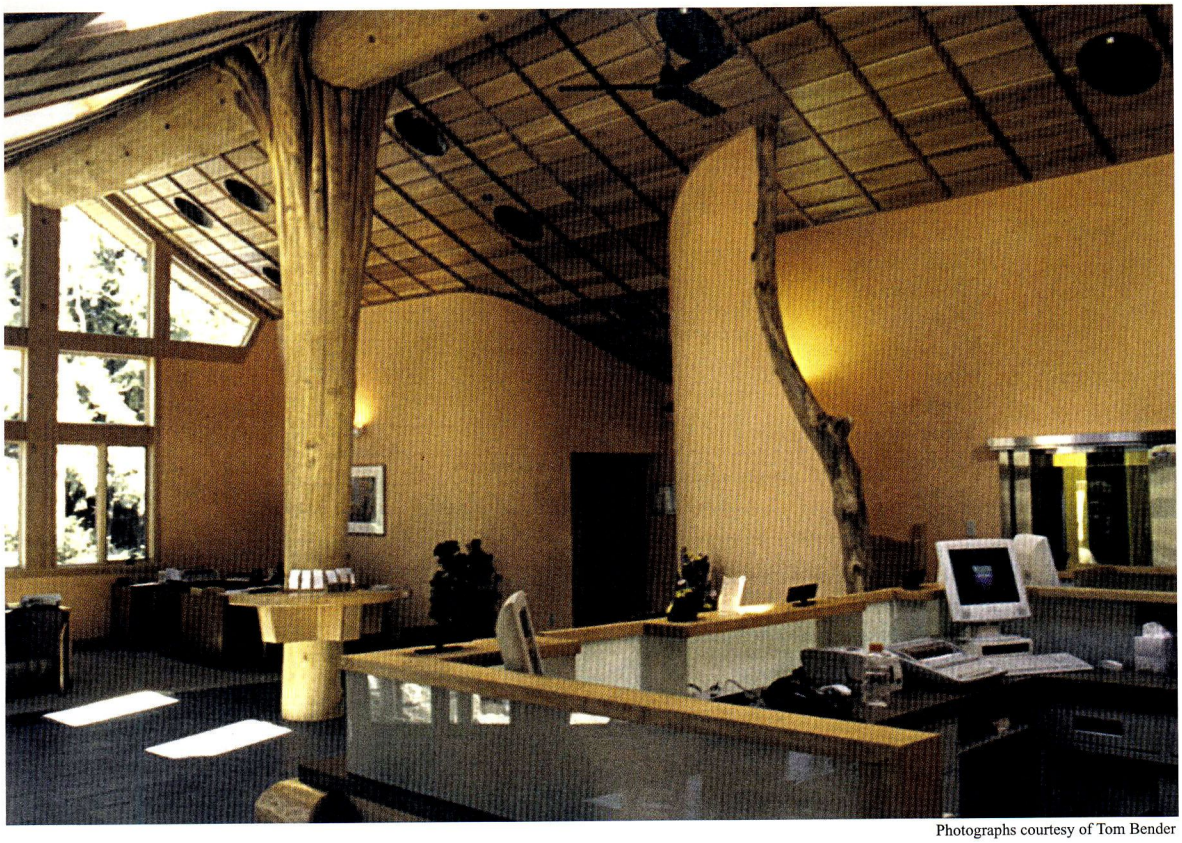

Photographs courtesy of Tom Bender

Figure 3-13. Energy-efficient office equipment and flat-screen computer monitors minimize energy and heat loads, in addition to adding critical workspace at each installation, in the Bank of Astoria.

Zone 4—Bank of Astoria

MANZANITA, ORE.

The Bank of Astoria is not a typical financial institution. Nestled on a wooded landscape in Manzanita, the bank does more than just handle financial matters. Designed by architect Tom Bender, it is a building that exhibits a wealth of sustainable elements.

Site location and building orientation were taken advantage of to allow south-facing windows and skylights for solar gain. Windows and skylights provide inviting views into the building and from the building into its entry garden. In addition, the windows and skylights provide 100 percent daylighting to all areas of the bank, except the vault. The windows are all occupant-controlled and provide 100 percent of ventilation needs. No air conditioning is used with the building; instead, a night-flushing ventilation system is used to pre-cool the building with the region's cool nighttime air. The system incorporates a high-level exhaust vent that uses gravity to vent hot air from the building, maintaining interior air temperatures at comfortable levels.

Siltation blockage of permeable paving was a concern, which led to two separate demonstration techniques. The first is a prefab plastic infiltration vault system under the drive-through paving. In the second system, water from the roof is discharged through a

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This example building demonstrates good design and construction practices suitable for this particular climate zone. In some cases, the example building may have incorporated additional features that go beyond the scope of the recommendations of this Guide.

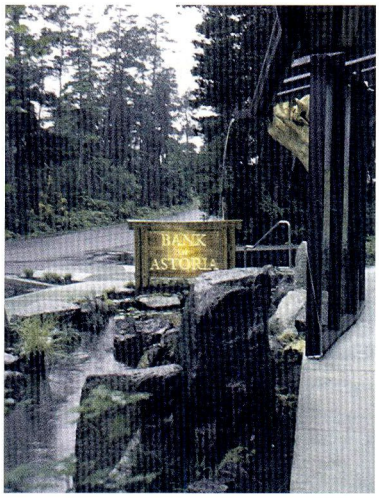

Figure 3-14. Water from the roof is discharged through a scupper into a landscaping pond for storage and settling before the water is reabsorbed into sandfill below.

Figure 3-15. South-facing windows and skylights provide inviting views into the building and from the building into its entry garden.

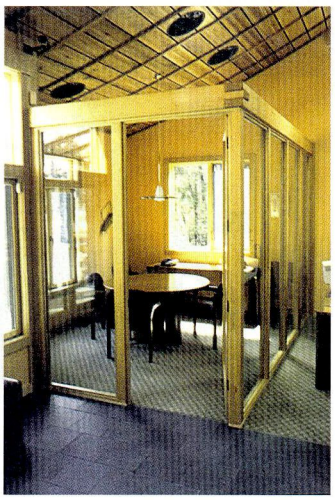

Figure 3-16. All cabinetry and partitions in the building, with the exception of teller steel, were built locally from local materials.

Figure 3-17. Skylights and windows provide an aggregate of twice the already stringent Oregon code standards for energy efficiency.

scupper into a landscaping pond for storage and settling before the water is reabsorbed into sandfill below. With the region's high rainfall, stormwater is transformed into something to be celebrated and enjoyed rather than hidden in pipes.

Building envelope efficiency was achieved with R-21 walls, R-38 floors and roof, U.30 windows, and U.38 skylights. As a result, the building provides an aggregate of twice the already stringent Oregon code standards for energy efficiency.

Inside the building, all cabinetry and partitions, except the teller steel, were built locally, from local materials. Eighty-five percent of the county the building is in is part of the world's most productive timber-growing area. Wherever possible, minimally processed, nontoxic, and recycled-content materials were used, including driftwood posts and door handles, natural linoleum and slate flooring, low-toxicity paints and wood finishes, and recycled desks and carpet pads. The resulting product is a building that honors its natural community and its resources.

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