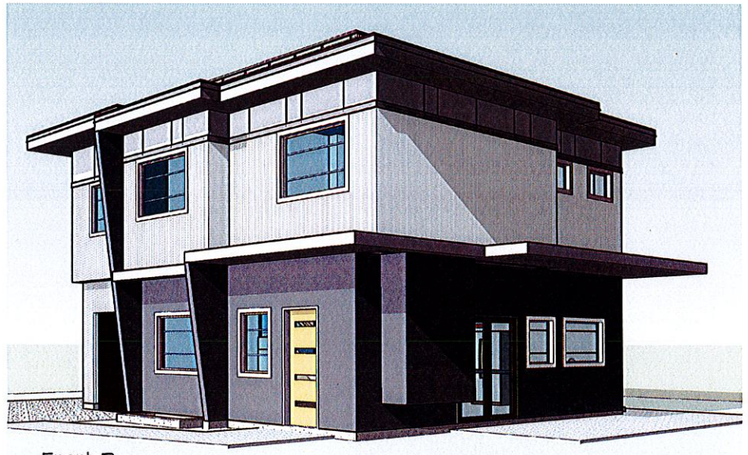
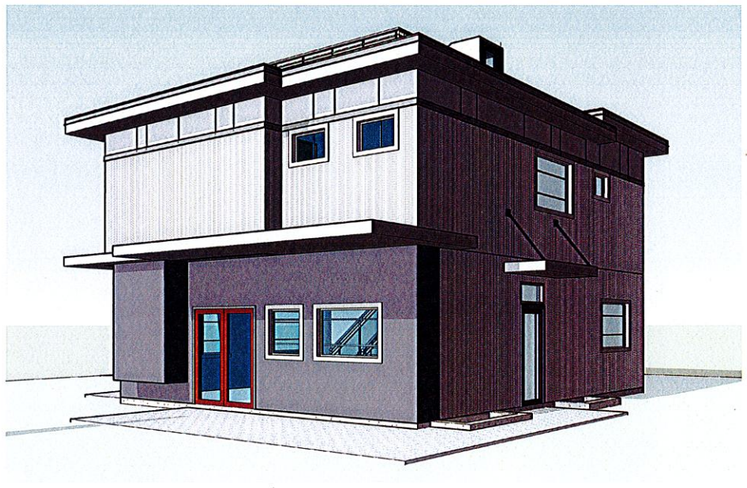
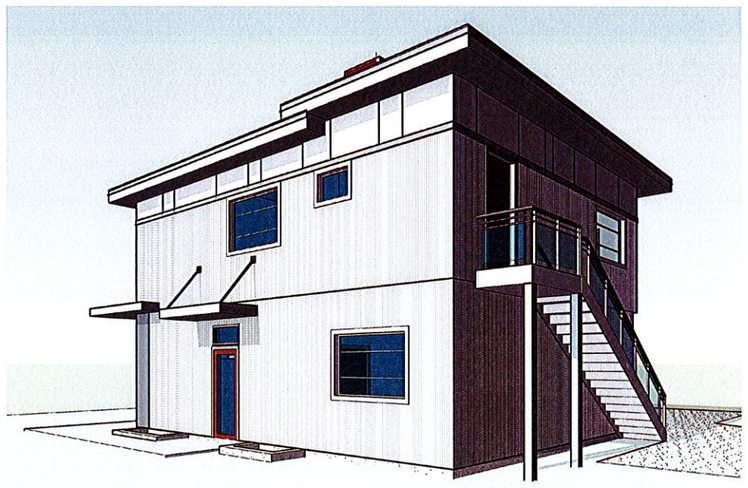
① Front L



② Front R

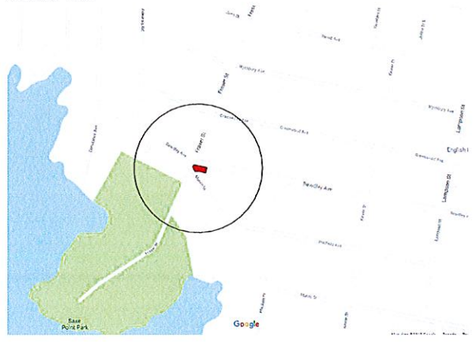


③ Rear R



④ Rear L

VICINITY MAP



GENERAL NOTES:

1) DIMENSIONS PROVIDED SHALL TAKE PRECEDENCE OVER SCALE. CONTRACTOR TO VERIFY ALL DIMENSIONS OF BUILDING DESIGNER AND CONSULTANT'S DRAWINGS PRIOR TO WORK COMMENCMENT. ANY DISCREPANCIES ARE TO BE REPORTED IMMEDIATELY. ANY NOTES ELSEWHERE ON THE PLANS THAT EXCEED THE REQUIREMENTS STATED IN THE GENERAL NOTES TAKE PRECEDENCE.

2) PRIOR TO ANY ALTERATION OR MODIFICATION OF PLANS OR DETAILS ON SITE, CONTRACTOR(S), TRADEPERSONS AND/OR HOMEOWNER(S) MUST CONTACT BUILDING DESIGNER TO CONFIRM BUILDING CODE AND/OR STRUCTURAL ENGINEERING REQUIREMENTS AND TO MAINTAIN ACCURACY AND COMPLETENESS OF PLANS.

3) ALL NEW CONSTRUCTION TO MEET CURRENT BC BUILDING CODE 2012.

4) VENTILATION INTAKE AND EXHAUST TO MEET ALL BCBC REGULATIONS.

5) VENTILATION CHECKLIST TO BE COMPLETED PRIOR TO FRAMING INSPECTION.

6) SAFETY GLASS REQUIRED FOR ALL BATHTUB ENCLOSURES, SIDELIGHTS, AND GLASS DOORS.

7) EGRESS FROM ALL BEDROOMS TO MEET CURRENT BCBC REGULATIONS.

8) CARBON MONOXIDE ALARM LOCATIONS TO BE DETERMINED, AS PER BCBC.

9) PHOTO-ELECTRIC/INTERCONNECTED SMOKE DETECTORS LOCATED AS PER BCBC.

RECEIVED
DEC 10 2018
CORP. OF TOWNSHIP OF ESQUIMALT
DEVELOPMENT SERVICES

PROJECT DATA

Property Owners:	Byron Rotgans
Civic Address:	1198 Munro Street, Victoria BC, V9A 5P6
Legal Description:	Lot 1, Section 11, Esquimalt District, Plan 44436
Existing Zone:	RD-3
Project Description:	Rezone; SFD, New Build
Site Area:	958.5 SqM (SqM.)
Average Grade: (see Sheet A2 for calculations)	15.23 M

PROJECT INFORMATION TABLE - PARENT LOT

	EXIST./PROP.	ALL'D/REQ'D
Zoning:	RD-3	
Site Area:	598 M²	
Site Coverage:	145 M² = 24%	40 %
Total Floor Area:	249 M²	
Floor Area Ratio:	0.41	0.40
Height of building (M):	5.76 M	7.3 M
Number of storeys:	2	
SETBACKS		
Front Yard:	7.16 M	6.0 M
Rear Yard:	1.5 M	6.0 M
Side - North:	2.8 M	2.4 M
Side - South:	2.4 M	1.5 M
Parking Stalls on site:	1	

PROJECT INFORMATION TABLE - SMALL LOT

	PROPOSED
Zoning:	
Site Area:	357 M²
Site Coverage:	126.7 M² = 35.5 %
Total Floor Area:	135.8 M²
Floor Area Ratio:	0.38
Height of building (M):	6.62 M
Number of storeys:	2
SETBACKS	
Front Yard:	4.10 M
Rear Yard:	2.1 M
Side - East:	3.48 M
Side - West:	4.6 M
Parking Stalls on site:	1

PROJECT TEAM:

SURVEYOR:

Key Mayenburg Land Surveying Inc.
#4-2227 James White Boulevard
Sidney, BC V8L 1Z5
250-656-5155

STRUCTURAL ENGINEER:

Byron Rotgans, P.Eng.
Munro Engineering Ltd.
1198 Munro St.
Victoria, BC V9A 5P6
250-857-2640

Sheet List

Sheet Number	Sheet Name
A1	Cover
A2	Site
A2.1	Site Context & Streetscape
A2.2	Survey
A3	Elevations
A4	Foundation Plan
A5	Main Floor Plan
A6	Upper Floor Plan
A7	Roof Plan & Section
A9	Siding Materials

Villamar DESIGN
6825A Veyaness Road
Victoria BC
V8M 2A7
778-351-4288

1198 MUNRO St.
Esquimalt, BC

Client:
Byron ROTGANS

REZONE

Cover

SHEET ISSUE DATE
DEC. 10, 2018

PROJECT NUMBER	1804
DRAWN BY	AJM
CHECKED BY	DE

A1

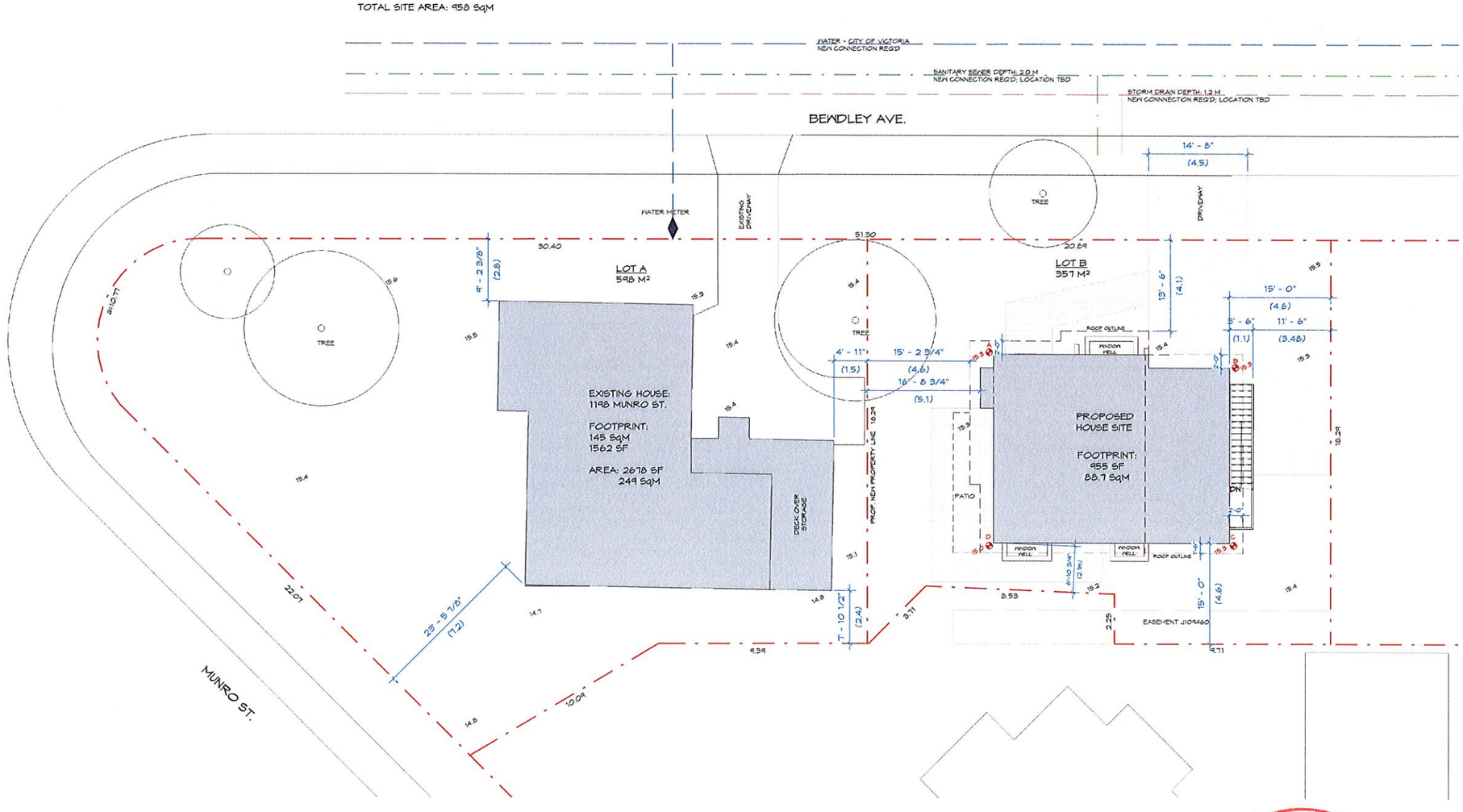
SCALE 1/4" = 1'-0"

Z:\DESIGN ONLY\1198 MUNROVA - Design\99 - REVIT models\1198 Munro.rvt

AVERAGE GRADE CALCULATIONS:

A-B: (15.3 + 15.3) /2 = 15.3
B-C: (15.3 + 15.3) /2 = 15.3
C-D: (15.3 + 15.0) /2 = 15.15
D-A: (15.0 + 15.3) /2 = 15.15
60.90 /4 = 15.23 M

TOTAL SITE AREA: 958 SqM



1 Site
1/8" = 1'-0"

RECEIVED
DEC 10 2018
CORP. OF TOWNSHIP OF ESQUIMALT
DEVELOPMENT SERVICES

Villamar DESIGN
6825A VERNESS ROAD
VICTORIA, BC
V8M 2A7
778-235-4988

1198 MUNRO St.
Esquimalt, BC

Client:
Byron ROTGANS

REZONE

Site

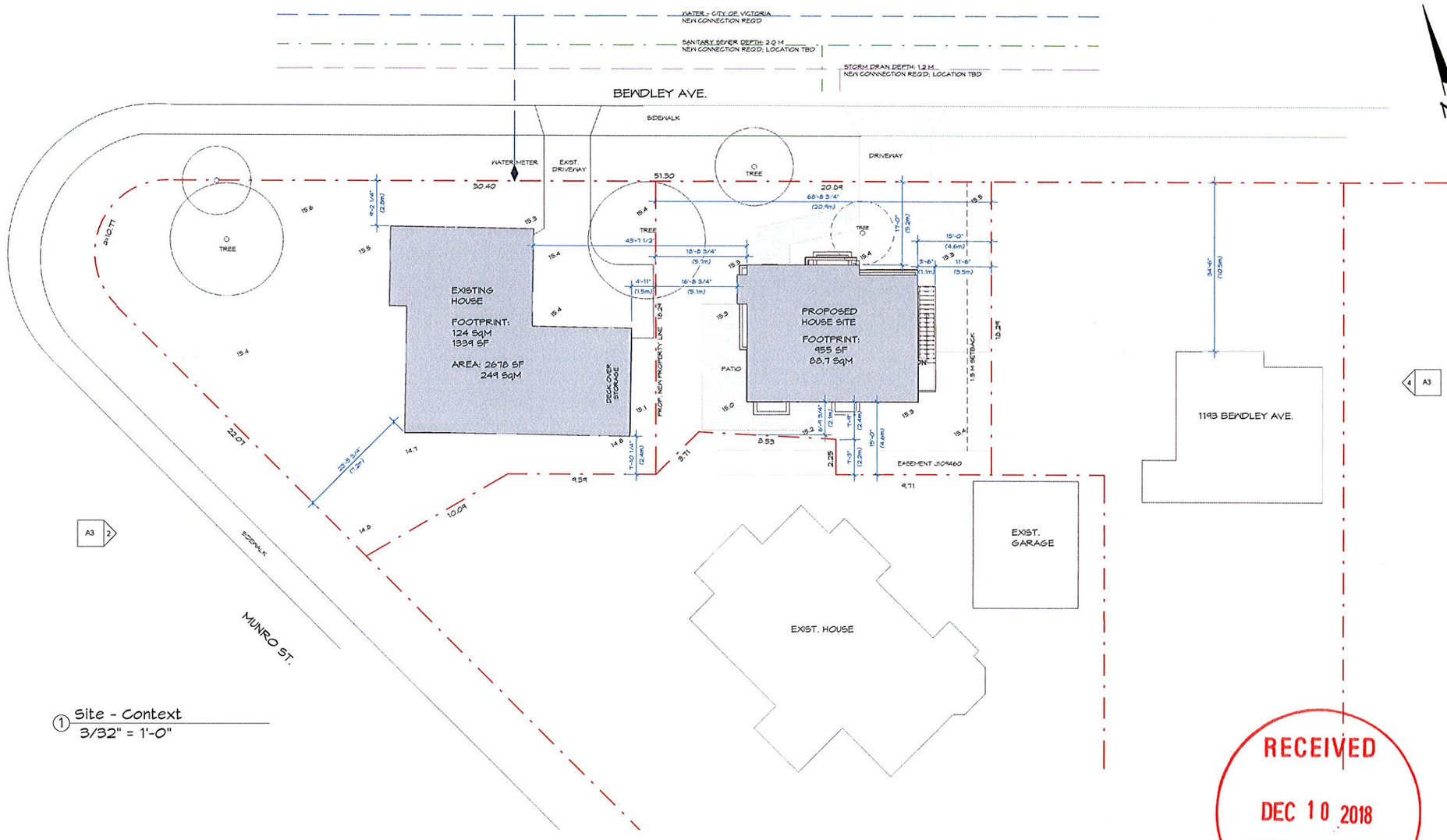
SHEET ISSUE DATE
DEC. 10, 2018

PROJECT NUMBER	1809
DRAWN BY	AJW
CHECKED BY	DE

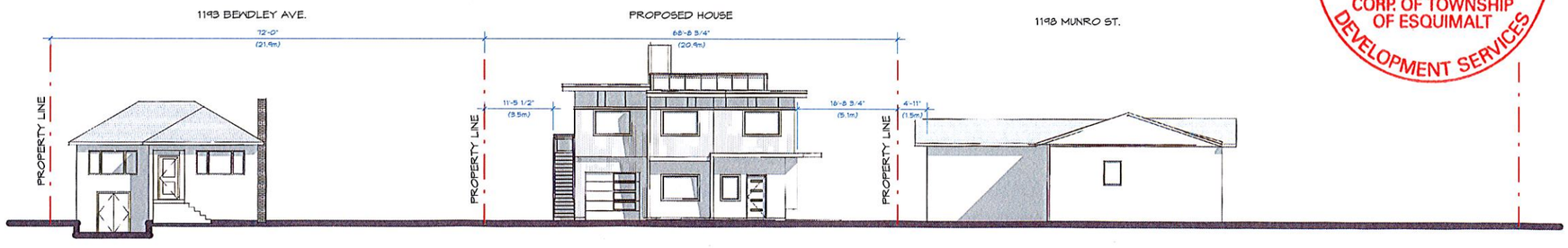
A2

SCALE As Indicated

Z:\DESIGN ONLY\1198 MUNROA - Design\99 - REVIT models\1198 Munro.rvt



① Site - Context
3/32" = 1'-0"



② North (Front) -STREETSCAPE
1" = 10'-0"

RECEIVED
DEC 10 2018
CORP. OF TOWNSHIP OF ESQUIMALT
DEVELOPMENT SERVICES

Z:\DESIGN ONLY\1198 MUNROA - Design\99 - REVIT models\1198 Munro.rvt

Villamar DESIGN
6825A VERANDES ROAD
VICTORIA BC
V8M 2A7
778-351-4088

1198 MUNRO St.
Esquimalt, BC

Client:
Byron ROTGANS

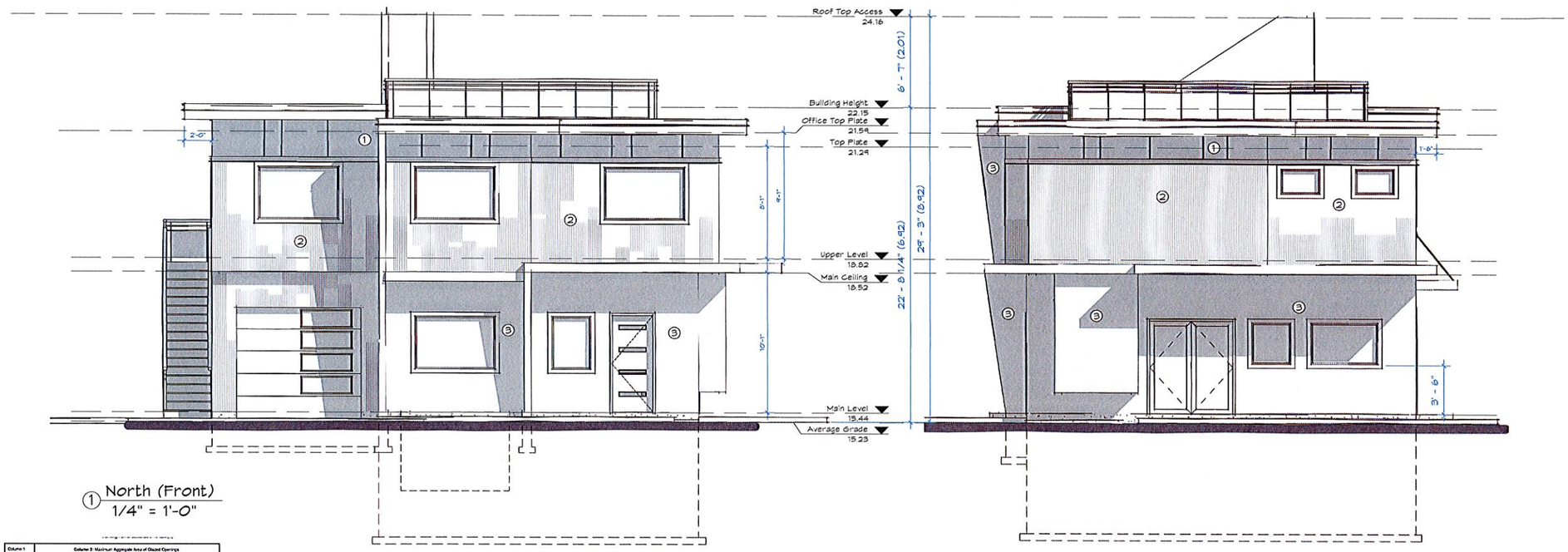
REZONE

Site Context & Streetscape

SHEET ISSUE DATE	DEC. 10, 2018
PROJECT NUMBER	1809
DRAWN BY	AJN
CHECKED BY	DE

A2.1

SCALE As indicated



① North (Front)
1/4" = 1'-0"

② West (Right)
1/4" = 1'-0"

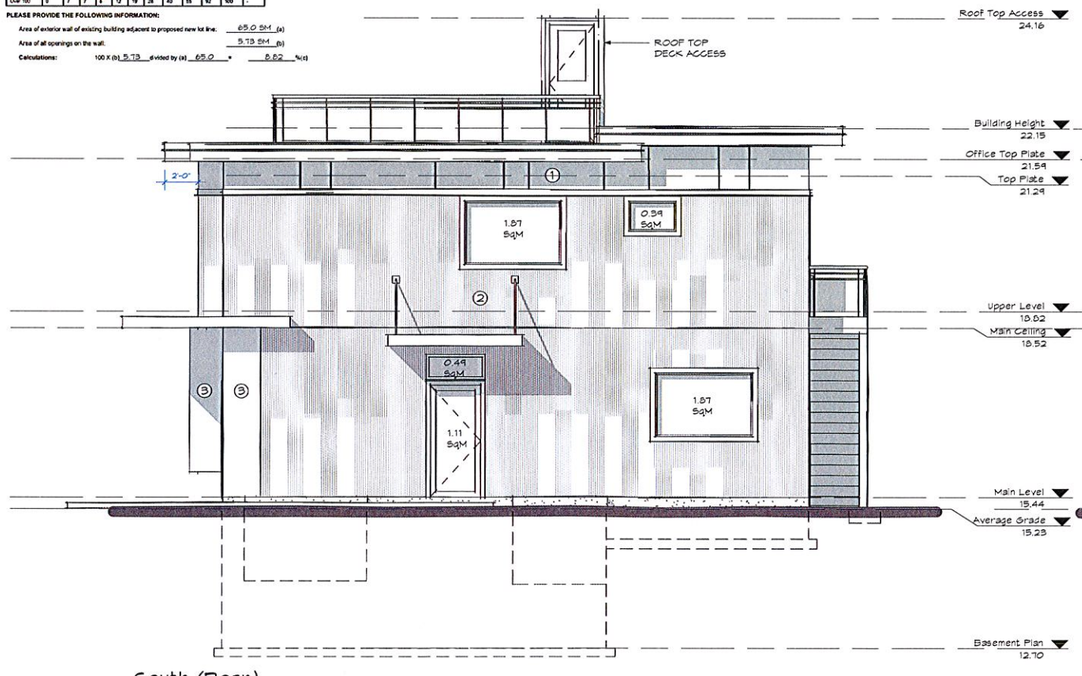
Column 1	Column 2: Maximum Aggregate Area of Glazed Openings % of Exposing Building Face Area										
Maximum Area of Exposing Building Face (m²)	Limiting Distance, m										
	Less than 1.2	1.2	1.5	2.0	4.0	6.0	8.0	10.0	12.0	14.0	20.0	25.0
20	2	7	8	10	22	36	69	100	-	-	-	-
50	2	7	8	10	22	36	69	100	-	-	-	-
100	2	7	8	10	22	36	69	100	-	-	-	-
200	2	7	8	10	22	36	69	100	100	-	-	-
500	2	7	8	10	22	36	69	100	100	100	-	-
1000	2	7	8	10	22	36	69	100	100	100	100	-
1000	2	7	8	10	22	36	69	100	100	100	100	100

PLEASE PROVIDE THE FOLLOWING INFORMATION:

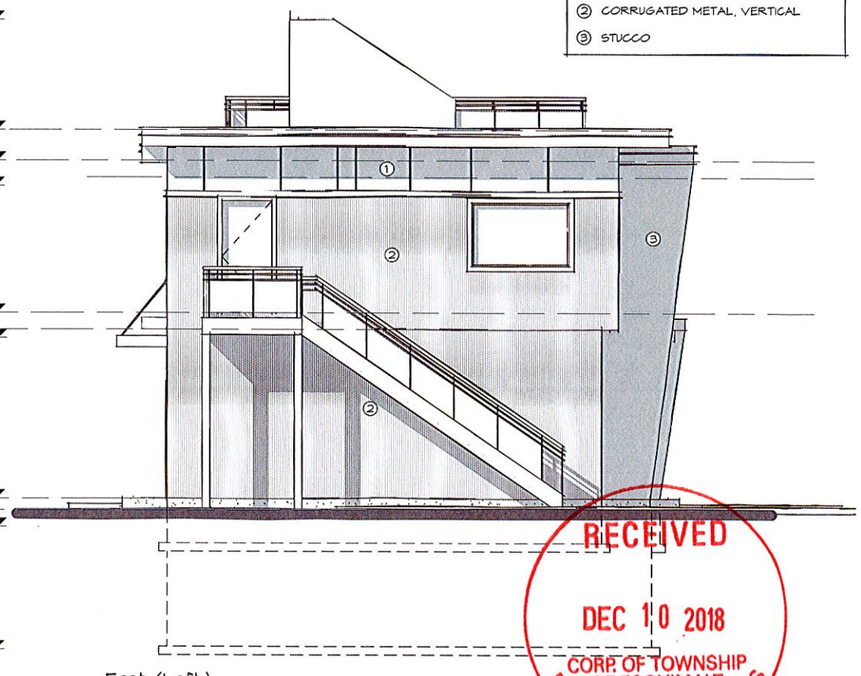
Area of exterior wall of existing building adjacent to proposed new lot line: 65.0 SM (a)

Area of all openings on the wall: 5.73 SM (b)

Calculations: 100 X (b) 5.73 divided by (a) 65.0 = 8.82 %(c)



③ South (Rear)
1/4" = 1'-0"



④ East (Left)
1/4" = 1'-0"

MATERIAL LEGEND

① CONCRETE FIBRE PANEL W/ REVEALS
② CORRUGATED METAL, VERTICAL
③ STUCCO

RECEIVED
DEC 10 2018
CORP. OF TOWNSHIP OF ESQUIMALT
DEVELOPMENT SERVICES

Villamar DESIGN

6825A VERANDER ROAD VICTORIA, BC V8X 2A7 778-966-4488

1198 MUNRO St.
Esquimalt, BC

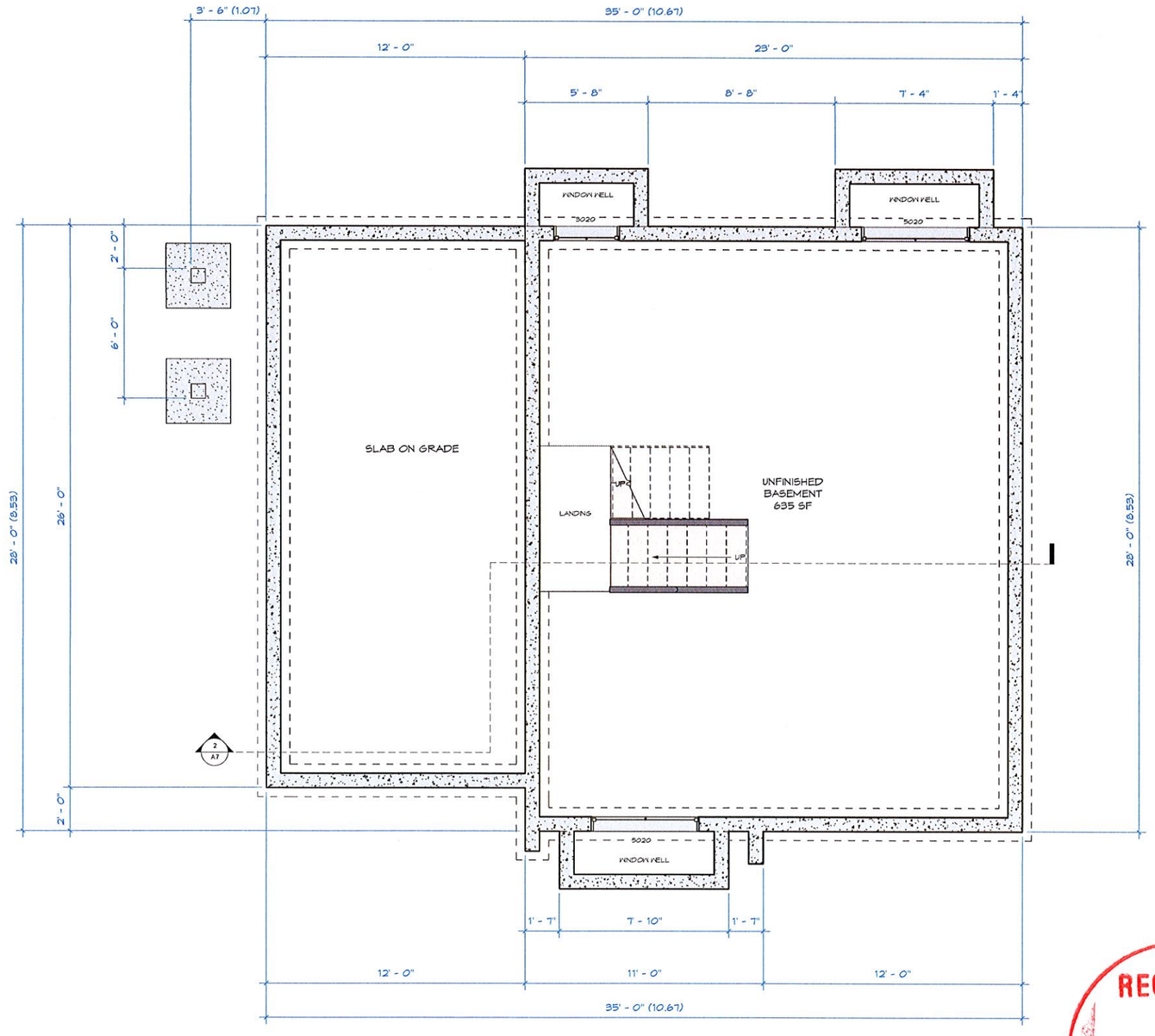
Client:
Byron ROTGANS

REZONE

Elevations

SHEET ISSUE DATE	DEC. 10, 2018
PROJECT NUMBER	1809
DRAWN BY	AJN
CHECKED BY	DE
	A3
SCALE	1/4" = 1'-0"

Z:\DESIGN ONLY\1198 MUNRO\A - Design\99 - REVIT models\1198 Munro.rvt



1 Basement Plan
3/8" = 1'-0"

RECEIVED
DEC 10 2018
CORP. OF TOWNSHIP OF ESQUIMALT
DEVELOPMENT SERVICES

Z:\DESIGN ONLY\1198 MUNROA - Design\99 - REVIT models\1198 Munro.rvt

Villamar DESIGN
6825A Vantress Road
Victoria, BC
V8M 2A7
778-351-4288

1198 MUNRO St.
Esquimalt, BC

Client:
Byron ROTGANS

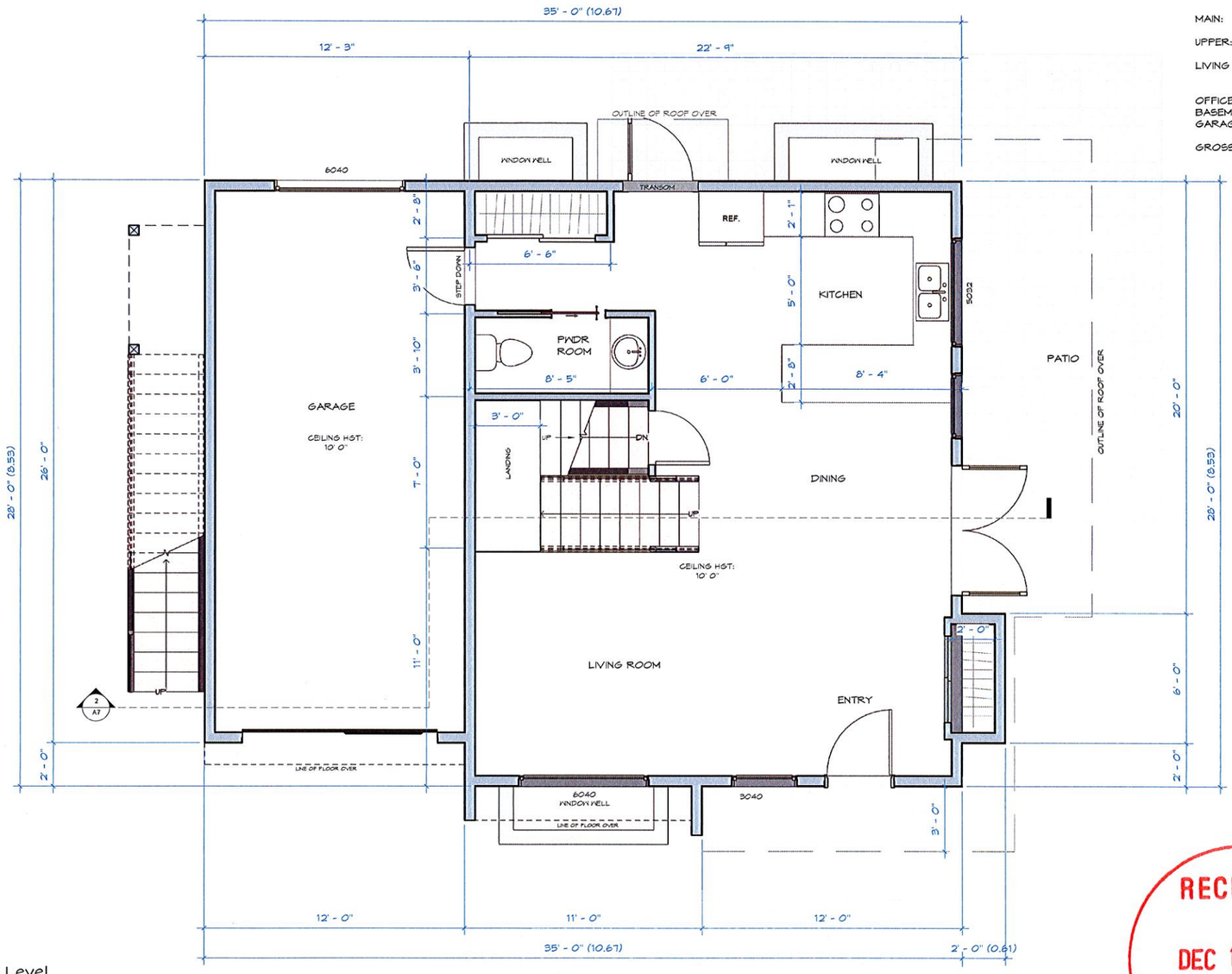
REZONE

Foundation Plan

SHEET ISSUE DATE	DEC. 10, 2018
PROJECT NUMBER	1804
DRAWN BY	AJW
CHECKED BY	DE

A4

SCALE 3/8" = 1'-0"



1 Main Level
3/8" = 1'-0"

FLOOR AREAS:	SqM.	SF	
MAIN:	56.1	604	
UPPER:	51.8	558	
LIVING AREA TOTAL:	107.9	1162	
OFFICE:	27.9	300	
BASEMENT:	53.7	578	(exempt)
GARAGE:	26.8	288	(exempt)
GROSS AREA:	216.3	2328	

RECEIVED
DEC 10 2018
CORP. OF TOWNSHIP OF ESQUIMALT
DEVELOPMENT SERVICES

Villamar DESIGN
6825A VETERANS ROAD
VICTORIA, BC
V8M 2A7
778-351-4088

1198 MUNRO St.
Esquimalt, BC

Client:
Byron ROTGANS

REZONE

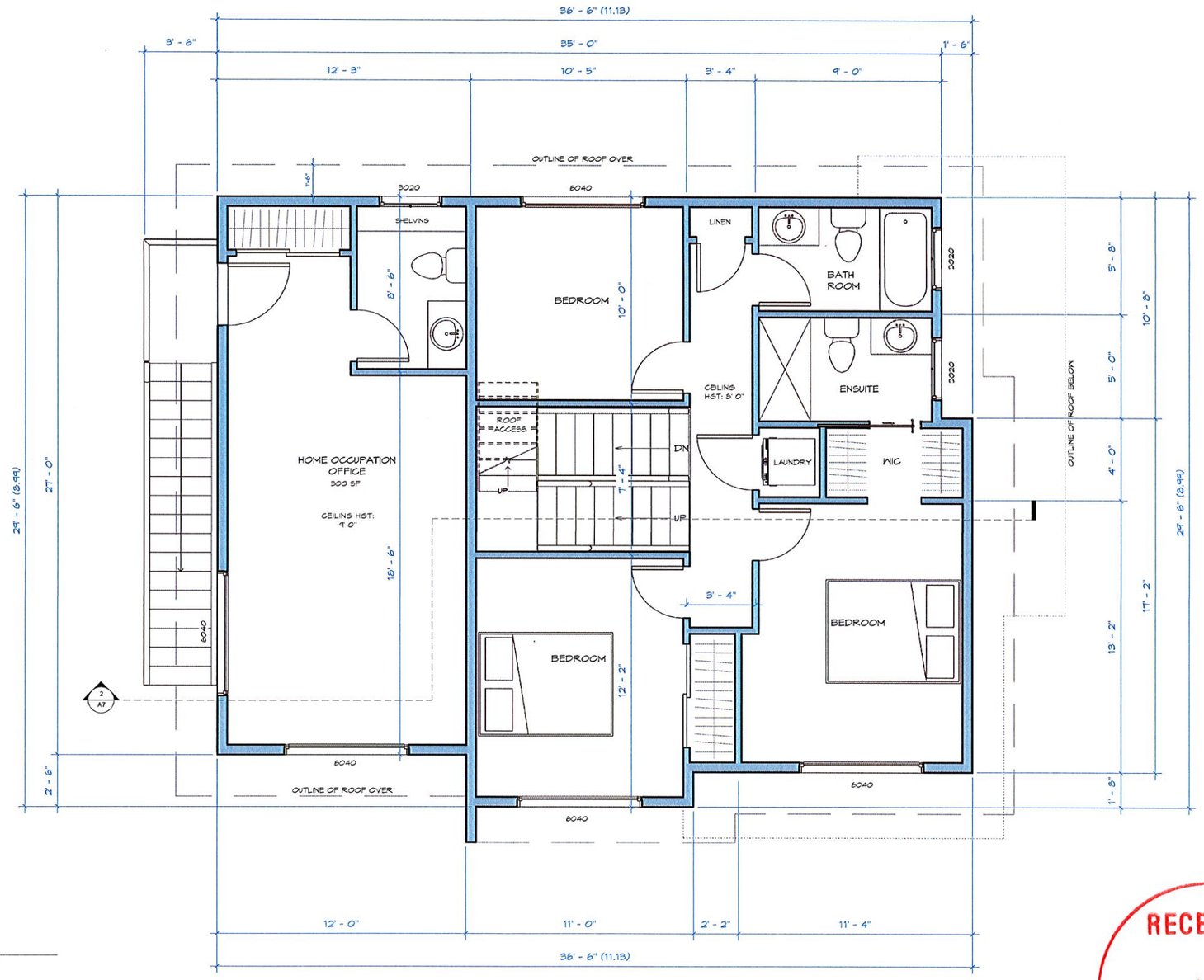
Main Floor Plan

SHEET ISSUE DATE	DEC. 10, 2018
PROJECT NUMBER	1809
DRAWN BY	AJM
CHECKED BY	DE

A5

SCALE As Indicated

Z:\DESIGN ONLY\1198 MUNROA - Design\99 - REVIT models\1198 Munro.rvt



① Upper Level
3/8" = 1'-0"

RECEIVED
DEC 10 2018
CORP. OF TOWNSHIP OF ESQUIMALT
DEVELOPMENT SERVICES

Z:\DESIGN ONLY\1198 MUNRO\A - Design\99 - REVIT models\1198 Munro.rvt

Villamar DESIGN
6825A Veyaness Road
Victoria, BC
V8M 2A7
778-257-4988

1198 MUNRO St.
Esquimalt, BC

Client:
Byron ROTGANS

REZONE

Upper Floor Plan

SHEET ISSUE DATE	DEC. 10, 2018
PROJECT NUMBER	1809
DRAWN BY	AJM
CHECKED BY	DE

A6

SCALE As indicated

N

ROOF AREAS:

UPPER ROOF: 1300 SF
VERANDAH ROOFS: 234 SF

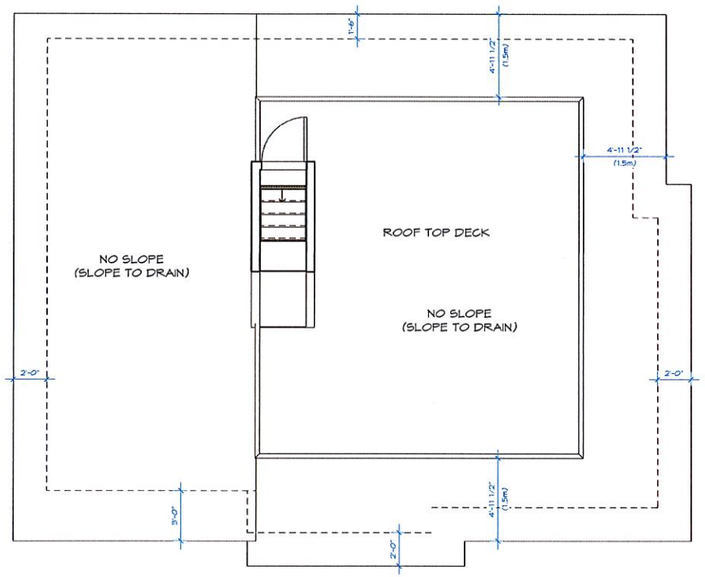
TOTAL: 1534 SF

* THIS IS FOR REFERENCE ONLY AND MUST BE CONFIRMED BY ROOFING CONTRACTOR

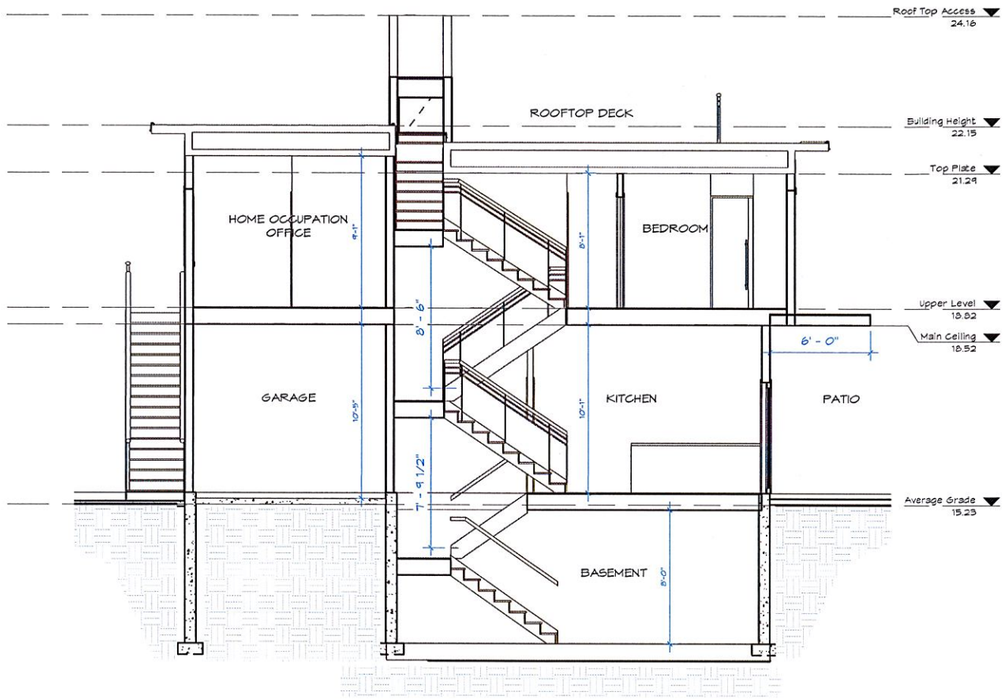
ROOF VENTILATION:

- SUGGESTED INTAKE TO BE 3" CONTINUOUS SOFFIT SLOT, AS PER INTAKE RATE OF 1/300.

- SUGGESTED EXHAUST TO BE 7 BUR FLAT TOP VENTS, AS PER EXHAUST RATE OF 1/300.



① Roof Plan
1/4" = 1'-0"



② Section 1
1/4" = 1'-0"

RECEIVED
DEC 10 2018
CORP. OF TOWNSHIP OF ESQUIMALT
DEVELOPMENT SERVICES

Villamar DESIGN
6825A VICTAVESS ROAD VICTORIA, BC V8M 2A7 778-433-8884

1198 MUNRO St.
Esquimalt, BC

Client:
Byron ROTGANS

REZONE

Roof Plan & Section

SHEET ISSUE DATE	DEC. 10, 2018
PROJECT NUMBER	1809
DRAWN BY	AJW
CHECKED BY	DE

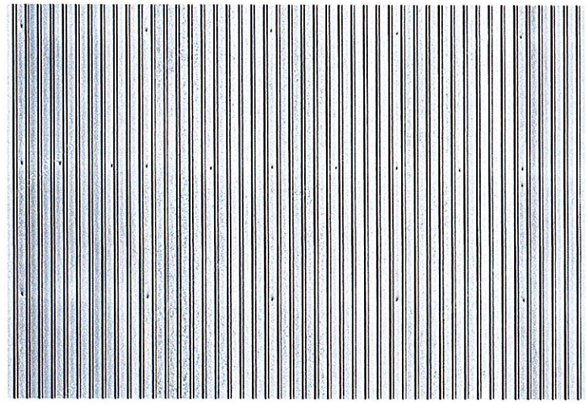
A7

SCALE 1/4" = 1'-0"

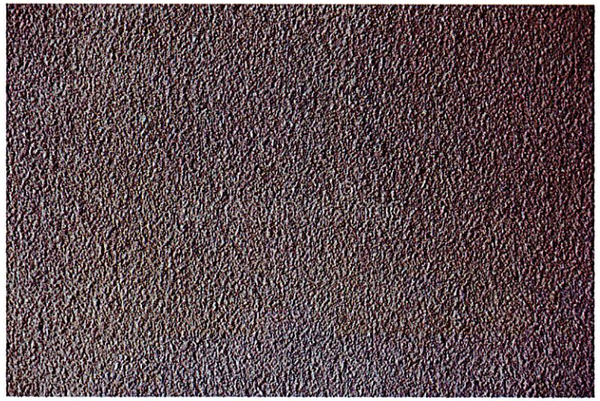
Z:\DESIGN ONLY\1198 MUNROVA - Design\99 - REVIT models\1198 Munro.rvt

SIDING MATERIALS:

CORRUGATED SHEET METAL



GREY STUCCO



RECEIVED
DEC 10 2018
CORP. OF TOWNSHIP OF ESQUIMALT
DEVELOPMENT SERVICES

Villamar DESIGN
6825A VICTANESS ROAD
VICTORIA, BC
V8M 2A7
778-265-4488

1198 MUNRO St.
Esquimalt, BC

Client:
Byron ROTGANS

REZONE

Siding Materials

SHEET ISSUE DATE	DEC. 10, 2018
PROJECT NUMBER	1809
DRAWN BY	AJW
CHECKED BY	DE

A9

SCALE

Z:\DESIGN ONLY\11198 MUNRO\A - Design\99 - REVIT models\11198 Munro.rvt

General Notes

Dimensions provided shall take preference over scale. Contractor to verify all dimensions of Building Designer and Consultants drawings prior to work commencement.
Any discrepancies are to be reported immediately. Any notes elsewhere on the plans that exceed the requirements stated in the general notes take precedence.
Owners to review drawings prior to construction and be satisfied as to all aspects of design, or notify Villamar Construction to discuss requirement prior to construction.
Prior to any alterations or modifications of plans or details on site, Contractor(s), tradesperson(s), or homeowner(s) must contact the Building Designer to confirm Building Code requirements and to maintain accuracy and completeness of the plans.
All references to the "British Columbia Building Code" (B.C.B.C.) are for its most current edition or published revision thereto, as approved by ministerial order by the Province of British Columbia. Any reference to a dated edition or revision is to be assumed for the equivalent requirement in the most current edition. All work shall comply with the current edition of the "British Columbia Building Code", the rules and customs of best trade practice to be executed by skilled tradespersons, well equipped and adequately supervised. All references to the BCBC is to Division B of the British Columbia Building code unless otherwise noted.
Surveyor and/or Contractor to confirm all aspects of siting and placement of structure on lot. Designer not responsible for placement. In the event that the proposed new or existing structure does not conform to the requirements of the B.C. Building Code an engineer(s) may be necessary and such services are for the owner's account.
All materials to be of best quality, complying with the applicable sections of the current C.S.A., C.G.S.B. and B.C.B.C. standards. All materials shall be used strictly according to manufacturers printed directions.

Demolition

Contractor is liable to maintain the strength and stability of existing structure where renovations and/or additions are proposed, including but not limited to providing and installing all shoring and props to uphold existing construction. All demolition work must comply with the requirements presented in part 8 of the B.C.B.C. and with WORKSAFEBC.

Structural Design

Structural is based on criteria stated in Part 9 of the 2012 B.C. Building Code.
Design live loads as follows, or as directed by Structural Engineer:

Design main floor load	- 41.8 p.s.f. -	2.00 kPa
Design bedroom floor load	- 41.8 p.s.f. -	2.00 kPa
Design decks and balconies	- 62.7 p.s.f. -	3.00 kPa
Design roof load	- 62.7 p.s.f. -	3.00 kPa

For heavier snow loading, drawings must be revised.
All interior and exterior wall bracing to resist lateral loads to comply with B.C.B.C 9.23.13. and to be designed by structural engineer unless noted elsewhere. Structural Engineering andtruss manufactures drawings to take precedence over structural design stated within.

Concrete

All concrete used for footings and foundations is to be not less than 15 MPa @ 28 days unless otherwise noted.
All concrete used for floors is to be not less than 20 MPa @ 28 days unless otherwise noted.
All concrete used for carport, garage floors and exterior steps to be a min. 32 MPa @ 28 days.
Exterior stairs, garage and carport slabs air entrainment of 5-8% required.
All foundations and footings to be carried down to solid undisturbed bearing.

Rough Carpentry

All construction and materials to comply with the "approved" current issue and amendments of C.N.C. and B.C.B.C. Pre-Manufactured homes and walls to comply with B.C.B.C. and C.S.A. requirements.
All structural framing members are sized for standard grade No. 2 better Spruce-Pine-Fir (in accordance with N.L.G.A. standard grading rules for Canadian Lumber) except where specifically noted otherwise.
Framing contractor is to provide backing for all plumbing accessories, shelving, curtain rods, cabinets, etc.
Contractor shall be responsible for the proper setting out of all work and ensure no eccentrical loads occur.

FIRE SAFETY

All concealed spaces to be fireblocked in compliance with B.C.B.C. 9.10.16. Fire block materials to comply with B.C.B.C. 9.10.16.3.
All rated partition walls to have solid blocking installed over within floor joist cavity.
Contractor to ensure all rated partition walls to run uninterrupted to underside of roof sheathing.
Rated wall assemblies must run continuous behind tub surrounds and stairs and must contain solid fire blocking continuous at interface with rated horizontal floor assemblies.
No combustible plumbing is to be installed in rated wall assemblies.
All penetrations in rated wall assemblies to be fire protected and caulked.
All doors, dampers & other closures in fire separations must comply with B.C.B.C. 9.10.13.
All duct chases must not penetrate rated wall assemblies and are to be directed to exterior within self-contained suite.

Doors, Windows, & Skylights

All windows, doors, and skylights to meet the requirements laid forth in B.C.B.C. 9.7. and 9.36.
All manufactured windows, doors and skylights to comply B.C.B.C 9.4.7.1.(1)(a) and with AAA/WDMA/CSA 101/I.S.2/A440, NAFS (North American Fenestration Standard/Specification for Windows, Doors, and Skylights), & A440S1-09 "Canadian Supplement to NAFS"
The following window requirements are derived from B.C.B.C. Table C-4 as per B.C.B.C 9.7.4.3. and are to be used to satisfy the requirements of "NAFS":
Victoria, Class R, DP 960, P520, Water Resistance 220, A2.
Minimum Thermal Resistance ratings of windows as per B.C.B.C 9.36.

Windows and Doors	- U 0.32 -	1.80 USI
Front Entrance Door	- U 0.46 -	2.60 USI
Glass Block	- U 0.51 -	2.90 USI
Skylight	- U 0.51 -	2.90 USI
Skylight shaft walls	- R 15.74 -	2.78 RSI
Overhead Garage Doors	- R 6.25 -	1.10 RSI

Site built doors and windows to comply with B.C.B.C 5.10.2. and 9.36.2.7.(3)
Flashing to be above all doors and windows not directly protected by eaves.
Limited Water doors are to be used for exterior garage utility doors and the door(s) separating the residence and the garage, and wherever allowed by B.C.B.C. 9.7.4.2.(2)
All interior doors to clear Finish flooring by 12mm (1/2") to allow for unobstructed air distribution.
EGRESS WINDOWS (Bedroom): Finished sill height maximum 44" above floor.
Net opening to be 5.7 square feet minimum, 20" wide minimum, and 24" height minimum.

Stairs & Handrails

Stairs to be minimum of 36" wide
7 3/4" max. rise, 11" min. tread, with 1" nosings.
Handrails to be installed between 865mm and 965mm (34"-38") above tread nosing, or 36" above floor. Exterior handrails to be 1065mm (42") above floor.
Handrails required on areas greater than 24" above ground or floor.
All handrails to be continuous for full length of stairs.
Hand grips portion of all handrails shall be no less than 1 1/4" and no more than 2" in cross sectional dimension, or shape shall provide equivlent surface.
Balusters shall be spaced so that a 4" shere may not pass between.

Crawlspaces

Crawl spaces to comply with 9.18.
Heated crawl space ventilation to comply with B.C.B.C. 9.32.3.7.
Contractor to ensure heated crawl space is vented into primary living space above by two (2) grilles of the size(s) noted in Mechanical subsection. If heated crawl space is divided into two (2) or more compartments, each heated compartment shall be vented by grilles of the size(s) noted below. Heated crawl space to have continuous 64mm (2 1/2") Extruded Polystyrene insulation around entire perimeter.
Crawl space access to be a 500mm x 700mm (20" x 28") hatch type access placed in either the laundry room, mud room, walk in closet, or in a location specified on the plans.

Insulation and Vapour Barrier

Insulation to be continuous around all openings. Effective R.S.I values are calculated using the Parallel Path Method, with all parts of the assembly taken into account. Any deviation from listed assemblies must be reported to the Building Designer for R.S.I. value recalculation
Refer to section notes for assemblies and to the Thermal Resistance of Wall, Ceiling, and Floor Assemblies calculations listed later on page.
Insulation values not to be decreased below required levels at any point around major penetrations, wall-floor connections, window/door headers, behind electrical breaker boxes, or around plumbing or ducting in walls. Refer to B.C.B.C. 9.36. for exceptions.
Insulation Values are based of those in B.C.B.C. 9.36 for Zone 4 (4500 Heating Degree Days in Celsius Degree-Days).

Trusses or Rafter with Ceiling Joists Roofs (attic spaces)	- R 34.24 -	6.41 RSI
Floors over unheated/exterior spaces	- R 26.52 -	4.61 RSI
Floors over Garages	- R 25.61 -	4.51 RSI
Cathedral Vaults or Flat roofs	- R 26.51 -	4.61 RSI
Exterior Walls above grade	- R 15.74 -	2.75 RSI
Between Garage and Primary Residence	- R 14.86 -	2.62 RSI
Foundation Walls below grade or < 600mm above grade	- R 11.30 -	1.98 RSI
Heated Concrete Slabs (beneath entire slab)	- R 13.11 -	2.32 RSI
Concrete Floor Slabs < 600mm below grade	- R 11.13 -	1.96 RSI
Concrete Floor Slabs > 600mm below grade	- N/A -	N/A

All "rigid insulation" to be extruded polystyrene insulation. If contractor/builder uses expanded polystyrene insulation they must use equivalent RSI values as shown in the insulation table on this page and is to ensure correct RSI values are used. (3.48 RSI (R 5.56) of to be installed between concrete foundation wall and concrete slab connections to provide a thermal break where applicable.
Window Headers to be insulated with extruded polystyrene insulation. All trimmer joists to be have 64mm (2 1/2") extruded polystyrene insulation, or R20 fibre glass batt insulation.
Vapour Barriers to comply with B.C.B.C 9.25.4.
Tape all seams of extruded polystyrene insulation, fill with spray applied insulation at perimeters to prevent air spaces where required. Extruded Polystyrene to comply with the requirements of B.C.B.C 9.25.4.2.(6) to fulfill the requirements of a vapour barrier.
6 MIL polythylene vapor barrier to be supplied uninterrupted around all openings.
Polythylene vapour barrier to be structurally supported, by being attached to studs, light fixtures, and plugs. Contractor to supply blocking as required.

Mechanical & Ventilation

Plumbing Installation shall comply with B.C.B.C. Part 7, B.C.B.C. 9.31, 9.36.4, and the "Canadian Electrical Code".
Plumbing contractor is to allow for (min.) 2 exterior hose bibs at convenient locations.
Contractor to provide 1 hot water heater, of type listed below. Inside the main residence or in location shown on plans. Hot water heater to be secured to structure with metal straps designed to resist lateral loads.
Hot Water Heater: (Storage Type-Electric) See B.C.B.C. Table 9.36.4Hot Water Heater: (Storage Type-Electric) See B.C.B.C. Table 9.36.4
Size: 272L (60 Imp. gal.) Input 240VAC, ≤ 12kW, Performance Standard(s): CAN/CSA-C191
Performance Requirement(s): Standby loss (max.) 90 (Top inlet), 95 (Bottom inlet.)
Heating and/or air conditioning systems are to comply with B.C.B.C. 9.32.3. and 9.36.3.
All duct sizes, fans and ventilation requirements to be verified prior to installation and to install to manufacturers specs. Heat Recovery Ventilator (HRV) to be installed to provide ventilation.
Baseboard heaters to be installed to provide heating. A licensed mechanical tradesperson to verify, size, install, and provide mechanical checklist to local authority having jurisdiction.
All Fans and ducts are to meet the minimum requirements of the B.C.B.C. and manufacture.
Fan and duct sizes provided are minimums as per the BCBC 9.32, for the spaces. Mechanical tradesperson to verify actual sizes, speeds and location of fans and ducts on site.
Kitchen fan: See B.C.B.C. Table 9.32.3.6., Table 9.32.3.8.(3).
47 Litres per second intermittent @ 50pa external static pressure
Duct size (Diameter): 125mm rigid, 150mm flexible.
Duct shall be noncombustible, corrosion resistant and cleanable, equipped with a grease filter at air intake, and not exceed 12m and 2 elbows. (Equivalent length of 26m)
Fan 1 (Bathroom Fan) : See B.C.B.C. Table 9.32.3.6., Table 9.32.3.8.(3).
23 Litres per second intermittent or 4 Liter per second continuous @ 50pa External static pressure.
Duct size (Diameter): 100mm rigid, 125mm flexible.
Intermittent controll to be wall mounted on/off switch.
Duct not to exceed 16m and 2 elbows. (Equivalent length of 32m)
Fan 2 (HRV Supply Fan): See B.C.B.C. Table 9.32.3.5.
** Litres per second continuous @ 50pa External static pressure supply and exhaust air.
A licensed mechanical tradesperson(s) to size and install ducts for HRV.
HRV to provide a minium of ** litre per second continuous exhaust vent in each bathroom
Fan to have a sound rating of 1.0 sones. Install Fan 2 as requesed by homeowner or builder, as long as it meets all sections of B.C. Building Code.
Vent 1: (Passive Supply Grilles in Secondary Suite)
Passive Supply Grilles to be located 1800mm (6') off the ground and have an unobstructed are of 25 cm (1' 0').
Vent 2: 25cm2 (4 in2) Crawlspace Air Transfer Grille
Vent 3: 36cm2 (5.6 in2) Crawlspace Air Transfer Grille
Vent 4: Interior Distribution Air Transfer Grille. To be located in the wall between the two adjacent spaces and to be not less than 10cm x 10 cm (100cm2)
Attic to be vented minimum 1:300 of area.

Electrical Panel

Electrical Facilities to comply with B.C.B.C. 9.34 and 9.36.
All electrical facilities, panels, lighting and any fixed equipment shall comply with the Canadian Electrical Code, BCBC 9.34 and 9.36. and shall be installed by a certified electrician.
A registered professional to design and/or verify work as required by the local authority having jurisdiction.

Secondary Suites

Secondary suites to comply with B.C.B.C. 9.37.
Secondary suite to be heated by independent electric baseboard heating system.
Secondary suite to have a separate Principal Exhaust Fan and Passive Supply Ventilation. One interconnected photoelectric smoke alarm to be installed in both the secondary suite and the primary residence in compliance with B.C.B.C. 9.37.2.19.(1) and (2) Fire separation between primary dwelling and secondary suite to have a 30 minute F.R.R. unless noted elsehere. Door(s) between primary dwelling and secondary suite are to be 20 Minute F.R.R. Solid Core Wood Door and to be gas tight with a self closing device. Door(s) to have bolt lock hardware installed with bolt turn on the property owner side.
Secondary suite Primary Exhaust Fan on/off switch to be mounted in the primary residence. On/Off switches to be labeled "PRIMARY EXHAUST FAN FOR SECONDARY SUITE". All duct chases must not penetrate rated wall assemblies and are to be directed to exterior within self-contained suite. Any ducts that penetrate the rated wall assembly as to be fitted with fire dampers and a duct-type smoke detector to prevent the circulation of smoke in compliance with B.C.B.C. 9.37.2.17.(1).
Water line to have separate shut off valves for main and suite. No combustible plumbing to penetrate the underside of a rated ceiling assemblies.

Design and plans are covered by copyright law and are the sole property of Villamar Construction. and may not be reproduced or used in any form without written permission from same. Villamar Construction permits the purchaser to construct only one (1) building per purchase of plans.

NAFS CALCULATIONS

Building and Site data

GEOGRAPHIC LOCATION	VICTORIA, BC
BUILDING HEIGHT	10 M. & under
TERRAIN	Rough
GLASS	R (Residential)

Calculations

Minimum Performance Grade:	30
Minimum Positive Design Pressure:	960 PA
Minimum Negative Design Pressure:	960 PA
Minimum Water Penetration Resistance Test Pressure:	220 PA

EFFECTIVE R-VALUE FOR EXTERNAL WALLS ABOVE GRADE:

Exterior Air Film	0.03
Sheet Metal Siding	0
1/2" Rain Screen Air Cavity	0.15
Building Paper	0
7/16" OSB Sheathing	0.11
R-20 Batt Insulation 2x6 Studs @ 16" O.C. *RSI=100/[(23/1.19)+(77/3.34)] = 2.36*	2.36
6 MIL Poly VB	0
1/2" Gypsum Board	0.08
Interior Air Film	0.11
	RSI=2.84

Cement Fibre Siding:	0.02
Wood Lap Siding:	0.14
Stone Cladding 1":	0.06

Values from Table A-9.36.2.4(1)D

EFFECTIVE R-VALUE FOR HOUSE TO GARAGE WALLS:

Exterior Air Film	0.03
1/2" Gypsum Board	0.08
R-20 Batt Insulation *(See Calculation Below)*	2.36
2x6 Wood Studs @ 16" O.C. *RSI=100/[(23/1.19)+(77/3.34)] = 2.36*	
6 MIL Poly VB	0
1/2" Gypsum Board	0.08
Interior Air Film	0.12
	RSI=2.67

Values from Table A-9.36.2.4(1)D
Since an enclosed space rating can be reduced by 0.16

EFFECTIVE R-VALUE FOR FOUNDATION WALLS:

Damp proofing	0
8" poured-in place Concrete	0
(2.5") R12 Rigid Insulation	2.11
	RSI=2.11

Values from Table A-9.36.2.4(1)D

EFFECTIVE R-VALUE FOR FLOOR OVER UNHEATED SPACE (OUTSIDE):

Exterior Air Film	0.03
Aluminum Soffit	0.00
R31 Batt Insulation 2x12 Wood Joists @ 16" O.C. *RSI=100/[(13/2.43)+(87/5.46)] = 4.70*	4.70
3/4" Sheathing	0.161
Interior Air Film	0.16
	RSI=5.05

Values from Table A-9.36.2.4(1)D

EFFECTIVE R-VALUE FOR UNHEATED FLOOR ABOVE FROST LINE:

Interior Air Film	0.11
4" poured-in place concrete	0
2.5" R12 Rigid Insulation	2.11
Exterior Air Film	0.03
	RSI=2.25

Values from Table A-9.36.2.4(1)D

EFFECTIVE R-VALUE FLOOR OVER GARAGE:

Exterior Air Film	0.03
1/2" Gypsum Board	0.08
R-31 Batt Insulation 2x12 Wood Joists @ 16" O.C. *RSI=100/[(13/2.43)+(87/5.46)] =*	4.70
3/4" Sheathing	0.161
Interior Air Film	0.12
	RSI=5.131

Values from Table A-9.36.2.4(1)D

RECEIVED
DEC 10 2018
CORP. OF TOWNSHIP OF ESQUIMALT
DEVELOPMENT SERVICES

Villamar DESIGN
6825A VETANESS ROAD
VICTORIA, BC
V8M 2A7
778-351-4288

1198 MUNRO St.
Esquimalt, BC

Client:
Byron ROTGANS

REZONE

Notes & RSI

SHEET ISSUE DATE	DEC. 10, 2018
PROJECT NUMBER	1804
DRAWN BY	AJW
CHECKED BY	DE

A10

SCALE 12" = 1'-0"

Z:\DESIGN ONLY\1198 MUNROA - Design\99 - REVIT models\1198 Munro.rvt

Proposed Subdivision Plan Of:
Lot 1, Section 11, Esquimalt District, Plan 44436. P.I.D. 005-455-031

5 4 3 2 1 0 5 10 15

Scale = 1:250

Dated this 5th day of July, 2018.

Brent Mayenburg C5S1Z1

Digitally signed by Brent Mayenburg C5S1Z1
DN: c=CA, cn=Brent Mayenburg C5S1Z1, o=BC Land Surveyor, ou=Verify ID at www.juricert.com/LKUP.cfm?id=C5S1Z1
Date: 2018.11.09 07:24:05 -08'00'

B.C.L.S. (Not valid unless originally signed & sealed)

Distances and elevations shown are in metres.

Elevations are based on geodetic datum CVD28BC and derived from OCM 87H3781.

This site plan is for building and design purposes and is for the exclusive use of our client.

This document shows the relative location of the surveyed structures and features with respect to the boundaries of the parcel described above. This document shall not be used to define property lines or property corners.

The subject property is affected by the following registered documents:
J109460.

Wey Mayenburg Land Surveying Inc.
www.weysurveys.com
#4-2227 James White Boulevard
Sidney, BC V8L 1Z5
Telephone (250) 656-5155
File: 180193\SIT\GH

RECEIVED
NOV 09 2018
CORP. OF TOWNSHIP OF ESQUIMALT
DEVELOPMENT SERVICES