID: 219.02
Drawn: rmm
Chk'd: NR
Scale: 1/16"=1'-0"

Sheet No.
Attachment Page 1
Rev:



STUART HOWARD ARCHITECTS INC.
MEMBERS AIBC - RAIC - AIA

405 - 375 West 5th Avenue
phone - 604.688.5585

Vancouver B.C. V5Y 1J6
fax - 604.688.7486

Project:
Apartment Building Q14

95 East 14th Avenue
Vancouver, B.C.

Title:
Basement/ Parking Level Key Plan

Date: 2019.11.28

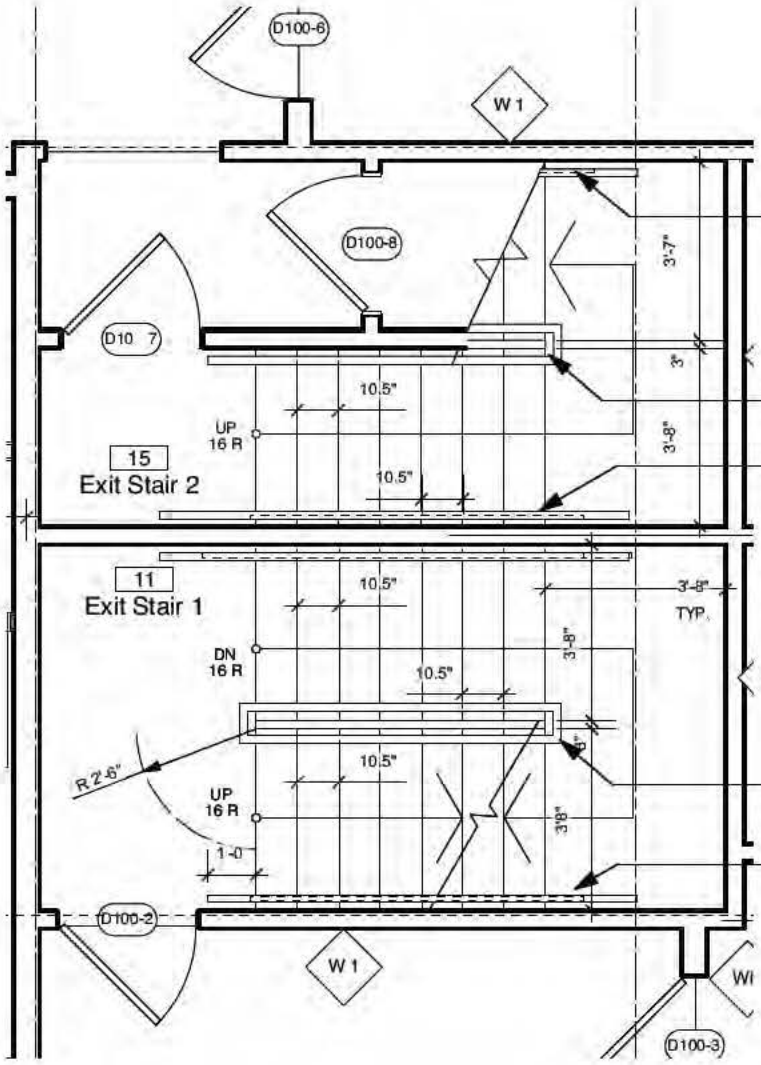
Project ID: 219.02

Drawn: rmm | Chk'd: NR

Scale: 1/16"=1'-0"

Sheet No. **Attachment Page 2**

Rev:



- New slip resistant finish will be installed on treads and landings.
- New nosings with distinct colour contrast for the full width of the leading edge will be installed.
- No projecting nosing, rakeback, or combimaion thereof shall exceed 38mm or angle of more than 30 degrees from the vertical.
- Lighting shall comply with 11.3.6.9.(4) c); emergency lighting shall comply with 11.3.6.9.(4) d).
- New Handrails shall comply with 3.4.6.5.
- Emergency power will be provided in accordance with 3.2.6.5.

D tail Plan - Level 1 - Exit Stair
Scale: 1/4" = 1'-0"

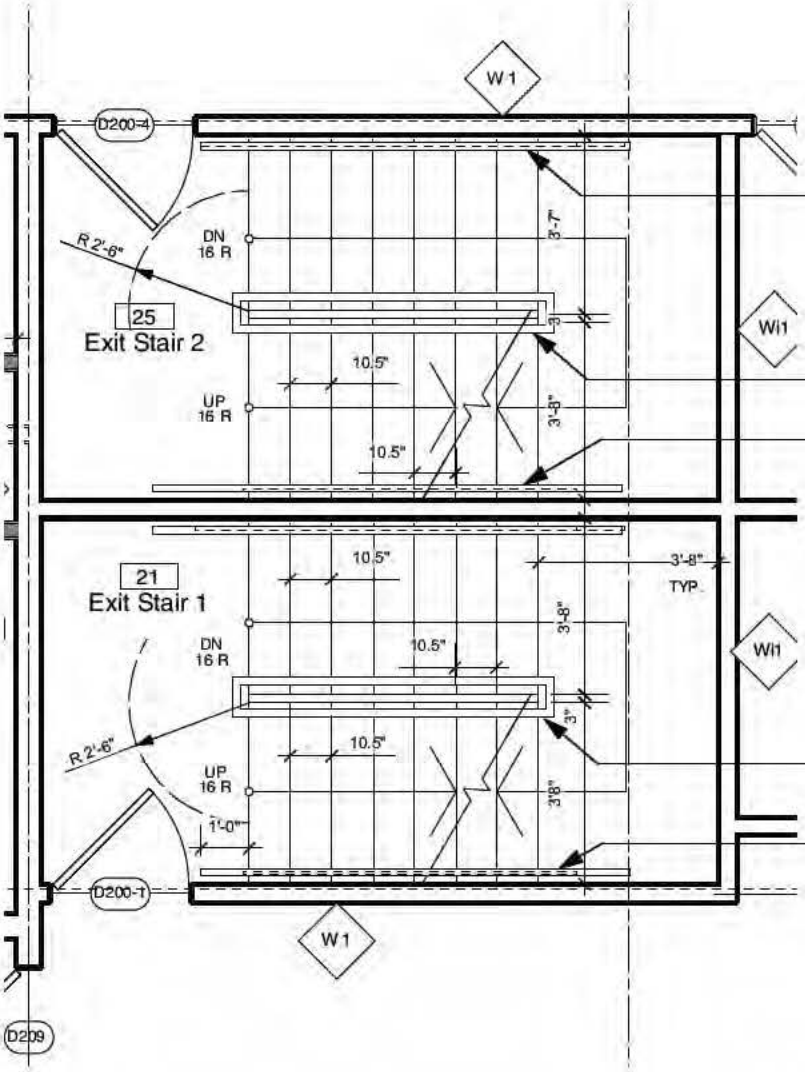
STUART HOWARD ARCHITECTS INC.
MEMBERS AIBC - RAIC - AIA
405 - 375 West 5th Avenue Vancouver B.C. V5Y 1J6
phone - 604.688.5585 fax - 604.688.7486

Project: **Apartment Building Q14**
95 East 14th Avenue Vancouver, B.C.

Title: **Exit Stairs Main Floor**

Date: 2019.11.28
Project ID: 219.02
Drawn: rmm Chk'd: NR
Scale: 1/4"=1'-0"

Sheet No. **Attachment Page 3**
Rev:



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- Emergency power will be provided in accordance with 3.2.6.5.

- D tail Plan - Level 2 - Exit Stair
Scale: 1/4" = 1'-0"

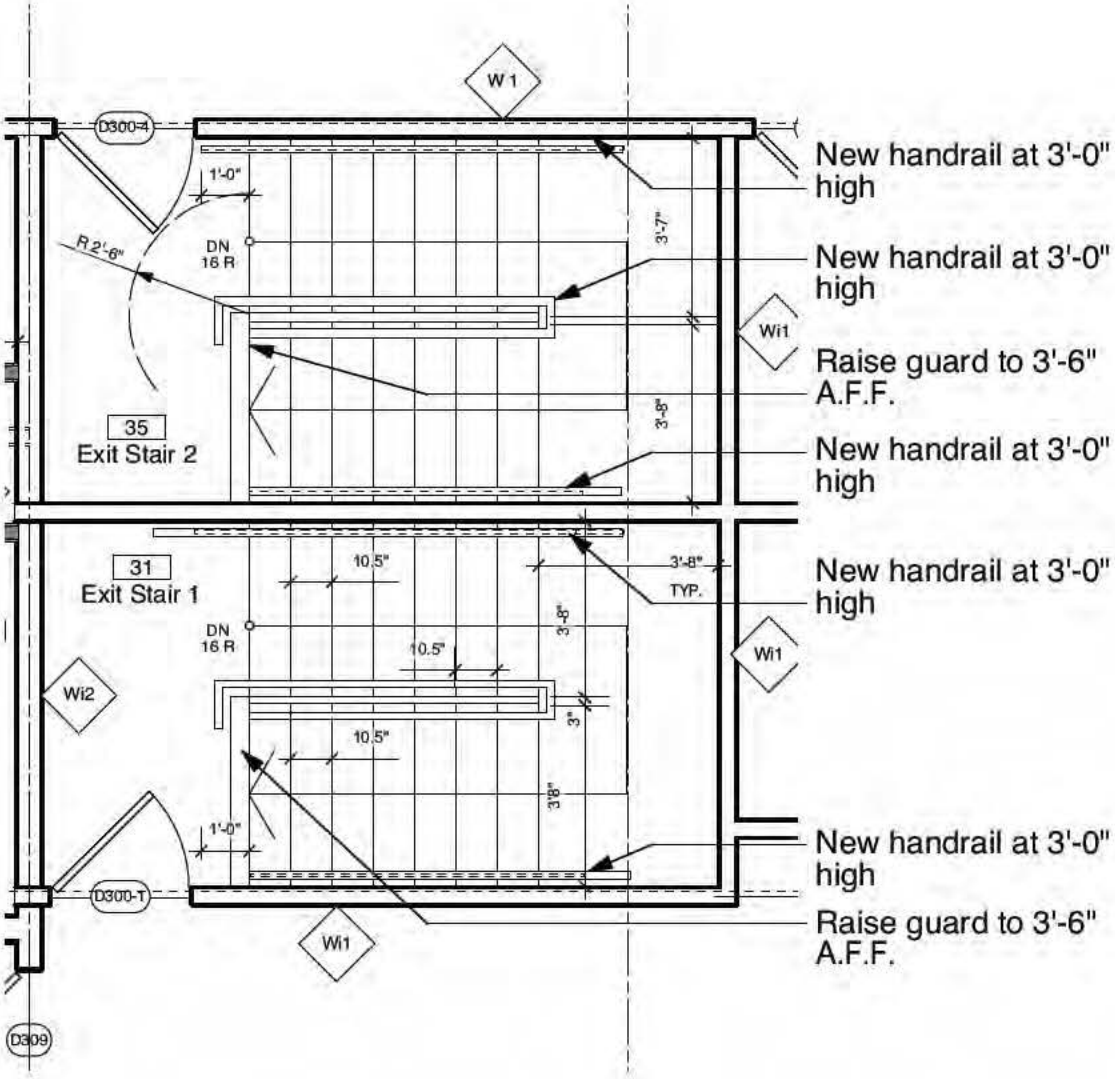
STUART HOWARD ARCHITECTS INC.
MEMBERS AIBC - RAIC - AIA
405 - 375 West 5th Avenue Vancouver B.C. V5Y 1J6
phone - 604.688.5585 fax - 604.688.7486

Project:
Apartment Building Q14
95 East 14th Avenue
Vancouver, B.C.

Title:
Exit Stairs Level 2

Date: 2019.11.28
Project ID: 219.02
Drawn: rmm
Chk'd: NR
Scale: 1/4"=1'-0"

Sheet No.
Attachment Page 4
Rev:



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- New Handrails shall comply with 3.4.6.5.
- Emergency power will be provided in accordance with 3.2.6.5.

D tail Plan - Level 3 - Exit Stair
Scale: 1/4" = 1'-0"

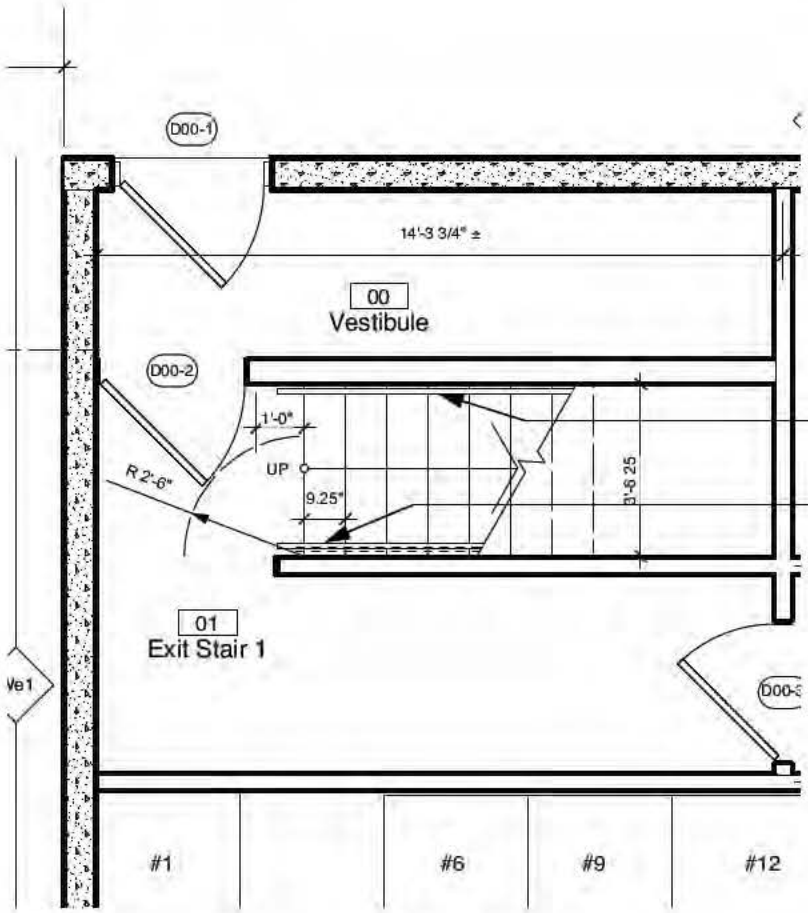
STUART HOWARD ARCHITECTS INC.
MEMBERS AIBC - RAIC - AIA
405 - 375 West 5th Avenue Vancouver B.C. V5Y 1J6
phone - 604.688.5585 fax - 604.688.7486

Project: **Apartment Building Q14**
95 East 14th Avenue Vancouver, B.C.

Title: **Exit Stairs Level 3**

Date: 2019.11.28
Project ID: 219.02
Drawn: rmm Chk'd: NR
Scale: 1/4"=1'-0"

Sheet No. **Attachment Page 5**
Rev:



Detail Plan - Level B - Exit Stair -
Scale: 1/4" = 1'-0"

- New slip resistant finish will be installed on treads and landings.
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STUART HOWARD ARCHITECTS INC.
MEMBERS AIBC - RAIC - AIA
405 - 375 West 5th Avenue Vancouver B.C. V5Y 1J6
phone - 604.688.5585 fax - 604.688.7486

Project: **Apartment Building Q14**
95 East 14th Avenue
Vancouver, B.C.

Title: **Exit Stairs Basement/ Parking Level**

Date: 2019.11.28
Project ID: 219.02
Drawn: rmm | Chk'd: NR
Scale: 1/4"=1'-0"

Sheet No. **Attachment Page 6**
Rev:

STUART HOWARD ARCHITECTS INC.
MEMBERS AIBC - RAIC - AIA

Stuart Howard Architect AIBC FRAIC AIA Principal
W. Neil Robertson Architect AIBC MRAIC AIA Principal

Date: July 2, 2019

Hamid Mahpour, Project Coordinator

Building Review Branch
City of Vancouver, Development, Buildings and Licensing
Ph: 604.871.6024
email: hamid.mahpour@vancouver.ca

RE: Project Address – 95 East 14th Avenue

Dear Hamid,

This letter is to confirm that work at the address noted, begun under previous building permit BP-2018-05371 will be included under the professional letters of assurance submitted for building permit BP-2019-01801 as issued by the undersigned registered professional and corporation named below.

Sincerely,

STUART HOWARD ARCHITECTS INC.

W. Neil Robertson
Architect AIBC, MRAIC, AIA
PRINCIPAL

405 • 375 WEST FIFTH AVENUE • VANCOUVER B.C. • V5Y 1J6
Telephone 604•688-5585 Facsimile: 604•688-7486

Project Coordinator: Hamid Mahpour

POSSE Permit Number: BP-2019-01801

Project Address: 95 E 14TH AVENUE
Vancouver, BC V5T 2M4

Related To:

Project Description:

Interior and exterior alterations to this existing rental building(26 suites) on first, second, and third floors. Exterior renovation is for replacing all exterior windows only. Interior alteration includes:
1-Replacement of all bathroom plumbing and and bathroom fixtures
2- Replacement of all kitchen cabinets, plumbing and other fixtures
3- Replacement of all electrical wiring and fixtures including detection and alarm system
4- Removal of some interior partitions and re configuring layout of some of the suites
5- Replacing some doors.

Please note:
1- Some plumbing are inside the rated demising wall. Included in the work is the replacement of those plumbing which may void listing of the wall assembly. Architect needs to demonstrate compliance with VBBL showing walls have proper fire and sound separations.
2- A set of drawings will be sent to ECO for clearance of exterior changes including whether the permit needs being converted to a DB.

ATTENTION: Name &/OR NOTES:	**DISTRIBUTION TO:** **DATE:**	
	Addressing	
	Eco	
	Electrical	
	Engineering Services	
	Environmental	
	Fire & Rescue Services	
	Health	
	Heritage	
	Landscape	
	Mechanical	
	Planning	

PLEASE RETURN DRAWINGS TO:

BUILDING REVIEW BRANCH CLERKS 4th FLOOR - WEST ANNEX

Project Coordinator: Hamid Mahpour
POSSE Permit Number: BP-2019-01801
Project Address: 95 E 14TH AVENUE
Vancouver, BC V5T 2M4

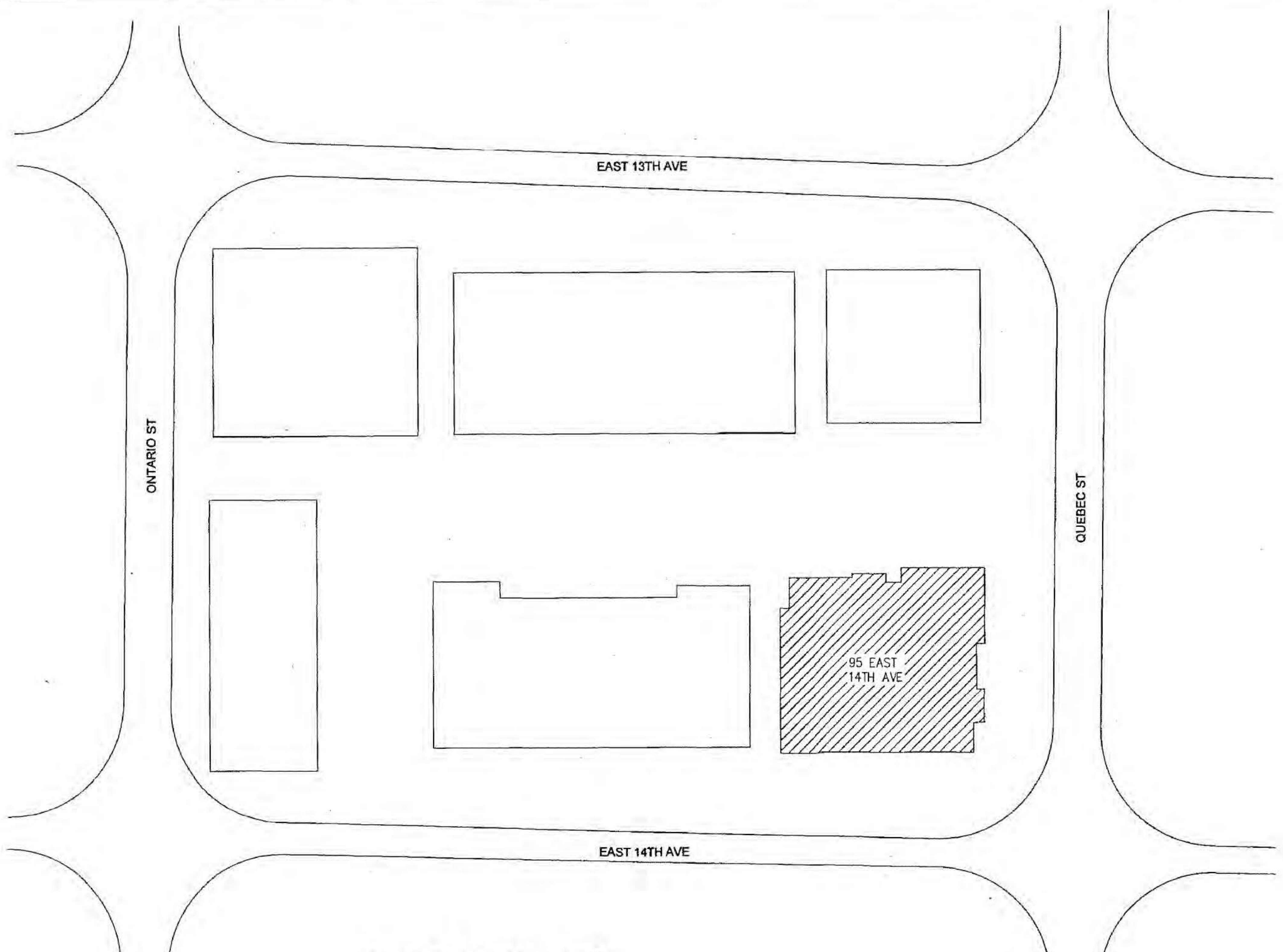
	Single Room Accom. (SRA)	
	CCFL	

PLEASE RETURN DRAWINGS TO:
BUILDING REVIEW BRANCH CLERKS 4th FLOOR - WEST ANNEX

BP-2018- 05371

95 E 14th AV

DS COPY



1 SITE PLAN
P-1.0 SCALE: N.T.S.

MECHANICAL GENERAL NOTES

1. THE MECHANICAL CONTRACTOR SHALL VISIT THE SITE, PRIOR TO SUBMITTING PRICE TO BECOME FAMILIAR WITH ALL EXISTING SITE CONDITIONS, INCLUDING BUT NOT LIMITED TO EXISTING WATER, SANITARY, AND GAS SERVICES. NOTIFY ENGINEER ANY DISCREPANCY DURING TENDER PERIOD. FAILURE TO VISIT THE SITE WILL NOT ALLEVIATE THE CONTRACTOR FROM HIS/HER RESPONSIBILITY TO EXECUTE THE CONTRACT DOCUMENTS TO THEIR FULL INTENT.
2. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. INSTALL UNITS PLUMB AND LEVEL, FIRMLY ANCHORED IN LOCATIONS INDICATED, AND MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES.
3. ALL MATERIAL SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER VERIFYING IT IS ADEQUATE FOR INSTALLATION PER THE SPECIFICATIONS AND DRAWING. VERIFY DIMENSIONS AND CLEARANCES AT BUILDING BEFORE COMMENCING WORK.
4. MECHANICAL CONTRACTOR SHALL PROVIDE TWO FILTER CHANGES PRIOR TO THE END OF CONSTRUCTION STAGE AND PRIOR TO GRAND OPENING.
5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE ACTUAL LOCATION OF STRUCTURAL MEMBERS AND COORDINATE INSTALLATION OF THE EQUIPMENTS ACCORDINGLY.
6. THE CONTRACTOR SHALL FULFILL ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS AND SHALL COMPLETE THE IMPROVEMENTS SHOWN ON THE DRAWINGS. ALL SYSTEMS SHALL BE FINISHED, TESTED, AND BALANCED, ADJUSTED, AND PROVEN FULLY OPERATIONAL AND USEABLE.
7. EXCEPT WHERE SPECIFICALLY SHOWN OR SPECIFIED OTHERWISE, EXISTING WORK IS TO REMAIN.
8. WHERE PIPES, CONTROL DEVICES AND WIRING WHICH ARE TO REMAIN IN-SERVICE ARE DISCONNECTED FOR THE REMOVAL OR RELOCATION OF EQUIPMENT OR BECAUSE OF BUILDING ALTERATIONS, THEY SHALL BE RE-CONNECTED BY MECHANICAL CONTRACTOR. MC TO COORDINATE WITH OTHER TRADES AS NECESSARY.
9. TRANSITION RECTANGULAR DUCTWORK ON BOTTOM AND SIDES. MAINTAIN TOP OF DUCTWORK LEVEL AND AS HIGH AS POSSIBLE. PROVIDE VOLUME DAMPER AT EACH BRANCH DUCTWORK.
10. CONTRACTOR SHALL COORDINATE VOLTAGE AND PHASE OF EACH PIECE OF EQUIPMENT WITH THE ELECTRICAL CONTRACTOR PRIOR TO ORDERING.
11. MOUNT THERMOSTATS AND FAN SWITCHES WHERE INDICATED ON PLANS 48" AFF UNLESS NOTED OTHERWISE. COORDINATE FINAL LOCATIONS OF THESE CONTROLS WITH OWNER'S REP.
12. COORDINATE DUCTWORK AND PIPING WITH PLUMBING, FIRE PROTECTION AND ELECTRICAL.
13. MAKE OFFSETS AND TRANSITIONS TO COORDINATE WITH OTHER TRADES WITHOUT ADDITIONAL EXPENSE TO THE OWNER.
14. CONTRACTOR SHALL COORDINATE FIRE RATED WALLS AND FLOORS. PROVIDE FIRE DAMPERS IN DUCT PENETRATIONS THROUGH RATED WALLS AND FLOORS.
15. EXACT LOCATIONS OF ALL CEILING AIR DEVICES SHALL BE COORDINATED WITH LIGHT FIXTURES, SPRINKLER HEADS AND OTHER CEILING MOUNTED FIXTURES AT JOB SITE. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN.
16. THE SCOPE OF WORK SHALL INCLUDE PROVIDING ALL WORK INDICATED, AND COORDINATION WITH ALL TRADES. SCOPE OF WORK IS INDICATED ON THE CONTRACT DOCUMENTS INCLUDING THE DRAWINGS AND THE SPECIFICATIONS, WHICH ARE COMPLIMENTARY. WORK INDICATED IN ANY CONTRACT DOCUMENT SHALL BE CONSIDERED PART OF THE SCOPE OF WORK. IN GENERAL, WORK REQUIREMENTS ARE NOT INDICATED IN BOTH DOCUMENTS. WHERE DOCUMENTS CONFLICT WITHIN THEMSELVES OR WITH CODES AND REGULATIONS, PROVIDE THE HIGHER QUANTITY AND QUALITY AND FOLLOW THE STRICTER REQUIREMENTS.
17. THIS SHEET HAS GENERAL LIST OF SYMBOLS AND ABBREVIATIONS AND SHALL BE USED AS A DICTIONARY TO DEFINE ITEMS INDICATED ON DRAWINGS. NOT ALL SYMBOLS OR ABBREVIATIONS ARE NECESSARILY USED ON THIS PROJECT.
18. DRAWING'S ISSUE DATE AND DESCRIPTION ARE NOTED ON THE TITLE BLOCK. G.G. SHALL CONFIRM AND GET ENGINEER'S APPROVAL IF ANY OF THESE DRAWINGS ARE USED FOR ANY OTHER PURPOSE THAN LISTED IN DESCRIPTION. G.C. SHALL COLLECT ALL RFI ON ISSUED FOR TENDER DRAWINGS AND SEND TO ENGINEER FOR ANSWERS AND CLARIFICATION, ENGINEER MAY ISSUE ADDENDUM AS NECESSARY.

CIVIC ADDRESS

95 EAST 14TH AVE., VANCOUVER, BC

SYMBOL SCHEDULE

- DOMESTIC COLD WATER
- DOMESTIC HOT WATER
- DOMESTIC HOT WATER RETURN
- SANITARY
- SZ — SANITARY SUD ZONE
- VENT
- EXISTING
- DIRECTION OF FLOW
- SLOPE PIPE
- PIPE DROP
- PIPE RISE
- PIPE TEE DOWN
- BALANCING VALVE
- CHECK VALVE
- PIPE TEE UP
- PIPE UNION
- ISOLATION VALVE – REFER TO SPECIFICATIONS
- EQUIPMENT / FIXTURE TYPE
- DRAWING NOTE
- P– DETAIL NUMBER DRAWING NUMBER
- WR # WATER RISER ID
- SAN # SANITARY RISER ID
- PUMP

CITY OF VANCOUVER DEVELOPMENT SERVICES
PLANS COMPRISED OF ...6... PAGES, EACH PERFORATED WITH A COMBINATION OF LETTERS AND NUMBERS OF A PERMIT, HAVE BEEN REVIEWED AND FORM PART OF THAT PERMIT.

IMPORTANT
THE ISSUANCE OF A PERMIT DOES NOT REPRESENT OR WARRANT THAT THE APPLICATION OR PLANS COMPLY WITH THE PROVISIONS OF THE BUILDING BY-LAW OR ANY OTHER BY-LAW REGULATING SIGNS OR THE CONSTRUCTION OF BUILDINGS, NOR DOES IT PREVENT THE CITY FROM ENFORCING ANY SUCH BY-LAWS AS IT SEES FIT. THE RESPONSIBILITY TO COMPLY WITH THE BY-LAWS AT ALL TIMES REMAINS WITH THE OWNER AND DEVELOPER.

SIGNATURE

DRAWING LIST

PAGE	DESCRIPTION
P-1.0	COVER PAGE, SITE PLAN, LEGEND & SYMBOLS
P-2.0	PLUMBING: PARKING & FIRST FLOOR PLAN
P-2.1	PLUMBING: SECOND & THIRD FLOOR PLAN
P-3.0	WATER & SANITARY SCHEMATICS
P-4.0	DETAILS
P-5.0	SPECIFICATIONS

The Water Works By-law (WWBL) has been amended to prohibit the connection of once through cooling equipment, non-recirculating liquid ring pumps and other single pass systems to the City's water system (WWBL Section 3.9)

CITY OF VANCOUVER
Licences & Inspections
Plumbing Inspection Branch

These drawings are accepted for the issuance of the plumbing permit subject to compliance with the current City of Vancouver Building by-laws, related regulations and good engineering practice.

Signature: ....

Date: DEC. 04. 2018

Drawings refer to permit # PP. 2018 - 05431

IMPORTANT

The issuance of a permit does not represent or warrant that the plans comply with the provisions of these by-laws, nor does it prevent the City from enforcing any such by-laws as it sees fit. The responsibility to comply with the by-laws at all times still remains with the applicant and the owner.

Backflow prevention to be installed for all fixtures and equipment required by the City of Vancouver Waterworks By-law 4848

These plans have not been looked at for compliance with the Building By-law requirements (other than as to location of the building on the site). They are not accepted for purposes of that By-law until the District Building Inspector endorses his acceptance of the "Building Permit-Inspection Approval Record", his "Inspection Record" and hereon

Inspector's Name (Print and Sign)

DOMESTIC WATER LOAD SUMMARY

DESCRIPTION	USE TYPE	QTY.	COLD FU	HOT FU	COMBINED (TOTAL) FU	TOTAL COLD FU	TOTAL HOT FU	COMBINED (TOTAL) TOTAL FU
THIRD FLOOR								
LAVATORY	PRIVATE	9	0.70	0.70	0.70	6.30	6.30	6.30
WATER CLOSET	PRIVATE	9	2.20	0.00	2.20	19.80	0.00	19.80
BATH TUB	PRIVATE	9	1.40	1.40	1.40	12.60	12.60	12.60
KITCHEN SINK	PRIVATE	9	1.40	1.40	1.40	12.60	12.60	12.60
DISHWASHER	PRIVATE	9	0.00	1.40	1.40	0.00	12.60	12.60
CLOTHES WASHER	PRIVATE	9	1.40	1.40	1.40	12.60	12.60	12.60
TOTAL						63.90	56.70	76.50
SECOND FLOOR								
LAVATORY	PRIVATE	9	0.70	0.70	0.70	6.30	6.30	6.30
WATER CLOSET	PRIVATE	9	2.20	0.00	2.20	19.80	0.00	19.80
BATH TUB	PRIVATE	9	1.40	1.40	1.40	12.60	12.60	12.60
KITCHEN SINK	PRIVATE	9	1.40	1.40	1.40	12.60	12.60	12.60
DISHWASHER	PRIVATE	9	0.00	1.40	1.40	0.00	12.60	12.60
CLOTHES WASHER	PRIVATE	9	1.40	1.40	1.40	12.60	12.60	12.60
TOTAL						63.90	56.70	76.50
FIRST FLOOR								
LAVATORY	PRIVATE	8	0.70	0.70	0.70	5.60	5.60	5.60
WATER CLOSET	PRIVATE	8	2.20	0.00	2.20	17.60	0.00	17.60
BATH TUB	PRIVATE	8	1.40	1.40	1.40	11.20	11.20	11.20
KITCHEN SINK	PRIVATE	8	1.40	1.40	1.40	11.20	11.20	11.20
DISHWASHER	PRIVATE	8	0.00	1.40	1.40	0.00	11.20	11.20
CLOTHES WASHER	PRIVATE	8	1.40	1.40	1.40	11.20	11.20	11.20
TOTAL						56.80	50.40	68.00
ALL UNITS TOTAL						184.60	163.80	221.00

NOTES:

1. WC BASED ON FLUSH TANK.
2. SIZING OF WATER DISTRIBUTION SYSTEM IS BASED ON BCBC 2012 USING AVERAGE PRESSURE LOSS METHOD; PIPE SIZING CHART IS BASED ON TABLE A-2.6.3.1.(2) F WITH WATER VELOCITY OF 5 FPS FOR COLD AND 4 FPS FOR HOT.
3. ALL PLUMBING FIXTURES ARE LOW FLOW.

DOMESTIC WATER PIPE SIZING CHART

	PEX PIPING	COPPER PIPING
PIPE SIZE	DCW/DHW – MAX. 8ft/sec (2.4m/s)	[illegible]
	FU (GPM)	[illegible]
1/2"	7 (6)	[illegible]
3/4"	17 (13)	[illegible]
1"	30 (20)	[illegible]
1 1/4"	54 (30)	[illegible]
1 1/2"	102 (44)	[illegible]
2"	265 (78)	[illegible]
2 1/2"	500 (123)	[illegible]
3"	750 (170)	[illegible]

CITY OF VANCOUVER
BP-2018 -05371
ACCEPTED

NOTES:

PIPE SIZING CHART USING AVERAGE PRESSURE LOSS METHOD. TABLE A-2.6.3.1.(2)F BCPC 2012.

DEVELOPED LENGTH FROM THE PRIVATE WATER SERVICE TO THE MOST REMOTE WATER OUTLET = 210 FT.

WATER PIPE SIZING BASED ON 8 FT/SEC FOR HOT & COLD USING (PEX, UPONOR). CONTRACTOR TO FOLLOW THE TABLE ABOVE CORRESPOND TO THE MATERIAL TO BE INSTALLED ON SITE.

PIPE SIZING METHODOLOGY

- MINIMUM PRESSURE REQUIRED AT FIXTURE = 35 PSI (241 KPA)
- LONGEST PIPE RUN LENGTH = 140 FT (42.7 M)
- DEVELOPED LENGTH INCLUDING FITTINGS (X 1.5 EXTRA) = 210 FT (64 M)
- PIPE LOSS = 4 FT/100 FT
- PRESSURE LOSS DUE TO LENGTH = 8.4 FT = 3.64 PSI (25 KPA)
- PRESSURE LOSS DUE TO HEIGHT = 36 FT = 15.6 PSI (107.6 KPA)
- AVAILABLE PRESSURE ON SITE AT WATER SERVICE CAPPED-OFF (AFTER PRV) = 80 PSI (550 KPA)*

*CONTRACTOR TO SITE VERIFY AND NOTIFY ANY CHANGE TO ENGINEER.

80 PSI (550 KPA)

80 PSI (550 KPA) – [35 PSI (241 KPA) + 3.64 PSI (25.1 KPA) + 15.6 PSI (107.6 KPA)] = 25.8 PSI (177.9 KPA)

25.8 PSI (177.9 KPA) / 210 FT (64 M) = 0.122 PSI/FT (2.78 KPA/M)

THEREFORE, USING AVERAGE PRESSURE LOSS METHOD IS SUITABLE.

General Notes

Written dimensions shall have precedence over scaled dimensions. Contractors shall verify and be responsible for all dimensions and conditions of the job and the designers shall be informed of any variations from the dimensions and conditions shown on the drawing.

CADA & Associates Consulting Ltd.
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201–1940 Oxford Connector,
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Web: www.cadaconsultants.com
Email: info@cadaconsultants.com
CD18-082

Issue	Description	Date
-	ISSUED FOR BP	2018-10-05

Engineer's seal:

Project: **DOMESTIC WATER RE-PIPING AND ADDED CLOTHES WASHERS**

95 EAST 14 AVE, VANCOUVER, BC

Drawing Title: COVER PAGE, SITE PLAN, LEGEND & SYMBOLS

Date: -

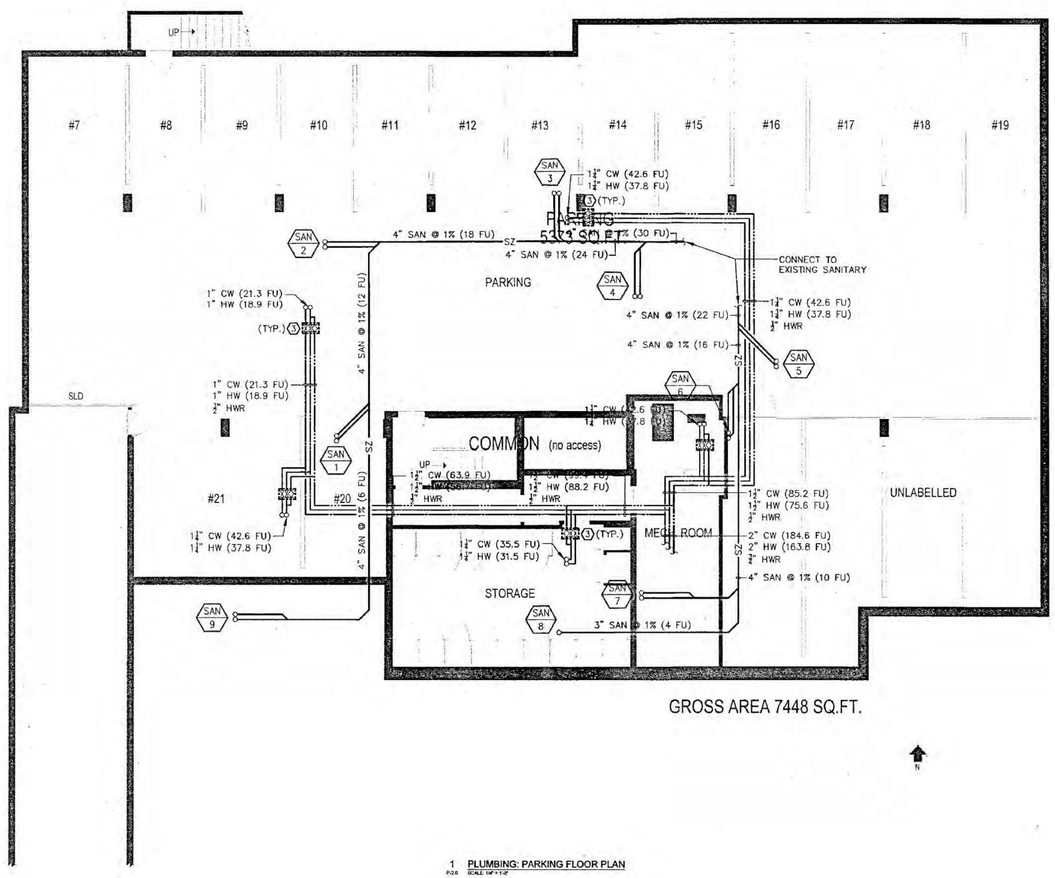
Drawn By: AD/CA/AS
Checked By: NP
Scale: N.T.S.
Drawing No. P-1.0

KEY NOTES

1. CONNECT TO EXISTING VENT. (TYPICAL)
2. CLOTHES WASHER DRAINS/STACKS TO HAVE SEPARATE SANITARY LINE FOR SUD PRESSURE ZONE RESTRICTIONS. CONNECT TO DOWNSTREAM OF BUILDING DRAIN WITH 40X DIAMETER OF MAIN SANITARY LINE. (TYPICAL)
3. PROVIDE RATED ACCESS PANEL AND VALVE TAGGING. (TYPICAL)

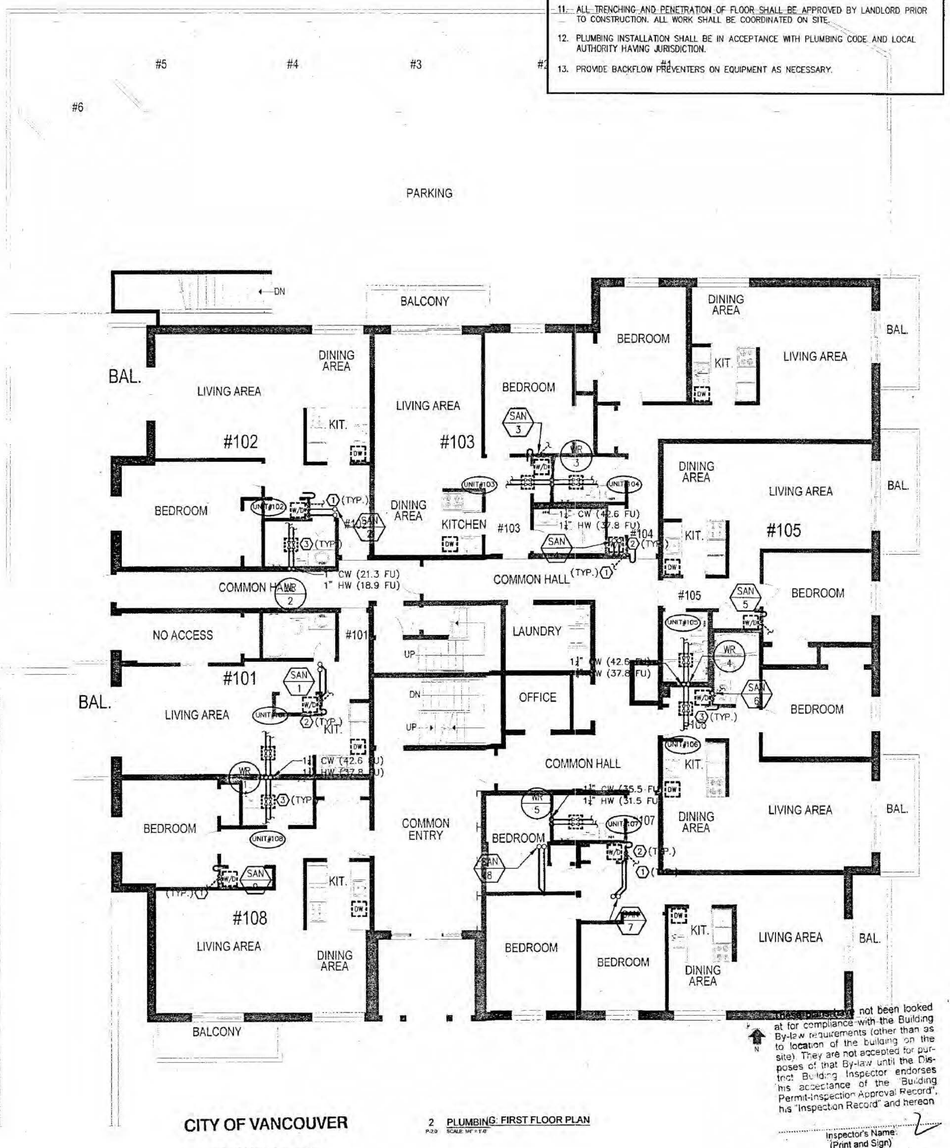
GENERAL NOTES

1. DRAWINGS ARE BASED ON LIMITED SITE REVIEW AND EXISTING DRAWINGS. THE MECHANICAL CONTRACTOR SHALL VISIT THE SITE, PRIOR TO SUBMITTING PRICE, TO BECOME FAMILIAR WITH ALL EXISTING SITE CONDITIONS. FAILURE TO VISIT THE SITE WILL NOT ALLEVIATE THE CONTRACTOR FROM HIS/HER RESPONSIBILITY TO EXECUTE THE CONTRACT DOCUMENTS TO THEIR FULL INTENT.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE ACTUAL LOCATION OF STRUCTURAL MEMBERS AND COORDINATE INSTALLATION OF THE PLUMBING EQUIPMENT AND PIPING ACCORDINGLY.
3. ALL PENETRATIONS THROUGH FIRE RATED WALLS TO BE FIRE STOPPED TO MATCH RATING.
4. COORDINATE ALL PIPE SLEEVE PLACEMENT WITH GENERAL CONTRACTOR.
5. TRAP PRIMER REQUIRED AT ALL FLOOR DRAINS.
6. ALL INDIRECT WASTE PIPING INSTALLED WITH A LENGTH GREATER THAN 5'-0" SHALL HAVE CLEANOUTS. MAX INDIRECT WASTE LINE SHALL BE 15'-0".
7. ENSURE ALL FLOOR DEMOLITION REQUIRED TO COMPLETE WORK IS REPAIRED TO EXISTING STANDARDS AFTER WORK IS COMPLETED.
8. PATCH, SEAL AND INSULATE ANY UNUSED ROOF PENETRATIONS.
9. SHADED LINE-TYPES INDICATE EXISTING SERVICES.
10. ALL SANITARY VENTING SHALL CONFORM TO THE LOCAL PLUMBING CODE AND REGULATIONS. ALL EXISTING CONDITIONS SHALL BE VERIFIED AND CONFIRMED PRIOR TO STARTING CONSTRUCTION ON SITE. ALL WORK SHALL CONFORM TO BASE BUILDING STANDARDS AND SPECIFICATIONS.
11. ALL TRENCHING AND PENETRATION OF FLOOR SHALL BE APPROVED BY LANDLORD PRIOR TO CONSTRUCTION. ALL WORK SHALL BE COORDINATED ON SITE.
12. PLUMBING INSTALLATION SHALL BE IN ACCEPTANCE WITH PLUMBING CODE AND LOCAL AUTHORITY HAVING JURISDICTION.
13. PROVIDE BACKFLOW PREVENTERS ON EQUIPMENT AS NECESSARY.



1 PLUMBING: PARKING FLOOR PLAN
P.28 SCALE: 1/4" = 1'-0"

GROSS AREA 7448 SQ.FT.



2 PLUMBING: FIRST FLOOR PLAN
P.29 SCALE: 1/4" = 1'-0"

CITY OF VANCOUVER
BP-2018-05371
ACCEPTED

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Inspector's Name: .....
(Print and Sign)

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Web: www.cadaconsultants.com
Email: info@cadaconsultants.com
CD18-082

Issue	Description	Date
-	ISSUED FOR BP	2018-10-05

Engineer's seal:

N. H. PATEL # 35713 PROFESSIONAL ENGINEER

Project:

DOMESTIC WATER RE-PIPING AND ADDED CLOTHES WASHERS

95 EAST 14 AVE, VANCOUVER, BC

Drawing Title:

PLUMBING: PARKING & FIRST FLOOR PLAN

Date:	-
Drawn By:	AD/CA/AS
Checked By:	NP
Scale:	AS SHOWN
Drawing No.	P-2.0

KEY NOTES

1. CONNECT TO EXISTING VENT. (TYPICAL)
2. CLOTHES WASHER DRAINS/STACKS TO HAVE SEPARATE SANITARY LINE FOR SUD PRESSURE ZONE RESTRICTIONS. CONNECT TO DOWNSTREAM OF BUILDING DRAIN WITH 40X DIAMETER OF MAIN SANITARY LINE. (TYPICAL)
3. PROVIDE RATED ACCESS PANEL AND VALVE TAGGING. (TYPICAL)

GENERAL NOTES

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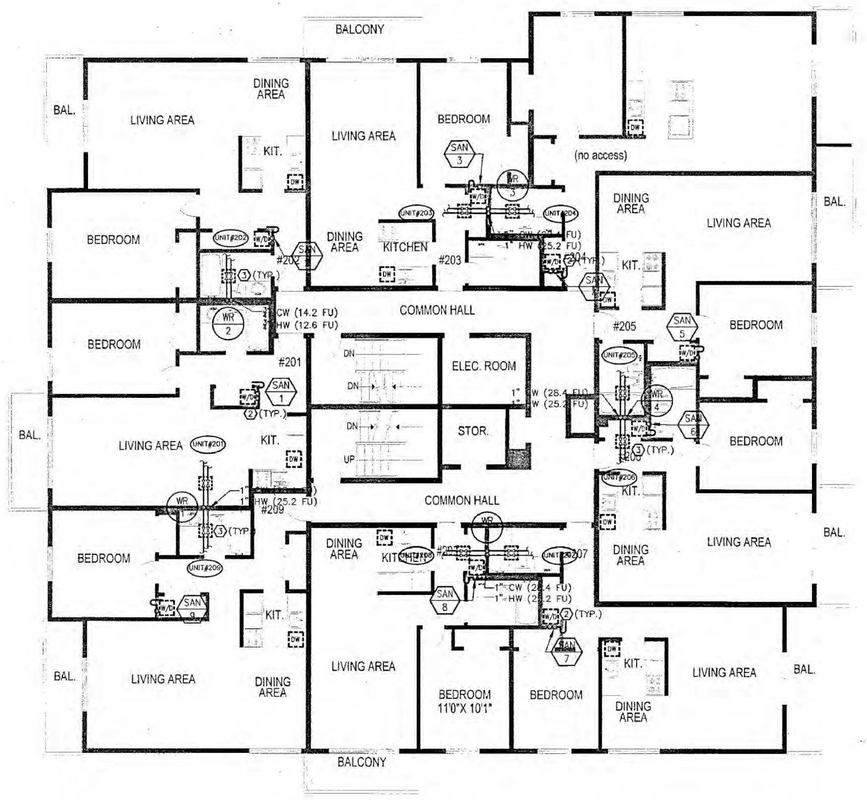
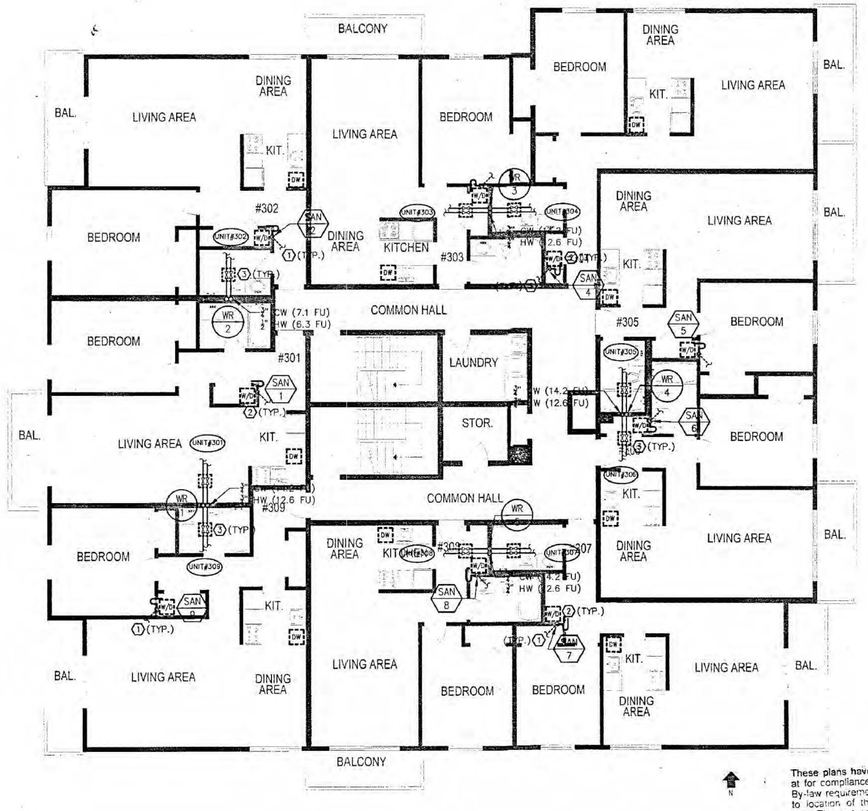
3. ALL PENETRATIONS THROUGH FIRE RATED WALLS TO BE FIRE STOPPED TO MATCH RATING.
4. COORDINATE ALL PIPE SLEEVE PLACEMENT WITH GENERAL CONTRACTOR.
5. TRAP PRIMER REQUIRED AT ALL FLOOR DRAINS.
6. ALL INDIRECT WASTE PIPING INSTALLED WITH A LENGTH GREATER THAN 5'-0" SHALL HAVE CLEANOUTS. MAX INDIRECT WASTE LINE SHALL BE 15'-0".
7. ENSURE ALL FLOOR DEMOLITION REQUIRED TO COMPLETE WORK IS REPAIRED TO EXISTING STANDARDS AFTER WORK IS COMPLETED.
8. PATCH, SEAL AND INSULATE ANY UNUSED ROOF PENETRATIONS.
9. SHADED LINE-TYPES INDICATE EXISTING SERVICES.
10. ALL SANITARY VENTING SHALL CONFORM TO THE LOCAL PLUMBING CODE AND REGULATIONS. ALL EXISTING CONDITIONS SHALL BE VERIFIED AND CONFIRMED PRIOR TO STARTING CONSTRUCTION ON SITE. ALL WORK SHALL CONFORM TO BASE BUILDING STANDARDS AND SPECIFICATIONS.
11. ALL TRENCHING AND PENETRATION OF FLOOR SHALL BE APPROVED BY LANDLORD PRIOR TO CONSTRUCTION. ALL WORK SHALL BE COORDINATED ON SITE.
12. PLUMBING INSTALLATION SHALL BE IN ACCEPTANCE WITH PLUMBING CODE AND LOCAL AUTHORITY HAVING JURISDICTION.
13. PROVIDE BACKFLOW PREVENTERS ON EQUIPMENT AS NECESSARY.



1 PLUMBING: SECOND FLOOR PLAN
P-2.1 SCALE: 1/4"=1'-0"



2 PLUMBING: THIRD FLOOR PLAN
P-2.1 SCALE: 1/4"=1'-0"

CITY OF VANCOUVER
BP-2018-05371
ACCEPTED

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Inspector's Name (Print and Sign)

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CD18-082

Issue	Description	Date
-	ISSUED FOR BP	2018-10-05

Engineer's seal:

N. H. PATEL
30710
PROVINCE OF BRITISH COLUMBIA
PROFESSIONAL ENGINEER

Project:

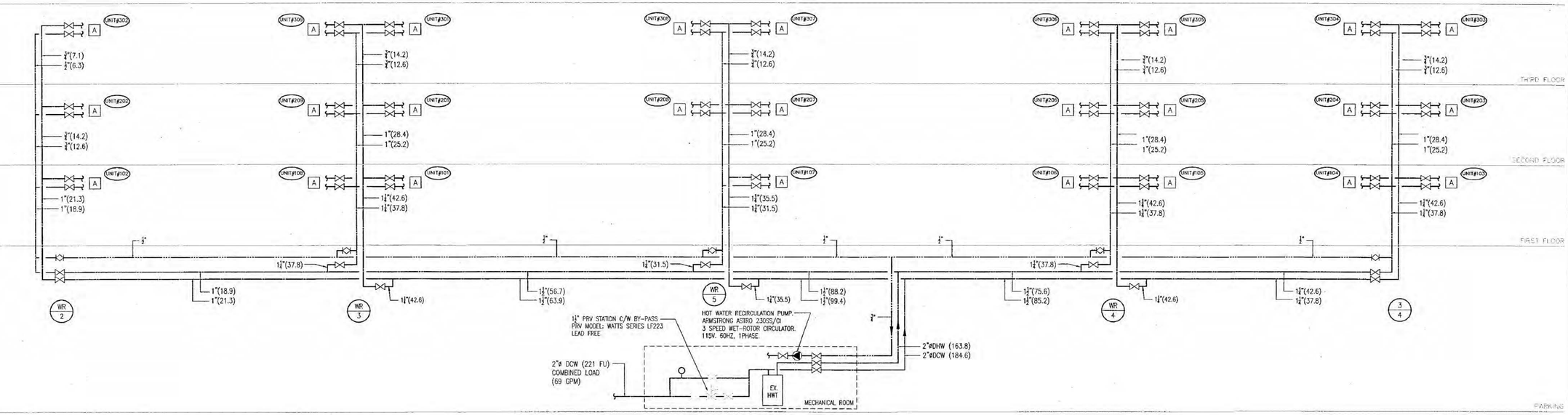
DOMESTIC WATER RE-PIPING AND ADDED CLOTHES WASHERS

95 EAST 14 AVE, VANCOUVER, BC

Drawing Title:

PLUMBING: SECOND & THIRD FLOOR PLAN

Date:	-
Drawn By:	AD/CA/AS
Checked By:	NP
Scale:	AS SHOWN
Drawing No.	P-2.1



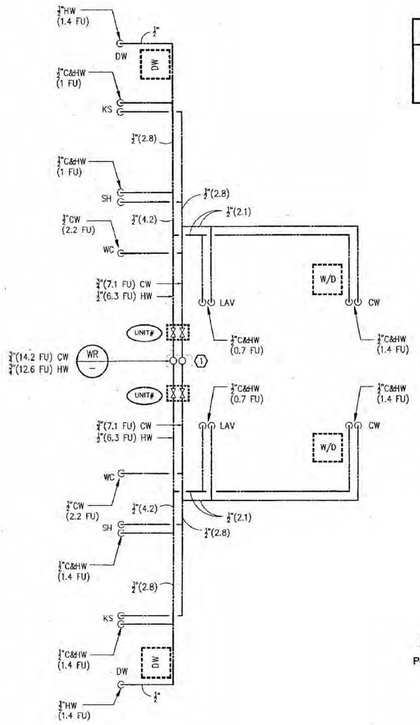
1 UNIT WATER RISER DIAGRAM
P-3.0 SCALE: NTS

KEY NOTES

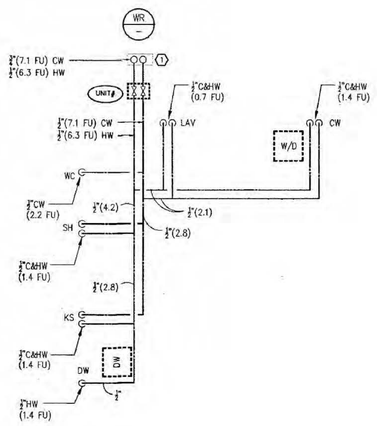
① PROVIDE BULKHEAD IN THE UNIT TO INSTALL WATER RISER. REFER TO WATER RISER DIAGRAM FOR THE SEQUENCE OF RISER TAG COMBINING WITH THE SUITE NEXT TO IT.

WATER DISTRIBUTION

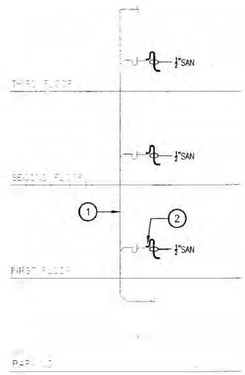
MANIFOLD TYPE		FIXTURE GROUP	FIXTURE UNITS - PIPE SIZE (OUTLETS)		
			COLD WATER	HOT WATER	COMBINED
A	UNIT TYPE	WC, L, BT, KS, DW, CW	¾" (7.1 FU)	¾" (6.3 FU)	8.5 FU



2 TYPICAL BACK TO BACK UNIT WATER DISTRIBUTION
P-3.0 SCALE: NTS



3 TYPICAL SINGLE UNIT WATER DISTRIBUTION
P-3.0 SCALE: NTS

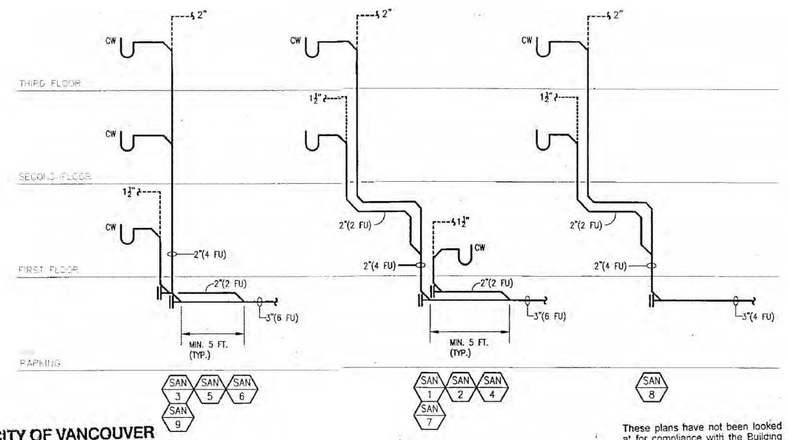


KEYNOTES:

① EXISTING KITCHEN SINK RISER. SITE VERIFY EXACT LOCATION AND SIZE.

② CONNECT TO EXISTING

4 DISHWASHER DRAIN CONNECTION TO EXISTING KITCHEN SINK (TYPICAL)
P-3.0 SCALE: NTS



5 CLOTHES WASHER SANITARY SCHEMATIC (TYPICAL)
P-3.0 SCALE: NTS

CITY OF VANCOUVER
BP-2018-05371
ACCEPTED

These plans have not been looked at for compliance with the Building By-law requirements (other than as to location of the building on the site) They are not accepted for purposes of that By-law until the Director Building Inspector endorses his acceptance of the "Building Permit-Inspection Approval Record", his "inspection Record" and hereon

Name (Print and Sign)

General Notes

CADA & Associates Consulting Ltd.
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201-1940 Oxford Connector,
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CD18-082

Issue	Description	Date
-	ISSUED FOR BP	2018-10-05

Engineer's seal:

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA N. H. PATEL # 36710 CONSULTING

Project:

DOMESTIC WATER RE-PIPING AND ADDED CLOTHES WASHERS

95 EAST 14 AVE, VANCOUVER, BC

Drawing Title:

WATER & SANITARY SCHEMATICS

Date: -

Drawn By: AD/CA/AS

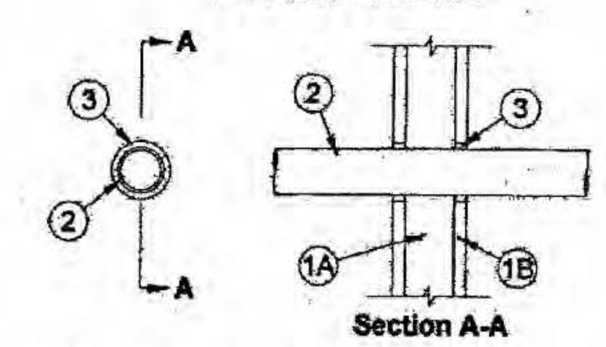
Checked By: NP

Scale: AS SHOWN

Drawing No. P-3.0

System No. W-L-2036C

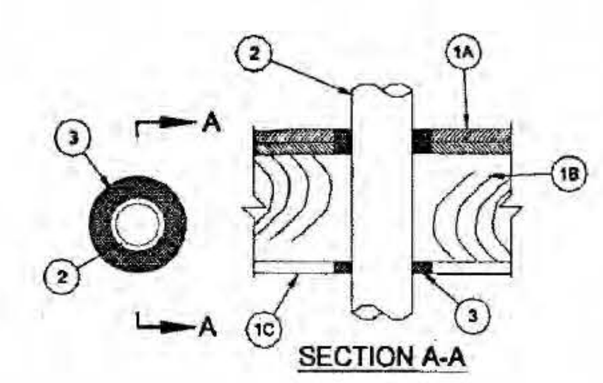
F Rating – 1 Hr
FT Rating – 0 Hr
FH Rating – 1 Hr
FTH Rating – 0 Hr
L Rating At Ambient – Less Than 1 CFM / Sq. Ft.
L Rating At 400°F – 3 CFM / Sq. Ft.



Section A-A

System No. F-C-2200

F Rating – 1 Hr
T Rating – 1 Hr
L Rating At Ambient – Less Than 1 CFM / Sq. Ft.
L Rating At 400°F – 8 CFM / Sq. Ft.

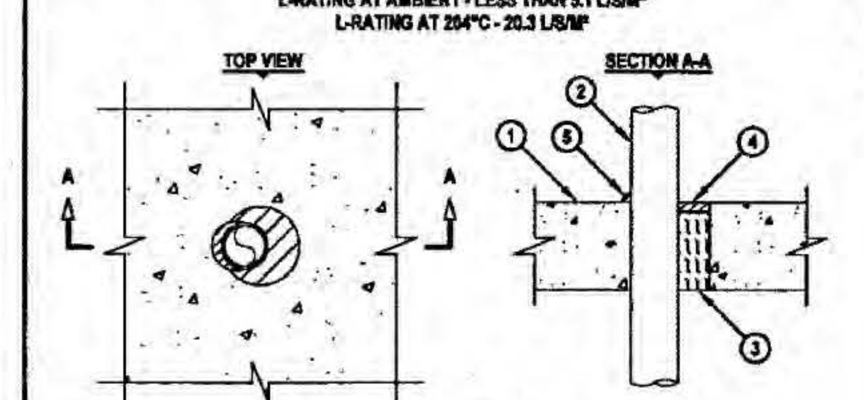


SECTION A-A

cUL SYSTEM NO. C-AJ-2061

PLASTIC PIPE THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL ASSEMBLY

F, FT, FH AND FTH-RATINGS = 2-HR.
L-RATING AT AMBIENT - LESS THAN 5.1 L/S/M²
L-RATING AT 204°C - 20.3 L/S/M²



1. CONCRETE FLOOR OR WALL ASSEMBLY (2-HR. FIRE-RATING).
   A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4-1/2" THICK).
   B. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 5" THICK).
   C. PRECAST (HOLLOW-CORE) CONCRETE FLOOR (MINIMUM 6" THICK).
   D. ANY UL CLASSIFIED CONCRETE BLOCK WALL.
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING (CLOSED PIPING SYSTEM ONLY):
   A. MAXIMUM 2" NOMINAL DIAMETER PVC PLASTIC PIPE (CELLULAR OR SOLID CORE).
   B. MAXIMUM 2" NOMINAL DIAMETER CPVC PLASTIC PIPE.
   C. MAXIMUM 2" NOMINAL DIAMETER RIGID NONMETALLIC CONDUIT (RNC).
   D. MAXIMUM 2" NOMINAL DIAMETER CROSS-LINKED POLYETHYLENE (PEX) TUBING.
   E. MAXIMUM 2" NOMINAL DIAMETER AQUARISE CPVC PLASTIC PIPE (SDR 11) MANUFACTURED BY IPEX, INC. (CLOSED PIPING SYSTEM ONLY).
3. MINIMUM 4" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED.
4. MINIMUM 1/2" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT.
5. MINIMUM 1/2" BEAD HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT APPLIED AT POINT OF CONTACT.

NOTES:
1. MAXIMUM DIAMETER OF OPENING = 4".
2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1-5/8".
3. WHEN HOLLOW-CORE FLOOR ARE USED, MINERAL WOOL MUST BE INSTALLED FLUSH WITH BOTTOM SURFACE OF FLOOR.
4. CLOSED PIPING SYSTEM ONLY (PVC, RNC = SCHEDULE 40; CPVC = SDR 13.5; PEX = SDR 9).
5. MINIMUM 1/2" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT IS REQUIRED ON BOTH SIDES OF A WALL.

Hilti Firestop Systems	HILTI, Inc. Tulsa, Oklahoma USA (800) 879-8000	Sheet 1 of 1	Drawing No. cUL CAJ2061b
		Scale 11/64" = 1"	
		Date June 17, 2008	

Saving Lives through Innovation and Education

System No. C-AJ-2061

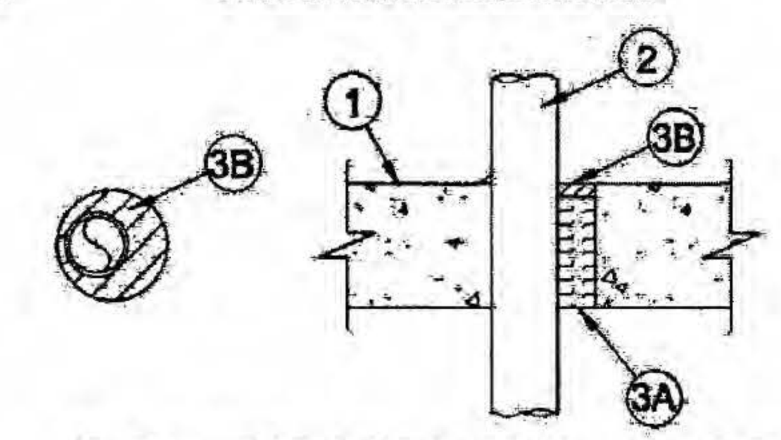
XHEZ7.C-AJ-2061

Through-penetration Firestop Systems Certified for Canada

Design/System/Construction/Assembly Usage Disclaimer

XHEZ7 - Through-penetration Firestop Systems Certified for Canada

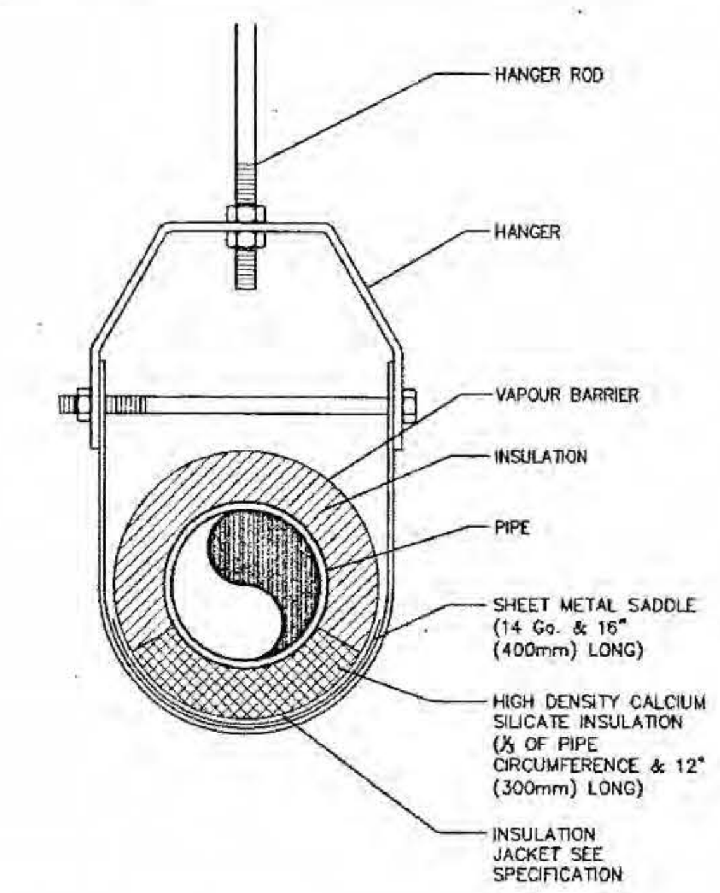
System No. C-AJ-2061



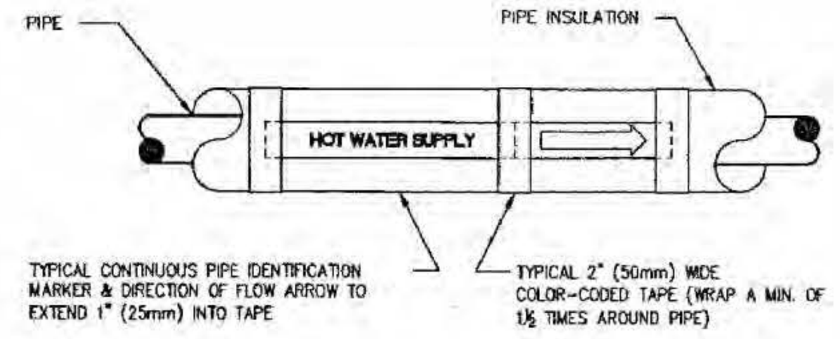
CITY OF VANCOUVER

BP-2018-05371

ACCEPTED



INSULATED PIPE HANGER DETAIL
N.T.S.

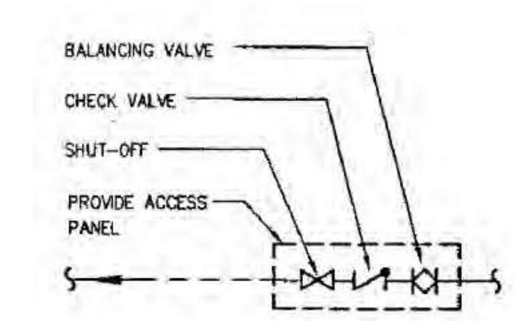


NOTES:

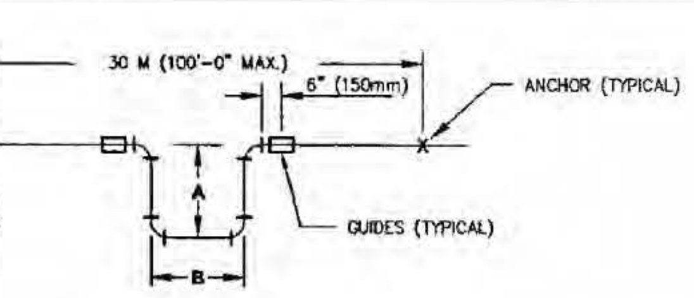
APPLY A CONTINUOUS COATING OF CONTACT CEMENT TO THE LABEL TO ENSURE PERMANENT ADHESION

REFER TO SPECIFICATION FOR COLOUR-CODING OF SERVICES & INSTALLATION

PIPE IDENTIFICATION DETAIL
N.T.S.



TYPICAL HWR BALANCING DETAIL
N.T.S.



EXPANSION LOOP DIMENSIONS		
PIPE SIZE	LENGTH 'A'	LENGTH 'B'
13mm - 20mm (1/2" - 3/4")	600mm (2'-6")	380mm (1'-3")
25mm - 32mm (1" - 1-1/4")	900mm (3'-0")	450mm (1'-6")
40mm - 65mm (1-1/2", 2", 2-1/2")	1200mm (4'-0")	600mm (2'-0")
75mm - 100mm (3" - 4")	1500mm (5'-0")	750mm (2'-6")
150mm (6")	2000mm (6'-6")	1000mm (3'-3")

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Inspector's Name (Print and Sign) 5

EXPANSION LOOP
DOMESTIC HOT WATER SUPPLY & RETURN PIPING
N.T.S.

General Notes

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Written dimensions shall have precedence over scaled dimensions. Contractors shall verify and be responsible for all dimensions and conditions of the job and the designers shall be informed of any variations from the dimensions and conditions shown on the drawing.

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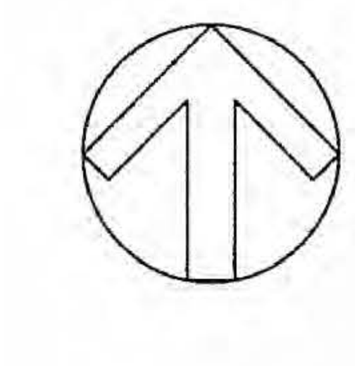

Issue	Description	Date
-	ISSUED FOR BP	2018-10-05

Engineer's seal:

Project:

DOMESTIC WATER RE-PIPING AND ADDED CLOTHES WASHERS

95 EAST 14 AVE, VANCOUVER, BC

Drawing Title:

DETAILS

Date:

Drawn By: AD/CA/AS

Checked By: NP

Scale: AS SHOWN

Drawing No. **P-4.0**

15010 GENERAL MECHANICAL PROVISIONS

1.1 CONFORMANCE

.1 CONFORM TO TERMS AND CONDITIONS OF THE GENERAL CONTRACT DOCUMENTS. THE DRAWINGS AND SPECIFICATIONS SHALL BE CONSIDERED AN INTEGRAL PART OF THE CONTRACT DOCUMENTS. NEITHER THE DRAWINGS NOR THE SPECIFICATIONS SHALL BE USED ALONE. SOLELY THE CONSULTANT HAS THE RIGHT TO INTERPRET THE DESIGN INTENT EXPRESSED IN THE DRAWINGS AND SPECIFICATIONS AS INDICATED BY THE CONTENT, DRAFTING SYMBOLS, TERMINOLOGY, ETC. MISINTERPRETATION OF ANY REQUIREMENTS OF EITHER PLANS OR SPECIFICATIONS SHALL NOT CHANGE THE REQUIREMENTS OR DESIGN INTENT OF THE SPECIFICATIONS FOR PROPER COMPLETION OF THE WORK TO THE FULL ACCEPTANCE OF THE CONSULTANT. NO EXTRAS WILL BE ENTERTAINED FOR MODIFICATIONS RESULTING FROM SUCH MISINTERPRETATIONS. ANY QUESTIONS REGARDING INTERPRETATION OF ANY OF THE CONTRACT DOCUMENTS MUST BE POSED IN WRITING DURING THE TENDER PERIOD.

1.2 SCOPE

.1 PROVIDE COMPLETE, FULLY TESTED AND OPERATIONAL MECHANICAL SYSTEMS TO MEET THE REQUIREMENTS DESCRIBED HEREIN AND IN COMPLETE ACCORDANCE WITH APPLICABLE CODES AND ORDINANCES.

.2 CONTRACT DOCUMENTS OF THIS DIVISION AND DRAWINGS ARE DIAGRAMMATIC AND APPROXIMATELY TO SCALE UNLESS DETAILED OTHERWISE. THEY ESTABLISH SCOPE, MATERIAL AND INSTALLATION QUALITY AND ARE NOT DETAILED INSTALLATION INSTRUCTIONS.

.3 FOLLOW MANUFACTURER'S RECOMMENDED INSTALLATION DETAILS AND PROCEDURES FOR EQUIPMENT, SUPPLEMENTED BY REQUIREMENTS OF CONTRACT DOCUMENTS.

.4 INSTALL EQUIPMENT GENERALLY IN LOCATIONS AND ROUTES SHOWN CLOSE TO BUILDING STRUCTURE WITH MINIMUM INTERFERENCE WITH OTHER SERVICES OR FREE SPACE. REMOVE AND REPLACE IMPROPERLY INSTALLED EQUIPMENT TO SATISFACTION OF THE CONSULTANT AT NO EXTRA COST.

.5 THE DRAWINGS INDICATE THE GENERAL LOCATION AND ROUTE TO BE FOLLOWED BY THE PIPING AND DUCTWORK. WHERE DETAILS ARE NOT SHOWN ON THE DRAWINGS OR ONLY SHOWN DIAGRAMMATICALLY, THE PIPES AND DUCTWORK SHALL BE INSTALLED IN SUCH A WAY AS TO CONSERVE HEAD ROOM AND INTERFERE AS LITTLE AS POSSIBLE WITH THE FREE USE OF SPACE THROUGH WHICH THEY PASS. SERVICE LINES SHALL RUN PARALLEL TO BUILDING LINES. ALL DUCT AND PIPES AT CEILING SHALL BE KEPT AS TIGHT AS POSSIBLE TO BEAMS OR OTHER LIMITING MEMBERS AT HIGH END. ALL PIPES AND DUCTS SHALL BE COORDINATED IN ELEVATION TO ENSURE THAT THEY ARE CONCEALED IN THE CEILING SPACE PROVIDED UNLESS DETAILED AND DIMENSIONED OTHERWISE ON DRAWINGS AND PERMITTED OTHERWISE BY THE CONSULTANT.

.6 CONNECT INTO EXISTING SYSTEMS WITH MINIMUM DISRUPTION TO THE EXISTING SYSTEMS.

.7 PROVIDE SEISMIC RESTRAINTS FOR ALL EQUIPMENT, PIPING AND DUCTWORK WHEN REQUIRED BY CODE.

.8 FIELD VERIFY ALL BUILDING AND SITE DIMENSIONS PRIOR TO ANY FABRICATION AND INSTALLATION OF EQUIPMENT OR MATERIALS. NO ADDITIONAL CHARGE SHALL BE ENTERTAINED FOR FAILURE TO VERIFY THESE DIMENSIONS ON SITE.

.9 IDENTIFY ALL OPENING AND HOLES REQUIRED FOR THE PASSAGE OF MECHANICAL SERVICES THROUGH STRUCTURES AND DIVIDING WALLS TO THE GENERAL CONTRACTOR. SUCH IDENTIFICATION SHALL BE VIA MARKED UP DRAWINGS SHOWING OPENING LOCATIONS, SIZES, AND LEVELS. IF REQUIRED, THE CONTRACTOR IS TO CLEARLY MARK ON SITE THE INTENDED OPENINGS FOR REVIEW BY THE STRUCTURAL ENGINEER.

.10 THE WORK SHALL INCLUDE BUT NOT LIMIT TO THE FOLLOWING:
  .1 COMPLETE PLUMBING INSTALLATION, AND BALANCING.

1.3 MATERIALS

.1 MATERIALS AND EQUIPMENT INSTALLED SHALL BE NEW, FULL WEIGHT AND OF QUALITY SPECIFIED.
.2 EACH MAJOR COMPONENT OF EQUIPMENT SHALL BEAR MANUFACTURER'S NAME, ADDRESS, CATALOG AND SERIAL NUMBER.

1.4 CUTTING AND PATCHING

.1 PROVIDE HOLES AND SLEEVES, CUTTING AND FITTING REQUIRED FOR MECHANICAL WORK. RELOCATE IMPROPERLY LOCATED HOLES AND SLEEVES.

.2 DRILL FOR EXPANSION BOLTS, HANGER RODS, BRACKETS, AND SUPPORTS.

.3 OBTAIN WRITTEN APPROVAL FROM STRUCTURAL CONSULTANT BEFORE CUTTING OR BURNING STRUCTURAL MEMBERS. THIS WORK SHALL BE CARRIED OUT BY THE SPECIALIST TRADE ONLY. GENERAL CONTRACTOR TO X-RAY SLAB/BEAM/HEADER OR OTHER CONCRETE STRUCTURAL ITEMS BEFORE CORING.

.4 PROVIDE OPENINGS AND HOLES REQUIRED IN PRE-CAST MEMBERS FOR MECHANICAL WORK. CAST HOLES LARGER THAN 4"Ø (100MM) IN DIAMETER TIGHT TO COLUMNS SHALL NOT EXCEED 8"Ø (200MM) IN DIAMETER. CAST OR FIELD CUT HOLES SMALLER THAN 4"Ø (100MM).

.5 REPAIR BUILDING WHERE DAMAGED FROM THE EQUIPMENT INSTALLATION, IMPROPERLY LOCATED HOLES, ETC., BY THIS SECTION OF THE WORK. THIS REPAIR WORK SHALL BE CARRIED OUT BY THE SPECIALIST TRADE AT THE EXPENSE OF THIS SECTION OF WORK. USE MATCHING MATERIALS AS SPECIFIED IN THE RESPECTIVE SECTIONS.

1.5 SHOP DRAWINGS

.1 IDENTIFY MATERIALS AND EQUIPMENT BY MANUFACTURER, TRADE NAME AND MODEL NUMBER. INCLUDE COPIES OF APPLICABLE BROCHURE OR CATALOG MATERIAL.
.2 CLEARLY MARK SUBMITTAL MATERIAL USING ARROWS, UNDERLINING OR CIRCLING TO SHOW DIFFERENCES FROM SPECIFIED, EG. RATINGS, CAPABILITIES AND OPTIONS BEING PROPOSED. CROSS OUT NON-APPLICABLE MATERIAL. SPECIFICALLY NOTE ON THE SUBMITTAL SPECIFIED FEATURES SUCH AS SPECIAL TANK LININGS, PUMPS, SEALS, MATERIAL, OR PAINTING.
.3 INSTALLED MATERIALS AND EQUIPMENT SHALL MEET SPECIFIED REQUIREMENTS REGARDLESS OF WHETHER OR NOT SHOP DRAWINGS ARE REVIEWED BY THE CONSULTANT.
.4 DO NOT ORDER EQUIPMENT OR MATERIAL UNTIL THE CONSULTANT HAS REVIEWED AND RETURNED APPROVED SHOP DRAWINGS.
.5 SUBMIT ELECTRONIC COPY OF SHOP DRAWINGS PRIOR TO ORDERING EQUIPMENT.

1.6 STANDARDS OF MATERIALS, EQUIPMENT AND INSTALLATION

.1 REQUESTS FOR CHANGES TO THE SPECIFICATION IN STANDARDS, MATERIALS, EQUIPMENT OR INSTALLATION TECHNIQUES SHALL BE SUBMITTED FOR REVIEW SEVEN (7) WORKING DAYS PRIOR TO CLOSE OF TENDERS, AND IF APPLICABLE WILL BE INCORPORATED IN AN ADDENDUM TO THE SPECIFICATION.

.2 EQUIPMENT USED SHALL NOT EXCEED SPACE LIMITATIONS IN ANY DIMENSION. REPLACE ANY EQUIPMENT OR APPARATUS WHICH DOES NOT MEET THIS SPECIFICATION AT NO COST. ASSUME FULL RESPONSIBILITY FOR THE EXPENSE OF REDESIGN AND ADJUSTMENT TO OTHER PARTS OF THE BUILDING WHEN PROPOSING THE USE OF APPROVED EQUAL OR ALTERNATE EQUIPMENT.

.3 SUBMIT SAMPLES, IN ADDITION TO DRAWINGS, OF ALL ITEMS WHICH IN THE CONSULTANT'S JUDGMENT, CAN BE BETTER EXAMINED FOR CAPACITY, QUALITY, FINISH OR DETAIL BY SAMPLE RATHER THAN BY DRAWINGS. SAMPLES SHALL BE SUBMITTED BEFORE EQUIPMENT IS ORDERED.

.4 PROVIDE EQUIPMENT FROM THE SPECIFIED MANUFACTURERS. ALL MECHANICAL EQUIPMENT SHALL HAVE THE APPROVED MANUFACTURERS NAME PERMANENTLY AFFIXED TO IT.

.5 EQUIPMENT ON ALTERNATE & APPROVED MANUFACTURERS LIST MUST BE EQUAL IN QUALITY AND PERFORMANCE TO THE MODEL SPECIFIED. EQUIPMENT WHICH IS NOT EQUAL WILL BE REPLACED WITH THE SPECIFIED EQUIPMENT AT NO COST TO THE OWNER.

.6 IF SHOP DRAWINGS ARE REJECTED TECHNICALLY AFTER 3 SUBMISSIONS, THE CONTRACTOR, AT NO ADDITIONAL EXPENSE TO THE OWNER, SHALL REVERT TO THE SPECIFIED PRODUCT AND MANUFACTURER FOR THIS PROJECT.

.7 THE EQUIPMENT MANUFACTURER SHALL ENSURE THAT THE STRENGTH AND ANCHORAGE OF THE INTERNAL COMPONENTS OF THE EQUIPMENT EXCEEDS THE FORCE LEVEL USED TO RESTRAIN AND ANCHOR THE UNIT ITSELF TO THE SUPPORTING STRUCTURE.

1.8 OPERATING AND MAINTENANCE DATA

.1 INSTRUCT THE BUILDING OPERATORS IN THE OPERATION AND PREVENTATIVE MAINTENANCE OF EACH PIECE OF EQUIPMENT AND SYSTEM SUPPLIED AND INSTALLED. COMPLETE AND TURN OVER DOCUMENTATION PRIOR TO SUBSTANTIAL PERFORMANCE.

.2 SUBMIT 2 SETS O & M MANUALS IN 3-RING BINDERS, TO INCLUDE THE FOLLOWING:

- NAME OF ENGINEER AND MECHANICAL CONTRACTOR AND PHONE NUMBER.
- DESCRIPTION OF OPERATION OF ALL MECHANICAL SYSTEMS.
- SHOP DRAWING OF ALL EQUIPMENT.
- LIST OF TAGGED VALVES.
- EXTENDED WARRANTIES.
- MAINTENANCE AND OPERATION INSTRUCTIONS.
- BALANCE REPORT OF AIR & WATER SYSTEMS.
- LIST OF INSPECTION AND TEST CERTIFICATES.

.3 BINDERS ARE TO BE PROVIDED WITH PERMANENT LABELS AFFIXED TO THE SPINE AND COVER. THESE LABELS ARE TO HAVE THE PROJECT NAME, PROJECT DATE, MANUAL TITLE, OWNER, ARCHITECT, AND CONSULTANT NAMES.

1.9 RECORD DRAWINGS

.1 SUBMIT RECORD DRAWINGS IDENTIFYING LOCATION OF ALL FIRE DAMPERS, MAJOR CONTROL LINES, ACCESS DOORS, TAGGED VALVES AND ACTUAL ROOM NAMES.

.2 THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND KEEP ONE SET OF WHITE PRINTS, INCLUDING REVISION DRAWINGS, IN JOB SITE OFFICE. BACKFILLING WILL NOT BE ALLOWED UNTIL UNDERGROUND SERVICE DIMENSIONS ARE MARKED ON PLANS. SET OF WHITE PRINTS SHALL BE MAINTAINED IN CONSTANT UP-TO-DATE CONDITION BY EACH TRADE (AS-BUILT CONDITIONS MARKED IN RED PENCIL). THE 1 WHITE SET OF PRINTS WILL BE PROVIDED TO THE CONTRACTOR BY THE CONSULTANT AT THE CONTRACTOR'S COST.

.3 THE "RECORD DRAWINGS" SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING CHANGES AND SHALL BE RECORDED DAILY.

.4 SIZE, LOCATION, ARRANGEMENT, ROUTE AND EXTENT OF DUCTWORK, PIPING, CONDUIT, TERMINAL UNITS, EQUIPMENT, FIXTURES, CLEANOUTS, VALVES, ROUGH-IN, ETC., ABOVE AND BELOW GRADE INSIDE THE BUILDING, INCLUDING LOCATIONS OF BURIED PIPING.

.5 SANITARY SEWERS: ALL SANITARY SEWERS. INVERT ELEVATIONS AND LOCATIONS TO BE GIVEN AT EACH CLEAN-OUT.

.6 STORM DRAINS & SEWERS: ALL STORM DRAINS AND SEWERS. INVERT ELEVATIONS TO BE GIVEN AT EACH MANHOLE, CLEAN OUT, CHANGE OF DIRECTION, JUNCTION, AND AT EVERY 100 FEET (30 M) RUN.

.7 GAS LINES: ALL PIPING OF ANY SIZE. INVERT ELEVATIONS TO BE GIVEN AT EACH JUNCTION, AT ENTRY TO BUILDING, AT CHANGE OF DIRECTION, AT HIGH AND LOW POINTS.

.8 LOCATION, TAGGING AND NUMBERING OF ALL VALVES EXCEPT INDIVIDUAL PLUMBING FIXTURES OR EQUIPMENT ISOLATION VALVES.

.9 THE AS-BUILT DAILY MARKED-UP PRINTS SHALL CONFORM TO THE STANDARDS OF THE CONTRACT DRAWINGS AND SHALL INCLUDE ALL DETAILS FROM REVISION DRAWINGS, SUPPLEMENTARY DRAWINGS, CHANGE ORDERS, ADDENDA AND SITE REVISIONS, ETC.

.10 AT THE END OF CONSTRUCTION, ALL OF THE ABOVE CHANGES SHALL BE TRANSFERRED BY THE CONSULTANT, AT THE CONTRACTORS COST, TO A SET OF "AUTOCAD" DISKS. THE CADD FILES SHALL BE USED TO PRODUCE 1- SET OF ORIGINAL "AS-BUILTS" THAT WILL BE TURNED OVER TO THE OWNER. THE CONTRACTOR SHALL ALLOW $300.00 / DRAWING.

1.10 PAINTING AND IDENTIFICATION

.1 CLEAN ALL EXPOSED BARE METAL SURFACES SUPPLIED BY THE MECHANICAL AND PLUMBING TRADE BY REMOVING ALL DIRT, DUST, GREASE AND MILLSCALE.

.2 REPAINT ALL MARRED FACTORY FINISHED EQUIPMENT, WHICH IS NOT SCHEDULED TO BE REPAINTED, TO MATCH THE ORIGINAL FACTORY FINISH.

.4 PIPE MARKERS AND DIRECTION ARROWS - IN ALL EXPOSED AREAS AND IN THE MECHANICAL ROOM:

.5 LOCATION OF PIPE MARKERS AND DIRECTION ARROWS
  .1 PIPE MARKER AND DIRECTION ARROW SHALL BE PLACED SIDE BY SIDE IN THE BOTTOM QUARTER OF THE PIPE TO BE IDENTIFIED.
  .2 ADJACENT TO ALL MAJOR CHANGES IN DIRECTION AND AT CONNECTIONS TO EACH PIECE OF EQUIPMENT.
  .3 AT LEAST ONCE IN EACH ROOM THAT THE PIPE PASSES THROUGH.
  .4 WHERE PIPING PASSES THROUGH WALLS, PARTITIONS, OR FLOORS, IDENTIFY PIPING ON BOTH SIDES OF THE SECTION AND AT ENTRY AND EXITS TO SHAFTS.

.6 CEILING ACCESS PANEL IDENTIFICATION THE LOCATION OF VALVES, ETC. ABOVE CEILING PANELS SHALL HAVE THEIR LOCATION IDENTIFIED BY MEANS OF A COLOURED TACK OR DATA DOT.

.8 VALVE TAGS
  .1 ALL VALVES, EXCEPT CONVECTOR HAND VALVES AND INDIVIDUAL PLUMBING FIXTURE STOP VALVES, SHALL BE PROVIDED WITH 2" X 2-1/4" (50MM X 30MM) BRASS TAGS WITH STAMPED NUMBERS, SECURED BY CHAINS TO THE VALVE CONCERNED. NUMBERS SHALL BE PREFIXED BY THE LETTER "P" OR THE LETTER "H" INDICATING THAT THE VALVE IS ON PLUMBING OR HEATING SERVICE.
  .2 EACH TRADE SHALL PREPARE A LIST DETAILING THE VALVES, LOCATION; NORMAL POSITION, AND PURPOSE SERVED. THE LIST SHALL BE INCLUDED IN THE MAINTENANCE MANUAL.

1.13 CONNECTION AND INTERRUPTION TO EXISTING SYSTEMS

.1 COORDINATE INTERRUPTION OF EXISTING BUILDING SYSTEMS WITH THE OWNER.

.2 INCLUDE PREMIUM TIME FOR CONNECTION TO EXISTING SYSTEM SO THAT NORMAL USE OF THE EXISTING SYSTEM WILL NOT BE AFFECTED.

1.14 SITE UTILITY SERVICES

.1 CO-ORDINATE AND MAINTAIN LIAISON WITH THE OWNER AND/OR CONSULTANT TO INTERRUPT, RE-ROUTE OR CONNECT TO WATER, SEWER, STORM, HEATING OR GAS SYSTEMS, WITH MINIMUM INTERRUPTION OF SERVICE. CONTACT RESPECTIVE UTILITY COMPANIES PRIOR TO STARTING WORK.

1.16 ACCESS DOORS AND PANELS

.1 PROVIDE ACCESS PANELS REQUIRED IN BUILDING CONSTRUCTION INCLUDING IN ARCHITECTURAL WALLS AND CEILINGS FOR ACCESS TO ANY CONCEALED MECHANICAL EQUIPMENT WHICH, IN THE CONSULTANT'S OPINION, REQUIRES MAINTENANCE OR ADJUSTMENT. ACCESS PANEL SHALL MATCH WALL/ CEILING FINISH. OBTAIN APPROVAL FROM ARCHITECT PRIOR TO INSTALLATION.

.2 SUCH PANELS SHALL BE MANUFACTURED PANELS, WITH FASTENING DEVICES, APPROPRIATE TO THE CONSTRUCTION INVOLVED. PROVIDE ACCESS PANEL 12"X 12" (300MM X 300MM) FOR HAND ACCESS, OTHERWISE 18"X 18" (450MM X 450MM) MIN. IN WALL / CEILING TO ALL MECHANICAL SYSTEM (SUCH AS VALVE, DAMPER) REQUIRING ACCESS. DRY WALL SURFACE: MILCOR STYLE DW FLUSH PANEL ACCESS DOOR; MASONRY TILE SURFACE: MILCOR STYLE M; PLASTERED WALL: MILCOR STYLE K.

1.17 ACCESS OF EQUIPMENT

.1 MAKE ALL ARRANGEMENTS TO ENSURE THAT ADEQUATE ACCESS IS AVAILABLE FOR ALL MECHANICAL EQUIPMENT. DO ALL HOISTING AND RIGGING INTO PLACE OF ALL SPECIFIED EQUIPMENT AND BE RESPONSIBLE FOR ANY DAMAGES INCURRED THEREFROM.

.2 CONTRACTOR TO DEMONSTRATE REASONABLE ACCESS TO ALL EQUIPMENT SERVICE LOCATIONS.

1.18 LIABILITY

.1 ASSUME FULL RESPONSIBILITY FOR LAYING OUT THE WORK AND FOR ANY DAMAGE CAUSED TO THE OWNER OR OTHER TRADES BY IMPROPER LOCATION, OR CARRYING OUT OF THE WORK.

.2 BE RESPONSIBLE FOR PROMPT INSTALLATION OF HIS WORK IN ADVANCE OF CONCRETE POURING OR SIMILAR WORK. PROVIDE AND SET SLEEVES WHERE REQUIRED. SHOULD ANY CUTTING OR REPAIRING OF EITHER UNFINISHED OR FINISHED WORK BE REQUIRED, THIS CONTRACTOR SHALL DIRECT THE PARTICULAR SUB-CONTRACTOR WHOSE WORK IS INVOLVED TO DO SUCH CUTTING AND REPAIRING WITHOUT EXPENSE TO THE OWNER. BEFORE BEING UNDERTAKEN, SUCH WORK SHALL BE LAID OUT FOR THE CONSULTANT'S REVIEW.

.3 EXAMINE THE SITE AND THE LOCAL CONDITIONS AFFECTING WORK UNDER THIS CONTRACT. EXAMINE CAREFULLY THE MECHANICAL, ELECTRICAL, STRUCTURAL AND ARCHITECTURAL DRAWINGS AND CONFIRM THAT THE WORK UNDER THIS CONTRACT CAN BE SATISFACTORILY CARRIED OUT WITHOUT CHANGES TO THE BUILDING AS SHOWN ON THESE PLANS. BEFORE COMMENCING THE WORK, EXAMINE THE WORK OF THE OTHER TRADES AND REPORT AT ONCE ANY DEFECT OF INTERFERENCE AFFECTING THE WORK OF THIS SECTION, OF THE GUARANTEE OF SAME. NO EXTRAS WILL BE SUBSEQUENTLY ALLOWED TO COVER ANY SUCH ERROR, OMISSION OR OVERSIGHT ON THE THOROUGH INSPECTION OF THE GROUNDS, BUILDING, CONDITIONS, ETC.

.4 ARRANGE WORK IN CO-OPERATION WITH OTHER TRADES IN THE BUILDING IN SUCH A MANNER AS NOT TO INTERFERE WITH OTHER WORK BEING CARRIED ON IN THE BUILDING AND PLACES WHERE OTHER PIPES AND EQUIPMENT BE INSTALLED ALONG WITH THE PIPES AND DUCTS PERTAINING TO THIS TRADE. CO-OPERATE WITH THE OTHER TRADES TO GET ALL THE PIPES, DUCTS, CONDUIT, ETC., INSTALLED TO THE BEST ADVANTAGE. WHEN OPEN WEB STRUCTURAL JOISTS ARE USED, MUST OBTAIN STRUCTURAL SHOP DRAWINGS TO ENSURE SPACE AVAILABLE FOR INSTALLATION OF PIPES AND DUCTWORK.

.5 WHERE ANY PIPES, DUCTS AND EQUIPMENT MUST BE BUILT INTO THE WORK OF OTHER TRADES SUCH AS MASONRY, STRUCTURAL, OR PLASTERING, BE RESPONSIBLE FOR SUPPLYING THE EQUIPMENT TO BE BUILT IN OR MEASUREMENTS TO ALLOW THE NECESSARY OPENINGS TO BE LEFT. ALL PIPES AND DUCTS WHICH ARE TO BE CONCEALED SHALL BE INSTALLED NEATLY AND CLOSELY TO THE BUILDING STRUCTURE SO THAT THE NECESSARY FURRING CAN BE KEPT AS SMALL AS POSSIBLE. ANY PIPES, DUCTS, OR OTHER WORK WHICH ARE NOT, IN THE OPINION OF THE CONSULTANT, INSTALLED AS THEY SHOULD BE, SHALL BE TAKEN OUT AND REPLACED WITHOUT COST TO THE OWNER.

.6 PROTECT FINISHED AND UNFINISHED WORK FROM DAMAGE DUE TO THE CARRYING OUT OF HIS WORK, GIVING SPECIAL ATTENTION TO THE PROTECTION OF BUILDING VAPOUR BARRIERS, WATERPROOF MEMBRANES, ETC. COVER FLOORS AND OTHER PARTS OF THE BUILDING WITH TARPAULINS, ETC., AND REPAIR ALL DAMAGE TO THE SATISFACTION OF THE OWNER AND THE CONSULTANT. DURING FREEZING WEATHER, PROTECT ALL HIS MATERIALS IN SUCH A MANNER THAT NO HARM CAN BE DONE TO THE INSTALLATION ALREADY MADE AND/OR TO MATERIALS AND EQUIPMENT ON THE JOB.

.7 BE RESPONSIBLE FOR THE CONDITION OF ALL MATERIALS AND EQUIPMENT SUPPLIED AND SHALL PROVIDE ALL NECESSARY PROTECTION FOR SAME.

.8 BE RESPONSIBLE FOR THE PROTECTION AND MAINTENANCE OF THE WORK OF THIS SECTION UNTIL THE BUILDING HAS BEEN COMPLETED AND ACCEPTED BY THE OWNER, AND BE RESPONSIBLE FOR THE SORTING OF HIS MATERIAL INSIDE AND OUT OF THE WAY, AND TO CLEAN UP ALL REFUSE CAUSED BY HIS WORK TO MEET CONSULTANT'S REVIEW.

.9 ON COMPLETION OF THE WORK, ALL TOOLS AND SURPLUS AND WASTE MATERIALS SHALL BE REMOVED AND THE WORK LEFT IN A CLEAN AND PERFECT CONDITION.

1.19 LIABILITY INSURANCE

.1 THIS CONTRACTOR SHALL MAINTAIN SUCH INSURANCE AS WILL FULLY PROTECT BOTH THE OWNER AND HIMSELF FROM ANY AND ALL CLAIMS, ALL AS NOTED WITHIN THE GENERAL CONDITIONS AND SUPPLEMENTARY GENERAL CONDITIONS. WHEN REQUESTED THE CONTRACTOR SHALL PROVIDE AND SHOW PROOF OF, AT HIS EXPENSE, COMPREHENSIVE GENERAL LIABILITY INSURANCE OF NOT LESS THAN $2,000,000.00 INCLUDING NON-OWNED CAR COVERAGE, CONTRACTUAL LIABILITY AND CONTAINING A CROSS LIABILITY CLAUSE. COVERAGE SHALL INCLUDE LOSS OR DAMAGE THE CONTRACTOR MAY CAUSE TO ANY WORK, BUILDING, EQUIPMENT, STRUCTURAL, ON THE OWNER'S PROPERTY,. THE INSURANCE MAY CONTAIN A DEDUCTIBLE CLAUSE NOT TO EXCEED $500.00.
.2 THE CONTRACTOR SHALL CARRY FULL EMPLOYEE'S LIABILITY INSURANCE FOR THE WHOLE OF THE WORK IN ACCORDANCE WITH THE WORKERS' COMPENSATION ACT.

1.20 GUARANTEE WARRANTY

.1 THIS CONTRACTOR SHALL FURNISH A WRITTEN WARRANTY STATING THAT ALL WORK EXECUTED UNDER THIS DIVISION WILL BE FREE FROM DEFECTS OF MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF SUBSTANTIAL PERFORMANCE, WHICH SHALL INCLUDE ONE (1) COMPLETE SUMMER AND ONE (1) COMPLETE WINTER OF UNINTERRUPTED OPERATION. WARRANTY SHALL INCLUDE ANY PART OF EQUIPMENT, UNITS OR STRUCTURES FURNISHED HEREUNDER THAT SHOW DEFECTS IN THE WORKS UNDER NORMAL OPERATING CONDITIONS AND/OR FOR THE PURPOSE OF WHICH THEY WERE INTENDED.

.2 THE CONTRACTOR SHALL AT HIS OWN EXPENSE PROMPTLY INVESTIGATE ANY MECHANICAL OR CONTROL MALFUNCTION, AND REPAIR OR REPLACE ALL SUCH DEFECTIVE WORK, AND ALL OTHER DAMAGES THEREBY WHICH BECOMES DEFECTIVE DURING THE TIME OF THE GUARANTY-WARRANTY.

1.21 HOISTS AND SCAFFOLDS

.1 PROVIDE INTERIOR MOVABLE OR ROLLER SCAFFOLDS FOR THE INSTALLATION OF THE MECHANICAL WORK. ALL OTHER HOISTS, SCAFFOLDS, TEMPORARY ELEVATORS, LADDERS, RUNWAYS, ETC., SHALL BE REQUESTED BY THIS CONTRACTOR AND ARRANGED WITH THE GENERAL CONTRACTOR.

1.22 PIPE CHASES AND DUCT SHAFTS

DW

.1 UNLESS OTHERWISE INDICATED, CONCEAL PIPING AND DUCTWORK IN THE CONSTRUCTION OF THE WALLS AND CEILINGS, AND IN PIPE CHASES, DUCT SHAFTS AND FURRING. IF IT IS NECESSARY, MOVE THE LOCATION OF PIPES AND DUCTS FROM THOSE INDICATED AND PROVIDED. CONSULT THE CONSULTANT FOR REVIEW BEFORE INSTALLATION OF THIS WORK. KS

1.23 INSPECTION

DW

.1 THE CONSULTANT OR HIS REPRESENTATIVE MAY CHOOSE TO INSPECT ALL WORK PRIOR TO IT BEING CONCEALED.

.2 THE CONTRACTOR SHALL NOTIFY THE CONSULTANT IN WRITING FOR THE FOLLOWING MINIMUM, BUT NOT LIMITED TO, INSPECTIONS: (REQUIRED TO PROVIDE A SCHEDULE 'C' FOR OCCUPANCY) KS
  .1 ALL HVAC AND PLUMBING ROUGH-IN PRIOR TO WALL AND CEILING FINISH INSTALLATION.
  .2 FIRE STOPPING OF ALL OPENINGS. DW
  .3 PRE-OCCUPANCY INSPECTION.
  .4 FINAL OCCUPANCY INSPECTION AND VERIFICATION OF ALL EQUIPMENT BEING FULLY OPERATIONAL.

.3 ALL WORK SHALL BE APPROVED BY ANY OTHER REGULATORY BODY HAVING JURISDICTION WHERE REQUIRED.

.4 THE CONTRACTOR IS TO PROVIDE COPIES OF ALL PERMITS, INSPECTION REPORTS AND CERTIFICATES FOR INSERTION INTO THE MAINTENANCE MANUAL.

.5 THE CONTRACTOR IS TO PROVIDE THE CONSULTANT REASONABLE NOTICE PRIOR TO CALLING AN INSPECTION.

.6 AFTER THE PRE-OCCUPANCY INSPECTION FOR SUBSTANTIAL PERFORMANCE ALL DEFICIENCIES SHALL BE COMPLETED FOR THE FINAL INSPECTION. THE CONTRACTOR WILL BE PERMITTED ONE ADDITIONAL FINAL INSPECTION TO FINISH ALL REMAINING DEFICIENCIES. THIS AND ANY OTHER ADDITIONAL INSPECTION WILL BE AT THE CONTRACTOR'S COST, AT $350.00 PER SITE VISIT. THIS COST WILL BE DEDUCTED BY THE OWNER FROM THE CONTRACTOR'S HOLDBACK AND PAID BY THE OWNER DIRECTLY TO THE CONSULTANT.

1.24 SUBSTANTIAL PERFORMANCE INSPECTION

.1 PRIOR TO THE CONTRACTOR REQUESTING AN INSPECTION FOR SUBSTANTIAL PERFORMANCE ALL THE FOLLOWING ITEMS MUST BE PROVIDED TO PERMIT BENEFICIAL USE BY THE OWNER.
  .1 COMPLY WITH REQUIREMENTS IN GENERAL CONTRACT CONDITIONS.
  .2 MAINTENANCE AND OPERATING MANUALS TO BE SUBMITTED.
  .3 AS-BUILT DRAWINGS SUBMITTED.
  .4 BALANCING REPORTS (AIR AND WATER.) IF REQUIRED.
  .5 ALL SYSTEMS SHALL BE CERTIFIED IN WRITING BY THE CONTRACTOR AS COMPLETE AND FULLY OPERATIONAL.
  .6 ALL LIFE/SAFETY ITEMS SUCH AS SPRINKLER SYSTEMS, FIRE STOPPING, FIRE DAMPERS, PLUMBING FIXTURES AND VENTILATION SYSTEMS MUST BE OPERATIONAL.

1.25 LAWS, NOTICES, PERMITS AND FEES

.1 GIVE ALL NECESSARY NOTICES, OBTAIN ALL NECESSARY PERMITS AND PAY ALL FEES IN ORDER THAT THE WORK SPECIFIED MAY BE CARRIED OUT, AND FURNISH ANY CERTIFICATES NECESSARY AS EVIDENCE THAT THE WORK INSTALLED CONFORMS WITH THE LAW AND REGULATIONS OF ALL AUTHORITIES HAVING JURISDICTION.

.2 ALL WORK SHALL BE IN ACCORDANCE WITH THE REGULATIONS OF THE FOLLOWING AUTHORITATIVE BODIES, THE CODES IN EFFECT AT THE TIME OF TENDER, AND ANY OTHERS HAVING JURISDICTION:
  .1 B.C. BUILDING CODE AND LOCAL BUILDING BY-LAWS
  .2 WORKER'S COMPENSATION BOARD
  .3 CANADIAN STANDARDS ASSOCIATION
  .4 B.C. PLUMBING CODE

1.26 DEMONSTRATION AND INSTRUCTION TO OWNER

.1 DEMONSTRATE TO AND INSTRUCT THE REPRESENTATIVE DESIGNATED BY THE OWNER ON THE COMPLETE MECHANICAL SYSTEMS OPERATING AND MAINTENANCE PROCEDURES USING THE ASSISTANCE OF SPECIALIST SUB-TRADES AND MANUFACTURER'S REPRESENTATIVES.

15010 MAINTENANCE AND SERVICE CONTRACT:

.1 THE CONTRACTOR SHALL INCLUDE IN THEIR TENDER PRICE THE SERVICE AND MAINTENANCE OF ALL SYSTEMS AND EQUIPMENT COVERED BY THE PRESENT CONTRACT FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE. THIS SHALL BE OVER AND ABOVE THE STANDARD SERVICE REQUIRED FOR GUARANTEES ON ALL SYSTEMS. THIS ADDITIONAL SERVICE SHALL INCLUDE ALL PARTS AND LABOUR, TAXES, ETC., REQUIRED TO MAINTAIN AND REPAIR ALL EQUIPMENT FOR ITEMS NOT COVERED BY THE GUARANTIES AND SHALL INCLUDE CLEANING, SERVICING, GREASING, FILTER CHANGES, ADJUSTMENTS, ETC. REGULAR MAINTENANCE SHALL BE CARRIED OUT IN ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S WRITTEN INSTRUCTIONS.

15042 TESTING:

.1 PERFORM ALL TESTING REQUIRED BY THE AUTHORITY HAVING JURISDICTION.
.2 OBTAIN TEST CERTIFICATES FOR ALL TESTS PERFORMED AND INCLUDE IN OPERATING MANUALS.
.3 PERFORM THE FOLLOWING TEST: (WHERE APPLICABLE)
  .1 DOMESTIC WATER TEST TO 1 1/2 TIMES MAX WATER PRESSURE OR 200PSI (13 BAR).
.4 ALL TESTS SHALL BE DOCUMENTED AND WITNESSED BY THE CONSULTANT OR GENERAL CONTRACTOR.

15043 BALANCING

.1 CONTRACTOR IS TO PROVIDE THE SERVICES OF A APPROVED PROFESSIONAL TESTING & BALANCING FIRM.
.2 PROVIDE A BALANCE REPORT OF ALL AIR & WATER BALANCE POINTS AND PERFORMANCE TESTING & BALANCING OF ALL EQUIPMENT AS PER THE AABC.
.3 BALANCE ALL AIR AND WATER QUANTITIES TO - 5% OR + 10% OF THE DESIGN REQUIREMENT.
.4 PROVIDE ALL REQUIRED SHEAVE, BELT AND IMPELLER CHANGES TO ACHIEVE THE REQUIRED FAN AND PUMP FLOW RATES.
.5 MEASURE AND BALANCE THE FOLLOWING (WHERE APPLICABLE):
  .1 BALANCE DOMESTIC WATER RECIRCULATION.

15060 PIPE & PIPE FITTINGS

.1 ENSURE ALL PIPE MATERIALS AND FITTINGS ARE ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.

.2 ALL TYPE 'K' COPPER MUST BE CERTIFIED TO ASTM B88. PROVIDE WRITTEN GUARANTEE THAT LEAD FEE SOLDER WAS USED ON ALL DOMESTIC WATER SYSTEMS.

.3 APPROVED PIPE & PIPE FITTINGS: REFER TO TABLE 1
.4 CONTRACTOR TO PROVIDE DRAINS AT ALL LOW POINTS IN THE PIPING SYSTEM.

15090 SUPPORT, ANCHORS & SEALS

.1 PROVIDE ALL NECESSARY SUPPORTS, AND HANGERS TO SECURE MECHANICAL SYSTEMS AND EQUIPMENT, INCLUDING PIPING AND DUCTWORK. SUPPORT PIPING AS REQUIRED BY THE CITY OF VANCOUVER PLUMBING CODE OR BY THE PIPING MANUFACTURER, WHICHEVER IS MORE STRINGENT. SUPPORT SHEET METAL DUCTWORK AS REQUIRED BY SMACNA.
.2 PROVIDE FIRE STOPPING AT ALL DUCT AND PIPING PENETRATIONS THROUGH RATED FLOORS/WALLS AND SHAFTS.
.3 PROVIDE OVERSIZE HANGERS ON ALL COLD PIPES TO FIT OVER PIPE INSULATION WHERE REQUIRED.
.4 PROVIDE ISOLATION AND PREVENT CONTACT WITH DISSIMILAR METALS.
.5 ALL SLEEVES FOR MECHANICAL PIPING TO EXTEND 1" (25MM) ABOVE THE FLOOR IN ALL MECHANICAL ROOM, SHAFTS AND WET AREAS.
.6 ALL EXPOSED PIPING PENETRATIONS SHALL BE PROVIDED WITH ESCUTCHEONS AT THE PENETRATION POINT.

15100 VALVES

.1 SCOPE
  .1 PROVIDE VALVES FOR HEATING WATER, DOMESTIC WATER, GAS AND REFRIGERATION SYSTEMS.
  .2 PROVIDE GATE, GLOBE, BALL, BUTTERFLY, DRAIN AND CHECK VALVES.
  .3 PROVIDE ALL NECESSARY VALVES SUITABLE FOR THE FLUID AND PIPING SYSTEM.
  .4 ALL VALVES MUST BE SUITABLE FOR A WORKING PRESSURE 1380 KPA AT 121%.
.2 INSTALL ALL VALVES IN UPRIGHT OR HORIZONTAL POSITION.
.3 PROVIDE DRAIN VALVES AT ALL LOW POINTS IN THE PIPING SYSTEM.
.4 PROVIDE ISOLATION VALVE AT EACH PLUMBING FIXTURE.
.5 VALVES PERMITTED: REFER TO TABLE 2
.6 VALVES UP TO 2" (50MM) DIAMETER CAN BE SWEATED OR SCREWED CONNECTION. VALVES LARGER THAN 2" (50MM) DIAMETER MUST BE SCREWED, FLANGED OR MECHANICALLY COUPLED TO PIPING SYSTEM.

15200 SEISMIC REQUIREMENTS

.1 SCOPE
  .1 SEISMIC RESTRAINTS FOR ALL EQUIPMENT, DUCTWORK, AND PIPING COVERED BY DIVISION 15. ATTACHMENT TO STRUCTURAL MEMBERS.
  .2 REFERENCE STANDARDS
  SEISMIC REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
    .1 LATEST BUILDING CODE DIVISION B PART 4
    .2 N.F.P.A. 13
    .3 N.F.P.A. 20.
    .4 SMACNA "GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS AND PLUMBING PIPING SYSTEMS".

.3 CONTRACTOR TO PROVIDE PROFESSIONAL CERTIFICATION AND SCHEDULES FROM SPECIALIST SEISMIC ENGINEER. CONTRACTOR TO PROVIDE A SCHEDULE S-B PRIOR TO BEGINNING CONSTRUCTION AND SCHEDULE S-C PRIOR TO REPORT FOR COMPLETION OR OCCUPANCY INSPECTION, WHICHEVER IS THE EARLIER. ALTERNATIVELY, IF THE SEISMIC ENGINEER DETERMINES THAT SEISMIC RESTRAINT IS NOT REQUIRED, HE MAY ISSUE A SEALED LETTER CERTIFYING THAT SEISMIC RESTRAINT IS NOT REQUIRED. THE SEISMIC ENGINEER MUST BE IN GOOD STANDING AND LICENSED TO PRACTICE IN THE PROVINCE WHERE THE WORK IS TO BE CARRIED OUT. NO EXTRAS WILL BE ENTERTAINED FOR MODIFICATIONS REQUIRED BY THE SEISMIC ENGINEER.

CITY OF VANCOUVER
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.3 SEISMIC REQUIREMENTS
  .1 PROVIDE AND INSTALL SEISMIC RESTRAINTS FOR ALL EQUIPMENT, DUCTWORK AND PIPING INSTALLED BY THIS DIVISION IN ACCORDANCE WITH ALL CURRENT APPLICABLE BUILDING CODES.
  .2 THE INSTALLATION OF SEISMIC RESTRAINS SHALL NOT COMPROMISE VIBRATION ISOLATION CAPABILITIES.
  .3 PRIOR TO CONSTRUCTION COMMENCEMENT, CONTRACTOR SHALL ORGANIZE A MEETING WITH THE GENERAL CONTRACTOR, MECHANICAL CONTRACTOR, STRUCTURAL CONSULTANTS AND OTHER APPROPRIATE PARTIES. AT THAT MEETING, THE CONTRACTOR SHALL PRESENT IN GENERAL THE APPROACHES/DETAILS USED TO PROVIDE SEISMIC BRACING FOR EQUIPMENT, DUCTWORK AND PIPING HIGHLIGHTING ATTACHMENTS TO STRUCTURE AND TRADE COORDINATION.
  .4 SEISMIC RESTRAINTS FOR HOT WATER TANKS TO BE VIBRA-SONIC CONTROL MODEL VS-100 FOR TANKS LARGER THAN 50 GALLONS (190 L). SMALL TANKS TO BE PROVIDED WITH STEEL STRAP SECURED TO STRUCTURE.
  .5 CONTRACTOR TO PROVIDE PROFESSIONAL CERTIFICATION FOR ALL ITEMS INSTALLED BY THIS DIVISION.

15250 INSULATION

.1 INSTALLATION SHALL CONFORM TO THE B.C.I.C.A. QUALITY STANDARDS MANUAL FOR MECHANICAL INSULATION.
.2 PIPING INSULATION:
  .1 PROVIDE VAPOUR BARRIER FOR ALL COLD PIPES AND ACCESSORIES.
  .2 INSULATION TO BE PROVIDED FOR ALL DOMESTIC HOT AND COLD AND RE-CIRCULATION PIPING.
  .3 INSULATE ALL PLUMBING TRAPS IN NON-HEATED AREAS WITH REMOVABLE INSULATED CAP.
  .4 PROVIDE INSULATION THICKNESS AND TYPE AS PER TABLE 3.

15400 PLUMBING GENERAL

.1 TO COMPLY WITH LATEST CITY OF VANCOUVER PLUMBING CODE AND LATEST LOCAL MUNICIPALITY REQUIREMENTS.

.2 FIRE STOP ALL PENETRATIONS THROUGH RATED SEPARATIONS. PROVIDE NECESSARY THERMAL INSULATION AND VAPOUR BARRIER AT PENETRATIONS. CONTRACTOR TO PROVIDE PROFESSIONAL CERTIFICATION FROM SPECIALIST FIRE-STOPPING TRADE PRIOR TO REPORT FOR COMPLETION OR OCCUPANCY INSPECTION, WHICHEVER IS THE EARLIER.

.3 SUPPLY AND INSTALL CLEANOUTS ON ALL DRAINS, CHANGES IN DIRECTION, AT BASE OF RISER AND ON MAIN SANITARY AND STORM LEAVING BUILDING IN ADDITION TO THE B.C. PLUMBING CODE.

.4 WHERE DRAINS ARE LOCATED OVER AN OCCUPIED AREA, MEMBRANE CLAMP IS TO BE PROVIDED WITH DRAIN FOR A WATERPROOF INSTALLATION.

.5 PRIOR TO COMMENCING THE UNDERGROUND PLUMBING INSTALLATION EXCAVATE AND VERIFY:
  .1 THE LOCATION, ELEVATION AND SIZE OF STORM AND SANITARY SERVICE CONNECTIONS.
  .2 THE SANITARY AND STORM LINES CAN BE ROUTED AND SUFFICIENTLY SLOPED WITH ADEQUATE COVER FOR FREEZING PROTECTION TO MEET THE SERVICE CONNECTIONS.
  .3 INFORM THE ENGINEER IMMEDIATELY IF ANY CHANGES ARE REQUIRED.

.6 GENERAL REQUIREMENTS:
  .4 ALL FLOOR DRAINS SHALL HAVE A TRAP PRIMER CONNECTION.
  .5 WATER DISTRIBUTION PIPE TO BE 3/4" (20MM) MINIMUM.
  .6 PROVIDE INSTALLATION OF PLUMBING FIXTURES WHEN SUPPLIED BY OTHERS.
  .7 MAINTAIN MINIMUM HEADROOM CLEARANCE IN THE BASEMENT AREAS OF 7' (2.1M). KEEP HIGHER IF POSSIBLE.
  .8 LEAD FREE SOLDER TO BE USED FOR ALL POTABLE WATER SYSTEMS. CONTRACTOR TO ISSUE A LETTER OF GUARANTEE AND INCLUDE IN THE MAINTENANCE MANUALS.

.7 PROVIDE UNIONS TO ALL EQUIPMENT AND VALVE CONNECTIONS FOR 2-1/2" (65MM) AND BELOW. FLANGED CONNECTIONS FOR 3" (75MM) AND OVER.

.8 PROVIDE NECESSARY THRUST BLOCKS, ANCHOR, ETC. TO UNDERGROUND WATER PIPING AT ALL CHANGES OF DIRECTION, ALL TEES AND AT THE END OF ALL MAINS AND BRANCHES.

.9 PROVIDE STAINLESS STEEL BELLOWS TYPE WATER HAMMER ARRESTORS ON WATER LINES CONNECTED TO CLOTHES WASHER AND DISH WASHER AND AT TOP OF RISERS. PROVIDE ACCESSIBLE ISOLATION VALVE AND ACCESS TO ARRESTORS FOR SERVICING.

.10 PROVIDE ANY EXCAVATIONS NECESSARY FOR THE INSTALLATION OF THE MECHANICAL WORK. NO CUTTING, BORING OR EXCAVATING NECESSARY FOR THIS WORK IN OR ABOUT THE BUILDING WHICH MAY CAUSE INTERFERENCE WITH THE PROGRESS OF THE WORK OR WEAKEN THE STRUCTURE IN ANY WAY, SHALL BE UNDERTAKEN WITHOUT THE APPROVAL OF THE CONSULTANT BEFORE COMMENCING WORK. TRENCHES FOR ALL UNDERGROUND PIPING SHALL BE EXCAVATED TO A DEPTH SLIGHTLY MORE THAN REQUIRED AND GRADED SO AS TO SECURE ALL AVAILABLE FALL. SUPPORT EACH LENGTH OF PIPE WITH CONCRETE BLOCKS AND BRICKS, OR BACKFILL THE TRENCH WITH GRAVEL TO THE REQUIRED DEPTH AND GRADE. SANITARY AND STORM LINES OUTSIDE OF THE BUILDING SHALL BE KEPT AS DEEP AS PRACTICAL.

.10 BACKFILLING IN ALL TRENCHES SHALL BE WITH SAND OR PEA GRAVEL WHERE APPROVED, 6" (150MM) BELOW PIPE AND UP TO 6" (150MM) OVER TOP OF PIPING. REMAINDER OF ALL TRENCHES SHALL BE FILLED BY THE GENERAL CONTRACTOR.

.12 WHERE SEWER, WATER OR STORM PIPES PASS UNDER A GRADE BEAM OR FOOTING THE TRENCH AROUND THE PIPING UP TO AND IN CONTACT WITH THE FOOTING, PROVIDE A 450 KG CONCRETE GROUTING SO AS TO SEAL THE OUTSIDE TRENCHING FROM NORMAL STORM RUN OFF AND BACKFLOW OF RAIN WATER THROUGH THE TRENCHING AND INTO THE CRAWL SPACE AND/OR UNDER THE BASEMENT FLOOR.

.13 WHERE SEWER, WATER OR STORM PIPES PASS THROUGH EXTERIOR WALLS BELOW GRADE, THE GENERAL CONTRACTOR SHALL INSTALL CORBELS ON THE EXTERIOR WALLS AND RUN BRIDGING FOR CORBEL TO UNDISTURBED SOIL FOR THE SUPPORT OF THE PIPES. ONE INCH THICK WATERPROOF MASTIC SHALL BE APPLIED AROUND THE PIPES WHICH PASS THROUGH THE WALL.

.14 PROVIDE CHROME ESCUTCHEON PLATES FOR ALL PLUMBING ROUGH-IN.

.15 GAS PIPING SHALL COMPLY WITH NATIONAL STANDARD OF CANADA CAN1_B149.1 M80 AND THE BC GAS SAFETY BRANCH BULLETINS. INSTALLATION CODE OF NATURAL GAS BURNING APPLIANCES AND EQUIPMENT. PROVIDE NECESSARY PRESSURE REGULATOR TO SUIT. YELLOW JACKET BURIED GAS LINE, PRIME COAT AND PAINT LINES EXPOSED TO OUTDOORS.

.16 PROVIDE LEAD SHEET FLASHING AND SHEET METAL COUNTER FLASHING FOR PIPE PASSING THROUGH ROOF DECK STRUCTURE.

.17 PROVIDE NON-CONDUCTING TYPE CONNECTION FOR JOINING OR SUPPORTING. PROVIDE SEPARATION BETWEEN DISSIMILAR METALS.

.18 PROVIDE STOP VALVE TO ALL EQUIPMENT AND PLUMBING FIXTURE CONNECTION. PROVIDE STOP VALVE TO BASE OF WATER RISERS. PROVIDE ISOLATION VALVES FOR ALL FIXTURE TRIM UNLESS COMPLETE WITH INTEGRAL STOPS.

.19 PROVIDE PIPING EXPANSION JOINTS AS REQUIRED BY THE CITY OF VANCOUVER PLUMBING CODE OR BY THE PIPING MANUFACTURER'S REQUIREMENTS, WHICHEVER IS MORE STRINGENT.

15475 CLEANING & CHEMICAL TREATMENT

.1 PROVIDE FOR CLEANING AND DISINFECTION OF ALL DOMESTIC HOT & COLD WATER SYSTEMS.

.2 FOR HOT WATER HEATING SYSTEMS PERFORM A BOIL OUT AND PROVIDE DEARBORN - 545 OR EQUIVALENT CHEMICAL TREATMENT.

.3 DURING SYSTEM FLUSHING ENSURE THAT ALL CONTROL VALVES AND OTHER SYSTEM VALVES ARE IN THE FULL OPEN POSITION.

.4 ALL DOMESTIC WATER PIPING SHALL BE THOROUGHLY FLUSH SO THAT IT IS FREE FROM ALL SCALE, SEDIMENT ETC.

END OF MECHANICAL SPECIFICATION

TABLE 1: PIPE & FITTINGS:

SERVICE	PIPE	
.1 DOMESTIC WATER ABOVE	UPONOR AQUAPEX UPTO 2"ø	
	AQUATHERM ABOVE 2"ø	
.2 SANITARY ABOVE GRADE	DWV COPPER	WROUGHT COPPER OR CAST BRASS 95-5 SOLDER GASKET WITH STAINLESS STEEL COUPLING
	CAST IRON	
	IPEX SYSTEM 15 (PVC-DWV)*	
	IPEX SYSTEM XFR (PVC-DWV)	
.3 SANITARY BELOW GRADE	CAST IRON	GASKET WITH STAINLESS STEEL COUPLING
	ABS	SOLVENT JOINT
	P.V.C./D.W.V.	SOLVENT JOINT
.4 NATURAL GAS	SCHEDULE 40 STEEL TO	ASME B16.3, MALLEABLE IRON, OR STEEL
		THREADED, WELDED, OR FLANGED, TO
	CAN/CSA-B149.1-05	CAN/CSA-B149.1-05

*NOT PERMITTED WHERE CEILING SPACE IS TO BE USED AS A RETURN PLENUM

TABLE 2: VALVES PERMITTED:

	LESS THAN 2" (50MM) DIAMETER	GREATER THAN 2" (50MM) DIAMETER
DOMESTIC HOT & COLD	GATE OR BALL	GATE, BALL OR BUTTERFLY
HEATING WATER	GATE OR BALL	GATE, BALL OR BUTTERFLY

These plans have not been looked at for compliance with the Building By-law requirements (other than as to location of the building on the site). They are not accepted for purposes of that By-law until the District Building Inspector endorses his acceptance of the "Building Permit Inspection Approval Record", his "Inspection Record" and thereon

Inspector's Name
(Print and Sign)

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TABLE 3: PIPE INSULATION

SERVICE	SIZE	INSULATION THICKNESS	
DOMESTIC HOT & COLD	UP TO 1" (25MM)	1" (25MM)	MINERAL FIBRE, FLEXIBLE FOAMED ELASTOMERIC(FOR PEX ONLY)
DOMESTIC HOT & COLD	1 1/2" & UP (40MM)	1-1/2" (38MM)	MINERAL FIBRE, FLEXIBLE FOAMED ELASTOMERIC(FOR PEX ONLY)

General Notes

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Written dimensions shall have precedence over scaled dimensions. Contractors shall verify and be responsible for all dimensions and conditions of the job and the designers shall be informed of any variations from the dimensions and conditions shown on the drawing.

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CD18-082

Issue	Description	Date
-	ISSUED FOR BP	2018-10-05

Engineer's seal:

N. H. PATEL
36710

Project:

DOMESTIC WATER RE-PIPING AND ADDED CLOTHES WASHERS

**95 EAST 14 AVE,
VANCOUVER, BC**

Drawing Title:

SPECIFICATIONS

Date: -
Drawn By: AD/CA/AS
Checked By: NP
Scale: AS SHOWN
Drawing No. P-5.0

Mahpour, Hamid

From: Jeliazkova, Diana
Sent: Tuesday, December 17, 2019 1:01 PM
To: Mahpour, Hamid; Renter Office
Cc: Kuhlmann, Thor
Subject: RE: 95 E 14 AV, BP-2019-01801

Hi Hamid,

The Renter Office does not have a hold on this BP permit. If a DP application were to come in for this address, then we would have requirements of the applicant with respect to a Tenant Relocation Plan. We were under the impression that a DP application was expected, but we understand this has not been received therefore we do not need any additional information from the applicant at this time.

Please let me know if you have any questions.

Thank you,
Diana

Diana Jeliazkova
Affordable Housing Programs | City of Vancouver
diana.jeliazkova@vancouver.ca
604-829-9279

From: Mahpour, Hamid
Sent: Wednesday, December 11, 2019 11:20 AM
To: Jeliazkova, Diana; Renter Office
Subject: RE: 95 E 14 AV, BP-2019-01801

Please note that I am still awaiting Renter's Office clarification on whether I can go ahead issuing the permit. Customer is under the impression that the requirement of the COV are already satisfied to issue the building permit.

Please call me at (604) 871- 6024 if there are any questions or concerns.

Thank you

Hamid Mahpour
Project Coordinator
Building Review Branch
Development, Buildings & Licensing
The City of Vancouver
(604)871-6024

From: Mahpour, Hamid
Sent: Monday, December 09, 2019 4:33 PM
To: Jeliazkova, Diana
Subject: RE: 95 E 14 AV, BP-2019-01801

No I do not have that information.

Thank you

Hamid Mahpour
Project Coordinator
Building Review Branch
Development, Buildings & Licensing
The City of Vancouver
(604)871-6024

From: Jeliazkova, Diana
Sent: Monday, December 09, 2019 1:05 PM
To: Mahpour, Hamid; Renter Office
Cc: Kuhlmann, Thor; Ellis, Sarah
Subject: RE: 95 E 14 AV, BP-2019-01801

Hi Hamid,

It was our understanding that there was an enquiry for a DP application for this building to add a 4th storey to the existing 3 storeys. This was to be an extended scope of work to an existing BP for renovation of this building. If this DP application were to come in, it would trigger a Tenant Relocation Plan. Do you have any updated information about the status of that enquiry?

Thanks,
Diana

Diana Jeliazkova
Affordable Housing Programs | City of Vancouver
diana.jeliazkova@vancouver.ca
604-829-9279

From: Mahpour, Hamid
Sent: Monday, December 09, 2019 11:17 AM
To: Renter Office; Jeliazkova, Diana
Cc: Kuhlmann, Thor; Ellis, Sarah
Subject: RE: 95 E 14 AV, BP-2019-01801

David

There is no DP at this time for the requested changes. They have complied with all application requirements and the permit is ready to be issued. I cannot hold on to the permit not issuing it, if all application requirements are resolved. So far we have not been opening a review group for renter's office and notification at the application intake was deemed sufficient, knowing that enquiry officers or development planners has already finalized issues related to the building being a rental property. Please clarify.

Thank you

Hamid Mahpour
Project Coordinator
Building Review Branch

Development, Buildings & Licensing
The City of Vancouver
(604)871-6024

From: Renter Office
Sent: Monday, December 09, 2019 10:17 AM
To: Mahpour, Hamid; Jeliazkova, Diana
Cc: Renter Office; Kuhlmann, Thor; Ellis, Sarah
Subject: RE: 95 E 14 AV, BP-2019-01801

Hello Hamid,

It sounds as if the work required in this BP could lead to tenant displacement. This applicant also applied for a DP (PS-2019-01129) for which the TRPP applies. Maybe it's best to hold issuance of this permit? The planner monitoring any TRP for this address, Thor Kuhlmann, is out of the office until next Monday.

Thanks,

David

From: Ellis, Sarah
Sent: Monday, December 9, 2019 9:40 AM
To: Mahpour, Hamid; Renter Office; Jeliazkova, Diana
Subject: RE: 95 E 14 AV, BP-2019-01801

Thanks Hamid – I haven't been as involved in this file but I am copying Dianna over in ACCS so she's aware.

Best,

Sarah

From: Mahpour, Hamid
Sent: Monday, December 09, 2019 8:53 AM
To: Renter Office; Ellis, Sarah
Subject: RE: 95 E 14 AV, BP-2019-01801
Importance: High

The building permit is ready to be issued today. The customer has paid all the fees and permit application requirements are finalized. Please get back to me, at the latest by the end of today, if I need to withhold issuance of the permit as it is a residential rental building.

Please call me at (604) 871- 6024 if there are any questions or concerns.

Thank you

Hamid Mahpour
Project Coordinator
Building Review Branch
Development, Buildings & Licensing
The City of Vancouver
(604)871-6024

From: Mahpour, Hamid
Sent: Wednesday, May 01, 2019 9:06 AM

To: Renter Office; Ellis, Sarah
Subject: 95 E 14 AV, BP-2019-01801

Permit application BP-2019-01801 is opened for renovation to the rental building at 95 E 14 Avenue. Included in the renovation is changes to layout of the units and replacement of exterior windows. BP-2018-05371 was also issued in December 2018 for re-piping of the said building.

Thank you

Hamid Mahpour
Project Coordinator
Building Review Branch
Development, Buildings & Licensing
The City of Vancouver
(604)871-6024

CITY OF VANCOUVER

Renovations - Envelope Performance Comparison

Property Address :	95 east 14th Avenue	Building Permit Application No.:	BP-2019-01801
Specific Address :			

This form is to be completed digitally. For ease of use, pop-up instructions are included.

Calculation

Input (imperial) the Original and Proposed values into the blue boxes below.

Original Envelope

	Studded Assembly Layer only - Eff R-value Calc						Remaining Assembly R-value	Total Assembly R-value	Assembly U-value	x	Area (ft^2)	=	U x A
	Insul (btw studs)		Studs (2 x _)			Insul/Stud							
Opaque:	R-value	Type	Size	O.C.	Type	Eff R-value							
North Elevation	12	Batt	6	16	Wood	11.5		11.5	0.087		1,900		166
East Elevation	12	Batt	6	16	Wood	11.5		11.5	0.087		1,531		134
South Elevation	12	Batt	6	16	Wood	11.5		11.5	0.087		1,795.2		157
West Elevation	12	Batt	6	16	Wood	11.5		11.5	0.087		1,533.6		134
						0 0		0.0					-
						0 0		0.0					-
						0 0		0.0					-
						0 0		0.0					-
						0 0		0.0					-
						0 0		0.0					-
						0 0		0.0					-
											6,760		
Glazing/Skylights:													
All Res. Windows									0.490		670		328
All Res. Sliding Drs									0.490		1,214		595
													-
													-
													-
													-
											1,884		1,513

Original Area: 8,644

Proposed Envelope

	A/R												
Opaque:													
North Elevation	-	12	Batt	6	16	Wood	11.5		11.5	0.087		1,900		166
East Elevation	-	12	Batt	6	16	Wood	11.5		11.5	0.087		1,531		134
South Elevation	-	12	Batt	6	16	Wood	11.5		11.5	0.087		1,795		157
West Elevation	-	12	Batt	6	16	Wood	11.5		11.5	0.087		1,534		134
	-						0 0		0.0					-
	-						0 0		0.0					-
	-						0 0		0.0					-
	-						0 0		0.0					-
	-						0 0		0.0					-
	-						0 0		0.0					-
	-						0 0		0.0					-
												6,760		
Glazing/Skylights:														
All Res. Windows	-											670		-
All Res. Sliding Drs	-											1,214		-
	-													-
	-													-
	-													-
	-													-
												1,884		590

Net Addition / Reduction:

Opaque: -

Glaz/Sky: -

-

0.0%

Proposed Area: 8,644

Original Envelope: 1,513

Proposed Envelope: 590

Compliant if Zero or Positive: 923

Determination: Compliant with ASHRAE 90.1

Calculation By: Rob McLean of Stuart Howard Architects

Signature: Date: 9/16/2019

CADA & Associates Consulting Ltd.

July 03, 2019

Hamid Mahpour, Project Coordinator
Building Review Branch
City of Vancouver, Development, Buildings and Licensing
Ph: 604.871.6024
email: hamid.mahpour@vancouver.ca

RE: Project Address – 95 East 14th Avenue, Vancouver, BC
(CD18-092)

Dear Mr. Mahpour,

This letter is to confirm that work at the address noted, begun under previous building permit BP-2018-05371 will be included under the professional letters of assurance submitted for building permit BP-2019-01801 as issued by the undersigned registered professional named below of CADA and Associates Consulting Ltd.

Feel free to contact us should you have any questions regarding this.

Sincerely,

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
N. H. PATEL
36710
July 3, 2019

CADA & ASSOCIATES CONSULTING LTD.
Nehal H. Patel, PE, P.Eng, LEED AP
Partner | Mechanical Engineer

CC: Carlo V. Ambito, ASct, LEED AP, TECA

RECEIVED
CITY OF VANCOUVER
JUL - 8 2019
DEVELOPMENT
BUILDINGS & LICENSING

Mahpour, Hamid

From: Mahpour, Hamid
Sent: Tuesday, June 18, 2019 10:43 AM
To: s.22(1)
Cc: Cho, Edna; Loney, Ed
Subject: RE: Building permit BP-2019-01801

s.22(1)

Modification of floor layout is usually part of many residential renovation applications. Contractor are responsible for removal of hazardous material based on Work Safe BC regulations. Building inspectors are aware of possible presence of hazardous materials in older building and may require report of their removal before performing inspection. A term is placed on the permit indicating a survey for hazardous materials be completed before any renovation work begins and a written confirmation that all hazardous materials identified in the survey have been either safely contained or removed. This specific project will requires having a Construction Safety Officer whose part of his/her job is to look after the said. Also note upgrading building structure based on the extent of the renovation work and in compliance with VBBL is a part of renovation projects. Part 11 of VBBL has specific minimum requirements for structural upgrades of the existing buildings which the details will be identified on the permit drawings.

Please call me at (604) 871- 6024 if there are any questions or concerns.

Thank you

Hamid Mahpour
Project Coordinator
Building Review Branch
Development, Buildings & Licensing
The City of Vancouver
(604)871-6024

From: s.22(1)
Sent: Tuesday, June 18, 2019 8:21 AM
To: Mahpour, Hamid
Subject: Building permit BP-2019-01801

Dear Mr Mahpour,
I was given your name by the Vancouver City Rental Office.
This is regarding Building Permit application BP-2019-01801 (attached)
s.22(1)
I understand there were plans attached to the application, which I have not seen.
The application makes no mention of structural repair or hazmat removal.
Please let me know if either are proposed do they have to be included in the Application and on the plans.
Please let me know if either are mentioned on the plans.
Both are health concerns and the extent of work proposed is in the public domain.
Thanks
s.22(1)

cc Vancouver Renters Office, George Heyman MLA

Mahpour, Hamid

From: Turishev, Boris
Sent: Tuesday, December 03, 2019 10:19 AM
To: rmclean@stuarthoward.com
Cc: Mahpour, Hamid
Subject: FW: Request for Acceptance of Generic Alternative Solution
Attachments: Apply generic AL - Q14 8 pages.pdf; unknown.tiff

Hi, Rob.

The attached is a copy of the accepted generic alternative solution for existing stairs. A copy of the proposal was uploaded into the Documents folder of the Building Permit Application.

Regards,

Boris Turishev, M. Eng., P. Eng., CP, MBA
Building Policy Engineer, Office of the Chief Building Official
Development, Building and Licensing, City of Vancouver
Tel: 604.873.7401
Email: boris.turishev@vancouver.ca
vancouver.ca/CBO

2019 Vancouver Building Bylaw (Effective November 1, 2019):
Council Report Version:
https://app.vancouver.ca/bylaw_net/Report.aspx?bylawid=12511
Print Copy Coming Soon:
http://www.bccodes.ca/vancouver-bylaws.html

From: Chief Building Official
Sent: Monday, December 02, 2019 9:24 AM
To: Turishev, Boris
Subject: FW: Request for Acceptance of Generic Alternative Solution

Hi Boris
Could you please follow up as it appears you are already involved.
Thanks
Hollie

From: Rob Mclean [mailto:rmclean@stuarthoward.com]
Sent: Friday, November 29, 2019 2:20 PM
To: Chief Building Official
Subject: Request for Acceptance of Generic Alternative Solution

For 95 E 14 AV, BP-2019-01801
See attached, PDF file, electronically sealed and signed. Material issued yesterday, now repackaged as a single PDF. As requested by Boris Turishev

R. McLean
rmclean@stuarthoward.com

Stuart Howard Architects Incorporated
405 - 375 West 5th Avenue
Vancouver, B.C. V5Y 1J6
t-604.688.5585 ext.226
f-604.688.7486

Mahpour, Hamid

From: Rob Mclean <rmclean@stuarthoward.com>
Sent: Thursday, December 05, 2019 10:29 AM
To: Mahpour, Hamid
Cc: Neil Robertson; Rotta Larry
Subject: 95 E 14 AV, BP-2019-01801 Finalizing Permit

Importance: High

Hi Hamid:

Please note correction to budget valuation

1) A contractor has not been selected yet. When he is selected he will have a city business licence, and we will provide all his contact information to you.

2) Until a contractor has returned his pricing for the work, the owners are working with a budget of $ 1,200,000.00, construction and design costs inclusive.

With best regards,
- Rob

R. McLean
rmclean@stuarthoward.com

STUART HOWARD ARCHITECTS INC.
ARCHITECTS AIBC - RAIC - AIA

Stuart Howard Architects Incorporated
405 - 375 West 5th Avenue
Vancouver, B.C. V5Y 1J6
t-604.688.5585 ext.226
f-604.688.7486

Mahpour, Hamid

From: Mahpour, Hamid
Sent: Wednesday, May 01, 2019 10:06 AM
To: 'nrobertson@stuarthoward.com'
Cc: Zienty, Eli; Loney, Ed
Subject: 95 E 14 AV, BP-2019-01801

Importance: High

Permit BP-2019-01801 is opened yesterday for renovation to the building at 95 E 14 Avenue. There is also an issued permit BP-2018-05371 for re-piping of all plumbing lines in the same building. Scope of some work in both permits (e.g. repair and replacement of plumbing walls) is the same which may create difficulty in managing, professional responsibility, and inspection of the work. It is best to cancel building permit BP-2018-05371 and transfer its work to the new building permit BP-2019-01801. Please:

1. Have the permit BP-2018-05371 holder (agent for the owner) to ask Inspection Department to cancel BP-2018-05371.
2. Submit 5 sets of plumbing drawings and related schedules to include its work in BP-2019-01801.

Please call me at (604) 871- 6024 if there are any questions or concerns.

Thank you

Hamid Mahpour
Project Coordinator
Building Review Branch
Development, Buildings & Licensing
The City of Vancouver
(604)871-6024

STUART HOWARD ARCHITECTS INC
MEMBERS AIBC - RAIC - AIA
Stuart Howard Architect AIBC SAA FRAIC AIA Principal
W. Neil Robertson Architect AIBC MRAIC AIA Principal

October 07, 2019

SUBJECT: Building Permit Deficiency List

Permit Number: BP-2019-01801
Address: 95 E 14th Avenue

Attn: Mr. Hamid Mahpour

In response to your email list of outstanding items, revision of your original list of 11 September, Email of 30 September.

Same item numbers from your list, your comments in blue, subsequent comments in green, our response in orange.

2. Energy upgrade requirement of the project is E4. Please: → Please discuss the submitted information with our energy policy specialist Greg McCall first and revise accordingly.
This has been discussed, and revised. See emails through October 4th. Drawing sheet A0.01 is reissued with the checklist sheets updated.
a. Revise residential suite energy checklist showing it would be upgraded to L4 level
This has been revised.
b. Revise common area energy checklist for changes to envelope, lighting, and energy upgrade to L4 level
This has been revised.
c. Submit digital files of the common area energy checklist in excel file and its related attachments (e.g. envelope, lighting, SWH) and also those for the energy compliance of residential suites in PDF.
This has been revised.

4. F2 upgrade requires alarms and detectors, emergency lights, access to exit, exits, exit signs, and exit lights within the project and the public area (leading from project area to an acceptable open space) upgraded to comply with current VBBL. Please:
a. Provide exit stair details demonstrating compliance with VBBL →Not provided. It is outstanding. You may be able to justify the existing noncomplying features of the building to

405 - 375 WEST FIFTH AVENUE • VANCOUVER , B.C. • V5Y 1J6
Telephone: 604 . 688 . 5585 Facsimile: 604 . 688 . 7486

satisfy the upgrade requirements of the project by Alternative Solution. Please contact Boris Turishev of the CBO office at boris.turishev@vancouver.ca to find out.
Notations and modifications have been provided on the drawings. Please see new drawing sheet A2.11 Vestibules & Exit Stairs.

c. Show exit stairs, corridors, and exit lobby are fire separated with assemblies having proper fire resistance rating from the rest of the floor area→ Not provided. It is outstanding. See item 4a for AL on existing non complying features of the building.
See A8.02 - revised assembly schedules, where testing of historic materials is noted. Taken from NRC Publications Archive, "Fire endurance of lighjt-framed and miscellaneous assemblies: a compilation of published information on fire endurance of a variety of light-frame walls, partitions, and floors", Galbreath, M. Technical Paper (National Research Council of Canada. Division of Building Research), 1966-06-01

d. Show public corridor and exit lobby are fire separated with assemblies having proper fire resistance rating from other floors including parking garage → Not provided. It is outstanding. See item 4a for AL on existing non complying features of the building.
On the residential floor areas, see revised assembly schedules, where testing of historic materials is noted.
Per assembly schedule, as noted previously, a cast in place concrete slab exists above the parking, providing a 2 hour fire resistance rating or greater, per appendix D, between parking level and the joists or sleepers of main floor.

e. Note the fire resistance rating of the assemblies shall either comply with ULC or VBBL Appendix D. Update wall and floor assembly information on drawing A8.02 as required. → It is outstanding. Also some information on drawing A8.02 is not readable.
Size of text and listings on this sheet have been revised accordingly. Note that very little original drywall has been exposed in the building, and of that no markings for ratings such as type 'x' have been observed yet. Therefore a historical listing of testing for non-rated drywall has been quoted for the typical existing rating. Where walls are opened, and drywall disturbed, new drywall to current standards will be installed to provide ratings as noted.

5. There seems to be shaft and electric closets in corridors. Please provide name of all spaces on the floor plan. Note that laundry room, service rooms, storage room, vertical and horizontal service spaces shall be separated from the rest of the floor area. Provide details including vertical cross section(s) through the building showing horizontal service spaces (if there is any) are separated with proper fire separation from the public corridor and exits. → is outstanding.
One vertical shaft has been identified, which contains the masonary flue from the boiler in the basement. Other 'closets' appear to have been closet-like structures, but are empty and without doors.
Horizontal service spaces have not been found.

Based on the records on file, an additional section cannot provide different information.

6. Residential suite 108 cannot open directly into exit lobby, VBBL 3.4.4.2. →Proposal does not comply with VBBL 3.3.1.12 for doors installed in series. Provide dimensional details demonstrating compliance.
A proposed vestibule entry to the suite has been revised to comply.

8. Clarify how exit route on the east is protected from exposure to unprotected openings of the building, VBBL 3.2.3.13. → Is outstanding.
This is an existing non-conforming condition, which has existed since the original permit. We propose to install automatic fire shutters on the offending openings (windows and sliding doors). These are now indicated on the floor plans of levels 1 and 2, and on the west elevation of the building.

10. Show the main entrance to the building meets H/C access requirements of VBBL including having proper hardware. → Update the door schedule indicating power operation of the door.
The door schedule has been updated accordingly.

11. Update energy information on drawing A0.01 as requested in item 2 above. → It is outstanding. Revise it as discussed.
The tables on this sheet have been updated.

13. Provide bottom of the door/sill installation detail for patio/balcony sliding door. Also provide its head and jamb installation details if different from those shown for window on drawing A9.01. Otherwise clarify on the same drawing that the said details are the same for installation of both, namely windows and patio/balcony doors. → It is outstanding. Revised drawings are not submitted.
Clarification and additional details are provided. See A4.01, Details 3 and 4. See 11/A9.01

16. New sliding doors and windows shall comply with Part 5 of VBBL and energy efficiency requirements of VBBL 10.2.2.7 having maximum thermal transmittance of 1.4 W/(m2K). Indicate it as a statement on architectural drawings. Please also review and clarify the information on drawing A8.01 as single glazing may not provide the required USI values for window and patio doors. → Door information on drawing A8.01a still indicates to single glazed door.
Contradictory information has been corrected.

17. Double check information on drawings and correct where required, e.g. first floor kitchens are being identified as new bath. → Still outstanding.
The remaining instances on level 1 plan have been corrected.

22. Provide mechanical drawings for kitchen and bathroom fan exhausts, venting of dryers in the laundry rooms (if there is any), and venting of dryers in the residential suites. Please also change name of the laundry rooms on floor plans, if it is not being used as a laundry room anymore. → Place note on the architectural drawings indicating kitchen and bathroom fans uses the existing exhaust ducts.

The note requested has been added.

As noted previously, Kitchen and bathroom exhausts will replace existing equipment, venting through existing ducts; dryers will be ventless condensing models; common laundry rooms are changed as now noted on the plans – old laundry rooms will be used for storage.

Thank you

Rob McLean,

Stuart Howard Architects.

STUART HOWARD ARCHITECTS INC
MEMBERS AIBC - RAIC - AIA
Stuart Howard Architect AIBC SAA FRAIC AIA Principal
W. Neil Robertson Architect AIBC MRAIC AIA Principal

October 07, 2019

Response to

SUBJECT: Building Permit Deficiency List

Permit Number: BP-2019-01801
Address: 95 E 14th Avenue

Attn: Mr. Hamid Mahpour

In response to your email list of outstanding items, revision of your original list of 11 September, Email of 30 September.

Same item numbers from your list, your comments in blue, subsequent comments in green, our response in orange.

2. Energy upgrade requirement of the project is E4. Please: → Please discuss the submitted information with our energy policy specialist Greg McCall first and revise accordingly.
This has been discussed, and revised. See emails through October 4th. Drawing sheet A0.01 is reissued with the checklist sheets updated.
a. Revise residential suite energy checklist showing it would be upgraded to L4 level
This has been revised.
b. Revise common area energy checklist for changes to envelope, lighting, and energy upgrade to L4 level
This has been revised.
c. Submit digital files of the common area energy checklist in excel file and its related attachments (e.g. envelope, lighting, SWH) and also those for the energy compliance of residential suites in PDF.
This has been revised.

4. F2 upgrade requires alarms and detectors, emergency lights, access to exit, exits, exit signs, and exit lights within the project and the public area (leading from project area to an acceptable open space) upgraded to comply with current VBBL. Please:
a. Provide exit stair details demonstrating compliance with VBBL →Not provided. It is outstanding. You may be able to justify the existing noncomplying features of the building to

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Telephone: 604 . 688 . 5585 Facsimile: 604 . 688 . 7486

satisfy the upgrade requirements of the project by Alternative Solution. Please contact Boris Turishev of the CBO office at boris.turishev@vancouver.ca to find out.
Notations and modifications have been provided on the drawings. Please see new drawing sheet A2.11 Vestibules & Exit Stairs.

c. Show exit stairs, corridors, and exit lobby are fire separated with assemblies having proper fire resistance rating from the rest of the floor area→ Not provided. It is outstanding. See item 4a for AL on existing non complying features of the building.
See A8.02 - revised assembly schedules, where testing of historic materials is noted. Taken from NRC Publications Archive, "Fire endurance of lighjt-framed and miscellaneous assemblies: a compilation of published information on fire endurance of a variety of light-frame walls, partitions, and floors", Galbreath, M. Technical Paper (National Research Council of Canada. Division of Building Research), 1966-06-01

d. Show public corridor and exit lobby are fire separated with assemblies having proper fire resistance rating from other floors including parking garage → Not provided. It is outstanding. See item 4a for AL on existing non complying features of the building.
On the residential floor areas, see revised assembly schedules, where testing of historic materials is noted.
Per assembly schedule, as noted previously, a cast in place concrete slab exists above the parking, providing a 2 hour fire resistance rating or greater, per appendix D, between parking level and the joists or sleepers of main floor.

e. Note the fire resistance rating of the assemblies shall either comply with ULC or VBBL Appendix D. Update wall and floor assembly information on drawing A8.02 as required. → It is outstanding. Also some information on drawing A8.02 is not readable.
Size of text and listings on this sheet have been revised accordingly. Note that very little original drywall has been exposed in the building, and of that no markings for ratings such as type 'x' have been observed yet. Therefore a historical listing of testing for non-rated drywall has been quoted for the typical existing rating. Where walls are opened, and drywall disturbed, new drywall to current standards will be installed to provide ratings as noted.

5. There seems to be shaft and electric closets in corridors. Please provide name of all spaces on the floor plan. Note that laundry room, service rooms, storage room, vertical and horizontal service spaces shall be separated from the rest of the floor area. Provide details including vertical cross section(s) through the building showing horizontal service spaces (if there is any) are separated with proper fire separation from the public corridor and exits. → is outstanding.
One vertical shaft has been identified, which contains the masonary flue from the boiler in the basement. Other 'closets' appear to have been closet-like structures, but are empty and without doors.
Horizontal service spaces have not been found.

Based on the records on file, an additional section cannot provide different information.

6. Residential suite 108 cannot open directly into exit lobby, VBBL 3.4.4.2. → Proposal does not comply with VBBL 3.3.1.12 for doors installed in series. Provide dimensional details demonstrating compliance.
A proposed vestibule entry to the suite has been revised to comply.

8. Clarify how exit route on the east is protected from exposure to unprotected openings of the building, VBBL 3.2.3.13. → Is outstanding.
This is an existing non-conforming condition, which has existed since the original permit. We propose to install automatic fire shutters on the offending openings (windows and sliding doors). These are now indicated on the floor plans of levels 1 and 2, and on the west elevation of the building.

10. Show the main entrance to the building meets H/C access requirements of VBBL including having proper hardware. → Update the door schedule indicating power operation of the door.
The door schedule has been updated accordingly.

11. Update energy information on drawing A0.01 as requested in item 2 above. → It is outstanding. Revise it as discussed.
The tables on this sheet have been updated.

13. Provide bottom of the door/sill installation detail for patio/balcony sliding door. Also provide its head and jamb installation details if different from those shown for window on drawing A9.01. Otherwise clarify on the same drawing that the said details are the same for installation of both, namely windows and patio/balcony doors. → It is outstanding. Revised drawings are not submitted.
Clarification and additional details are provided. See A4.01, Details 3 and 4. See 11/A9.01

16. New sliding doors and windows shall comply with Part 5 of VBBL and energy efficiency requirements of VBBL 10.2.2.7 having maximum thermal transmittance of 1.4 W/(m2K). Indicate it as a statement on architectural drawings. Please also review and clarify the information on drawing A8.01 as single glazing may not provide the required USI values for window and patio doors. → Door information on drawing A8.01a still indicates to single glazed door.
Contradictory information has been corrected.

17. Double check information on drawings and correct where required, e.g. first floor kitchens are being identified as new bath. → Still outstanding.
The remaining instances on level 1 plan have been corrected.

22. Provide mechanical drawings for kitchen and bathroom fan exhausts, venting of dryers in the laundry rooms (if there is any), and venting of dryers in the residential suites. Please also change name of the laundry rooms on floor plans, if it is not being used as a laundry room anymore. → Place note on the architectural drawings indicating kitchen and bathroom fans uses the existing exhaust ducts.

The note requested has been added.

As noted previously, Kitchen and bathroom exhausts will replace existing equipment, venting through existing ducts; dryers will be ventless condensing models; common laundry rooms are changed as now noted on the plans – old laundry rooms will be used for storage.

Thank you

Rob McLean,

Stuart Howard Architects.

STUART HOWARD ARCHITECTS INC
MEMBERS AIBC - RAIC - AIA
Stuart Howard Architect AIBC SAA FRAIC AIA Principal
W. Neil Robertson Architect AIBC MRAIC AIA Principal

September 10, 2019

SUBJECT: Response to Building Permit Deficiency List

Permit Number: BP-2019-01801
Address: 95 E 14th Avenue

1. Submit:

a. Architectural schedule B which is also signed off for building envelope item 1.25
[Correction: a confirmed typo in the deficiency list: item 1.25 should read item 1.23];
a revised sealed signed page is provided with item included accordingly herewith.

b. Building envelope schedule D1
Schedule D1 is provided herewith.

c. Mechanical schedule B.
A revised Plumbing & Mechanical schedule B provided herewith.

2. Energy upgrade requirement of the project is E4. Please:
E4 is now noted.

a. Revise residential suite energy checklist showing it would be upgraded to L4 level
Revised checklist showing L4 level upgrade is provided herewith.

b. Revise common area energy checklist for changes to envelope, lighting, and energy upgrade to L4 level
Revised checklist is provided herewith.

c. Submit digital files of the common area energy checklist in excel file and its related attachments (e.g. envelope, lighting, SWH) and also those for the energy compliance of residential suites in PDF.
Initial revision is provided herewith, some attachments remain to be acquired; updated electronic package with related attachments will follow within about 48 hours.

3. The architect letter that confirms he takes responsibility and will look after all architecturally related works needs being stamped by the architect. Submit a revised stamped letter.
A new signed sealed letter is provided herewith.

Building Bylaw compliance:

4. F2 upgrade requires alarms and detectors, emergency lights, access to exit, exits, exit signs, and exit lights within the project and the public area (leading from project area to an acceptable open space) upgraded to comply with current VBBL. Please:

405 - 375 WEST FIFTH AVENUE • VANCOUVER, B.C. • V5Y 1J6
Telephone: 604 . 688 . 5585 Facsimile: 604 . 688 . 7486

a. Provide exit stair details demonstrating compliance with VBBL
The stairs are an existing condition which remains as originally permitted; it is not possible to physically rebuild the stairs within this scope.]

b. Update door schedule to include all related particulars (e.g. fire protection rating , having closer) and demonstrating compliance with VBBL for the main entrance door to dwelling units, main entrance to lobby, door separating first floor exit lobby from public corridor, and all exit doors
Revised drawing sheets are provided with additional/revised door tags; revised door schedule sheet is provided accordingly.

c. Show exit stairs, corridors, and exit lobby are fire separated with assemblies having proper fire resistance rating from the rest of the floor area .
Revised drawing sheets are provided with fire separations, and the required ratings are noted in the assemblies schedule. However, the original walls are an existing condition as originally permitted.

d. Show public corridor and exit lobby are fire separated with assemblies having proper fire resistance rating from other floors including parking garage
The Main floor is separated from the parking garage by a concrete slab, described in Building Section A4.01, listed as floor assembly F04 on A8.02, with rating noted per Appendix D on the Assemblies sheet.
The basement of the building is separated from the parking garage by continuous C.I.P. concrete walls 8" thick, shown on floor plan A2.00, assembly We1 scheduled on A8.02, with rating noted per Appendix D.

Need about other places beside interior of suite? e.g. corridors

e. Note the fire resistance rating of the assemblies shall either comply with ULC or VBBL Appendix D. Update wall and floor assembly information on drawing A8.02 as required.
The assembly schedules have been updated.

5. There seems to be shaft and electric closets in corridors. Please provide name of all spaces on the floor plan. Note that laundry room, service rooms, storage room, vertical and horizontal service spaces shall be separated from the rest of the floor area. Provide details including vertical cross section(s) through the building showing horizontal service spaces (if there is any) are separated with proper fire separation from the public corridor and exits.
There is a vertical shaft which contains a flue exhaust from the boiler room in the basement; there is an alcove on each floor which has no function, and is open to the corridor. Plan sheets are revised to note exhaust flue and the alcoves. No horizontal service spaces have been identified to demonstrate on an additional cross section.

6. Residential suite 108 cannot open directly into exit lobby, VBBL 3.4.4.2.
A revised plan sheet is provided, a vestibule has been added at the entry of the suite.

7. Doors of the suite 101 and 102 cannot open directly into exit, VBBL 3.3.1.3.
A Revised plan and door schedule sheet are provided, a vestibule is provided at the entry of each suite

8. Clarify how exit route on the east is protected from exposure to unprotected openings of the building, VBBL 3.2.3.13.
The existing exit route is not protected from exposure to unprotected openings of suite

#101 and #102.

9. Provide detail demonstrating doors installed in series at entrance to suite 101 and 102 meet VBBL 3.3.1.13(12).
   Per item 7 above, the configuration of the doors has been revised.
10. Show the main entrance to the building meets H/C access requirements of VBBL including having proper hardware.
    [A powered door opener will be provided. Latch hardware to be revised accordingly.]
11. Update energy information on drawing A0.01 as requested in item 2 above.
    As noted above re item 2.
12. Update door schedule on drawing A8.01 to relate every door to its type as shown on the same drawings page.
    Revised door schedule sheet A8.01 is provided herewith and additional sheet A8.01a is provided for an expanded schedule schedule.]
13. Provide bottom of the door/sill installation detail for patio/balcony sliding door. Also provide its head and jamb installation details if different from those shown for window on drawing A9.01. Otherwise clarify on the same drawing that the said details are the same for installation of both, namely windows and patio/balcony doors.
    [Head details are similar, additional sill detail for slider.]
14. Indicate on architectural drawings that the followings shall be restrained to ensure safety from overhead falling hazards as required for N3 upgrade level;
    Notes have been added, see A0.01 and A4.01.

a. All interior partition walls, ceiling supporting frames, T-bar assemblies, ceiling gypsum wall boards, all overhead mechanical equipment and services, overhead electrical equipment and services.
   Notes have been added, see A0.01 and A4.01.
b. All falling hazards from cladding, veneer, parapets, canopies and ornaments over exit and extended to 5 m on either side of exit.
   Notes have been added, see A0.01 and A4.01.

15. Indicate on architectural drawings that non-structural elements and falling hazards shall be restrained to resist lateral loads due to earthquakes within the project area as required for S2 upgrade level.
    Notes have been added, see A0.01 and A4.01.
16. New sliding doors and windows shall comply with Part 5 of VBBL and energy efficiency requirements of VBBL 10.2.2.7 having maximum thermal transmittance of 1.4 W/(m2K). Indicate it as a statement on architectural drawings. Please also review and clarify the information on drawing A8.01 as single glazing may not provide the required USI values for window and patio doors.
    All dwelling unit windows and sliding doors are at a minimum double glazed, and shall provide thermal transmittance of 1.4 W/(m2K) a statement has been added to A8.01 and A801a.
17. Double check information on drawings and correct where required, e.g. first floor kitchens are being identified as new bath.
    Labels on drawing sheets have been corrected, new sheets are provided herewith.

Mechanical, plumbing, and electrical review

18. Update the electrical drawings for the 3rd floor fire detection and alarm system.
    A new, revised electrical drawing set has been provided a few days ago.
19. Show building emergency lighting system complies with current VBBL.
    A new, revised electrical drawing set has been provided a few days ago
20. Some information on the electrical floor plans is not readable. Please look into modifying the electrical drawings scale or their legend/font size and submit 3 new sets of revised drawings.
    A new, revised electrical drawing set has been provided a few days ago
21. Exit signs shall be green running man per the City of Vancouver Bulletin 2015-006-BU.
    A new, revised electrical drawing set has been provided a few days ago
22. Provide mechanical drawings for kitchen and bathroom fan exhausts, venting of dryers in the laundry rooms (if there is any), and venting of dryers in the residential suites. Please also change name of the laundry rooms on floor plans, if it is not being used as a laundry room anymore.
    Kitchen and bathroom fan exhausts will replace existing, using existing ducts. Dryers will be condensing ventless models. Common Laundry rooms are to be changed as now noted on plan, there will be no common laundry facility, the old laundry space will be used for storage.

Regards,
- Rob McLean

Place it as note onto dwgs.

STUART HOWARD ARCHITECTS INC
MEMBERS AIBC - RAIC - AIA
Stuart Howard, Architect AIBC FRAIC AIA Principal
W. Neil Robertson, Architect AIBC MRAIC Principal

TRANSMITTAL

To: Hamid Mahpour
Project Coordinator
Building Review Branch
Development, Buildings & Licensing
The City of Vancouver

(604)871-6024

From: Rob McLean
Stuart Howard Architects Inc
405-375 West 5th Ave.
Vancouver, BC
604.688.5585 ext. 229
rmclean@stuarthoward.com

Date:	July 05, 2019
Delivery Method:	By Hand
Project Number/ Name:	219.02
Address	**95 East 14th Avenue**
Permit Application Number	**BP-2019-01801**

Documents Included:

- Letter confirming Mechanical engineer includes plumbing work started for the previous BP under this application
- Letter confirming the Architect (CRP) includes the work started for the previous BP under this application
- 3 wet sealed sets of the plumbing drawings as submitted under the 2018 BP (5 wet sealed sets could be provided)
- schedule B signed and sealed by mechanical engineer
- schedule B signed and sealed by electrical engineer
- 3 wet sealed sets of the electrical drawings (5 wet sealed sets could be provided)

Sincerely,
Rob McLean

CITY OF VANCOUVER

Community Services Group
Licenses and Inspections

Certificate of Inspection

Building Permit (BP) Inspection | Enforcement

Inspection Number: BP-2018-05371-01
Inspection Date: 18 Dec 2018

Inspector: Name: Ed Loney, District Building Inspector
Office Hours: 8:30AM - 9:30AM
Phone: (604) 873-7074

Address: 95 E 14TH AVENUE
Vancouver, BC V5T 2M4

Contractor:

Inspection Result: Not Safe

Comments:

CITY OF VANCOUVER

Community Services Group
Licenses and Inspections

Certificate of Inspection

Building Permit (BP) Inspection | Enforcement

Inspection Number: BP-2018-05371-02
Inspection Date: 11 Mar 2019

Inspector: Name: Ed Loney, District Building Inspector
Office Hours: 8:30AM - 9:30AM
Phone: (604) 873-7074

Address: 95 E 14TH AVENUE
Vancouver, BC V5T 2M4

Contractor:

Inspection Result: Passed

Comments: suites 302, 205 & 105 are unoccupied due to activities related to construction. unclear if the suites were vacant prior to re-pipe beginning.