

CONVEYING PORTLAND'S HISTORY IN MODERN USE: THE ROLE OF  
INDUSTRIAL AND CULTURAL HERITAGE IN ADAPTIVE REUSE

by

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A THESIS

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“Conveying Portland’s History in Modern Use: The Role of Industrial and Cultural Heritage in Adaptive Reuse,” a thesis prepared by Patience Rose Churchward in partial fulfillment of the requirements for the Master of Science degree in the Interdisciplinary Studies Program: Historic Preservation. This thesis has been approved and accepted by:

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This thesis examines the role of cultural heritage in adaptively reused historic industrial buildings in Portland, Oregon. While it has been argued that adaptive reuse contributes to the ecological and economic initiatives of sustainability, this research explores how adapting historic industrial buildings for modern reuse can also be socially and culturally sustainable for communities. Industrial buildings provide physical evidence of a rich cultural and industrial past and there are opportunities to share this heritage with a building's new users and/or the surrounding community. Case studies include selectively chosen National Register nominated buildings that meet specific criteria, share a common regulatory framework, and provide insightful information regarding the relationship between history and new use. Strengths and challenges of

conveying industrial heritage in modern use as well as opportunities for developers of historic properties to highlight and improve upon this process are identified.

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## CHAPTER I

### INTRODUCTION

Historic preservation, particularly adaptive reuse, is a logical step in community revitalization. As Richard Moe, President of the National Trust for Historic Preservation states, “Preservation is simply having the good sense to hold on to things that are well designed, that link us with our past in a meaningful way, and that have plenty of good use left in them.”<sup>1</sup> Historic industrial buildings are excellent resources to transform into new, mixed-use, community driven spaces. Their common proximity to historic urban centers provides an ideal modern location. The embodied energy of reusing the built environment prevents countless tons of landfill waste caused by demolition. Redevelopment brings opportunity for new businesses and generates tax revenue for their communities. Revitalized spaces provide new cultural hubs for the existing communities. Planners, designers, economists and environmentalists will all attest to the benefits of adaptive reuse in their respective fields. Most historic preservationists are thrilled about this multi-billion dollar industry that surrounds their field. State and federal tax incentives further enhance the benefits of this process. However, no evaluative tool has measured the direct role of history and cultural identity in successful adaptive reuse projects. To maximize the benefits of adaptive reuse and historic preservation, it is essential to understand the value of incorporating the “story” of a site into its new use.

*Adaptive reuse*, the practice of rehabilitating historic buildings and giving them new modern uses is a major element in historic preservation practice and holds tremendous value for both sustainability and community revitalization endeavors. Sustainable development focuses on creating beneficial situations in three important

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<sup>1</sup> Richard Moe, “Sustainable Stewardship: Historic Preservation Plays an Essential Role in Fighting Climate Change” (lecture presented at International Conference of National Trusts, Dublin, Ireland; March 27, 2008).

areas: energy, economy, and socio-culture. Historic preservation is a good fit to this triple bottom-line agenda. As adaptive reuse becomes an increasingly important tool in sustainable development and building practices, urban planning, and community revitalization, it is imperative to understand the contextual framework of all of its combined components, including the less-examined role of how cultural heritage overlaps with urban adaptive reuse design. This study is intended to flesh out such details and build a practical model of successful practices that can be used in the future.

Successful practices in adaptively reusing underutilized industrial spaces demonstrate the potential economic, environmental, and socio-cultural benefits for communities that undertake the challenge of transforming obsolescence into vibrancy. Places that once produced the cultural and economic lifeblood for communities, but have long since failed to serve such purposes, can be revitalized into relevant spaces that serve today's communities and foster a new sense place and social identity. In this study, the large concept of adaptive reuse is considered in two main elements: *cultural heritage*, identified in this research as manmade or natural elements that are definitive of a social, cultural, or regional history; and *redevelopment* or *adaptive reuse* (used interchangeably in this thesis), the strategic planning process that transforms historic buildings into modern real estate properties.<sup>2</sup> To narrow the scope, historic urban industrial case studies were chosen because they are “symbolic and monumental in character,” as expressions of a past that have helped to shape the economic identity of a city or region's heritage.<sup>3</sup>

Cultural heritage is the social fabric of a place created by natural and social forces that have endured over time, and arguably should be retained and incorporated into a building's new use. Conveying the histories of rehabilitated buildings requires an important presentation and interpretation component in adaptive reuse. *Interpretation*, the process of intellectually and emotionally connecting viewers to the meaning of a

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<sup>2</sup> Freeman Tilden, *Interpreting our Heritage* (New York: University of North Carolina Press, 1957), 3; National Association for Interpretation defines “heritage” as nature and culture. <http://www.definitionsproject.com/definitions/index.cfm> (accessed November 16, 2009).

<sup>3</sup> Yucel Severcan & Adnan Barlas, “The Conservation of Industrial Remains as a Source of Individualization and Socialization,” *Industrial Journal of Urban and Regional Research* 31, no. 3 (September 2007): 679.

resource, is an important aspect of preservation work.<sup>4</sup> Understanding its effectiveness in adaptive reuse is a valuable tool for improving preservation practices. The relationship between preservation and presentation is complex, and the outcomes can emphasize, alter, or impose various meanings.<sup>5</sup> Interpretation techniques are paramount to conceptually analyzing how cultural heritage shapes community identity.

Past research analyzes adaptive reuse and interpretation in historic preservation, but little data exists that defines and connects the relationships among adaptive reuse, cultural heritage, and sustainability. For example, energy and economics are two related components of adaptive reuse that are addressed in various articles. Langston, et al., propose a method to assess the use potential of adaptive reuse opportunities in regard to a space's obsolescence. Their study then attempts to connect this to the "triple bottom line philosophy," that accounts for environmental, economic, and social benefits of sustainable development.<sup>6</sup> Shackel and Palus focus on the issue of a false sense of history or heritage in the interpretation of industrial sites. They use Harper Ferry National Historical Park on Virginous Island as a case study to argue that the stories of the working class labor force are often omitted or overshadowed by the greater industrial feats of the place.<sup>7</sup> Often the voices of labor histories are underrepresented to make room for a stronger focus on the general economic boom of the industrial revolution. The United States Green Building Council's LEED (Leadership in Energy Efficiency and Design) standards offer certification points for reusing existing structures and preventing

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<sup>4</sup> National Association for Interpretation defines "interpretation" as a mission-based communication process that forges emotional and intellectual connections between the interests of the audience and meanings inherent in the resource. National Association for Interpretation. <http://www.interpnet.com> (accessed November 16, 2009).

<sup>5</sup> David Baker, "Contexts for Collaboration and Conflict," in *Managing Historic Sites and Buildings: Reconciling Presentation and Preservation*, ed. Gill Chitty & David Baker (New York, Routledge 1999), 2.

<sup>6</sup> Craig Langston, Francis K.W. Wong, Eddie C. M. Hui, & Li-Yin Shen, "Strategic Assessment of building Adaptive Reuse Opportunities in Hong Kong," *Building and Environment* 43(2008):1709.

<sup>7</sup> Paul A. Shackel & Matthew Palus, "Remembering an Industrial Landscape," *International Journal of Historical Archaeology* 10, no. 1 (March 2006): 49.

demolition waste.<sup>8</sup> Donovan Rypkema touts the economic forces in adaptive reuse that fuel community revitalization and local economic benefits. While costs of new construction are primarily spent on materials alone, rehabilitation projects spend less on materials and more on labor and craft, looking locally for skilled tradesmen to complete the work.<sup>9</sup> Paying for people instead of for materials spurs cyclical spending within the communities, and reinvesting money locally on a more efficient scale, all key components to community revitalization.<sup>10</sup> Preserving historic buildings is a sustainable way for a metropolitan area to grow wisely, contribute to successful public transit and create an “urban renaissance.”<sup>11</sup> Reusing degraded industrial sites in particular contributes to redevelopment and becomes an agent of urban revitalization.

The overarching question of this thesis examines the connection between cultural heritage and adaptive reuse. How can the significance of historical social fabric be further emphasized to better demonstrate its role and value in revitalization projects and heighten the importance of considering heritage in the adaptive reuse process? Historic preservation, influenced by social insight, is the engine for effectively incorporating cultural heritage into new uses. There are several methods for interpreting industrial heritage. While developers in Portland, Oregon acknowledge the cultural and social benefits of retaining and sharing the city’s industrial heritage and offer some indirect interpretation of this history, the effectiveness often falls short in practice. The research examines this disconnect between philosophies, expectations, and implementations and offers recommendations to build a stronger connection among these factors and how to influence more effective industrial adaptive reuse projects in the future.

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<sup>8</sup> United States Green Building Council. *LEED® for New Construction & Major Renovations: Version 2.2*, October 2005.

<sup>9</sup> Donovan Rypkema, “Community, Place and the Economics of Historic Preservation,” Keynote Address: Alexandria Historic Preservation Conference and Town Meeting (First Baptist Church, Alexandria), May 5, 2007.

<sup>10</sup> Ibid.

<sup>11</sup> Dan Costello, Robert Mendelsohn, Anne Canby & Joseph Bender, *The Returning City: Historic Preservation and Transit in the Age of Civic Revival* (Washington D.C. Federal Transit Administration, National Trust for Historic Preservation, 2003), 5.

There also appears to be a gap in research analyzing adaptive reuse projects from the planning and design stage. How much focus is given to the industrial history and cultural heritage when undertaking such a project? This thesis argues that, in general, the research goes only as far as necessary to nominate the building to the National Register of Historic Places and determine its eligibility for financial incentives. What are the benefits of retaining, exposing and sharing the historic character of a place in a modern architectural program and how can this be achieved? These questions are addressed through literature review, analysis of National Register nominations, case study visits and interviews with historic property developers in Portland, Oregon. Discovering social and cultural connections between urban industrial cultural histories and modern new uses is at the heart of this research.

Retaining already existing spaces encourages sustainable development and sense of place in communities.<sup>12</sup> As people become more inspired by adaptively reused spaces, more enthusiasm will grow for historic preservation on a broad spectrum. This thesis research is meant to go beyond just showing the benefits of repurposing underutilized industrial resources. It is about providing effective examples and recommendations for developers and preservationists, and to give users and communities the opportunity to connect and identify with the story of a place through a building's continuum of time. Users and communities can then capture the essence of how historic industrial buildings contribute to the built environment and why they have such an important role in the city landscape. When adaptively reused historic buildings reach this heightened level of sharing both meaning and process with their users, historic preservation ethos can contribute to sustainable development on all levels.

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<sup>12</sup> N. Duxbury & E. Gillette, "Culture as a Key Dimension of Sustainability: Exploring Concepts, Themes, and Models," (Working paper, 2007), 12.  
<http://74.125.155.132/search?q=cache:Sj3UhjdNiwQJ:www.cultureandcommunities.ca/downloads/WP1-Culture-Sustainability.pdf> (accessed March 25, 2010).

## CHAPTER II

### RESEARCH DESIGN

#### PURPOSE

Urban, historic industrial buildings are prime candidates for adaptive reuse, as transportation and manufacturing changes over time have increased the number of underutilized industrial buildings within the city landscape. Portland, Oregon's dynamic industrial heritage, preservation ethos, and regulatory framework provide an ideal setting for case-study analysis in this study. Five National Register listed properties in Portland were chosen that are insightful examples of how industrial and cultural heritage can be incorporated into a place's adaptive reuse. Although they share a common framework, each case study offers unique examples that are analyzed throughout this study. This thesis research took place in 2009 and 2010 with a heavy focus on literature review and research design at the beginning, interviews, observations, and data collection in the middle, and analysis in the spring of 2010, concluding with a presentation of findings in June, 2010.

The purpose of this study is to examine the role of industrial heritage in adaptive reuse projects as a means of expressing cultural value and fostering community revitalization. The intention is to explore this connection and inform the professional field for further advancement in adaptive reuse. This process is analyzed through the lens of historic preservation as an expression of cultural and community identity. This study is meant to describe and measure the characteristics and relationships of how the history of a place is conveyed through an adapted modern use.<sup>13</sup> Case studies are essential for understanding the contextual framework of this study, as social realities can be examined through focused, direct observation at each case study site. When carefully defined by a

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<sup>13</sup> John Zeisel, *Inquiry by Design*, (New York: W. W. Norton & Company, 2006), 92.

series of parameters and approached through a variety of methodologies, case studies are particularly informative in describing complex situations, buildings, and processes.<sup>14</sup>

## STRATEGY OF INQUIRY

Case studies are an effective way to analyze and interpret research regarding the feasibility and success of rehabilitating buildings or industrial structures and giving them new uses. Robert Yin provides a thorough description and analysis of this research methodology in *Case Study Research: Design and Methods*. Questions in a case study should ask how and why.<sup>15</sup> According to Yin case study research involves “direct observation of the events being studied and interviews of the persons involved in the events.”<sup>16</sup> Case study research often consists of a combination of quantitative and qualitative evidence. Formal case study structure requires researchers to determine a problem, make initial hypotheses, conduct research to gather information and observations, revise hypotheses and theory, and tell a story.<sup>17</sup> This thesis follows a similar model.

Erendil and Ulusoy offer an example of multi-faceted case study research. They take a case study-oriented, quantitative approach to analyze a historic section in the Ankara Citadel, but complement it with a qualitative explanation of the actors involved. A survey of the area is analyzed to assess the deterioration or improvement of the citadel’s spatial qualities, the economic feasibility for stakeholders that cross all class sectors, and the ethics and legitimacy of the research process itself. Historical-comparative research supplements Erendil and Ulusoy’s case study by looking at title deeds as a way of understanding changes in the market and city.<sup>18</sup> Severcan and Barlas

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<sup>14</sup> Zeisel, 98.

<sup>15</sup> Robert Yin, *Case Study Research: Design and Methods* (Los Angeles: Sage Publications, 2009), 8.

<sup>16</sup> Ibid.

<sup>17</sup> Maggie Breslin, & Richard Buchanan, “On the Case Study Method of Research and Teaching in Design,” in *Design Issues* 24, no. 1 (Winter 2008): 38.

<sup>18</sup> Asuman Erendil Türkün & Auhul Ulusoy, “Reinvention of tradition as an urban image: the case of Ankara Citadel.” *Environment and Planning B: Planning and Design* 29 (2002): 656.



also use a historical-comparative research approach and discuss their findings from several case study sites, concluding with a summary of major advantages for adapting industrial landscapes as a source for building community individualization and socialization.<sup>19</sup>

To develop a successful research design, the case study methodology aims to be of the highest quality, validity, and reliability.<sup>20</sup> Case studies are ideal for evaluation and exploratory research, but should be strengthened and supplemented through a triangulation of methods that includes interviews, ethnography, questionnaires, and historical-comparative analysis.<sup>21</sup> The case studies in this research are analyzed through a multi-layered contextual approach.

## CASE STUDY CRITERIA

Specific criteria were referenced to choose case studies to minimize variables, provide access, and offer informational frameworks for analysis. Research began with eight sites and was narrowed down throughout the research to five case studies that are particularly informative in addressing the research questions. Case study selection was limited to sites that include the following criteria:

- Sites are located in Portland, Oregon within twenty blocks of the downtown central business district. Because the case studies are all located in Portland, they share the same historic preservation regulatory framework. This limits several variables and provides comparable conditions for data collection.
- Sites are nominated to National Register of Historic Places. National Register listing accredits a building's significance and serves as a way to attain written statements of significance and historical documentation on these resources. The nomination's Physical Description (Section 7) and Statement of Significance (Section 8) must be substantial enough to convey a detailed history of the

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<sup>19</sup> Severcan, & Barlas, 680.

<sup>20</sup> Yin, 19.

<sup>21</sup> Ibid., xiii.

resource and its character-defining features. The nominations were reviewed as part of the data collection and analysis.

- Sites used Federal Rehabilitation Tax Credits in their redevelopment. This is a common method used to fund a redevelopment project and, through the necessary compliance, exemplifies confidence that character-defining features are preserved. This criterion was not met by all the case studies. In retrospect, however, the failure to meet this criterion in every case offers an interesting insight into the tax credit process.
- Sites' adapted uses have a local purpose (office, retail, restaurant, hotel, housing, entertainment, public service, community center), but have not become a gallery or a museum. The purpose of a museum or gallery is interpretive by nature and thus is not valid for research that analyzes the interpretation methods of conveying the history of the building in the new use.
- Sites were historically used for industrial purposes. Industrial heritage provides interesting opportunities for discussion on regional economic and cultural development, labor history, and other special factors, along with unique opportunities to convey and interpret this heritage. Buildings were nominated to the National Register of Historic Places under Criterion A for their significant contributions to industrial history, validating their industrial significance.
- The researcher was allowed access to the building.
- Developers or building experts of each site were willing to participate in at least one interview with the researcher.

The sites chosen were:

- Weinhard Brewery Complex – Brewery Blocks, Block Two: 1131-1133 West Burnside Street, Portland, Oregon
- Crane Company Building – Crane Lofts, 720 Northwest Fourteenth Avenue, Portland, Oregon
- Northwest Fence and Wire Works Building, 400 Northeast Eleventh Avenue, Portland, Oregon

- Olympic Cereal Mill Building – Olympic Mills Commerce Center, 107 Southeast Washington Street, Portland, Oregon
- Portland Cordage Company Building – Bridgeport Brewing Company, 1313 Northwest Marshall Street, Portland, Oregon.

## DATA COLLECTION & ANALYSIS PROCEDURES

Triangulation of methodology was used to thoroughly understand the context of this research through interviews, direct observations, document analysis, and historical comparative methods. Specific case studies were chosen through purposive sampling. These case studies represent situations of seemingly successful adaptive reuse projects that transformed historic industrial sites into modern developments. Once the data was gathered, substantial analysis and comparison of case studies provided findings of patterns, successful practices, and informative exceptions.

*Document Analysis* of National Register of Historic Places nominations, Federal Rehabilitation Tax Credit Compliance, design and preservation plans, and any other available documentary evidence was analyzed within a consistent framework to identify patterns of procedural elements and considerations among the case studies.

*Direct observations* described the balance of how character-defining features overlap with the building's modern use and how this balance helps to convey industrial heritage of the adaptively reused buildings. Each project's interpretive approach, if an approach existed, was evaluated using a system adapted from Kathleen McLean's approach to critiquing exhibits along with the National Association for Interpretation's resources for best practices in interpretation.<sup>22</sup> Patterns rose in the use of photographs, overlapping stories, marketing, website interpretation, and material culture.

*Semi-structured interviews* were conducted with the developer, planner, designer, project manager, or building expert of each case study property. The perceptions and philosophies of these expert informants provide collective insight on the process of

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<sup>22</sup> Kathleen McLean, "Looking at Exhibitions: One Approach to Criticism," in *Planning for People in Museum Exhibitions* (Washington D.C.: Association of Science-Technology Centers, 1993), 163; National Association for Interpretation, *Standards and Practices for Interpretive Methods*. (2009). <http://www.interpnet.com/standards/> (accessed November 16, 2009).

adaptive reuse and redevelopment projects. A state regulatory official associated with determining eligibility for Federal Rehabilitation Tax Credits was also interviewed. This helped to understand the regulatory framework of the redevelopment process and provide expert opinions about successful adaptive reuse projects. Interviews were documented through note taking and/or digital recordation. Informants were recruited with a letter and authorized consent to share their opinions for the purposes of this study. Anonymity could not be maintained as these individuals can easily be identified by their connection to each case study. Letters of recruitment and consent, along with interview protocol, document analysis and direct observation forms, can be found as Appendices at the end of this thesis.

## LIIMITATIONS

Because this research only analyzed a few case study examples, the findings from this study cannot be generalized. However, the analysis of data concludes with some recommendations of good practices for adaptive reuse projects in the field. The goal of this research was to find particularly informative or “effective” examples and practices of conveying cultural heritage in adaptive reuse. Determining and evaluating effectiveness in this situation can be subjective. Because of this, interviews with preservation and redevelopment experts, statements of significance, and interpretation plans were collectively gathered and compared against one another. This allowed the research to inform and make some non-conclusive recommendations about better implementation of conveying industrial heritage in industrial adaptive reuse projects in the future.

## BENEFITS OF THE STUDY

The data gathered in this study will help to measure and model a successful approach to industrial adaptive reuse projects to further advance the field. An analysis, including several examples and critiques of situational models of this problem is now available to readers and professionals. Findings from this research heighten the value of conveying heritage to a building's new users which can encourage more successful adaptive reuse redevelopment projects in the future. Aside from these benefits, this thesis encourages dialogue about how the cultural resources embodied in industrial buildings can effectively contribute to the socio-cultural aspects of sustainability.

## CHAPTER III

### CULTURE & SUSTAINABILITY

#### INTRODUCTION

The ethos of sustainable development calls for the equity and balance of the ecological environment, economics, and society. In a sense, sustainable development “meets the needs of the present without compromising the ability of future generations to meet their own needs.”<sup>23</sup> Countless studies and articles tout the *environmental* benefits of historic preservation and adaptive reuse, of conserving and reusing resources in our built environment. Additionally, the *economics* of adaptive reuse have also been researched in ways that consider the financial incentives for rehabilitation available to bridge financial gaps, and also the affordable incubator spaces created for smaller, newer businesses in older buildings. The aspects of sustainability are generally less discussed, but it has been well-reasoned that historic redevelopment and adaptive reuse plays an important role in neighborhood revitalization and often functions as a catalyst for future community projects. The layout of historic districts and neighborhoods has become a leading example for what planners and designers refer to as “the new urbanism,” which improves social livability standards through walkability, access to public transportation, scale of buildings, and multi-use spaces, among other factors.<sup>24</sup> There appears to be one missing element in the discussion of sustainability, a component that adaptive reuse has the potential to generously contribute to, especially in the case of historic industrial buildings. This entails sustaining the *cultural* processes of our past, present and future.

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<sup>23</sup> United Nations, “Report on the World Commission on Environment and Development: Our Common Future,” (U.N. Documents, 1987). <http://www.un-documents.net/ocf-02.htm#I> (accessed April 7, 2010).

<sup>24</sup> James Howard Kunstler, “Home from Nowhere,” *The Atlantic Monthly* 278, no. 3 (September 1996), 55.

Within the sustainability field, culture is discussed in terms of cultural capital, defined as “traditions and values, heritage and place, the arts, diversity and social history.”<sup>25</sup> The stock of cultural capital, both tangible and intangible, consists of what is inherited from past generations and what will be passed on to future generations.<sup>26</sup> Acknowledgement of cultural capital leads to social cohesion, which becomes an important component of community through a shared collective identity.<sup>27</sup> Cultural capital also encompasses the values and aspirations of a group, the processes and mediums of developing and sharing these values and aspirations, and the tangible and intangible manifestations of these processes.<sup>28</sup> The built environment, including its history and uses, is a clear and tangible manifestation of culture.

For years, sustainability practitioners and scholars have proposed that culture is an important missing element in the sustainability debate. For example, in *The Fourth Pillar of Sustainability: Culture’s Essential Role in Public Planning*, John Hawkes argues that culture must play a vital role in sustainability planning. One of his key assessments for demonstrating how the concept of culture can be most effectively applied to public planning is that “carefully planned cultural action is essential for the achievement of sustainability and wellbeing.”<sup>29</sup> Within the community planning and design field, cultural considerations emerge through discussions about social sustainability and community capital. Knox and Mayer support this by stating that “community sustainability continues to be most commonly seen as a way to improve a community’s ‘well-being’ in social, economic, and environmental terms, with culture gradually

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<sup>25</sup> Mark Roseland, Maureen Cureton & Heather Wornell, *Towards Sustainable Communities: Resources for Citizens and their Governments* (Gabriola Island, BC: New Society, 2005), 12.

<sup>26</sup> Duxbury & Gillette, 5.

<sup>27</sup> Sustainable Development Research Institute, “Social Capital Formation and Institutions for Sustainability,” (workshop proceedings prepared by Asoka Mendis, Vancouver, BC, November 16-17, 1998). [www.williambowles.info/mimo/refs/soc\\_cap.html](http://www.williambowles.info/mimo/refs/soc_cap.html) (accessed April 1, 2010).

<sup>28</sup> John Hawkes, *The Fourth Pillar of Sustainability: Culture’s Essential Role in Public Planning* (Melbourne: Cultural Development Network, Common Ground, 2003), 4.

<sup>29</sup> Hawkes, 2.

forming a part of this vision.”<sup>30</sup> If communities are to grow in all aspects of cultural, social, economic, and environmental values, tangible aspects and processes of community well-being are to be cultivated and shared. Historic preservation is one aspect that, as analyzed in this thesis, embodies several of the necessary characteristics and values of community sustainability. Preservation is “as much concerned with building the future as with holding on to the past.”<sup>31</sup> Making modern use of historic spaces that have outlived their original functions while preserving and conveying their heritage serves sustainability at a culturally conscious social level.

Literature suggests that the inclusion of culture in sustainability is an internationally emerging trend that has yet to be fully embraced by the United States. Nevertheless, patterns are becoming evident and an argument can be made to offer historic preservation as an effective form of cultural capital in the sustainability framework. Cultural sustainability can be defined in the Sustainable Development Research Institute’s words as “the ability to retain cultural identity and to allow change to be guided in ways consistent with the cultural values of a people.”<sup>32</sup> Providing a “sense of place” is perhaps culture’s strongest attribute for retaining identity and achieving sustainability. The following section analyzes some of the literature regarding culture, sustainability and sense of place, and shapes an understanding of how industrial buildings and adaptive reuse fit into this framework.

## CULTURAL HERITAGE & SENSE OF PLACE

*“Inescapably inscribed in the land, history is intrinsic to the idea of place that forces people to be human.”<sup>33</sup>*

Place, a synthesis of land and people, reflects context and society, and is created through the cultural identification process.<sup>34</sup> E. Relph in *Place and Placelessness* substantiates

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<sup>30</sup> Duxbury & Gillette, 3.

<sup>31</sup> Moe, “Sustainable Stewardship”.

<sup>32</sup> Sustainable Development Research Institute, 24.

<sup>33</sup> Edward Relph, *Place and Placelessness* (London: Pion Limited, 1976), 24.



the cultural identification of place by saying that “sense of place is the ability to recognize different places and different identities of place.”<sup>35</sup> Human geographers have formulated a sense of place that Kent Ryden discusses in *Mapping the Invisible Landscape* as “the strong sense of rootedness in a location,” and the “identification with that location.”<sup>36</sup> He continues by stating that sense of place involves “membership in a unified place-based community” that shares “a common world view as a result of a common geographical experience.”<sup>37</sup> As these theorists suggest, place, through its social construction, becomes far more than just the built environment, but something with which people culturally identify. A fundamental element of this social construction includes the “existential imperative for people to define themselves in relation to the material world.”<sup>38</sup> Place takes on a physical, visual form.<sup>39</sup> Historic industrial buildings are physical and tangible reminders of the original nature of a place and become the material evidence of cultural development. Character-defining features illuminate the industrial traditions, and evidence of a particular history can emphasize a place’s social construction and continuum through time.

Sense of place is also created through the authenticity of its existence. Authenticity can be understood as tied to the original form of something, tradition, or evidence of the “wear and tear and adjustments resulting from the passage of time.”<sup>40</sup> While it can easily be stated that a lack of authenticity implies indifference with sense of place, this research suggests that the opposite is true – that retaining the authenticity of a

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<sup>34</sup> John Matthews & David Herbert, eds. *Unifying Geography: Common Heritage, Shared Future?* (Oxfordshire, UK: Routledge, 2004), 168.

<sup>35</sup> Relph, 63.

<sup>36</sup> Kent C. Ryden, *Mapping the Invisible Landscape: Folklore, Writing and the Sense of Place* (Iowa City: University of Iowa Press, 1959), 59.

<sup>37</sup> Ibid.

<sup>38</sup> Knox & Mayer, 76.

<sup>39</sup> Relph, 30.

<sup>40</sup> Knox & Mayer, 85.

space shows great care and value in its culture and sense of place.<sup>41</sup> This is especially important to consider in adaptive reuse, where modern changes are an inherent part of the process. Relph's philosophy on authenticity is particularly informative when applied to historic preservation and preserving the authentic history of a place. "An authentic attitude to place is understood to be a direct and genuine experience ... not mediated and distorted through a series of quite arbitrary social and intellectual fashions about how that experience should be." Inclusive of adaptive reuse, historic preservation serves to provide an authentic, sincere, and genuine tie to the past. Developers and preservationists recognize that the invested heritage and unique character of historic buildings cannot be mimicked in a modern fashion and still have the same impact on the community as they do in their authentic form. Nevertheless, the advantage of having unmatched character already existent in a building comes with a great responsibility to preserve the authentic nature as a necessary component of generating a strong sense of place.

## CULTURAL HERITAGE & ADAPTIVE REUSE

The growing trends in adaptive reuse begin to provide familiarity to communities about the processes of retaining heritage while encouraging new uses. According to Knox & Mayer, "industrial redevelopment becomes easier to implement when its merits are understood by the public."<sup>42</sup> If interaction with a place's history becomes a large part of a group's regular routine, this bond becomes a shared connection to the place and its meanings.<sup>43</sup> The result is "a collective and self-conscious 'structure of feeling'... generated among people as a result of the experiences and memory associated with a particular place."<sup>44</sup> This embeds stronger meaning of a place into societal values and memory.

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<sup>41</sup> Paul Knox & Heike Mayer, *Small Town Sustainability: Economic, Social, and Environmental Innovation* (Basel: Birkhäuser, 2009), 84.

<sup>42</sup> *Ibid.*, 76.

<sup>43</sup> *Ibid.*, 76.

<sup>44</sup> *Ibid.*, 77.

History and sense of place are dynamic concepts, as are their interpretations. “Places are constantly under social construction as people respond to the opportunities and constraints of their particular locality.”<sup>45</sup> Historically, a social understanding of a city was greatly influenced by the industrial and economic opportunities that the area offered. Individuals were able to build their lives and communities based on the industrial and commercial vitality of the location. Consequently, industrial developments throughout history have become inherently rooted in a community’s sense of place.

According to Ryden, “to see, listen and talk about a place – is to understand and perpetuate the history of a place, history which lives simultaneously on a number of levels and colors the meaning of that place in a number of ways.”<sup>46</sup> As people try to identify with the social and cultural make-up of a location, industrial history becomes an important component to understand. In a modern setting, sense of place can be determined by an area’s social action and responsibility taken towards its natural and cultural capital. An urban area like Portland’s Central Eastside Industrial District or the Pearl District may in time come to be defined by its methods of adaptive reuse and repurposing historic industrial structures. The ability to define both a historic and modern sense of place provides quite an enticing prospect for historic redevelopers who can successfully achieve this complex and delicate balance.

To understand why an investor should be interested in culture and sustainability, it should be emphasized that cultural capital and sense of place are valuable components in attracting new economic activities and users to an area.<sup>47</sup> In addition, the real estate of historic industrial redevelopment provides tremendous value to investors by representing a unique character that is not reproducible, and that is identifiable in its originality and authenticity of place.”<sup>48</sup> According to Hardy in “The Romance of Abandonment:

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<sup>45</sup> Knox & Mayer, 76.

<sup>46</sup> Ryden, 64.

<sup>47</sup> Luis Cesar Herrero, José Ángel Sanz, María Bedate, Ana Devesa & María José del Barrio, “The Economic Impact of Cultural Events: A Case-Study of Salamanca 2002, European Capital of Culture,” *European Urban and Regional Studies* 13, no. 1 (2006): 41.

<sup>48</sup> Ibid.

Industrial Parks,” the intelligent reuse of industrial sites can provide a genuine sense of place, one that celebrates both a rich history and an “off-beat aesthetic” character of place.<sup>49</sup> Redevelopers have the opportunity to use the character, sense of place, and history in unique marketing materials aimed for potential leasing tenants.

People and businesses commonly define themselves through their history. A stronger understanding of industrial heritage, as one component of history, develops a stronger regional identity to which people can culturally connect. That culture can then become commoditized. Researchers explain that culture, a “sign of identity, knowledge and national histories, becomes merchandise, namely, a good that can be demanded and consumed.”<sup>50</sup> Although careful consideration must be taken to retain authenticity, the promoting and selling of a place’s history can provide a boost to the urban regeneration of cities. Historic preservation and redevelopment provides an avenue to share an area’s unique authentic character and stand out as an appealing element of a city’s cultural image.<sup>51</sup>

## CONCLUSION

Culture supports collective remembrance and social identity, and generates a strong sense of place. Additionally a strong presence of culture in social and economic activities can be an indicator of a community’s quality of life, the greatest factor of success in sustainability.<sup>52</sup> Industrial buildings, as evidence of a community’s past cultural developments, can be effectively preserved and reused in ways that connect humans to a collective identity. This fosters a stronger social awareness and builds community based upon the common understandings of how a place is embedded in culture and history. In these ways, the preservation and reuse of historic industrial

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<sup>49</sup> Hugh Hardy, “The Romance of Abandonment: Industrial Parks,” *Places – Massachusetts* 17, no. 3 (2005): 37.

<sup>50</sup> *Ibid.*

<sup>51</sup> Herrero, et al., 53.

<sup>52</sup> *Ibid.*, 54.

buildings provides a strong and multi-faceted approach to the cultural ethos of sustainability.

## CHAPTER IV

# INDUSTRIAL HISTORY OF PORTLAND, OREGON

### INTRODUCTION

Portland's development history includes factors that have greatly influenced and have been influenced by industry, transportation, and adaptive reuse. A brief version of the city's history and industrial development is intended to look carefully at these factors. The relationships among historical industrial developments, transportation, and today's redevelopment can strengthen the argument for why, today, industrial buildings are viewed as ideal sites for historic preservation and adaptive reuse.

Industrial buildings and warehouses in the West were commonly built near the core of cities as regional industry drove the early economy of urbanizing settlements. As Portland historian Carl Abbott states, "Like other river cities, Portland is a working city built around a working river."<sup>53</sup> He continues, "The river is key for understanding the city's history, economic functions, and geographic distribution of activities."<sup>54</sup> Portland's industrial areas were sited along the city's two rivers in order to capitalize on the flat topographic features of the riverbed which was ideal for manufacturing and warehouse operations. Interestingly, these same topographic features are also considered ideal for railroads, conveniently situating industrial and transportation resources in operational proximity.<sup>55</sup>

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<sup>53</sup> Carl Abbott, *Portland: Gateway to the Northwest* (Northridge, CA: Winchester Publications, Inc., 1985), 7.

<sup>54</sup> Carl Abbott, *Portland Planning Politics, and Growth in a Twentieth-Century City* (Lincoln, NE: University of Nebraska Press, 1983), 21.

<sup>55</sup> Portland City Planning Commission, *Portland's Industrial Areas: An Initial Appraisal of Blight and Related Factors* (Portland, OR: Community Renewal Program, Portland City Planning Commission, 1967), 3.

## EARLY HISTORY

Portland, once only a small clearing visible from the Willamette River, was settled in 1843, over fifty years after Anglo-American explorers had been in Oregon, and over thousands of years following Native American occupancy in the region.<sup>56</sup> William Overton and Asa Lovejoy spotted the clearing from the river and, in 1843, purchased the 640 acre donation land claim. According to Abbott, “Portland’s founding fathers quickly lost interest in their land speculation, and Overton’s share was quickly sold to Francis Pettygrove in 1844.”<sup>57</sup> Other began to arrive in larger numbers, and a coin toss determined which eastern hometown would christen the settlement, Boston or Portland.<sup>58</sup> The town developed at a steady rate over the next few years, centered around Pettygrove’s wharf and warehouse at the end of Washington Street.<sup>59</sup>

Portland’s ideal geographic features offered dry flat land and access to two rivers, both the Willamette and Columbia, swiftly establishing Portland as a shipping town. Buildings were erected along the west side of the river to support Portland’s shipping industry and the streetscape began to develop. Although Portland grew at a rapid rate, the town remained tightly condensed, closely strung along the Willamette River. The majority of all buildings were on Front Street, facing the river, and First and Second Avenues. Business centered around the warehouses, docks, and waterfront stores. As the town eventually expanded outward, the industrial activities remained near the river for easy access to shipping.

In his article, “Evolution of Built Landscapes in Metropolitan Regions,” Stephen Wheeler describes this downtown grid development as a system that occurred often in the west, as it was easy for land survey and rapid development. Blocks were smaller, two-

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<sup>56</sup> Abbott, *Portland: Gateway to the Northwest*, 7.

<sup>57</sup> *Ibid.*, 18.

<sup>58</sup> *Ibid.*, 19.

<sup>59</sup> John M. Tess & Jeri S. Tess, “Portland Thirteenth Avenue Historic District Nomination,” National Register of Historic Places Nomination (U.S. Secretary of the Interior: National Park Service, 1987), Section 8, p. 2.

hundred to three-hundred feet, and “land uses were highly mixed.”<sup>60</sup> In her Master’s thesis, “The Impacts of Transportation Developments on Urban Form and Society in Portland, Oregon: 1851-1990,” Laura Buhl suggests that the historic city landscape was similar to what city planners strive for with mixed use development today. “The historical walking city was limited by how far workers and shoppers could walk to do business and live their lives.”<sup>61</sup> The historical establishment of street grids for past industrial, commercial and residential purposes laid the groundwork for today’s streetscape in Portland and other regional metropolitan cities.

The California Gold Rush of 1849 enticed people from many surrounding settlements to gravitate south with hopes of striking it rich. Portland lost the majority of its population in this feverish rush for wealth, but the people who stayed enjoyed the lucrative industries that supported the mining boom.<sup>62</sup> Providing food and lumber supplies to the south via the Willamette and Columbia Rivers and then down the coast to San Francisco was certainly more reliable than mining itself. Portland quickly became the jumping off point and supply source for several mining booms in the surrounding regions.<sup>63</sup> This movement certainly helped establish Portland as a major trade center in the West.<sup>64</sup>

Waterfronts and rivers were the transportation and economic lifeblood for early developing cities like Portland. Steamboats and river traffic helped Portland and nearby towns economically prosper and promote population growth.<sup>65</sup> By 1850, Portland was deemed the “head of navigation” above several nearby competing settlements that lacked

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<sup>60</sup> Stephen M. Wheeler, “Evolution of Built Landscapes in Metropolitan Regions,” *Journal of Planning Education and Research* 27 (2008): 405.

<sup>61</sup> Laura Buhl, “The Impact of Transportation Developments on Urban Form and Society in Portland, Oregon: 1851-1990” (Master’s Thesis, University of Oregon, 2000), 38.

<sup>62</sup> Abbott, 1985, 33

<sup>63</sup> Ibid.

<sup>64</sup> John M. Tess & Jeri S. Tess, Section 8, p. 2.

<sup>65</sup> Buhl, 30.



the same topographic features and port facilities.<sup>66</sup> In 1854, the national Pacific Mail Company chose Portland as the terminus for their steamships, further solidifying Portland's establishment as an urban leader among the settlements along the Willamette and Columbia Rivers.<sup>67</sup> Oregon became a state on February 14, 1859, marking a period of progressive growth, economic diversification, and transportation advancements.

The railroad's arrival in Portland was perhaps the most impacting factor for the city's early development. Rival railroad companies competed on either side of the Willamette River to be the first to connect Portland to California via railways. Leading Portland investors, Reed, Corbett and Ladd owned the Oregon Central Railway Company on the west side and aimed to connect Portland to the Willamette Valley.<sup>68</sup> The terminus was to be in what is now northwest Portland.<sup>69</sup> Ben Holladay, the wealthy owner of the Overland Mail stagecoach company, bought the East side's Oregon & California Railroad Company in 1869.<sup>70</sup> By 1870, Holladay owned docks, warehouses, steamships, and the railroad, creating somewhat of a "transportation empire" in Portland and trumped the Oregon Central Railway Company in establishing his railway first. Henry Villard bought out Holladay in 1876 as part of his plan to build his own "railroad kingdom."<sup>71</sup> The Oregon Central Railway was eventually absorbed by the Southern Pacific Railroad.<sup>72</sup> By the end of 1883, the end of the Northern Pacific line, also in Villard's possession, was complete and Portland gained the advantages of immediate access to not just one, but two transcontinental railroads.<sup>73</sup>

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<sup>66</sup> Buhl, 22.

<sup>67</sup> Ibid., 26.

<sup>68</sup> Abbott, *Portland: Gateway to the Northwest*, 37.

<sup>69</sup> John M. Tess & Jeri S. Tess, Section 8, p. 3.

<sup>70</sup> Abbott, *Portland: Gateway to the Northwest*, 39.

<sup>71</sup> Ibid., 40.

<sup>72</sup> Ibid., 39.

<sup>73</sup> Ibid., 48.

Prior to the development of the railroad, all shipments into the city came by water. Because of this, the warehouses developed early on as a cluster along the west bank. With the establishment of the railroad, it became easier to move away from the river and maintain access to a means of transferring goods. Railroad transport became a cheaper and more convenient means of transportation. Spurs extended to clusters of individual buildings, and warehouse development was quickly drawn closer to the railroad tracks.<sup>74</sup> The Northwest Thirteenth Avenue Historic District is significant due to its collection of warehouses that were built along the Thirteenth Street spur line of the Oregon and California Railroad. The expanding rail network throughout the west “made Portland a center for ideas as well as commerce,” greatly contributing to the city’s rapid growth in the latter part of the nineteenth century.<sup>75</sup>

Portland’s population growth following the railroad’s establishment was tremendous. In 1850, there were approximately seven-hundred people; by 1860, the Census recorded 2917 people; 1870 – nearly ten-thousand people; and by 1880 the population was approximately seventeen-thousand. The population continued to grow in the 1880s to over sixty-thousand by 1890. Due to railroad and population developments, “Portland inaugurated a great building era beginning in the mid 1880s in business development, industrial manufacturing, seaport and railway expansion, as well as the building of many elegant private homes.”<sup>76</sup> The Portland Chamber of Commerce formed in 1890 followed by the Manufacturers’ Association in 1895, to support the flux of manufacturing and commerce companies in the city.<sup>77</sup> Portland’s small walking city quickly changed to accommodate specific land use zones in particular areas. Distinct divisions among residential, commercial, and industrial zones developed in the 1880s. Streetcar railways supported the division by providing infrastructure to allow access from residential suburbs to work and commerce in the downtown hub. Bridges and access to

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<sup>74</sup> John M. Tess & Jeri S. Tess, Section 8, p. 15.

<sup>75</sup> Abbott, *Portland: Gateway to the Northwest*, 40.

<sup>76</sup> Sharr Prohaska & Elizabeth O’Brien, “Portland Cordage Company Building,” National Register of Historic Places Nomination (U.S. Department of the Interior: National Park Service, 1992), Section 8, p. 7.

<sup>77</sup> Abbott, *Portland: Gateway to the Northwest*, 68.

the Bull Run water supply via cast iron pipe also supported suburban development, particularly east of the Willamette River.<sup>78</sup> Buhl theorizes in her thesis that “though today urban sprawl is commonly associated with a declining downtown sector, in the time of the streetcars, just the opposite happened – the downtown grew and flourished.”<sup>79</sup> Wholesaler and small manufacturers tore down the older wood buildings along the water’s edge and gave the riverfront a new image with brick and cast iron buildings that were larger, more industrial, and designed to last as more permanent structures.<sup>80</sup>

The economic recession of 1893 hit Portland residents fairly hard, but the city’s growth remained phenomenal despite the economic hardships. Between 1890 and 1900, the city population increased by fifty percent and the geographic area increased by forty percent.<sup>81</sup> Portland had become the “Metropolis of the Great Northwest”<sup>82</sup> At the turn of the century, several businesses were thriving throughout the city. There were over a dozen local factories as well as branch offices for many Eastern manufacturers.<sup>83</sup> The city shared its success with the national and international arenas by hosting the 1905 Lewis and Clark Centennial Exposition. Intentions were to attract investors to the material resources and manufacturing prospects the entire state had to offer.<sup>84</sup> The exposition gave reason to tout Portland’s position as the center of commerce in the Northwest.<sup>85</sup> Over 1.5 million people attended, far surpassing the exposition’s predictions.<sup>86</sup> Attitudes from the Exposition sparked new standards for what could be achieved, and the city progressed further with this new confidence for growth, industry,

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<sup>78</sup> Abbott, *Portland: Gateway to the Northwest.*, 55.

<sup>79</sup> Buhl, 70.

<sup>80</sup> *Ibid.*, 50.

<sup>81</sup> John M. Tess & Jeri S. Tess, Section 8, p. 8.

<sup>82</sup> *Ibid.*, Section 8, p. 8.

<sup>83</sup> Prohaska & O’Brien, Section 8, p. 3.

<sup>84</sup> Abbott, 1983, 38.

<sup>85</sup> John M. Tess & Jeri S. Tess, Section 8, p. 11.

<sup>86</sup> Abbott, *Portland Planning, Politics and Growth*, 44.

real estate, and commerce. Following the Exposition, 1905-1912 marked seven years of some of the most prosperous growth Portland has ever experienced.<sup>87</sup>

The northwest quadrangle of Portland became the center of industrial expansion in the 1910s. In conjunction, residential development expanded to the east side in tandem with the widespread installation of streetcar lines. Warehouse keepers, sales agents for national manufacturers, and downtown office clerks were the most lucrative roles in Portland's growth.<sup>88</sup> Factories, utilities, and advancements in transportation supported their success.<sup>89</sup> The northwest industrial zone quickly expanded to its limits, geographically restricted by the West Hills. Portland developers turned to the east side of the river, which was then primarily orchards, as a new location for industrial growth.<sup>90</sup> The east side, with its proximity to both railroad and shipping points, served the rapid industrial growth of the early twentieth century.<sup>91</sup>

Ship building boomed in Portland in 1917 and 1918.<sup>92</sup> The city was sought out during World War I to supply food and war supplies, most notably new ships. A conglomeration of Portland companies and firms collaborated to produce forty-four steel ships during 1917 and 1918.<sup>93</sup> The demand for shipbuilding and growth associated with this industry returned with repeated results during the Second World War.

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<sup>87</sup> Abbott, *Portland Planning, Politics and Growth.*, 50.

<sup>88</sup> *Ibid.*, 51.

<sup>89</sup> *Ibid.*, 52.

<sup>90</sup> Jessica Engeman, "Northwest Fence and Wire Works Building," National Register of Historic Places nomination (U. S. Department of the Interior: National Park Service, 2004), Section 8, p. 6.

<sup>91</sup> Engeman, Section 8, p. 7.

<sup>92</sup> Abbott, *Portland Planning, Politics, and Growth*, 72.

<sup>93</sup> *Ibid.*, 74.

## AUTOMOBILE & TRUCK TRANSPORT

Following World War I, the automobile quickly became “big business” in Portland, continuing the suburbanizing trends the streetcar started, but at a much more rapid pace.<sup>94</sup> By 1923, most Portlanders were more interested in enjoying their new automobiles and the products of postwar production than worrying about the next political schemes and fears.<sup>95</sup> The downtown core, which was founded during the era of the walking city and developed during the streetcar era, seemed to be unequipped to deal with the influx of automobiles during the post-war era.<sup>96</sup> The automobile appealed to the general American’s sense of freedom and individuality.<sup>97</sup> This new freedom ended the dependent relationship between people and transportation, allowing individuals to go where they wanted when they wanted. The onslaught of the Interstate Highway system further encouraged suburban living and the automobile as the prominent form of transportation. In the 1950s and 1960s, Portlanders flocked to new subdivisions and suburbs outside the city, particularly in the west.<sup>98</sup> People opted against increasing downtown traffic and chose to relocate instead to new and growing suburbs with more access to space. The suburbs were inaccessible to the streetcars, but attainable with the ever-increasingly popular automobile. Development was no longer tied to public transportation, causing a degeneration of the gridded street structures and systems.<sup>99</sup>

## URBAN INDUSTRIAL BLIGHT

The nature of industrial real estate heavily contributed to the changing industrial landscape in Portland. The evolution of industrial building typology explains this connection. Originally, industrial buildings in Portland were two to four stories tall. As

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<sup>94</sup> Abbott, *Portland: Gateway to the Northwest*, 101.

<sup>95</sup> *Ibid.*, 101.

<sup>96</sup> *Ibid.*, 97.

<sup>97</sup> Buhl, 91.

<sup>98</sup> *Ibid.*, 101.

<sup>99</sup> Wheeler, 405.

manufacturing and transportation trends changed, the ideal industrial building type adjusted to become more in favor of single-story structures. Urban centers were rapidly developing and real estate had become more expensive. Most industrial proprietors did not have the assets to own larger tracts of land within the urban core or demolish and rebuild their existing multi-story structures. Interstate highways convinced Americans that the suburban lifestyle was an affordable, accessible and desirable path to the American dream. Suburban land was available in large tracts and was far less expensive than in the city center. The industrial sector saw several advantages in relocating and acted upon them. The workforce followed, leaving the urban centers in population and industrial blight.

Although the suburbs provided opportunity and the American dream of homeownership to millions of citizens, this movement had a detrimental effect on the previously bustling urban metropolis. According to Buhl, “the exodus of the suburbs caused a decline in the downtown and many older neighborhoods. Indeed, in the 1960s and 1970s the ‘crisis of the city’ was a major concern. Some people even declared the city dead.”<sup>100</sup> The industrial landscape was not immune from the urban blight that ominously loomed over the city of Portland. A 1967 report on Portland’s Industrial areas by the city’s Planning Commission lists a number of concerns associated with the loss of industrial growth in Portland. Some of these concerns are as follows:

- As the central city became more dense and congested, vacant land was scarce and growing in costs.
- Environmental concerns about land use were progressing.
- Automobile traffic greatly interfered with industrial production and transport in the closely knit Portland core.
- Suburban development relocated an industrial workforce to areas where land was inexpensive and readily available.
- Increasing use of the automobile gave workers more flexibility in commuting to locations less congested or connected with public transportation.<sup>101</sup>

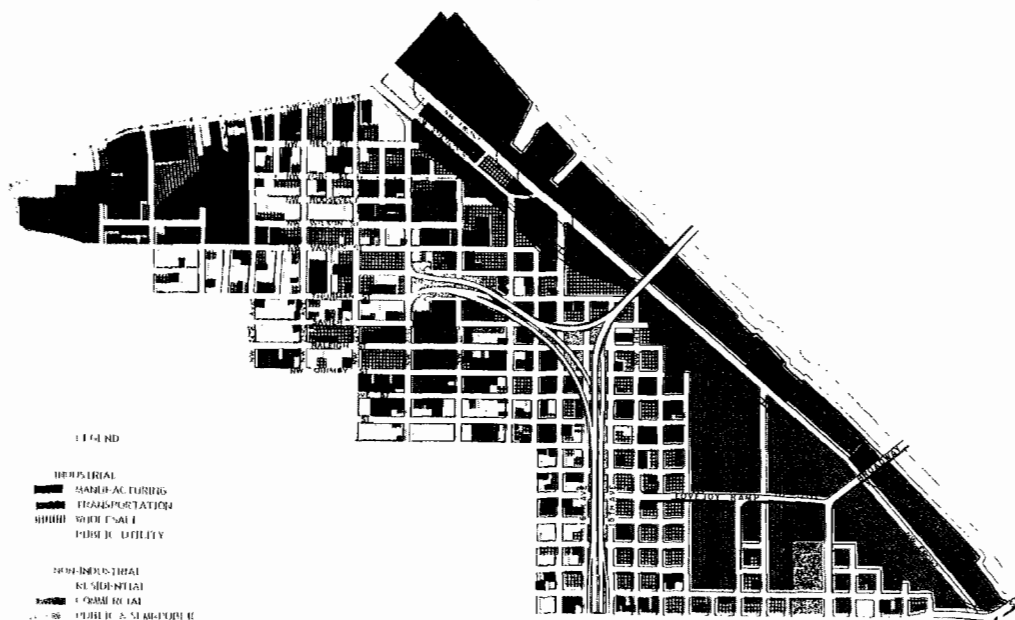
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<sup>100</sup> Buhl, 107.

Urban industrial buildings were left nearly vacant and underused for several decades. However, their construction, character, urban conditions, and in fact, underuse, have primed these resources with several of the right factors necessary for effective historic preservation, adaptive reuse, and community revitalization.

## CONCLUSION

Transportation has played a critical role, both historically and presently in historic industrial development and modern adaptive reuse. Industrial buildings in the West were constructed in urban areas due to their easy access to transporting goods. These modes of transportation have historically transformed cities and their industrial environments throughout time. Rivers, railroads, cars and semi-trucks, each in their own era have been the preferred method for transporting massive amounts of manufactured products from Portland to other regional, national, and international areas. For example, Figure 1 shows the locational relationship between transportation access and industrial buildings in Northwest Portland. Changes in transportation have greatly impacted transitions in urban



**Figure 1: 1967 Coded map of Northwest Industrial District in Portland, Oregon, showing the strong locational correlation between manufacturing and wholesaling with transportation corridors.<sup>102</sup>**

<sup>101</sup> Portland City Planning Commission, 3-12.

industries, leading not only to their success, but also demise, and now, as a potential for redevelopment.

When Interstates and inexpensive automobiles became available, people and companies fled the cities and sprawled into suburban environments, seeking out inexpensive property. This movement left several well-crafted industrial buildings abandoned and underused. In many ways, transportation has generated some of the conditions necessary for effective adaptive reuse projects, especially for urban industrial warehouse buildings. Manufacturing plants and warehouses were designed simultaneously with transportation lines, due to the necessities of shipping, railroads, and later trucking. Today, metropolitan environments are experiencing resurgence to the cities, and urban communities are flourishing from this contextual transition. With the change of attention now more urban focused, adaptive reuse has become a popular way to make new and relevant uses of the historic, unused industrial buildings, providing plenty of opportunities for sharing the cultural heritage of the urban industrial past. Portland, Oregon is an ideal a case study city with its rich industrial history, progressive rehabilitation practices, and regulatory historic preservation framework.

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<sup>102</sup> Portland City Planning Commission, 32.



## **CHAPTER V**

# **PORTLAND'S PRESERVATION REGULATORY FRAMEWORK**

### **INTRODUCTION**

Historic resources in Portland are subject to preservation regulations and are eligible for preservation-related financial incentives. This section summarizes the preservation regulatory framework that Portland historic resources face. It is important to explain this framework and the incentives involved to understand the regulatory processes involved with redeveloping historic industrial buildings in Portland and identify some of the financial incentives offered with this form of historic preservation. Each of the case study sites in this thesis fall within this regulatory framework.

There are several layers of designation under which historic properties fit. Listing on the National Register of Historic Places includes federal recognition and is considered the most straight-forward process for a property to be considered for financial incentives. Properties can be individually listed or considered contributing properties in a Historic District. On a local level, properties in Portland can be designated as Local Historic Landmarks, Conservation Landmarks, or in local Historic or Conservation Districts. Local designation acknowledges local historic significance but offers fewer restrictions on alterations or demolition.

### **FEDERAL FRAMEWORK**

National Register listing triggers eligibility for Federal Rehabilitation Tax Credits which are often considered the main financial source to make a historic redevelopment project “pencil” or make clear financial and profitable sense. This tax credit program offers up to twenty percent of rehabilitation costs in the form of federal income tax

credits. These tax credits have become somewhat of a commodity in themselves. They are often syndicated, sold to large companies familiar with their benefits. Through this complicated process, a percentage of the project value can be sold to investors seeking the tax credits at a cost on the dollar. The investment funds the project and helps to secure financing.

Federal tax dollars for rehabilitation funds do not come without restrictions. The National Park Service has several checks-and-balances in place to make sure that the design and rehabilitation work remains consistent with the historic character of the property and that the project must not damage, destroy, or cover materials or features that help define the building's historic character.<sup>103</sup> Rehabilitation projects that are not considered historic or contributing to a historic district yet were built before 1936 are eligible for a ten percent tax credit on work that involves far fewer preservation restrictions.

## STATE FRAMEWORK

National Register listing triggers state and local incentives as well. The state of Oregon participates in a Special Assessment program, allowing listed properties to freeze their assessed property values for ten years. This can be especially worthwhile for properties that become listed before undergoing substantial rehabilitation work that will greatly increase a property's value. The Oregon State Historic Preservation Office also offers Preserving Oregon Grants for rehabilitation or restoration work on National Register listed properties, often those owned by public entities. The National Park Service has similar financial programs including Save America's Treasures grants. The National Trust for Historic Preservation offers grants as well. The Historic Preservation League of Oregon has an easement program that provides added preservation standards for historic properties. An easement is a legal contract by which the owner agrees the property will not be changed in a way that would compromise its historic and

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<sup>103</sup> City of Portland Bureau of Planning & Sustainability, "Financial Incentives for Historic Preservation: A Summary of Selected Grants, Loans, & Tax Benefit Programs," (City of Portland Bureau of Planning & Sustainability: Historic Resources Program, 2007).  
<http://www.portlandonline.com/bps/index.cfm?c=44012&a=146265> (accessed March 26, 2010).

architectural integrity.<sup>104</sup> It is granted, usually into perpetuity, and is filed in the county land records and sustained through changes in property ownership. There are substantial tax benefits associated with easements, as they are considered donations. Additional tax incentives apply if the easement decreases the value of the property.

## CITY FRAMEWORK

The city of Portland offers several additional incentives for rehabilitating local historic resources through the Portland Development Commission. Some of these are directly related to historic preservation, including low-interest loans for seismic upgrades and technical and design assistance. Others are more general programs that can be coupled with preservation incentives to create a sound investment package for historic redevelopment projects. These programs include New Market tax credits, Quality Jobs, and Business Energy Tax Credits, among others.

These incentives come with restraints. The Secretary of the Interior's Standards for the Treatment of Historic Properties often becomes the standard regulatory framework used to determine eligibility for Federal Rehabilitation Tax Credits. State and local levels of regulation also use these standards in their own design review processes. The State Historic Preservation Office is required to facilitate and maintain the standards in such projects by working with developers, designers, and consultants to ensure that historic character and the property's character-defining features are preserved in a redevelopment process. The city of Portland chooses to execute historic preservation on a local level through Historic Design Review by the Local Landmarks Commission.

According to the City of Portland:

Historic Design Review is one of the City's most important preservation tools, helping to ensure that the special characteristics, historic integrity, and architectural character of designated resources are preserved over time. Alterations to Historic and Conservation Landmarks generally require this review, to ensure that historic values are considered and preserved when changes are made. Construction of a new building and alterations to an existing structure—regardless of its contributing status—

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<sup>104</sup> City of Portland Bureau of Planning & Sustainability.

also requires Historic Design Review. This ensures that development activity supports and enhances the qualities that make the area historic. Generally, normal repair and maintenance and interior alterations do not require Historic Design Review.<sup>105</sup>

Projects are approved through Historic Design Review based on criteria that is adapted for specific areas. In general, projects are approved that retain and preserve historic character, retain evidence of a building's existence through time, and preserve the overall integrity of a building.<sup>106</sup> New additions or alterations are to be compatible yet differentiated from original features and not be destructive to original materials. Additionally, "deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement, the new feature will match the old in design, color, texture, and other visual qualities and, where practical, in materials. Replacement of missing features must be substantiated by documentary, physical, or pictorial evidence."<sup>107</sup> The Portland Landmarks Commission also has a demolition review and delay program for historic properties. This program is set in place to allow time for consideration of alternatives to demolition, such as restoration, relocation, or salvage.<sup>108</sup> Demolition review gives the City authority to deny the request or place conditions on the demolition of a National Register listed Individual, Historic District, or Landmark property.<sup>109</sup>

Portland has several zoning incentives to encourage preservation and redevelopment of historic properties, particularly in the central city area. For example, historic building owners can transfer density and development rights to other properties. This is often income generating, as the receiver of development rights frequently pays the historic property owner for this transfer. Changes in density and use in particular zones

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<sup>105</sup> City of Portland Bureau of Planning & Sustainability, "Summary of Portland Historic Resources Zoning Regulations," (City of Portland Bureau of Planning & Sustainability: Historic Resources Program, 2007). <http://www.portlandonline.com/bps/index.cfm?c=44012&a=146263> (accessed March 26, 2010).

<sup>106</sup> Ibid.

<sup>107</sup> Ibid.

<sup>108</sup> Ibid.

<sup>109</sup> Ibid.

also allow for more flexibility of uses in residential, commercial, and employment zones that would thus increase income potential for property owners. In Employment and Industrial zones, landmark properties have increased use allowances for Office, Retail Sales, and Services uses.<sup>110</sup> “The increased allowances recognize that some historic industrial buildings cannot economically accommodate modern industrial activities due to design inefficiencies or structural deficiencies and therefore are often underutilized, neglected and sometimes demolished. The incentive encourages their reuse by providing more development flexibility and higher income potential for historic landmarks in areas where non-industrial uses are otherwise tightly restricted.”<sup>111</sup>

## CONCLUSION

The designation process, financial and zoning incentives, and regulatory design review processes shape the framework of historic preservation and redevelopment in Portland, Oregon. Many of these incentives are “stick-and-carrot” procedures that involve implementing certain preservation standards to receive financial or zoning advantages. These processes play important roles in determining how buildings are rehabilitated, what features are preserved, and how new uses are identified. Industrial buildings are interesting case studies in this framework because their original uses have often expired or the space is no longer conditioned to support modern industry. Within the preservation regulatory framework the location, materials, and other features of industrial buildings identify this building type as an intriguing opportunity for redevelopment in Portland.

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<sup>110</sup> City of Portland Bureau of Planning & Sustainability, “Summary of Portland Historic Resources Zoning Regulations.”

<sup>111</sup> Ibid. For more information on Commercial allowances in Employment and Industrial Zones, see Chapter 33.140, Employment and Industrial Zones in the Portland Zoning Code.

## CHAPTER VI

### WHY ADAPTIVELY REUSE INDUSTRIAL BUILDINGS

*Until quite recently, the industrial building was virtually ignored by all but those who built or worked in it. Long thought unimportant by scholars, unattractive by historic preservationists, and unsuitable for new uses by businessmen, such structures are now the subject of considerable interest from all three quarters. For the scholar, the factory may represent the most important single building type of the past 200 years, an architectural record of the technological transformation of Western Europe and North America that began in the eighteenth century. For the preservationist, it is now recognized as contributing important evidence of our social and cultural past; a new concept of comprehensive preservation perceives the mixture of diverse building types within a historic community as more truly representative of a previous period than the mere preservation of isolated buildings. And lastly, for the potential investor, who in the best sense is also a preservationist, industrial buildings frequently offer easily subdivided interior space, housed within durable construction that yields higher quality and less expensive space than could be obtained in a new building of comparable size.<sup>112</sup>*

—Walter C. Kidney

#### INTRODUCTION

The purpose of this chapter is to examine the potential of industrial buildings as resources for adaptive reuse projects. What makes industrial buildings ideal candidates for adaptive reuse? Why do we look to them as exciting opportunities for development, preservation, or just an ideal work or living space? Why are they available? Historic industrial buildings have lost their function in today's idea of how industry should operate. The massing, location, and size of urban warehouses are no longer necessary for industry, causing such historic buildings to be under-utilized and neglected. It is

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<sup>112</sup> Walter C. Kidney, *Working Places: The Adaptive Use of Industrial Buildings* (Pittsburgh, PA: Ober Park Associates, Inc., 1976), xi.

important to gain a stronger understanding of industrial design to analyze the potential value and adaptability that can come from redeveloping this building type.

## LOCATION

Historic industrial buildings are often in prime locations for adaptive reuse, usually in urban centers where the heart of industry once existed. Industrial buildings were built close to railroad lines to have access to the fastest available transportation during their era. Today some of the railroad lines, especially the service tracks in Portland's industrial zones, have been converted into local public transportation lines. Industrial buildings are often located directly on or near the light rail, street car, or bus systems. This pedestrian focus in the physical environment where people live, work, shop, and play encourages citizens to use their cars less.<sup>113</sup>

Today, industry can rarely afford the high real estate values of urban properties, nor does industry serve today's needs of the surrounding communities. However, industrial buildings are in prime locations that can spur economic growth, vitality, and community revitalization from a number of avenues, including residential, office, retail, culture and entertainment, public service, and more. The central core of cities is an ideal place to promote redevelopment in a dense urban environment.

"Density is what it's all about" in marrying historic preservation and adaptive reuse with the goals of sustainable communities, comments Blair Kamin, architecture critic, in his *Preservation* article, "Historic Preservation and Green Architecture: Friends or Foes."<sup>114</sup> The density of historic urban areas becomes an ideal setting for sustainable communities. "If we live densely and don't sprawl, we'll save on energy. And if we save cities we'll create a demand for the historic buildings within them."<sup>115</sup> Mass transit, walkable streets and vibrant cultural attractions are desirable features in dense urban

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<sup>113</sup> Donovan Rypkema, "Why Historic Preservation is Smart Growth." <http://www.wisconsinhistory.org/hp/smartgrowth/Rypkema.asp> (accessed January 10, 2010).

<sup>114</sup> Blair Kamin, "Historic Preservation and Green Architecture: Friends or Foes?" *Preservation* (March 2010): 33.

<sup>115</sup> *Ibid.*

neighborhoods. The adaptive reuse of buildings in Portland's historic industrial areas can provide spaces to serve these social functions for the area's users.

Urban growth boundaries, a distinct feature of Oregon statewide land-use planning, are continuously challenged by increasing populations in urban areas. People have a difficult time grasping the difference between *density*, a measurement of people in a given space and *crowded*, a feeling associated with having too many people around you.<sup>116</sup> Designers have an even bigger challenge of grappling with these concepts in their work, and how to increase density without the perception of crowdedness. Rehabilitating industrial buildings may provide one prototype solution to this problem. As Donovan Rypkema states, "No new land is consumed when rehabilitating a historic building."<sup>117</sup> Historic industrial buildings in Portland are most often within urban growth boundaries, and their underutilization makes them prime candidates for increased density without intruding on undeveloped land. While ground floors are usually in use, upper floors are often left empty. Mixed-use housing or flex work space could easily be incorporated into these spaces, allowing people to live near where they work in interesting, familiar buildings that are massed on a human scale, have access to public transportation, and increase urban density without impacting the urban or rural landscape.

Industrial building reuse in urban locations also promotes safety and security. Jane Jacobs, in *Life and Death of Great American Cities*, discusses the concept of "eyes on the street," referring to the improved safety of an area resulting from an increased population of permanent occupants.<sup>118</sup> A residential presence implies that more people are around for more hours of the day, especially in the evenings after businesses close. Residents come to recognize one-another and gain an awareness of acceptable and unacceptable behavior on the street. They take ownership over the space and socially protect that space. Those participating in unacceptable behavior quickly recognize that people are aware and disapproving of such activities and will find it more difficult to

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<sup>116</sup> Jon T. Lang, "Privacy, Territoriality, and Personal Space – Proxemic Theory," in *Creating Architectural Theory: The Role of the Behavior Sciences in Environmental Design* (Van Nostrand Reinhold, 1987), 147.

<sup>117</sup> Donovan Rypkema, "Why Historic Preservation is Smart Growth."

<sup>118</sup> Jane Jacobs, *The Death and Life of Great American Cities* (New York: Random House, 1961), 288.



continue such behavior. Portland's Skidmore/Old Town Historic District in Portland is an example of an area that clearly illustrates this concept of "eyes on the street," or lack thereof. Many of the buildings in this district are only used for certain hours of the day, and very few, if any, are used for residential purposes. Several architecture firms have recently commandeered some of the commercial and industrial spaces as their new offices. Given the stereotypical schedule and long hours of architects, these offices may be the closest the district currently has to living quarters. Because there is less of an awareness and permanence of occupants, the district struggles to rise above its perceived reputation as a crime-laden area with little that promotes a healthy social community.

Gentrification is an important issue to consider when dealing with the adaptive reuse and redevelopment of historic industrial areas. Joshua Bloom in *Economic Restructuring* defines gentrification as "a work used pejoratively by some and to describe the apotheosis of revitalization by others, has typically denoted the upscale evolution of a commercial or residential area."<sup>119</sup> Jane Jacobs has a simple explanation. When neighborhoods become desirable, historic buildings often economically filter up in value.<sup>120</sup> This can push out or have negative impacts on the place's former users. Gentrification is an important ethical issue to consider in any redevelopment project, especially if it involves the displacement of people. It is deserving of lengthy research in its own right. However, while gentrification is important to note as an issue in this thesis, it is not the focus of the research.

## INDUSTRIAL BUILDING DESIGN

Historic industrial buildings are incredibly adaptable by design, and with proper consideration are set up for a variety of socially and aesthetically compatible new uses. Proper consideration is necessary to determine a successful new use, even if a myriad of possibilities are available. "The identification of future uses for redundant industrial

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<sup>119</sup> Joshua Bloom, "Commercial District Gentrification," in *Economic Restructuring*, 1. [http://www.preservationnation.org/main-street/resources/public/RMS\\_Gentrification.pdf](http://www.preservationnation.org/main-street/resources/public/RMS_Gentrification.pdf) (accessed March 17, 2010).

<sup>120</sup> Jacobs, 193.

buildings can be a mystical, even bizarre process pervaded by wishful thinking and gross optimism.”<sup>121</sup> While designers and consultants can offer unique ideas for building reuse, it is important to consider the compatibility of a building’s conversion with the creative process for identifying a new use. It is essential to ensure a successful new use or range of uses that are well-suited to the building environment and provide promising and flexible opportunities for future uses. According to Stratton, “the key skills are identifying viable new functions, generating enthusiasm, being flexible and maintaining momentum.”<sup>122</sup>

Stewart Brand in *How Buildings Learn* defines the flexibility and adaptability of a space as ‘scenario-based planning.’ Scenario-based planning is a design tool that, unlike programming for specific needs, encompasses “unforeseeably changing conditions.”<sup>123</sup> Scenario planning explores the driving forces that are likely to shape the future environment. These include technological, neighborhood, economic, and tenant changes.<sup>124</sup> Future preservation involves designing buildings that are not only built to last, but that will remain capable of offering new options for its use.<sup>125</sup> More options for a building’s use will inevitably ensure the resource’s longevity. Industrial structures are particularly susceptible to adaptation due to the availability of capital for investment, market forces or the introduction of new technologies.<sup>126</sup> It becomes important to design loosely around technology, as this is the fastest changing component of user needs.<sup>127</sup> The historic buildings analyzed in this thesis were built during the Industrial Revolution, a time when industry saw rapid changes and advances in technology. Factory and

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<sup>121</sup> Michael Stratton, ed., *Industrial Buildings: Conservation & Regeneration* (New York & London: E & FN Spon, 2000), 40.

<sup>122</sup> Stratton, 41.

<sup>123</sup> Stewart Brand, *How Buildings Learn*, (New York: Viking Penguin), 1994, 178.

<sup>124</sup> Brand, 182.

<sup>125</sup> *Ibid.*, 184.

<sup>126</sup> Blockley, 143.

<sup>127</sup> Brand, 186.

warehouse design during this era likely foresaw technological advances in mechanical equipment and industrial forces and thus designed accordingly with anticipation for future change.

## MATERIALS

Industrial Revolution era buildings were built from long-lasting and often locally made materials, such as heavy timber, steel, and brick, and provide unsurpassed structural strength that was intended to withstand both fire and the weight of heavy machinery. These were also considered the best materials at the time for any type of building, but especially for the intended uses within industrial buildings. This structural capacity has contributed to an industrial building's ability to withstand long periods of time without any maintenance or attention. Preservation by neglect, caused by a lack of maintenance from underuse, inadvertently allows for the retention of historic integrity as long as the condition does not deteriorate to an irreprehensible state. Aside from integrity, the condition of these stout buildings is often quite impressive in relationship to age. This is especially important to recognize when upgrades and code compliance are considerably daunting for redevelopers of historic buildings. Ideas for interior adaptations necessary for reprogramming become far more feasible when considering the strength of the existing structural systems. In addition, the exposed brick, steel and heavy timber post and beam, among other historic industrial building materials, are key indicators that connect a building's users to the craft and construction methods that distinguish a previous era of building practices.

The embodied energy of the materials in historic industrial buildings provides tremendous value to the building stock of a city. Richard Moe, President of the National Trust for Historic Preservation, explains the process of "embodying" energy through the construction and use of a building over time.

Buildings are vast repositories of energy. It takes energy to manufacture or extract building materials, more energy to transport them to a construction site, still more energy to assemble them into a building. All of that energy is embodied in the finished structure, and if the structure is

demolished and landfilled, the energy locked up in it is totally wasted. What's more, the process of demolition itself uses more energy, and of course, the construction of a new building in its place uses more yet.<sup>128</sup>

Donovan Rypkema extols taking advantage of the embodied energy of historic buildings in sustainable development, saying that smart growth should not entail “abandoning existing assets.”<sup>129</sup> As landfills increasingly expand with construction and demolition waste, it is invaluable to take inventory of the material resources already in our built landscape. Jacobs discusses the purpose of time in a building's embodied energy.

Time makes the high building costs of one generation the bargains of a following generation. Time pays off original capital costs, and this depreciation can be reflected in the yields required from a building. Time makes certain structures obsolete for some enterprises, and they become available to others.<sup>130</sup>

James Howard Kunstler continues the argument in his article, “Home from Nowhere,” by touting the value of historic building construction and design that “paid homage to history in [the] design[s], including elegant solutions to age-old problems posed by the cycles of weather and light, and they paid respect to the future in the sheer expectation that they would endure through the lifetimes of the people who built them.”<sup>131</sup> When America was a far less wealthy nation, buildings were constructed with the expectation that they would endure.<sup>132</sup>

## NATURAL LIGHTING & VENTILATION

Prior to technological advances that allowed humans to control temperature and “comfort” without ever having to interact with the outdoors, buildings were designed to take advantage of day-lighting, ventilation, and surrounding resources. Natural light, passive cooling, and use of local resources not only fit the mantras of today's sustainable

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<sup>128</sup> Moe, “Sustainable Stewardship.”

<sup>129</sup> Rypkema, “Smart Growth.”

<sup>130</sup> Jacobs, 189.

<sup>131</sup> Kunstler, 44.

<sup>132</sup> *Ibid.*, 43.

building initiatives, but are also key characteristics of historic industrial buildings. Industrial buildings that include these aspects are ideal candidates for adaptive reuse because they embody sustainable design tactics.

## MASSING & OPEN FLOOR PLAN

Historic industrial buildings in Portland are often massed with few stories (usually no more than five) with large open floor plans on the upper floors to provide space for heavy machinery, production lines and storage. The open floor plan offers enticing opportunities for designers with intentions to re-program industrial buildings with new uses. For example, the open space can allow for tremendous collaboration, accessibility, and ventilation in an office setting. Large windows and open plans provide day-lighting for impressive distances on the interior of a building. In several instances, the open floor plan is an ideal setting. Also, if preservation regulations focus mostly on the exterior of a historic building, as is often the case, the wide-open interiors are like a blank canvas for designers who want to add rooms, corridors, and more, without having to contend with existing wall systems. The “open canvas” floor plan allows for a large amount of flexibility among spaces, programs, and users. The benefit of offering such versatility often corresponds with leasing rates and can be quite profitable for developers. However, open floor plans are often identified as a character-defining feature in historic buildings that needs to be preserved to retain integrity. This challenge is often met with new and creative innovations for partitions, room barriers and space allocations that do not impact the structural integrity of the building.

## SMALL BUSINESS POTENTIAL

Historic Industrial buildings are prime locations for small local businesses. New office towers and buildings are often restricted to large businesses that can afford the necessary high overhead in such buildings.<sup>133</sup> However, Rypkema attests that eighty-five percent of all new jobs in America are created by small businesses. He continues that

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<sup>133</sup> Jacobs, 187.

“for most small businesses there are few costs that are controllable, but there is one – occupancy.”<sup>134</sup> Warehouses and light-industrial factories can be easily converted to offices with non-structural, non-intrusive partitions and serve small start-up businesses in need of affordable workspaces. Historic buildings are often less expensive to rehabilitate than new construction building and can thus offer lower rents to smaller start-up companies. The buildings are often smaller in size and mass, which makes them better suited for smaller businesses. Portland is a city in which small business development thrives, especially in the creative arena. This may be a result of the creative workforce Portland attracts with its cultural amenities, recreation, and overall vitality and livability. Smaller businesses can occupy smaller spaces and pay more affordable rents. This helps to ensure high occupancy in adaptively reused industrial buildings, an essential component of any building’s economic and social vitality. The success of these small local businesses has countless indirect benefits for the surrounding community and economy. This includes equitable employment for local workers who then support their local economies. The property and income taxes generated from this relationship create funding for local public services in the community. Redeveloped industrial buildings fit the size and usually the cost needs for smaller companies, providing well-located and interesting work environments for local businesses.

## SOCIAL WAYFINDING

Buildings that are familiar in the landscape and have existed for several years have a social value that new buildings simply cannot match. Such buildings are easily identifiable and become community-recognized wayfinding marks that help people navigate through a community. The contention associated with new construction, disagreeing opinions over design, or the economic and political factors that were involved with a new building, have long passed in the case of historic buildings. Familiarity and positive connotations, even if subtle, are often what remains in people’s opinions of a historic place.

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<sup>134</sup> Rypkema “Smart Growth.”

A community's societal value of a building is an incredibly strong factor of how long it will remain extant. The selection of structures for preservation and future economic capabilities is ultimately subjective to aesthetic values. Public perception and the acceptance of elements of past culture often determine what is preserved in the industrial landscape.<sup>135</sup> Beautiful buildings are frequently those that show thoughtful care in craftsmanship, materials, and architectural details, and that convey an important message about a community's identity. Communities are far more likely to value and preserve beautiful and thoughtful design investments made in the built landscape.

In addition to the functional role social wayfinding holds with identifiable resources, the wayfinding concept can be expanded to address societal memory. Historic buildings are reminders of who and where we are in a time and place. A collective understanding of a community's history can be achieved with well-interpreted resources that contribute to telling the story of a place. Historic industrial buildings that stand alone or contribute to a greater industrial district, when revitalized, serve a strong social purpose in navigable and memorial wayfinding.

## CONCLUSION

Finally, industrial buildings are often in industrial settings, a built environment that helps to create the unique cultural fabric of our urban landscape. Industrial buildings are not big temporary boxes that only survive thirty years, nor are they metal and glass towers that sear the skyline. There is nothing wrong with either of these building types, but neither completely contributes to a sense of place that cities should offer. Industrial buildings are unique examples of designs that are driven by function, are scaled at a size comfortable for humans and their communities, and connect to a cultural past that we can learn from, identify with, and appreciate.

Former industrial areas treated with interpretative or museum intentions frequently present only the establishment's perspectives and memorialize just elite

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<sup>135</sup> Marion Blockley, "Preservation, Restoration and Presentation of the Industrial Heritage : a case study of the Ironbridge Gorge," in *Managing Historic Sites and Buildings: Reconciling Presentation and Preservation*, ed. Gill Chitty and David Baker, (New York: Routledge, 1999), 151.

individuals or companies. It is becoming more evident today that industrial buildings were also places for a workforce and this significance has gained value as interpretation tactics have changed. The resources that are preserved with these intentions are often the innovative or spectacular examples of industry and are not the typical or representative. One-of-a-kind industrial resources are more landmark-based and require strict preservation guidelines as they become interpretive sites or museums. Nevertheless, the more typical industrial buildings have become valuable resources that meet modern community needs while still conveying the broader historic industrial context.

Industrial buildings were, at their time, socially recognized symbols of regional resources, progress and development in the west. They were economic engines for regional industries and growth. Industry provided jobs that brought in people from all over the world looking for work and an opportunity to find success in a new place. Local industries were symbols of the region's progress, and the buildings were designed to represent this pride associated with industrial developments. Industrial buildings have helped to shape cultural fabric. Such powerful connections to people, place, and history make industrial buildings ideal candidates for redevelopment. These buildings are already social landmarks rooted in place that people identify with and accept as part of the community's landscape, and that tell the story of our cities.



## CHAPTER VII

### SYNTHESIS OF NATIONAL REGISTER NOMINATIONS

#### INTRODUCTION

This section provides an analysis of National Register nominations and is intended as a method for reviewing the history and significance of nominated Portland historic industrial properties used in the case studies. As a validating document that determines historic significance, National Register nominations are an important component of comprehensive case study research. Well-written physical descriptions carefully explain character-defining features and alterations, while statements of significance address the historic themes, use, change over time, and relationship to the broader local and national historic contexts. A synthesis of these documents provides a solid initial understanding of the case studies in this research as preparation for site visits and interviews. A review of several nominations helps to narrow the focus and identify key themes that relate to this study. A selective sample of four individual nominations and two district nominations were analyzed in this study.<sup>136</sup> In the nomination synthesis, analytical patterns surfaced that question:

- The evolving approaches and expectations for National Register nominations
- Criteria used in nominating historic industrial buildings
- The evaluation of integrity in historic industrial buildings
- Differences between individual and district nominations
- The connection between Portland's industrial settings and transportation developments
- Clustered growth and changes in use over time
- Common character-defining features of historic industrial buildings

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<sup>136</sup> The nominations include: Northwest Fence & Wireworks Building, Olympic Cereal Mill Building, Portland Cordage Company Building, Weinhard Brewery Complex, Portland Northwest *John M. Tess & Jeri S. Tess*, and Portland Skidmore/Old Town Historic District.

- The perception of historic industrial buildings as visual landmarks
- The human or cultural context of a building's space

## EVOLVING APPROACHES TO NATIONAL REGISTER NOMINATIONS

Many of the industrial buildings in Portland, Oregon, were nominated to the National Register of Historic Places prior to 1990. The majority of earlier nominations from this research sample were substantially shorter than those written after 1990. They lack the details and rigorous research of the more contemporary nominations that identify the buildings' character-defining features, industrial significance, and role within the broader historic framework.

Overall, regardless of the vintage, several of the nominations lack information about how the company actually used the significant space. Architectural features, business timelines, and connection to a broader history were the primary focus, not connecting these concepts to the building itself. This could be due to the nature of available research documents. For example, financial records are likely easier to access than accounts of labor and work experiences. The Portland Cordage Building is an exception to this concept, as the nomination explains the use of each floor.<sup>137</sup>

## NATIONAL REGISTER CRITERIA

The National Register of Historic Places recognizes four criteria under which historic properties are considered significant.

- A. Associations to significant events or broad patterns of history
- B. Associations to significant individuals or groups in history
- C. A significant example of architectural style, workmanship, or the work of a master
- D. The ability to yield or potentially yield important information about history

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<sup>137</sup> Sharr Prohaska & Elizabeth O'Brien, "Portland Cordage Company Building," National Register of Historic Places Nomination (U.S. Department of the Interior: National Park Service, 1992), Section 8 pg. 8.

The buildings considered in this research were all nominated under Criterion A for their associations with early industrial developments in Portland during the late nineteenth and early twentieth centuries. Some were nominated under both Criteria A and C, as also being important examples of architecture. This thesis research considers the ways industrial buildings balance the specific or broad patterns of local and regional history with modern users, confirming why the buildings commonly have this criterion for significance.

## EVALUATION OF INTEGRITY

In historic preservation, integrity refers to the significant elements that have been retained in a historic building. There are seven aspects of integrity that National Register nominations are required to address in regards to the nominated building, site, or district. *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation* discusses these seven aspects of integrity, which have been applied to the case studies and summarized in this synthesis, including, location, setting, design, materials, workmanship, association, and feeling.<sup>138</sup>

### **Location**

Location is the place where a historic property was constructed or the place where a historic event took place. Integrity of location refers to whether or not the property has been moved or relocated since its construction.<sup>139</sup> None of the buildings from this study have been moved from their original sites, signifying high integrity of location.

### **Setting**

Setting is the physical environment of a historic property that illustrates the character of the place. Integrity of setting refers to the character of the place in which the

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<sup>138</sup> Rebecca H. Shrimpton, ed. *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation* (National Park Service: Department of the Interior, 2002). <http://www.nps.gov/nr/publications/bulletins/nrb15/INDEX.htm> (accessed January 13, 2010).

<sup>139</sup> Ibid.

property played its historical role. It involves how, not just where, the property is situated and its relationship to surrounding features and open space.<sup>140</sup> The selected industrial buildings were chosen because they are located in central urban settings. In some cases, they contribute to the overall industrial historic character of the setting, where in others, the nominated resource may be the last remaining industrial building in the nearby surrounding that is connected to its era. The Thirteenth Avenue Historic District nomination describes the setting as an “aggregation of intact historic warehouse buildings linked by railroad spur.”<sup>141</sup> Characteristic features that contribute to the setting include heavily constructed multi-story buildings, roof top water towers, metal awnings, loading docks, overhead doors, unpaved roadways, railroad spur trackage, and remnants of old Belgian street pavers. These are all features that define this industrial landscape. In adaptive reuse situations, it is likely that the setting will drastically change around the redeveloped building, unless the resource is in a well-preserved industrial district. Even still, change is expected. For example, the railroad spur trackage and unpaved roadways of the Thirteenth Avenue district have been long gone since the district’s major overhaul and transformation into the modern Pearl District.

## **Design**

Design is the composition of elements that constitute the form, plan, space, structure, and style of a property. It results from conscious decisions made during the original conception and planning of a property (or its significant alteration) and applies to activities as diverse as community planning, engineering, architecture, and landscape architecture. Design includes such elements as organization of space, proportion, scale, technology, ornamentation, and materials. A property's design reflects historic functions and technologies as well as aesthetics.<sup>142</sup> Design is connected to multiple components of a property’s significance, relating to both style and function. Particular design features

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<sup>140</sup> Shrimpton, 2002.

<sup>141</sup> John Tess & Jeri Tess, Section 8, SHPO Summary.

<sup>142</sup> Shrimpton, 2002.

can identify the use of an industrial building and be character-defining even if they do not necessarily depict the architectural style. Loading docks, freight elevators, and spatial relationships between public and private spaces are some character-defining features of industrial building design. Verticality or horizontality in mass, transom lights, and work entrances are architectural features that convey both style and industrial use by serving an industrial purpose, yet also become palettes for stylistic details.

In industrial buildings that are *purpose-built*, meaning those that were designed for their industrial use, details such as windows and spatial massing may have been included in a building's design not necessarily to contribute to the architectural character or style, but instead to reflect its industrial needs. Lighting, ventilation, open floor plans, and stout structures are features that were historically intended to support the industrial operation and labor force. It appears as though the purposes intended in the designs are not generally discussed in the selected statements of significance although both functional and stylistic components are necessary to contribute to a design's integrity.

## **Materials**

Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.<sup>143</sup> Common materials in these Pacific Northwest industrial buildings are brick, or concrete cladding, heavy timber or concrete structures, and operable windows. It should be mentioned that such materials were considered the best and most contemporary building materials at the time of construction for most of these resources. Industrial buildings were built comparable with similar building methods during their periods of construction, but also fulfilled a necessity to support heavy loads and provide expansive, well-lit, and well-ventilated workspaces. Materials are likely the most apparent form of integrity in all buildings, but being especially true for industrial buildings.

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<sup>143</sup> Shrimpton, 2002.

## **Workmanship**

Workmanship is the physical evidence of the crafts of a particular culture or people during any given period of history. Evidence of workmanship can demonstrate the technology of the craft, illustrate the aesthetic principles of a historic period, and reveal individual, local, regional, or national applications of both technological practices and aesthetic principles.<sup>144</sup> Workmanship is the evidence of how a building is constructed. Within this research sample, stout buildings with durable structures and exposed heavy timber post and beam systems are common trends that illustrate how industrial buildings were expected to be constructed. Integrity of workmanship is clearly depicted and most significant in buildings that embody their industrial function through noticeable intended methods of construction.

## **Association**

Association is the direct link between a property and the event or person for which the property is significant. The other aspects of integrity combine to convey a property's association.<sup>145</sup> All of the buildings in this sample are considered significant because of their association with industry, commerce, and architecture, as indicated at the beginning of each Statement of Significance section. Industry and commerce are general themes, and many of these buildings illustrate patterns in their character-defining features that are representative of these general relationships, such as the open floor plans for factory equipment and warehouse storage, stout structural systems, and specialized windows for ventilation. However, the buildings are each associated with specific industries as well, defined by a company's particular history, a distinct labor culture, or the greater implications of a manufactured product. The industries represented in the selected nominations had substantial impacts on Portland's establishment as a western port as well as the city's overall development.

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<sup>144</sup> Shrimpton, 2002.

<sup>145</sup> Ibid.

## Feeling

Feeling is a property's expression of the aesthetic or historic sense of a particular period of time. Although it is itself intangible, integrity of feeling results from the presence of physical features that, taken together, convey the property's historic character.<sup>146</sup> This aspect of integrity embodies perhaps all of the larger questions of this thesis that consider how heritage is conveyed. Because feeling can be intangible, it becomes very difficult to discuss this in National Register nominations. The historic “feeling” of a place is often alluded to in a Statement of Significance conclusion, in explaining how a combination of the other elements of integrity collectively contributes to the overall character. There is little in the selected nominations that discusses the contributing value of the various components, or what, if missing, would destroy this aspect of integrity. This thesis analyzes the elements that as a whole can convey the industrial heritage of a building, but it is fair to suggest that stronger inclusion of integrity of feeling would better illustrate the overarching character and importance of a place.

## Summary of Integrity

In this selection of nominations, the seven aspects of integrity are rarely addressed in an organized and overt manner. Integrity of materials and design are most frequently discussed in the Physical Descriptions of the National Register nominations. The physical descriptions also discuss the ways in which the settings have developed over time. However, integrity of association and feeling, aspects of socio-cultural historic value, are often ignored in the nominations. These aspects appear to be less tangible and more difficult to evaluate and express. Integrity of location, materials or workmanship, can be discussed in a more explicit manner since integrity of these components is more accessibly evaluated and addressed. This analysis of integrity ultimately questions what information is available, researched, and/or considered important in the nomination process.

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<sup>146</sup> Shrimpton, 2002.

## HISTORIC DISTRICTS

A Historic District nomination includes brief descriptions of each property including the significant history and role as a contributing resource, (primary, secondary, or compatible-contributing) or a non-contributing resource (based on date of construction, alterations, or vacancy). The primary question asked of individual properties in a district nomination is whether or not a property contributes to the collective character that conveys the district's overall significance. Many districts have several uses that include but are not limited to residential, commercial, and industrial, and the Portland districts analyzed in this study were no different. The Thirteenth Avenue Historic District in Northwest Portland is composed primarily of industrial warehouse buildings.

The explanation of a historic industrial property in a Historic District nomination is far different from the Physical Description and Statement of Significance for an individual property listing. For one, it is not feasible to expect a researcher to provide the same amount of information for every building in a district that is necessary for an individual property listing. Also, district nominations generally focus on how the resources contribute to the overall character of a district, focusing more on setting and the collective identity that contributes to the overall historic landscape.

## CHARACTER-DEFINING FEATURES

When a building is described in a nomination, several character-defining features are included to illustrate the physical characteristics of building. What is often missing, however, is how these details relate to human, cultural, and industrial use. Upon closer analysis, cultural and industrial themes can be gleaned from what appear to be stylistic or material characteristics. Several features stand out from this research sample as character-defining features of industrial buildings in Portland. These patterns help typify the city's industrial building type. A close analysis of the character-defining features discussed in the nominations identify key components to look for and understand when conducting the case studies.



## **Height Variety**

Several of the buildings could be more comparably described as building complexes. As industrial companies grew, they often added on to their existing buildings, made space for new equipment, and created warehouses for their stock. The resulting height variety in these complexes is highly character-defining of the resources and the industry's growth. The relationship of massing to a building's change over time as a response to a growing company is easily observable and frequently discussed in the sampled nominations.

## **Style**

Nominations analyzed in this research reflect a number of architectural styles that include Late Victorian Romanesque, Industrial-Italianate, and Sullivanesque. Regardless of the architectural classification, it is interesting to note that the buildings reflect the popular building styles of their eras. These industrial buildings were designed with the same ornamentation as governmental and commercial buildings, but were overlaid onto the massing, structure, and plans more typical of industrial buildings.

## **Ornamentation**

A high level of ornamentation is often applied to historic industrial buildings and is discussed in the nominations' physical descriptions of character-defining features. It is perceivable that industrial developments were a strong part of regional identity and buildings held a stronger representation of this pride. Many Portland historic industrial buildings are associated with industries that helped develop the early city and are considered regional pioneers in the city's economy.

Another, more practical reason suggests that the purpose of the building and the technologies available at the time had enormous impacts on industrial building construction. For example, because indoor air conditioning did not yet exist, more windows were necessary to control ventilation. The need for multiple windows created

the opportunity for more ornamentation. Labor and craftsmanship were far less expensive in the late nineteenth and early twentieth centuries than they are today, suggesting that the ornamentation is simply a reflection of both value and design expectations of building construction during this historic era.

### **Historic Windows**

Windows are a noteworthy aspect of historic buildings, often lively discussed in preservation and always included in a National Register nomination. Fenestration is an important element of a building. It sites a building in relation to the surrounding natural space, takes advantage of daylight, and connects users to their outdoor environments. Fenestration provides opportunity for a designer to include details that express workmanship, style, and aesthetics. In historic industrial buildings, operable windows served a more functional role by providing ventilation for industrial workers. This aspect is rarely addressed in the nominations.

### **TRANSPORTATION & SETTING**

Transportation is an important theme defining the significance of historic industrial buildings, and its connection is most evident in a property's setting. Transportation has played a critical role in the development of urban industrial settings and has especially impacted the conditions necessary for effective adaptive reuse projects. Manufacturing plants and warehouses were designed simultaneously with transportation lines, due to the necessities of shipping, railroads, and later trucking. Portland took full advantage of the Willamette and Columbia Rivers, and the urban industrial core quickly grew up around the river's edge. The transcontinental railroad lines intersected the industrial area for both ease of transport and shared topographical conditional requirements. The Federal Highway Administration designed interstate freeways to skirt downtown areas and connect cities to one another across the country. Modern industrial sites are now often located along the interstate highway system for easy access to this paved transportation network. Transportation and industry have

clearly been and continue to be inherently connected in any era. Transportation developments drastically defined and impacted urban industries of all types, as the transport of goods was integral to the industrial process. An area's location and setting should convey these relationships. Railroad spurs, river docks, and loading areas are common features seen in Portland industrial settings with high integrity. The National Register nominations discuss the relationship between the industrial resource and transportation at great length. It appears as though the explanation of local transportation developments has become an acceptable framework in which to discuss the historic and contextual background of a resource in its nomination.

## CHANGING USE

Industrial-based companies have, according to Stratton, “traditionally opted to take over or adapt existing buildings rather than plan afresh.”<sup>147</sup> As a means of saving money, especially when an industry's future is unpredictable, compatible factory and warehouse reuse provided affordable opportunities for companies to start-up, or grow without losing momentum. “By adapting existing buildings, firms avoided the major interruption to work necessitated by clearance and building anew.”<sup>148</sup> Thus, an industrial building's change over time is a typical and inherent component of a building's history.

Many industrial buildings can be referred to as use- inspired designs. Properties that were designed for their industrial use may often retain character-defining elements of this period, such as transom lights for better light and ventilation, but rarely are properties occupied by users that have been there for several decades. Businesses grow and change, and changing property types reflects this. If successful, the original owners will often move to a new, larger space that better represents the changing needs of its growing company, and a newer startup company may move in, make adjustments to fit its needs, and flexibly accommodate the new space. Edward Muller corroborates this notion in his lecture, “Industrial Preservation: Connecting People, Place and History,” by saying that

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<sup>147</sup> Stratton, 40.

<sup>148</sup> Ibid.

industrial buildings are “quintessentially part of ordinary or vernacular landscapes, [and] represent multiple layers of time and cultural activity. . . [Industrial sites are] inherently and recognizably dynamic.”<sup>149</sup> Adaptive reuse becomes an intrinsic component of a building’s life cycle.

Depending on the degree of a company’s desire to alter and change its space, the building’s ability to convey its occupancy is greatly impacted. National Register nominations appear to address either the first industrial activity of a building, or the industry that had the heaviest hand in leaving an impression of a particular occupancy.

The nominations list several occupants and users of industrial buildings throughout a building’s life. With effective adaptive reuse, redevelopers can add to this continuum with a new set of occupants and users. It is communally beneficial that contemporary developers find modern uses for these buildings that serve the surrounding communities. This prolongs a buildings social value and provides the opportunity to preserve and convey its cultural heritage.

## VISUAL LANDMARKS

Nearly all of the individual building nominations include a statement about the resource’s role as a visual landmark in the neighborhood or community. Although a building’s function as a “visual landmark” holds no weight in its evaluation for National Register status, this statement appears to commonly be included in nominations to bolster evidence for its significance as a primary resource. However, a building’s role as a visual landmark may serve an important role in sharing industrial heritage with a community through wayfinding and prominent landmarks. On-site evaluation provides a more informative evaluation and consideration of this concept.

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<sup>149</sup> Edward K. Muller, “Industrial Preservation: Connecting People, Place, and History,” Sixth Annual Fredric M. Miller Memorial Lecture, (City Museum of Washington, 2004).

## HUMAN & CULTURAL CONTEXT

The focus of architectural style in contrast to cultural significance is a common conversation in the preservation field. It is often argued (including in this thesis) that architectural details often outweigh the importance of the social life and human interaction that occurred in the space. Cultural significance should be considered in a discussion of style and character-defining features, because this human component is often the catalyst for the features of a building's design. In the case of industrial buildings, function and form determined a building's human and mechanical efficiency, and then informed its architectural style.

In general, the majority of the reviewed National Register nominations unsuccessfully identified the relationship that connects human historical context to the building's significance and character-defining features. It appears as though it is common to explain a building's use through the story of the business operations of the company, not the human context of the space's main users. A more detailed focus on cultural heritage would question how people interacted with the space, or how effective the space was for the particular industry.

## CONCLUSION

National Register nominations are valuable tools for assessing a property's significance and identifying features and "stories" that are to be preserved, conveyed, and carried through a building's life, regardless of its new use. The historic integrity of the resource is comprised of the preservation of such features, although some aspects of integrity garner more attention than others. The federal government views the nomination process as the first step to document a building and then to determine eligibility for financial incentives to restore, rehabilitate, or repurpose a historic building. Industrial buildings are particularly interesting in this process because while they change over time, their significant "story" becomes connected with what is most evident in the building's form or in available research. As nomination research follows the path of least resistance to defining its significance, the original occupants of the building most often define the period of significance and the contributions to broad patterns of history.

Industrial buildings appear to most always have been purpose-built, constructed by the company for its industrial use, highlighting the original story in the building's form and design, through the relationships of interior space, lighting conditions, or permanent signage on the exterior. In many ways, the nomination process then defines the emphasized history of a building. The case studies address the specific nominations for each building in an analysis of the relationships among the significant history, character-defining features, and modern use, highlighted by the philosophies that drive the redevelopment process.

## **CHAPTER VIII**

### **CASE STUDIES**

#### **INTRODUCTION TO CASE STUDIES**

The following case studies analyze five adaptively reused properties in Portland, Oregon, unified by their central locations in the city, listing on the National Register of Historic Places, and industrial histories. The historic buildings and their new uses are:

- Weinhard Brewery Complex – Brewery Blocks, Block Two: 1131-1133 West Burnside Street, Portland, Oregon
- Crane Company Building – Crane Lofts, 720 Northwest Fourteenth Avenue, Portland, Oregon
- Northwest Fence and Wire Works Building, 400 Northeast Eleventh Avenue, Portland, Oregon
- Olympic Cereal Mill Building – Olympic Mills Commerce Center, 107 Southeast Washington Street, Portland, Oregon
- Portland Cordage Company Building – Bridgeport Brewing Company and studio spaces, 1313 Northwest Marshall Street, Portland, Oregon.

The case studies will describe the building through their character-defining features, history, and modern use. Interviews with project developers inform the research of the process, intuitions, challenges, and impetus behind industrial adaptive reuse projects. Information from site visits allows for evaluation of the on-the-ground effectiveness of preserving and sharing a building's industrial heritage.

The success of the projects is determined by leasing feasibility, preservation of character-defining features, and the ability to share the building's industrial history. Most of these projects aimed to receive Federal Rehabilitation Tax Credits or state Special Assessment incentives as part of the project funding package which requires seemingly

more rigorous preservation standards. Not all received this incentive and some are still in the evaluation process, which elicits interesting questions about the challenges of preserving integrity in industrial adaptive reuse, compatible new uses, and the success of the tax credit process itself.

The chosen case studies represent industrial buildings in Portland that were constructed between 1887 and 1922, during thirty-five years of tremendous industrial growth for the city. Several of the character-defining features of these buildings are similar and suggestive of the collective features of Portland industrial buildings. In general, these features include brick and concrete building materials, as well as concrete and timber structural systems and expansive lighting conditions. Most of these buildings are actually conglomerates of several building components that were added to over time as the industries grew. The industrial settings of all the case studies share characteristics of being closely tied to central downtown locations, proximity to railroad lines or spurs, and have industrial developments in the surrounding area. In many cases, these significant buildings are the best or only examples of successful adaptively reused industrial buildings in their respective neighborhoods and are each the most effective at conveying their industrial use in comparison with other surrounding buildings.



## CASE STUDY 1: BLITZ WEINHARD BREWERY COMPLEX (BREWERY BLOCKS, BLOCK TWO)

### Introduction

This case study analyzes Block Two of the Blitz Weinhard Brewery complex, located at 1131-1133 West Burnside Street (See Figure 2). The complex originally comprised of four buildings, the Brewhouse, Hop and Malt Building (1907), Ice and Power plant (1906), Condenser Building (1906), and Cellar Storage Building (ca. 1940). See Figure 3 for site plan. The non-contributing Cellar Storage Building was recently demolished and replaced with a modern ten-story office building as part of the 2006 redevelopment. There are buildings on nearby blocks that were also part of Weinhard's enterprise. The complex was originally constructed for Henry Weinhard's establishing



Figure 2: Weinhard Brewery Complex, Northwest corner, (image courtesy of GBD Architects).

brewery, which was founded in a different complex immediately west of the subject site in 1862. The Weinhard Brewery complex was nominated to the National Register of Historic Places in 1999. John & Jeri Tess of Heritage Consulting Group wrote the nomination for Gerding Edlen Development Company, then and present owners and redevelopers of the building.

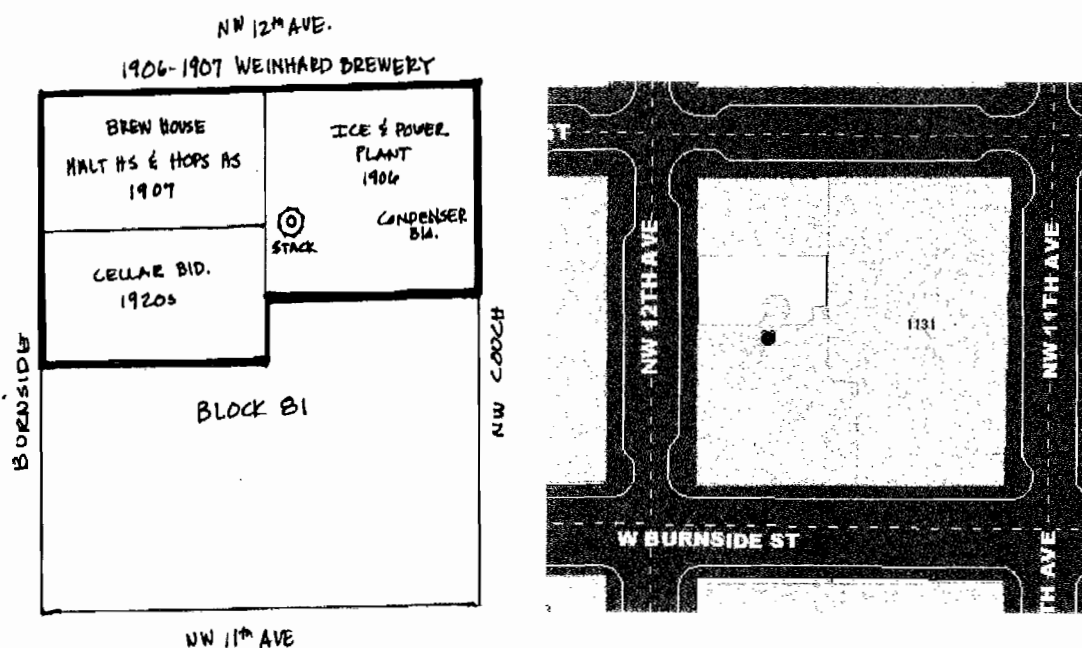


Figure 3: Weinhard Brewery Complex Site Plans, (Sources: Weinhard Brewery Complex National Register of Historic Places Nomination and Portland Maps).<sup>150</sup>

## Physical Description

The Weinhard Brewhouse is a six-story building with brick walls and a stone foundation and is an “outstanding example of early brick industrial construction in the City of Portland.” Its Romanesque Revival style is characterized by the building’s heavy corbel cornices, supporting parapets, brick construction, segmental relieving arches, and

<sup>150</sup> John Tess, “Weinhard Brewery Complex,” National Register of Historic Places Nomination, (United States Department of the Interior: National Park Service, 1999), Section 10, pg 4. Brewery Blocks, Block Two, 1131 West Burnside Street, Portland Maps, <http://portlandmaps.com/detail.cfm?&nofooter=no&activetheme=Property&action=Explorer> (accessed April 28, 2010).

height variety. The malt and hop section of the building, facing Twelfth Avenue, is four stories tall. The industrial characteristics include its large massing, brick smokestack on top of the brewhouse, storage tanks, and signage embedded in the brick exterior that identifies the building with the company. A stone plaque is mounted above the doorway that reads, “H. Weinhard, Brew House, 1907” (See figure 4).



**Figure 4: Historic sign identifies place as H. Weinhard Brew House. It includes the 1907 construction date. A historic window is centered above. (Photo taken by author, 2010).**

The windows consist of three large openings on the ground floor, divided by wood transoms and mullions. According to the National Register research, these windows have been slightly altered, simplified from their original three horizontal divisions and multi-paned transoms. Smaller segmental arch windows, three per floor, are aligned above the first floor openings. Gerding Edlen Development rebuilt the windows and reached a close match to the historic fenestration.<sup>151</sup>

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<sup>151</sup> Mark Edlen, Interview, Portland, Oregon, April 9, 2010.

The Weinhard complex contained several features that define industrial buildings as effective models for adaptive reuse. Mark Edlen, project developer and co-founding partner of Gerding Edlen Development Company, is drawn to the “incredible glass lines” of industrial buildings, specifically to their potential to evoke an unbelievable quality of light for modern users.<sup>152</sup> High ceilings and exposed brick and timber also stand out to Edlen. The timber can be expressive of the regional historic timber industry in the Pacific Northwest. In many ways, the wood materials are a way to share the region’s rich timber history.<sup>153</sup>

## History

The Weinhard Brewhouse is one of the oldest structures in Portland’s northwest industrial and warehouse area. This complex, designed by Whidden & Lewis, was listed in the National Register of Historic Places as significant under Criterion B for being associated with Henry Weinhard and Paul Wessinger, the company’s two most prominent owners. The complex is also considered significant under Criterion C as an excellent example of Romanesque Revival industrial architecture. The nomination was later revised to also denote the building’s significance under Criterion A for its association with significant patterns in history, specifically as the most prominent brewery in Portland during its time.<sup>154</sup> Figure 5, below, shows the historic interior of the building in its industrial operation.

Henry Weinhard immigrated to Oregon from Germany in the 1850s and started his brewery in the Portland area in 1862.<sup>155</sup> The nomination research indicates that the majority of the brewers in Portland at that time were of German descent and that

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<sup>152</sup> Edlen, 2010.

<sup>153</sup> *Ibid.*, 2010.

<sup>154</sup> John Tess, “Weinhard Brewery Complex,” National Register of Historic Places Nomination, (United States Department of the Interior: National Park Service), 1999. This revision was made in 2000 by Historian and Nomination Reviewer, Paul R. Lusignan.

<sup>155</sup> John Tess, Section 8, pg. 1.

Weinhard also shared this ethnic heritage.<sup>156</sup> It can be generalized from the nomination research that Weinhard took great care in the well being of his workers.<sup>157</sup> The brewery had its own saloon and workers had access to free beer throughout the workday.<sup>158</sup> Weinhard also constructed a Lutheran chapel near the brewery to serve the prominent religious sect of his German immigrant workforce.<sup>159</sup>



**Figure 5: Historic photograph of employees inside the Weinhard Brewery (Photo courtesy of Gerding Edlen Development).**

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<sup>156</sup> John Tess., Section 8, pg. 1.

<sup>157</sup> Ibid., Section 8, pg. 6.

<sup>158</sup> Ibid.

<sup>159</sup> "The Germans," in Immigration: Journey to America, <http://library.thinkquest.org/20619/German.html> (accessed March 4, 2010).

The Weinhard Brewery also played a prominent role in Portland's community development. The company persevered through Prohibition by producing near-beer, root beer, ginger-ale, syrups, soda water of all flavors and crushed fruit drinks when beer was not a legal beverage.<sup>160</sup> They also maintained a bottling franchise with 7-Up and Coca Cola, and sold fountain supplies and equipment.<sup>161</sup> Weinhard's survival of Prohibition was rare among breweries in Portland, but further solidified the company as a steady element of Portland commerce.

In 1928 Weinhard merged with Arnold Blitz's Portland Brewing Company and formed Blitz-Weinhard Brewing Co, which lasted until 1979.<sup>162</sup> For reference, in 1968 the brewery employed 200 people and produced roughly one-third of the state of Oregon's beer. In 1979, the company was sold to Pabst Brewing Company of Milwaukee, WI, then G. Heileman Brewing Co. in 1982, then Stroh Brewery Co. in 1996, the 4<sup>th</sup> largest brewer in nation. When Stroh merged again in 1999, the Portland operation was closed and the buildings were vacated.<sup>163</sup> The 1906-07 brewery buildings are considered a visual and social landmark in Portland as a "testament to one of Portland's most successful businesses, started by Henry Weinhard in 1862."<sup>164</sup>

## Modern Use

The Brewery Blocks redevelopment project was completed in 2006 by Gerding Edlen Development along with GBD Architects, KPFF Engineering, Glumac Engineering and Hoffman Construction Company. Both companies now have offices in Block Two, which has been identified as "urban retail," "creative class A office space," and includes three levels of underground parking.<sup>165</sup> These classifications apply to both

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<sup>160</sup> John Tess, Section 8, pg. 9.

<sup>161</sup> Ibid.

<sup>162</sup> Ibid.

<sup>163</sup> Ibid., Section 8, pg. 11

<sup>164</sup> Ibid.

the historic elements of the block, plus the new ten-story office building that was constructed on the east side of the block, which is where the developer's and architect's offices are located. Through an elevator connection, the new building became the historic building's "seismic bridge." Promotional material about the Brewery Blocks claim that the new tower building incorporates design qualities and materials of the "classic" warehouse buildings of the Pearl.<sup>166</sup> Block Two of the Weinhard Brewery complex achieved LEED Gold rating and won the 2004 ACEC Oregon – Engineering Excellence Project of the Year award.<sup>167</sup> The smokestack restoration and seismic stabilization, while expensive and tenuous, demonstrated the company's commitment to the buildings preservation of character-defining features. Gerding Edlen Development looked at the smokestack preservation "as the right thing to do."<sup>168</sup> This statement resonates with Gerding Edlen Development's overall philosophies about historic preservation, that it is their social obligation to both contribute and retain a more interesting city.<sup>169</sup> Interior and exterior views of the Ice House and Power Plant can be seen below, now the courtyard for Henry's Tavern, with its retained brick shell and now open air interior (Figures 6 and 7). There are marketing benefits of historic preservation as well, and the company certainly took advantage of this in its leasing strategies. Also, Henry's Tavern, the main tenant in the historic building, references the building's smokestack on its webpage as an iconic element of the building's history.<sup>170</sup>

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<sup>165</sup> GBD Architects, Inc., "The Brewery Blocks, Portland, Oregon," Promotional Material, 2010.

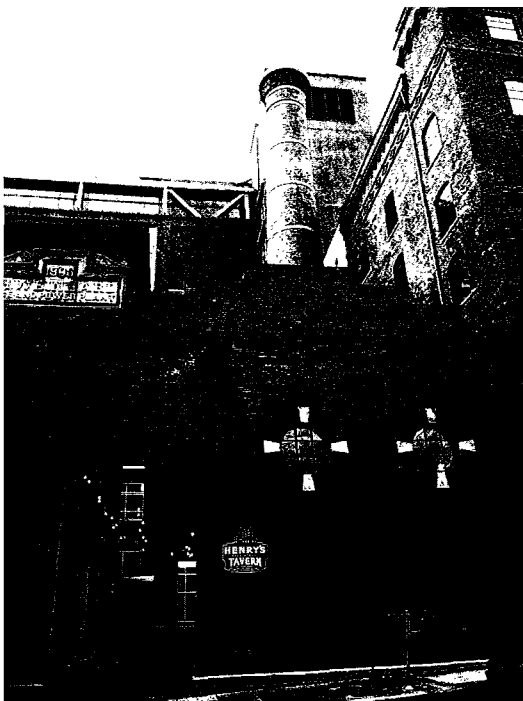
<sup>166</sup> GBD Architects, Inc., "The Brewery Blocks, Portland, Oregon," Promotional Material, 2010.

<sup>167</sup> Ibid.

<sup>168</sup> Edlen, 2010.

<sup>169</sup> Ibid.

<sup>170</sup> Henry's Twelfth Street Tavern, <http://www.henrystavern.com/page/history> (accessed March 1, 2010).



**Figure 6 (left): Exterior of Ice House and Power plant building with retained smoke stack and modern addition in background (photo by author, 2010).**

**Figure 7 (right): Interior of Ice House and Power Plant building, now an open air courtyard for Henry's Tavern (photo by author, 2010).**

## Unique Considerations

The unique industrial exterior of the brewery stands out as an icon of Northwest Portland's industrial history, especially given the preserved and restored smokestack. Since the building's interior has undergone substantial alterations due to changes in technology, equipment, and use throughout the years, the interior retains little integrity that reflects a historic brewery. Henry's Tavern is the space that is most accessible to the public. Aside from some exposed brick and covered timber columns, Henry's falls short in conveying its history. There is however, plenty of opportunity to interpret the German heritage of both the historic workers and Weinhard himself, and to share the experience of an important ethnic group in Portland's industrial history, especially in the beer industry. Henry's Tavern serves a retail connection to the beer industry providing a clear connection that incorporates the significance of the historic space and use with the marketing and customer "experience" of the place.



The historic tower offices also offer a unique situation to convey the brewery story. According to Edlen, there is a high-finished brewmaster's suite on the sixth floor of the Condenser Building. This room has vaulted ceilings, mahogany paneled wainscot, and classical pilasters with lions' head carved Corinthian capitals.<sup>171</sup> There is also a movie screen in this space that was historically used to show films about the brewery. The room has been preserved intact and is now used as a conference room. Edlen can picture the brewmaster upstairs with his staff members saying "You must make good beer today!" while he bangs on the pulpit.<sup>172</sup>

In this building, the interior spaces are not necessarily well suited for their modern use. The Condenser Building Tower, for example was not well laid out for conventional office space, and the developer had some difficulty finding tenants who could make use of the space.<sup>173</sup> Edlen identifies overcoming these challenges by finding compatible user patrons that "embrace the historic nature of the place," such as Diesel, a retail clothing store looking for a gritty brick interior scene, or Henry's Tavern, which really ran with the marketing of the brewery story.

The Weinhard Brewery Complex redevelopment was closely tied to specific connections to Henry Weinhard and his brewery. The signage on the buildings offers an overt tie to the past, and Gerding Edlen Development, along with some of the tenants, took the history into consideration when naming both the historic spaces and the associated new construction projects. For example, the Henry and Louisa, referencing Mrs. Weinhard, are two new residential towers constructed on Blocks Three and Five, respectively. Portlanders can strongly relate to the Weinhard history. There were generations that grew up around the brewery, that worked there, and that bought Weinhard's beer.<sup>174</sup> Generally, the historic complex "harkens back to another era,

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<sup>171</sup> John Tess, Section 7, pg. 7.

<sup>172</sup> Edlen, 2010.

<sup>173</sup> Ibid.

<sup>174</sup> Ibid.

another generation.”<sup>175</sup> The Weinhard complex is one of the most prominent reminders of the industrial history of this neighborhood.

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<sup>175</sup> Edlen, 2010.

## CASE STUDY 2: CRANE COMPANY BUILDING (CRANE LOFTS)

### Introduction

The Crane Building, located at 710-712 NW Fourteenth Avenue (old address is 160-164 North Fourteenth Avenue) is a primary contributing resource in Portland's National Register-listed Northwest Thirteenth Avenue Historic District (See Figure 8). This Commercial style six-story warehouse was designed by Portland Architect W. C. Knighton. It was built in 1909 for the Crane Company, a nationally known operation that manufactured piping equipment and plumbing materials. Although Knighton had the opportunity to impress his own architectural features on the building, this Crane Building was similar to other buildings owned and operated by the company throughout the nation.



Figure 8: The Crane Company warehouse, now residential Crane Lofts in the Portland Northwest Thirteenth Avenue Historic District (photo by author, 2010).

The Crane Company warehouse has been recently redeveloped into residential lofts by Guardian Management Company.

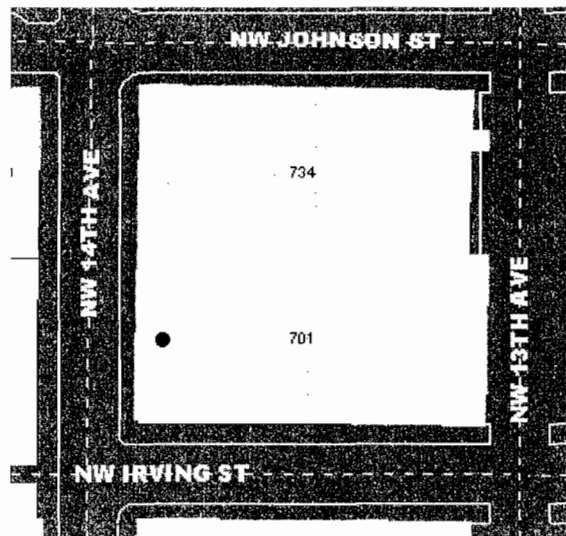
### **Portland Thirteenth Avenue Historic District**

A six-block corridor of early twentieth century industrial warehouses makes up the Portland Thirteenth Avenue Historic District. The resources are in close proximity to the railroad via spurs, illustrating the primary transportation means utilized during the building's original era. The district developed as a regional distribution center in the early twentieth century due to the area's central location and integration with transportation. Common building materials in the district include heavy masonry and concrete with timber, steel, and concrete framing in the heavily constructed multi-storied quarter-block buildings of the district. Other characteristics include roof top water towers, metal awnings, loading docks, overhead doors, unpaved roadways, railroad spur trackage, and remnants of historic Belgian block street pavers. The district was nominated to the National Register of Historic Places in 1983 for the intact industrial character and historic industrial context this group of warehouse buildings represents.

### **Physical Description**

The red brick Crane Company Building faces west on a prominent industrial lot in the historic district and comprises of two interconnected building components. The western half of the building is a six-story tower while the eastern half is an attached single story space that expands the building footprint along Thirteenth Avenue (see Figure 9 for site plan). The building has a steel reinforced concrete structure that was stoutly designed to handle the storage and manufacture of plumbing and steam-fitting supplies. The exterior is marked with the company's name carved with raised lettering into a stone pediment in the center bay of the west elevation, above the building's main door, and is also painted on the southwest corner. This entrance has a set of double-hung wood doors, each with a single glass panel, flanked by sidelights and a four-light transom. The ground floor windows are characterized by their height that "rise from the

stone base and almost reach the second floor level.”<sup>176</sup> The remaining windows on the building are a series of 1/1 double hung wood sash and visually rationalize the building into horizontal floors, emphasizing its Commercial style. The Crane Company building contributes to the overall industrial setting of the area with its characteristic warehouse presence.



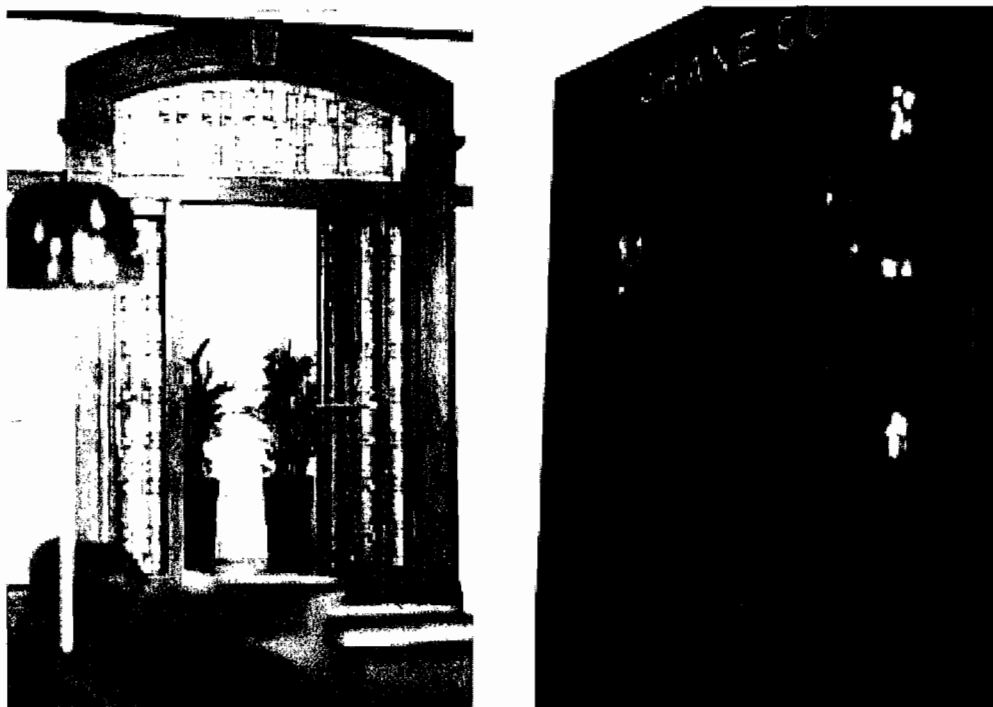
**Figure 9: Crane Company Building site plan showing building complex on south end of block (courtesy of Portland Maps).<sup>177</sup>**

The interior of the building has a retail tenant and a clothing design company on the ground floor. The second floor is highly finished office space (see Figure 10). A safe from Crane Company’s era remains intact and is visible on the second floor (see Figure 11). The upper warehouse floors are of concrete construction with operable wood windows and an exposed brick envelope. The modern studio apartment construction has

<sup>176</sup> John M. Tess & Jeri S. Tess, “Thirteenth Avenue Portland District Nomination,” National Register of Historic Places Inventory – Nomination Form, (United States Department of the Interior: National Park Service, 1983), Section 7, pg. 61.

<sup>177</sup> Crane Company Building, 720 NW 14<sup>th</sup> Avenue, Portland Maps, [http://portlandmaps.com/detail.cfm?action=Explorer&propertyid=R596051&state\\_id=1N1E33AD%20%2099000&address\\_id=&intersection\\_id=&dynamic\\_point=0&x=7642163.52126&y=686211.725984&place=NO%20ADDRESS%20AVAILABLE&city=PORTLAND&neighborhood=PEARL&seg\\_id=0](http://portlandmaps.com/detail.cfm?action=Explorer&propertyid=R596051&state_id=1N1E33AD%20%2099000&address_id=&intersection_id=&dynamic_point=0&x=7642163.52126&y=686211.725984&place=NO%20ADDRESS%20AVAILABLE&city=PORTLAND&neighborhood=PEARL&seg_id=0) (accessed April 28, 2010).

taken advantage of these features, along with carefully added wall partitions, finished bathrooms and kitchens in each apartment.



**Figure 10 (left): Crane Building Second Floor wood finished interior entry (photo courtesy of Crane Lofts).**

**Figure 11 (right): Crane Company safe on building's second floor, (photo courtesy of Crane Lofts).**

## **History**

The Crane Company Building is considered significant for its association with the nationally known Crane Company and as an excellent example of W.C. Knighton's architecture. Throughout its history, the building was mostly used as a warehouse for the Crane Company, although manufacturing and office activities also took place in the large tower. This wholesaling company developed branch houses in areas they speculated were profitable in sales. The Portland branch was established earlier in 1893 at Twenty Front Street and moved twice more before constructing this building on Thirteenth Avenue. The Crane Company remained at this location until 1964 when it sold the property to

American Rag and Metal Co. and Wiping Cloth Co., later named Pioneer Sterilized Wiping Cloth Co. This rag manufacturing company was the owner at the time of the nomination and later sold the property to Guardian Management Company who redeveloped it.

Crane Company buildings in other cities shared the same general appearance as the Portland building, each having only slight variations. The nomination implies that the common design features leads one to believe that the company may have had general building plans that they made available to local architects and then allowed the architect to add his own personal touch to the building.”<sup>178</sup> That said, the building is favorably associated with Knighton’s architecture and is considered to be one of the most architecturally distinguished buildings in the historic district. The building, revered as a significant piece of architecture at the time of construction and “considered a notable addition to the warehouse district, remains a primary resource depicting the character of the area.”<sup>179</sup>

## **Modern Use**

In 2007 the building was renovated and redeveloped by Guardian Management LLC. SERA Architects was the designer on the project. Today the first and second floors of the tower are offices that serve retail and Guardian Management’s headquarters, while the rest of the building is residential lofts. A restaurant space is intended for the single-story eastern portion of the building (See Figure 12). Two penthouse suites were constructed on top of the historic building to assist with the financing for the project. SERA, the architecture firm assigned to the project explains the redevelopment on the firm’s website.

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<sup>178</sup> John Tess & Jeri Tess, Section 7, pg. 63.

<sup>179</sup> Ibid.



**Figure 12: Southeast view of Crane Company Building. Single-story restaurant space is currently under renovation (photo by author, 2010).**

The renovation design for the building includes a seismic upgrade and conversion of the original six story structure into a combined retail, office and apartment building, with the addition of one level on the roof to accommodate two penthouse condominiums. The former one story staging area includes 8,500 sq ft of restaurant space. The basement of the building contains parking and storage.<sup>180</sup>

The building's website now boasts its opportunity for quality residential living in the Pearl district with thirty apartments and two penthouse condos. Retail and restaurant spaces occupy the bottom floor. Although the Crane Lofts website highlights the elegance of living in the historic Pearl District and notes the building's importance for its architectural value and as a historical landmark, it says little to connect the building to the specific history of the Crane Company.<sup>181</sup>

<sup>180</sup> SERA Architects, <http://www.serapdx.com/project.php?category=1&project=106> (accessed February 24, 2010).

<sup>181</sup> Crane Lofts, website. <http://cranelofts.com/> (accessed February 24, 2010).



Guardian Management Company knew they wanted a vertical mixed-use project out of the Crane Company Building redevelopment. They also knew that the building was unreinforced masonry construction, which would require a challenging seismic upgrade. Seismic upgrades often become the most difficult hurdle in historic redevelopment projects. The first seismic engineer consulted by Guardian Management Company suggested that shotcrete be used as a shell inside the building to provide a structure that would be like its own modern building inside the historic brick envelope. Not only did Guardian Management realize that this treatment would not be approved by the National Park Service, they were also concerned about missing out on a well recognized marketing component with the exposed brick interior walls and historic wood windows.<sup>182</sup> Their tenants see these as highly attractive and desirable features (see Figure 13).



**Figure 13: Crane Loft interior highlighting brick walls, operable historic windows, and the exposed ceiling (photo courtesy of Crane Lofts).**

KPFF, an engineering firm more experienced with preservation projects was then consulted to come up with a better plan, which was approved and implemented. Now, in the hallway by the elevator, there is an extremely solid exposed concrete archway. Ross

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<sup>182</sup> Ross Cornelius, Interview, Portland, OR, April 23, 2010.

Cornelius, Crane Building Project Manager marveled at the amount of steel that reinforces this concrete structural upgrade.<sup>183</sup> The structure is thicker at the bottom and tapers in girth as it increases in height, very similar to the historic unreinforced round columns that once served the building. The historic columns remain in the building juxtaposed against the new structure, offering a differentiated yet compatible approach to the building's seismic upgrade (See Figure 14). Horizontal steel beams tie the building to the concrete and steel while small square steel columns brace the building vertically. A specialist was required to come in and prove that in the case of a fire, people would have enough time to exit the building before the steel melted. This defense successfully in appealed the fire department's request to encase the steel in drywall.<sup>184</sup>



**Figure 14: Corridor illustrates both the concrete seismic upgrade as well as the retained historic unreinforced concrete columns (photo by author, 2010).**

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<sup>183</sup> Cornelius, 2010.

<sup>184</sup> Ibid.

Guardian Management was not the only company that considered the Crane Company Building for redevelopment. Cornelius reckons that everyone in town looked at this building, and all saw it as a potential condo development project, but no one could figure out how to make it financially pencil.<sup>185</sup> Guardian Management found a solution by offering its own company headquarters as the anchor tenant on the bottom two floors, which made lending on the project much more feasible.<sup>186</sup> Figure 15 illustrates this office space that was historically finished with decorative columns and wood finishes.



**Figure 15: Second Floor space was given a high finish to serve the historic Crane Company offices and is now occupied by Guardian Management Company. (Photo by author, 2010).**

To Guardian management, the Crane Building Redevelopment was not necessarily intended to make a potentially lucrative profit, even with the incentive of four million dollars in Federal Rehabilitation Tax Credits to help fund the project. The tax

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<sup>185</sup> Cornelius, 2010.

<sup>186</sup> Ibid.

credits, along with two penthouse suites built on top of the historic building, had become necessary just to make the project pencil. Cornelius reflects on the challenges of securing tax credits. “Looking back, I would tell someone to think very carefully about a tax credit project. We spent more money than we had planned on, and it was a very complicated and difficult process to get the tax credits.”<sup>187</sup> The benefits for this project were about getting into the desirable Pearl District, about the company owning its own building, and about proving that Guardian Management is capable of managing and successfully executing a historic redevelopment project.<sup>188</sup> This opens up a whole new genre of business for the company, indicating that the Portland real estate market has recognized a value for developers experienced in the complicated yet promising process of adaptive reuse and historic redevelopment.

### **Unique Considerations**

Because the Crane Company Building is part of a historic district, the industrial context of the surrounding setting becomes an important component of conveying the building’s heritage and significance. The district nomination discusses how the various resources contribute to the overall character of the area, and it can be supposed that the interpretive angle of this redevelopment project had similar intentions. However, the Crane Company adamantly carved and painted its name on the main elevations of the building, allowing the building to depict its more specific history through time. There are several other industrial buildings on the surrounding blocks. The Crane Building and the nearby Avenue Lofts seem to perhaps serve better economic and social uses of the historic resources in contrast to the storage units in the next-door warehouse, or the ground floor light industrial use in the building across the street.

In residential scenarios, it is important to give tenants the opportunity to impress a space with a person or family’s own personality and character. The modern wall partitions that make up the studio residential spaces are impressionable in their modern

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<sup>187</sup> Cornelius, 2010.

<sup>188</sup> Ibid.

uses, while the historic features, such as the exposed brick interior and double-hung windows, remain as unmaleable expressions of the past. These historic features are perhaps the most aesthetically desirable attributes of the residential space, providing an interesting overlay of historic character-defining features and modern individuality in this building.

Lizard Lounge, a retail clothing company on the ground floor, has taken full advantage of the historic character of the building and its industrial use. Industrial metal carts are used to display clothing, while historic scales and adding machines become décor in the retail space (See Figure 16). It appears as though there could be opportunity to interpret the relationship of this equipment to the Crane Company history while still retaining an appropriate balance of the space as a retail store, not as a museum.



**Figure 16: Crane Company Building ground floor occupant, Lizard Lounge retail clothing store makes effective use of industrial equipment by displaying merchandise on metal rolling carts and decorating with a historic scale (photo by author, 2010).**

## CASE STUDY 3: NORTHWEST FENCE & WIRE WORKS BUILDING

### Introduction

The Northwest Fence & Wire Works building is located at 400 Northeast Eleventh Avenue (See Figure 17). This two-story brick building was constructed in 1911 and is stylistic of the late nineteenth and twentieth century revivals. Its original function was a livery stable, but the building burned in 1921 or 1922, then renovated and occupied by Northwest Fence & Wire Works, and then Cyclone Fence until 1959. H.C. Rhodes Bakery Equipment Company later occupied the building and then sold it to Venerable Group, Inc., who is the redeveloper and current owner of the property. Jessica Engeman of Venerable Group wrote the nomination in 2004 in order to secure state Special



Figure 17: Northwest Fence and Wire Works Building, view from southwest corner. Ghost signage represents three eras of industrial occupancy (photo by author, 2010).

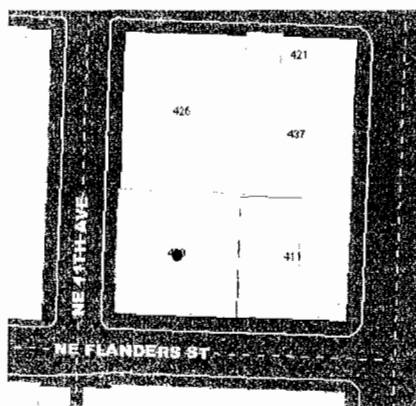
Assessment and Federal Rehabilitation Tax Credits to help finance the redevelopment project.

## Physical Description

The two-story brick building has a wood post-and-beam structural system and a full basement. The south and west elevations are the most visually prominent (see Figure 18 for site plan). Character-defining features include brick parapets and windows and doorways ornamented with brick segmental arches and keystones. The north façade has very faded signage from the Northwest Fence & Wire Works business saying,

“Northwest Fence & Wire Works, the Fence Builders  
Fence for all Purposes  
Wire and Iron Work  
Sand and Gravel Screens”

(See Figure 19 for a modern image of this signage). The exterior signage on the building offers in a way, a graphic timeline of the building’s use over time. One can also slightly make out the “Fashion Stables” name as well, signage that survived the building’s fire and appears ghostly today. “Rhodes Bakery” is clearly painted on the building’s west elevation representing the building’s more recent industrial occupant.



**Figure 18: Northwest Fence & Wire Works Building Site Plan (Source: Portland Maps).<sup>189</sup>**

<sup>189</sup> Northwest Fence & Wire Works Site Plan, 400 NE 11<sup>th</sup>, Portland Maps, [http://portlandmaps.com/detail.cfm?action=Explorer&ZoomLevel=10&propertyid=R150499&state\\_id=1N1E35CA%20%20500&address\\_id=626909&intersection\\_id=&dynamic\\_point=0&x=7650055.46&y=685220.769&place=400%20NE%2011TH%20AVE&city=PORTLAND&neighborhood=KERNS&seg\\_id=137718](http://portlandmaps.com/detail.cfm?action=Explorer&ZoomLevel=10&propertyid=R150499&state_id=1N1E35CA%20%20500&address_id=626909&intersection_id=&dynamic_point=0&x=7650055.46&y=685220.769&place=400%20NE%2011TH%20AVE&city=PORTLAND&neighborhood=KERNS&seg_id=137718) (accessed April 28, 2010).



**Figure 19: Northwest Fence & Wire Works Building north elevation has evidence of ghost signage from both Fashion Stables and Fence company occupancies (photo by author, 2010).**

The interior of the building highlights its expansive spaces with exposed columns, cross bracing, beams and joists. The exposed roof system and sawtooth light monitor are key character-defining features. As Engeman describes in the nomination's Physical Description:

The beams spanning the space from east to west and have a slight crest in the center. Running perpendicular to these beams is a wood truss system. At the center of the ceiling is a sawtooth light monitor [with wire-glass pivot windows], added in 1923 to enhance the ventilation and lighting of the space. Each of the two sawtooth components measures approximately 20 feet long and has seven 10-light north facing windows and one six-light window at either end; one facing east and one facing west. The 10-light windows are pivot windows with metal sashes and wire glass. The six-light windows have fixed sashes.<sup>190</sup>

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<sup>190</sup> Jessica Engeman, "Northwest Fence & Wire Works," National Register of Historic Places Registration Nomination, (United States Department of the Interior: National Park Service, 2004), Section 7, pg.6.



The ventilation components of the building would have historically been recognized as elements of an improved industrial work environment in the early twentieth century.

The building is surrounded by several other industrial buildings in the Central Eastside Industrial District. This setting is close to downtown, twelve blocks from the Willamette River. Jessica Engeman describes the building as fulfilling the “creative cool” factor of industrial buildings.<sup>191</sup> The building’s materials contribute to this character, including the exposed brick, wood floors, operable windows, skylights, and exposed wood in ceiling structures. Industrial buildings are compatible for “creative” office reuse because they do not require a high level of finish. Exposed metal and ductwork can even increase the appeal. The open floor plate is easy to work with in reprogramming a building to place corridors, elevators, bathrooms, and provide a variety of workspaces.<sup>192</sup>

## History

The Northwest Fence & Iron Works Building is listed on the National Register of Historic Places under Criterion A for its significance with commerce and industry as a manufacturing facility. The building’s period of significance is 1922-1954. Northwest Fence & Wire Works was a predominate manufacturer in the Portland area and greatly contributed to the fence and wire industries in Portland. On a broader national and cultural scale, “the fence helped institutionalize the collective recognition of private property.”<sup>193</sup> Chain link was directly tied to the perceived social need for greater wartime security during World War One. Later, it became a regular use by private property owners because it was “cheaper, easier, and quicker to use than any alternative.”<sup>194</sup> In

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<sup>191</sup> Jessica Engeman, Interview, Portland, Oregon, March 26, 2010.

<sup>192</sup> Ibid.

<sup>193</sup> Engeman, “Northwest Fence and Wire Works Building,” Section 8, pg. 2.

<sup>194</sup> Engeman, Northwest Fence & Wire Works, Section 8, pg. 3.

many ways, the fence and wire industry impacted the American landscape and manifested notions of privacy, enclosure, and institutionalized protection.

## **Modern Use**

Venerable Group completed the Northwest Fence and Wire Works redevelopment in 2005, winning a Preservation in Action Award from the Architectural Heritage Center for the project's efforts.<sup>195</sup> The smaller project is aimed at smaller scaled tenants, but still provides a lot of variety and flexibility in users. This was a speculative development project, meaning there were no specific users in mind but that the company and lenders trusted that the market would attract tenants to the building.<sup>196</sup> Today, the building houses Cascade Lighting Representative, a regional lighting company in the Northwest, along with Bonfire Snowboarding Company, a yoga studio, and some other small businesses (See Figure 20 for interior image of Bonfire Snowboarding Company office). There is nothing on the companies' websites about the history of the building, possibly due to the nature of the some of the offices located here being only branches of larger operations. Although, there is an interior photo on Cascade Lighting's homepage, showing the southwest corner of the ground floor of the building.<sup>197</sup> In many ways, Engeman likens the building to a second tier incubator space, aimed at small tenants looking for approximately five-year leases. The space is perfect for businesses wanting to experience some of the benefits of their early successes in a workspace closer to downtown and that expresses their use.<sup>198</sup>

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<sup>195</sup> "Northwest Fence & Wire Works Case Study: Preservation in Action Award Recipient," Architectural Heritage Center. <http://www.visitahc.org/content/northwest-fence-and-wire-works-case-study> (accessed March 6, 2010).

<sup>196</sup> Engeman, Interview, 2010.

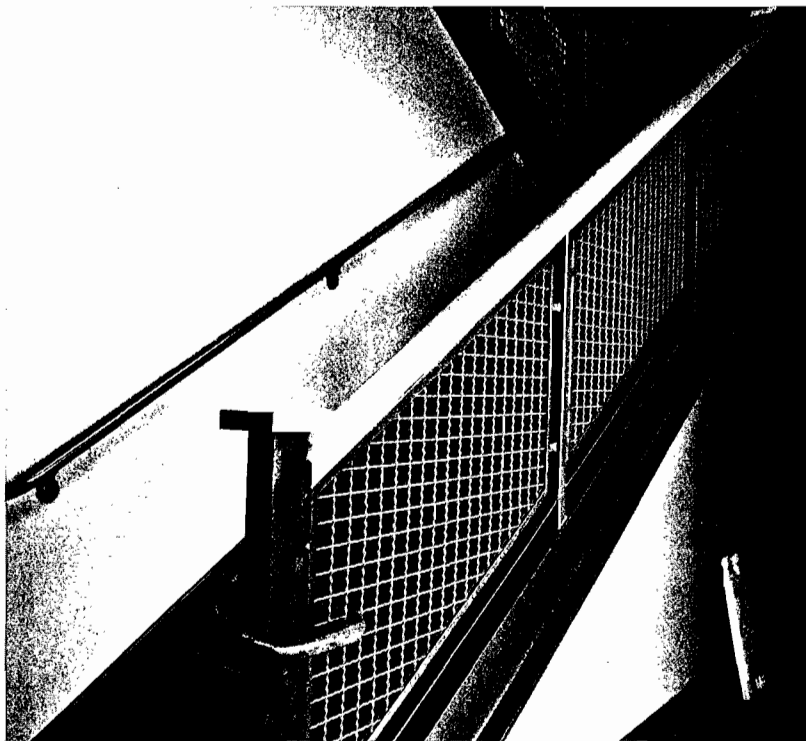
<sup>197</sup> Cascade Lighting Representatives, <http://www.cascadelight.com/home.aspx> (accessed March 6, 2010).

<sup>198</sup> Engeman, Interview, 2010.



**Figure 20: Northwest Fence & Wire Works interior view of Catena Consulting Engineer's office (photo by author, 2010).**

The fence- and wire-making industry is conveyed in two ways through the modern use. An interpretive panel has been installed near the main entrance with historic photos and a narrative of the building's significance. The stair rail used a creative approach in its material choice by using a wire mesh material evocative of chain link fence in place of stair rails as a subtle tribute to the building's specific manufacturing history. The entire stairway unit has been painted in a monochromatic color (see Figure 21).



**Figure 21:** Northwest Fence & Wire Works Building interior stairway uses wire fence instead of nails as a nod to the building's industrial history (photo by author 2010).

## Unique Considerations

Part of the redevelopment included restoring the saw tooth light monitor.<sup>199</sup> It appears as though a substantial amount of research was done on the industrial function of the window types and placements. Engeman acknowledged the historic importance of natural light and ventilation for workers who spent their days welding and connecting small materials.<sup>200</sup> Although Venerable normally tries to retain historic wood windows in their redevelopment projects, the exterior windows of the Northwest Fence and Wire Works Building were severely deteriorated and in need of replacement. The historic windows were repurposed on the interior, placed down the hallway to allow for greater flow of light from the overhead monitor into the office spaces (See Figure 22).

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<sup>199</sup> Venerable Properties, Northwest Fence and Wire Works, website. <http://www.venerableproperties.com/divisions/development/northwest-fence-wire-works/> (accessed March 6, 2010).

<sup>200</sup> Engeman, Interview, 2010.



**Figure 22: Northwest Fence & Wire Works Building deteriorated exterior wood windows were repurposed in upper floor hallway to maximize the visibility of and day lighting from the historic saw-tooth light monitor above (photo by author, 2010).**

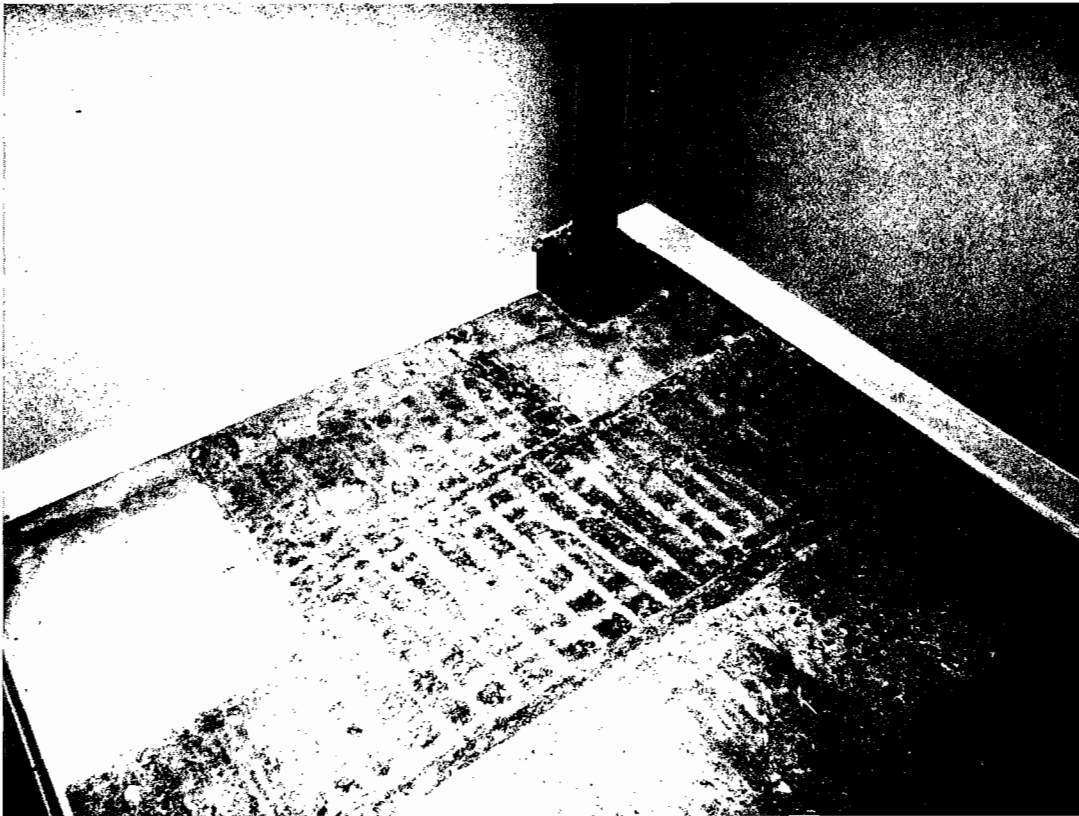
Although the nomination states that the building still reflects the historically significant role this industry played in the development of Portland, there is little explicit information demonstrating how this is accomplished, either in the nomination or on site.<sup>201</sup> Engeman even states that unless explicitly told, she suspects that the majority of the tenants are unaware of the history of the building. The building does, however, retain an overall historic industrial feel, using the general desirable characteristics of a historic industrial building to its leasing advantages.

This building has an interesting story in that it shares two historic “stories.” When writing the nomination, Engeman followed both leads in the building’s history, that of the Northwest Fence and Wire Works Company, but also of its prior use, as the Fashion Stables for horses. Venerable’s president, Art DeMuro, had hoped that the livery stable story would be the one that he could carry through the nomination and

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<sup>201</sup> Engeman, “Northwest Fence & Wire Works,” Section 8, pg. 10.

redevelopment, but Engeman went with the story that had more information and offered a more substantial argument for its significance and integrity.<sup>202</sup> The livery stable history would have created a stronger juxtaposition to modern culture and may have made for more desirable space because of this. More distance from modern culture and a stronger association with a more romantic, authentic time period creates a stronger real estate appeal.<sup>203</sup> The redevelopment was mindful of retaining the few elements left in the building that represent the original use of the building, including ghost signage and some gridded treading on the concrete basement floor, presumably part of the stable stalls (see Figure 23).



**Figure 23: Northwest Fence & Wire Works Building gridded marks in basement presumably reflect livery stable history (photo by author, 2010).**

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<sup>202</sup> Engeman, Interview, 2010.

<sup>203</sup> Ibid.

Venerable Group has become a successful historic redevelopment company in Portland by mastering some of the development industry's most complex and complicated processes, particularly in securing Federal Rehabilitation Tax Credits. Art DeMuro's and the company's passion for historic preservation and the buildings carried the business through the learning curve of the more difficult and complex components of historic redevelopment.<sup>204</sup> They look at projects as being socially sustainable because they are often "catalytic for neighborhood change" and revitalization.<sup>205</sup> While cultural components of adaptive reuse are not directly looked at, Engeman does recognize the socio-cultural connection of delivering and sharing the history of a space with its users. Venerable Group approaches historic redevelopment as "historically sustainable" and finds value in providing livable communities. An industrial building in the central city reused as an office ensures that the building is identified as the best type of use for the area. This contributes to the downtown job market while still maintaining the scale and rich historic texture of the neighborhood.

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<sup>204</sup> Engeman, Interview, 2010.

<sup>205</sup> Ibid.

## CASE STUDY 4: OLYMPIC CEREAL MILL BUILDING (OLYMPIC MILLS COMMERCE CENTER)

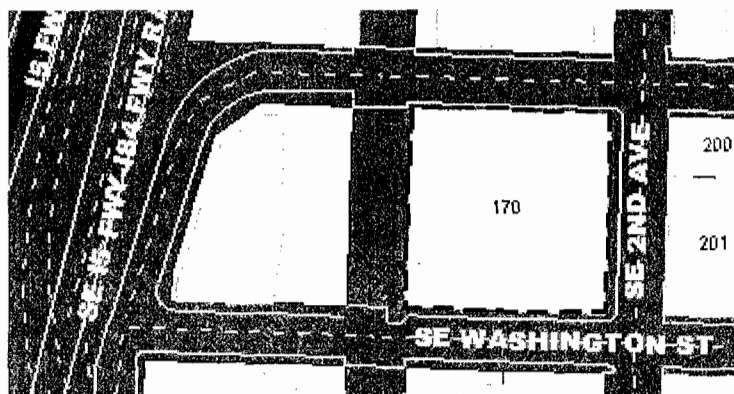
### **Introduction**

The Olympic Cereal Mill Building, now referred to as the Olympic Mills Commerce Center, is located at 107 Southeast Washington Street (See Figure 24). Figure 25 shows a site plan of the property. This multi-story reinforced concrete building was constructed in 1920 by the Hurley-Mason Construction Company for the Portland Flouring Mill. In 1923, the mill was purchased by Sperry Flour, a subsidiary of General Mills who likely operated the building as a flour and cereal mill until 1938, the end of the building's period of significance. Later, the building was operated by the Baggage and Omnibus Company and became known as the "B & O Warehouse."



**Figure 24: Olympic Mills Cereal Building/Olympic Mills Commerce Center, view from northwest corner (photo by author, 2010).**





**Figure 25: Olympic Mills Commerce Center site plan. The property sits on a full block in the Central Eastside Industrial District (Source: Portland Maps).<sup>206</sup>**

The property was nominated to the National Register of Historic Places in 1989 by a group of writers for the Hawthorne Boulevard Business Association.<sup>207</sup> B & O Warehouse was the owner at the time of the nomination, but sold it soon after to an investor with plans to redevelop it as a residential conversion. The seismic upgrades for residential development made the project unfeasible, and the building remained mostly empty until Beam Development purchased the property in 2005.<sup>208</sup>

## Physical Description

The Olympic Cereal Mill Building has multiple sections with various heights, ranging from two to seven stories and has multiple roof levels. The building is made of reinforced concrete block. The wood windows are primarily four-over-four double-hung

<sup>206</sup> Olympic Mills Commerce Center, Portland Maps, 107 SE Washington, [http://portlandmaps.com/detail.cfm?action=Maps\\_Summary&propertyid=R149926&state\\_id=1S1E03AA%20%20900&address\\_id=485305&intersection\\_id=&dynamic\\_point=0&x=7647426.814&y=682752.181&place=107%20SE%20WASHINGTON%20ST&city=PORTLAND&neighborhood=BUCKMAN&seg\\_id=138838](http://portlandmaps.com/detail.cfm?action=Maps_Summary&propertyid=R149926&state_id=1S1E03AA%20%20900&address_id=485305&intersection_id=&dynamic_point=0&x=7647426.814&y=682752.181&place=107%20SE%20WASHINGTON%20ST&city=PORTLAND&neighborhood=BUCKMAN&seg_id=138838) (accessed April 28, 2010).

<sup>207</sup> K. Zisman, J. Koler, J. Morrison, B. Grimala & A. Yost, "Olympic Cereal Mill Building," National Register of Historic Places Nomination, (United States Department of the Interior: National Park Service), 1989, Section 11.

<sup>208</sup> National Trust for Historic Preservation, "B & O Warehouse, Oregon," National Trust Community Investment Corporation (NTCIC) Projects Case Study. <http://www.preservationnation.org/resources/case-studies/ntcic/b-o-warehouse.html> (accessed April 30, 2010).

sash set in groups and six-over-six double-hung sash. The original wood entry with transom windows is at the southeast corner of the building on the south elevation. Several of the windows have been replaced by Beam's wood window factory.<sup>209</sup> At the time of the nomination, there were no windows on the middle floors of the northern elevation, purposely done to protect the grain from damage by sunlight. Windows were installed on these floors during the redevelopment to allow for natural light in the adapted workspaces. Interestingly, the developer discovered during this process that the wall was originally constructed with the window framing already available for such an installation at a later time, perhaps predicting that the use of the building would change over time.<sup>210</sup>

There are four existing loading docks, each with original wood double panel doors. Inside, the first floor had office spaces in the south corners, including some partitions that were originally designated as the "men's lunch, coat, and locker rooms."<sup>211</sup> Due to its original function, flooring is absent between the third and fourth floors. Today, there are flexible workspaces on all floors and interior lobbies in the loading dock areas (See Figure 26). The seven-story tower rises 118 feet above grade and is perhaps the building's most character-defining feature. It creates a "strong visual landmark" by soaring above the surrounding structures and dominating the industrial district's skyline with its mass.<sup>212</sup> The building occupies an entire block and is located off the main railroad track in the Central Eastside Industrial District.

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<sup>209</sup> Brad Malsin, Interview, Portland, Oregon, March 7, 2010.

<sup>210</sup> Ibid.

<sup>211</sup> K. Zisman et al., Section 7 pg. 2.

<sup>212</sup> Ibid.



**Figure 26: Interior public space in Olympic Mills Commerce Center Building (photo by author, 2010).**

## **History**

The Olympic Cereal Building is listed on the National Register of Historic Places under Criterion A for its significance in the flourmill industry, and under Criterion C for its architectural significance as an early example of reinforced concrete in a Portland industrial building.<sup>213</sup> Its period of significance is 1920 to 1938 marking both Portland Flouring Mills' and General Mills' occupancies that "played a pivotal role in establishing Portland as the principal west coast port for the shipment of flour products."<sup>214</sup>

The Portland Flouring Mill, incorporated in 1883 was one of prominent businessman William Ladd's early companies in Portland. By the turn of the century, the mill was one of the largest operations of its kind on the west coast. Grain was one of Oregon's primary exports during the building's historic period,

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<sup>213</sup> Zisman, et al., Section 8, pg. 1.

<sup>214</sup> Ibid.

and the company expanded to this site to accommodate its growth. Near the end of the period of significance, the building, under Sperry Flour's ownership, became known throughout Portland as the "home of Wheaties and Bisquick, two nationally known companies that originated here."<sup>215</sup> The Baggage and Omnibus Company later occupied the building in the 1950s and for several decades more, explaining the building's secondary historic name as the "B & O Warehouse."<sup>216</sup>

Although the 1989 nomination is extremely short, it summarizes the building's significance for both architecture and industry along with how the industrial use is evident in the building's form.

The form and mass of the mill and the materials used in construction reflect both the building's function as well as the latest technology of the day. Concrete not only promoted speed of construction but also had the high loading capacity necessary to endure the heavy weight of stored grains and flour. While brick has a bearing capacity of 3000 psi, concrete can sustain loads over 6000psi. The grain was stored vertically for ease of loading and also to aid in the milling process. In addition, the tower housed the tall, gravity air-filtering devices necessary to control the explosive dust problem. Today, the building remains a prominent visual reminder of the important place which food-related industry has held in the development of the study area's wholesale and warehouse district.<sup>217</sup>

The vertical nature of the building is both evident and significant for its original function-determined design.

## **Modern Use**

Beam Development Company renovated the Olympic Cereal Mill Building in 2007 and changed the name to the Olympic Mills Commerce Center. Federal Rehabilitation Tax Credits, and National Trust Community Investment Corporation incentives were used in the redevelopment process, as were Portland Development

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<sup>215</sup> Zisman, et al., Section 8, pg. 2.

<sup>216</sup> Ibid., Section 8, pg. 1.

<sup>217</sup> Ibid., Section 8, pg. 2.

Council Urban Renewal and Quality Jobs incentives for some of the building's tenants.<sup>218</sup> Spaces have been partitioned off to accommodate the several small businesses. Although the open industrial floor plan is characteristic of the original mill, the redevelopment needed partitions, and Beam was required to find a creative solution in preserving the essence of this feature. Beam achieved this by creating open floor plans within the individual workspaces, and also by ensuring that the partitions were non-structural and easily removable in the future. Every office around the perimeter of the building has exceptional day lighting.

History appears to have become an integral part of Beam Development's marketing strategy for the Olympic Mills Commerce Center. Nearly every page of the building's website suggests the building's importance as a historic resource.<sup>219</sup> The website includes information about the building's industrial history, most of it directly pulled from the National Register nomination. The website also displays historic photos of the building and surrounding industrial landscape. The historic nature and affordability of the spaces and neighborhood are also pulled into the marketing strategy.

Location is an obviously important element of the company's leasing strategies, marketing the building for its "close-in southeast riverfront area" location.<sup>220</sup> The Central Eastside Industrial District has been designated as both an industrial sanctuary and an Urban Renewal district by the City of Portland. These designations are meant to spur economic development in a financially decimated part of town while protecting the character and existing industrial business from gentrification.<sup>221</sup> It is important to retain industrial activity and the associated jobs in the central city and not push this work out to the suburbs. Additionally, these overlays protect the industrial character of the neighborhood by maintaining more affordable workspaces and preventing condominium

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<sup>218</sup> Olympic Mills Commerce Center website, <http://www.olympicmill.com/funding> (accessed April 29, 2010).

<sup>219</sup> Olympic Mills Commerce Center, website. <http://www.olympicmill.com/home> (accessed April 29, 2010).

<sup>220</sup> Ibid.

<sup>221</sup> Heidi J. Stout, "Eyeing the Industrial Sanctuary," in *Portland Business Journal*, <http://www.bizjournals.com/portland/stories/2003/09/08/focus1.html> (accessed April 25, 2010).

development from occurring, which drives up values, taxes, and other costs that directly impact the users. Malsin says that although it may not be as lucrative of an investment initially, providing affordable spaces is a good long-term investment for both his company and the community. Other projects of Beam's highlight his dedication to historic redevelopment, adaptive reuse, and affordability for users, such as Milepost Five, an artist live-work community in a 1960s renovated nursing home; the Eastbank Commerce Center located near Olympic Mills; and also Beam's latest charge with revitalizing downtown Eugene with the Center Court building.

### **Unique Considerations**

The nomination for this building was extremely short, lacking detailed information that has become necessary in more current nominations. The redevelopment process may have been impacted by the amount of information in the nomination, possibly allowing for more freedom with alterations without details deeming what features were significant. Currently, the project is under Special Assessment with the state, and according to the State Historic Preservation Office, is still finalizing its Federal Rehabilitation Tax Credits with the National Park Service.<sup>222</sup>

The Olympic Cereal Mill Building appears to be more an example of general industrial history in Portland, and focuses less on conveying the building's specific history as a flourmill. The industrial nature of the building is quite obvious through its form, design and materials, but the specific historic uses appear to be somewhat vague to the building's common users. Sharing the story is part of Beam's marketing. By managing their own leasing, the company is able to immediately share the story with potential leasers, and people are excited to hear about the history.<sup>223</sup> It is becoming ever important to tell the story of preservation. Malsin sees the true thumbprint of a city, the fabric of a city, through a place's history. Adaptive reuse projects spur thoughts of

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<sup>222</sup> Joy Sears, Interview, Salem, Oregon, April 19, 2010.

<sup>223</sup> Malsin, 2010.

“What happened here?” and this curiosity stimulates inspiration.<sup>224</sup> Malsin continues to explain his business philosophies by saying, “buildings should inspire you. Old buildings that have been redeveloped often inspire us.”<sup>225</sup> This inspiration becomes an ideal model for the vast market of creative-type businesses in Portland.

Malsin identifies historic industrial buildings as ideal candidates for flexible workspace design. The character-defining features of industrial buildings, including the impressive lighting capacity, and the gritty raw, inspirational integrity are desirable for creative style businesses. He achieves this by “uncovering as much of the building’s integrity as possible,” and re-purposing harvested materials from the building, such as hanging art from exposed metal lath.<sup>226</sup> Concrete, metal, and ductwork are visible and contribute to the gritty industrial nature and historic character, as does the metal catwalk above the first floor (See Figure 27). Beam also posts images of the building’s evolution in the lobby spaces, including historic photographs, mid-construction images, and photographs of the finished redeveloped building.<sup>227</sup>

Malsin’s intentions with this project were to retain integrity and authenticity, emphasize the reuse of historic materials, and create a sense of community among tenants by providing creative and cost-effective spaces. Small companies, a business model that is particularly strong in Portland, have responded well to this concept.<sup>228</sup> Although the less-finished workspaces do not suit everyone, the creative culture of Portland is able to find inspiration in the Olympic Mills Commerce Center. According to Malsin, “when small businesses co-locate, they feed off of each other and create a synergy.”<sup>229</sup> In many ways, the Olympic Mills Commerce Center is socially sustainable by creating a positive and supportive work community.

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<sup>224</sup> Malsin, 2010.

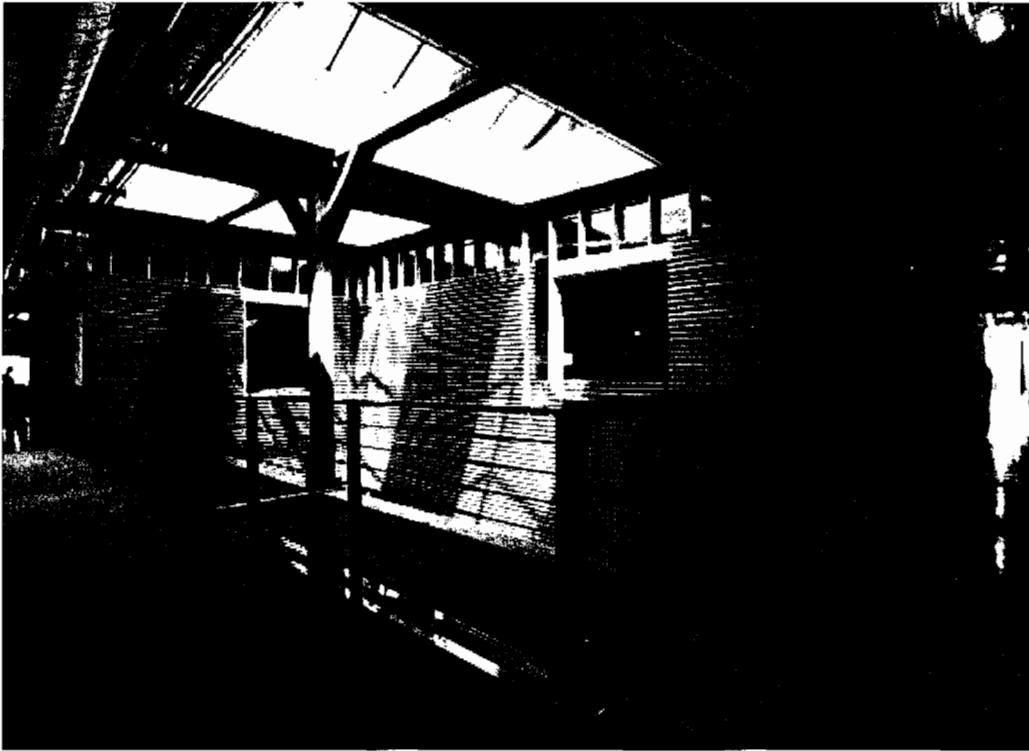
<sup>225</sup> Ibid.

<sup>226</sup> Ibid.

<sup>227</sup> Ibid.

<sup>228</sup> Ibid.

<sup>229</sup> Ibid.



**27: Olympic Mills Commerce Center interior metal and concrete catwalk and exposed columns and beams. Wood slats were harvested as part of building renovation and are meant to retain open space "feel" and provide natural light to the interior offices from the skylights (Photo courtesy of Works Partnership Architecture, 2007).<sup>230</sup>**

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<sup>230</sup> Works Partnership Architecture, "Olympic Mills Commerce Center," website, <http://www.worksarchitecture.net/www/html/omcc.html> (accessed May 1, 2010).



## CASE STUDY 5: PORTLAND CORDAGE BUILDING (BRIDGEPORT BREWING COMPANY)

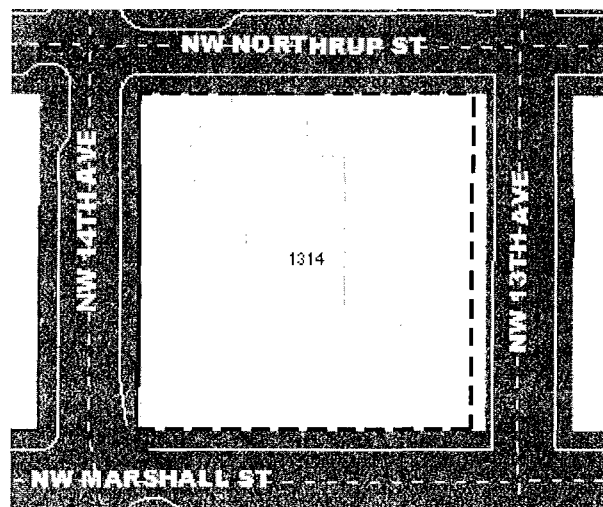
### Introduction

The Portland Cordage Building is located at 1313 Northwest Marshall Street (See Figure 28). This complex consists of six attached Industrial-Italianate buildings that were constructed beginning in 1887 as a manufacturing facility and warehouse for the Portland Cordage Company. The remaining buildings were constructed over a twenty-year period and were completed by 1908. The brick and stucco building complex occupies a full city block and consists of the main factory building (ca. 1887), Office/Warehouse Building (ca. 1887), Warehouse One (ca. 1890), Tar and Carding Building (ca. 1890), Spinning and Storage Building (1908) and Spinning Building Two (ca. 1908). See Figure 29 for a site plan of the property. The Portland Cordage Company Building was nominated to the National Register of Historic Places in 1992 by Sharr Prohaska and Elizabeth O'Brien for the owners, Patricia Madden, Paula Madden and Annette St. Pierre. Today the building



**Figure 28: Portland Cordage Company/Bridgeport Brewing Company Building, view from southeast corner (photo by author, 2010).**

is still owned by Patricia Madden and is leased by Bridgeport Brewing Company along with some other small studio and artisan tenants on the upper floors.



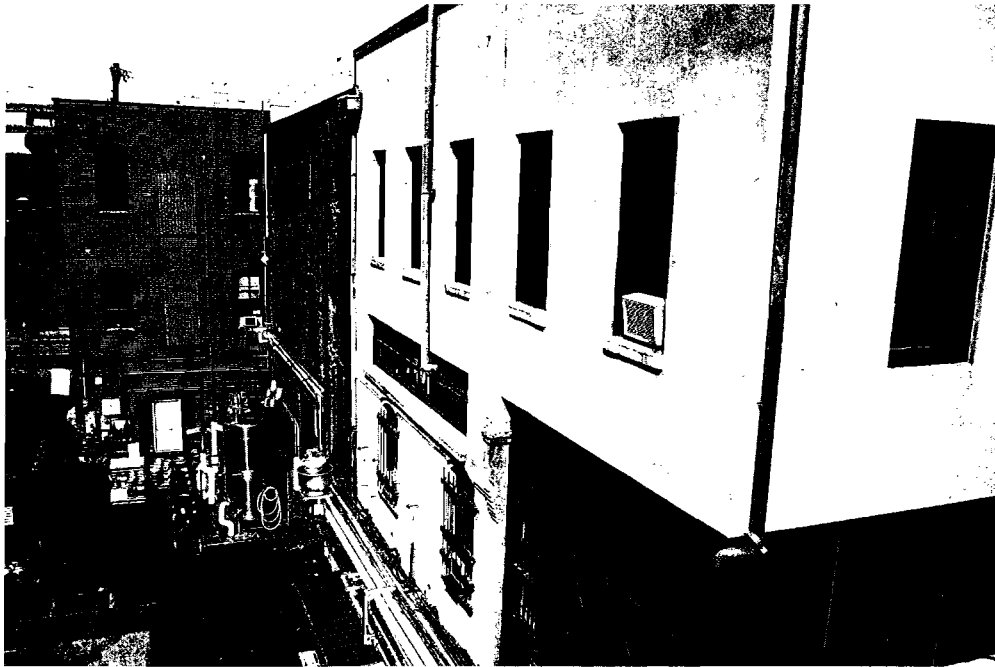
**Figure 29: Portland Cordage Company/Bridgeport Brewing Company Building site plan shows buildings that surround rear courtyard on a U-shaped plan (courtesy of Portland Maps).<sup>231</sup>**

### Physical Description

A composite of six Industrial-Italianate red brick buildings of varying heights makes up the Portland Cordage Company U-shaped complex (See Figure 30). The elements include the three-storied Main Factory Building, the long and narrow gable roofed one-story Office/Warehouse Building, the single story double gable roofed wide Warehouse One, the three story brick Tar and Carding Building which has a small footprint, the two story brick Spinning and Storage Building, and the three story narrow brick Spinning Building Two. The nomination describes the building's character-defining features as similar to textile factories in the Northeast.

<sup>231</sup> Portland Cordage Company/Bridgeport Brewing Company Building, 1313 NW Marshall Street, Portland Maps, [http://portlandmaps.com/detail.cfm?action=summary&propertyid=R140970&address\\_id=625352&x=7642248.991&y=687300.747&state\\_id=1N1E33AA%20%202800&site\\_name=1313%20NW%20MARSHALL%20ST&city=PORTLAND&ResultCount=3](http://portlandmaps.com/detail.cfm?action=summary&propertyid=R140970&address_id=625352&x=7642248.991&y=687300.747&state_id=1N1E33AA%20%202800&site_name=1313%20NW%20MARSHALL%20ST&city=PORTLAND&ResultCount=3) (accessed April 28, 2010).

The original factory followed the form and exterior detailing of tradition nineteenth century New England textile mills, which are characterized by regular, arcuated fenestration with heavy, buttressing pilaster strips marking structural bays. Typically, triangular parapet gables with raking corbelled cornices finished the ends of such multi-storied volumes.<sup>232</sup>



**Figure 30: Portland Cordage Company Building view into rear courtyard (photo by author, 2010).**

The cordage industry required large spaces for machinery that separated and wove fibers and also space for storing raw materials and manufactured product ready for distribution. Most of the windows are multi-paned wood sash. Historically, the complex was connected via rail spur to Portland's inland harbor for ocean-going shipping transport.<sup>233</sup> Some of these spurs remain intact around the building today. Not only is the Cordage Building one of the best and earliest remaining examples of industrial buildings in Northwest Portland, but it also represents a company that grew to be known throughout the Northwest, nationally, and internationally as a leading wholesale cordage

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<sup>232</sup> Prohaska & O'Brien, Section 8, pg. 2A.

<sup>233</sup> Ibid.

supplier. Portland's rope industry is significant to the city's overall industrial and economic development.

## History

The Portland Cordage Building is listed on the National Register of Historic Places under Criterion A for its industrial significance as a rope-making facility and Criterion B for its significant association with Samuel M. Mears, company president and prominent Portland businessman. The company was established in 1887 by Henry Failing, Henry Corbett, Cicero Lowis and Winslow Ayer.<sup>234</sup> Maxwell Mears began working for the company in 1892 and became president in 1895.<sup>235</sup> The company quickly grew, and the clustered expansion of surrounding buildings represents the "increasing international and domestic demands for high quality cordage products."<sup>236</sup> The Portland Cordage Company established a market with Manila and imported most of the necessary raw materials from there. At the height of the company's industrial development, 150 men were employed, many of them Chinese laborers.<sup>237</sup> It is unclear whether or not the Chinese labor history is a significant part of the building's heritage, as this connection was not researched.

The cordage products produced in the building were used throughout the nation and several international countries, but the company was most prominently a northwest supplier. They distributed binding twine for farms or rope to operate the running gear of ships and towing vessels.<sup>238</sup>

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<sup>234</sup> Prohaska & O'Brien, Section 8, pg. 15.

<sup>235</sup> Ibid.

<sup>236</sup> Ibid., Section 8, pg. 8.

<sup>237</sup> Ibid., Section 8, pg. 3A.

<sup>238</sup> Ibid., Section 8, pg. 9.

## Modern Use

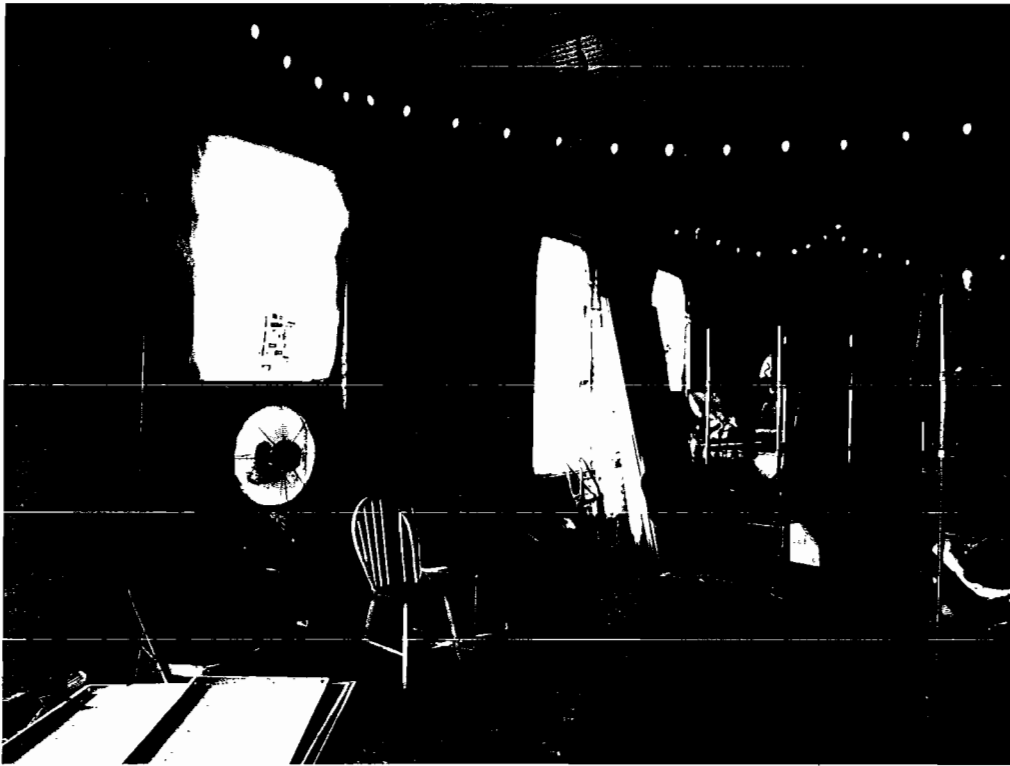
The building was substantially renovated and restored in 2006 for the Bridgeport Brewing Company, who has occupied the building since the 1980s. The project included adding an on-site bakery, which allowed the pub access to a second story, and creating natural light through a large glass atrium in the middle of the building.<sup>239</sup> The redevelopment occurred during a time when several of the other surrounding buildings in the area were demolished due to enforcement of stricter seismic codes. Bridgeport was dedicated to retaining its occupancy in the building in order to maintain consistency in its brewing operation. Intricate details, such as the flavor and mineral make-up of water are incredibly important elements of the microbrew industry. Bridgeport worked closely with the building's owners to fund and complete the redevelopment project. Bridgeport Brewing Company currently occupies the Factory Building, the Spinning Building and Warehouse.

The redevelopment involved what Oregon State Historic Preservation Office Restoration Specialist Joy Sears describes as a "gut and stuff."<sup>240</sup> In this case, the building's interior was stripped down to the dirt surface to make way for the brewery's new pub and restaurant. There are varying degrees of integrity among the six buildings that make up the complex and some spaces convey the building's heritage better than others. Upstairs and in some of the less prominently seen parts of the building, several elements were retained. The Children's Healing Art Project (CHAP) is one of the current leasers. Their workspace features whitewashed brick walls, arched brick window openings, exposed upper floor joists and the original wood floor (See Figure 31). Perhaps most interesting is the storage room on the upper floor, where hemp from the rope-making operation has seeped into the wood floorboards over time and secretes out through the wood surface on hot days.

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<sup>239</sup> "Historic BridgePort Brewpub Prepares to Reopen," Portland Media Update: January 2006, <http://www.travelportland.com/media/updates/jan06.html> (accessed March 6, 2010).

<sup>240</sup> Sears, 2010.



**Figure 31: Children's Healing Art Project (CHAP) space on upper floor of Portland Cordage Company Building (photo by author, 2010).**

Bridgeport's brewing operation horizontally snakes through the building's ground floor on a factory line that cannot help but remind a visitor of rope-making if only it were interpreted. Like the Portland Cordage Company, Bridgeport's operation line is unique in its horizontal emphasis, and the brew masters have become expert masters in maneuvering forklifts and carts around narrow corners and through entryways that lack in height.<sup>241</sup> The company has become socially embedded in the location despite its maneuvering challenges. Their modern experience may be similar to how and why the Portland Cordage Company expanded its operation by adding to the building complex instead of finding a new location elsewhere.

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<sup>241</sup> Todd Fleming, Interview, Portland, Oregon, March 27, 2010.

## Unique Considerations

The building's history as a rope-making facility is used in Bridgeport's marketing. The brewery's Ropewalk Amber Ale was released as part of Bridgeport's twentieth anniversary and pays tribute the brewery's history as a rope factory with the ale's namesake.<sup>242</sup> The Bridgeport Brewing Company website admits that change has pierced the Historic Landmark Building, but that the historic character contributes to a "comfortable and familiar atmosphere, paring rustic brick, aged timber, classic iron, great food and of course, award winning ales."<sup>243</sup>

The company offers tours to visitors, and the Portland Cordage Company history is woven into the story depending on visitor interest, but the primary focus is on Bridgeport's brewing industry. There is a small, framed collage of fliers and images associated with the Portland Cordage Company History (See Figure 32). Bridgeport brewer Todd Fleming says that there were once more interpretive materials in the restaurant as part of the building's re-opening after renovation and unveiling of the Ropewalk Amber Ale.<sup>244</sup> These elements included large ropes hanging from the ceiling. Fleming recalls that the ropes may have been stolen.<sup>245</sup> Although it is unfortunate that interpretive materials were taken, the act of theft shows that someone was interested enough in the historical materials to go as far to steal it for him- or herself. From a historian's perspective, this can be viewed as an exciting revelation about the community's interest and perceived value of the area's industrial heritage.

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<sup>242</sup> "To Celebrate Turning 20, Bridgeport Brews 'Ropewalk,' *Portland Business Journal*, February 16, 2004. <http://portland.bizjournals.com/portland/stories/2004/02/16/daily9.html> (accessed February 25, 2010).

<sup>243</sup> Bridgeport Brewing Company, <http://www.bridgeportbrew.com/#/brewpub/> (accessed February 25, 2010).

<sup>244</sup> Fleming, 2010.

<sup>245</sup> *Ibid.*



**Figure 32: Portland Cordage Company interpretive panel hangs on the wall behind Bridgeport Brewing Company's hostesses counter (photo by author, 2010).**

This property has multiple histories: that of an important businessman, a lucrative and prominent industry in rope making, labor, and international commerce. For this reason, the Portland Cordage Building is an ideal case study for examining multiple overlapping histories. Also, the present industrial use as Bridgeport Brewing Company, in many ways, continues to represent the industrial nature of the building's history. Change over time is expected and evident, but the conveyance of these changes has the opportunity to weave a rich interpretation of the neighborhood's industrial history.



## **CHAPTER IX**

### **ANALYSIS**

#### **INTRODUCTION**

This section analyzes the patterns and unique considerations of the five case studies used in this research. It is important to address common occurrences of conveying heritage in the case studies, thus allowing for some generalizations to be made about adaptively reused industrial buildings in Portland. It is important to emphasize that Portland's characteristics may or may not be applicable for industrial adaptive reuse in other cities, given Portland's specific industrial history, modern business culture, and unique approaches to preservation and adaptive reuse. This discussion addresses both the strengths and disconnections of how industrial heritage is shared in adaptive reuse projects. Research conclusions offer recommendations for improved practices and future study that may further inform and benefit the historic redevelopment field.

Developers use a variety of methods to convey the industrial heritage of a building by retaining historic character, marketing the history for potential tenants, and carrying the historic "story" into the modern use. However, none of the buildings studied are forthright in directly conveying this heritage on a day-to-day basis through effective interpretive methods. All of the developers recognize the community interest in their buildings' histories and the opportunity to share the unique stories. Common features, patterns, and unique considerations are addressed and further analyzed in this section.

#### **COMPARATIVE ANALYSIS OF CASE STUDIES**

Collective analysis of the case studies considers this gap between developer philosophies and implementation and provides suggestions for a stronger emphasis, cultural connection, and emphasized social value of Portland's rich industrial heritage.

Table 1 charts the occurrence of various factors and activities in each case study that can be defined as methods of conveying industrial heritage. There are several characteristics related to sharing the history with users. This list offers a series of common features or practices present in each of the case studies and indicates patterns for discussion and analysis.

- The general industrial function and use of the building is evident in its design and form.
- Structural materials on the buildings' interiors are exposed and preserved, regardless of the material although masonry (brick, stone, concrete) is exposed in every building. Wood structural members are also common features.
- Historic windows are preserved, restored, or closely reconstructed.
- All of the buildings retain *some* integrity, be it an overall general feeling that has been adequately preserved, or specific spaces that have been well-preserved. None of the buildings retain high integrity of all aspects.
- History is interpreted through the marketing strategies of every case study especially through website marketing and leasing tactics. Each case study also uses other methods to interpret history, but provide a thorough interpretation of the industrial space.
- All of the buildings contribute to Portland's ability to convey the city's overall industrial history. If the "story" of a building is perceived to be particularly unique or well recognized by the community, its specific history is more prominently shared.
- The surrounding settings retain a collection of other industrial buildings, helping to convey the overall industrial context.

<b>Table 1: Comparative Analysis of Case Studies</b>					
	<b>Brewery Block II</b>	<b>Crane Co.</b>	<b>Olympic Mills</b>	<b>NW Fence &amp; Wire</b>	<b>Portland Cordage</b>
<b>Industrial Character-Defining Features</b>					
Building function evident in its form	X	X	X	X	X
Complex height and plan/multiple buildings	X	X	X		X
Retained open floor plan or feel of open floor plan		X	X	X	X
Historic Windows	X	X	X	X	X
Arched Openings	X				X
Freight entrances and/or elevators			X	X	X
Existing equipment			X	X	X
<b>Exposed Structural Materials</b>					
Wood	x		x	x	x
Masonry	x	x	x	x	x
Metal	x			x	x
<b>Interior Integrity</b>					
Completely gutted	X				X
Some integrity		X	X	X	
Specific well-preserved spaces	X	X		X	X
<b>Overt historical connection</b>					
Signage on building	X	X		X	
Modern name of bldg/space refers to past	X	X	X		
<b>History used in Marketing</b>					
Leasing	X	X	X	X	
Website	X	X	X	X	X
Product	X				X
<b>Interpretation</b>					
Framed photos	X		X	X	
Interp. panel				X	X
Historic product on display				X	X
<b>Significance Conveyed</b>					
Gen. Portland Industrial	X	X	X	X	X
Specific industry	X			X	
<b>Industrial Context</b>					
Neighborhood retains industrial use		X	X	X	
Other similar industrial buildings	X	X	X	X	X
Streetcar/Public transportation		X			X
Near RR spurs or tracks		X	X	X	X

## DISCUSSION

Character, materials, and setting are three key features that stand out for their ability to convey industrial heritage. The materials and building features of industrial spaces are particularly important in adaptive reuse projects. Brick walls, wood structural systems, and open floor plans stand out as desirable character-defining features of historic industrial spaces. Developers look for flexibility in the space to make architectural programs work for various users. Open warehouse plans work well for this, especially when modern solutions can be employed to create partitions while still maintaining the essence of an open plan. The low-finish requirements of “creative class” spaces allow developers to highlight the historic materials and character of industrial buildings.

Setting is critically important in historic redevelopment. The Central Eastside Industrial District is especially effective in its setting that conveys the overall industrial character of the area. Nearby industrial buildings contribute to each other’s character and ability to collectively share the past. Access to transportation and parking are also factors in determining the feasibility of an adaptive reuse project. Ties to public transportation are an attribute in settings where redevelopment may increase the number of people and jobs in an area.

Although developers recognize the value of historic industrial buildings and appreciate their unique histories, it requires a conscious effort to interpret the industrial heritage of an adaptively reused building to new users. The case studies highlighted several methods for interpreting and sharing a building’s industrial story. All the forms of interpretation observed in the case studies are listed below.

- Preservation and exposure of general character-defining features of historic industrial buildings
  - Brick, concrete, wood materials
  - Wood or concrete structural systems
  - Windows
  - Freight doors and elevators
  - Railroad spurs in setting

- Recognition of historic use in certain spaces, i.e. the hemp oil that has seeped into floor in the Portland Cordage Building, or the repurposed conference room in the Weinhard Brewery Complex brewmaster's suite
- Retained specific components of the historic building, i.e. safe in Crane Company Building
- Repurposed equipment and tools, i.e. carts and scales for displays in Lizard Lounge in the Crane Company Building
- Repurposed significant manufactured products, i.e. fence as stair rails
- Preserved signage (ghost signage or permanent signage). This is much more effective in conveying a building's original history, especially when the name is embedded into the building materials, such as the stone header in the Weinhard complex, or the carved lettering in the Crane Building.
- Renamed buildings (new and old) with names that reference history, i.e. Henry, Louisa, Cellar Tower, Olympic Mills Commerce Center
- Historic photos and narrative interpretive panel inside building lobby
- Marketing
  - One-on-one story telling from broker to potential buyers or leasers
  - Leasing materials
  - Online website marketing
  - Branding modern products that connect to historic use, i.e. Ropewalk Amber beer
  - Included history in menus

Although each of the case studies satisfies at least one aspect of conveying industrial heritage effectively, none take an ideal approach to this concept. These projects are done by some of the most successful developers of historic properties in Portland. Each of the buildings are well-leased, occupied by active users, and are in prime locations. The developers all acknowledged that this was something they did not do as thoroughly as they would have liked, and each expressed an interest in the potential of having a stronger interpretation component in their buildings. How would this impact

their spaces? Would the value change? Would the users talk more about the history of the space? What would conversation about a space's history accomplish? Multiple developers identified the social value of these buildings that "harkens back to another era" and connects with a past far different from what we experience today. These concepts are what create the historic "cool" factor. They are also what often designates a building as a "social landmark," a place that stands out for its character and well-known story to the surrounding community. While developers and users see the value in preserving historic character, they are also strongly motivated to create a place that serves and appeals to modern needs. This is the nature of adaptive reuse, repurposing and recreating a space socially relevant for its modern use while retaining the historic character that makes it so visually and experientially appealing. It appears to be difficult to strike a balance between paying homage to the history of a building and leaving one's own modern legacy.<sup>246</sup>

## **Marketing**

History was a large focus of the marketing in all the leasable historic spaces. Although a higher dollar may not necessarily result from the preservation of character-defining features or the sharing of a story, there is a draw for potential renters, leasers, and buyers of industrial historic spaces. Many individuals appreciate knowing the history of the spaces they occupy, and love hearing a good story. In many ways, history has become a marketable tool used to provide a sense of place in Portland's real estate. Although heritage is often commoditized to generate the heritage tourism economy, adaptive reuse provides economic value to historic places on a local, community-oriented level through real estate. The unique industrial histories provide an interesting twist to the general leasing marketing schemes and can draw potential users in with stories that stand out as interesting, meaningful, and authentic.

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<sup>246</sup> Joy Sears, Interview, Salem, Oregon, April 19, 2010.

## **General Portland vs. Specific Industrial History**

Depending on the building's physical characteristics or popularity of a story, developers choose to address either the specific story of a building's life or support the general character that a space represents given the city's overall industrial past. The overall design of industrial buildings is often representative of its historic function, particularly in conveying the building's general history, like that of a warehouse or factory without necessarily needing to portray the space's specific industrial use. If a story is particularly "juicy" or familiar in the community, the specificities are more likely to be conveyed. Some developers recognize the value of stories that are either unique in their cultural disconnection from modern society or that inspire nostalgia in their clear depiction of collectively recognized era of a city's past (i.e. the Weinhard Brewery Complex).

However, it can be suggested that people would likely identify with and appreciate the history of more of Portland's industrial buildings if their stories were more thoughtfully shared. The stolen rope from the Portland Cordage Company Building is an excellent example. In many cases, the research on the industrial history has already been compiled and completed in a building's National Register nomination. Great care is taken to produce accurate and well-written National Register nominations in order for buildings to be listed and become eligible for Special Assessment and Federal Rehabilitation Tax Credit incentives. Instead of pulling a few paragraphs for website development and then filing the nomination away with the State Historic Preservation Office, these documents could be used as valuable tools for interpreting and sharing the story and historic context of a place.

## **Interpretive Panels & Photographs**

Photographs in the lobby or public spaces are usually the extent of on-site interpretation techniques. Some businesses develop single, small framed interpretive panels but, even here, they recognize their efforts as only a minimal nod to sharing the history. Placement of the panels is an important component of this critique. In both the

Northwest Fence and Wire Works Building and the Portland Cordage Company Building, the framed panels are in the front entries, but neither is in a prominent location. If the Northwest Fence and Wire Works panel had been hung on the fence stair railing, for instance, the building's users might be more likely to see the information since it would catch their eye as they head toward the stairs. Users might then be more likely to acknowledge the subtle yet interpretive nature of the wire fence used in the stairway.

## **Material Culture**

The industrial material culture is generally not preserved in the adaptive reuse process. Occasionally, a user will identify a need or desire to use certain elements, such as Lizard Lounge's use of the metal carts and other equipment in the Crane Company Building. If the building's historic significance is to be conveyed through its specific use, material culture offers a direct visual link to the past. Users, instead of simply questioning what the building was used for, spark their curiosities to reach a deeper level of understanding the place by considering how the existing space served its historical purpose, or how people used the building's conditions to serve their labor, social, and/or cultural needs.

## **Signage**

Historic signage, when evident, is a feature that explicitly conveys a building's historic use. The preservation of signage can be due to the permanence of the sign. The Crane Company Building and the Weinhard Complex are both fortunate to have the original owner's name carved into stone above the door. The Crane Company name is written all over the building, above the entrances, painted on the corner, and carved into the parapets. There is no question as to what companies originally occupied these buildings. This permanent signage will last as long as the building as an overt expression of its history.

Painted signage on brick is also common. Neglect plays a role here, leaving ghost signage to remain on a building's elevation for years long after that company's



occupancy. The Northwest Fence and Wire Works Building is a strong example of a building's ability to convey use over time in the same explicit manner of signage. Portland wayfinding blogs catalog the historic use of commercial and industrial buildings for company advertisement through photographs, indicating that this is a revered aspect of historic industrial and commercial buildings.<sup>247</sup> Historic signs may offer an overt explanation of a building's historic association, but can also cause confusion. If it is intended to convey a particular use or period of significance, the overlapping signage may be misleading. "Rhodes Bakery" is most prominently painted on the Northwest Fence & Wire Works Building, although this was only the building's most recent occupancy, while the Fashion Livery Stables and Northwest Fence insignias are faded shadows of the building's more historic and unique stories. This offers an opportunity to see a building's evolution, but may not clearly represent its period of significance. The intentions of the redevelopment drive the decisions in this approach. Regardless, signage is an effective tool for both neighborhood wayfinding and expressing a building's association or significance.

## **Tax Credit Incentives**

It appears as though the path of least resistance is usually taken to nominate a building and attain Federal Rehabilitation Tax Credits. If the building's significance is straightforward and evident in its architectural features, this, along with the general history of the area, becomes what is described. Architectural features have long been the characteristics described in determining a building's National Register significance. However, if the significance does not appear to be so simply explained through tangible architectural features, as is often the case with Criterion A's complex stories, nominations become more about massaging the information to draw significant associations to the broader historic context. The cultural and social significance is perhaps less often tackled because it is less tangible than architectural features. Also, how can preservation officials regulate the preservation of intangible histories? A better understanding of how built

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<sup>247</sup> "Hiatus," Portland Building Ads Blog, entry posted February 17, 2010, <http://pdxbuildingads.blogspot.com/> (accessed February 27, 2010).

features are associated with industrial use may lead to a stronger presence of industrial heritage in defining significance. Perhaps the National Register process itself needs to be broadened to better accommodate places of cultural and social significance.

Regardless of a building's significance, developers' end goals seem to be the same. Joy Sears reflects on the speed at which nominations, Special Assessments, and Federal Rehabilitation Tax Credits are often processed by a developer, saying that the tax credit applications are often started before the nomination is even complete.<sup>248</sup> Twenty-percent of a project's total cost is an extremely large incentive amount, and most often becomes a deciding factor in a project's feasibility. If preserving and conveying the industrial heritage of such buildings is in fact more important than a project's implementation implies, could this become a stronger part of the redevelopment process?

### **Recommendations for Improved Interpretation**

If nominated under Criterion A, the story of a building's significant history should be considered a "character-defining feature" in of itself in the tax credit compliance process. In doing this, the developer becomes obligated to interpret the story to the building's new users. Interpretation should be approached in a broad sense to allow for creativity and innovation over time. Just as architectural and engineering plans are approved, so could an interpretive plan. Potentially acceptable uses could include:

- Interpretive panels in the lobby or other central space that most users share
- Framed photos on the interior of the building
- Incorporation of history into marketing strategies
- Website interpretation
- Interactive events with users
- Use of artifacts as art or wayfinding
- Identifying spaces by names associated with historic use instead of numbers

The intention is not to force interpretation onto developers as one more requirement with which to contend and comply, but instead to motivate the process and highlight the

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<sup>248</sup> Sears, 2010.

benefits of taking a significant building's redevelopment to a new level of social recognition and awareness in the cityscape.

The Jean Vollum Natural Capital Center, (otherwise known as the Eco-Trust Building), is a well-known adaptively reused historic warehouse in Portland, now occupied by office and retail tenants.<sup>249</sup> This building was not chosen as a case study because it is not listed on the National Register of Historic Places. However, it provides a striking example of a building that interacts with its users on an uncommon level. Touting its sustainable innovations in design, visitors are invited to tour the building with a brochure that guides them through various parts of the building and discover the salvaged wood floors, water reuse methods, and structural brackets shaped like tree-huggers that illustrate the project's commitment to environmental sustainability. If this can successfully be done in a way that considers how resources have been preserved through material conservation efforts, why can't the same serve the cultural heritage that has been preserved, pointing out details such as the hemp oil that has forever seeped into the wood, the meeting space of a brew master and his team, or the marks in the concrete basement floor that may identify horse stalls from a building's livery history?

### **Inspiration from Historic Industrial Buildings**

Adaptively reused historic industrial buildings tell a story. As long as the history and historic character is not covered up by high finishes, users are reminded of the industrial nature and building materials of another era, while accepting that new modern uses now exist in the space. If well conveyed, people can reflect on the former users, workers, and leaders of the companies who occupied the space, and relate today's experiences within the building to the historic uses. Users and developers alike can be proud that an old underutilized building can be given a "new lease on life" and can foster and revitalize a community. Contributing to this essence of social and cultural sustainability is just plain cool for Portlanders.

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<sup>249</sup> The Jean Vollum Natural Capital Center is located at 721 Ninth Avenue in Portland, Oregon.

Adaptively reusing historic industrial buildings evokes creative inspiration by grasping onto the raw, gritty creativity in a place that has become considered an art form in itself with its exposed historic materials juxtaposed by modern technologies and new uses. The richness of natural materials, such as wood and brick, especially in timber-framed buildings, provides a warm authenticity of buildings in the Pacific Northwest. Large, operable windows and skylights add to this by offering further connection with the natural environment. Exposed structural systems convey the industrial strength of industrial buildings in the same way historic French architect Gaudet inspired designers to create buildings that impart a clear, rational structure that provided truth in construction and expressed a perceptible strength in its design.<sup>250</sup> Modern users of historic industrial buildings marvel at the stout nature and massive structure of historic industrial buildings as characteristic evidence of their heavy-duty and intensive uses. The well-conveyed industrial character and essence of such places can inspire modern businesses and individuals to be creative and innovative in their work and potentially in their everyday lives. Preserving this raw integrity is at the heart of why industrial adaptive reuse projects have become desirable and successful resources in the modern urban landscape.

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<sup>250</sup> Julien-Aziis Gaudet, "Elements and Theories of Architecture: 1894 and following, 1901," in *America Builds*, edited by Leland Roth (Draft for Second Edition, 2010), Part 7a, pg. 34.

## CHAPTER X

### CONCLUSION

This research shows the potential of historic preservation on a variant that includes more than just a historical museum on one end and a modern utilitarian renovation on the other. The interaction between historical interpretation and modern use can effectively create a built environment that informs and inspires through this creative balance. How do we reach a point where new users recognize the cultural thumbprints that were made on a building while still supporting the modern nature of a new use? Many developers say it is all in leaving the evidence of the building uncovered, exposing as much of the industrial character as possible. If a space is divided up into several smaller private apartments, offices, or flexible work spaces, individuals may be more likely to create their own environments instead of collectively feeding off of what is evident in the building as a whole. However, if tenants have the opportunity to come together and share parts of a historic industrial space, they may be more likely to share an interest in the heritage that is common to everyone's experience of the building. Does this then create a shared identity, a shared ownership, a stronger community or sense of place?

Adaptively reusing historic industrial buildings in Portland is not necessarily about conveying just the past, but can offer instead a continuum through time that shows the progress of the city. Historic industrial buildings express the historical depth of a city's economic and industrial growth. Adaptive reuse is a treatment for historic buildings that is not about freezing a space in history, but offers an expression of its existence and use through time. Adaptive reuse is not meant to be a solution for all historic buildings. This treatment does not necessarily apply to sites and buildings that are iconic or nationally known for their historic associations, nor those that perfectly

exemplify their architectural significance. Adaptive reuse is a good fit for solid buildings with historic character that convey heritage, especially on a local level. Previously under-utilized industrial resources that have value associated with their central location and visual presence are good examples of resources poised and ready for vibrant new uses. The buildings in this study are not architectural icons of the city recognized across the nation, but instead are considered local cultural landmarks for their industrial pasts. They define a historical context of the industries that helped shape the local and regional economies of Portland and the Pacific Northwest. Collectively, their reuse and interpretation share a broader story of industrial heritage.

This history cannot be conveyed with just one good example. The industrial past of a city should be conveyed through a collective compilation of sites and buildings throughout the city. Communities and users can then connect with the individual histories of each place, but gain a broad understanding about the industrial heritage of a city. The individual characteristics and stories create a richer fabric to understand, identify with, and celebrate. Fortunately for Portland, there are several underutilized industrial buildings scattered throughout multiple metropolitan neighborhoods. These resources are ready to serve their communities through reuse and revitalization in ways that will share the past, connect to the present, and provide for future generations of the city.

A building's longevity is based on its quality of construction, usability, versatility and social value. Architecture must address the social and community needs of a building's users in order to become a sound and ethical investment in the built environment. Industrial adaptive reuse maximizes the advantages of the embodied energy of historic resources, location, and existing infrastructure, yet retains the motive of sharing and preserving the past. Industrial adaptive reuse exemplifies a societal obligation to preserve a city's industrial heritage. When historic industrial buildings correspond with other desirable factors, such as their structural capacities, embodied and irreplaceable unique character, historic redevelopment becomes more than a responsibility, but also a worthwhile investment.

In adaptive reuse and historic redevelopment, preserving character-defining features is a process that can be perceived as a means to an end. In Oregon, participants

can follow this ‘stick and carrot’ program to gain Federal Rehabilitation Tax Credits, Special Assessment, and relaxed code requirements. However, developers who find the most success in adaptive reuse, developers who own well-leased buildings that are easily recognizable by the public and perceived as “social landmarks,” proclaim that they do so for deeper reasons. This dedication and commitment to historic preservation and to retaining and sharing industrial heritage requires creativity, dedication, and passion that cannot be matched or repeated in perfunctory renovations.

Even still, there appears to be a disconnection between developers’ philosophies for preservation and what occurs in actual redevelopment process. While most adaptive reuse projects aim for some degree of interpretation, the placement, extent, or implementation is either value-engineered out or overlooked as adaptive reuse projects reach their completion. There is benefit however, in not overlooking these final details as they are often what drive the overall process. The real estate interest in historic industrial buildings can be summarized to three key factors: location, character, and financial incentive. There is opportunity to better connect each of these factors by providing a stronger understanding of the industrial context and history of the buildings. The end result is a more marketable, more desirable product – a usable building with a unique, well presented story with which people recognize and identify. This collective value builds a stronger sense of place and community. Communities with a strong sense of social and cultural value associated with a reused and revitalized built environment are more sustainable on all levels.

## RECOMMENDATIONS FOR FUTURE RESEARCH

As “innovation in the reconstruction of industrial sites is sure to continue as this phenomenon is refined and better understood,” it is important to consider the ways this thesis can inform research in other related areas.<sup>251</sup> The following recommendations are made for future study.

- Carefully look at the architectural process of designing industrial buildings. Understanding industrial-purposed design may help designers who strive for sustainability in their work today. This understanding may also educate modern users on the working conditions and labor culture from historic industrial periods.
- Conduct quantitative longitudinal impact studies to gain more robust empirical evidence about the effects of industrial adaptive reuse and community revitalization.
- Class issues and gentrification deserve careful study and analysis within the process of adaptive reuse, particularly in industrial working class neighborhoods that have been gentrified to serve higher tax brackets through the allure of adaptively reused industrial buildings. Analysis of adaptive reuse programs that provide affordable housing and other livability needs could inform the ways historic preservation and adaptive reuse can serve one of our nation’s greatest social needs.
- Consider repeating this study in other cities that are either similar to Portland’s cultural framework, or are shaped differently in regards to their industrial heritage, preservation framework, or modern business culture. A comparison of these case studies with Portland would provide stronger generalizations about the relationships among these components.
- Consider adapting this study to small towns or rural communities. Cultural heritage is often considered to have a larger impact on collective social identity in

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<sup>251</sup> Hugh Hardy, “The Romance of Abandonment: Industrial Parks,” *Places – Massachusetts* 17, no. 3 (2005): 37.



areas with smaller populations. The adaptive reuse, repurposing, and preservation of rural industrial buildings may have a stronger impact in smaller communities.

- Consider adapting this study to industrial structures (non-buildings) and how the repurposing of industrial relics impacts cultural landscapes. Parks and green spaces are often created around such industrial relics as “machines in the garden” that illustrate their beauty in the juxtaposition of industry against nature’s picturesque scene.
- Consider adapting this study to non-industrial buildings, looking at the ways commercial buildings, transportation buildings, or public buildings have shaped our heritage and how their use can convey this. Firehouses, for example, are a commonly reused resource that exists in nearly every community. Effective models could convey the history of America’s relationship and reaction to the risks of fire, along with the social roles these buildings played in their communities.

**APPENDIX A**  
**INTERVIEW QUESTIONS**

## OWNER/DEVELOPER/BUILDING EXPERT

1. Tell me about this building and your company's process for acquiring and redeveloping it.
  - a. Why did the company choose this building?
  - b. What factors helped you identify it as a potential redevelopment project?
2. How do you identify a new use for a historic industrial building? Do certain programs fit better than others? Why did an office setting work so well here?
  - a. How did the new use fit or play into the historic conditions?
  - b. What restraints arose between programming for a new use and preserving the character-defining features?
3. What character-defining features of this building stand out as the most unique and appealing to tenants?
  - a. How you have treated these features in the redevelopment?
4. Are there features beyond its architectural character that make it unique or challenging? (such as stories about the labor force, ethnic background of industry, events, disasters)
5. Was this building was already on the National Register when you acquired it?
  - a. Did you use Federal Rehabilitation Tax Credit incentives?
  - b. Where there other incentives? Please explain.
6. What is important about this building's history?
  - a. Did you find any historical surprises or mysteries in the redevelopment process? Like what?
  - b. How have you been able to share this history with the new users?
7. What makes historic industrial buildings a good model for Adaptive Reuse?
8. How do you see today's users connecting with or understanding the history of this building?
  - a. Do you have an official or unofficial interpretation plan? (if so, can I get a copy?)

- b. Do you use the history in your promotional materials?
  - i. What benefit do you think this has?
- 9. Do you consider this a sustainable building? How? How do the socio-cultural aspects contribute into its sustainability?
- 10. Adaptive Reuse is a challenging process. There are so many added layers with pulling together various financial incentives and dealing with preservation restrictions. Why has the company carved out a niche in the preservation field?
  - a. How has it proven successful to your company?
  - b. How has it proven successful to the surrounding community?

## STATE RESTORATION SPECIALIST

1. What are some strengths and weaknesses of Adaptive Reuse as a treatment for historic industrial buildings?
2. Define adaptive reuse in contrast to rehabilitation.
3. If the developer of a historic building wants to compartmentalize an open warehouse floor plan into smaller units, but the open floor plan is character-defining, how do you make that work?
4. Are there other common features of historic industrial buildings that you often have to work with for tax credit compliance?
5. Are there situations where the integrity is a non-architectural feature (related instead to natural disasters, labor strikes, etc)?
6. Does the evidence of material culture (artifacts not necessarily associated with the building's architecture) add to a building's integrity of Feeling or Association?
7. Is this a good treatment strategy for the building?
8. In your opinion, do the majority of developers who nominate a building and then rehabilitate it for adaptive reuse do so primarily for the tax credits?
9. Are there deeper intentions? Like what?
10. When choosing projects for Adaptive Reuse in preservation awards, what stands out as exceptional work?
11. Is the interpretation of a building (its ability to convey history) included at all?
12. It is said that sustainability has three main components, environmental, economic, and social. Studies have argued the environmental and economic benefits of adaptive reuse. How do you see Adaptive Reuse as contributing to the social and cultural values of Sustainability?
13. Why is it important to preserve our industrial heritage?

**APPENDIX B**  
**RECRUITMENT & CONSENT DOCUMENTS**

## PARTICIPATION RECRUITMENT LETTERS

<DATE>

<OWNER/DEVELOPER/BUILDING EXPERT>

<ORGANIZATION>

<ADDRESS Line 1>

<ADDRESS Line 2>

Dear <OWNER/DEVELOPER/BUILDING EXPERT>

You are invited to participate in my research project titled *Conveying History in Modern Use: The Role of Cultural Heritage in Adaptive Reuse*. This thesis fulfills my Masters Degree requirement for the University of Oregon's Historic Preservation Program. The purpose of this study is to explore how cultural heritage is incorporated into the adaptive reuse and redevelopment process of historic buildings, using Portland, Oregon as a case study.

While it is often suggested that historic preservation, specifically adaptive reuse, make valuable contributions to a community's economic and environmental sustainability initiatives, there is a significant gap in understanding the socio-cultural role of redeveloping historic spaces for modern use. Although downtown industrial buildings may be ideal candidates for both economic and ecological business incentives, these spaces are also physical evidence of a cultural and industrial past, rich with stories and information about a community's heritage. Can this heritage be conveyed to a building's new users? This study intends to explore the role of cultural industrial heritage in adaptive reuse, identifying methods for conveying cultural historic significance to a place's new and modern users, and the opportunities for redevelopers to highlight and improve upon this process. Case studies are selectively chosen in Portland, Oregon based on specific criteria, regulatory framework, and by providing particularly insightful information regarding this relationship between heritage and new use.

You were selected to participate in this study because of your leadership position with <ORGANIZATION> and your experiences with and expertise pertinent to adaptive reuse in Portland, Oregon. If you decide to take part in this research project, you will be asked to provide relevant organizational materials and participate in an in-person interview, lasting approximately one hour in March or April of 2010. If you wish, interview questions will be provided beforehand for your consideration. Interviews will take place at your organization, or at a more conveniently located site. Interviews will be scheduled at your convenience. In addition to taking handwritten notes, with your permission, I will use an audio digital recorder for transcription and validation purposes. You may also be asked to provide follow-up information through phone calls or email.

If you have any questions, please feel free to contact me at XXX-XXX-XXXX or XXX@uoregon.edu or my thesis chair, Robert Z. Melnick at XXX-XXX-XXXX or XXX@uoregon.edu. Any questions regarding your rights as a research participant should be directed to the Office for the Protection of Human Subjects, University of Oregon, Eugene, OR 97403, (541) 346-2510.

Thank you in advance for your interest and consideration. I will contact you shortly to speak about your potential involvement in this study.

Sincerely,

Patience Churchward

<DATE>

<STATE RESTORATION SPECIALIST>

<ORGANIZATION>

<ADDRESS LINE 1>

<ADDRESS LINE 2>

Dear Joy Sears:

You are invited to participate in a research project titled *Conveying History in Modern Use: The Role of Cultural Heritage in Adaptive Reuse* conducted by Patience Churchward from the University of Oregon's Historic Preservation Program. The purpose of this study is to explore how cultural heritage is incorporated into the adaptive reuse and redevelopment process of historic buildings, using Portland, Oregon as a case study.

While it is often suggested that historic preservation, specifically adaptive reuse, make valuable contributions to a community's economic and environmental sustainability initiatives, there is a significant gap in understanding the socio-cultural role of redeveloping historic spaces for modern use. Although downtown industrial buildings may be ideal candidates for both economic and ecological business incentives, these spaces are also physical evidence of a cultural and industrial past, rich with stories and information about a community's heritage. Can this heritage be conveyed to a building's new users? This study intends to explore the role of cultural industrial heritage in adaptive reuse, identifying methods for conveying cultural historic significance to a place's new and modern users, and the opportunities for redevelopers to highlight and improve upon this process. Case studies are selectively chosen in Portland, Oregon based on specific criteria, regulatory framework, and by providing particularly insightful information regarding this relationship between heritage and new use.

You were selected to participate in this study because of your Restoration Specialist position with the Oregon State Historic Preservation Office and your experiences with and expertise pertinent to adaptive reuse in Portland, Oregon. If you decide to take part in this research project, you will be asked to provide relevant organizational materials and participate in an in-person interview, lasting approximately one hour in April of 2010. If you wish, interview questions will be provided beforehand for your consideration. Interviews will take place at your organization, or at a more conveniently located site. Interviews will be scheduled at your convenience. In addition to taking handwritten notes, with your permission, I will use an audio digital recorder for transcription and validation purposes. You may also be asked to provide follow-up information through phone calls or email.

If you have any questions, please feel free to contact me at XXX-XXX-XXXX or XXX@uoregon.edu or my thesis chair, Robert Z. Melnick at XXX-XXX-XXXX or XXX@uoregon.edu. Any questions regarding your rights as a research participant should be directed to the Office for the Protection of Human Subjects, University of Oregon, Eugene, OR 97403, (541) 346-2510.

Thank you in advance for your interest and consideration. I will contact you shortly to speak about your potential involvement in this study.

Sincerely,

Patience Churchward



## INTERVIEW CONSENT FORMS

### **Owner/Developer/Building Expert**

Patience Churchward, Principal Investigator  
University of Oregon Historic Preservation Program

You are invited to participate in a research project titled *Conveying History in Modern Use: The Role of Cultural Heritage in Adaptive Reuse* conducted by Patience Churchward from the University of Oregon's Historic Preservation Program. The purpose of this study is to explore how cultural heritage is incorporated into the adaptive reuse and redevelopment process of historic buildings, using Portland, Oregon as a case study.

While it is often suggested that historic preservation, specifically adaptive reuse, make valuable contributions to a community's economic and environmental sustainability initiatives, there is a significant gap in understanding the socio-cultural role of redeveloping historic spaces for modern use. Although downtown industrial buildings may be ideal candidates for both economic and ecological business incentives, these spaces are also physical evidence of a cultural and industrial past, rich with stories and information about a community's heritage. Can this heritage be conveyed to a building's new users? This study intends to explore the role of cultural industrial heritage in adaptive reuse, identifying methods for conveying cultural historic significance to a place's new and modern users, and the opportunities for redevelopers to highlight and improve upon this process. Case studies are selectively chosen in Portland, Oregon based on specific criteria, regulatory framework, and by providing particularly insightful information regarding this relationship between heritage and new use.

You were selected to participate in this study because of your leadership position with <REDEVELOPMENT ORGANIZATION> and your experiences with and expertise pertinent to adaptive reuse in Portland, Oregon. If you decide to take part in this research project, you will be asked to provide relevant organizational materials and participate in an in-person interview, lasting approximately one hour in April of 2010. If you wish, interview questions will be provided beforehand for your consideration. Interviews will take place at your organization, or at a more conveniently located site. Interviews will be scheduled at your convenience. In addition to taking handwritten notes, with your permission, I will use an audio digital recorder for transcription and validation purposes. You may also be asked to provide follow-up information through phone calls or email. There are minimal risks associated with participating in this study, particularly since this phase of research is exploratory in nature.

With your permission, your name will be used in any resulting documents and publications. Use of a pseudonym in this study is not an option because with the well-known network of preservation professionals in Oregon, it is unlikely that your identity could remain confidential. Your participation is voluntary. If you decide to participate, you are free to withdraw your consent and discontinue participation at any time without penalty. It may be advisable to obtain permission to participate in this interview to avoid potential social or economic risks related to speaking as a representative of your institution.

I anticipate that the results of this research project will be of value to the preservation and adaptive reuse sector as a whole, especially in the Portland region. However, I cannot guarantee that you personally will receive any benefits from this research.

If you have any questions, please feel free to contact me at XXX-XXX-XXXX or XXX@uoregon.edu or my thesis chair, Robert Z. Melnick at XXX-XXX-XXXX or XXX@uoregon.edu. Any questions regarding your rights as a research participant should be directed to the Office for the Protection of Human Subjects, University of Oregon, Eugene, OR 97403, (541) 346-2510.

Please read and initial the following statements to note your agreement:

\_\_\_\_\_ I consent to my identification as a participant in this study.

\_\_\_\_\_ I consent to the use of audiotapes and note taking during my interview.

\_\_\_\_\_ I consent to the potential use of quotations from the interview.

\_\_\_\_\_ I consent to the use of information I provide regarding the organization with which I am associated.

\_\_\_\_\_ I wish to have the opportunity to review and possibly revise my comments and the information that I provide prior to these data appearing in the final version of any publications that may result from this study.

Your signature indicates that you have read and understand the information provided above, that you willingly agree to participate, that you may withdraw your consent at any time and discontinue participation without penalty, that you have received a copy of this form, and that you are not waiving any legal claims, rights or remedies. You have been given a copy of this letter to keep.

Print Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Thank you for your interest and participation in this study.

Sincerely,

Patience Churchward

## State Historic Preservation Office Restoration Specialist

Patience Churchward, Principal Investigator  
University of Oregon Historic Preservation Program

You are invited to participate in a research project titled *Conveying History in Modern Use: The Role of Cultural Heritage in Adaptive Reuse* conducted by Patience Churchward from the University of Oregon's Historic Preservation Program. The purpose of this study is to explore how cultural heritage is incorporated into the adaptive reuse and redevelopment process of historic buildings, using Portland, Oregon as a case study.

While it is often suggested that historic preservation, specifically adaptive reuse, make valuable contributions to a community's economic and environmental sustainability initiatives, there is a significant gap in understanding the socio-cultural role of redeveloping historic spaces for modern use. Although downtown industrial buildings may be ideal candidates for both economic and ecological business incentives, these spaces are also physical evidence of a cultural and industrial past, rich with stories and information about a community's heritage. Can this heritage be conveyed to a building's new users? This study intends to explore the role of cultural industrial heritage in adaptive reuse, identifying methods for conveying cultural historic significance to a place's new and modern users, and the opportunities for redevelopers to highlight and improve upon this process. Case studies are selectively chosen in Portland, Oregon based on specific criteria, regulatory framework, and by providing particularly insightful information regarding this relationship between heritage and new use.

You were selected to participate in this study because of your Restoration Specialist position with the Oregon State Historic Preservation Office and your experiences with and expertise pertinent to adaptive reuse in Portland, Oregon. If you decide to take part in this research project, you will be asked to provide relevant organizational materials and participate in an in-person interview, lasting approximately one hour in April of 2010. If you wish, interview questions will be provided beforehand for your consideration. Interviews will take place at your organization, or at a more conveniently located site. Interviews will be scheduled at your convenience. In addition to taking handwritten notes, with your permission, I will use an audio digital recorder for transcription and validation purposes. You may also be asked to provide follow-up information through phone calls or email. There are minimal risks associated with participating in this study, particularly since this phase of research is exploratory in nature.

With your permission, your name will be used in any resulting documents and publications. Use of a pseudonym in this study is not an option because with the well-known network of preservation professionals in Oregon, it is unlikely that your identity could remain confidential. Your participation is voluntary. If you decide to participate, you are free to withdraw your consent and discontinue participation at any time without penalty. It may be advisable to obtain permission to participate in this interview to avoid potential social or economic risks related to speaking as a representative of your institution.

I anticipate that the results of this research project will be of value to the preservation and adaptive reuse sector as a whole, especially in the Portland region. However, I cannot guarantee that you personally will receive any benefits from this research.

If you have any questions, please feel free to contact me at XXX-XXX-XXXX or XXX@uoregon.edu or my thesis chair, Robert Z. Melnick at XXX-XXX-XXXX or XXX@uoregon.edu. Any questions regarding your rights as a research participant should be directed to the Office for the Protection of Human Subjects, University of Oregon, Eugene, OR 97403, (541) 346-2510.

Please read and initial the following statements to note your agreement:

\_\_\_\_\_ I consent to my identification as a participant in this study.

\_\_\_\_\_ I consent to the use of audiotapes and note taking during my interview.

\_\_\_\_\_ I consent to the potential use of quotations from the interview.

\_\_\_\_\_ I consent to the use of information I provide regarding the organization with which I am associated.

\_\_\_\_\_ I wish to have the opportunity to review and possibly revise my comments and the information that I provide prior to these data appearing in the final version of any publications that may result from this study.

Your signature indicates that you have read and understand the information provided above, that you willingly agree to participate, that you may withdraw your consent at any time and discontinue participation without penalty, that you have received a copy of this form, and that you are not waiving any legal claims, rights or remedies. You have been given a copy of this letter to keep.

Print Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Thank you for your interest and participation in this study.

Sincerely,

Patience Churchward

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