



DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

BAINBRIDGE ISLAND CODE INTERPRETATION OF THE  
DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

KORTEN ADMINISTRATIVE CODE INTERPRETATION RELATED TO PRIVATE  
RESIDENTIAL BALCONY RAILING HEIGHT

**Date of Issuance:** August 19, 2016

**Project Name:** Korten - Administrative Code Interpretation

**File Number:** PLN50606 ADM

**Applicant:** David & Frances Korten

**Description of Proposal:** The applicant requests an administrative interpretation of the requirement for a private balcony railing height for a private residence within the “Seabreeze” mixed use project located at 123 Bjune Drive, Unit 303, Bainbridge Island, WA 98110.

**Location of Proposal:** 123 Bjune Drive, Apt 303, Bainbridge Island, WA 98110  
Assessor Parcel Number: 81800003030009

**I. Introduction:**

On July 15, 2016, the City received a request for an administrative interpretation regarding the requirement for the railing height for the private residential balcony, within unit # 303 in the Seabreeze Mixed Use Complex, located at 123 Bjune Drive, Bainbridge Island, Washington. The request was in response to a Home Owners Association request for a City interpretation as to whether a 42” railing height or a 36” railing height was applicable for the private residence balcony. The administrative interpretation application was accepted and assigned project number PLN 50606 ADM (Permit). Additional documents and photos were provided in July, 2016. The Department of Planning and Community Development began processing this Permit and researching records regarding the construction and approval for the Seabreeze Mixed Use Complex. This interpretation is pursuant to Bainbridge Island Municipal Code (BIMC) 18.03.090.

## **II. Factual Background:**

The Seabreeze Mixed Use Complex included three buildings and was constructed under Bainbridge Island Building Permit # BLD12991 COM. All three buildings, Building A, B, and C were submitted, reviewed, and processed as one permit and under a unified construction plan set. Unit #303 was constructed as part of Building C. The permit application for the Seabreeze Mixed Use Complex was submitted on June 24, 2004, and was issued on May 20, 2005. The City records indicate that the construction occurred through 2008, and that the final inspection for Unit 303 was conducted and approved on February 15, 2008, with the entire Seabreeze Mixed Use Complex showing a final inspection date of February 26, 2008. The Seabreeze Mixed Use Complex was submitted, reviewed, and approved under the 1997 Uniform Building Code, with the 2000 Washington State Amendments.

## **III. 1997 Uniform Building Code – Guardrail Height:**

The 1997 Uniform Building Code specifically determines the required height of guardrails, within Chapter 5, General Building Limitations, Section 509 Guardrails. The building code requires guardrails to be 42 inches in height, with exceptions for residential occupancies to be 36 inches in height as depicted below.

# **1997 UNIFORM BUILDING CODE**

## **CHAPTER 5, GENERAL BUILDING LIMITATIONS**

### **SECTION 509- GUARDRAILS**

**Section 509.2 Height.** The top of guardrails shall not be less than 42 inches (1067 mm) in height.

#### **Exceptions:**

1. The top of guardrails for Group R, Division 3 and Group U, Division 1 Occupancies and interior guardrails within individual dwelling units, Group R Division 3 congregate residences and guest rooms of Group R, Division 1 Occupancies may be 36 inches (914 mm) in height.

The approved construction plans, Sheet A 0.02 (see Attachment A), defined the residential occupancy as Residential Group R, Division 1 occupancy for the Seabreeze Mixed Use Complex, levels two, three, and four. The occupancy for the residential units would allow a 36" railing height for guardrails within individual dwelling units. The approved construction plans, Sheet A 20.09 (See Attachment B) specifically identifies the guardrail height of 36 inches for Unit 303 balcony. Additionally, the approved construction plans, Sheet A 50.01 (see Attachment C) depicts a building section for the residential balcony with a 36 inch guardrail with wood cap, called out on the plans. The Seabreeze Mixed Use Complex permit building was reviewed, constructed, inspected, and approved for a minimum guardrail height of 36 inches for the Unit 303 balcony.

#### **IV. 1997 Uniform Building Code – Guardrail Openings:**

The code interpretation also addresses if the utilization of the wood cap, located on top of the guardrail and consisting of a wood rail with widely spaced brackets, at a total height of 42 inches above the private residential balcony deck, could be considered as part of the guardrail. The wood cap, to qualify as part of the guardrail must be compliant with The 1997 Uniform Building Code Chapter 5, General Building Limitations, Section 509 Guardrails specifically related to allowable openings within guardrails, under Section 509.3 Openings. The building code requires that all guardrails must be constructed so that a 4 inch sphere cannot pass through the railings/guardrails, with exceptions as depicted below:

### **1997 UNIFORM BUILDING CODE**

#### **CHAPTER 5, GENERAL BUILDING LIMITATIONS**

##### **SECTION 509- GUARDRAILS**

**Section 509.3 Openings.** Open guardrails shall have intermediate rails or an ornamental pattern such that a sphere 4 inches (102 mm) in diameter cannot pass through.

##### **Exceptions:**

1. The open space between the intermediate rails or ornamental pattern of guardrails in areas of commercial and industrial-type occupancies which are not accessible to the public may be such that a sphere 12 inches (305 mm) in diameter cannot pass through.
2. The triangular openings formed by the riser, tread and bottom element of a guardrail at the open side of a stairway may be of such a size that a sphere 6 inches (152 mm) in diameter cannot pass through.

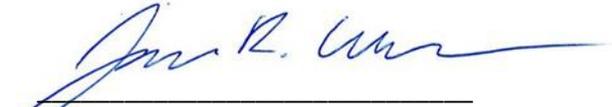
In evaluation of the residential balcony, neither exception for the openings requirement would be applicable for the guardrails located at Unit 303. For the wood cap to be considered as part of the guardrails, the maximum openings between the bottom of the wood cap and the top of the 36" guardrail must be small enough such that a 4 inch sphere cannot pass through.

The distance between the bottom of the wood cap and the top of the 36" guardrail has been determined to have an opening of at least 4 ½ inches (see Attachment D) with intermediate rails and supporting brackets at even wider spacing. The wood cap and associated brackets or intermediate rails, as designed and constructed would allow a 4 inch sphere to pass between the guardrail and the bottom of the wood cap, and therefore would not meet the requirements of contributing to the guardrail height. To meet the definition of guardrail, the addition of compliant intermediate rails or an ornamental pattern as cited in the 1997 Uniform Building Code, Section 509.3 would be required. The opening size exempts the wood cap from being included within the total guardrail height and establishes that the guardrail height is at 36 inches above the balcony deck. Raising of the balcony deck would not be consistent with applicable building codes.

**V. CONCLUSION**

Based on the interpretations contained above, the Building Official determines that pursuant to the 1997 Uniform Building Code, Section 509.3, Exception 1, the minimum guardrail height is 36 inches for the residential balcony for Unit 303, located at 123 Bjune Drive, Bainbridge Island, Washington. The wood cap, located on top of the guardrails, as constructed, would allow a 4 inch sphere to pass through and as presently exists, would not be able to be considered as part of a guardrail or contributing to the guardrail total height. As constructed, additional raising of the balcony deck floor would not be consistent with meeting the minimum 36 inch guardrail height requirement.

DATED THIS 19<sup>th</sup> DAY OF August, 2016.

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James Weaver, City Building Official

**Appeal Procedures:**

BIMC 2.16.020(P) provides that any appeal of a interpretation set forth herein are made to the City's Hearing Examiner. Any appeal must be filed with the City Clerk within 14 days of the date of this decision.

**Attachments:**

- A. BLD12991COM – Approved Construction Plans-Sheet A 0.02
- B. BLD12991COM – Approved Construction Plans-Sheet A 20.09
- C. BLD12991COM – Approved Construction Plans-Sheet A 50.01
- D. Photo of Unit 303 Balcony Guardrail and Wood Cap

BUILDING CODE NOTES

**OCCUPANCY:**  
 UBC 311.1 LEVEL 0 12,453 S.F. S-3 VEHICLE PARKING GARAGE  
 UBC 309.1 LEVEL 1/GROUND 4,781 S.F. M COMMERCIAL/RETAIL  
 UBC 304.1 LEVEL 1/GROUND 1,694 S.F. B BUS/RESTAURANTS < THAN 50 OCCS.  
 UBC 310.1 LEVEL 2,4 14,399 S.F. R-1 MULTIPLE DWELLING UNIT  
 PER UBC TABLE 10-A DWELLING OCC. RATIO = 1:300  
 NUMBER OF RESIDENTS IN DWELLINGS PER RATIO = 48

**CONSTRUCTION TYPE:** ALL USED FULLY SPRINKLERED WITH AUTOMATIC FIRE ALARM SYSTEM  
 UBC 311.2.2.1 - GROUP S, DIV. 3 WITH GROUP B,M,R-1:  
 LEVEL 0 - GARAGE (S-3): TYPE I W/ 3HR OCC. SEPARATION FROM USES ABOVE - SEE CODE NOTE BELOW  
 WALLS: CAST-IN-PLACE MONOLITHIC REINF. CONCRETE  
 FLOORING: CAST-IN-PLACE MONOLITHIC POST-TENSIONED CONCRETE SLAB - 6" MIN. THICK  
 SEE STRUCTURAL NOTES & WALL TYPES  
 CODE NOTE: Similar exception per City of Seattle: A 2-Hr. occupancy separation is proposed in lieu of the 3-Hr occupancy separation per UBC 311.2.2.1. The proposed post-tensioned concrete slab will meet the 3-hr requirement, however, slab penetrations will be protected to 2-hr levels.

LEVEL 2,4 - REMAINING USES: TYPE V-1 HR (SPRINKLERED)  
 EXTERIOR EXPOSED STEEL STRUCTURE - 1 HR. RATED THROUGH APPLIED INTUMESCENT COATING  
 INTERIOR AND EXTERIOR WALLS: WOOD FRAME - SEE WALL TYPES FOR ASSEMBLY LISTINGS  
 SHAFT WALLS - C-T STEEL STUDS WITH SHAFT-WALL INSIDE LINER - SEE WALL TYPES  
 ROOFS - NO RATING REQUIRED DUE TO UBC SECTION 508 FIRE RESISTIVE SUBSTITUTION FOR APPROVED AUTOMATIC SPRINKLER SYSTEM

**ALLOWABLE AREA AND HEIGHT CALCULATIONS:**  
 MAXIMUM HEIGHT: 4 STORY (3 TABLE 5-B MAX.) + 1 (UBC 506 - SPRINKLER)  
 AREA (OCC. GRP.) 12,453 (S-3) + 4,781 (M) + 1,694 (B) + 14,399 (R-1)  
 UBC TBL. 5-B (TYPE) = 0 + .34 + .12 + .51 = .97 < 1, OK

**FIRE RESISTIVE REQUIREMENTS**  
 (5-A) TYPE I - GARAGE (S-3)  
 BEARING WALLS - EXTERIOR 4-HR  
 BEARING WALLS - INTERIOR 3-HR  
 NON BEARING WALLS - INTERIOR AND EXTERIOR 1-HR  
 PARTITIONS 1-HR  
 FLOORS/CEILING/ROOF 2-HR  
 SHAFTS 2-HR

(5-A) BEARING WALLS 44HR < 5 FT., 2-HR ELSEWHERE  
 NON-BEARING WALLS 44HR < 5 FT., 2-HR < 20'  
 OPENINGS NOT PER < 5 FT., PROT. < 20'

(5-A) B, M BEARING WALLS 1-HR  
 NON-BEARING WALLS 1-HR  
 OPENINGS NOT PER. < 5 FT., PROT. < 10'

**UBC'97 TABLE 29 PLUMBING CALCULATIONS**  
 TABLE 29-A GROUP M - RETAIL OR WHOLESALE STORES  
 OCCUPANT/AREA RATIO = 1:200

UBC '97 WAC AMENDMENTS SECTION 2902.3.1 EXCEPTION 1 AND 2 BOTH APPLY TO ALL SPACES - UNISEX OK  
 NO DRINKING FOUNTAINS REQUIRED UNDER 30 OCCUPANTS.

COMMERCIAL UNIT 101 1,370 SF # OCCUPANTS = 6.85 (3.4 M 3.4 W) - 1 UNISEX RESTROOM PROVIDED  
 COMMERCIAL UNIT 102 1,130 SF # OCCUPANTS = 5.65 (2.8 M 2.8 W) - 1 UNISEX RESTROOM PROVIDED  
 COMMERCIAL UNIT 103 469 SF # OCCUPANTS = 2.34 (1.2 M 1.2 W) - 1 UNISEX RESTROOM PROVIDED  
 COMMERCIAL UNIT 104 1,220 SF # OCCUPANTS = 6.1 (3 M 3 W) - 1 UNISEX RESTROOM PROVIDED  
 COMMERCIAL UNIT 105 1,061 SF # OCCUPANTS = 5.3 (2.7 M 2.7 W) - 1 UNISEX RESTROOM PROVIDED  
 COMMERCIAL UNIT 106 1,226 SF # OCCUPANTS = 6.13 (3 M 3 W) - 1 UNISEX RESTROOM PROVIDED

**RESIDENTIAL DWELLING UNITS**  
 ALL UNITS ARE PROVIDED WITH AT LEAST 1 WC, 1 LAV., AND 1 BATH/TUB OR SHOWER

**CODES IN USE**  
 BUILDING CODE: 1997 UBC WITH 2000 WASHINGTON STATE AMENDMENTS  
 ENERGY CODE COMPLIANCE: 1997 NON-RESIDENTIAL ENERGY CODE

**MECHANICAL, PLUMBING, AND ELECTRICAL:** UBC VERSIONS AS ADOPTED BY CITY OF BAINBRIDGE ISLAND. PERMITS BY DEFERRED SUBMITTAL.

**FIRE CODE:** UBC VERSIONS AS ADOPTED BY CITY OF BAINBRIDGE ISLAND AND LOCAL JURISDICTION FIRE MARSHAL. PERMITS BY DEFERRED SUBMITTAL.

**ZONING CODE:** CITY OF BAINBRIDGE ISLAND MUNICIPAL CODE

**EGRESS REQUIREMENTS:**  
 UBC 1007.2.6 AN APPROVED SIGN POSTED NEAR THE MAIN EXIT SHALL BE POSTED, INDICATING THE NUMBER OF OCCUPANTS PERMITTED FOR EACH ROOM USE.  
 UBC 1003.2.2.2.4 THE OCC. LOAD SHALL BE ASSIGNED BY THE BUILDING OFFICIAL IN ACCORDANCE WITH THEIR ANTICIPATED USE

**TRAVEL DISTANCE** FULLY SPRINKLERED BUILDING  
 MAXIMUM TRAVEL DISTANCE TOTAL - SPRINKLERED BUILDINGS = 250'

**FIRE EXTINGUISHERS**  
 4A.60 B-C TYPE EXTINGUISHERS  
 SEE MOUNTING HEIGHTS DIAGRAM FOR REQUIRED DIMENSIONS

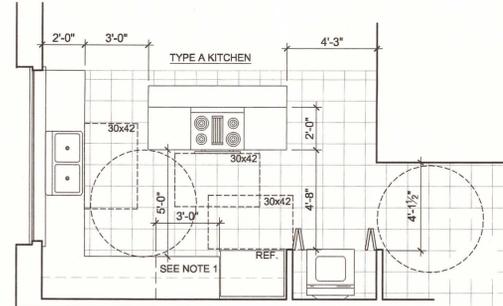
LOCATE WITHIN 75 FT. MAX. TRAVEL DISTANCE OF ANY POINT, AND PER LOCAL JURISDICTION FIRE MARSHAL. SEE FLOOR PLANS FOR PROPOSED LOCATIONS.

**SPRINKLER / FIRE ALARM REQUIREMENTS**  
 FIRE SPRINKLER SYSTEM SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE MOST CURRENT EDITION OF NFPA STANDARD 13.

A MONITORED FIRE ALARM SYSTEM SHALL BE INSTALLED THROUGHOUT THE BUILDING. FIRE ALARM SHALL BE AN ADDRESSABLE TYPE SYSTEM. A REMOTE ANNUNCIATOR SHALL BE LOCATED AT THE MAIN ENTRANCE UNLESS THE FIRE ALARM PANEL IS PLACED AT THAT LOCATION. MANUAL PULL STATIONS SHALL BE LOCATED AT EACH EXIT. SMOKE DETECTORS MUST BE LOCATED IN ALL AREAS EXCEPT RESTROOMS, MECHANICAL ROOMS, STORAGE AREAS, AND KITCHEN AREAS. AUDIBLE AND VISUAL ALARM DEVICES SHALL BE INSTALLED THROUGHOUT THE BUILDING, IN ACCORDANCE WITH UBC 1007.3.3.3 AND WA STATE AMENDED SECTION 1007.3.3.4 (WAC 51-34) THE ALARM SYSTEM SHALL BE CONNECTED TO A U.L. LISTED CENTRAL STATION.

PROVIDE TWO (2) CLASS A/10BC FIRE EXTINGUISHERS IN THE LOCATIONS INDICATED ON THE FLOOR PLANS.

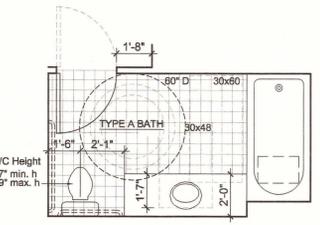
FIRE SPRINKLERS AND FIRE ALARM SYSTEMS SHALL BE SUBMITTED UNDER SEPARATE PERMIT.



1. Knee space at work surfaces or fixtures may be included if they are a min. 30" wide, 27" high and max. 29" deep. Toe spaces as described above are also allowed. Pull out counter surfaces meeting above dimensions and able to lock securely in place are acceptable.

2. 1106.17.2.2 - Adaptable feature - cabinets/shelving may be installed beneath the 30" x 24" counter space provided that the cabinetry/shelving is not permanent, & is easily removable.

TYPE "A" KITCHEN



1. 1106.27.2.3 - Cabinets and shelving may be installed beneath bathroom lavatories provided that it is not permanent and is easily removable.

2. 1106.11.7.5 - Faucet control handles (lever per 1106.3.1) shall be max. 17" from the front edge of the counter.

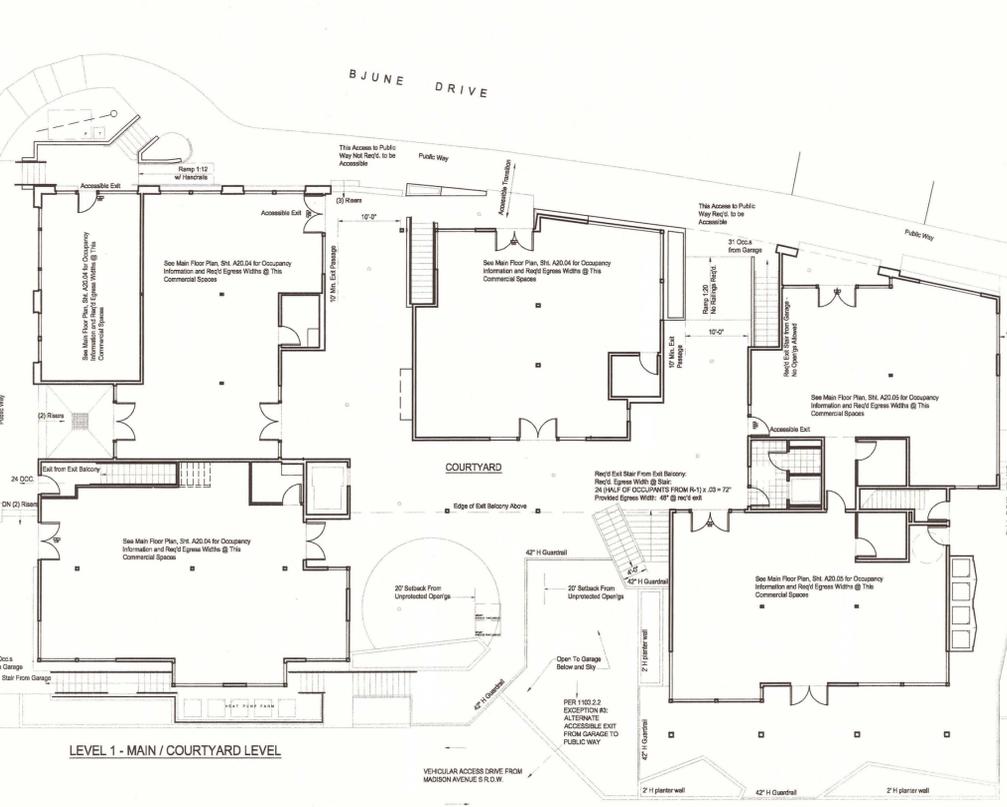
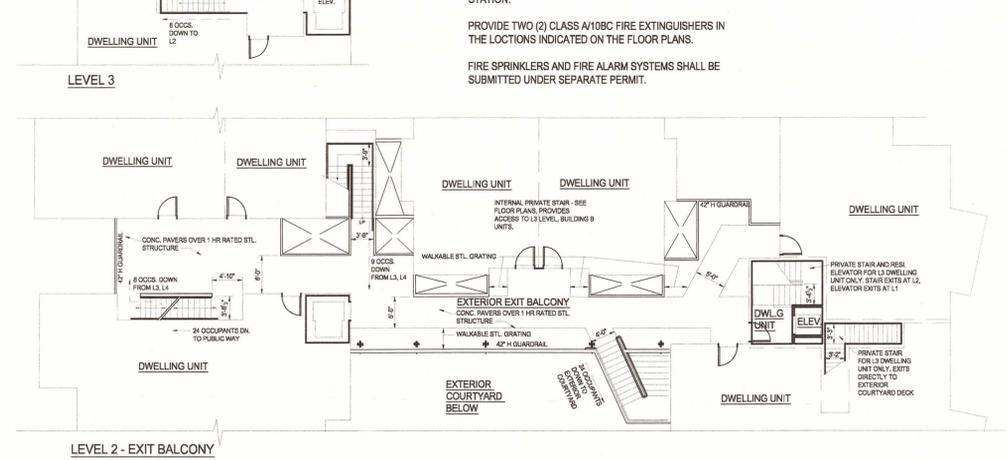
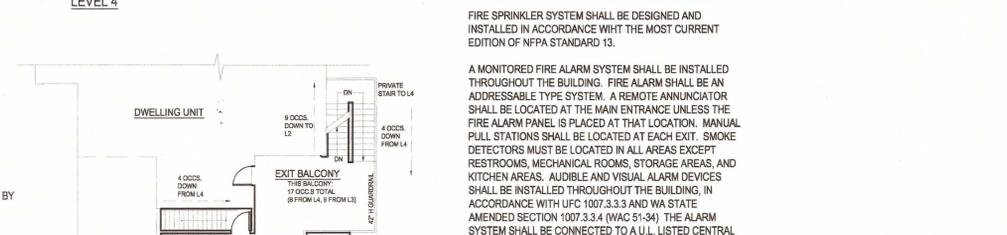
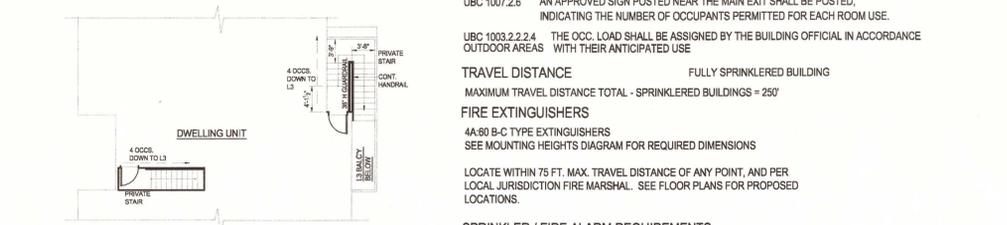
3. 1106.11.9.1 - Bathtub clear floor space minimums are 60" in length (parallel to tub) and 30" in width for parallel access or: A lavatory may be located within this space, but must be located at the end of the tub adjacent to the controls.

4. 1106.27.2.1 - Adaptable feature - omit grab bars, at water closet and bathtub/shower provide blocking Per 1106.11.5.3 and 1106.11.9.3 for grab bar locations for blocking

TYPE "A" BATHROOM



OCCUPANCY DIAGRAM NTS



EGRESS PATH DIAGRAMS NTS



BAINBRIDGE ARCHITECTS COLLABORATIVE  
 330 MADISON AVENUE S, SUITE 110  
 BAINBRIDGE ISLAND, WA 98110  
 206-842-2011 F:206-842-9386

SEAN PARKER, AIA  
 WILLIAM ISLEY, FAIA  
 DANA WEBBER, AIA

Seabreeze

for Seabreeze, LLC



If this drawing is not 24" x 36", it is a reduced print, scale accordingly.

DRAWING HISTORY

NO.	DESCRIPTION	DATE
1	PERMIT SET	6/23/2004

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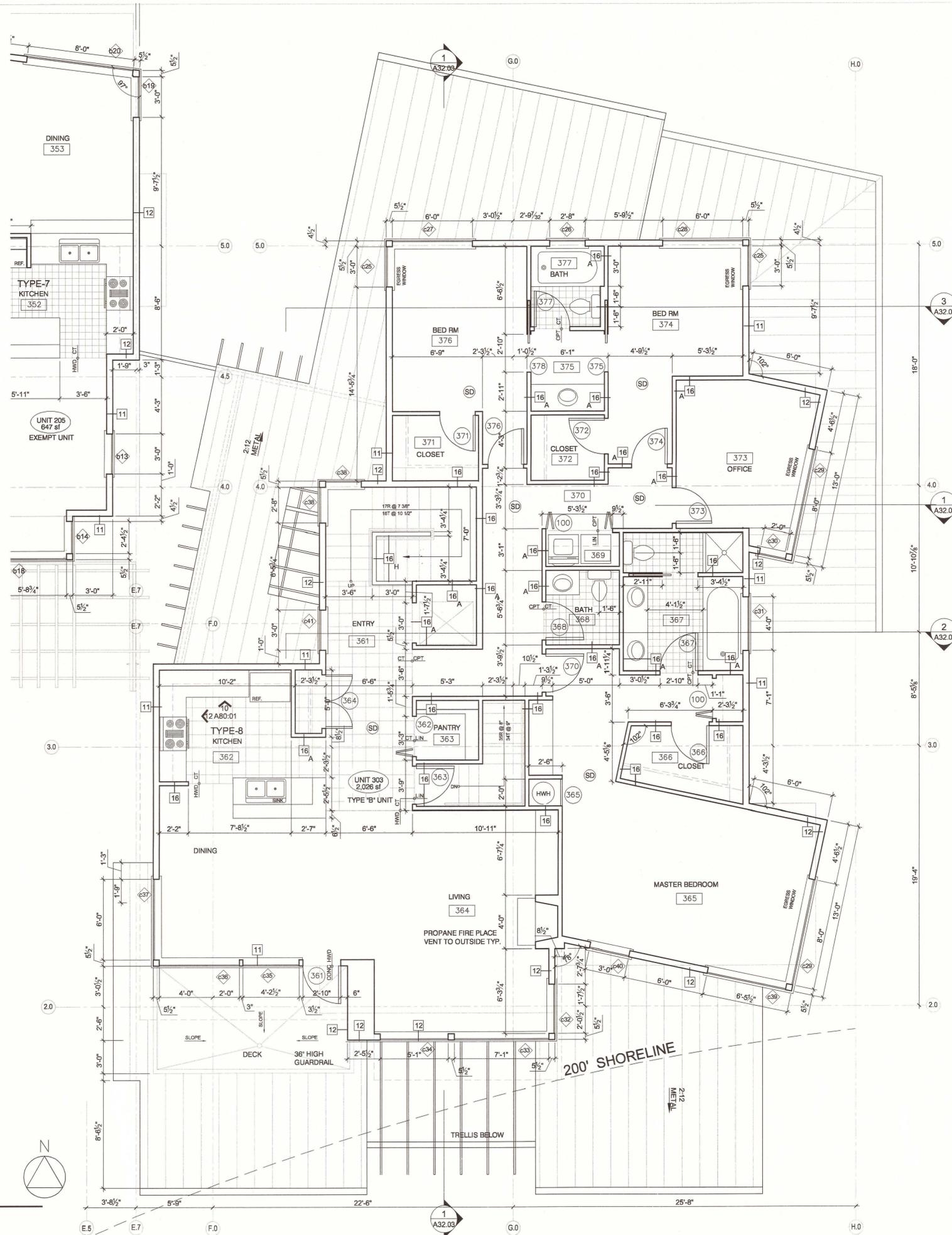
SHEET TITLE  
 Code Data

PROJECT NUMBER SHEET NUMBER

SCALE  
 None

A0.02

DATE  
 6/23/2004  
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1 LEVEL 3 PLAN  
1/4"=1'-0"



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COLLABORATIVE**  
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BAINBRIDGE ISLAND, WA 98110  
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SEAN PARKER, AIA  
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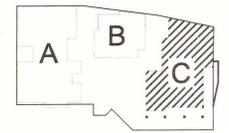
Seabreeze

for  
Seabreeze, LLC



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CITY OF  
BAINBRIDGE ISLAND  
JUN 23 2004  
DEPT. OF PLANNING &  
COMMUNITY DEVELOPMENT

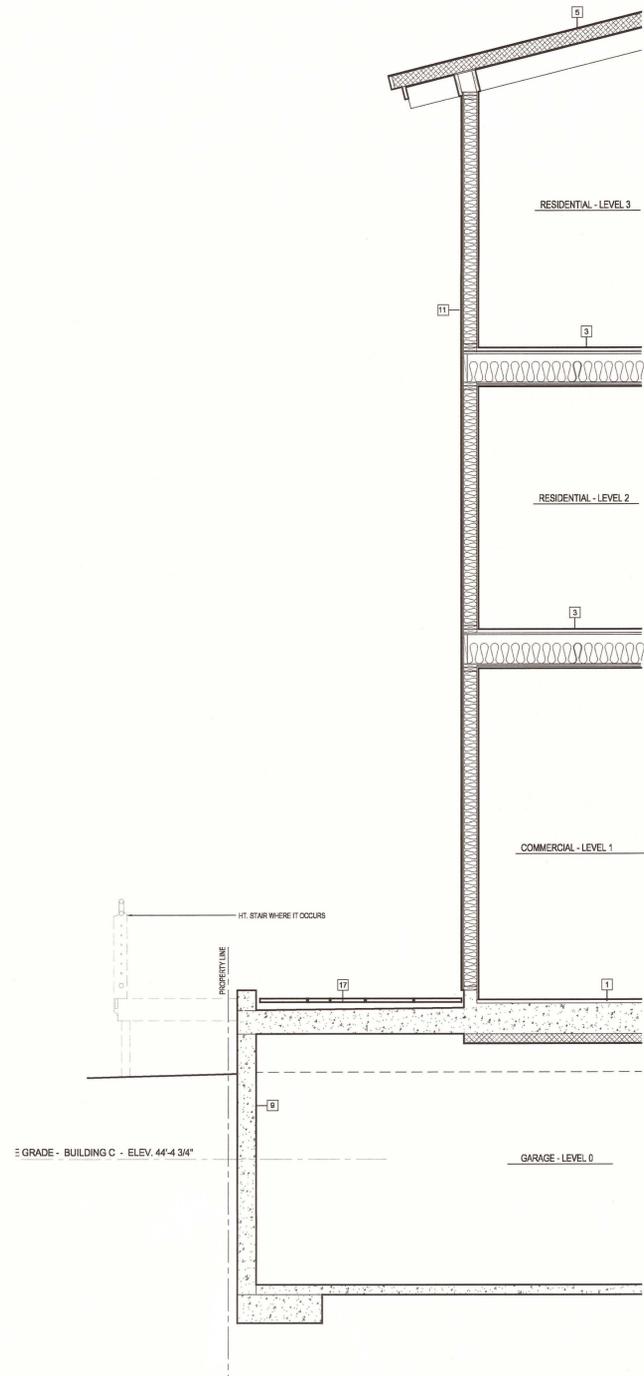
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LEVEL 3 PLAN - C  
ELEV. 73' 5"

PROJECT NUMBER: 0302  
SHEET NUMBER:

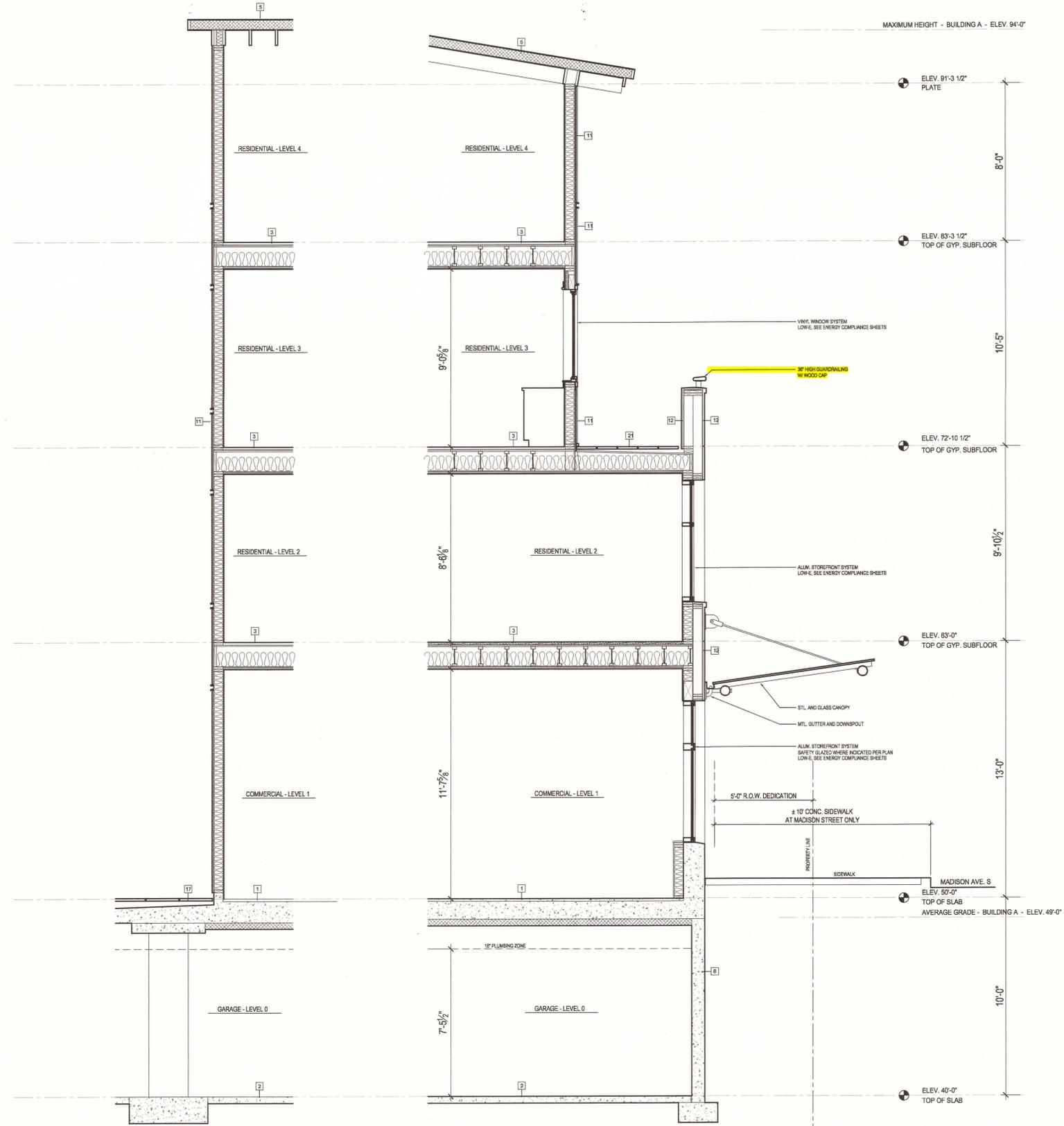
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DATE: 6/23/2004  
**A20.09**  
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HEIGHT - BUILDING C - ELEV. 89'-4.34"



3 TYPICAL WALL SECTION  
3/8"=1'-0"



2 TYPICAL WALL SECTION  
3/8"=1'-0"

1 TYPICAL WALL SECTION  
3/8"=1'-0"



BAINBRIDGE ARCHITECTS  
COLLABORATIVE  
330 MADISON AVENUE S, SUITE 110  
BAINBRIDGE ISLAND, WA 98110  
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JUN 23 2004  
DEPT. OF PLANNING & COMMUNITY DEVELOPMENT

SHEET TITLE  
WALL SECTIONS

PROJECT NUMBER 0302 SHEET NUMBER

SCALE  
3/8"=1'-0"

DATE  
6/23/2004

A50.01

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**ATTACHMENT D**

