

APPENDIX C

SEISMIC SCREENING FORM

SEISMIC SCREENING INVENTORY FORM

89 Prudeaux Parks and Rec Administration
City of Nanaimo Building No. B103

Comments:

- Single Storey (14 FT)
- Load Bearing Masonry Block Exterior Walls
- Glulam beams with wood joists
- Stiff Soil (visible rock outcrops)

SEISMIC SCREENING FORM				p. 1 of 2	ITEM No.: B103
Address: 89 Prideaux		Postal Code: V9R2M6		Bldg. Name: Parks - Admin	
No. of storeys: 1	Total Floor Area: 207 m ²	Year Built: 1970	Design NBC: 1965		
Primary use (see list on p. 2): Office			Heritage Designation: N/A		
Inspector: GK		Date: April 17, 2012		Checked by:	

See attached

Sketch

See attached

Photo

TYPE OF STRUCTURE (circle appropriate descriptors) see 4.3.2			BM	BUILDING IRREGULARITIES (circle appropriate descriptors) see 4.3.3	
Wood	WLF WPB	Wood Light Frame Wood, Post and Beam	90	1. Vertical Irregularity	Abrupt changes in plan dimensions over height (e.g. setback or building on hill)
Steel	SMF SBF SLF SCW SIW	Steel Moment Frame Steel Braced Frame Steel Light Frame Steel Frame with Concrete Shear Walls Steel Frame with Infill Masonry Shear Walls	90	2. Horizontal Irregularity (Torsion)	Irregular building shapes such as "L", "V", "E", "T", eccentric stiffness in plan (e.g. shear wall on only one side of building)
Concrete	CMF CSW CIW	Concrete Moment Frame Concrete Shear Walls Concrete Frame with Infill Masonry Shear Walls	85	3. Short Concrete Columns	Short columns restrained by partial storey height walls (structural or infill) or deep spandrels
	PCF PCW	Precast Concrete Frame Precast Concrete Walls		4. Soft Storey	Severe reduction of stiffness caused by discontinuous shear walls, openings, etc.
Masonry	RML	Reinforced Masonry Bearing Walls with Wood or Metal Deck Floors or Roofs	90	5. Pounding	Separation between buildings less than 20 Z _v x no. of storeys (in mm)
	RMC	Reinforced Masonry Bearing Walls with Concrete Diaphragms		6. Major Modifications	Any change in function, use or addition which results in significant increase in loading or weight
	URM	Unreinforced Masonry Bearing Wall Building		7. Deterioration	Structural elements are damaged, poor condition of building is apparent (corroded reinforcement or steel, rotted wood, poor concrete or masonry)
				8. None	None of the irregularities listed above is present.

NON - STRUCTURAL HAZARDS (Circle appropriate descriptors) see 4.3.4

F₁ Falling Hazards to Life:
 Exterior: Masonry chimneys, parapets, veneer or stone / precast panels, non-safety glass, or canopies over exits and walkways
 Interior: Heavy components; masonry partitions; non-safety glass in egress areas; storage shelves which may collapse onto areas of human occupancy

F₂ Hazards to Continuous Operation of Special Buildings: Equipment or lifelines required for continuous operation of special facilities. The owner or authority should provide a list of critical items needed for continuing operations.

SEISMIC SCREENING FORM

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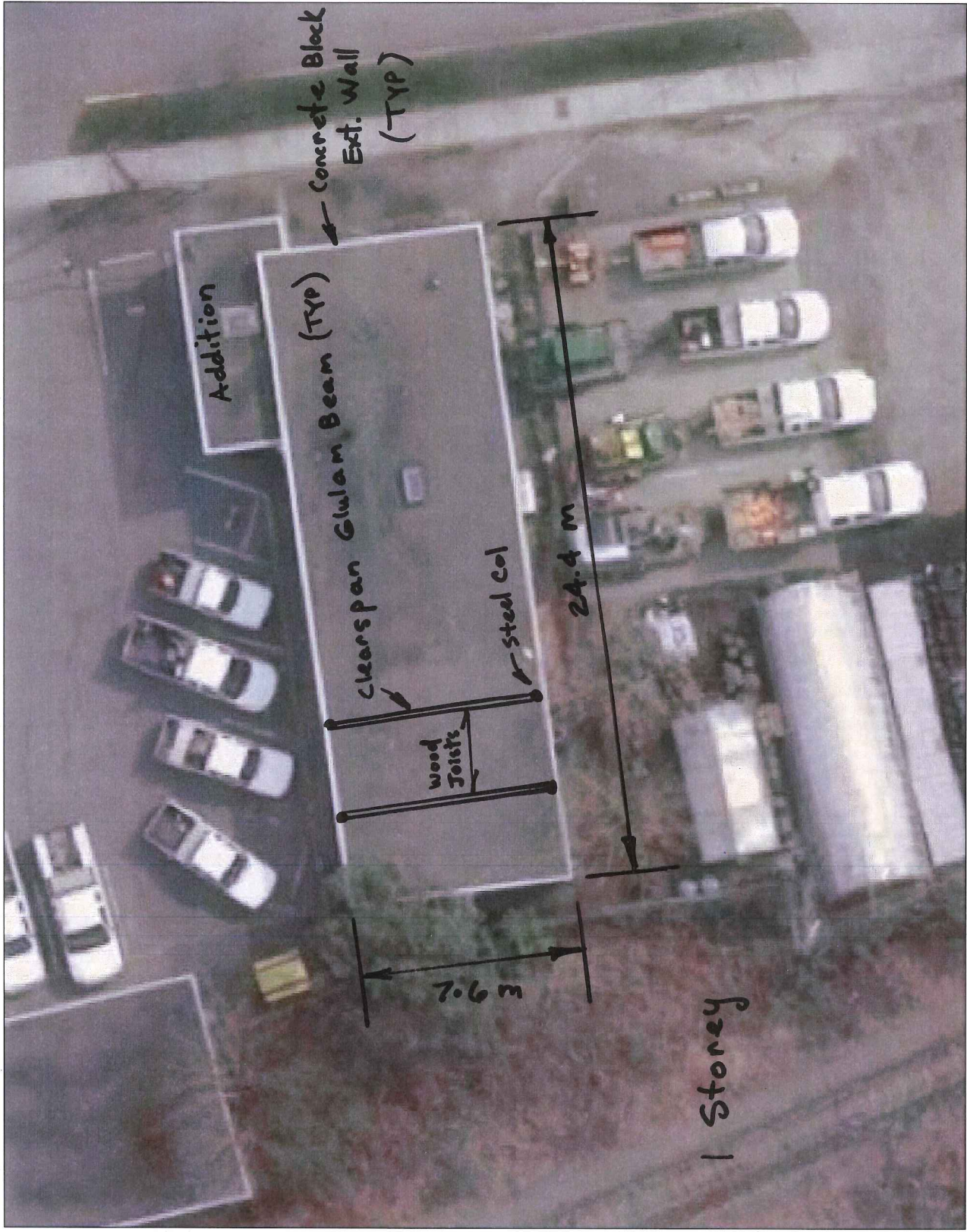
ITEM No.: B103

SEISMIC PRIORITY INDEX: Circle appropriate value and enter each result on right side. Use asterisk (*) with uncertain values

A	Seismicity	Design NBC	Effective Seismic Zone (Z_v , or $Z_v + 1$ if $Z_a > Z_v$)					A = 1.3																						
			2	3	4	5	6																							
		Pre - 65 65 - 84 Post - 85	1.0 1.0 1.0	1.5 1.0 1.0	2.0 1.3 1.0	3.0 1.5 1.0	4.0 2.0 1.0																							
B	Soil Conditions	Design NBC	Soil Category					B = 1																						
			Rock or Stiff Soil	Stiff Soil > 50 m	Soft Soil > 15 m	Very Soft or Liquefiable Soil	Unknown Soil																							
		Pre - 65 Post - 65	1.0 1.0	1.3 1.0	1.5 1.0	2.0 1.5	1.5 1.5																							
C	Type of Structure (BM = Benchmark year, see p.1)	Design NBC	Construction Type and Symbol (see p. 1)											C = 2.5																
			Wood		Steel			Concrete		Precast		Masonry Infill	Masonry																	
		Pre - 70 70 - BM Post - BM	WLF 1.2 1.2 1.0	WPB 2.0 2.0 1.0	SLF 1.0 1.0 1.0	SMF 1.2 1.2 1.0	SBF 1.5 1.5 1.0	SCW 2.0 1.5 1.0	CMF 2.5 1.5 1.0	CSW 2.0 1.5 1.0	PCF 2.5 1.8 1.0	PCW 2.0 1.5 1.0	SIW, CIW 3.0 2.0 1.0		RML, RMC 2.5 1.5 1.0	URM 3.5 3.5 -														
D	Building Irregularities	Design NBC	1. Vertical	2. Horiz.	3. Short Concrete Columns	4. Soft Storey	5. Pounding	6. Modification	7. Deterioration	8. None	D = product of circled Numbers (Max of 4.0) = 1																			
		Pre - 70 Post - 70	1.3 1.3	1.5 1.5	1.5 1.5	2.0 1.5	1.3 1.3	1.3 1.0	1.3 1.3	1.0 1.0																				
E	Building Importance	Design NBC	Low Occupancy N < 10	Normal Occupancy N = 10 - 300	School, or High Occupancy N = 301 - 3000	Post Disaster, or Very High Occup. N > 3000	Special Operational Requirements	E = 1																						
		Pre - 70 Post - 70	0.7 0.7	1.0 1.0	1.5 1.2	2.0 1.5	3.0 2.0																							
		$N = \text{Occupied Area} \times \text{Occupancy Density} \times \text{Duration Factor}^* = \dots 207 \dots \times \dots 1 \dots \times \dots 5 \dots = 10.3$																												
<table border="0"> <tr> <td>Primary Use:</td> <td>Occupancy Density Persons / m²</td> <td>Average Weekly Hours of Human Occupancy</td> <td>* Duration Factor is equal to the average weekly hours of human occupancy divided by 100, not greater than 1.0</td> </tr> <tr> <td>Assembly</td> <td>1</td> <td>5 - 50</td> <td></td> </tr> <tr> <td>Mercantile, Personal service</td> <td>0.2</td> <td>50 - 80</td> <td></td> </tr> <tr> <td>Offices, Institutional, Manufacturing</td> <td>0.1</td> <td>50 - 60</td> <td></td> </tr> <tr> <td>Residential</td> <td>0.05</td> <td>100</td> <td></td> </tr> <tr> <td>Storage</td> <td>0.01 - 0.02</td> <td>100</td> <td></td> </tr> </table>							Primary Use:	Occupancy Density Persons / m ²	Average Weekly Hours of Human Occupancy	* Duration Factor is equal to the average weekly hours of human occupancy divided by 100, not greater than 1.0	Assembly	1	5 - 50		Mercantile, Personal service	0.2	50 - 80		Offices, Institutional, Manufacturing	0.1	50 - 60		Residential	0.05	100		Storage	0.01 - 0.02	100	
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SI STRUCTURAL INDEX = A · B · C · D · E =							SI = 3.3																							
F	NON - STRUCTURAL HAZARDS		Description (see p. 1)	Pre - 70 NBC	None	Yes	Yes *	F = max (F ₁ , F ₂) = 1																						
	F ₁	Falling Hazards to Life		Post - 70 NBC	1.0	3.0	6.0																							
	F ₂	Hazards to Vital Operations		Any Year	1.0	3.0	6.0																							
* applies only if one or more of the following descriptors on page 1 are circled: SMF, CMF, soft storey, torsion																														
NSI NON - STRUCTURAL INDEX = B · E · F =							NSI = 1																							
SPI SEISMIC PRIORITY INDEX = SI + NSI =							SPI = 4.3																							
Comments: <i>Low Priority</i>																														

Item No.	Address and/or Name of Building	SI Structural Index	NSI Non-Structural Index	SPI Seismic Priority Index	Priority for Evaluation	Comments

From: Manual for Screening of Existing Buildings for Seismic Investigation, IRC / NRC, Canada, Ottawa, September 1992



89 Prideaux
Parks and Rec
Administration

SCALE 1 : 219





NORTHWEST VIEW



NORTHEAST VIEW



SOUTHEAST VIEW

**APPENDIX "G"
BUILDING COST ANALYSIS
CITY OF NANAIMO
PARKS MAINTENANCE OFFICES
89 PRIDEAUX STREET**



APPRAISAL BUILDING #: B103
GROSS FLOOR AREA: 2,233 FT²

CLASS: C

EFFECTIVE DATE: FEBRUARY 8, 2008
YEAR(S) BUILT: CIRCA 1970 & 1990

BELOW GRADE ASSETS	CRN	CRNLD
EXCAVATION, BACKFILL AND SITE PREPARATION:	7,200	3,300
FOUNDATIONS:	15,300	7,200
ARCHITECTURAL OR ENGINEERING FEES:	1,600	800
TOTAL BELOW GRADE ASSETS:	24,100	11,300

ABOVE GRADE ASSETS		
BUILDING FRAMING:	6,800	3,200
FLOOR STRUCTURE:	11,900	5,500
INTERIOR CONSTRUCTION, MEZZANINES, STAIRS:	89,300	41,900
FLOOR AND CEILING FINISHES:	30,900	14,500
PLUMBING SYSTEM, FIXTURES, AND SEWERAGE:	15,000	7,000
HEATING, VENTILATION AND AIR CONDITIONING:	19,100	9,000
ELECTRICAL AND LIGHTING:	14,300	6,700
EXTERIOR WALL CONSTRUCTION, BALCONIES:	82,800	38,800
ROOF STRUCTURE, ROOF COVERING, AND CANOPIES:	23,700	11,100
FIRE PROTECTION:	-	-
ELEVATORS:	-	-
ADDITIONAL CONSTRUCTION:	-	-
ARCHITECTURAL OR ENGINEERING FEES:	20,600	9,600
TOTAL ABOVE GRADE ASSETS:	314,400	147,300

TOTAL BELOW AND ABOVE GRADE ASSETS:	338,500	158,600
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BUILDING CODES & BYLAWS		
PARKING SPACES	MEETS CODE	-
SPECIAL NEEDS ACCESS	MEETS CODE	-
FIRE PROTECTION	MEETS CODE	-
TOTAL BUILDING CODES & BYLAWS:		-

TOTAL YARD IMPROVEMENTS:	13,400	13,400
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TOTAL CRN COST:	351,900	172,000
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FOUNDATIONS:	REINFORCED CONCRETE FOUNDATIONS
FRAMING:	LOAD BEARING MASONRY WALLS & PART STEEL COLUMNS
FLOOR STRUCTURE:	REINFORCED CONCRETE SLAB ON GRADE
INTERIOR CONSTRUCTION:	PAINTED BLOCK, PART WD FRAME & DRYWALL, ACOUSTICAL TILE
PLUMBING SYSTEM:	STANDARD FIXTURES & TYPICAL SERVICE FOR OCCUPANCY
H.V.A.C.:	FORCED AIR
ELECTRICAL AND LIGHTING:	STANDARD FIXTURES & TYPICAL SERVICE FOR OCCUPANCY
EXTERIOR WALLS:	PAINT CONCRETE BLOCK
ROOF:	WOOD JOIST & WOOD DECK WITH BUILT-UP ROOFING
FIRE PROTECTION:	NIL
ELEVATORS:	NIL
ADDITIONAL CONSTRUCTION:	NIL