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Michaela Jones THQ Project Manager The Salvation Army 2 Overlea Blvd Toronto, Ontario M4H 1P4

Date: April 10, 2024 Our Ref: 30209312

Subject: Confirmation of Design Compliance with Instrument Conditions (revised) 1580 Fitzgerald Avenue, Courtnay, BC

Dear Michaela,

As requested by The Salvation Army, Arcadis has prepared this letter in response to the City of Courtenay's (Courtenay) request for information further to the Application for Development Variance Permit for 1580 Fitzgerald Avenue, in Courtnay, British Columbia (the Site). This request was sent to Phi Architecture Inc. (Phi) on January 19, 2024. This letter has been prepared to confirm that the proposed development design for the Site is consistent with the contaminated sites legal instrument Certificate of Compliance (CoC), including the Requirements and Conditions as outlined in Schedule B of the CoC.

Background

The Site is located within a residential area in Courtnay, British Columbia. The Site has a significant slope to ground level with an approximate 2.2 m drop from the southwest property line along Fitzgerald Avenue to northeast Site property line along the laneway, and an approximate 1.0 m drop from the northwest property line to the southeast property line. The Site is currently undergoing redevelopment without land use change. The redevelopment has included the removal of the prior existing multi-use church building, and will include the construction of a new, larger multi-use church building.

Environmental investigation work conducted between 2011 and 2013, identified that leaks in the former (2) Site heating oil underground storage tanks (USTs), had caused contamination in soil, groundwater and soil vapour at the Site. The USTs had previously been removed in December 2010 at which time the soil and groundwater contamination was first identified. Remediation conducted in 2013 removed the majority of soil and associated groundwater contamination, however a minor amount of soil and groundwater contamination was left in place as this contamination extended under the former Site building and also extended partially into the laneway and was not accessible without compromising the structural stability of the building and roadway. Post remedial groundwater monitoring in 2015 identified that groundwater contamination continued to exist at the Site albeit at much lower levels than measured prior to remediation. A human health and ecological risk assessment was completed in 2013 and again in 2016 which identified that the residual soil, groundwater and soil vapour contamination did not present an unacceptable risk to human or ecological health.

On receiving the risk assessment conclusions that no unacceptable environmental risk was present at the Site, a submission was made to the then BC Ministry of Environment in late 2016, requesting that CoC be issued for the

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Site confirming that the Site had been satisfactorily remediated. The CoC was issued by the Ministry on December 16, 2016.

As part of the development approval process, Courtenay has requested confirmation that the proposed development design for the Site is consistent with the contaminated sites legal instrument Certificate of Compliance (CoC), including the Requirements and Conditions as outlined in Schedule B of the CoC.

Objective and Scope of Work

As identified above, the objective of this letter and the underlying work is to confirm that the current development proposal adheres to the CoC, including the Requirements and Conditions as outlined in Schedule B of the CoC. In supporting this confirmation, Arcadis completed the following:

- Review of the development plans provided by Phi (Attachment 1), specifically details regarding the final grade and elevation of the proposed building lower foundation
- Review of the CoC, specifically the Requirements and Conditions as outlined in Schedule B of the CoC (Attachment 2)
- Review of the following Site investigation, remediation, and risk assessment reports:
 - Detailed Site Investigation and Site Remediation, 1580 & 1590 Fitzgerald Avenue, Courtenay, BC. Franz Environmental Inc. December 2013. (Franz 2013)
 - 1580 Fitzgerald Avenue Post Remediation Monitoring. Franz Environmental Inc. January 2015. (Franz 2015)
 - The Salvation Army, Human Health and Ecological Risk Assessment, 1580 & 1590 Fitzgerald Avenue, Courtenay, BC. Arcadis Canada Inc. February 2016. (Arcadis 2016)
- Preparation of this letter

Review of Development Plans

As identified above, Arcadis reviewed the Development Plans as provided by Phi, in order to determine the physical parameters of the proposed development, within specific attention to the details regarding the final grade and elevation of the proposed building lower foundation and the proposed paved areas. The Development Plans as provided to Arcadis by Phi are included as **Attachment 1** to this letter.

Arcadis noted that the proposed development will mainly comprise:

- a new building on the western half of the Site,
- a row of paved parking spaces along the northern extent of the property abutting the laneway,
- a paved parking area on the eastern half of the Site, with perimeter planting areas along the north and east perimeter, and
- a planted area along the southern extent of the property abutting the sidewalk along Fitzgerald Avenue, with the exception of a walkway (accessing the Site building) and a driveway (accessing the eastern parking area).

A review of the elevations for the above-noted developmental areas identified that the northern parking area was consistent or slightly above the elevation of the laneway, while the eastern parking area will be at the elevation or slightly below that of Fitzgerald Avenue, and just over 2 m above the elevation of the laneway.

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A review of the elevation for the building foundation identified that the foundation will be largely below the surrounding grade with the exception of the northern extent of the building which will be slightly above the surrounding grade at the east corner, and slightly below grade at the west corner. The elevation for the top of the crawlspace floor slab (the lowest elevation within the building) is identified as 16.11 m (per Phi email, all elevations herein to geodetic datum CGVD28). The plans identify that this slab is continuous across the footprint of the Site building and that there are no unfinished portions of the building foundation.

Review of Certificate of Compliance

The Salvation Army applied for and received a CoC for the Site which is dated December 16, 2016 (**Attachment 2**). The CoC is a "risk based" CoC in that its application was supported by a risk assessment (Arcadis 2016). All CoCs are provided for specific bounds in legal property, and land use. The bounds for the CoC provided for the Site are as follows:

- **Property Designation**: The CoC is specific to the legal property parcel identified within Schedule A of the CoC, specifically Lot A, (DD P54316) Section 41, Comox District, Plan 7449. On review of the proposed development plan, the development plan falls within this legal property parcel.
- Designated Land Use: The CoC is specific to the type of land use for which it was obtained, as described in Schedule C of the CoC. The land use specified in Schedule C is Residential Land (RL) use. As Residential Land, as defined under the BC Contaminated Sites Regulation (CSR) includes uses such as community centres. While the primary use of the Site will be as a church, which is a CSR defined Commercial Land (CL) use, the CoC specified land use (RL) will allow the Salvation Army to use the property for more sensitive uses such as summer schools, child daycare, and community centre type activities, should the need arise.

In addition to the specific bounds of the CoC, the CoC may also specify requirements and conditions of future land use within those bounds, as provided in Schedule B of the CoC. The conditions which are specific to limiting future development of the Site are as follows:

- Maintaining a Barrier Over the Management Area: The area of the Site over which contaminated soil remains in place is referred to as the "Management Area" (Figure 1). Within the Management Area, a minimum of one of the following conditions must be maintained:
 - The ground surface is covered with an immovable barrier (e.g. asphalt paving or concrete slab) impermeable to human access.
 - A minimum soil thickness of 1 m of soil meeting RL land use standards is in place overlying the contaminated soil at depth below.

On review of the proposed development plan, over 95% of the area of the Management Area will be either paved or covered by the Site building, such that no human exposure to the underlying soil could potentially occur within this portion of the Management Area. Less than 5% of the management area (planting area within the northern boundary of the raised parking area) will contain area for plantings, identified as small shallow rooting shrubs. The elevation of grade at this portion of the Site will be over 2m above grade existing at the time of investigation & risk assessment, and likely separated from grade by concrete structure. Accordingly, the proposed development is compliant with this condition.

• No Deep Rooting Plants within the Management Area: Within the Management Area, no plants with roots which will exceed 1 m in depth from ground surface, should be planted. On review of the proposed development plan, over 95% of the area of the Management Area will be either paved or covered by the

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Site building. Less than 5% of the management area (planting area within the northern boundary of the raised parking area) will contain area for plantings, identified as small shallow rooting shrubs. Accordingly, the proposed development is compliant with this condition.

Foundation Depth Limit: As stated in Schedule B, "Basements in any new buildings onsite will not extend beyond the depth of the existing basement (0.6 m depth) evaluated in the risk assessment.". It is noted in Schedule B that this condition is based on vapour attenuation factors selected based on assumptions of the structures, locations, and depths of buildings and trenches existing (at the time of risk assessment) or expected at the Site. This condition is somewhat poorly articulated as it is noted that the Site building at the time of risk assessment had several different basement levels, with varied depths below ground level due to the sloping nature of the ground surface of the Site at that time. Accordingly, the depth, or more appropriately the elevation(s) which should serve as the lower limit(s) or bound(s) for future development is unclear from the immediate wording within Schedule B. Accordingly, Arcadis reviewed key supporting environmental reports, on which the CoC conditions were based, to determine the limits (specific to potential soil vapour exposure) to which this Schedule B condition is referring. This review is provided in the following section.

Review of Environmental Reports

As identified above, in order to accurately determine the intent of foundation depth limitations provided within Schedule B of the CoC, it was necessary to review the foundational documentation which was used to develop that condition. Accordingly, Arcadis reviewed the Site investigation and remediation report (Franz 2013), the post remediation monitoring report (Franz 2015) and the risk assessment report (Arcadis 2016). Specifically, Arcadis reviewed the condition of the residual soil and groundwater contamination, which is the source of soil vapour contamination, the levels of soil vapour contamination which were either modeled or measured, and the resulting assessment of environmental risk related to soil vapour contamination at the Site. These reviews are discussed in the following sections.

Residual Soil and Groundwater Contamination

Investigation and remediation results identified that soil and groundwater at the Site has become contaminated with petroleum hydrocarbons (PHCs) as a result of the former leaking onsite heating oil USTs. A review of the 2013 investigation and remediation report (Franz 2013) identified that field observations and analytical results for groundwater and excavation water samples from both the investigation and remediation work confirmed that groundwater contamination had been delineated, extending from the former USTs outward, primarily in the northeast direction (BH9), which was inferred to be the direction of the flow of groundwater. This contamination was noted as being delineated, extending no further than 10 m from the former USTs at the centre of the Site. Post remedial groundwater monitoring identified that the PHC contamination continued to persist in the same location onsite (BH9). The groundwater itself was noted as being shallow, ranging from approximately 1.5 mbgs (within the laneway) to 2.8 mbgs (at the highest measured elevation point on the Site).

A review of the 2013 investigation and remediation report (Franz 2013) identified that field observations and analytical results for soil samples from both the investigation and remediation work confirmed that residual (non-remediated) soil PHC contamination remained beneath former Site building and the laneway. The residual soil contamination does not extend above an elevation of 14.17 m across the Site (Franz 2013, Fig. 5 & Fig. 17). This was equivalent to depths of approximately 2.0 mbgs in the northeastern extent of the Site along laneway, the lowest point of ground surface at the Site, and approximately 2.8 mbgs close to the southeast end of the building

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(the southeastern extent of the contaminated soil plume) at the time of the investigation and remediation work. It is also approximately 1.94 m below the lowest point of the previous building basement floor surface (16.11 m elevation). As soil contamination was caused through contact with dissolved and free-phase PHCs via groundwater transport, impacts in soil should not extend above the vadose zone overlying the high groundwater elevation. Accordingly, the top elevation of soil contamination can be reliably identified in relation to known high groundwater levels.

Evaluation of Soil Vapour Contamination

A review of the 2013 investigation and remediation report (Franz 2013) identified that field observations and analytical results for soil vapour samples from both the investigation and remediation work confirmed that soil vapour PHC contamination was not identified in the onsite probes but was identified in one offsite probe (BH15SV in the alleyway) prior to remediation. It is noted that this contamination exists only with the unattenuated measured concentration. Following the application of the most conservative attenuation factor it was calculated that the resulting vapour concentration in the breathing zone was not indicative of contamination. In two follow-up post-remediation soil vapour sampling events, no vapour contamination either un-attenuated or attenuated was measured in the onsite and offsite vapour probes.

Assessment of Soil Vapour Risk

The Site risk assessment uses an assumption that any future basement at the Site will not extent deeper than the depth of the previous church basement (Arcadis 2015, Section 2.2). This assumption is used consistent with the fact that sub-slab soil vapour assessed below the former building sub-slab (BH21), were compliant with applicable soil vapour standards. Review of the sole sample collected sub-slab (post-remediation) indicated that at worst, measured volatile PHC concentrations (unattenuated) were 55% of the applicable standards.

Soil vapour data from the adjacent shallow (1.0 mbgs) vapour probe (BH18) were also reviewed. Further review of the soil vapour data from BH18 indicated that the unattenuated volatile PHC concentrations were at worst < 60% of the applicable standards pre-remediation, and <5% post-remediation.

After review of the historical reports, it is Arcadis' opinion that identifying the previously existing basement depth as a limitation to potential future Site development is overly conservative considering post-remediation groundwater and soil vapour sampling results. Based on the review of the assessment of soil vapour risk, the historically measured concentrations of PHCs in soil vapour, and the potential for application of attenuation factors in evaluating vapour risk, Arcadis has identified that the any new development could safely place its basement floor up to 1m deeper than the deepest point on the previously existing basement floor. The restriction for a new developments lowest floor elevation to not go below the existing floor elevation represents an intrinsic safety factor of just over 350 (i.e. soil vapour would have to be greater than 350 times what has been historically measured for there to be an issue with the soil vapour within the breathing zone of a building basement built with this restriction). Accordingly, it is reasonable to use the lowest elevation to which a future building could be constructed and remain consistent with the assumptions used and stated within the risk assessment, and be consistent with the wording and conditions of Schedule B of the CoC.

Conclusion

After review of the proposed development plan, the Site CoC, and historical environmental reports, Arcadis can confirm that the current development proposal adheres to the CoC, including the Requirements and Conditions as outlined in Schedule B of the CoC.

Limitations

Arcadis prepared this report for the exclusive use of The Salvation Army and their agents. The City of Courtenay may also rely on the information provided herein for the sole purpose of supporting the current development of the Site. Any use which a third party makes of this report, or any reliance on, or decisions to be made based on it, are the responsibility of such third parties. The authors accept no responsibility for damages, if any, suffered by any third party because of decisions made or actions based on this report.

The material presented in this report reflects Arcadis' judgement in light of the information available to us at the time of preparation. Third party information reviewed and used to formulate this report is assumed to be complete and correct. Arcadis used this information in good faith and will not accept any responsibility for deficiencies, misinterpretation, or incompleteness of the information contained in documents prepared by third parties.

No investigative method can eliminate the possibility of obtaining partially imprecise or incomplete information; it can only reduce the possibility to an acceptable level. Professional judgement was exercised in gathering and analyzing the information obtained. However, it is believed that the level of detail carried out for this investigation program is appropriate to meet the project objectives.

Sincerely, Arcadis Canada Inc.



Art Hildebrand, P.Eng., CSAP Senior Environmental Engineer

Email: arthur.hildebrand@arcadis.com Mobile: 778-222-4781

CC. Phillipa Atwood, Phi Architecture Inc. (pippa@phiarchitecture.ca)

Enclosures:

Attachment 1 Phi Development Plans (2024-02-22) Attachment 2 Certificate of Compliance (Site ID: 12695)



Ň	LEGEND Management Area Former UST Existing Building Utility - Storm Sewer Wanhole Manhole Monitoring Well Monitoring Well Monitoring Well Soil Vapour Probe Wall Sample Wall Sample Municipal Water Connection (Approx. Location) Notes: Notes:
	Scale 1250 5 2.5 0 2.5 1000000000000000000000000000000000000

ARCADIS

APRIL 2024

FIGURE 1



Attachment 1

Phi Development Plan













Architecture Inc.

Phillipa Atwood Architect. AIBC, MRAIC, LEED AP 5 Little Bear Way Royston BC VOR 2V0 pippa@patwoodarchitect.ca 250.703.0433 / 250.218.0724

MAIN FLOOR DOOR SCHEDULE								
Mark	Width	Height	Fire Rating	Construction Type	Frame Material	Level	Comments	
100	6' - 0"	7' - 0"				MAIN		
101	6' - 0"	7' - 0"				MAIN		
102	6' - 0"	7' - 0"				MAIN		
103	2' - 10"	7' - 0"				MAIN		
104	3' - 0"	7' - 0"				MAIN		
105	3' - 3"	7' - 0"				MAIN		
106	3' - 0"	7' - 0"			Wood	MAIN		
107	5' - 0"	7' - 0"				MAIN		
110	3' - 0"	7' - 0"				MAIN		
111	6' - 0"	7' - 0"				MAIN		
112	3' - 0"	7' - 0"				MAIN		
113	3' - 6"	7' - 0"				MAIN		
114	0"	0"				MAIN		
115	2' - 6"	6' - 8"				MAIN		
116	2' - 10"	7' - 0"				MAIN		
117	2' - 10"	7' - 0"				MAIN		
118	3' - 0"	7' - 0"				MAIN		
119	2' - 6"	6' - 8"				MAIN		
120	2' - 10"	7' - 0"				MAIN		
121	2' - 10"	7' - 0"				MAIN		
122	3' - 0"	7' - 0"				MAIN		
123	2' - 6"	6' - 8"				MAIN		
124	3' - 0"	7' - 0"				MAIN		
228	2' - 6"	6' - 8"				MAIN		
229	3' - 6"	7' - 0"				MAIN		
232	4' - 0"	7' - 0"				MAIN		
233	3' - 0"	7' - 0"				MAIN		

Mark	Width	Haight		Commonto
IVIAIN	VVICUI	Height	Level	Comments
100	1' - 0"	8' - 0"	MAIN	
101	1' - 0"	8' - 0"	MAIN	
102	1' - 0"	8' - 0"	MAIN	
103	1' - 0"	8' - 0"	MAIN	
104	1' - 0"	8' - 0"	MAIN	
107	4' - 0"	4' - 0"	MAIN	
108	4' - 0"	4' - 0"	MAIN	
109	4' - 0"	4' - 0"	MAIN	
110	3' - 0"	3' - 6"	MAIN	
111	3' - 0"	3' - 6"	MAIN	
112	2' - 6"	5' - 0"	MAIN	
113	2' - 6"	5' - 0"	MAIN	
114	2' - 6"	5' - 0"	MAIN	
115	2' - 6"	5' - 0"	MAIN	
116	1' - 0"	8' - 0"	MAIN	Interior
117	1' - 0"	8' - 0"	MAIN	Interior
118	1' - 0"	8' - 0"	MAIN	Interior
119	1' - 0"	8' - 0"	MAIN	Interior
120	1' - 0"	8' - 0"	MAIN	Interior
121	2' - 6"	2' - 6"	MAIN	
122	1' - 0"	8' - 0"	MAIN	
123	1' - 0"	8' - 0"	MAIN	Interior
124	3' - 0"	3' - 0"	MAIN	Interior
126	3' - 0"	3' - 0"	MAIN	Interior



TOTALS: Main 4631 sq. ft. Second 3448 sq. ft.

total = 8079 sq. ft.

••••• Fire Separation

LEGEND 1/4" = 1'-0"

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Phillipa Atwood Architect. AIBC, MRAIC, LEED AP 5 Little Bear Way Royston BC VOR 2V0 pippa@patwoodarchitect.ca 250.703.0433 / 250.218.0724

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Architecture

Inc.

SECOND FLOOR DOOR SCHEDULE

		Heig	Fire	Construction	Frame		
Mark	Width	ht	Rating	Туре	Material	Level	Comments
	1	1	1		I	1	· · · · · · · · · · · · · · · · · · ·
200	3' - 0"	7' - 0"				SECOND	
201	2' - 10"	7' - 0"				SECOND	
202	2' - 10"	7' - 0"				SECOND	
203	2' - 10"	7' - 0"				SECOND	
204	2' - 10"	7' - 0"				SECOND	
205	3' - 0"	7' - 0"		Solid core dutch door	Wood	SECOND	Dutch door
206	3' - 0"	7' - 0"				SECOND	
207	3' - 0"	7' - 0"				SECOND	
209	3' - 0"	7' - 0"				SECOND	
210	3' - 0"	7' - 0"				SECOND	
211	3' - 0"	7' - 0"				SECOND	
212	3' - 0"	7' - 0"				SECOND	
213	6' - 0"	7' - 0"				SECOND	
214	6' - 0"	7' - 0"				SECOND	
215	2' - 6"	6' - 8"				SECOND	
216	2' - 10"	7' - 0"				SECOND	
217	2' - 10"	7' - 0"				SECOND	
218	2' - 10"	7' - 0"				SECOND	
219	2' - 10"	7' - 0"				SECOND	
220	2' - 10"	7' - 0"				SECOND	
221	4' - 0"	7' - 0"				SECOND	
222	2' - 10"	7' - 0"				SECOND	
224	2' - 6"	6' - 8"				SECOND	

SECOND FLOOR WINDOW SCHEDULE

Mark	Width	Height	Level	Comments
200	3' - 4"	4' - 0"	SECOND	
201	2' - 6"	5' - 0"	SECOND	
202	2' - 6"	5' - 0"	SECOND	
203	2' - 6"	5' - 0"	SECOND	
204	4' - 0"	4' - 0"	SECOND	
205	4' - 0"	4' - 0"	SECOND	
206	3' - 0"	5' - 0"	SECOND	
207	3' - 0"	4' - 0"	SECOND	
208	3' - 0"	4' - 0"	SECOND	
209	3' - 0"	4' - 0"	SECOND	
210	3' - 0"	4' - 0"	SECOND	
211	3' - 0"	4' - 0"	SECOND	
212	3' - 0"	4' - 0"	SECOND	
213	3' - 0"	4' - 0"	SECOND	
214	4' - 0"	4' - 0"	SECOND	
215	4' - 0"	4' - 0"	SECOND	
216	4' - 0"	4' - 0"	SECOND	
217	4' - 0"	4' - 0"	SECOND	
219	3' - 0"	3' - 0"	SECOND	Sound
220	3' - 0"	3' - 0"	SECOND	Interior
221	3' - 0"	3' - 0"	SECOND	Interior
222	6' - 0"	4' - 0"	SECOND	Sound. Wired glass.
223	3' - 0"	3' - 0"	SECOND	Interior
224	3' - 0"	3' - 0"	SECOND	Interior
225	3' - 0"	3' - 0"	SECOND	Interior
225	2' - 6"	2' - 6"	SECOND	
226	1' - 6"	6' - 0"	SECOND	Wired glass
234	2' - 6"	2' - 6"	SECOND	
235	2' - 6"	2' - 6"	SECOND	



1/4" = 1'-0" .

Issue Date

Drawn by

Project number

Checked by Checker Date

A103

Sheet

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••••• Fire Separation

LEGEND 1/4" = 1'-0"



Architecture ٠ m Inc. Phillipa Atwood Architect. AIBC, MRAIC, LEED AP 5 Little Bear Way Royston BC VOR 2V0 pippa@patwoodarchitect.ca 250.703.0433 / 250.218.0724 NATR ON NS Description No. Date REVISIONS: ISSUED: For Date SALVATION ARMY - CV COMMUNITY CHURCH ROOF PLAN Drawn by Author Scale 1/4" = 1'-0" . Checked by Checker Date Issue Date A104 Plot date: Sheet 2024-02-22 10:43:06 AM Project number



















		M	AIN FLOOR F	ROOM SCHE	DULE			
Number	Name	Area	Floor Finish	Base Finish	Wall Finish	Ceiling Finish	Level	Comments
1	MAIN FOYER	531 SF	Vinyl plank				MAIN	
2	SANCTUARY	1512 SF	Vinyl plank				MAIN	
3	SOUND BOOTH	50 SF	Vinyl plank				MAIN	
4	HALL	919 SF	Vinyl plank				MAIN	
5	CLOSET	9 SF	Vinyl plank				MAIN	
6	CRAWLSPACE ACCESS	69 SF	Vinyl plank				MAIN	
7	STORAGE	37 SF	Vinyl plank				MAIN	
8	N/W EXIT	36 SF	Vinyl plank				MAIN	
9	SUPPLIES	9 SF	Vinyl plank				MAIN	
10	KITCHEN	330 SF	Concrete				MAIN	
11	PANTRY	106 SF	Concrete				MAIN	
12	JAN	11 SF	Concrete				MAIN	
13	CORRIDOR	67 SF	Vinyl plank				MAIN	
14	Μ	75 SF	Concrete				MAIN	
15	W	88 SF	Concrete				MAIN	
16	FOYER	70 SF	Concrete				MAIN	
17	W/C	24 SF	Concrete				MAIN	
18	RECEPTION	72 SF	Vinyl plank				MAIN	
19	STAIRWELL	129 SF					MAIN	
20	CASE WORKER	112 SF	Vinyl plank				MAIN	
21	CMD	113 SF	Vinyl plank				MAIN	
64	ELECTRICAL	44 SF					MAIN	



24 <u>18W</u> 1/4" = 1'-0"

	SECOND FLOOR ROOM SCHEDULE									
Number	Name	Area	Floor Finish	Base Finish	Wall Finish	Ceiling Finish	Level	Comments		
30	Room	578 SF					SECOND			
31	BOARD/LUNCH	223 SF					SECOND			
32	Room	8 SF					SECOND			
33	OFFICER 2	124 SF					SECOND			
34	ADMIN	92 SF					SECOND			
35	WORK	103 SF					SECOND			
36	HEAD STRONG 1	106 SF					SECOND			
37	STORAGE	86 SF					SECOND			
38	HEAD STRONG 2	143 SF					SECOND			
39	YOUTH PROGRAM	590 SF					SECOND			
40	CHILDREN	332 SF					SECOND			
41	Room	20 SF					SECOND			
42	Room	13 SF					SECOND			
43	W/C	73 SF					SECOND			
44	YOUTH COORDINATOR	115 SF					SECOND			
45	OFFICER 1	168 SF					SECOND			
46	BUSINESS MANAGER	116 SF					SECOND			
47	FAMILY SERVICES	111 SF					SECOND			
48	STORAGE	58 SF					SECOND			







_M<u>AIN</u>_0"

<u>-STORAGE</u> -7' - 2"





Mark	Width	Height	Level	Comments
100	1' - 0"	8' - 0"	MAIN	
101	1' - 0"	8' - 0"	MAIN	
102	1' - 0"	8' - 0"	MAIN	
103	1' - 0"	8' - 0"	MAIN	
104	1' - 0"	8' - 0"	MAIN	
107	4' - 0"	4' - 0"	MAIN	
108	4' - 0"	4' - 0"	MAIN	
109	4' - 0"	4' - 0"	MAIN	
110	3' - 0"	3' - 6"	MAIN	
111	3' - 0"	3' - 6"	MAIN	
112	2' - 6"	5' - 0"	MAIN	
113	2' - 6"	5' - 0"	MAIN	
114	2' - 6"	5' - 0"	MAIN	
115	2' - 6"	5' - 0"	MAIN	
116	1' - 0"	8' - 0"	MAIN	Interior
117	1' - 0"	8' - 0"	MAIN	Interior
117	1' - 0"	8' - 0"	MAIN	Interior
119	1' - 0"	8' - 0"	MAIN	Interior
120	1' - 0"	8' - 0"	MAIN	Interior
120	2' - 6"	2' - 6"	MAIN	
121	1' - 0"	8' - 0"	MAIN	
122	1' - 0"	8' - 0"	MAIN	Interior
123	3' - 0"	3' - 0"	MAIN	Interior
124	3' - 0"	3' - 0"	MAIN	
	3' - 0"		MAIN	
128	0"	3' - 0" 0"		Interior
190	0"	0"	MAIN	
191	-	-		
193	2' - 6"	2' - 6"	MAIN	
200	3' - 4"	4' - 0"	SECOND	
201	2' - 6"	5' - 0"	SECOND	
202	2' - 6"	5' - 0"	SECOND	
203	2' - 6"	5' - 0"	SECOND	
204	4' - 0"	4' - 0"	SECOND	
205	4' - 0"	4' - 0"	SECOND	
206	3' - 0"	5' - 0"	SECOND	
207	3' - 0"	4' - 0"	SECOND	
208	3' - 0"	4' - 0"	SECOND	
209	3' - 0"	4' - 0"	SECOND	
210	3' - 0"	4' - 0"	SECOND	
211	3' - 0"	4' - 0"	SECOND	
212	3' - 0"	4' - 0"	SECOND	
213	3' - 0"	4' - 0"	SECOND	
214	4' - 0"	4' - 0"	SECOND	
215	4' - 0"	4' - 0"	SECOND	
216	4' - 0"	4' - 0"	SECOND	
217	4' - 0"	4' - 0"	SECOND	
219	3' - 0"	3' - 0"	SECOND	Sound
220	3' - 0"	3' - 0"	SECOND	Interior
221	3' - 0"	3' - 0"	SECOND	Interior
222	6' - 0"	4' - 0"	SECOND	Sound. Wired glass
223	3' - 0"	3' - 0"	SECOND	Interior
224	3' - 0"	3' - 0"	SECOND	Interior
225	3' - 0"	3' - 0"	SECOND	Interior
225	2' - 6"	2' - 6"	SECOND	
226	1' - 6"	6' - 0"	SECOND	Wired glass
232	4' - 0"	4' - 0"	MAIN	
233	2' - 6"	2' - 6"	MAIN	
234	2' - 6"	2' - 6"	SECOND	
235	2' - 6"	2' - 6"	SECOND	
236	2' - 6"	2' - 6"	MAIN	
	6' - 0"	4' - 0"	MAIN	



				Construction	Frama		
Mark	Width	Height	Fire Rating	Construction Type	Frame Material	Level	Comments
100	6' - 0"	7' - 0"				MAIN	
101	6' - 0"	7' - 0"				MAIN	
102	6' - 0"	7' - 0"				MAIN	
103	2' - 10"	7' - 0"				MAIN	
104	3' - 0"	7' - 0"				MAIN	
105	3' - 3"	7' - 0"				MAIN	
106	3' - 0"	7' - 0"			Wood	MAIN	
107	5' - 0"	7' - 0"				MAIN	
110	3' - 0"	7' - 0"				MAIN	
111	6' - 0"	7' - 0"				MAIN	
112	3' - 0"	7' - 0"				MAIN	
113	3' - 6"	7' - 0"				MAIN	
114	0"	0"				MAIN	
115	2' - 6"	6' - 8"				MAIN	
116	2' - 10"	7' - 0"				MAIN	
117	2' - 10"	7' - 0"				MAIN	
118	3' - 0"	7' - 0"				MAIN	
119	2' - 6"	6' - 8"				MAIN	
120	2' - 10"	7' - 0"				MAIN	
121	2' - 10"	7' - 0"				MAIN	
122	3' - 0"	7' - 0"				MAIN	
123	2' - 6"	6' - 8"				MAIN	
124	3' - 0"	7' - 0"				MAIN	
200	3' - 0"	7' - 0"				SECOND	
201	2' - 10"	7' - 0"				SECOND	
202	2' - 10"	7' - 0"				SECOND	
203	2' - 10"	7' - 0"				SECOND	
204	2' - 10"	7' - 0"				SECOND	
205	3' - 0"	7' - 0"		Solid core dutch door	Wood	SECOND	Dutch door
206	3' - 0"	7' - 0"				SECOND	
207	3' - 0"	7' - 0"				SECOND	
209	3' - 0"	7' - 0"				SECOND	
210	3' - 0"	7' - 0"				SECOND	
211	3' - 0"	7' - 0"				SECOND	
212	3' - 0"	7' - 0"				SECOND	
213	6' - 0"	7' - 0"				SECOND	
214	6' - 0"	7' - 0"				SECOND	
215	2' - 6"	6' - 8"				SECOND	
216	2' - 10"	7' - 0"				SECOND	
217	2' - 10"	7' - 0"				SECOND	
218	2' - 10"	7' - 0"				SECOND	
219	2' - 10"	7' - 0"				SECOND	
220	2' - 10"	7' - 0"				SECOND	
221	4' - 0"	7' - 0"				SECOND	
222	2' - 10"	7' - 0"				SECOND	
224	2' - 6"	6' - 8"				SECOND	
226	5' - 8"	6' - 0"				STORAGE	
228	2' - 6"	6' - 8"				MAIN	
229	3' - 6"	7' - 0"				MAIN	
232	4' - 0"	7' - 0"				MAIN	
233	3' - 0"	7' - 0"				MAIN	



SOUTH	C/W
3/8" = 1'-0"	













Architecture ٠ m Inc. Phillipa Atwood Architect. AIBC, MRAIC, LEED AP 5 Little Bear Way Royston BC VOR 2V0 pippa@patwoodarchitect.ca 250.703.0433 / 250.218.0724 Cho. Date No. Description REVISIONS: ISSUED: For Date SALVATION ARMY - CV COMMUNITY CHURCH PERSPECTIVES -EXTERIOR Drawn by Author Scale Checked by Checker Date Issue Date A900 Plot date: Sheet 2024-02-22 10:43:22 AM Project number











Attachment 2

Certificate of Compliance (Site ID: 12695)



Victoria File:

Site ID:

26250-20/12695

12695

REGISTERED MAIL

December 16, 2016

Andrzej Wodkiewicz The Governing Council of the Salvation Army, Canada West 2 Overlea Blvd., Toronto, ON M4H 1P4

Dear Andrzej Wodkiewicz:

Re: Certificate of Compliance - 1580-1590 Fitzgerald Avenue, Courtney, British Columbia

Please find enclosed a Certificate of Compliance respecting the site referenced above.

In addition to the conditions set out in Schedule B of the Certificate of Compliance, please be advised of the following:

- 1. Information about the site will be included in the Site Registry established under the *Environmental Management Act*.
- 2. The provisions of this Certificate of Compliance are without prejudice to the right of the Director to make orders or impose requirements as the Director may deem necessary in accordance with applicable laws. Nothing in this Certificate of Compliance will in any way restrict or impair the Director's power in this regard.
- 3. A qualified environmental consultant should be available to identify, characterize and appropriately manage:
 - (a) any environmental media that may be contaminated, or
 - (b) soil which may exceed the standards triggering a Contaminated Soil Relocation Agreement set out in section 40 of the Contaminated Sites Regulation

and may be encountered during any future subsurface work at the site.

4. Groundwater wells that are no longer required must be properly decommissioned in accordance with the *Water Act's* Groundwater Protection Regulation.

- 5. Please note that future site development may create preferential pathways for vapour. In this event, further assessment and remediation of vapour may be warranted.
- 6. Please note that the attached Certificate of Compliance does not address obligations of employers regarding worker health and safety under the Workers Compensation Act and Occupational Health and Safety Regulation. Development of site-specific work procedures in accordance with Workers' Compensation Board regulations may be warranted. Please direct related questions to Worksafe BC.

Issuance of this Certificate of Compliance is a decision that may be appealed under Part 8 of the *Environmental Management Act*.

If you require clarification of any aspect of this Certificate of Compliance, please contact the undersigned at 604-582-5348 (toll free via Enquiry BC at 1-800-663-7867).

Yours truly,

Lavinia Zanini, P.Geo. Senior Contaminated Sites Officer

Enclosure

cc: Courtenay City Hall, 830 Cliffe Avenue, Courtenay, B.C., V9N 2J7

> Richard Wells, P.Eng., Approved Professional - Keystone Environmental Ltd. Suite 320 - 4400 Dominion Street, BC, V5G 4G3

Marc Cameron, Approved Professional, Core6 Environmental 777 Hornby Street, Suite 1410, Vancouver, BC V6C 1S4

CSAP Society, 613 - 744 West Hastings Street, Vancouver, BC, V6C 1A5



CERTIFICATE OF COMPLIANCE (Pursuant to Section 53 of the *Environmental Management Act*)

THIS IS TO CERTIFY that as of the date indicated below, the site identified in Schedule A of this Certificate of Compliance has been satisfactorily remediated to meet the applicable Contaminated Sites Regulation remediation standards and criteria.

This Certificate of Compliance is qualified by the requirements and conditions specified in Schedule B.

The substances for which remediation has been satisfactorily completed and for which this Certificate of Compliance is valid are listed in Schedule C.

I have issued this Certificate of Compliance based on a review of relevant information including the documents listed in Schedule D. I, however, make no representation or warranty as to the accuracy or completeness of that information.

A Director may rescind this Certificate of Compliance if requirements and conditions imposed in the Certificate of Compliance are not complied with or any fees payable under Part 4 of the Act or regulations are outstanding.

This Certificate of Compliance should not be construed as an assurance that there are no hazards present at the site.

For Director, Environmental Management Act

December 16, 2016 Date Issued

Schedule A

The site covered by this Certificate of Compliance is located at 1580-1590 Fitzgerald Avenue, Courtenay, British Columbia which is more particularly known and described as:

Lot A, (DD P54316) Section 41, Comox District, Plan 7449 PID: 001-830-392

The approximate centre of the site using the NAD (North American Datum) 1983 convention is:

Latitude:	49°	41'	1.5"
Longitude:	124°	59'	36.8"

Lavinia Zanini, P.Geo. For Director, Environmental Management Act

December 16, 2016 Date Issued





December 16, 2016 Date Issued

2

Lavinia Zanini, P.Geo. For Director, Environmental Management Act

Schedule B

Requirements and Conditions

1. Any changes in land, vapour, or water uses must be promptly identified by the responsible person in a written submission to the Director. An application for an amendment or new Certificate of Compliance may be necessary. The uses to which this condition applies are described in Schedule C and in the site investigation documents listed in Schedule D.

The documents listed in Schedule D indicate that vapour attenuation factors were applied to meet a Contaminated Sites Regulation numerical and risk-based standards at the site. These vapour attenuation factors were selected based on assumptions about the structures, locations and depths of buildings and trenches existing or expected at the site. These assumptions include the following:

a) Basements in any new buildings onsite will not extend beyond the depth of the existing basement (0.6 m depth) evaluated in the risk assessment.

Any inconsistencies that arise between the structures, locations and depths of proposed or constructed buildings at the site and the range of structures, locations and depths assumed in the selection of vapour attenuation factors in the documents listed in Schedule D must be promptly identified by the responsible person or persons in a written submission to the Director. An application for an amendment or new Certificate of Compliance may be necessary.

- 2. The principal risk controls which must be present or implemented and must be maintained at the site include the following:
 - a) Current intrinsic controls consisting of compliant surface soil (current natural barriers, >1 m thickness) will remain in place over the identified management area (Management Area 1) as follows:

Starting at the Northwest corner of Lot A, Section 41, Comox District, Plan 7449:

Thence 136°19'00" for 15.792 Metres; the point of commencement.

Thence 136°19'00" for 27.500 Metres;

Thence 226°19'00" for 5.000 Metres;

Thence 316°19'00" for 12.500 Metres;

Thence 226°19'00" for 12.500 Metres;

Thence 316°19'00" for 10.000 Metres;

Thence 226°19'00" for 10.000 Metres;

Thence 316°19'00" for 5.000 Metres;

December 16, 2016 Date Issued

Lavinia Zanini, P.Geo. For Director, Environmental Management Act

Thence 46°19'00" for 27.500 Metres;

Returning to the point of commencement.

- b) Site groundwater must not be used as a potable water resource.
- c) Deep rooting vegetation will not be established over the identified Management Area 1
- 3. If requested by the Director, the responsible person<s> must provide a signed statement indicating whether the principal risk controls listed in clause 2 of this Schedule have been and continue to be met. This may include providing a signed statement by an Approved Professional.
- 4. Performance verification must be undertaken as specified in the Performance Verification Plan listed in Schedule D or as specified in a modification of the plan approved by the Director.
- 5. Where required under a Performance Verification Plan for the site, records of performance verification actions and results must be maintained by the responsible person<s> or their agent. The records must be available for inspection by the Director.
- 6. The Director must be notified promptly by the persons responsible for the site if performance verification actions indicate that any institutional and engineering controls required in clause 2 of this Schedule are not being met. The following information must be submitted to the Director with the notification, or as soon as practicable thereafter:
 - (a) The time period over which institutional and engineering controls did not meet the requirements of Schedule B;
 - (b) The nature of the excursions;
 - (c) The temporary or permanent corrective measures implemented or to be implemented;
 - (d) An implementation schedule; and
 - (e) Supporting documentation.
- 7. If requested by the Director, a report signed by an Approved Professional must be submitted for review to the Director and must include the following:
 - (a) An evaluation of the performance of the institutional and engineering controls;

(b) Recommendations for modification of any plans referenced above, along with supporting rationale;

(c) Interpretation of current and cumulative results of the performance verification actions undertaken according to the plans described in clause 4 above; and

(d) Supporting documentation.

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Lavinia Zanini, P.Geo. For Director, Environmental Management Act

December 16, 2016 Date Issued

Schedule C

Substances and Uses

Substances remediated in soil for residential land soil use:

To meet numerical remediation standards:

- Naphthalene and phenanthrene; and,
- Benzene and xylene.

To meet risk-based remediation standards:

- VPHs, LEPHs and HEPHs; and,
- Ethylbenzene.

Substances remediated in water for freshwater aquatic life water use:

To meet numerical remediation standards:

- EPHw10-19; and,
- Naphthalene.

To meet risk-based remediation standards:

- LEPHw; and,
- Pyrene.

Substances remediated in water for protection of drinking water use:

To meet numerical remediation standards:

• EPHw₁₀₋₁₉

To meet risk-based remediation standards:

- EPH w_{10-19} ; and
- Ethylbenzene.

Lavinia Zanini, P.Geo. For Director, Environmental Management Act

December 16, 2016 Date Issued

Schedule D

Documents

- Summary of Site Condition, prepared by Richard Wells, Marc Cameron, dated 11 September 2016;
- 1580 & 1590 Fitzgerald Avenue, Courtenay, BC, Addendum Report Supplemental Site Investigation, prepared by ARCADIS Canada Inc., dated 24 May 2016;
- Performance Verification Plan (PVP) for: 1580 and 1590 Fitzgerald Avenue, Courtenay, B.C., Human Health and Ecological Risk Assessment, prepared by ARCADIS Canada Inc., dated 20 February 2016;
- The Salvation Army, Human Health and Ecological Risk Assessment, 1580 & 1590 Fitzgerald Avenue, Courtenay, BC, prepared by ARCADIS Canada Inc., dated 20 February 2016;
- Addendum Report Stage 1 PSI 1580 Fitzgerald Avenue, Courtenay, BC, prepared by ARCADIS Canada Inc., dated 31 July 2015;
- 1580 Fitzgerald Avenue Post Remediation Monitoring, prepared by Franz Environmental Inc., dated 29 January 2015;
- Update on Remedial Methods and Progress, 1580 Fitzgerald Avenue and Adjacent City of Courtenay Alleyway, Courtenay, British Columbia, prepared by Franz Environmental Inc., dated 19 December 2013;
- Update on Remedial Methods and Progress, 1580 Fitzgerald Avenue and Adjacent City of Courtenay Alleyway, Courtenay, British Columbia, prepared by Franz Environmental Inc., dated 30 September, 2013;
- Update on Remedial Methods and Progress, 1580 Fitzgerald Avenue and Adjacent City of Courtenay Alleyway, Courtenay, British Columbia, prepared by Franz Environmental Inc., dated 31 January 2013;
- Update on Remedial Methods and Progress, 1580 Fitzgerald Avenue and Adjacent City of Courtenay Alleyway, Courtenay, British Columbia, prepared by Franz Environmental Inc., dated 24 August 2012;
- Detailed Site Investigation and Site Remediation, 1580 & 1590 Fitzgerald Avenue, Courtenay, BC, prepared by Franz Environmental Inc. dated December 2013;
- Stage 2 PSI 1580 & 1590 Fitzgerald Avenue, Courtenay, BC, prepared by Franz Environmental Inc., dated September 2011; and
- Stage 1 PSI, 1580 Fitzgerald Avenue, Courtenay, BC, prepared by Franz Environmental Inc., dated January 2011.

December 16, 2016
Date Issued

Lavinia Zanini, P.Geo. For Director, Environmental Management Act