Development Services

From Concept to Construction

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More Contact Info (http://www.portlandoregon.gov//bds/article/519984)

APPEAL SUMMARY

Status: Decision Rendered	
Appeal ID: 15816	**Project Address:** 1414 SW Park Ave
Hearing Date: 9/13/17	**Appellant Name:** Eric Buschert
Case No.: B-010	**Appellant Phone:** 503-224-9656
Appeal Type: Building	**Plans Examiner/Inspector:** Natalie Davis
Project Type: commercial	**Stories:** 7 **Occupancy:** R-2, S-2 **Construction Type:** I-A, III-A
Building/Business Name:	**Fire Sprinklers:** Yes - entire building
Appeal Involves: Erection of a new structure	**LUR or Permit Application No.:** 17-152022-CO
Plan Submitted Option: pdf [File 1] [File 2] [File 3] [File 4]	**Proposed use:** Multi-family housing (apartments)

APPEAL INFORMATION SHEET

Appeal item 1

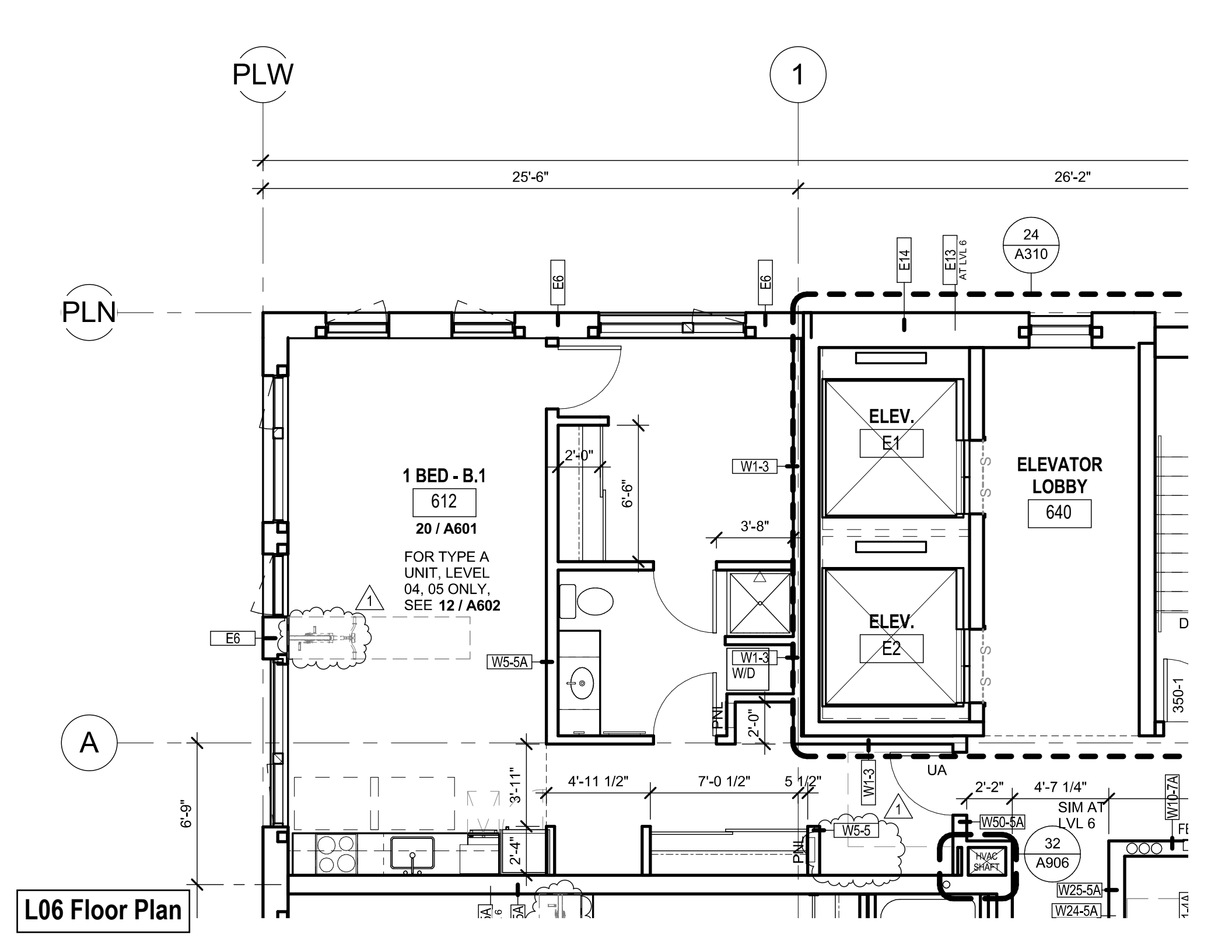
Code Section	OSSC 1207.2 & 1207.3
Requires	1207.2 Air-borne sound. Walls, partitions and floor/ceiling assemblies separating dwelling units from each other or from public or service areas shall have a sound transmission class (STC) of not less than 50 (45 if field tested) for air-borne noise when tested in accordance with ASTM E 90. Penetrations or openings in construction assemblies for piping; electrical devices; recessed cabinets; bathtubs; soffits; or heating, ventilating or exhaust ducts shall be sealed, lined, insulated or otherwise treated to maintain the required ratings. This requirement shall not apply to dwelling unit entrance doors; however, such doors shall be tight fitting to the frame and sill. 1207.3 Structure-borne sound. Floor/ceiling assemblies between dwelling units or between a dwelling unit and a public or service area within the structure shall have an impact insulation class (IIC) rating of not less than 50 (45 if field tested) when tested in accordance with ASTM E 492
Proposed Design	There is no previously tested assembly for the floor-ceiling assembly between our L07 roof terrace and the L06 unit directly below it. The attached analysis from our acoustical engineer, Listen Acoustics, demonstrates that the assembly will meet STC 61 and IIC 53, exceeding the code minimum of 50 for each.
Reason for alternative	There is no previously tested assembly for this specific floor-ceiling assembly.

APPEAL DECISION

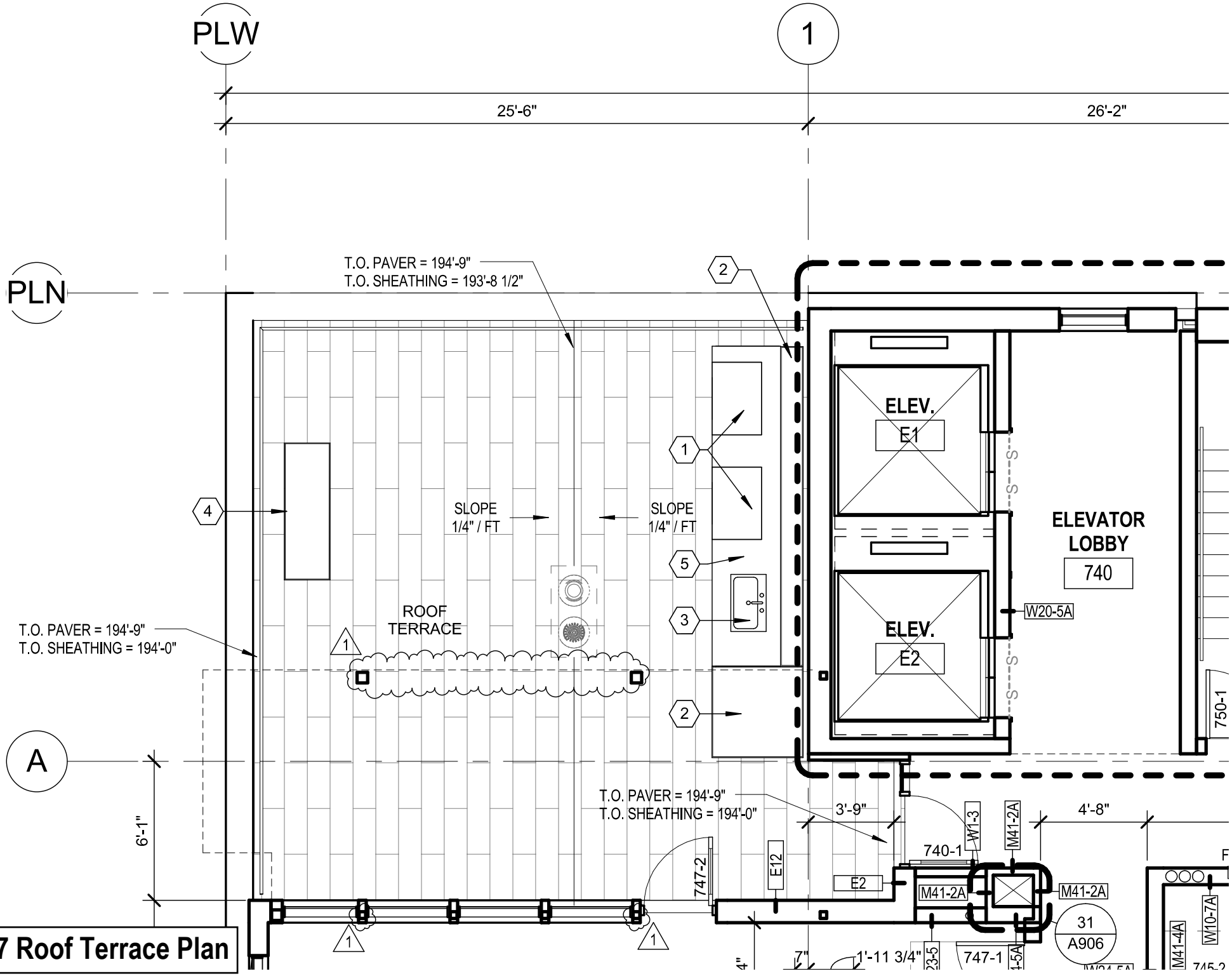
Sound transmission ratings (STC / IIC) for 1 hour rated roof / ceiling assembly at roof terrace and unit below per Acoustical Engineer's analysis: Granted as proposed.

The Administrative Appeal Board finds that the information submitted by the appellant demonstrates that the approved modifications or alternate methods are consistent with the intent of the code; do not lessen health, safety, accessibility, life, fire safety or structural requirements; and that special conditions unique to this project make strict application of those code sections impractical.

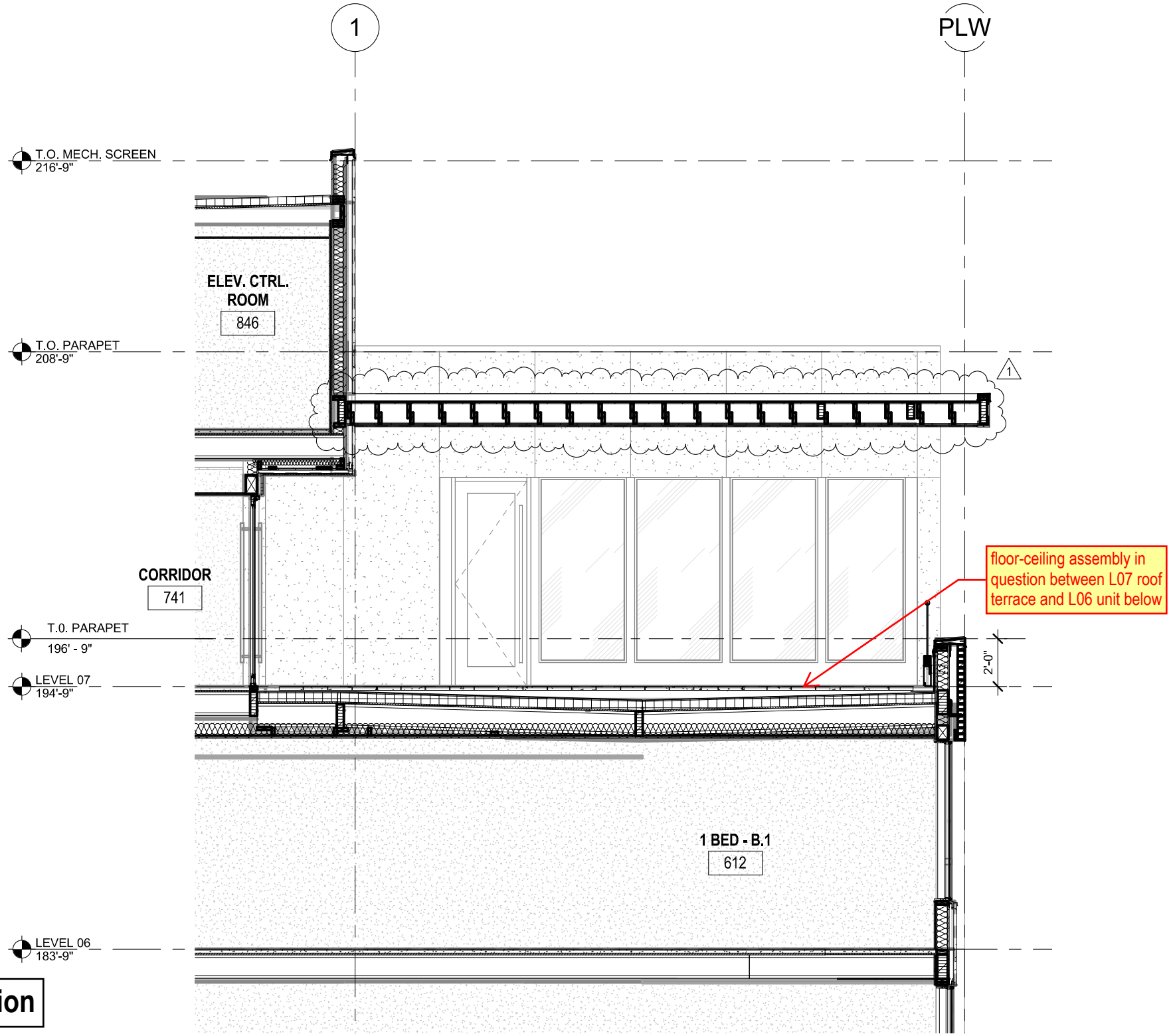
Pursuant to City Code Chapter 24.10, you may appeal this decision to the Building Code Board of Appeal within 180 calendar days of the date this decision is published. For information on the appeals process and costs, including forms, appeal fee, payment methods and fee waivers, go to www.portlandoregon.gov/bds/appealsinfo, call (503) 823-7300 or come in to the Development Services Center.



L06 Floor Plan



L07 Roof Terrace Plan



L06-07 Section

LISTEN ACOUSTICS™
acoustical and audio/visual systems engineering

Memo

To: Eric Buschert, GBD

From: Tobin Cooley, P.E.

Date: August 30, 2017

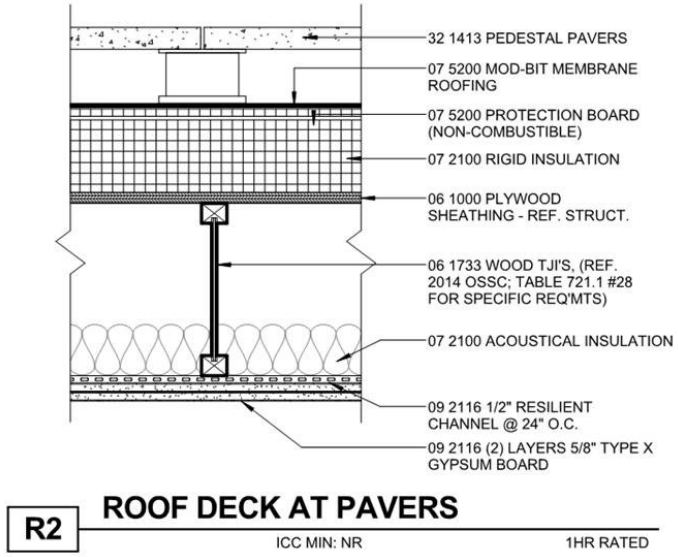
RE: R2 Roof Assembly STC/IIC

We have analyzed the R2 Roof Deck assembly for STC and IIC ratings, and have the following comments and conclusions:

Based on our analysis of comparable assemblies, with modifications for specific conditions, the R2 roof/ceiling assembly exceeds the Code minimum STC 50 and IIC 50.

Our explanations are below:

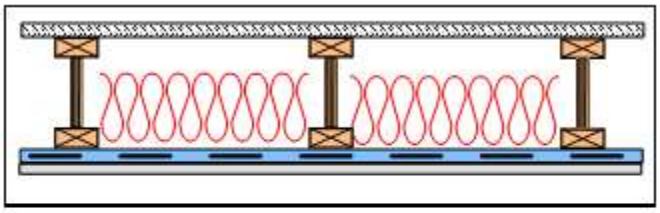
The R2 assembly is detailed as follows:



There is no test of this exact assembly, but based on our professional analysis of the a base assembly, plus modifiers as discussed below, the assembly exceeds the STC 50 and IIC 50 minimums.

- The comparable base assembly has OSB/Plywood sheathing on top, TJI, RC channel and ONE layer gwb. The Test # from NRC IRC is: **Test #TLF-96-069a**

- The rating for this comparable base assembly is STC 51 and IIC 45



	Flange dimensions, mm					
Manufacturer	Horizontal	Vertical	Test ID	STC	Test ID	IIC
A	64	38	TLF-96-069a	51	IIF-96-022	45

STC Additions:

1. Concrete Pavers, 1" min thick, plus air gap, +4 STC points;
2. Protection board + rigid insulation, +4 STC points
3. Added 5/8" gwb layer, +2 STC points

IIC Additions:

1. Rigid insulation with protection board, +6 IIC points
2. Added 5/8" gwb layer, +2 IIC points

Therefore, the calculated resulting STC is at least STC 61 and the calculated resulting IIC rating is at least IIC 53. For best results, we recommend adding rubber pads under the paver pedestals will increase the IIC by an additional 11 points, to ensure reduced footfall noise.

EXPIRATION DATE: 12/31/2017