

1. Everett Fire Department, Station 2

1.1 Building Description

Fire District:	Everett Fire Department
Facility Name:	Station 2
Latitude:	47.997
Longitude:	-122.199
ASCE 41 Bldg Type:	C2a
Gross Sq. Ft.:	4,225
Year Built:	1969
Number of Stories:	1
S _{XS} BSE-1E:	0.518
S _{X1} BSE-1E:	0.261
ASCE 41 Level of Seismicity:	High
Site Class:	C
V _{S30} (m/s):	475
Structural Drawings	Yes
Evaluating Firm:	Reid Middleton, Inc.



The building is a one-story 1970s-era fire station. The building has a square floor plan with an apparatus bay along at the middle of the floor, and office spaces and living quarters along east and west sides of the apparatus bay. The building has foot print of 65-feet by 65-feet with attached generator room at northeast end. The structural system consists of a cast-in-place concrete walls along exterior walls and hose tower and wood framed stud walls at the interior walls along apparatus bay. The gravity systems of the building consists of 2x6 roof joist spanning between glulam hip beams, interior wood stud walls, and exterior concrete walls forming a pyramid hip roof. The glulam hip beams are supported by 5-inch square steel tubes and exterior concrete walls. The lateral force resisting system of the building appears to be exterior concrete shear walls with plywood diaphragm the roof level.

1.1.1 Building Use

The building is use as a fire station to provide fire truck maintenance and to provide the living quarters for the department personnel.

1.1.2 Structural System

Table 1.1-1. Structural System Description of Everett Fire Station 2

Structural System	Description
Structural Roof	The roof system consists of a 5/8-inch-thick plywood over 2x6 wood joists spanning between glulam hip beams, interior wood stud walls and exterior concrete walls.
Foundations	Foundations consist of shallow continuous wall footings under exterior concrete walls and interior wood stud walls, and shallow spread footings below steel columns and concrete pilasters supporting apparatus overhead doors.
Gravity System	The gravity systems of the building consists of 2x6 roof joist spanning between glulam hip beams, interior wood stud walls, and exterior concrete walls forming a pyramid hip roof.
Lateral System	The lateral force resisting system of the building appears to be exterior concrete shear walls with plywood diaphragm the roof level.

1.1.3 Structural System Visual Condition

Table 1.1-2. Structural System Condition Description of Everett Fire Station 2

Structural System	Description
Structural Roof	The structural roof system appears to be in good condition. No deterioration was observed. However, some water stain on the ceiling were observed inside the one of the room along west end of the building.
Foundations	Foundations are not visible but appear to be in satisfactory condition with no visible indications of damage or distress.
Gravity System	The gravity system appears to be in satisfactory condition.
Lateral System	The lateral force resisting system appears to be in satisfactory condition. However, it should be noted that the lateral system consisting of exterior concrete wall pier have large height to width ration and are not reliable. Also, considering the age of the building and construction era, there are concerns about lateral system performance.

1.2 Seismic Evaluation Findings

1.2.1 Structural Seismic Deficiencies

The structural seismic deficiencies identified during the Tier 1 evaluation are summarized below. Commentary for each deficiency is also provided based on this evaluation.

Table 1-3. Identified Structural Seismic Deficiencies for Everett Fire Station 2

Deficiency	Description
Shear Stress Check	The shear stress check does not appear to be compliant. Further investigation should be completed. Lateral system strengthening or shear wall addition may be appropriate to mitigate seismic risk.
Overturning	The overturning check does not appear to be compliant. Further investigation should be completed.
Confinement Reinforcing	Based on the age of the building, it is unlikely the presence of boundary confinement reinforcements. Further investigation should be completed. Lateral system strengthening may be appropriate to mitigate seismic risk.

1.2.2 Structural Checklist Items Marked as 'Unknown'

Where building structural component seismic adequacy was unknown due to lack of available information or limited observation, the structural checklist items were marked as “unknown”. These items require further investigation if definitive determination of compliance or noncompliance is desired. The unknown structural checklist items identified during the Tier 1 evaluation are summarized below. Commentary for each unknown item is also provided based on the evaluation.

Table 1-4. Identified Structural Checklist Items Marked as Unknown for Everett Fire Station 2

Unknown Item	Description
Liquefaction	The liquefaction potential of site soils is unknown at this time given available information. \low\ liquefaction potential is identified per ICOS based on state geologic mapping. Requires further investigation by a licensed geotechnical engineer to determine liquefaction potential.
Surface Fault Rupture	Requires further investigation by a licensed geotechnical engineer to determine whether site is near locations of expected surface fault ruptures.
Transfer to Shear Walls	The available record drawings have limited information on diaphragm connections to concrete shear walls. Further investigation should be completed.
Deflection Compatibility	Secondary component details are unknown. Further investigation should be performed. Secondary component strengthening may be appropriate to mitigate seismic risk.

1.3.1 Nonstructural Seismic Deficiencies

The nonstructural seismic deficiencies identified during the Tier 1 evaluation are summarized below. Commentary for each deficiency is also provided based on this evaluation. Some nonstructural deficiencies may be able to be mitigated by school district staff. Other nonstructural components that require more substantial mitigation may be more appropriately included in a long-term mitigation strategy. Some typical conceptual details for the seismic upgrade of nonstructural components can be found in the FEMA E-74 Excerpts appendix.

Table 1-5. Identified Nonstructural Seismic Deficiencies for Everett Fire Station 2

Deficiency	Description
LSS-1 Fire Suppression Piping. HR-not required; LS-LMH; PR-LMH.	No available record drawing information on fire suppression piping and unable to verify during site investigation. Based on age of the building, it is assumed that seismic bracing for fire suppression piping do not comply with NFPA 13. Bracing for fire suppression piping may be appropriate to mitigate seismic risk.
LSS-2 Flexible Couplings. HR-not required; LS-LMH; PR-LMH.	No available record drawing information on fire suppression piping and unable to verify during site investigation. Based on age of the building, it is assumed the flexible couplings on the fire suppression piping do not comply with NFPA 13. Flexible coupling for fire suppression piping may be appropriate to mitigate seismic risk.

1.3.2 Nonstructural Checklist Items Marked as 'U'known

Where building nonstructural component seismic adequacy was unknown due to lack of available information or limited observation, the nonstructural checklist items were marked as “unknown”. These items require further investigation if definitive determination of compliance or noncompliance is desired. The unknown nonstructural checklist items identified during the Tier 1 evaluation are summarized below. Commentary for each unknown item is also provided based on the evaluation.

Some nonstructural deficiencies may be able to be mitigated by school district staff. Other nonstructural components that require more substantial mitigation may be more appropriately included in a long-term mitigation strategy. Some typical conceptual details for the seismic upgrade of nonstructural components can be found in the FEMA E-74 Excerpts appendix.

Table 1-6. Identified Nonstructural Checklist Items Marked as Unknown for Everett Fire Station 2

Unknown Item	Description
LSS-5 Sprinkler Ceiling Clearance. HR-not required; LS-MH; PR-MH.	No available record drawing information on sprinkle head clearance and unable to verify during site investigation. Evaluation of penetrations may be appropriate to mitigate seismic risk.
HM-5 Flexible Couplings. HR-LMH; LS-LMH; PR-LMH.	Flexible couplings for natural gas piping is unknown. Further investigation of mechanical piping should be performed. Flexible coupling for piping may be appropriate to mitigate seismic risk.
P-1 Light Partition Supported by ceiling. HR-not required; LS-MH; PR-LMH.	Partition wall support is known. Further investigation should be performed. The top of the partition wall may need to be laterally supported to mitigate seismic risk.
C-1 Suspended Lath and Plaster. HR-not required; LS-MH; PR-LMH.	The lath and plaster ceiling attachment is unknown. Further investigation should be performed. Appropriate ceiling attachment may need to be provided to mitigate seismic risk.
C-2 Suspended Gypsum Board. HR-not required; LS-MH; PR-LMH.	The gypsum ceiling is bracing is unknown. Further investigation should be performed. Bracing for ceilings may be appropriate to mitigate seismic risk.
LF-1 Independent Support. HR-not required; LS-MH; PR-MH.	It is unknown how much the light fixtures weigh. Based on the age of the building, it is unlikely that they are independently supported by the structure. Further investigation should be completed. Adding wires for suspending the light fixtures may be appropriate to mitigate seismic risk.
P-3 C-Clamps. HR-not required; LS-not required; PR-H.	The use of one-sided C-clamps are unknown. Further investigation should be performed.
D-2 Duct Support. HR-not required; LS-no required; PR-H.	The duct supports are unobservable. Further investigation should be performed.

Photos:



Figure 1-1. Everett Fire Station 2, Northwest Façade



Figure 1-2. Everett Fire Station 2, Partial Northeast Façade



Figure 1-3. Everett Fire Station 2, Inside Hose Tower (Looking Up)



Figure 1-4. Everett Fire Station 2, Multi-Purpose Room



Figure 1-5. Everett Fire Station 2, Ductwork at Apparatus Bay Ceiling



Figure 1-6. Everett Fire Station 2, Apparatus Bay Overhead Door Support

17-3 Immediate Occupancy Basic Configuration Checklist

Building record drawings have been reviewed, when available, and a non-destructive field investigation has been performed for the subject building. Each of the required checklist items are marked Compliant (C), Noncompliant (NC), Not Applicable (N/A), or Unknown (U). Items marked Compliant indicate conditions that satisfy the performance objective, whereas items marked Noncompliant or Unknown indicate conditions that do not. Certain statements might not apply to the building being evaluated.

Very Low Seismicity

Building System - General

C	NC	N/A	U	EVALUATION STATEMENT	COMMENT
X				LOAD PATH: The structure contains a complete, well-defined load path, including structural elements and connections, that serves to transfer the inertial forces associated with the mass of all elements of the building to the foundation. (Tier 2: Sec. 5.4.1.1; Commentary: Sec. A.2.1.1)	
		X		ADJACENT BUILDINGS: The clear distance between the building being evaluated and any adjacent building is greater than 0.5% of the height of the shorter building in low seismicity, 1.0% in moderate seismicity, and 3.0% in high seismicity. (Tier 2: Sec. 5.4.1.2; Commentary: Sec. A.2.1.2)	No adjacent building.
		X		MEZZANINES: Interior mezzanine levels are braced independently from the main structure or are anchored to the seismic-force-resisting elements of the main structure. (Tier 2: Sec. 5.4.1.3; Commentary: Sec. A.2.1.3)	No mezzanine.

Building System – Building Configuration

C	NC	N/A	U	EVALUATION STATEMENT	COMMENT
		X		WEAK STORY: The sum of the shear strengths of the seismic-force-resisting system in any story in each direction is not less than 80% of the strength in the adjacent story above. (Tier 2: Sec. 5.4.2.1; Commentary: Sec. A.2.2.2)	1-story building.
		X		SOFT STORY: The stiffness of the seismic-force-resisting system in any story is not less than 70% of the seismic-force-resisting system stiffness in an adjacent story above or less than 80% of the average seismic-force-resisting system stiffness of the three stories above. (Tier 2: Sec. 5.4.2.2; Commentary: Sec. A.2.2.3)	1-story building.
		X		VERTICAL IRREGULARITIES: All vertical elements in the seismic-force-resisting system are continuous to the foundation. (Tier 2: Sec. 5.4.2.3; Commentary: Sec. A.2.2.4)	1-story building.

Everett Fire Department, Station 2

C	NC	N/A	U	EVALUATION STATEMENT	COMMENT
		X		GEOMETRY: There are no changes in the net horizontal dimension of the seismic-force-resisting system of more than 30% in a story relative to adjacent stories, excluding one-story penthouses and mezzanines. (<i>Tier 2: Sec. 5.4.2.4; Commentary: Sec. A.2.2.5</i>)	
		X		MASS: There is no change in effective mass of more than 50% from one story to the next. Light roofs, penthouses, and mezzanines need not be considered. (<i>Tier 2: Sec. 5.4.2.5; Commentary: Sec. A.2.2.6</i>)	
		X		TORSION: The estimated distance between the story center of mass and the story center of rigidity is less than 20% of the building width in either plan dimension. (<i>Tier 2: Sec. 5.4.2.6; Commentary: Sec. A.2.2.7</i>)	Square building, no torsion.

Everett Fire Department, Station 2

Low Seismicity

(Complete the Following Items in Addition to the Items for Very Low Seismicity)

Geologic Site Hazards

C	NC	N/A	U	EVALUATION STATEMENT	COMMENT
			X	LIQUEFACTION: Liquefaction-susceptible, saturated, loose granular soils that could jeopardize the building's seismic performance do not exist in the foundation soils at depths within 50 ft (15.2 m) under the building. (Tier 2: Sec. 5.4.3.1; Commentary: Sec. A.6.1.1)	Geotechnical report not available for review.
		X		SLOPE FAILURE: The building site is located away from potential earthquake-induced slope failures or rockfalls so that it is unaffected by such failures or is capable of accommodating any predicted movements without failure. (Tier 2: Sec. 5.4.3.1; Commentary: Sec. A.6.1.2)	Building is founded on flat ground.
			X	SURFACE FAULT RUPTURE: Surface fault rupture and surface displacement at the building site are not anticipated. (Tier 2: Sec. 5.4.3.1 ; Commentary: Sec.A.6.1.3)	Geotechnical report not available for review.

Moderate and High Seismicity

(Complete the Following Items in Addition to the Items for Low Seismicity)

Foundation Configuration

C	NC	N/A	U	EVALUATION STATEMENT	COMMENT
X				OVERTURNING: The ratio of the least horizontal dimension of the seismic-force-resisting system at the foundation level to the building height (base/height) is greater than $0.6S_a$. (Tier 2: Sec. 5.4.3.3; Commentary: Sec. A.6.2.1)	
X				TIES BETWEEN FOUNDATION ELEMENTS: The foundation has ties adequate to resist seismic forces where footings, piles, and piers are not restrained by beams, slabs, or soils classified as Site Class A, B, or C. (Tier 2: Sec. 5.4.3.4; Commentary: Sec. A.6.2.2)	Shallow foundation is tied by concrete slab-on-grade.

Note: C = Compliant, NC = Noncompliant, N/A = Not Applicable, and U = Unknown.

Everett Fire Department, Station 2

17-25. Immediate Occupancy Structural Checklist for Building Types C2 and C2a

Building record drawings have been reviewed, when available, and a non-destructive field investigation has been performed for the subject building. Each of the required checklist items are marked Compliant (C), Noncompliant (NC), Not Applicable (N/A), or Unknown (U). Items marked Compliant indicate conditions that satisfy the performance objective, whereas items marked Noncompliant or Unknown indicate conditions that do not. Certain statements might not apply to the building being evaluated.

Very Low Seismicity

Seismic-Force-Resisting System

C	NC	N/A	U	EVALUATION STATEMENT	COMMENT
X				COMPLETE FRAMES: Steel or concrete frames classified as secondary components form a complete vertical-load-carrying system. (Tier 2: Sec. 5.5.2.5.1; Commentary: Sec. A.3.1.6.1)	
X				REDUNDANCY: The number of lines of shear walls in each principal direction is greater than or equal to 2. (Tier 2: Sec. 5.5.1.1; Commentary: Sec. A.3.2.1.1)	Two lines of shear walls each directions.
	X			SHEAR STRESS CHECK: The shear stress in the concrete shear walls, calculated using the Quick Check procedure of Section 4.4.3.3, is less than the greater of 100 lb/in. ² (0.69 MPa) or $2\sqrt{f'_c}$. (Tier 2: Sec. 5.5.3.1.1; Commentary: Sec. A.3.2.2.1)	The shear stress in the concrete walls is greater than 100psi.
X				REINFORCING STEEL: The ratio of reinforcing steel area to gross concrete area is not less than 0.0012 in the vertical direction and 0.0020 in the horizontal direction. The spacing of reinforcing steel is equal to or less than 18 in. (457 mm). (Tier 2: Sec. 5.5.3.1.3; Commentary: Sec. A.3.2.2.2)	

Connections

C	NC	N/A	U	EVALUATION STATEMENT	COMMENT
X				WALL ANCHORAGE AT FLEXIBLE DIAPHRAGMS: Exterior concrete or masonry walls that are dependent on flexible diaphragms for lateral support are anchored for out-of-plane forces at each diaphragm level with steel anchors, reinforcing dowels, or straps that are developed into the diaphragm. Connections have strength to resist the connection force calculated in the Quick Check procedure of Section 4.4.3.7. (Tier 2: Sec. 5.7.1.1; Commentary: Sec. A.5.1.1)	
			X	TRANSFER TO SHEAR WALLS: Diaphragms are connected for transfer of loads to the shear walls, and the connections are able to develop the lesser of the shear strength of the walls or diaphragms. (Tier 2: Sec. 5.7.2; Commentary: Sec. A.5.2.1)	Diaphragm connections are unknown. Available record drawings do not have information on diaphragm connections to concrete walls.
X				FOUNDATION DOWELS: Wall reinforcement is doweled into the foundation, and the dowels are able to develop the lesser of the strength of the walls or the uplift capacity of the foundation. (Tier 2: Sec. 5.7.3.4; Commentary: Sec. A.5.3.5)	

Everett Fire Department, Station 2

Foundation System

C	NC	N/A	U	EVALUATION STATEMENT	COMMENT
		X		DEEP FOUNDATIONS: Piles and piers are capable of transferring the lateral forces between the structure and the soil. <i>(Commentary: Sec.A.6.2.3)</i>	No deep foundation.
		X		SLOPING SITES: The difference in foundation embedment depth from one side of the building to another does not exceed one story. <i>(Commentary: Sec. A.6.2.4)</i>	Building is founded on relatively flat grade.

Everett Fire Department, Station 2

Low, Moderate, and High Seismicity

(Complete the Following Items in Addition to the Items for Very Low Seismicity)

Seismic-Force-Resisting System

C	NC	N/A	U	EVALUATION STATEMENT	COMMENT
			X	DEFLECTION COMPATIBILITY: Secondary components have the shear capacity to develop the flexural strength of the components and are compliant with the following items in Table 17-23: COLUMN-BAR SPLICES, BEAM-BAR SPLICES, COLUMN-TIE SPACING, STIRRUP SPACING, and STIRRUP AND TIE HOOKS. (Tier 2: Sec. 5.5.2.5.2; Commentary: Sec. A.3.1.6.2)	
		X		FLAT SLABS: Flat slabs or plates not part of seismic-force-resisting system have continuous bottom steel through the column joints. (Tier 2: Sec. 5.5.2.5.3; Commentary: Sec. A.3.1.6.3)	
		X		COUPLING BEAMS: The ends of both walls to which the coupling beam is attached are supported at each end to resist vertical loads caused by overturning. Coupling beams have the capacity in shear to develop the uplift capacity of the adjacent wall. (Tier 2: Sec. 5.5.3.2.1; Commentary: Sec. A.3.2.2.3)	No coupling beams.
	X			OVERTURNING: All shear walls have aspect ratios less than 4-to-1. Wall piers need not be considered. (Tier 2: Sec. 5.5.3.1.4; Commentary: Sec. A.3.2.2.4)	Concrete walls appear to have aspect ratio greater than 4-to-1.
	X			CONFINEMENT REINFORCING: For shear walls with aspect ratios greater than 2-to-1, the boundary elements are confined with spirals or ties with spacing less than $8d_b$. (Tier 2: Sec. 5.5.3.2.2; Commentary: Sec. A.3.2.2.5)	Available record drawings do not have information on boundary reinforcements. However, based on the age of the building, it is unlikely the presence of boundary reinforcements.
			X	WALL REINFORCING AT OPENINGS: There is added trim reinforcement around all wall openings with a dimension greater than three times the thickness of the wall. (Tier 2: Sec. 5.5.3.1.5; Commentary: Sec. A.3.2.2.6)	Available record drawings do not have information on trim reinforcements.
X				WALL THICKNESS: Thicknesses of bearing walls are not less than 1/25 the unsupported height or length, whichever is shorter, nor less than 4 in. (101 mm). (Tier 2: Sec. 5.5.3.1.2; Commentary: Sec. A.3.2.2.7)	8-inch concrete walls.

Diaphragms (Stiff or Flexible)

C	NC	N/A	U	EVALUATION STATEMENT	COMMENT
X				DIAPHRAGM CONTINUITY: The diaphragms are not composed of split-level floors and do not have expansion joints. (Tier 2: Sec. 5.6.1.1; Commentary: Sec. A.4.1.1)	
X				OPENINGS AT SHEAR WALLS: Diaphragm openings immediately adjacent to the shear walls are less than 15% of the wall length. (Tier 2: Sec. 5.6.1.3; Commentary: Sec. A.4.1.4)	
X				PLAN IRREGULARITIES: There is tensile capacity to develop the strength of the diaphragm at reentrant corners or other locations of plan irregularities. (Tier 2: Sec. 5.6.1.4; Commentary: Sec. A.4.1.7)	No irregularity, square building.

Everett Fire Department, Station 2

C	NC	N/A	U	EVALUATION STATEMENT	COMMENT
		X		DIAPHRAGM REINFORCEMENT AT OPENINGS: There is reinforcing around all diaphragm openings larger than 50% of the building width in either major plan dimension. <i>(Tier 2: Sec. 5.6.1.5; Commentary: Sec. A.4.1.8)</i>	No openings at roof diaphragm.

Flexible Diaphragms

C	NC	N/A	U	EVALUATION STATEMENT	COMMENT
X				CROSS TIES: There are continuous cross ties between diaphragm chords. <i>(Tier 2: Sec. 5.6.1.2; Commentary: Sec. A.4.1.2)</i>	
X				STRAIGHT SHEATHING: All straight-sheathed diaphragms have aspect ratios less than 1-to-1 in the direction being considered. <i>(Tier 2: Sec. 5.6.2; Commentary: Sec. A.4.2.1)</i>	
X				SPANS: All wood diaphragms with spans greater than 12 ft (3.6 m) consist of wood structural panels or diagonal sheathing. <i>(Tier 2: Sec. 5.6.2; Commentary: Sec. A.4.2.2)</i>	
		X		DIAGONALLY SHEATHED AND UNBLOCKED DIAPHRAGMS: All diagonally sheathed or unblocked wood structural panel diaphragms have horizontal spans less than 30 ft (9.2 m) and aspect ratios less than or equal to 3-to-1. <i>(Tier 2: Sec. 5.6.2; Commentary: Sec. A.4.2.3)</i>	Straight sheathing
		X		NONCONCRETE FILLED DIAPHRAGMS: Untopped metal deck diaphragms or metal deck diaphragms with fill other than concrete consist of horizontal spans of less than 40 ft (12.2 m) and have aspect ratios less than 4-to-1. <i>(Tier 2: Sec. 5.6.3; Commentary: Sec. A.4.3.1)</i>	Plywood sheathing
X				OTHER DIAPHRAGMS: Diaphragms do not consist of a system other than wood, metal deck, concrete, or horizontal bracing. <i>(Tier 2: Sec. 5.6.5; Commentary: Sec. A.4.7.1)</i>	

Connections

C	NC	N/A	U	EVALUATION STATEMENT	COMMENT
		X		UPLIFT AT PILE CAPS: Pile caps have top reinforcement, and piles are anchored to the pile caps; the pile cap reinforcement and pile anchorage are able to develop the tensile capacity of the piles. <i>(Tier 2: Sec. 5.7.3.5; Commentary: Sec. A.5.3.8)</i>	No pile foundation.

Note: C = Compliant, NC = Noncompliant, N/A = Not Applicable, and U = Unknown.

Everett Fire Department, Station 2

17-38. Nonstructural Checklist

Notes:

C = Compliant, NC = Noncompliant, N/A = Not Applicable, and U = Unknown.

Performance Level: HR = Hazards Reduced, LS = Life Safety, and PR =

Position Retention. Level of Seismicity: L = Low, M = Moderate, and H = High

Life Safety Systems

C	NC	N/A	U	EVALUATION STATEMENT ^{a,b}	COMMENT
	X			HR—not required; LS—LMH; PR—LMH. FIRE SUPPRESSION PIPING: Fire suppression piping is anchored and braced in accordance with NFPA-13. (<i>Tier 2: Sec. 13.7.4; Commentary: Sec. A.7.13.1</i>)	Bracing at sprinkler piping is nonexistent.
	X			HR—not required; LS—LMH; PR—LMH. FLEXIBLE COUPLINGS: Fire suppression piping has flexible couplings in accordance with NFPA-13. (<i>Tier 2: Sec. 13.7.4; Commentary: Sec. A.7.13.2</i>)	
		X		HR—not required; LS—LMH; PR—LMH. EMERGENCY POWER: Equipment used to power or control Life Safety systems is anchored or braced. (<i>Tier 2: Sec. 13.7.7; Commentary: Sec. A.7.12.1</i>)	No Emergency power generator.
		X		HR—not required; LS—LMH; PR—LMH. STAIR AND SMOKE DUCTS: Stair pressurization and smoke control ducts are braced and have flexible connections at seismic joints. (<i>Tier 2: Sec. 13.7.6; Commentary: Sec. A.7.14.1</i>)	No stair in the building.
			X	HR—not required; LS—MH; PR—MH. SPRINKLER CEILING CLEARANCE: Penetrations through panelized ceilings for fire suppression devices provide clearances in accordance with NFPA-13. (<i>Tier 2: Sec. 13.7.4; Commentary: Sec. A.7.13.3</i>)	Sprinkler system is below the ceiling.
X				HR—not required; LS—not required; PR—LMH. EMERGENCY LIGHTING: Emergency and egress lighting equipment is anchored or braced. (<i>Tier 2: Sec. 13.7.9; Commentary: Sec. A.7.3.1</i>)	

Hazardous Materials

C	NC	N/A	U	EVALUATION STATEMENT ^{a,b}	COMMENT
		X		HR—LMH; LS—LMH; PR—LMH. HAZARDOUS MATERIAL EQUIPMENT: Equipment mounted on vibration isolators and containing hazardous material is equipped with restraints or snubbers. (<i>Tier 2: Sec. 13.7.1; Commentary: Sec. A.7.12.2</i>)	No hazardous material equipment on vibration isolator.
		X		HR—LMH; LS—LMH; PR—LMH. HAZARDOUS MATERIAL STORAGE: Breakable containers that hold hazardous material, including gas cylinders, are restrained by latched doors, shelf lips, wires, or other methods. (<i>Tier 2: Sec. 13.8.3; Commentary: Sec. A.7.15.1</i>)	No hazardous material in the building.

Everett Fire Department, Station 2

C	NC	N/A	U	EVALUATION STATEMENT ^{a,b}	COMMENT
		X		HR—MH; LS—MH; PR—MH. HAZARDOUS MATERIAL DISTRIBUTION: Piping or ductwork conveying hazardous materials is braced or otherwise protected from damage that would allow hazardous material release. (<i>Tier 2: Sec. 13.7.3, 13.7.5; Commentary: Sec. A.7.13.4</i>)	
X				HR—MH; LS—MH; PR—MH. SHUTOFF VALVES: Piping containing hazardous material, including natural gas, has shutoff valves or other devices to limit spills or leaks. (<i>Tier 2: Sec. 13.7.3, 13.7.5; Commentary: Sec. A.7.13.3</i>)	Natural gas shutoff valve in kitchen
			X	HR—LMH; LS—LMH; PR—LMH. FLEXIBLE COUPLINGS: Hazardous material ductwork and piping, including natural gas piping, have flexible couplings. (<i>Tier 2: Sec. 13.7.3, 13.7.5; Commentary: Sec. A.7.15.4</i>)	Natural gas piping unknown.
		X		HR—MH; LS—MH; PR—MH. PIPING OR DUCTS CROSSING SEISMIC JOINTS: Piping or ductwork carrying hazardous material that either crosses seismic joints or isolation planes or is connected to independent structures has couplings or other details to accommodate the relative seismic displacements. (<i>Tier 2: Sec. 13.7.3, 13.7.5, 13.7.6; Commentary: Sec. A.7.13.6</i>)	No seismic joint exists.

Partitions

C	NC	N/A	U	EVALUATION STATEMENT ^{a,b}	COMMENT
		X		HR—LMH; LS—LMH; PR—LMH. UNREINFORCED MASONRY: Unreinforced masonry or hollow-clay tile partitions are braced at a spacing of at most 10 ft (3.0 m) in Low or Moderate Seismicity, or at most 6 ft (1.8 m) in High Seismicity. (<i>Tier 2: Sec. 13.6.2; Commentary: Sec. A.7.1.1</i>)	No URM partition walls.
		X		HR—LMH; LS—LMH; PR—LMH. HEAVY PARTITIONS SUPPORTED BY CEILINGS: The tops of masonry or hollow-clay tile partitions are not laterally supported by an integrated ceiling system. (<i>Tier 2: Sec. 13.6.2; Commentary: Sec. A.7.2.1</i>)	No URM partition walls.
		X		HR—not required; LS—MH; PR—MH. DRIFT: Rigid cementitious partitions are detailed to accommodate the following drift ratios: in steel moment frame, concrete moment frame, and wood frame buildings, 0.02; in other buildings, 0.005. (<i>Tier 2: Sec. 13.6.2; Commentary: Sec. A.7.1.2</i>)	
			X	HR—not required; LS—not required; PR—MH. LIGHT PARTITIONS SUPPORTED BY CEILINGS: The tops of gypsum board partitions are not laterally supported by an integrated ceiling system. (<i>Tier 2: Sec. 13.6.2; Commentary: Sec. A.7.2.1</i>)	Partition walls support unknown.
		X		HR—not required; LS—not required; PR—MH. STRUCTURAL SEPARATIONS: Partitions that cross structural separations have seismic or control joints. (<i>Tier 2: Sec. 13.6.2; Commentary: Sec. A.7.1.3</i>)	No structural separation exist.
		X		HR—not required; LS—not required; PR—MH. TOPS: The tops of ceiling-high framed or panelized partitions have lateral bracing to the structure at a spacing equal to or less than 6 ft (1.8 m). (<i>Tier 2: Sec. 13.6.2; Commentary: Sec. A.7.1.4</i>)	

Everett Fire Department, Station 2

Ceilings

C	NC	N/A	U	EVALUATION STATEMENT ^{a,b}	COMMENT
			X	HR—H; LS—MH; PR—LMH. SUSPENDED LATH AND PLASTER: Suspended lath and plaster ceilings have attachments that resist seismic forces for every 12 ft ² (1.1 m ²) of area. (Tier 2: Sec. 13.6.4; Commentary: Sec. A.7.2.3)	Available record drawings do not have information on suspended ceiling supports.
			X	HR—not required; LS—MH; PR—LMH. SUSPENDED GYPSUM BOARD: Suspended gypsum board ceilings have attachments that resist seismic forces for every 12 ft ² (1.1 m ²) of area. (Tier 2: Sec. 13.6.4; Commentary: Sec. A.7.2.3)	Available record drawing do not have information on suspended ceiling support.
			X	HR—not required; LS—not required; PR—MH. INTEGRATED CEILINGS: Integrated suspended ceilings with continuous areas greater than 144 ft ² (13.4 m ²) and ceilings of smaller areas that are not surrounded by restraining partitions are laterally restrained at a spacing no greater than 12 ft (3.6 m) with members attached to the structure above. Each restraint location has a minimum of four diagonal wires and compression struts, or diagonal members capable of resisting compression. (Tier 2: Sec. 13.6.4; Commentary: Sec. A.7.2.2)	
			X	HR—not required; LS—not required; PR—MH. EDGE CLEARANCE: The free edges of integrated suspended ceilings with continuous areas greater than 144 ft ² (13.4 m ²) have clearances from the enclosing wall or partition of at least the following: in Moderate Seismicity, 1/2 in. (13 mm); in High Seismicity, 3/4 in. (19 mm). (Tier 2: Sec. 13.6.4; Commentary: Sec. A.7.2.4)	Available record drawing do not have information on suspended ceiling support.
		X		HR—not required; LS—not required; PR—MH. CONTINUITY ACROSS STRUCTURE JOINTS: The ceiling system does not cross any seismic joint and is not attached to multiple independent structures. (Tier 2: Sec. 13.6.4; Commentary: Sec. A.7.2.5)	No seismic joint exists.
			X	HR—not required; LS—not required; PR—H. EDGE SUPPORT: The free edges of integrated suspended ceilings with continuous areas greater than 144 ft ² (13.4 m ²) are supported by closure angles or channels not less than 2 in. (51 mm) wide. (Tier 2: Sec. 13.6.4; Commentary: Sec. A.7.2.6)	Available record drawing do not have information on suspended ceiling support.
		X		HR—not required; LS—not required; PR—H. SEISMIC JOINTS: Acoustical tile or lay-in panel ceilings have seismic separation joints such that each continuous portion of the ceiling is no more than 2,500 ft ² (232.3 m ²) and has a ratio of long-to-short dimension no more than 4-to-1. (Tier 2: Sec. 13.6.4; Commentary: Sec. A.7.2.7)	No seismic joint exists.

Light Fixtures

C	NC	N/A	U	EVALUATION STATEMENT ^{a,b}	COMMENT
			X	HR—not required; LS—MH; PR—MH. INDEPENDENT SUPPORT: Light fixtures that weigh more per square foot than the ceiling they penetrate are supported independent of the grid ceiling suspension system by a minimum of two wires at diagonally opposite corners of each fixture. (Tier 2: Sec. 13.6.4, 13.7.9; Commentary: Sec. A.7.3.2)	Available record drawing do not have information on light supports.

Everett Fire Department, Station 2

C	NC	N/A	U	EVALUATION STATEMENT ^{a,b}	COMMENT
X				HR—not required; LS—not required; PR—H. PENDANT SUPPORTS: Light fixtures on pendant supports are attached at a spacing equal to or less than 6 ft. Unbraced suspended fixtures are free to allow a 360-degree range of motion at an angle not less than 45 degrees from horizontal without contacting adjacent components. Alternatively, if rigidly supported and/or braced, they are free to move with the structure to which they are attached without damaging adjoining components. Additionally, the connection to the structure is capable of accommodating the movement without failure. (<i>Tier 2: Sec. 13.7.9; Commentary: Sec. A.7.3.3</i>)	
X				HR—not required; LS—not required; PR—H. LENS COVERS: Lens covers on light fixtures are attached with safety devices. (<i>Tier 2: Sec. 13.7.9; Commentary: Sec. A.7.3.4</i>)	

Cladding and Glazing

C	NC	N/A	U	EVALUATION STATEMENT ^{a,b}	COMMENT
		X		HR—MH; LS—MH; PR—MH. CLADDING ANCHORS: Cladding components weighing more than 10 lb/ft ² (0.48 kN/m ²) are mechanically anchored to the structure at a spacing equal to or less than the following: for Life Safety in Moderate Seismicity, 6 ft (1.8 m); for Life Safety in High Seismicity and for Position Retention in any seismicity, 4 ft (1.2 m) (<i>Tier 2: Sec. 13.6.1; Commentary: Sec. A.7.4.1</i>)	No cladding in the building.
		X		HR—not required; LS—MH; PR—MH. CLADDING ISOLATION: For steel or concrete moment-frame buildings, panel connections are detailed to accommodate a story drift ratio by the use of rods attached to framing with oversize holes or slotted holes of at least the following: for Life Safety in Moderate Seismicity, 0.01; for Life Safety in High Seismicity and for Position Retention in any seismicity, 0.02, and the rods have a length-to-diameter ratio of 4.0 or less. (<i>Tier 2: Sec. 13.6.1; Commentary: Sec. A.7.4.3</i>)	
		X		HR—MH; LS—MH; PR—MH. MULTI-STORY PANELS: For multi-story panels attached at more than one floor level, panel connections are detailed to accommodate a story drift ratio by the use of rods attached to framing with oversize holes or slotted holes of at least the following: for Life Safety in Moderate Seismicity, 0.01; for Life Safety in High Seismicity and for Position Retention in any seismicity, 0.02, and the rods have a length-to-diameter ratio of 4.0 or less. (<i>Tier 2: Sec. 13.6.1; Commentary: Sec. A.7.4.4</i>)	
		X		HR—not required; LS—MH; PR—MH. THREADED RODS: Threaded rods for panel connections detailed to accommodate drift by bending of the rod have a length-to-diameter ratio greater than 0.06 times the story height in inches for Life Safety in Moderate Seismicity and 0.12 times the story height in inches for Life Safety in High Seismicity and Position Retention in any seismicity. (<i>Tier 2: Sec. 13.6.1; Commentary: Sec. A.7.4.9</i>)	

Everett Fire Department, Station 2

C	NC	N/A	U	EVALUATION STATEMENT ^{a,b}	COMMENT
		X		HR—MH; LS—MH; PR—MH. PANEL CONNECTIONS: Cladding panels are anchored out of plane with a minimum number of connections for each wall panel, as follows: for Life Safety in Moderate Seismicity, 2 connections; for Life Safety in High Seismicity and for Position Retention in any seismicity, 4 connections. (<i>Tier 2: Sec. 13.6.1.4; Commentary: Sec. A.7.4.5</i>)	
		X		HR—MH; LS—MH; PR—MH. BEARING CONNECTIONS: Where bearing connections are used, there is a minimum of two bearing connections for each cladding panel. (<i>Tier 2: Sec. 13.6.1.4; Commentary: Sec. A.7.4.6</i>)	
		X		HR—MH; LS—MH; PR—MH. INSERTS: Where concrete cladding components use inserts, the inserts have positive anchorage or are anchored to reinforcing steel. (<i>Tier 2: Sec. 13.6.1.4; Commentary: Sec. A.7.4.7</i>)	
		X		HR—not required; LS—MH; PR—MH. OVERHEAD GLAZING: Glazing panes of any size in curtain walls and individual interior or exterior panes more than 16 ft ² (1.5 m ²) in area are laminated annealed or laminated heat-strengthened glass and are detailed to remain in the frame when cracked. (<i>Tier 2: Sec. 13.6.1.5; Commentary: Sec. A.7.4.8</i>)	No curtain walls.

Masonry Veneer

C	NC	N/A	U	EVALUATION STATEMENT ^{a,b}	COMMENT
		X		HR—not required; LS—LMH; PR—LMH. TIES: Masonry veneer is connected to the backup with corrosion-resistant ties. There is a minimum of one tie for every 2-2/3 ft ² (0.25 m ²), and the ties have spacing no greater than the following: for Life Safety in Low or Moderate Seismicity, 36 in. (914 mm); for Life Safety in High Seismicity and for Position Retention in any seismicity, 24 in. (610 mm). (<i>Tier 2: Sec. 13.6.1.2; Commentary: Sec. A.7.5.1</i>)	No masonry veneer.
		X		HR—not required; LS—LMH; PR—LMH. SHELF ANGLES: Masonry veneer is supported by shelf angles or other elements at each floor above the ground floor. (<i>Tier 2: Sec. 13.6.1.2; Commentary: Sec. A.7.5.2</i>)	No masonry veneer.
		X		HR—not required; LS—LMH; PR—LMH. WEAKENED PLANES: Masonry veneer is anchored to the backup adjacent to weakened planes, such as at the locations of flashing. (<i>Tier 2: Sec. 13.6.1.2; Commentary: Sec. A.7.5.3</i>)	No masonry veneer.
		X		HR—LMH; LS—LMH; PR—LMH. UNREINFORCED MASONRY BACKUP: There is no unreinforced masonry backup. (<i>Tier 2: Sec. 13.6.1.1, 13.6.1.2; Commentary: Sec. A.7.7.2</i>)	No masonry veneer.
		X		HR—not required; LS—MH; PR—MH. STUD TRACKS: For veneer with coldformed steel stud backup, stud tracks are fastened to the structure at a spacing equal to or less than 24 in. (610 mm) on center. (<i>Tier 2: Sec. 13.6.1.1, 13.6.1.2; Commentary: Sec. A.7.6.</i>)	No masonry veneer.

Everett Fire Department, Station 2

		X		HR—not required; LS—MH; PR—MH. ANCHORAGE: For veneer with concrete block or masonry backup, the backup is positively anchored to the structure at a horizontal spacing equal to or less than 4 ft along the floors and roof. <i>(Tier 2: Sec. 13.6.1.1, 13.6.1.2; Commentary: Sec. A.7.7.1)</i>	No masonry veneer.
		X		HR—not required; LS—not required; PR—MH. WEEP HOLES: In veneer anchored to stud walls, the veneer has functioning weep holes and base flashing. <i>(Tier 2: Sec. 13.6.1.2; Commentary: Sec. A.7.5.6)</i>	No masonry veneer.
				HR—not required; LS—not required; PR—MH. OPENINGS: For veneer with cold-formed-steel stud backup, steel studs frame window and door openings. <i>(Tier 2: Sec. 13.6.1.1, 13.6.1.2; Commentary: Sec. A.7.6.2)</i>	

Parapets, Cornices, Ornamentation, and Appendages

C	NC	N/A	U	EVALUATION STATEMENT ^{a,b}	COMMENT
		X		HR—LMH; LS—LMH; PR—LMH. URM PARAPETS OR CORNICES: Laterally unsupported unreinforced masonry parapets or cornices have height-to-thickness ratios no greater than the following: for Life Safety in Low or Moderate Seismicity, 2.5; for Life Safety in High Seismicity and for Position Retention in any seismicity, 1.5. <i>(Tier 2: Sec. 13.6.5; Commentary: Sec. A.7.8.1)</i>	No parapet.
		X		HR—not required; LS—LMH; PR—LMH. CANOPIES: Canopies at building exits are anchored to the structure at a spacing no greater than the following: for Life Safety in Low or Moderate Seismicity, 10 ft (3.0 m); for Life Safety in High Seismicity and for Position Retention in any seismicity, 6 ft (1.8 m). <i>(Tier 2: Sec. 13.6.6; Commentary: Sec. A.7.8.2)</i>	No canopy.
		X		HR—H; LS—MH; PR—LMH. CONCRETE PARAPETS: Concrete parapets with height-to-thickness ratios greater than 2.5 have vertical reinforcement. <i>(Tier 2: Sec. 13.6.5; Commentary: Sec. A.7.8.3)</i>	
		X		HR—MH; LS—MH; PR—LMH. APPENDAGES: Cornices, parapets, signs, and other ornamentation or appendages that extend above the highest point of anchorage to the structure or cantilever from components are reinforced and anchored to the structural system at a spacing equal to or less than 6 ft (1.8 m). This evaluation statement item does not apply to parapets or cornices covered by other evaluation statements. <i>(Tier 2: Sec. 13.6.6; Commentary: Sec. A.7.8.4)</i>	

Masonry Chimneys

C	NC	N/A	U	EVALUATION STATEMENT ^{a,b}	COMMENT
		X		HR—LMH; LS—LMH; PR—LMH. URM CHIMNEYS: Unreinforced masonry chimneys extend above the roof surface no more than the following: for Life Safety in Low or Moderate Seismicity, 3 times the least dimension of the chimney; for Life Safety in High Seismicity and for Position Retention in any seismicity, 2 times the least dimension of the chimney. <i>(Tier 2: Sec. 13.6.7; Commentary: Sec. A.7.9.1)</i>	NO masonry chimney in the building.

Everett Fire Department, Station 2

		X	HR—LMH; LS—LMH; PR—LMH. ANCHORAGE: Masonry chimneys are anchored at each floor level, at the topmost ceiling level, and at the roof. (<i>Tier 2: Sec. 13.6.7; Commentary: Sec. A.7.9.2</i>)	
--	--	---	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

Everett Fire Department, Station 2

Stairs

C	NC	N/A	U	EVALUATION STATEMENT ^{a,b}	COMMENT
		X		HR—not required; LS—LMH; PR—LMH. STAIR ENCLOSURES: Hollow-clay tile or unreinforced masonry walls around stair enclosures are restrained out of plane and have height-to-thickness ratios not greater than the following: for Life Safety in Low or Moderate Seismicity, 15-to-1; for Life Safety in High Seismicity and for Position Retention in any seismicity, 12-to-1. (<i>Tier 2: Sec. 13.6.2, 13.6.8; Commentary: Sec. A.7.10.1</i>)	
		X		HR—not required; LS—LMH; PR—LMH. STAIR DETAILS: The connection between the stairs and the structure does not rely on post-installed anchors in concrete or masonry, and the stair details are capable of accommodating the drift calculated using the Quick Check procedure of Section 4.4.3.1 for moment-frame structures or 0.5 in. for all other structures without including any lateral stiffness contribution from the stairs. (<i>Tier 2: Sec. 13.6.8; Commentary: Sec. A.7.10.2</i>)	

Contents and Furnishings

C	NC	N/A	U	EVALUATION STATEMENT ^{a,b}	COMMENT
		X		HR—LMH; LS—MH; PR—MH. INDUSTRIAL STORAGE RACKS: Industrial storage racks or pallet racks more than 12 ft high meet the requirements of ANSI/RMI MH 16.1 as modified by ASCE 7, Chapter 15. (<i>Tier 2: Sec. 13.8.1; Commentary: Sec. A.7.11.1</i>)	No industrial storage racks.
		X		HR—not required; LS—H; PR—MH. TALL NARROW CONTENTS: Contents more than 6 ft (1.8 m) high with a height-to-depth or height-to-width ratio greater than 3-to-1 are anchored to the structure or to each other. (<i>Tier 2: Sec. 13.8.2; Commentary: Sec. A.7.11.2</i>)	
		X		HR—not required; LS—H; PR—H. FALL-PRONE CONTENTS: Equipment, stored items, or other contents weighing more than 20 lb (9.1 kg) whose center of mass is more than 4 ft (1.2 m) above the adjacent floor level are braced or otherwise restrained. (<i>Tier 2: Sec. 13.8.2; Commentary: Sec. A.7.11.3</i>)	
		X		HR—not required; LS—not required; PR—MH. ACCESS FLOORS: Access floors more than 9 in. (229 mm) high are braced. (<i>Tier 2: Sec. 13.6.10; Commentary: Sec. A.7.11.4</i>)	No access floor.
		X		HR—not required; LS—not required; PR—MH. EQUIPMENT ON ACCESS FLOORS: Equipment and other contents supported by access floor systems are anchored or braced to the structure independent of the access floor. (<i>Tier 2: Sec. 13.7.7 13.6.10; Commentary: Sec. A.7.11.5</i>)	No access floor.
X				HR—not required; LS—not required; PR—H. SUSPENDED CONTENTS: Items suspended without lateral bracing are free to swing from or move with the structure from which they are suspended without damaging themselves or adjoining components. (<i>Tier 2: Sec. 13.8.2; Commentary: Sec. A.7.11.6</i>)	

Everett Fire Department, Station 2

Mechanical and Electrical Equipment

C	NC	N/A	U	EVALUATION STATEMENT ^{a,b}	COMMENT
	X			HR—not required; LS—H; PR—H. FALL-PRONE EQUIPMENT: Equipment weighing more than 20 lb (9.1 kg) whose center of mass is more than 4 ft (1.2 m) above the adjacent floor level, and which is not in-line equipment, is braced. (Tier 2: Sec. 13.7.1 13.7.7; Commentary: Sec. A.7.12.4)	Air compressor in generator room do not appear to be braced.
	X			HR—not required; LS—H; PR—H. IN-LINE EQUIPMENT: Equipment installed in line with a duct or piping system, with an operating weight more than 75 lb (34.0 kg), is supported and laterally braced independent of the duct or piping system. (Tier 2: Sec. 13.7.1; Commentary: Sec. A.7.12.5)	
X				HR—not required; LS—H; PR—MH. TALL NARROW EQUIPMENT: Equipment more than 6 ft (1.8 m) high with a height-to-depth or height-to-width ratio greater than 3-to-1 is anchored to the floor slab or adjacent structural walls. (Tier 2: Sec. 13.7.1 13.7.7; Commentary: Sec. A.7.12.6)	
			X	HR—not required; LS—not required; PR—MH. MECHANICAL DOORS: Mechanically operated doors are detailed to operate at a story drift ratio of 0.01. (Tier 2: Sec. 13.6.9; Commentary: Sec. A.7.12.7)	
X				HR—not required; LS—not required; PR—H. SUSPENDED EQUIPMENT: Equipment suspended without lateral bracing is free to swing from or move with the structure from which it is suspended without damaging itself or adjoining components. (Tier 2: Sec. 13.7.1, 13.7.7; Commentary: Sec. A.7.12.8)	
		X		HR—not required; LS—not required; PR—H. VIBRATION ISOLATORS: Equipment mounted on vibration isolators is equipped with horizontal restraints or snubbers and with vertical restraints to resist overturning. (Tier 2: Sec. 13.7.1; Commentary: Sec. A.7.12.9)	No equipment on vibrator isolators.
		X		HR—not required; LS—not required; PR—H. HEAVY EQUIPMENT: Floor supported or platform-supported equipment weighing more than 400 lb (181.4 kg) is anchored to the structure. (Tier 2: Sec. 13.7.1, 13.7.7; Commentary: Sec. A.7.12.10)	No heavy equipment.
X				HR—not required; LS—not required; PR—H. ELECTRICAL EQUIPMENT: Electrical equipment is laterally braced to the structure. (Tier 2: Sec. 13.7.7; Commentary: Sec. A.7.12.11)	Electrical equipment appears to be mounted on wall or floor.
	X			HR—not required; LS—not required; PR—H. CONDUIT COUPLINGS: Conduit greater than 2.5 in. (64 mm) trade size that is attached to panels, cabinets, or other equipment and is subject to relative seismic displacement has flexible couplings or connections. (Tier 2: Sec. 13.7.8; Commentary: Sec. A.7.12.12)	Conduits do not appear to have flexible couplings.

Piping

C	NC	N/A	U	EVALUATION STATEMENT ^{a,b}	COMMENT
	X			HR—not required; LS—not required; PR—H. FLEXIBLE COUPLINGS: Fluid and gas piping has flexible couplings. (Tier 2: Sec. 13.7.3, 13.7.5; Commentary: Sec. A.7.13.2)	Piping does not appear to have flexible coupling.

Everett Fire Department, Station 2

C	NC	N/A	U	EVALUATION STATEMENT ^{a,b}	COMMENT
	X			HR—not required; LS—not required; PR—H. FLUID AND GAS PIPING: Fluid and gas piping is anchored and braced to the structure to limit spills or leaks. (<i>Tier 2: Sec. 13.7.3, 13.7.5; Commentary: Sec. A.7.13.4</i>)	No bracing at pipes.
			X	HR—not required; LS—not required; PR—H. C-CLAMPS: One-sided C-clamps that support piping larger than 2.5 in. (64 mm) in diameter are restrained. (<i>Tier 2: Sec. 13.7.3, 13.7.5; Commentary: Sec. A.7.13.5</i>)	Not observable during site visit.
		X		HR—not required; LS—not required; PR—H. PIPING CROSSING SEISMIC JOINTS: Piping that crosses seismic joints or isolation planes or is connected to independent structures has couplings or other details to accommodate the relative seismic displacements. (<i>Tier 2: Sec. 13.7.3, 13.7.5; Commentary: Sec. A.7.13.6</i>)	No seismic joints.

Ducts

C	NC	N/A	U	EVALUATION STATEMENT ^{a,b}	COMMENT
	X			HR—not required; LS—not required; PR—H. DUCT BRACING: Rectangular ductwork larger than 6 ft ² (0.56 m ²) in cross-sectional area and round ducts larger than 28 in. (711 mm) in diameter are braced. The maximum spacing of transverse bracing does not exceed 30 ft (9.2 m). The maximum spacing of longitudinal bracing does not exceed 60 ft (18.3 m). (<i>Tier 2: Sec. 13.7.6; Commentary: Sec. A.7.14.2</i>)	No duct bracing present.
			X	HR—not required; LS—not required; PR—H. DUCT SUPPORT: Ducts are not supported by piping or electrical conduit. (<i>Tier 2: Sec. 13.7.6; Commentary: Sec. A.7.14.3</i>)	Not observable during site visit.
		X		HR—not required; LS—not required; PR—H. DUCTS CROSSING SEISMIC JOINTS: Ducts that cross seismic joints or isolation planes or are connected to independent structures have couplings or other details to accommodate the relative seismic displacements. (<i>Tier 2: Sec. 13.7.6; Commentary: Sec. A.7.14.4</i>)	No seismic joints.

Elevators

C	NC	N/A	U	EVALUATION STATEMENT ^{a,b}	COMMENT
		X		HR—not required; LS—H; PR—H. RETAINER GUARDS: Sheaves and drums have cable retainer guards. (<i>Tier 2: Sec. 13.7.11; Commentary: Sec. A.7.16.1</i>)	No elevator in the building.
		X		HR—not required; LS—H; PR—H. RETAINER PLATE: A retainer plate is present at the top and bottom of both car and counterweight. (<i>Tier 2: Sec. 13.7.11; Commentary: Sec. A.7.16.2</i>)	No elevator in the building.
		X		HR—not required; LS—not required; PR—H. ELEVATOR EQUIPMENT: Equipment, piping, and other components that are part of the elevator system are anchored. (<i>Tier 2: Sec. 13.7.11; Commentary: Sec. A.7.16.3</i>)	No elevator in the building.

Everett Fire Department, Station 2

C	NC	N/A	U	EVALUATION STATEMENT ^{a,b}	COMMENT
		X		HR—not required; LS—not required; PR—H. SEISMIC SWITCH: Elevators capable of operating at speeds of 150 ft/min (0.30 m/min) or faster are equipped with seismic switches that meet the requirements of ASME A17.1 or have trigger levels set to 20% of the acceleration of gravity at the base of the structure and 50% of the acceleration of gravity in other locations. (<i>Tier 2: Sec. 13.7.11; Commentary: Sec. A.7.16.4</i>)	No elevator in the building.
		X		HR—not required; LS—not required; PR—H. SHAFT WALLS: Elevator shaft walls are anchored and reinforced to prevent toppling into the shaft during strong shaking. (<i>Tier 2: Sec. 13.7.11; Commentary: Sec. A.7.16.5</i>)	No elevator in the building.
		X		HR—not required; LS—not required; PR—H. COUNTERWEIGHT RAILS: All counterweight rails and divider beams are sized in accordance with ASME A17.1. (<i>Tier 2: Sec. 13.7.11; Commentary: Sec. A.7.16.6</i>)	No elevator in the building.
		X		HR—not required; LS—not required; PR—H. BRACKETS: The brackets that tie the car rails and the counterweight rail to the structure are sized in accordance with ASME A17.1. (<i>Tier 2: Sec. 13.7.11; Commentary: Sec. A.7.16.7</i>)	No elevator in the building.
		X		HR—not required; LS—not required; PR—H. SPREADER BRACKET: Spreader brackets are not used to resist seismic forces. (<i>Tier 2: Sec. 13.7.11; Commentary: Sec. A.7.16.8</i>)	No elevator in the building.
		X		HR—not required; LS—not required; PR—H. GO-SLOW ELEVATORS: The building has a go-slow elevator system. (<i>Tier 2: Sec. 13.7.11; Commentary: Sec. A.7.16.9</i>)	No elevator in the building.

Note: C = Compliant, NC = Noncompliant, N/A = Not Applicable, and U = Unknown.

^a Performance Level: HR = Hazards Reduced, LS = Life Safety, and PR = Position Retention.

^b Level of Seismicity: L = Low, M = Moderate, and H = High