





CITY OF BELLEVUE

In Partnership with the University of Washington

VISUALIZING BELLEVUE'S DOWNTOWN URBAN DESIGN GUIDELINES THROUGH AN IMAGE CATALOGUE

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Livable City Year 2018–2019 in partnership with City of Bellevue

Winter - Spring 2019





Livable City Year 2018–2019 in partnership with City of Bellevue www.washington.edu/livable-city-year/



LCY student researchers Irving Chu and Jennifer Meulenberg with Professor Rachel Berney, Urban Design and Planning, at Bellevue City Hall following their final presentation to City staff. TERI THOMSON RANDALL

ACKNOWLEDGMENTS

We would like to thank the City of Bellevue Land Use Division Urban Design Team for their time, commitment, and quality feedback for this project. We greatly enjoyed learning from Sally Nichols, Mark Brennan, and the rest of the team. We hope our project deliverable will serve their team well.

We would also like to thank the professional urban designers, architects, and landscape architects who we interviewed for this project. Their insight into successful urban design characteristics and knowledge of local examples of good urban design were invaluable to the creation of this Design Review Image Catalogue. These professionals include: David Malda (GGN), John Owen and Rachel Miller (Makers), Walt Niehoff and John Chau (LMN), Kay Compton (Compton Design), Kris R. Snider and Jake Woland (HEWITT), and Mark Brands (SiteWorkshop).

Lastly, we would like to thank our Professional Project Committee: Professor Rachel Berney and Professor Manish Chalana, of the Department of Urban Design and Planning, for their guidance, and for the time and hard work they put into shaping our project deliverable and refining our written report. The Elements Too building in Bellevue showcases how pedestrian-scale design and active edges allow people to linger and use open space. JENNIE MEULENBERG

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ABOUT LIVABLE CITY YEAR

The University of Washington's Livable City Year (LCY) initiative is a partnership between the university and one local government for one academic year. The program engages UW faculty and students across a broad range of disciplines to work on city-defined projects that promote local sustainability and livability goals. Each year hundreds of students work on high-priority projects, creating momentum on real-world challenges while serving and learning from communities. Partner cities benefit directly from bold and applied ideas that propel fresh thinking, improve livability for residents, and invigorate city staff. Focus areas include environmental sustainability; economic viability; population health; and social equity, inclusion and access. The program's 2018–2019 partner is the City of Bellevue; this follows partnerships with the City of Tacoma (2017–2018) and the City of Auburn (2016– 2017).

LCY is modeled after the University of Oregon's Sustainable City Year Program, and is a member of the Educational Partnerships for Innovation in Communities Network (EPIC-N), an international network of institutions that have successfully adopted this new model for community innovation and change. For more information, contact the program at uwlcy@uw.edu.



ABOUT CITY OF BELLEVUE

Bellevue is the fifth largest city in Washington, with a population of more than 140,000. It's the high-tech and retail center of King County's Eastside, with more than 150,000 jobs and a skyline of gleaming high-rises. While business booms downtown, much of Bellevue retains a small-town feel, with thriving, woodsy neighborhoods and a vast network of green spaces, miles and miles of nature trails, public parks, and swim beaches. The community is known for its beautiful parks, top schools, and a vibrant economy. Bellevue is routinely ranked among the best mid-sized cities in the country.

The city spans more than 33 square miles between Lake Washington and Lake Sammamish and is a short drive from the Cascade Mountains. Bellevue prides itself on its diversity. Thirty-seven percent of its residents were born outside of the US and more than 50 percent of residents are people of color, making the city one of the most diverse in Washington state.

Bellevue is an emerging global city, home to some of the world's most innovative technology companies. It attracts top talent makers such as the University of Washington-Tsinghua University Global Innovation Exchange. Retail options abound in Bellevue and artists from around the country enter striking new works in the Bellwether arts festival. Bellevue's agrarian traditions are celebrated at popular seasonal fairs at the Kelsey Creek Farm Park.

Bellevue 2035, the City Council's 20-year vision for the city, outlines the city's commitment to its vision: "Bellevue welcomes the world. Our diversity is our strength. We embrace the future while respecting our past." Each project completed under the Livable City Year partnership ties to one of the plan's strategic areas and many directly support the three-year priorities identified by the council in 2018.





BELLEVUE 2035: THE CITY WHERE YOU WANT TO BE

Visualizing Bellevue's Downtown Urban Design Guidelines through an Image Catalogue supports the High Quality Built and Natural Environment target area of the Bellevue City Council Vision Priorities and was sponsored by the Department of Development Services.



HIGH QUALITY BUILT AND NATURAL ENVIRONMENT

Bellevue has it all. From a livable high-rise urban environment to large wooded lots in an equestrian setting, people can find exactly where they want to live and work in Bellevue. The diverse and well-balanced mix of business and commercial properties and wide variety of housing types attract workers and families who desire a safe, sustainable, and accessible community.

Bellevue has an abundance of parks and natural open space. Known as a "city in a park," our park system is one of the best in the nation due to its high park acreage-to-population ratio. From neighborhood walking paths and forested trails to a regional waterfront park, we enjoy a variety of recreational opportunities within walking distance of our homes and businesses. Bellevue is a "Smart City" with a clean, high-quality environment and excellent, reliable infrastructure that supports our vibrant and growing city, including high-tech connectivity. The city has a connected multi-modal transportation system that blends seamlessly with its buildings, plazas, and parks.

Whether it's an urban high rise, a classic Bellevue rambler, or a historic resource, the constant is our people. Our neighborhoods and businesses transcend age, ethnicity, and culture to create safe, welcoming places to live and work.

BELLEVUE 2035: THE CITY WHERE YOU WANT TO BE

Bellevue welcomes the world. Our diversity is our strength. We embrace the future while respecting our past.

The seven strategic target areas identified in the Bellevue City Council Vision Priorities are:



ECONOMIC DEVELOPMENT Bellevue business is global and local



TRANSPORTATION AND MOBILITY Transportation is both reliable and predictable. Mode choices are abundant and safe.



HIGH QUALITY BUILT AND NATURAL ENVIRONMENT From a livable high-rise urban environment to large wooded lots in an equestrian setting, people can find exactly where they want to live and work.



BELLEVUE: GREAT PLACES WHERE YOU WANT TO BE Bellevue is a place to be inspired by culture, entertainment, and nature.



the region.



ACHIEVING HUMAN POTENTIAL Bellevue is a caring community where all residents enjoy a high quality life.



is well managed.

For more information please visit: https://bellevuewa.gov/city-government/citycouncil/council-vision

REGIONAL LEADERSHIP AND INFLUENCE

Bellevue will lead, catalyze, and partner with our neighbors throughout

HIGH PERFORMANCE GOVERNMENT

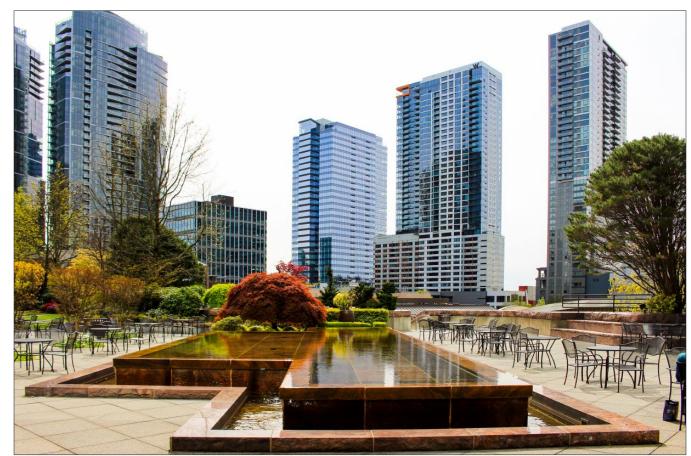
People are attracted to living here because they see that city government

This study was conducted by two University of Washington students, Irving Chu and Jennifer Meulenberg, in partnership with the City of Bellevue, and with support from the University of Washington Livable City Year program and the University of Washington Department of Urban Design and Planning. As a part of this project, we, the students, produced an image catalogue, which is a library or compilation of images, for the City of Bellevue. The purpose of the Design Review Image Catalogue is to provide a tool that the City of Bellevue's design review team can share with design review applicants so that they can understand and respond to the City's design requirements.

Using the recommendations provided by the Bellevue Downtown Livability Initiative, we sought to assess what aspects of regional urban design projects have led to livable and vibrant places. More specifically we asked: within the Puget Sound Region, what are the best examples of open space, through-block pedestrian connections, and alleys with addresses, and how can these examples be presented in an online platform for applicant and general public use?

This study involved a qualitative research design that developed a series of case studies drawn from the Puget Sound Region. A literature review was vital to this project to inform the project framework and deliverable. Case studies and projects similar to our work served as precedents with which to benchmark our final project and aided in our understanding and analysis of successful urban design. Primary sources of data included photographs, interviews, and the new Downtown Land Use Code 20.25A.140-170 for the City of Bellevue.

This catalogue will serve as a practical visualization tool for development project applicants submitting plans to the City of Bellevue. It can also serve as a precedent for other catalogues around the region and nationally. Ultimately, this tool may help in the implementation of a cohesive urban design vision for Downtown Bellevue.



The outside public space of the Symetra building provides attractive views of the downtown skyline while providing ample seating for passive activities. IRVING CHU

INTRODUCTION

Within the Puget Sound Region, what are the best examples of 1) open space, 2) through-block pedestrian connections, and 3) alleys with addresses, and how can these examples be presented in an online platform for applicant and general public use? The City of Bellevue is the fifth largest city in the State of Washington, with an estimated population of 145,000. A leader in the high-tech and retail sectors, the city boasts a burgeoning urban center, a vibrant economy, and beautiful neighborhoods, and consistently ranks among the top midtier cities in the US. The tremendous pace at which the region is growing has had major effects on Bellevue's built environment — particularly in the BelRed, Downtown, Eastgate, Factoria, and Wilburton urban areas.

In response to this increasing demand for downtown development, the City of Bellevue commissioned a Citizens Advisory Committee in 2013 to deliver a Downtown Livability Initiative — a broad spectrum of recommendations related to public open space, design guidelines, public amenities, pedestrian environment, building form, and parking — with the objective of improving the experience for people living, working, and visiting downtown. To codify these recommendations, Bellevue's Land Use Division updated sections of the City's urban design land use codes in 2017, which the City Council adopted. One of these updates established new Land Use Code (LUC) design guidelines for the "Downtown" neighborhood (City of Bellevue n.d.).

To convey the goals and intent of this new code, the Urban Design Team within the City's Land Use Division desired to create a "photo library" that would document and depict the required design elements. This project - part of the Livable City Year partnership between the University of Washington and the City of Bellevue — delivers the first draft of that Design Review Image Catalogue. The catalogue is intended to serve as a tool for City employees to reference and for applicants and the general public to learn more about the desired urban design outcomes in Bellevue. More specifically, this tool is meant to assist developers and designers in submitting applications for future development that would incorporate what Bellevue is seeking in the built form in new and redeveloped areas. At this stage in its development, the catalogue serves as an online tool that contains 1) a collection of images and 2) a written assessment of how various locations around the Puget Sound Region successfully comply with the intent of the Bellevue Downtown Design Guidelines.

The main question this project aimed to answer is: within the Puget Sound Region, what are the best examples of 1) open space, 2) throughblock pedestrian connections, and 3) alleys with addresses, and how can these examples be presented in an online platform for applicant and general public use? Related questions include:

- What is the new Land Use Code for the City of Bellevue and what is its intent?
- What urban design qualities make successful spaces (e.g., open spaces, through-block pedestrian connections, and alleys with addresses)?
- What are the best tools and techniques for taking photographs of urban spaces?
- What is the best online platform upon which to assemble and publish our image catalogue?

The Bellevue Downtown LUC identifies several built form types with specific design guidelines. The City's Land Use Division's Urban Design Team (UDT) chose three types of built forms that are represented in this project: open space, through-block pedestrian connections, and alleys with addresses. The UDT felt that applicants would benefit the most from having these forms depicted. Within the Bellevue LUC the City defines these three built forms as:

Open Space: landscaped areas, walkways, gardens, courtyards, and lawns; excluding areas devoted to buildings, traffic circulation roads, or parking areas.

Pedestrian Connection: a continuous, readily accessible, usable area, open at either end and designed primarily to provide public access between two or more publicly accessible spaces, including perimeter sidewalks, by means of a direct route. Through-block pedestrian connections are required in each of the superblocks within the Downtown Boundary in Bellevue, per Bellevue Land Use Code 20.25A.160.D.)

Alleys with Addresses: pedestrian-oriented ways off the main vehicular street grid that provide an intimate pedestrian experience through a combination of residential, small retail, restaurant, and other commercial entries with meaningful transparency along the frontage building walls.

METHODS

The concept and use of Design Review Image Catalogues is relatively unexplored, at least in the capacity that the City of Bellevue proposed; there is very little previous research or examples of this type of study. Therefore, this project needed to reference and pull together a range of methods to create a suitable overall approach. The ideal catalogue can integrate with the City of Bellevue's website, is accessible for both internal and external use, provides quality images of successful spaces, and succinctly describes why the design of the space is successful.

DATA SOURCES

We worked with three main sets of data for this study:

- The City of Bellevue's Downtown Land Use Code (LUC)
- Interviews with professionals in urban planning, architecture, and landscape architecture in the Puget Sound region
- Photos and images that were compiled to inform the visual aspects of the catalogue

BELLEVUE DOWNTOWN LAND USE CODE

The first source of data we used was the revised Land Use Code for the City of Bellevue. This source is important because without understanding what the City is looking to promote, the catalogue will be unhelpful or detrimental to designers and developers. The LUC is easily accessible and available through the City of Bellevue's website (City of Bellevue, n.d.). The code includes Design Guidelines for various overlay districts around Bellevue, including a new section of code for Downtown Bellevue, called "Part 20.25A Downtown." The citywide LUC has nine chapters that describe the land use and zoning laws for the city. Within this code we focused specifically on the design review sections of Part 20.25A Downtown code because the City of Bellevue envisioned this tool as something to be used during the design review process.

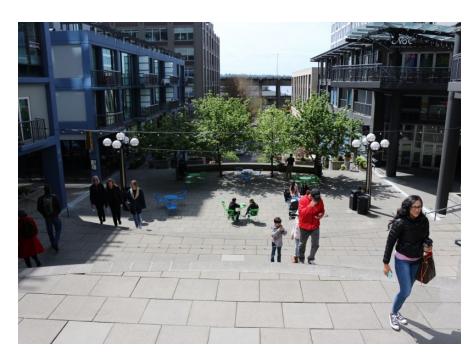
INTERVIEWS WITH PROFESSIONALS

Second, we used interviews with professionals in the urban design field in the Puget Sound region. These interviews gave us a better understanding of the characteristics of successful urban design as well as examples of locations around the Puget Sound region that exemplify good urban design.

We selected our interview subjects in two ways. First, we identified members of our graduate mentor program who would be good candidates to interview. Second, during our January 22 meeting with the Bellevue Urban Design Team (UDT), we received a list of firms and professionals that had previously worked on projects in Bellevue and that the UDT felt would contribute positively to our interview data. The firms and professionals we interviewed were: David Malda with GGN, John Owen and Rachel Miller with MAKERS, Walt Niehoff and John Chau with LMN Architects, Kay Compton with Compton Design Office, Kris Snider and Jake Woland with HEWITT, and Mark Brands with Site Workshop. We interviewed these professionals in person, with each interview lasting around one hour. The interviews took place over a three-week span in February 2019.

Before our interviews with these nine professionals, we wrote three baseline questions that we wanted to ask during each informal interview:

- What would you say characterizes successful design in the public realm?
- Are there any examples in the Puget Sound Region that exemplify these successful design elements?
- What built typologies would be helpful to represent in this type of catalogue (e.g., plazas, pedestrian streets, etc.)?



The students photographed people using and interacting with the spaces. At Harbor Steps, people enjoy walking through and sitting in the tiered plazas. IRVING CHU

Each interview resulted in a unique take on successful urban design and examples of local manifestations of successful urban design. There were also similarities that arose from each of the interviews. These results and a subsequent analysis are detailed in the Analysis and Deliverable section of this report.

PHOTOGRAPHY AND IMAGE COLLECTION

Architectural photography usually involves static subjects which are built and stationary. This gives the photographer time to consider the best composition for the photograph. For this study, we used photography equipment provided by the University of Washington, and spent time getting to know the manual settings of the camera including ISO, shutter speed, and aperture as well as how to manipulate these settings given the available light and desired depth of field.

For each photograph in our final deliverable, we provide a design element assessment that details how the example complies with the newly-adopted LUC and the intent of the design guidelines provided by the City. Therefore, prior to our site visits, we studied the City's LUC in depth to identify areas around Bellevue that fit the criteria of each style of development. Our photographs capture the key visible areas of the proposed site/landscape that were identified as successful urban design. This includes elements such as structural buildings, street furniture, lighting facilities, landscaping, and people's interaction with those elements.

PRECEDENT EXAMPLES

We are aware of only a few projects similar to a design review image catalogue that are used by municipal governments or other agencies. It appears that this is a relatively unique visualization method because, while the use of photos to portray urban design is fairly common, compiling them into an online tool that can be used by developers and designers is not as common.



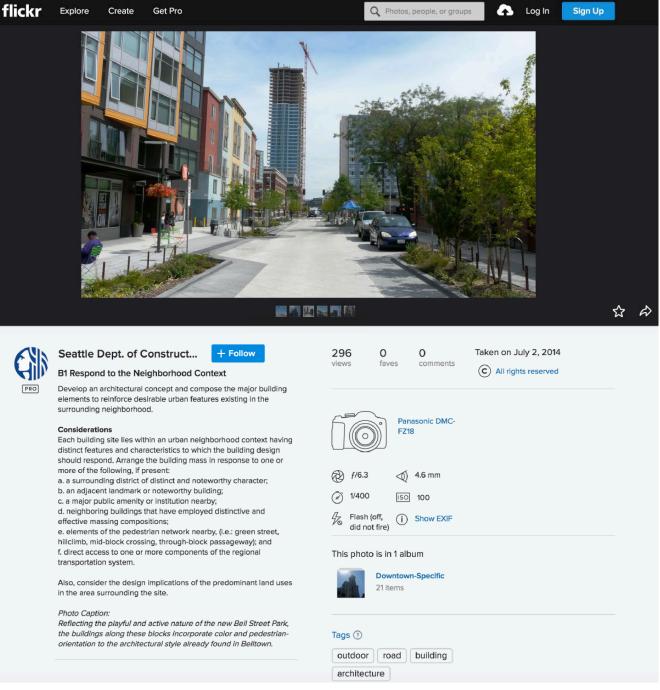
The LCY student team took photos over several days during the Spring of 2019. Here Irving Chu takes a close-up photo in Compass Plaza. IENNIE MEULENBERG

One precedent example that we were able to reference was the City of Seattle's Visual Design Guidelines hosted on the Design Excellence portion of the City's Design Review web pages (Seattle Department of Construction & Inspections, n.d.). We looked specifically at the "Downtown Examples" section, which links to a Flickr page hosted by the Seattle Department of Construction and Inspections. This Flickr page includes albums that relate to specific areas of Seattle's Design Review Guidelines, including a Downtown-specific album that we used as our primary source of reference (Seattle Department of Construction & Inspections, n.d.).

Seattle's downtown-specific album is organized by location, each represented by one photo that exemplifies specific sections of the downtown Design Review Guidelines. The relevant Seattle Design Review Guideline is listed under the photo. Each photo also has a unique "photo caption" that explains how the image portrays the specific section of the Design Review Guidelines.

We used this example as a precedent for our Design Review Image Catalogue with some modifications. For example, instead of listing text that relates to a design review guideline, we include a design element assessment of the location and the relevant City of Bellevue Downtown LUC. We also include more than one photo for each location, so the overall layout and organization of our Flickr page is somewhat different from the Seattle Flickr page.

The Seattle Flickr site is successful in showcasing examples of the Seattle Downtown Design Guidelines. By including the text from the corresponding guideline with each photo, the user is assisted in interpreting the photo. The photo caption also elaborates on how the built form shown in the photo meets the design guidelines. Having the Flickr site linked from the City of Seattle's Design Review page is essential because the Downtown Specific album is mixed in with many other unrelated Flickr albums. It would be hard to search for or find the Downtown Specific Flickr album within the Seattle Flickr page unless you knew the specific name of the album (which does not include the words "Design Review" or "Design Guidelines"). The site could be improved by including more than one photo of each location or by showing more than one location for each design guideline. This Flickr album does not allow public comment, which is a feature we considered for our Bellevue catalogue and ultimately decided not to include per the Bellevue land use team preferences.





Seattle "Design Excellence" Downtown-Specific Flickr Example SEATTLE DEPT. OF CONSTRUCTION AND INSPECTIONS DOWNTOWN SPECIFIC FLICKR SITE

DELIVERABLE INTERFACE SELECTION AND FLICKR SITE

The precedent locations in the catalogue showcase the intent of the new Bellevue Downtown Land Use Code (LUC) sections 20.25A.140-170, which emphasize livable design within the urban center of the city. We selected the deliverable interface through discussion with the City of Bellevue (discussed in the Analysis and Deliverable Section of this report and in the Appendix).

The Urban Design Team ultimately chose Flickr as the online platform for the Design Review Image Catalogue. The Flickr site includes photos of successful design characteristics and includes text such as: general location information, site design analysis, and relevant Bellevue LUC. A Flickr user manual is also included as a deliverable for the City of Bellevue. A detailed description of the interface selection process, the Flickr deliverable, and the user manual are discussed later in this report and in the Appendix.

PROJECT DEVELOPMENT

In January 2019, with input from the UW and our client, the City of Bellevue Land Use Division, we developed a Scope of Work that guided our project development. An initial meeting with Sally Nichols, our Bellevue Project Lead, and a subsequent meeting with the entire Urban Design Team guided project vision and direction, including suggestions on professionals to be interviewed for this project. The team focused our analysis of the Bellevue Land Use Code (LUC) to the design review sections of the Part 20.25A Downtown code because the City of Bellevue envisioned using this tool during the design review process.

Through discussions with the Bellevue Land Use Division Urban Design Team (UDT) we established the relevant built form types to include in our project. A midterm review and subsequent bi-weekly meetings helped refine the locations and project interface selection for our final deliverable. Details on each meeting and the resulting project direction from each meeting are provided in the Appendix.



LCY student researchers Jennifer Meulenberg and Irving Chu present their work at the year-end review for Masters in Urban Planning Professional Projects. TERI THOMSON RANDALL

INTERVIEWS WITH PROFESSIONALS

Our interviews with professionals in the urban design field in the Puget Sound region provided important data. We used these interviews to both gain a better understanding of the characteristics of successful urban design as well as to identify examples of locations around the Puget Sound region that exemplify good urban design. Each interview resulted in a unique take on successful urban design and local manifestations of successful urban design. We also noted similarities among the interviews.

While the professionals we interviewed did not specifically discuss the characteristics of good urban design through the lens of specific built form types, the characteristics that they discussed are directly applicable to the three built form types that we represented in the Design Review Image Catalogue. We synthesized the responses from our interviews and analyzed how this information could be applied to our built form types and the design element assessments in our Design Review Image Catalogue.

The following table summarizes each hour-long interview with the professionals' design suggestions applied to each of our three primary urban typologies: open spaces, through-block pedestrian connections, and alleys with addresses. A comprehensive table of our interview summaries can be found in the Appendix.

One of the most discussed design characteristics that relates to open space was the idea of providing active edges (retail use, restaurants or cafes, building lobbies, etc.) to open space. Four out of the six firms mentioned specifically that it was important to intentionally design for having activity border open spaces, with a few interviewees saying that at least two edges of an open space need to be "active." Continuing on the theme of activating space, interviewees mentioned that programing is essential to successful open space urban design. While it might not typically be considered an element of "urban design," Mark Brands from SiteWorkshop suggested that it should be actively planned for (Brands 2019). In other words, programming should be budgeted for and classified as infrastructure. Facilities and amenities such as power, water, restrooms, and storage facilities, which can be referred to as "soft programing," should be included in the design of public open spaces.

INTERVIEW SYNOPSES

Built Form Type	Suc
Open Space	 Provide active edges (a Programming is essen budgeted for and class Security should be cor Open spaces should be
Through-Block Pedestrian Connections	 Should be used to bre Spaces should have vis Unique building entrat Continuous design ele Can increase permeat
Alleys with Addresses	 Should be used to bre Spaces should have vis Unique building entrat Continuous design ele Discovery, movement,
General Design Characteristics	 Spaces should be desi Include greenery and Take advantage of nat Promote transparency

LCY STUDENT TEAM

ccessful Design Characteristics

- (at least two)
- ntial to open space, and it should be planned for (e.g.,
- ssified as infrastructure)
- nsciously considered
- be concentrated on the southern side of a block if possible
- eak down larger blocks and increase granularity
- visible connections and wayfinding
- ances can provide articulation
- ements can provide interest and rhythm
- bility for pedestrian access
- eak down larger blocks and increase granularity
- visible connections and wayfinding
- ances can provide articulation
- ements can provide interest and rhythm
- t, and "invitation in" can enhance varied spaces
- signed at a pedestrian scale l vegetation in designs tural light cy into buildings



Kenmore Town Center uses high quality materials for their external facade to draw the attention of street users. The site layout and building orientation creates a unique shape for users of the public realm. This building includes a community meeting space and other public facilities. IRVING CHU

Another major design element that was discussed during all of our interviews was the need to design open spaces at a pedestrian scale. This includes elements such as pedestrian scale lighting, seating, and breaking down larger spaces into smaller, more comfortable areas. One way that multiple professionals highlighted as a means to design at a pedestrian scale was to include articulation to create interest and to break up larger massing (Snider 2019). For example, creating "rooms" through landscaping, providing pockets of seating, or installing an interesting art piece can break down large spaces. This should not come at the cost of visual continuity, however. In order to create a more continuous visual experience of a space and to increase accessibility, the interviewees suggested minimizing the use of stairs and handrails in a space if possible. Instead, ramps or gentle slopes can create rhythm and an ebb and flow.

The professionals we interviewed also spoke to the importance of designing spaces that considered security (Owens and Miller 2019). While other professionals did not discuss security in specific terms, most did touch upon the need to design spaces that help users feel protected. Design elements that could improve perceived safety include good lighting, clearly marked connections through a space, and protection from natural elements. The designers who mentioned the importance of safety did not suggest other design elements to improve safety beyond these basic elements.

Considering the context of Bellevue in the Pacific Northwest, all of the professionals we interviewed mentioned the need to concentrate open spaces on the southern side of the block if possible and to include greenery and vegetation into the urban design of an open space. Multiple professionals emphasized using native plants and that integrating green stormwater infrastructure into an open space served both an ecological as well as design purpose. For example, Walt Niehoff and John Chau of LMN suggested that designs should aim to obtain the Salmon Safe Designer Accreditation, which can result in both innovative and restorative projects (Chau and Niehoff 2019).

As previously mentioned, our interviews did not focus on the three specific urban form typologies that we eventually decided on including in the catalogue. Thus, the professionals that we interviewed did not provide design characteristics that can be detailed at a level that only apply to through-block pedestrian connections or alleys with addresses, and many of the design characteristics previously described that are applicable to open spaces are also applicable to these two built form typologies. Most of the characteristics that were discussed pertain to all mid-block crossings, whether that be through-block pedestrian connections or alleys with addresses. Therefore, a general analysis of the successful design characteristics of these two built form types will be conducted in tandem.

These two built forms can successfully incorporate granularity and connections by breaking down larger blocks. In order to do this successfully, these built form types need to be designed with clear connections between the spaces that they join. While this does not mean that these spaces need to always be open and have straight connections, there does need to be an indication that the spaces are meant to be passed through. This can be done through a visible connection, wayfinding signs, or other types of maps that indicate that the space is a pedestrian streetscape connecting multiple spaces.

Similar to the successful design characteristics of open spaces, throughblock pedestrian connections and alleys with addresses are most comfortable when designed at the pedestrian scale, which can include pedestrian lighting, seating, and the creation of interest, articulation, and or rhythm at the pedestrian scale (Compton 2019). For example, continuous, pedestrian-scale, attractive lighting throughout the corridor can provide interest and rhythm, and unique building entrances can provide articulation and break up larger building masses. Vegetation and greenery are also important in through-block pedestrian connections and alleys with addresses. These built form types can use vegetation to filter stormwater and can take advantage of vertical vegetation, such as green-walls. Visible circulation is essential to through-block pedestrian connections and alleys with addresses and can reassure pedestrians that there are multiple and logical entry and exit points (Malda 2019).



Capital One Café incorporates multiple design features such as ceiling art, maximized solar access, weather protection, enclosed tiered seating arrangements, and a water fountain to create a comfortable leisure area adjacent to the local businesses. IRVING CHU



Post Alley serves as an example of an activated pedestrian through connection. Businesses have entrances on the alley. Pedestrian scale design such as seating and lighting makes the alley an inviting space through which to walk and linger. JENNIE MEULENBERG

LOCATION SELECTION PROCESS

We started our location selection process by following the criteria for successful open spaces gleaned from our literature review, pulling from works from Jan Gehl, Allen Jacobs, Arlie Adkins, Jane Jacobs, and the like. We also referenced the data and information from our interviews of the six firms. Through the synthesis of these two sets of information, we identified various design elements that focused our search for successful public spaces within the region. After we looked at the successful design elements we went about selecting a number of locations that represented the different form types found within Bellevue's Downtown LUC, which was refined further at our midterm review. These typologies had to exemplify the elements of successful urban design in public realm spaces identified by our literature and the nine individual professionals from the six firms. Examples of elements of successful design include legibility/ visible circulation, sense/perception of safety, downscaling size, active edges/programming, and aesthetic diversity/variation.

Our preliminary location list was comprised of the examples provided by the interviewed firms, projects suggested by the UDT, and projects that we identified through our own search for successful open spaces within the Puget Sound Region. During our interview process we asked the firms to share with us projects that best embodied their definition of success. From our discussions we selected a few of their recommended sites that we believed represented and covered the urban typologies chosen for our catalogue. During our initial meeting with the UDT on January 22 we received suggestions on locations to consider that the staff personally felt represented the Downtown LUC. We also used our experiences as Master of Urban Planning Students, employees of planning agencies, and residents of the Puget Sound Region to scout out successful open spaces within downtown and urban areas.

We sent out a project update on March 2 that contained a preliminary list of locations (see Appendix). We sent the update to the project faculty members and to the City of Bellevue Land Use Division Urban Design Team (UDT). The UDT categorized locations on the list based on priority, such as "High," "Low," "Maybe," and "Remove" locations. They also sent suggestions of locations that we could consider to include in our catalogue. From this update and subsequent feedback we updated our location list. This initial preliminary list of locations included: open spaces, streetscapes, through-block pedestrian connections, and alleys with addresses. All of the submitted examples that fell into the category of "streetscape" were removed at this stage in the process per City of Bellevue recommendations.



The twelve locations for this report were selected in several ways. Chophouse Row is an example of a location selected by the students and verified by the Bellevue Urban Design Team. JENNIE MEULENBERG

The Bellevue Land Use team worked with us during our mid-term review presentation to refine our final list of locations. The UDT proposed that we include more Bellevue-based projects on our list and remove projects that they deemed "low priority." By the end of this process we had a list of twelve projects, three from our interviewed firms, five from our personal field reconnaissance work, and four from the Bellevue Urban Design Team.

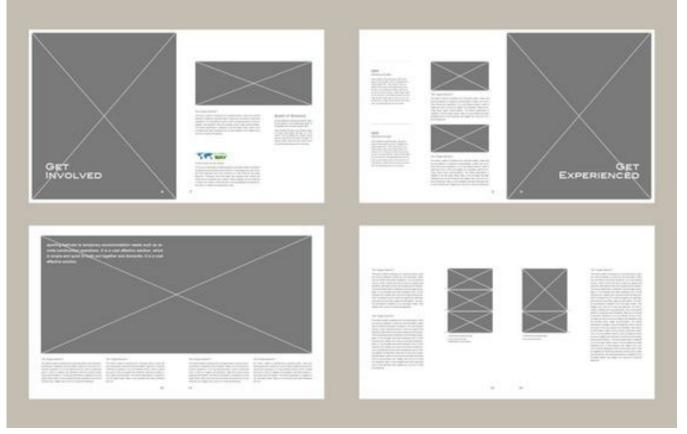
PROJECT INTERFACE SELECTION

The deliverable for this professional project is a Design Review Image Catalogue that contains images of development projects that best exemplify the type and caliber of design for Bellevue's Downtown Area. These precedent locations showcase intent of the new Downtown LUC sections 20.25A.140-170, which emphasizes livable design within the urban center of the city. The catalogue also incorporates a written design element assessment that succinctly describes how the precedent location is successfully designed.

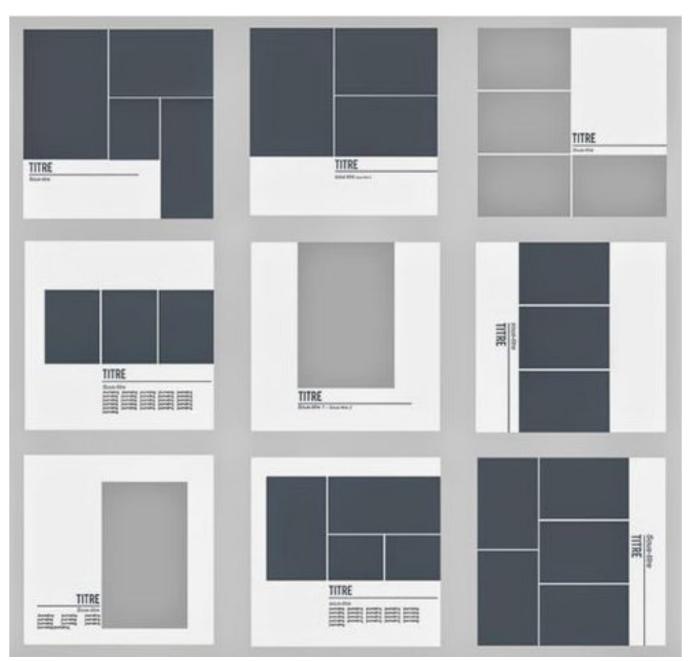
The ideal catalogue provides the City of Bellevue with a deliverable that is internally and externally accessible. It also has the potential to add future precedent projects by in-house City staff. At the mid-term review presentation to the City of Bellevue's Land Use Division, we provided three types of catalogue template designs for them to consider — a minimal graphic-design oriented template that is more user friendly, a heavier graphic-design oriented template that requires more design program skills, and an online website with a premade user interface platform.

Each design layout has its benefits and drawbacks for the intended client and audience. The first two designs provide the City with a catalogue that can be printed as well as saved on the City's Sharepoint site. They each embody the typical form of a catalogue, and they each require additional design program knowledge (the skills requirement can vary depending on the first or second template).

The third template would use the online website Flickr. Flickr was designed to be an online photo management and sharing application, showcasing photographers and their photographs. Having an interface solely designed for ease of organizing and sharing images is one of the major benefits of using Flickr to house Bellevue's Design Review Image Catalogue. The inability to convert the online catalogue into a printed or PDF catalogue is one of the major drawbacks of using Flickr.



Example of a "Minimal Graphic Design" project interface option. INSPIREDPHOTOSHOP



Another example of a "Minimal Graphic Design" project interface option. OZEN









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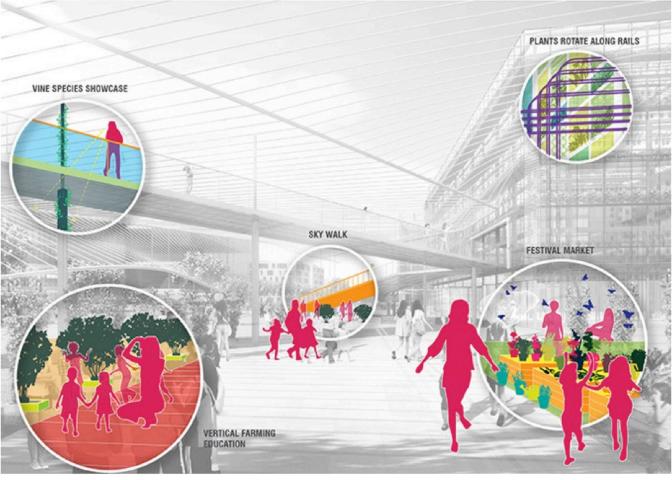
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Another example of a "Heavier Graphic Design" project interface option GIBSON

Example of a "Heavier Graphic Design" project interface option BAIANAT

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Wanting to prioritize the catalogue as a working document, the Bellevue Urban Design Team chose the third option of using Flickr as the platform to house their catalogue. They concluded that their time availability is limited and that they were more comfortable with an interface that required less design program involvement. Additionally, with the influx of projects to be reviewed by the Land Use Division UDT, they felt that they would not have sufficient time to create highly design-oriented images and graphics. The shared sentiment seemed to be that they wanted an interface or platform where they were not required to edit the images and could simply upload files and a written assessment. With that being said, they did show an initial interest in having a basic InDesign template with the photos and assessments that could be exported to a PDF to create a document that could be housed on the City's internal Sharepoint site. The UDT could select photos and provide written assessments to an IT staff member who would then update the InDesign document as new projects are added to the catalogue. Ultimately, however, the City decided that they would prefer to have the images as jpeg and png files and have the written text in a document so that they could adapt the catalogue to their needs after this project concluded. This would provide more flexibility than a PDF version of the catalogue.

PHOTOGRAPHY AND IMAGE COLLECTION

Architectural photography is typically associated with static subjects that are built and stationary. This allows for more time and thought to be put into framing and camera settings. To give us the most flexibility in our image making, we used equipment provided by the University of Washington that allows for manual adjustment of focal length, ISO, shutter speeds, and aperture settings. We shot the majority of our photos on a Cannon EOS REBEL T5i.

We studied the City's LUC in depth to identify areas around Bellevue and the Puget Sound Region that fit the criteria of each style of development. Studying the City's LUC as a data source was central as it provided guidance towards the goals and designs the City is trying to encourage, and thus what we needed to photograph for the design catalogue. The photographs showcase key proposed site/landscape elements including structural buildings, street furniture, lighting facilities, landscaping, materiality and people's interaction to those elements.



The students captured various elements of the space, including materiality and textures, such as these pavers near Elements Too. JENNIE MEULENBERG

After we finalized our list of preliminary locations with the City of Bellevue, we conducted background research on each of the locations, including physical addresses and google street view shots to scout out the elements we wanted to photograph. We deprioritized project sites that were suggested by the design firms that we interviewed because we were hoping to receive photos of the sites from the firms. With that in mind we organized our photo shoots around location convenience and clusters of projects. We also endeavored to photograph during a consistent time of day and weather: overcast or sunny (not drizzle or rain), and between two to three hours before sunset. All of our site projects were located within the vicinity of an urban downtown area.

We decided that a uniform style of photography between the two of us would benefit our catalogue and its users. To achieve this, we visited the first six locations in Bellevue together, and compared and discussed our photography styles midway and at the end of each photography session. We then divided the remaining six project sites evenly between the two of us.

Prior to taking photographs of each location, we would spend a few minutes observing the area. For example, we would note the entrances and public connections to the space and locate where the active areas, landscaping designs, and other features were. We then composed our images to feature these elements. At each location we would photograph the design elements discussed in the Downtown LUC from various angles and focal lengths. For example, if we wanted to capture the element of wayfinding in a through-block pedestrian connection, we would take photos at various angles of the signs at that location. A more specific example would be at the University Village Apple Store location, where, due to its form and location within the overall lifestyle development shopping center, particular attention had to be considered when framing the image to be captured. The large wooden canopy and open-air design concept of the building provided a large area adjacent to pedestrian paths, wayfinding elements, and art features, but in order to capture the intent of the canopy for weather protection purposes, we captured the canopy in a wide shot and photographed the other elements in tighter shots. We also made sure to capture an overall wide shot that contained a number of the specific design elements. These wide shots became the main photo for each location on the Flickr site.



Medium shots and close-ups help portray specific elements of the Bellevue Downtown Land Use Code Design Guidelines, such as the desire to provide pedestrian seating. IRVING CHU

In total, we captured more than 650 photographs for the 12 locations in our catalogue. Many of our initial photos were taken mid-working day, after the lunch rush and before the end of the typical working day. Upon seeing our initial batch of Bellevue photographs, City staff suggested that we capture photos at times when more people were interacting with the spaces.

We were aware also of our relationship with the space while we were taking photos, keeping in mind Mia Hunt's concerns and suggestions regarding urban photography described in our Literature Review. For example, Hunt writes that photos should not be merely "objects of analysis or illustrations... but a mode of argument and creative performance" (Hunt 2014). We wanted to capture images that highlight the feelings, experiences, and textures of place, and that capture an honest representation of the location (Hunt 2014). We did this by taking time to observe the space and discuss the space with each other before we took photos. We also aimed to take photos of people using the space so that we would capture how the space truly functions in its context and design.



University Village uses a semi-enclosed space to house a large water feature, creating a multi-sensory space for shoppers to enjoy through sight, touch, and sounds. IRVING CHU

The deliverable for this project includes a Flickr website and account. We also provided the City with a file package that contains image files and an outline of each photo's assessment. Both of these deliverables contain the location photos, design element assessment, and relevant Bellevue Downtown Land Use Code. Twelve locations are included in these deliverables:

- 1. City Center Plaza (Open Space Bellevue)
- 2. Symetra (Open Space Bellevue)
- 3. Elements Too (Open Space Bellevue)
- 4. Compass Plaza (Open Space Bellevue)
- 5. Capital One Café (Open Space Bellevue)
- 6. Civica (Open Space Bellevue)
- 7. Kenmore Town Square (Open Space Kenmore)
- 8. University Village (Open Space Seattle)
- 9. Harbor Steps (Through-Block Pedestrian Connection Seattle)
- 10. Amazon Galleria (Through-Block Pedestrian Connection Seattle)
- 11. Chophouse Row (Alleys with Addresses Seattle)
- 12. Post Alley (Alleys with Addresses Seattle)

Specifics about these locations, including their addresses and individual assessments, can be found on both the Flickr page as well as in the file package. All locations are presented in a similar format.

The Bellevue Design Review Image Catalogue Flickr site is located at: https://www.flickr.com/photos/165157629@ N02/albums.

LOCATION PHOTO TYPES AND ASSESSMENT TEXT

Title	Image	Text
"Main Photo"	Photo depicting a general overview of the space	 Address Designer Area (square footage) Written design element assessment — formatted in bullets — of the successful design elements within the space Code relevant to the entire location
Specific successful design elements (multiple). For example: "Pedestrian Scale Design" or "Wayfinding"	Photo depicting the specific successful design element	 6. Written design element assessment — formatted in bullets — of the successful design element depicted in the photo 7. Code relevant to the design element

LCY STUDENT TEAM

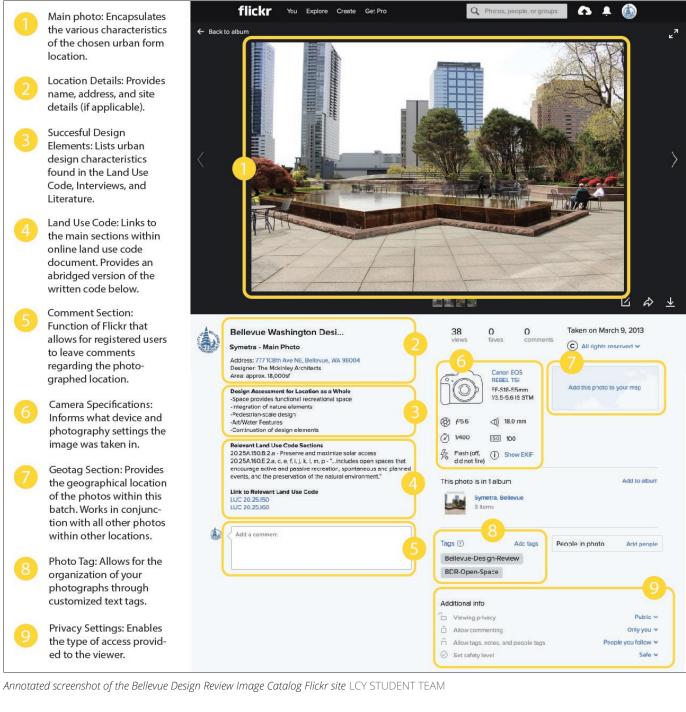
The following shows an annotated version of the main photo for each location. Each of the photos after the main photo contain the relevant design element assessment and code related to the specific design element portrayed in the photo.

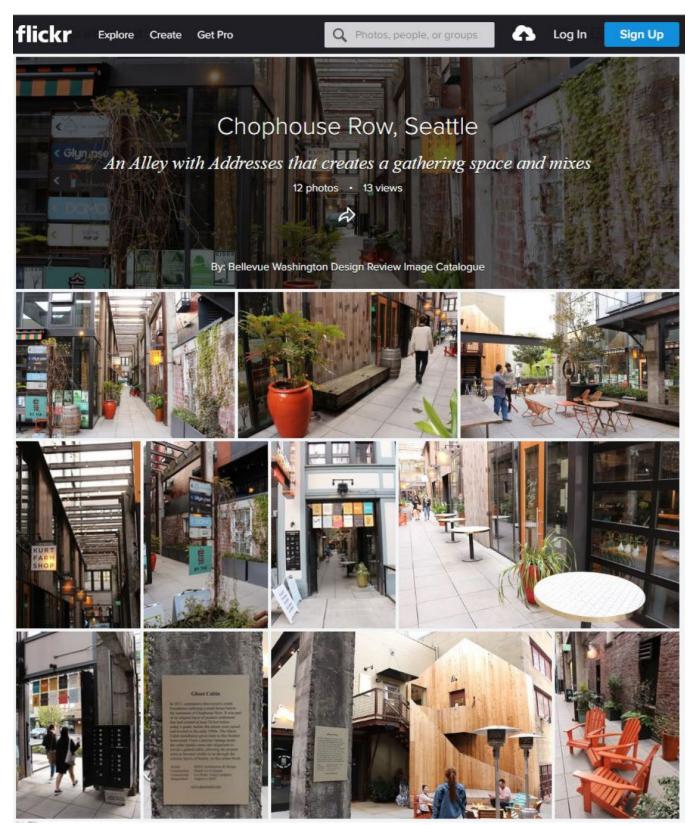
With the decision to use Flickr to house the Bellevue Design Review Image Catalogue, our team expanded the deliverable section to include a user manual for the online platform to aid the City of Bellevue in adding to the catalogue. The manual:

- Informs beginning users of the purpose of the Flickr site
- Instructs users on how to use the platform
- Explains how to organize and present the catalogue

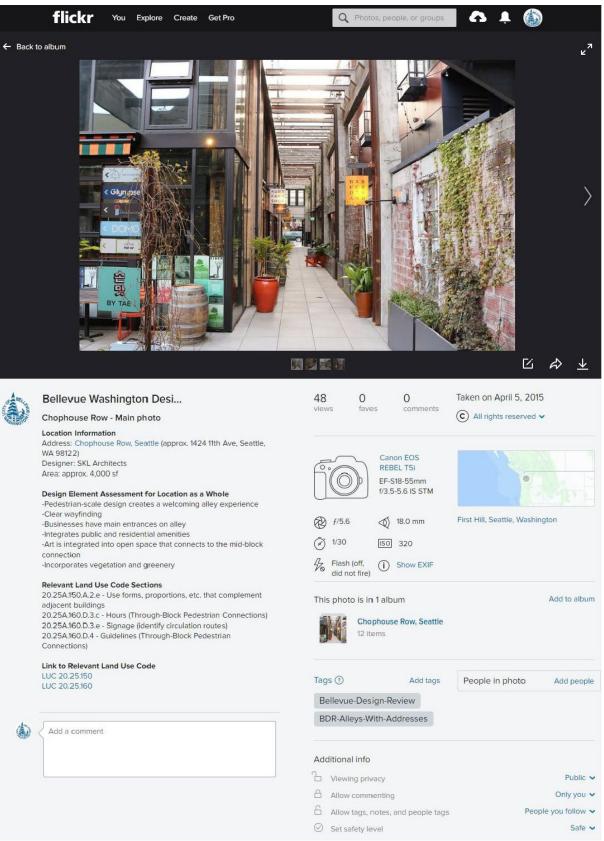
This manual is attached in the Appendix.

The following pages are an example of one location album from the Flickr site. The initial location album landing page, main photo, and subsequent specific successful design element photos are each shown for Chophouse Row in Seattle.





Location album landing page for Chophouse Row in Seattle with built form type description LCY STUDENT TEAM





sections, and link to relevant Land Use Code LCY STUDENT TEAM

Chophouse Row main photo with location information, design element assessment for location as a whole, relevant Land Use Code

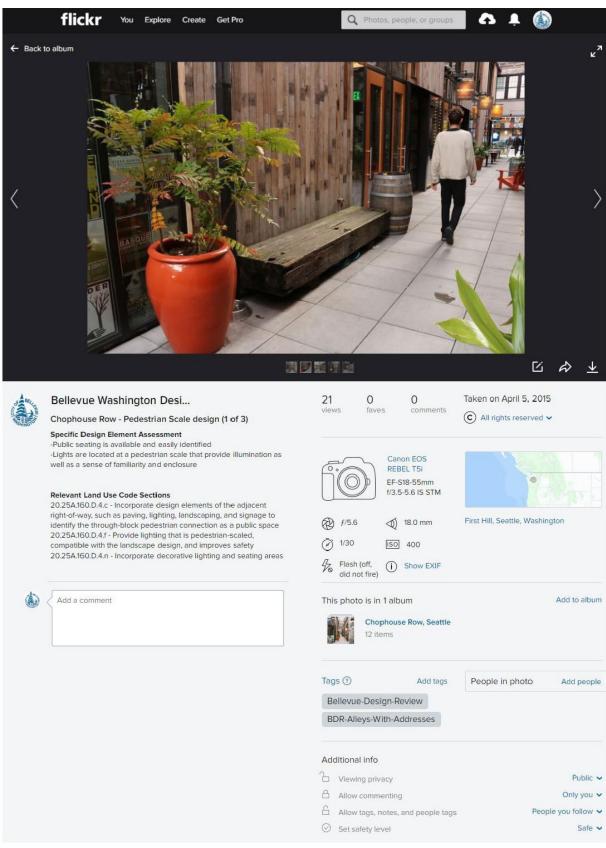


Photo and assessment of the specific successful design element of pedestrian scale design (1 of 3) LCY STUDENT TEAM

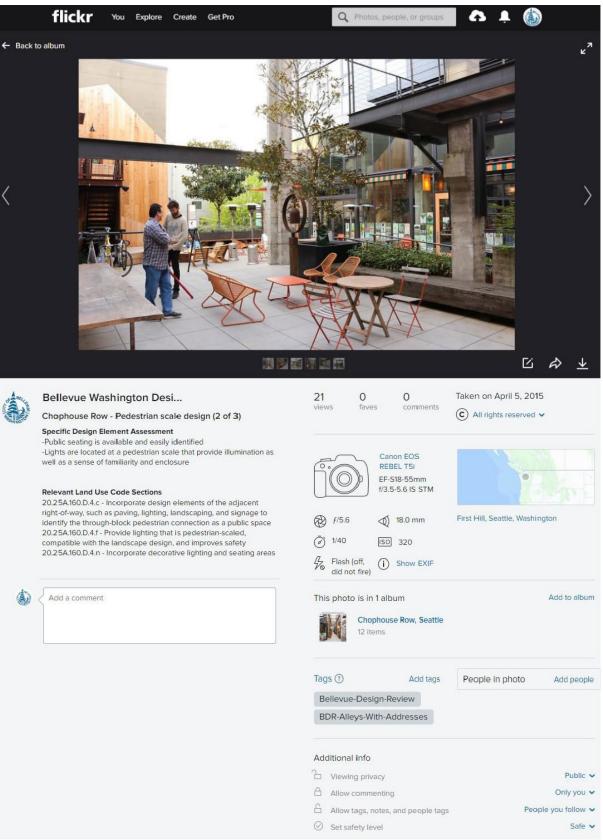






Photo and assessment of the specific successful design element of pedestrian scale design (2 of 3) LCY STUDENT TEAM

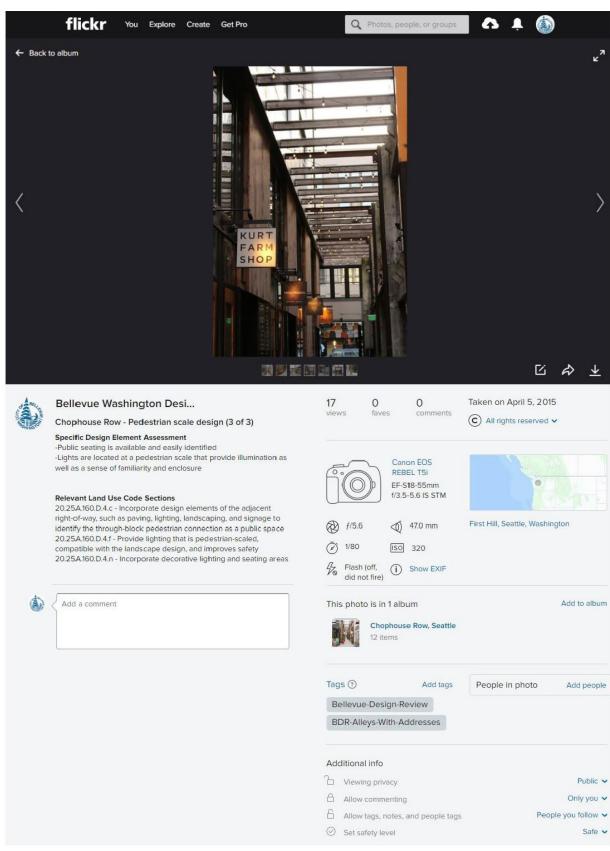


Photo and assessment of the specific successful design element of pedestrian scale design (3 of 3) LCY STUDENT TEAM

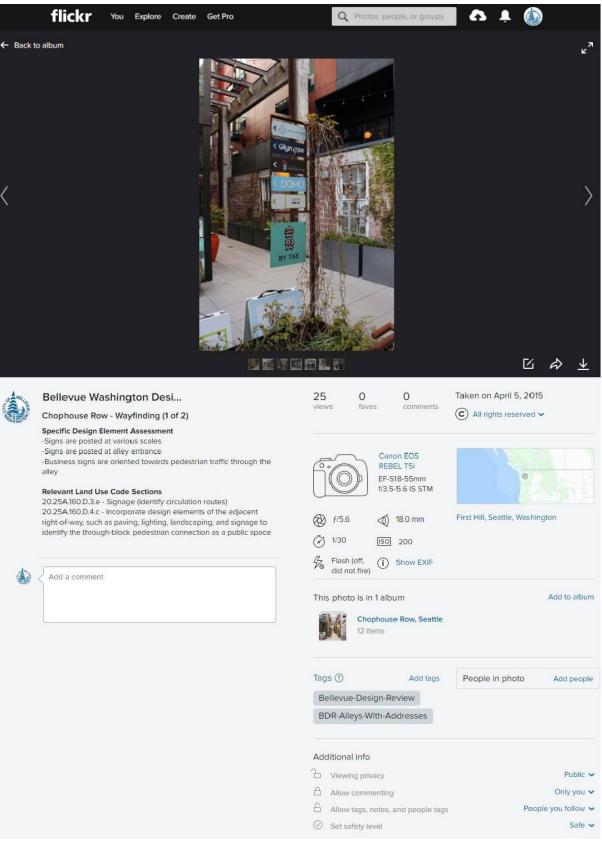






Photo and assessment of the specific successful design element of wayfinding (1 of 2) LCY STUDENT TEAM

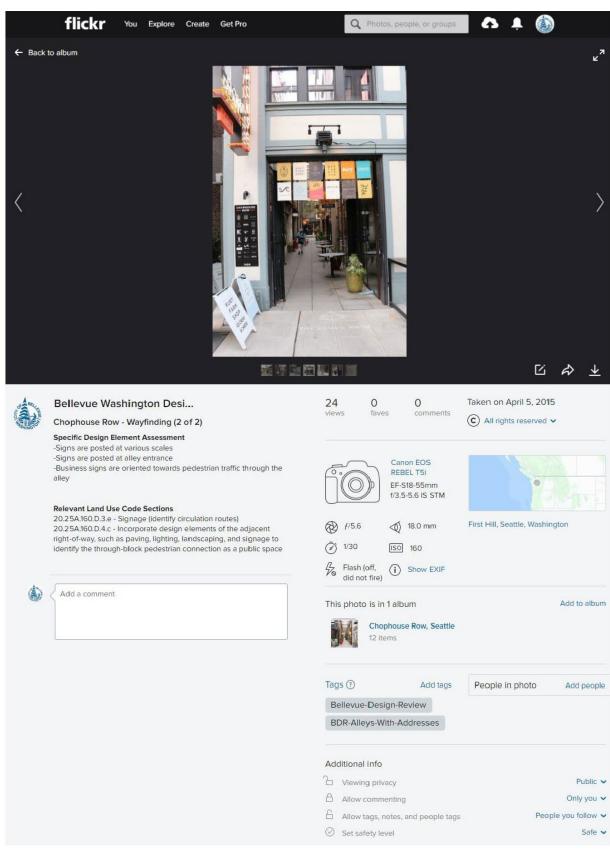


Photo and assessment of the specific successful design element of wayfinding (2 of 2) LCY STUDENT TEAM

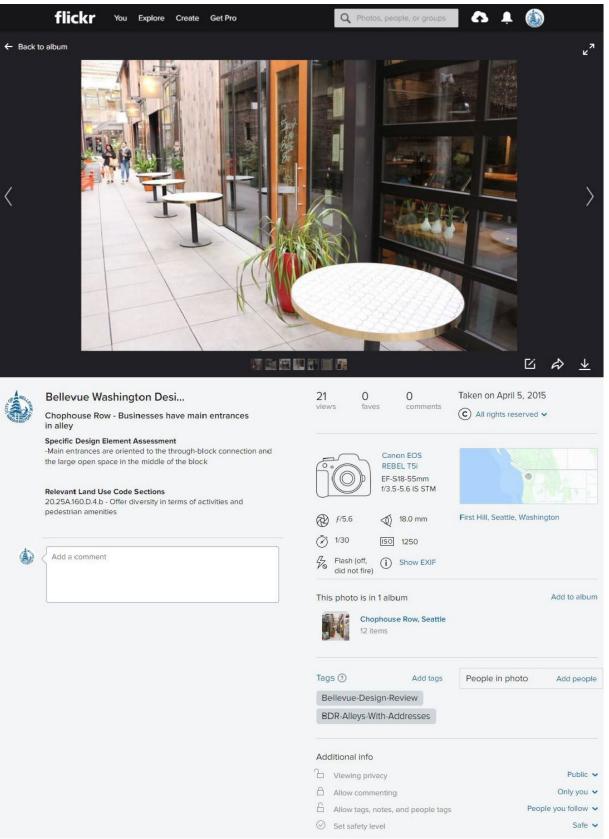




Photo and assessment of the specific successful design element of business entrances located in an alley LCY STUDENT TEAM

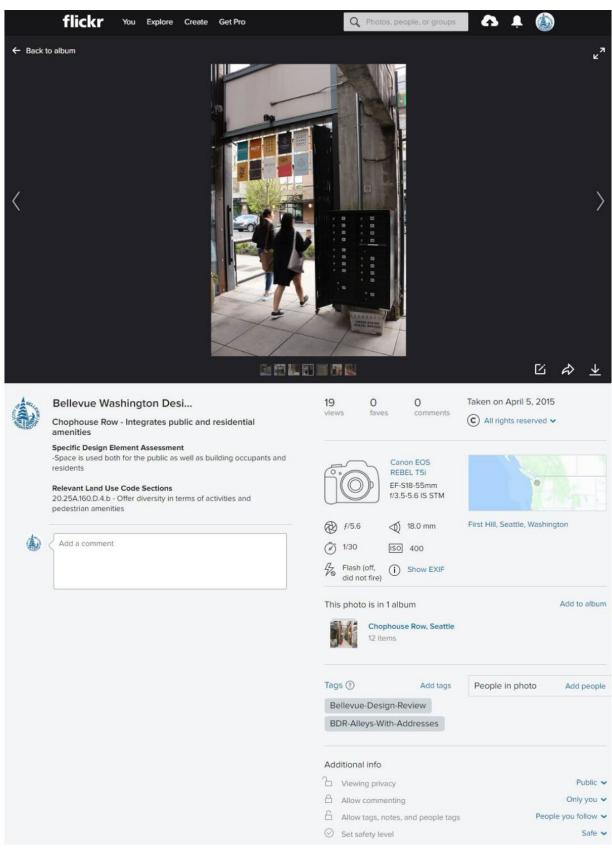
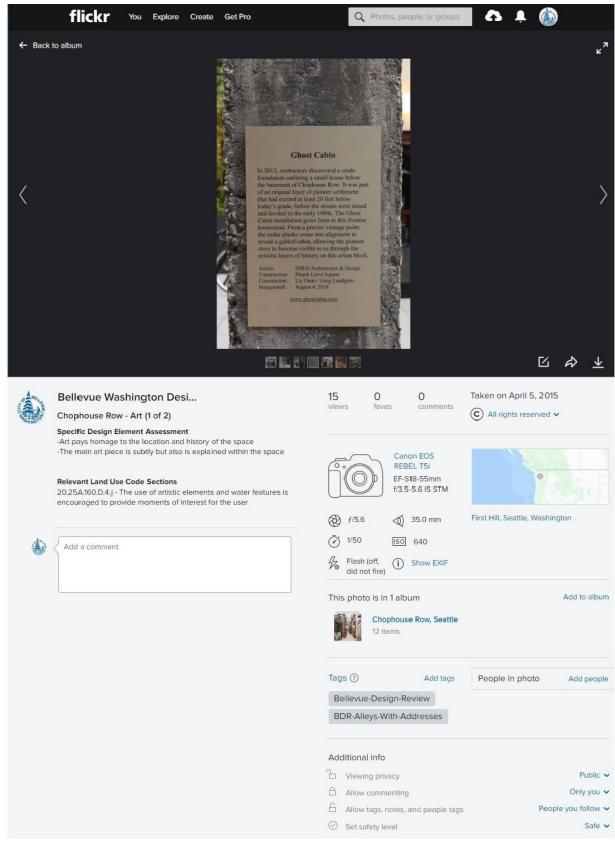


Photo and assessment of the specific successful design element of integrated public and residential amenities LCY STUDENT TEAM





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Photo and assessment of the specific successful design element of integrating art into the space (1 of 2) LCY STUDENT TEAM

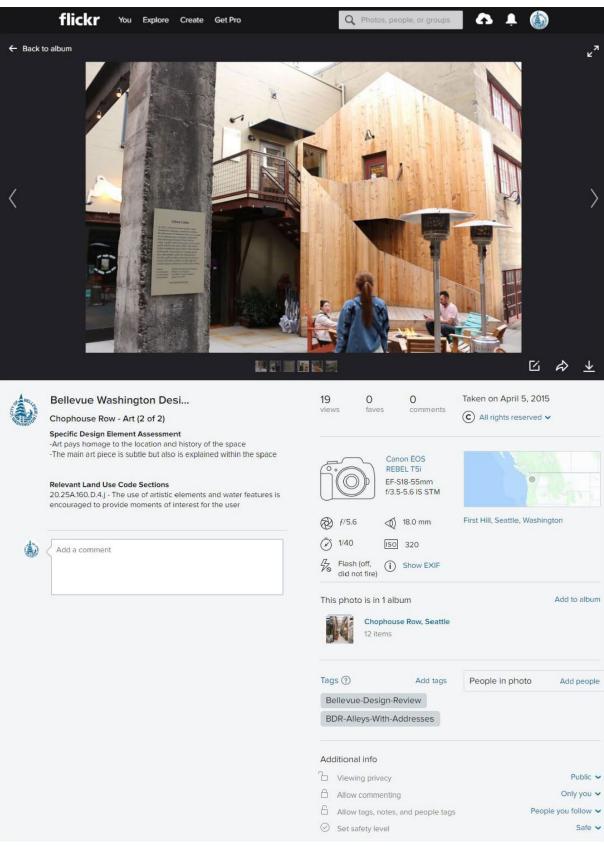


Photo and assessment of the specific successful design element of integrating art into the space (2 of 2) LCY STUDENT TEAM

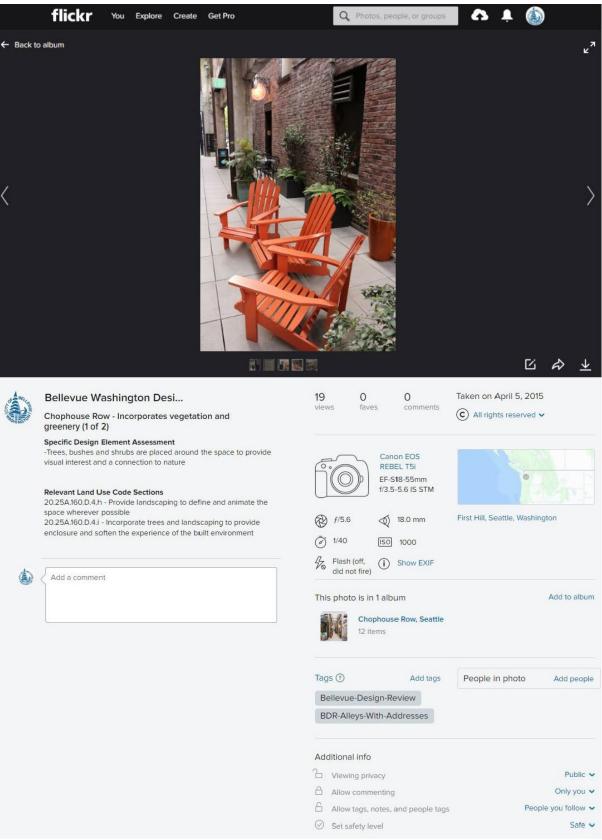




Photo and assessment of the specific successful design element of incorporating vegetation and greenery (1 of 2) LCY STUDENT TEAM

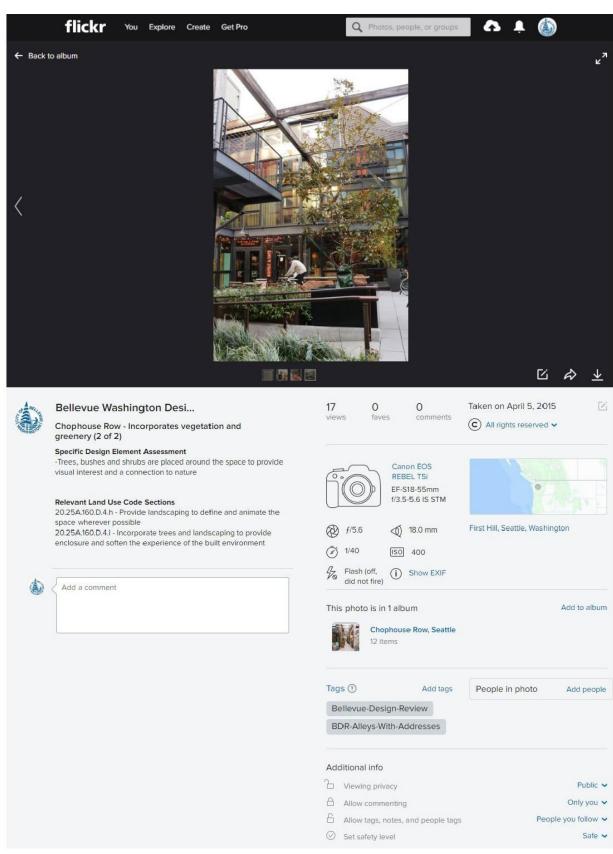


Photo and assessment of the specific successful design element of incorporating vegetation and greenery (2 of 2) LCY STUDENT TEAM



If the LCY team were to continue this project they would want to include more examples of through-block pedestrian connections and alleys with addresses. Alley 111 in Bellevue is one example of a location that could be included in another iteration or future development of this image catalog. JENNIE MEULENBERG

REFLECTION

RECOMMENDATIONS

EXPAND CATALOGUE TO INCLUDE MORE EXAMPLES OF THROUGH-BLOCK PEDESTRIAN CONNECTIONS AND ALLEYS WITH ADDRESSES

If we were continuing this project we would want to include more examples of through-block pedestrian connections and alleys with addresses. We included two examples of each, thereby showcasing how these built forms can be designed successfully, and providing sufficient representation of these built forms for our client. However, because there are only two examples of each there is not a large amount of variety in what is shown.

EXPAND CATALOGUE TO INCLUDE THE STREETSCAPE URBAN FORM

In addition, the Bellevue Urban Design Team was satisfied with only having open space, through-block pedestrian connections, and alleys with addresses represented in our project. They were not as concerned with including the streetscape urban form type in the initial catalogue. With streetscapes being a vital urban form type discussed by many professional firms, literature pieces, and the Bellevue Downtown Land Use Code (LUC), the next iteration of this catalogue should include streetscapes when looking at enhancing the user experience through walkability, active connections, and sense of place. Bellevue defines and lays out the importance of streetscapes and its relation to public spaces in section 20.25A.170 of their LUC. The intent of the streetscape is to define the pedestrian realm, with the main purpose of providing a continuous, visually rich pedestrian experience where active use is present, usually along the ground to second-floor street levels.

We propose that streetscapes would be important to include because people travel and experience the city through the streets. Streets are usually the main ways to interact with the city outside of the confines of vehicular or public transit walls. Streetscapes, similar to through-block connections and alleys with address, revolve around the importance of active use on main pedestrian levels. These built forms share common design elements that can be enhanced to improve the livability and user experience of those spaces. For example, streetscapes have the ability to visually and functionally break down large blocks to increase granularity through the promotion of unique building entrances and building façade styles. In conjunction with softscaping, hardscaping, and wayfinding techniques, these design elements have the ability to increase interest and design rhythm for pedestrians.

USE THE FLICKR "COMMENTS" FEATURE TO ENHANCE COMMUNICATION WITH DEVELOPERS

We also suggest that the urban design team use the "comments" feature on the Flickr site to interact with the photos and assessments. For example, the UDT could comment on photos that they find particularly helpful or on specific design elements shown in the photos that they would like to see incorporated in proposed design plans.

USE CATALOGUE IN CONJUNCTION WITH IN-PERSON DESIGN DISCUSSIONS

Based on our literature review, we recommend that Bellevue integrate this online Design Review Image Catalogue with in-person design discussion. Online urban design tools work best in conjunction with faceto-face interaction where, in the case of this project, the urban design team can explain how a developer or designer's plans fit with the Bellevue Downtown LUC and the examples shown in the catalogue.

SEEK COMMUNITY INPUT

We also believe the City would benefit from widely promoting this catalogue not only primarily on their City website, but to all residents on their MyBellevue programs and other public-private community outreach groups. The Flickr platform is designed to encourage the community to interact with the photographs. In the case of this Flickr site, these photographs and assessments are direct manifestations of the City's LUC, which is purposed to promote livability within the downtown public space areas. It would be beneficial to understand the public's experience and gain feedback on the usability of the catalogue. This catalogue could potentially facilitate direct dialogue between Bellevue residents and City staff who guide the urban form design experience of Bellevue.

PROJECT LIMITATIONS

One limitation of this project was that we were unable to add more location examples to the Design Review Image Catalogue. Because other aspects of this project took significant time, such as the interviews that were conducted, we were not able to select as many examples as we had initially thought we might. Additionally, because the relatively wet and cloudy weather during the time frame when we were able to take location photographs, we were not able to get all of the photos that we wanted, such as photos with the public interacting with the space, for all locations.

During many conversations with the City of Bellevue Land Use Urban Design Team, the team made clear to us that they had limited time to devote to graphic design. They advised us to create a catalogue that was user friendly and that had a relatively easy learning curve so that staff wouldn't need to spend time on graphic design. With this limitation guiding the design portion of our catalogue, we chose to create a mock catalogue that would have originally been the deliverable had the City prioritized the aesthetic graphic design look (See Appendix). This design required more advanced Adobe Creative Suite skills, but the content within it remained the same as is presented on the Flickr site. Having a more design-polished catalogue provides a clearer picture of what urban design elements are being highlighted. Unlike the Flickr website, annotations and callouts are possible in this format, which offers a stronger user connection between text and image. A drawback of this mock design-focused catalogue is the purposeful removal and cropping of external contexts. This becomes an issue when context is a priority in portraying a fuller understanding of an area, which can be important for certain photos in this project.

The very nature of 2-D photography also limited our project somewhat, in that we had to rely on the positioning of landscaping, furniture, people and other surrounding objects to establish depth and scale. Additionally, while it is possible highlight prominent design characteristics through the use of tight compositions, the technique has its drawbacks in that the surrounding context is excluded from the frame. In these ways, the 2D photograph does not fully capture the space as we experience it in real life. Other imaging technologies can provide a more holistic assessment of spaces. For example, 360-degree cameras can eliminate the problem of omitting details in a framed or cropped image, but they still have the limitations of depth perception and the lack or documenting active use over time. Video or 3-D capturing technologies are more encompassing space assessment techniques. Video conveys a sense of time, which can depict active use. Video also widens the viewer's understanding of the space by moving the viewer through a continual projection of the area. By comparison, 3-D virtual reality captures space and scale, but may be limited in its ability to capture time and active use.

3-D technologies are already being used within the architecture and realestate fields to help designers, buyers, and sellers have a more immersive experience of buildings, homes, and offices. Since the functionality of these tools are quite similar across these different fields, they can also be brought into urban planning and design processes as well. Because of this, this project could have benefited from incorporating other photography or imaging methods to showcase examples of successful urban design.



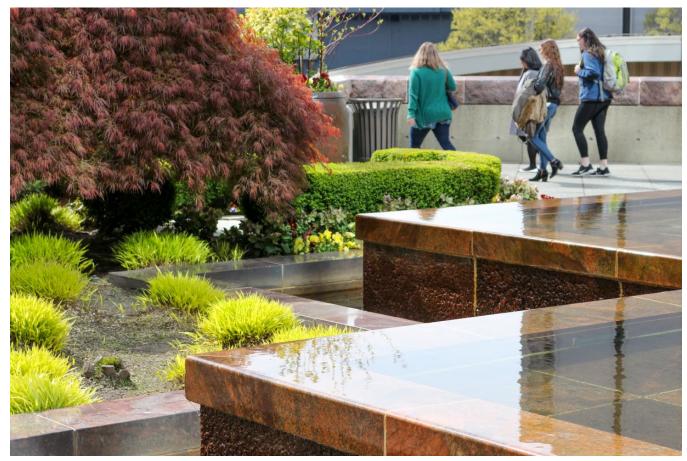
LCY student researcher Irving Chu discusses the project with Carol Ross, Community Relations Coordinator with Bellevue's Department of Community Development. TERI THOMSON RANDALL

CONCLUSION

We hope the City of Bellevue Land Use Division Urban Design Team will use this report and catalogue to promote more livable and vibrant development in Downtown Bellevue. [The following sentence would make a great pull quote.] By providing developers and urban designers with a direct and visual tool, communication between the two parties can be more efficient, and the developer's energy, innovation, and quality work will hopefully benefit. [The following sentence would make a great pull quote.] It is our hope that this Design Review Image Catalogue will shift the type of understanding developers and designers have about the Bellevue Downtown Urban Design Guidelines: from words on paper to a visual representation of what the Land Use Code should look like. We also hope that other municipal or professional entities that aim to create a Design Review Image Catalogue can learn from our experience.

Local urban design professionals were invaluable to our process and the interviews we conducted were extremely useful to our location selection and analysis. Future projects or a continuation of this project would benefit from communication with local urban design professionals along various steps in the catalogue creation process. We also found that it is essential to understand the capabilities, both graphically and legally, of the municipal government that the catalogue is being created for, and would suggest other municipalities explore these considerations and constraints prior to developing an online design catalogue.

It is our hope that this Design Review Image Catalogue will shift the type of understanding developers and designers have about the Bellevue Downtown Urban Design Guidelines: from words on paper to a visual representation of what the Land Use Code should look like.



A large reflective water feature serves as the prominent visual element of the Symetra Center plaza in Bellevue, engaging the natural environment and providing visual interest. IRVING CHU

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APPENDICES

APPENDIX A: LITERATURE REVIEW

INTRODUCTION

Our literature review informed the design and creation of the Design Review Image Catalogue as well as our criteria for "successful" designed urban spaces. The literature we examined largely pertains to five categories: Livability, the Bellevue Downtown Land Use Code (LUC), Successful Urban Design Characteristics (of open spaces, through-block pedestrian connections, and alleys with addresses), Visualization Tools and Techniques (including project precedents), and Urban Photography Methods and Considerations.

LIVABILITY

The City of Bellevue, Washington, recently adopted a "Downtown Livability Initiative" that resulted in significant updates to its Land Use Code. These LUC updates support the City Council's vision for a downtown that is a vibrant, mixed-use center by improving the pedestrian and residential environment and by creating urban villages to enhance the identify of downtown (City of Bellevue n.d.). We wanted to understand the development and use of the term "livability" to better understanding the LUC and the design intentions that should be conveyed in our catalogue.

In its Comprehensive Plan, the City of Bellevue views downtown evolutions through a "non-linear progression in which cities are relatively more viable, livable, or memorable during different stages of their growth," with Bellevue currently positioned between Viability and Livability (City of Bellevue 2017). Because of this, the City of Bellevue has recently implemented policies and initiatives that push the city closer to the livability dimension and towards creating a downtown that serves as an urban center. Bellevue's Comprehensive Plan states that "Livability is about quality; about weaving an urban fabric rich in resources and quality of life. Livable cities provide welcoming places to eat and sources of entertainment. Livable cities develop parks and open space" (City of Bellevue 2017).

The term livability has grown in prominence in urban design literature and theories, municipal documents and plans, and urban organizations over the past 30 years. Although growing in prevalence, the term livability does not have a singular definition. At its most basic definition, livability can be defined as: 1) survival expectancy or 2) suitability for human living (Merriam-Webster, n.d.). However, this does not fully capture the intent of the word when applied to the urban context. According to the National Research Council, the concept of livability "...embraces cognate notions such as sustainability, quality of life, the 'character' of place, and the health of communities" (National Research Council 2002). Furthermore, livability is an "ensemble concept," "whose factors include many complex characteristics and states" (National Research Council 2002; Myers 1988). Livability can also encompass the concept of "quality of life" and "broad human needs ranging from food and basic security to beauty, cultural expression, and a sense of belonging to a community or a place" (National Research Council 2002).

One of the first urban thinkers behind the modern concept of livability is the notable New York writer Jane Jacobs. In The Death and Life of Great American Cities (1961), Jacobs discusses the state of urban planning and its detrimental impact on cities. She goes on to suggest ways in which planners should instead look at and plan for cities. For example, she suggests that "the science of city planning and the art of city design, in real life for real cities, must become the science and art of catalyzing and nourishing these close-grained relationships," and that by deliberately inducing mixed primary uses, short city blocks, diverse building stock, and a dense population, a city can generate diversity; in short, she states that "... planning can induce city vitality" (Jacobs 1961). While she does not necessarily use the term "livability" or the phrase "livable urbanism" in this book, her writings point to a desired urban fabric that leads to "workable and vital cities" (Jacobs 1961).

Around the time that Jane Jacobs was observing and writing about her ideal of an urban environment, Donald Appleyard and others actively explored the concept of "livability," particularly in the context of traffic. In the 1981 book Livable Streets, Appleyard, Gerson, and Lintell examine "what it is like to live on streets with different kinds of traffic" and search for ways "in which more streets can be made safe and livable" (Appleyard, Gerson, and Lintell 1981). Building on this work, Allan Jacobs and Donald Appleyard produced another notable work in 1987 that influenced the emergence of livability as an urban design standard, titled "Toward an Urban Design Manifesto." These authors propose seven goals that they deem essential for the future of a good urban environment: livability; identity and control; access to opportunity, imagination and joy; authenticity and meaning; open communities and public life; self-reliance; and justice (Jacobs and Appleyard 1987). Most notably, they suggest that within the concept of livability the

> "...city should be a place where everyone can live in relative comfort. Most people want a kind of sanctuary for their living environment, a place where they can bring up children, have privacy, sleep, eat, relax, and restore themselves. This means a well-managed environment relatively devoid of nuisance, overcrowding, noise, danger, air pollution, dirt, trash, and other unwelcome intrusions" (Jacobs and Appleyard 1987).

The authors go on to describe five physical characteristics that must be present to evoke a positive response to the authors' proposed goals and values:

"...livable streets and neighborhoods; some minimum density of residential development as well as intensity of land use; an integration of activities — living, working, shopping — in some reasonable proximity to each other; a manmade environment, particularly buildings, that defines public space (as opposed to buildings that, for the most part sit in space); and many, many separate, distinct buildings with complex arrangements and relationships (as opposed to few, large buildings)" (Jacobs and Appleyard 1987).

The authors found that these characteristics, the first of which is "livable streets and neighborhoods," are present in the grain of a good city. By listing livability as the first of the five most important physical characteristics to create a positive urban life, the authors are suggesting that the concept of livability, which was a relatively new concept at the time, is a prerequisite of a good urban fabric (Jacobs and Appleyard 1987). The emphasis of livability as both a goal and a descriptor of desirable urban characteristics highlights livability as a key tenant of urban design for Allan Jacobs and Donald Appleyard. Jan Gehl has written extensively about what leads to a good urban fabric on the pedestrian scale. While Gehl does not specifically use the term "livability" in the book Life Between Buildings: Using Public Space, he uses international examples, thoughtful diagrams, and explanatory descriptions of how to design the public realm to improve the quality of life of those living in urban spaces (Gehl and Koch 2006). His design ideas are tailored to what makes pedestrians feel comfortable, safe, and welcome in the public realm. For example, he suggests the scale at which building articulation should occur in order to provide interest to passersby and to break up monotonous façades. He also speaks to the necessity of quality pedestrian connections that make urban areas more "digestible," i.e., more livable, for residents and visitors. For example, having increased opportunities for access can help pedestrians feel more at ease while walking through a larger-scale urban environment.

Following these and other works that emphasize the need to reexamine urban design to make more livable, vibrant places for people, the concept of livability was developed and applied through organizations such as the Smart Growth Network and the Congress for the New Urbanism.

BELLEVUE DOWNTOWN LAND USE CODE

The City of Bellevue identified the Bellevue Downtown Land Use Code (LUC) as the primary source for guiding the content of the catalogue. The LUC includes Design Guidelines for various overlay districts around Bellevue, including a new section of code for Downtown Bellevue, called "Part 20.25A Downtown." The citywide LUC has nine chapters that describe the land use and zoning laws for the city.

Within the LUC we focused specifically on the design review sections of Part 20.25A Downtown Code because the City of Bellevue envisioned this tool as something to be used during the design review process. The specific sections of code that we read and applied to our locations were LUC 20.25A.140-170, the "Downtown Design Guidelines." The specific sections of the Design Guideline Code include: Section 20.25A.140 Downtown Design Guidelines Introduction; 20.25A.150 Context; 20.25A.160 Site Organization; and 20.25A.170 Streetscape and Public Realm. Within these sections there are general design guidelines that apply to building height and form, as well as the development's relationship to open spaces and transportation elements. Within the Site Organization section, key elements included On-Site Circulation, Building Entrances, Through-Block Pedestrian Connections, and Open Space. Within the Streetscape and Public Realm section, key elements included: Streetscapes, Right-of-Way Designations, Alleys with Addresses, and Upper-Level Active Uses.

SUCCESSFUL URBAN DESIGN CHARACTERISTICS

All types of planning tools need to be grounded in the theory or question of "what is good urban design?" Visualization tools that are not based on urban design principles can oftentimes be rendered useless or run contrary to a city's design priorities. Many architects, landscape architects, urban planners, and urban designers have written on the vast topic of urban design and the spaces that contribute to successful built form.

Through discussions with the Bellevue Urban Design Team (UDT) it was established that the three form typologies that were most important to include in the catalogue were 1) through-block pedestrian connections, 2) open space, and 3) alleys with addresses. These spaces were selected from the Bellevue Downtown LUC sections 20.25A.020.A and 20.25A.160.D.2. The UDT viewed the other typologies present in the LUC — which mostly relate to aspects of the streetscape or elements that are more architectural than public-realm oriented — as being sufficiently addressed in the design plans they were receiving from developers and designers.

GENERAL SUCCESSFUL DESIGN CHARACTERISTICS

Although there are specific design characteristics that apply to each of our three specific built form types, there are a few general design characteristics that are inherently important to all built form types, including sense of place, active connections, and pedestrian walkability.

Sense of Place

Urban guality and sense of place are two important concepts that have arisen throughout the history of urban planning. Urban designers such as Gordon Cullen focus on public-facing design styles, decoration, amenities, and the way buildings orient themselves towards open spaces, landmarks, and so forth (Cullen 1971). Cullen encourages new planners to think not only visually but to see the physical built environment as making "one ensemble" (Cullen 1971). Other urban designers, such as Kevin Lynch and Christopher Alexander, emphasize the importance of grounding a sense of place into the psychology of the user and are motivated by the importance of tools such as "mental maps," where people imagine areas of a place which are most important and relevant to them (Lynch 1960; Alexander, Ishikawa, and Silverstein 1977). Tools such as these are used as internal frameworks that help people to digest urban places. John Montgomery describes these senses as "the romantic subjective view of urban design," but understands the need for these "internal guides" to help people gauge whether a place feels comfortable, safe, livable, quiet, or dangerous (Montgomery 1998).

Successful urban design draws upon both physical characteristics of buildings, spaces, and street patterns, as well as the psychology attached to those spaces. When integrated intentionally and suitably, many design features generate quality public and livable spaces. It is important to note that urban quality is also connected with social, psychological, and cultural contexts of a place. Therefore, when assessing a space and its "success" for this project, we needed to draw connections between the psychological responses to the built environment and its physical design elements.

Active Connections

Vitality and diversity are both needed to facilitate and sustain activity in public spaces. Vitality typically relates to the number of people walking through and staying in a specific urban space, whether it is a public plaza, mid-block connection, or alley with addresses. For example, a successful outdoor retail street provides a variety of businesses and store fronts for pedestrians to walk past and be visually stimulated by, and potentially stay and patronize the business. To create vitality, urban places should have their own cadence and design rhythm. Cultural events and celebrations are two ways this can be achieved; programing can also bring in pedestrians throughout various times of day to foster a continuous sense of life on the street. There are many ways to increase activity within the public realm. William Whyte describes one method, triangulation, as what occurs when an external factor becomes a catalyst for people to interact with nearby people (Whyte 1980). For example, an interactive art piece in a plaza or open quadrangle acts as a magnet for people to linger in the area. It also has the ability to bring strangers together through conversation, whether through a request for a photograph or a discussion about the artwork. Cities can apply this concept by encouraging popular businesses to set up shop within close proximity to each other to help catalyze the adjacent spaces. This is especially successful if a place can support everyday activities through mixed-use developments such as combined residential and commercial uses.

A diversity of uses helps support successful public urban places. Jane Jacobs has championed the concept of diversity in the public realm. In her book The Death and Life of Great American Cities, she emphasizes mixed primary uses, which are the main functions of a space or building, as a way to bring about vibrancy in a public space:

> "The district, and indeed as many of its internal parts as possible, must serve more than one primary function; preferably more than two. These must ensure the presence of people who go outdoors on different schedules and are in the place for different purposes, but who are able to use many facilities in common" (Jacobs 1961).

Walkability

Safe and convenient walkability is an important requirement for citizens when looking for a place to live, work, and play, and serves a key component of livable urban design. Communities that are appropriate for walking ultimately offer numerous positive benefits including personal health. Creating a place with good walking experiences also enhances individual and public safety, convenience and accessibility for all ages, and promotes services such as public transit, local businesses, and tourism. Some urban planners assess walkability through the benefits that it offers pedestrians, such as accessibility and interaction with neighbors. Holly Lund tests New Urbanist claims that local access contributes positively to increased rates of pedestrian trips and neighboring behaviors (Lund 2003). Her quantitative analysis found that local access does indeed increase levels of pedestrian travel, especially in retail shops, as well as increase neighboring behaviors of the individual in the community (Lund 2003). Walkability levels differ among urban areas such as downtown and surrounding residential neighborhoods. Athanasios Galanis, et al., note that differences in walkability levels can be based on circumstances related to "economic, cultural, and topographical factors" of the built environment and that to reach their end destinations pedestrians should be able to access and walk the complete right-of-way network (Galanis, Botzoris, and Eliou 2017). This means that urban design in the public realm needs to provide accessible and attractive pedestrian infrastructure.

Furthermore, active travel modes, such as walking, have the ability to address public health issues in our society. Walking has been connected to various health benefits, from reducing BMI in children and increased cardiovascular health in adults (Rosenberg et. al. 2006, Manson et. al. 2002). In addition to enhancing quality of life, choosing to walk also "raises the sustainability footprint of the city" (Galanis, Botzoris, and Eliou 2017).

The energy expenditures of pedestrians do not come from fossil fuel nor do they create air, noise, or light pollution. While the benefits are clear, the resulting behaviors are sometimes unrealized. In urban areas, the choice to walk as an active transportation mode may be contingent on various factors. In Elizabeth Shay and Asad J. Khattak's 2012 study, they identify that in urban areas the choice to walk, drive, or take public transportation responds mainly to two factors: motivation and opportunity. The motivation factors relate to personal and/or household constraints, while opportunity factors relate to the environment and/or facilities such as transportation systems. Only through the presence of opportunity can walking be a viable option (Shay and Khattak 2012).

Likewise, in the creation of successful public realm spaces, there are several sub-considerations that need to be taken into account when promoting pedestrian mobility for those areas. For example, personal constraints for pedestrians regarding length of time and distance to arrive at their end destination should be considered (Mackett 2001). It is important to know that the speed at which the typical person walks is relatively slow and the distance they are willing to travel comfortably is limited. The average convenient distance for a person to walk is 0.5 km/ 0.3 mi. Additional considerations include an individual's perception and value of their free time. People whose jobs are time sensitive are usually less likely to travel on foot or on public transit services. Therefore, an important urban design implication is that pedestrian connections should be numerous, convenient, and increase access to other forms of transportation.

SPECIFIC BUILT FORM CHARACTERISTICS

While these overall design characteristics apply to most, if not all, built forms, there are specific characteristics that should be emphasized based on which type of built form is being evaluated or designed. For this study we focused on the three built form types that were selected by the City of Bellevue from their Land Use Code sections 20.25A.140-170.

- Open Spaces: Landscaped areas, walkways, gardens, courtyards, and lawns; excluding areas devoted to buildings, traffic circulation roads, or parking areas. Outdoor Plazas, Major Pedestrian Open Spaces, and Minor Publicly Accessible Spaces are kinds of open spaces.
- Pedestrian Connections: A continuous, readily accessible, usable area, open at either end and designed primarily to provide public access between two or more publicly accessible spaces, including perimeter sidewalks, by means of a direct route. The pedestrian connection is not a public right-of-way. (Through-block pedestrian connections are required in each of the superblocks within the Downtown Boundary in Bellevue.)
- Alleys with Addresses: Pedestrian-oriented ways off the main vehicular street grid that provide an intimate pedestrian experience through a combination of residential, small retail, restaurant, and other commercial entries with meaningful transparency along the frontage building walls. This area does not have a "back of house" feel.

Numerous authors discuss the importance of these built forms and the characteristics that can make each successful. The following is an analysis of general desired qualities and specific characteristics suggested by these authors that work together to make livable places within the urban environment.

Open Space

One of our fundamental sources for examining urban open space design was the book Life Between Buildings: Using Public Space, by Jan Gehl. Gehl discusses many notable urban design qualities, including the need for hierarchy, differentiated structures, walking networks, and places for sitting. Gehl writes about how a hierarchy division can strengthen

a community and that "large building projects need more streets and squares with a more differentiated structure that includes main streets, side streets, and primary and secondary squared, such as are found in old cities" (Gehl and Koch 2006). Furthermore,

> "A person walking down a street sees practically nothing but the ground floor of buildings, the pavement, and what is going on in the street space itself. Events to be perceived must therefore take place in front of the viewer and on approximately the same level, a fact that is reflected in the design of all types of spectator spaces..." (Gehl and Koch 2006).

A significant proportion of Gehl's work provides commentary on how to design for people and pedestrians as they move through space. He suggests that "people and activities can be assembled by placing the individual buildings and functions so that the distances for pedestrian traffic and sensory experiences are as short as possible" (Gehl and Koch 2006). Moreover, creating a walking or pedestrian network with "alternating street spaces and small squares often will have the psychological effect of making the walking distances seem shorter" (Gehl and Koch 2006). This will allow for people to concentrate on "movement from one square to the next," rather than focusing on how long the walk actually is (Gehl and Koch 2006). Prioritizing pedestrian ramps as opposed to stairs when variations in level cannot be avoided can also create a more pleasing cadence for pedestrians walking through a space.

Gehl provides pragmatic urban design suggestions, such as "whenever in doubt, leave some space out" (Gehl and Koch 2006). He explains that the urban spaces in many modern cities are "grossly oversized" and suggests that "it is nearly always more interesting to be in small spaces;" therefore, urban designers should not "throw in some extra space" and instead design spaces that are comfortable and not oversized (Gehl and Koch 2006). Gehl also suggest that it is preferential to include seating or places for sitting along facades and spatial boundaries as opposed to "sitting areas in the middle of a space" (Gehl and Koch 2006). In regards to standing, "people tend to seek support from the details of the physical environment" (Gehl and Koch 2006). In other works Gehl also emphasizes the need to create spaces that provide for "stay and play activity" (Gehl 1980). Gehl's design guidelines and suggestions helped us select open space locations that have a good urban design as well as aided in our assessments that are written for each location included in the design catalogue.

In another study, researchers have found that the most highly valued open spaces are those that enhance the positive qualities of urban life: "variety of opportunities and physical settings; sociability and cultural diversity" (Burgess, Harrison, and Limb 1988). This study identified a need for diversity of both natural settings and social facilities within local areas. It suggests that urban green spaces can improve the quality of life for all citizens. The concept that varied opportunities and physical settings are valued in open spaces reinforces Gehl's findings that spaces are the most lively when longer lasting activities have the chance to develop. Gehl and Burgess, Harrison, and Limb support the idea that if spaces are designed for multiple uses and users, they lend themselves to more lively activities.

Because the City of Bellevue is looking for successful built spaces and forms that have applicability to vibrant, livable urban development, understanding what makes spaces lively is relevant to this project. The concepts outlined by Gehl and Burgess, Harrison, and Limb informed our criteria for evaluating the "success" of a space and our suggestions for new designs for lively development.

Urban composition also informs good urban design, and in particular good open spaces. Ron Kasprisin has written about urban composition extensively; he identifies the elements and principles of composition and explores "the challenge of applying design composition principles and methods to the complex nature of cities" (Kasprisin 2011). Kasprisin highlights successful urban patterns and building forms and emphasizes the need to take into consideration the context within which a project will be situated. He also ventures into the topic of visualization techniques, albeit only through sketching and watercolor techniques. Lessons from this work on how to depict successful urban design projects are applicable to other visualization means as well, such as photography, which we used to capture depictions of urban spaces for Bellevue. General composition techniques and patterns explored in Kasprisin's work also helped us evaluate the locations that were selected for the catalogue.

Another realm of urban design that is important in creating vibrant, livable urban development is public space. Judit Bodnár writes about reclaiming public space, reflecting on the "life of public space, its cycles, forms, and locations" (Bodnár 2015). Bodnár explores what public space is and gives some insight into the general discussion around public space, discussing the difference between public space and public sphere. Public space is about "thin sociality" where people are in the same space but do not often interact (Bodnár 2015). Conversely, the public sphere involves action and proximity. Her work informs how to analyze the public space and the public sphere, and this can inform the creation of criteria regarding what makes public places successful. For example, Bodnár suggests that "public space thrives on diversity," a characteristic that can and should be incorporated into the criteria created for this study (Bodnár 2015).

Proximity to greenery in urban settings has been linked to extended life expectancy and lower levels of mental stress and fatigue (Ward Thompson et. al. 2012). Urban green spaces can become a positive factor for a livable experience (Kabir Shuvo, Awal, and Mazharul Islam 2017). It is important to consider how public space is shaped by green landscaping and built barriers, which have the potential to enhance or hinder positive user experiences. Therefore urban planners and designers should recalibrate planning boundaries to include the surrounding street-level greenery and people's views of the landscape (Lu, Sarkar, and Xiao 2018).

Through-Block Pedestrian Connections

Jan Gehl has written extensively on people-centered urban design since the early 1970s, including pieces on using public space and on residential streetscapes (Gehl and Koch 2006; Gehl 1980). For example, in his article "The Residential Street Environment," Gehl explores what makes "lively streets," focusing on which types of activities lead to lively streets and how street design can promote desired activities (Gehl 1980). In his study, observers recorded and categorized all activities during daylight hours and then the types of activities and their durations were analyzed. Gehl concludes that a lot of "come and go" activity does not create a lively street. Instead, "lively streets" are "much more dependent on whether the longer lasting 'stay and play' activities have a chance to develop — and this to a very large extent is dependent on careful street design" (Gehl 1980). Therefore, if designers want to create lively streets they must design for "stay and play" activities, which can be applied to all types of pedestrian connections, not just those adjacent to a public street. This need to design for and promote "stay and play" activities also holds true when designing for through-block pedestrian connections. Including retail entries and restaurant cafes on the interior of through-block pedestrian connections is one way in which "stay and play" activities can be encouraged through urban design.

City blocks and their through-block connections are closely related to scale and the street grid. To improve the experience in and permeability of a city, blocks should be short, thus providing more accessibility to pedestrian, bicycle, and vehicular travel. If city-blocks are large and more difficult to walk around, a way to achieve better connectivity of the grid is to include through-block connections, alleys, courtyards and public plazas. All of these urban forms, but specifically through-block pedestrian connections, enhance the permeability of an area by providing increased travel paths, variation in design, and destinations for the user.

People are more inclined to walk along shorter, finer grain streets (e.g., those in areas with smaller blocks or a shorter street grid), with more activity or a multifaceted identity. Spaces that are isolating or static limit the attractiveness of the walking environment (Adkins et al. 2012). Long city blocks prevent good or easy connections. They also limit the possibilities of small enterprise development. Downtown districts with shorter blocks tend to have enhanced street life. In the same manner, the presence of through-block pedestrian connections can provide a cadence of breaking down the block and opening up more spaces to active use. To be successful, city districts and their blocks should ideally not exceed 300 by 300 feet. (Montgomery 1998). Therefore, due to the larger blocks found in Downtown Bellevue, which are approximately 600 by 600 feet, there is a need for introducing more through-block connection facilities that will increase the circulation and street life composing these blocks. Creating a permeable grain is essential to creating successful urban spaces; this is especially the case for downtown core areas as well as more mixed residential communities.

Alleys with Addresses

Alleys serve a variety of functions and uses that vary depending on location and surrounded land use type. Historically the United States has not emphasized alley use as pedestrian corridors, and yet

> "Of all the American street types, the alley most closely resembles the medieval street which has been so successfully pedestrianized in Europe. Planners and designers are designing medieval streets back into our cities in places like San Francisco's Pier 39... In light of recent and conscious attempts to recreate the medieval street, the alley should be considered as a potential candidate for providing an infrastructure for the well-loved walking street" (Kornhandler 1980, 12).

Alley use can be considered as a function of "context (setting), exposure, width, etc.," and can be categorized into four basic types: commercial walkway; mini-park, square, or playground; transportation node; and access/drop-off (Kornhandler 1980). The City of Bellevue views alleys with addresses mainly as "pedestrian-oriented ways off the main vehicular street grid that provide an intimate pedestrian experience through a combination of residential, small retail, restaurant, and other commercial entries with meaningful transparency along the frontage building walls," and in some cases can include vehicle access (City of Bellevue n.d.).

Before considering the design elements that create an enhanced pedestrian walking corridor, considerations such as auto use and delivery access need to be studied. In most cases, alley conversions (or reuse) would "necessitate the removal or restriction of the automobile" and therefore can have a large impact on the accessibility and service of goods to businesses that rely on vehicle access in alleys (Kornhandler 1980). Therefore, when an alley is pedestrianized and "deliveries are to take place on the alley, the loading zones should ideally be designed into the scheme so as to minimize contact with pedestrians" (Kornhandler 1980). Keeping in mind the dual function of alleys and the impacts that could result from converting a multimodal space into a pedestrian only or restricted auto space is essential in the design or redesign process.

Debra Kornhandler studied multiple pedestrian-oriented alleys and suggests key design elements that enhance alleys. For example, "wider spaces and alleyways reinforce variety and contribute an element of surprise to the stereotype" (Kornhandler 1980). In general, alley dimensions should be around 20-35 feet in width and should be broken into one-block segments. Variations of these dimensions, such as a widening of the alley into an open space or a jog in the alley direction, can create pockets of interest and spaces that serve as destinations in and of themselves.

The buildings that frame an alley serve as an essential element of alley design. "The architecture, combined with planting, creates the alley experience... The architecture can also allow various uses to spill out from the buildings onto the alley by providing doorways or protective covers at appropriate places" (Kornhandler 1980). Furthermore, windows and points of access are an important method through which to provide interest and continuity between the inside and outside of buildings. Amenities within the alley should be selected to accompany use and orientation. For example, alleys that are oriented such that they receive significant sun exposure could benefit from having tables and chairs. Alleys with less sunlight could use benches along the alley to create spots of rest and passive activity while devoting other space to different uses, such as greenery or enhanced building entrances. Pedestrian-scale design elements, such as greenery and lighting, are also important essentials for creating a comfortable pedestrian environment. Furthermore, "planting often serves as a signal to people that the space is special" and can help pedestrians identify that the space is accessible for use (Kornhandler 1980). In the same way, lighting and decorative amenities (awnings, trellises, flags, or banners) can enhance the space.

Other considerations that are important when designing an alley include identifying the significance of the space and if there is an opportunity to relate to the larger regional context. Certain philosophies of design for small urban spaces suggest that "regionalism is the key to successful social design" and "with creative and thoughtful design, alleys can become pedestrian spaces that help to improve neighborhood awareness and sense of place" (Devaney 1995). Integrating local history and art displays into alley design can enhance the space because "small urban spaces should be a representation of the area's cultural and regional elements" (Devaney 1995). Furthermore, creative paving patterns and plantings can ensure that "motorists are made aware that pedestrians are the primary users of this environment" (Devaney 1995). Combining these design elements successfully can result in alleys that serve a variety of uses and functions: "alleys can be pedestrian corridors, parks, gardens, small neighborhood spaces, and destination spots for various activities" (Devaney 1995).

VISUALIZATION TOOLS AND TECHNIQUES

Using visual tools to convey urban design and planning concepts is not a recent phenomenon; planners and researchers have written many articles that introduce, discuss, and evaluate public participation and visualization tools. However, the use of web-based tools is a fairly recent development. As previously described, Kheir Al-Kodmany characterizes visualization tools into two categories: traditional and computerized (Al-Kodmany 2001). He places photos into the "traditional" category and on-line tools in the "computerized" category and suggests that integrating traditional tools with new technologies will create the most useful visualization tools (Al-Kodmany 2001). It is interesting to note that the type of catalogue this study produced integrates both the traditional category (photos) and the

computerized category (on-line platform), which hopefully will result in an effective visualization tool for the City of Bellevue.

In other articles, Al-Kodmany aims to convey a conceptual model that shows the "relationship between eight visualization tools... and two types of communication media" (Al-Kodmany 2002). The author starts the article by describing notable authors on the subject and how premodern (not digital) visualization tools carry over into computer visualization. The model that the author has developed "provides a logic to understand the capabilities of each tool, its practical use, and its relationship to other tools" (Al-Kodmany 2002). It also provides a "basis for evaluating the tools using such criteria as interactivity, cost, ability to represent complex data, and ability to evaluate potential designs" (Al-Kodmany 2002). The model helped us assess the type of visualization tool that the City of Bellevue requested and consider if it was the best type of tool for this project. One of the primary tools that Bellevue selected for their catalogue falls under Al-Kodmany's "Photographs" category. One advantage of using photographs within our visualization tool is that photos provide a high degree of realism, which "makes a significant contribution to the comprehension of a model" (Al-Kodmany 2002), which is essential to the success of a Design Review Image Catalogue.

Other new uses of visualization tools include coupling them with webbased platforms that can be used for public participation. Jennifer Evans-Cowley and Justin Hollander reviewed the ways in which modern web-based programs such as Facebook and "Second Life" can be used as platforms for public participation in planning (Evans-Cowley and Hollander 2010). The researchers were interested in the engagement of cities and citizens in planning processes with social networking and virtual reality tools. In their study they use case studies to analyze communities that use the two tools in conjunction. Evans-Cowley and Hollander found that virtual participation does contribute to planning but that it can also pose challenges for communities. They suggest that online social networking works best as part of a broader participatory process and not as the sole participatory process (Evans-Cowley and Hollander 2010). This literature — on both the creation of an online-based Design Review Image Catalogue and the use of an online platform as a participatory tool for the public — is relevant to our project. The catalogue will need to be used in conjunction with meeting and design review sessions with Bellevue staff and not in isolation. Additionally, when the tool is made public on the City's website, the City will need to advertise the tool as one part of a broader participatory or design process and not the sole process.

While these studies cover a range of visualization tools — some more applicable than others to the creation of a Design Review Image Catalogue — they all seem to have a similar theme. Each identifies that the use of one singular visualization tool or technique is not the most effective means of conveying urban planning and design concepts. Effective visualization is achieved when urban planners thoughtfully consider the combination of visualization tools — traditional and digital — that will best convey their message.

URBAN PHOTOGRAPHY METHODS AND CONSIDERATIONS

This project is rooted at the intersection of urban planning visualization tools and urban design theory.. The project caused us to consider how to portray the good tenets of urban design within the context of a visualization tool, specifically through photographs with supporting annotations. Because of this, we needed to consult literature on how to take photos of urban spaces to communicate certain emotions or intents. We were particularly interested in works by Mia Hunt, who has written about urban photography and its connection to cultural geography. Hunt suggests that the task for "urban photographic practice is to capture the more intangible aspects of urban space, through the practice of working with a camera and in a spirit of collaboration with place" (Hunt 2014, 152). Hunt writes more about the importance of the photographer's self-awareness in urban spaces and less on the technical techniques of photography. For example, she emphasizes the need to recognize and understand the importance of reflexivity, the concept of a two-way feedback loop in which perceptions impact an environment, which in turn impacts future perceptions, because

> "...uncritical floundering with a camera, false sense of knowing while skimming the surface, impressionable beautification of everything, trivialization and disempowering of the subject, and selectivity of the frame, all allow a photographer to cast images in problematic ways (Hunt 2014).

Therefore, the photographs for this study needed to not just show a surface-level understanding of a location or only portray places that are aesthetically beautiful but that are not actually lively or successful.

Similarly, Anne Spirn, suggests that a photograph "can embody a complete thought or an entire story; a series of photographs can shape a narrative or make an argument" (Spirn 2008). Furthermore, the text

that accompanies photographs can function as the "punch line" to the photographic statement (Spirn 2008). This was important for us to consider through the creation of this project; that we would not create text that simply told a person what to look for in a photo, but that fortified and enhanced the photo by giving it a "different look" (Spirn 2008). We used Sprin's, and by extension Lange's, work as "models for how to capture in photographs and extend in words the meanings of visual images, with the camera as instrument of discovery" (Spirn 2008).

Photography is a commonly used tool to capture everyday life. Through efficient advancements in digital photography, an understanding of the basics of visual design has become commonplace. For this project we sought to draw on the basic components of visual design such as lines, shape/subject, form, texture, pattern, and color (Zhou et al. 2015) as well as the deeper relevance of urban photography.

In the urban planning field, visualization tools such as photography are primarily used for engaging with the public. Compared to written descriptions of observations, still-life architectural photography is a straightforward and mostly unadulterated depiction of what is captured. is . This allows photography to visually communicate with and to inform people in ways that oral and written communication methods cannot on their own. Therefore, photography can be used as a tool to help sway people's perception of the world (Panke 2016).

Abeer Elshater argues that it is of utter importance that students within the urban design field be taught photography. He calls on urban planning students to take back the visual perception of cities, as many students have been plagued with observing cities only through written and second-hand work. By shifting their orthodoxy back to direct observation, students can have clear sight and observation of what is outside their academic walls (Elshater 2018). Through direct, hands-on experiences, such as visually communicating through architectural and urban design photography, an increase in the quality of student work can be seen. A study done at the Catholic University of Murcia found that low performance by students was directly correlated with a lack of real-client interaction and visual communication tools. The research found that working with real clients and visual communication tools increased the overall energy, innovation, and quality of students' work (Cortés-Selva and Wandosell-Fernández de Bobadilla 2018).

APPENDIX B: FLICKR USER MANUAL

What is Flickr?

Flickr is a popular photo-sharing and hosting service. It supports an active and engaged community allowing people to share and explore each other's photos. You can freely share and host hundreds of your pictures on Flickr. There's also a pro service that gets you unlimited storage and sharing for about \$2 a month, making it one of the cheapest hosting sites around (more on that later).

What are the important features and what do they do?

The following features are described briefly to help you understand how this professional project utilizes Flickr. Only the features important for this project are listed with a majority of the features located in the main tabbed toolbar running right below the profile main banner photo.

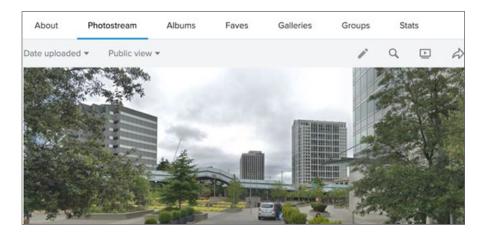
When logging in, you will see the main tabbed toolbar under the main account banner photo. Please note the banner photo may look different from the image below. Here is an example of the banner photo and featured tabs:

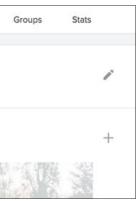


About: Similar to other social network platforms, Flickr allows for a user photo and a briefly written bio about the account. You can also showcase up to 25 of your favorite photos and collect reviews from other users.

About	Photostream	Albums	Faves	Galleries	
About	-	Abuilis	Tuves	Guierres	
	Write a little about yo	urself			
	Showcase 🧪				
					1 10 10 10

Photostream: Your photostream is your own public portfolio of photos. They are not organized by albums, they are only organized chronologically by upload date.





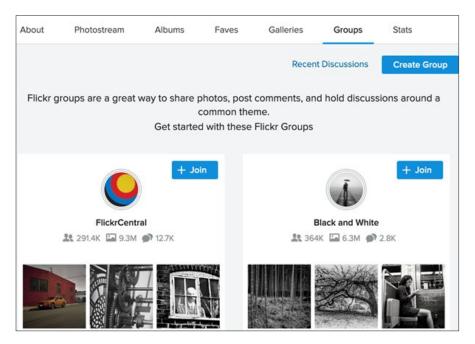
Albums: To keep your photo collections neat and organized. You can share entire albums with friends. The "New album" and "New collection" buttons underneath the main toolbar will redirect you to Flickr's 'Organizr' Tool. We will discuss that further in the Orgnanizr Section later in this document. Collections can contain albums or collections of albums. Collections can be nested 5 deep. Ex: City Collection > Districts > Neighborhoods > Streets > Homes

About	Photostream	Albums	Faves	Galleries	Groups	Stats
			New album	🕈 New	collection	View my collections
			EF.	T		
AND ALL			THE REAL PROPERTY OF			
Amazon Seattle	Galleria,		Center Plaza, evue	- A		
	24 views		tos • 18 views			

Faves: This is a way to bookmark photos you want to come back to later by accessing your Faves tab. Underneath every photo shared on Flickr is a star button that you can click to 'favorite' that photo.

Photostream	Albums	Faves	Galleries	Groups	Stats
Start p	icking you	ır faves. J	ust click on	the star.	
Like something	you see? Let th	e photograph	er know by clicki	ng on the star i	con.
	s	itart exploring	Flickr		
	Start p	Start picking you	Start picking your faves. J Like something you see? Let the photograph	Start picking your faves. Just click on	Start picking your faves. Just click on the star. Like something you see? Let the photographer know by clicking on the star in

Groups: Groups are based around a central topic or idea and allow users to freely join. Members of a group can share their photos and participate in group discussions. By joining is this missing a part of the sentence?



Stats (Pro Version Only): You can see exactly how other users are finding and viewing your photos on Flickr by accessing your stats. You'll get to see graphs and charts representing your source breakdown, recent views, and top views.

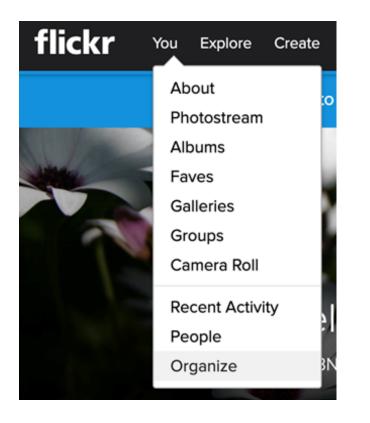
Recent Activity: Get a glimpse of all the recent interactions you've received on your photos, like faves and comments, by looking at your recent activity. You can also filter your activity to see activity on just your photos, replies to your comments, messages or a custom view.

People: Flickr is better with friends. You can import your contact lists from Facebook, Yahoo! or Gmail to see who's already on Flickr so you can connect with them.

Flickr Organizr: Use Flickr's unique Organizr tool to edit your photos and arrange them just the way you want. Within the Organizr you have the ability to edit the look of your photos, insert information about your photo, attach your photos to a geolocated map, tag your photos, etc. The following section will go into more depth of what you can do in the Organizr tool.

How to access and use Organizr?

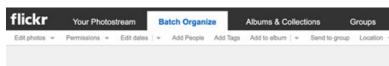
To access this organizational tool, navigate to "You" at the very top of the page. Click it to bring up a drop down menu with "Organize" located at the very bottom of the list.



You can also go to the Organizr Tool by navigating to a specific photo in your album. Click into "Edit in Organizr" to access the Organizr Tool. Can we add a box or an arrow to help identify the edit in organizr tool?

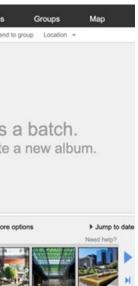


Once you click "Organize" the page will refresh to the image below. This is Flickr's Organizr Tool. Here Flickr's Organizr Tool can help you edit your photos, edit dates, add tags, add people, etc. (but it does not allow you to upload photos from this tool). Organizr is the back-end method of editing your photo's title, description, and tags. You can also edit these features through the main the main what? The photographs located at the bottom of the page is your photostream. There you can select, drag, and drop into the center of the page to edit the photos. Editing and organizing can be done in batches to save from editing each photo individually.



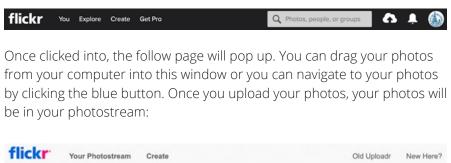
Drag items here to edit them as a batch. You can then change any attributes or create a new album.

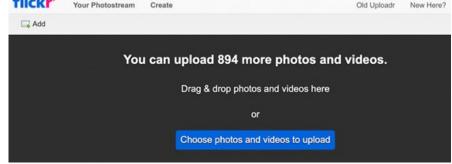




How Do I Upload Photos?

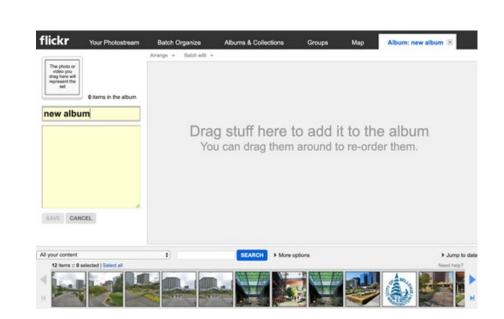
From your main Flickr page, navigate to the top right hand corner of the page toolbar. There you will see a Cloud with an Arrow icon. Can we add a box or an arrow to help identify the tool?





Now that your photos are in your photostream, you can create an album by going into the Organizr Tool. There are options of getting there:

First option: Go back to the albums page and click the "new album" button. Once you're in the "new album" page, your photostream is located at the bottom of the page. The photos start from most recent uploads to oldest uploads (left to right). To group photos into a batch, select however many photos you want and drag them to the space above. Click save once you have the preferred selection of photos.



Second Option: Go through "You" and then "Organizr" from the toolbar located at the top of the page. Once you're in the Organizr page, you can drag your photos from your photostream (located at the bottom of the page) to the space above. Once you have the batch of photos you are happy with, click the "add to album" button under the "batch organize" tab. From there you can name your album and save it.

flickr	Your Photos	tream	B	atch Organi	ze	Albums & Co	ollec	tions
Edit photos 👻	Permissions *	Edit dates	+	Add People	Add Tags	Add to album	٠	Sen

Drag items here to edit them as a batch. You can then change any attributes or create a new album.



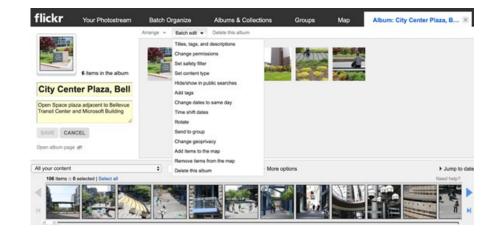


How to add/edit Information to your photo(s)?

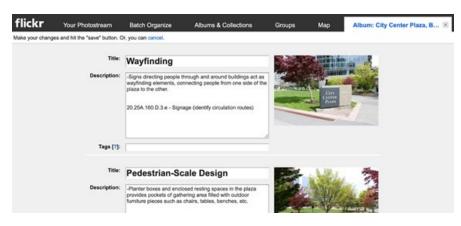
Edit Individual Photo: To edit an individual photo's title, description, and tags in the Organizr, double-click into a photo and a box will pop-out within the existing window. Populate the text boxes with the appropriate information.

flickr						Album: new album 🔳	Album: Amazon Galleria, Sea 🛞
Amazon	3 items in the album Galleria, Seat pedestrian connection on Nessee Aurop:	Arrays Back and A Eds. Title, Descri Tale Amazon Ga Description Location Title Arra Back 11500 kg. Advance 11500 kg. Array 201 Arr	Delive His show glion & Tags Cates Perm alleria, 500 9th Ave N zon Galleria, between Amazon Ne we N. Seatte, WA 99109	sions Fitters Loca , Seattle, V side and Amazon Indure, GLY		Abort: new abort	Album: Amazon Galleria, Sea 36
		Tags	on Downtown-Livability-Code	Car	in photo jaque	DELETE PHOTO Next Rem ()	
Cosen album page							
All your content	selected Select all	e)	SEARCH + More o	ptions			Jump to da leaded healer?
					聖		

Edit a Batch of Photos: To edit a batch of photos' titles, descriptions, and tags in the Organizr, click the "batch edit" button located on the smaller toolbar (under the main toolbar) near the top of the page. Click the "Titles, tags, and descriptions" option.



Once you click into "Titles, tags, and descriptions" a window will pop up with text boxes for you to populate. Click "SAVE ALL" at the bottom of the pop-up window when you are finished.



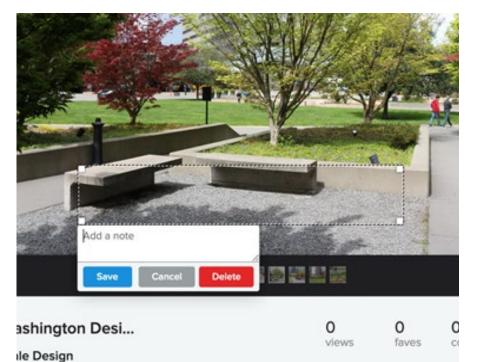
What are notes?

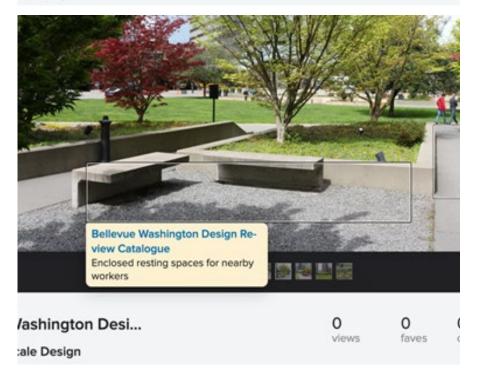
Notes are useful for highlighting specific elements within your photograph for your viewer to be able to see and be informed. A note will only be identified when the viewer hovers their mouse over that section of the photo.

How to add notes?

To add a note for viewers to be able to hover over, you click and drag your mouse to create a box on the photo. Once you release the click of your mouse, a box will automatically pop up with an "Add a note", "save" and "cancel" option. You can do this all over the photo to call out specific elements to your choosing.

How the note looks when hovered





What are tags?

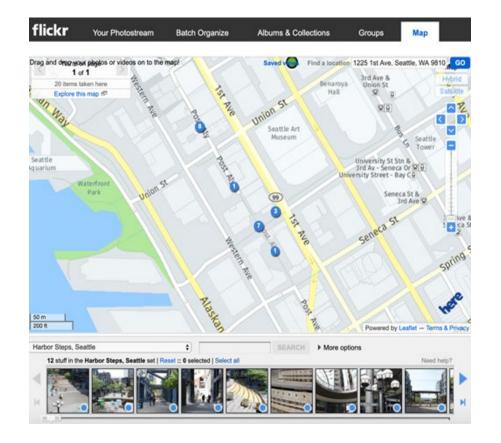
Once your photos have been uploaded, you can use tags: short identifiers you can later use to categorize and search for photos. Sorting by tags lets you create sets on the fly, either of just your pictures, or yours plus the community's. People often tag pictures with names, locations, event descriptions, and theme, for example: "Bellevue-Design-Catalogue", "through-block-connection", "Plaza". Etc.

How to add tags?

Please follow the instructions in the section: "How to add/edit Information to your photo(s)?"

How to pin photos to the map?

Flickr offers the option to attribute/geolocate your photos to their online map. To do this, go back to the "batch edit" drop-down toolbar and click on "add items to map". A new window will pop up with a base map in the background and your photostream at the bottom of the page. Find the location where you want to pin your photos to. You can do this manually or by searching through the search bar in the top right corner of the page. Once you have the prefered location on the screen, drag and drop your photos individually or in a batch onto the map. The photos will pin themselves down onto the map with a blue dot. The dot can be moved around on the map to update the photo's address. Once the photo is placed, the photos in the photostream will have an identical dot in each corner of the photo thumbnail to indicate its attachment to a geolocation.



How to change privacy and permission settings for photos/albums?

Flickr allows you to change the privacy and permission settings for your photos and albums. This means you can change who gets permission to see your items, who can comment, and who can add notes/tags. There are two ways to change permission access. The first way is on the individual photo level. If you want to change the access of the individual photo, go to the bottom right corner of the photo page. There you will see the section below with an arrow allowing for to see the permission options.

Additional info

Ъ	Viewing privacy	Public 🛩
Ъ	Allow commenting	Any Flickr member 🛩
8	Allow tags, notes, and people tags	People you follow 🛩
\odot	Set safety level	Safe 🛩

To change permission levels for entire albums, go to the Flickr Organizr and open an album. Once you are within the album, go to the batch edit drop down menu near the top tool bar, and click "Change permissions". Here you will see this section below pop up. Click on "More options" to see the entire menu options. You are informed with the number of items being affected in the parenthesis near the top. After choosing the permission levels, click "CHANGE PERMISSIONS" to save your settings for that album.

Who can see these items? (Acting on 9 items)

Only You (Private)

- Your friends
- Your family
- Anyone (Public)

Who can comment?

- Only you
- Your friends and family
- O Your contacts
- Any Flickr member (Recommended)

Who can add notes, tags, and people?

- Only you
- Your friends and family
- Your Contacts (Recommended)
- Any Flickr member

CANCEL CHANGE PERMISSIONS

How to comment?

To comment on photos, go directly to the individual photo page and near the bottom of the written assessment will be a comment box that people are able to leave comments in. Who can access this function depends on the permission levels mentioned above.

Flickr vs. Flickr Pro

A Free Flickr account gets you 1,000 GB of storage, all of Flickr's powerful photo editing tools and smart photo management. If you upgrade to a pro account, you'll get access to advanced stats, an ad-free browsing and sharing experience and use of Flickr's Desktop Auto-Uploadr tool.

photo page and near nent box that people

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APPENDIX C: INTERACTIONS WITH BELLEVUE

SCOPE OF WORK AND INITIAL MEETINGS

The professional project students drafted a scope of work between December 15 and December 28th, with a first draft sent out to the faculty committee members and Bellevue Land Use team on December 17th for comments and revisions. The scope of work document identified the purpose, desired outcomes, deliverables, timeline, communication plan, and responsibilities for the individuals and teams involved in this project.

An initial meeting with the professional project students, faculty committee members, and Bellevue lead Sally Nichols was held on January 15th in order to increase clarity on the desired objectives for this project and to set forth a clearer vision of what would be the most beneficial to the City of Bellevue. This initial discussion was followed up with a meeting with the majority of the Bellevue Urban Design Team on January 22nd where we discussed the team's vision for the project; their definitions and characteristics of successful urban design; urban planning, architects, and landscape architects to interview for this project; and examples of locations that could be used in the design review image catalogue.

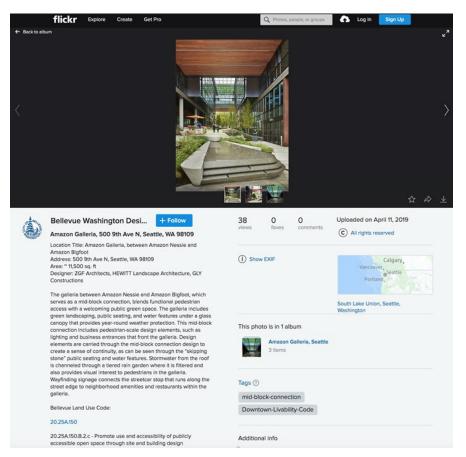
A project update was sent out on March 2nd that contained a preliminary list of locations (See Appendix 1). The update was sent to the project faculty members and the City of Bellevue Land Use Division Urban Design Team staff. The Urban Design team categorized locations on the list based on priority, such as "High," "Low," "Maybe," and "Remove" locations. The Urban Design Team also sent suggestions of locations that we could consider to include in our design review image catalogue. From this update and subsequent feedback we updated our location list that would be presented at our mid-term review. This initial preliminary list of locations included: open spaces, streetscapes, through-block pedestrian connections, and alleys with addresses. All of the examples submitted that fell into the category of "streetscape" were removed at this stage as per City of Bellevue recommendations.

MIDTERM REVIEW

A midterm-review was held on March 20th with Sally Nichols and other members of the Bellevue Land Use Team in order to update the client on the progress of this project. Topics covered at this meeting included: an overview of a selection of the literature reviewed, a review of the interviews that had been conducted with professionals in the Puget Sound region, a refined selection of locations and how each one related to the Downtown Land Use code, and three options for the layout or interface of the project deliverable to the City of Bellevue. From this meeting four projects were removed or put on hold from the revised list and three projects in Bellevue were introduced for consideration for the design review image catalogue. We also established the three types of built form that the City wanted us to include in our design review image catalogue. These three built form types are: open space, throughblock pedestrian connections, and alleys with addresses. These three form types are all represented in the City of Bellevue Downtown Land Use Code. At this meeting we verified that a fourth built form type that is present in the code, streetscapes, was not a built form type that the Design Review team felt needed to be represented in the design review image catalogue.

BI-WEEKLY MEETINGS

Bi-weekly meeting were discussed and later scheduled as a result of this meeting. These meetings occurred on April 19th, May 3rd, May 17th, and May 31st. During the meeting on April 19th we presented an initial version of the Flickr page that contained two location examples, Amazon Galleria and City Center Plaza. We also presented the photographs that had been taken of the selected sites up until that date. During this meeting one of the most important points of feedback that was communicated by the City of Bellevue was that the written assessment that had been created for the two example locations was too long and detailed (See Figure 1). The Bellevue team preferred that the written assessment be shorter, more concise, and organized into bullet points. The Bellevue team also asked us to explore the option of adding tags on the photos within the Flickr site and if that was something that could be added through the site or if it would have to be done externally and then uploaded to Flickr as an image with the tags already embedded.



Preliminary Flicker Written Assessment. AUTHORS

During the May 3rd meeting we discussed any questions or edits that the Bellevue urban design team had for the Flickr page. The team suggested adding a hyperlink of each location's Google maps address to the location that would be on each of the main photos. They also suggested that we incorporate some sort of "what is this" text that would explain the intended use and purpose of the design review image catalogue. We decided that the best way to do this would be to upload an image with the text as a separate album on the Flickr page.

The client also asked that we include the name of the location in the title for each photo, instead of including only the title of the design element that the photo portrayed. The client also reiterated that they were still working with the Bellevue IT and Legal teams to identify the best way to have the City host the design review image catalogue as a Flickr page, which was still unresolved at that time.

What is it?

This Flickr page is intended to serve as a tool to be shared with design review applicants during the design review process to effectively guide projec design in downtown Bellevue, Washington. This too can be used as a reference and should assist applicants in submitting design ideas for future projects that incorporate what Bellevue is looking for in terms of successful built form and urban design in the public realm. The locations analyzed show successful examples of how the City's new Downtown Land Use Code (LUC) Design Guidelines could be interpreted. The built form types represented in this tool, which are each found in the Downtown LUC Design Guidelines, are: open spaces; through-block pedestrian connections; and alleys with addresses.

"What is this?" explanation photo uploaded as an album on the Flickr site. AUTHORS

At the May 17th meeting we verified several final details for our locations and Flickr site. For example, we verified that designers of three of our projects and had the team confirm the official name of one of the locations. We also discussed if the City of Bellevue land use team was still interested in having us create a PDF deliverable of our photos and assessments for the City's Sharepoint site. The team said that they were no longer leaning toward using Sharepoint to host this project and would instead prefer that we give the team a file package that included the photos on the Flickr site and the written assessments that accompany each image.

On May 31st we held a phone call conversation with Mark Brands to verify the final details of what we should present at our final client presentation to the City of Bellevue Land Use Division. We also discussed how the final deliverables should be passed off to the Land Use Team.



APPENDIX D: INTERVIEW SUMMARIES

Professional Firm	Main Interview Takeaways
GGN	 Incorporate streets and alleys on larger size projects Incorporate granularity by breaking down scale Try to create a sense of familiarity/perception Legibility is key Discovery, movement, invitation in (varied spaces) Take advantage of ecological benefits, shift expectations so it is not generic, use native plants Visible circulation
Makers	 Sense of Security Articulation - hierarchy of Events every 30 seconds or less (Gehl/Owen) Active edges to open space Provide programing in larger public spaces Natural lighting as a design element (higher buildings should be on the northern side of a block)
LMN	 Wide sidewalk and wide planting curb Landscape that filtered water (Salmon-safe design) Lighting from the ground-plane - need to have lighting in multiple ways Need to have transparency into building (low-iron glass) Overhead canopies should be glass to allow daylight through Use a greenwall or a "livingwall" on an incline so there is not a blank wall Think in terms of designing for different moments Provide activity from outside to inside (art connection incentive for FAR) Hold edges on north side to allow for space on the south side

Professional Firm	1
Compton Design	 Continuity: height, prop Canopy for protection. Consistency of types of Need to consider huma Design spaces to feel p Can not treat the north Do not need to build to Build in alleys and pede Create diverse and vibr Create active uses to specifies to the second s
Hewitt	 Too much reliance on r Divide big space down i Do not have the densi feel activated Requirement of progra Consider "borrowing" the plaza) Plants/greenery can be Consider using greenst Minimize stairs & hand
SiteWorkshop	 Need to break down bl Programing for public s programing (power, wa Make places safe & sec Provide interior public Include new types of ac Brew pubs and market Games, seating can hel Look for continuity (env

Main Interview Takeaways

- portion, scale
- . Should create street hierarchy
- of street lighting
- nan scale alongside canopy height
- protected, safe (buffer to street)
- th side of a block same as the south side
- to build line
- destrian connections
- brant places to be, get away from sameness
- spill into sidewalk
- to experience, not specifics of design

n making it look good at a large scale/master plan level n into smaller spaces; create a rhythm Look at cross-sections sity for huge (open) spaces, push scale down so it can

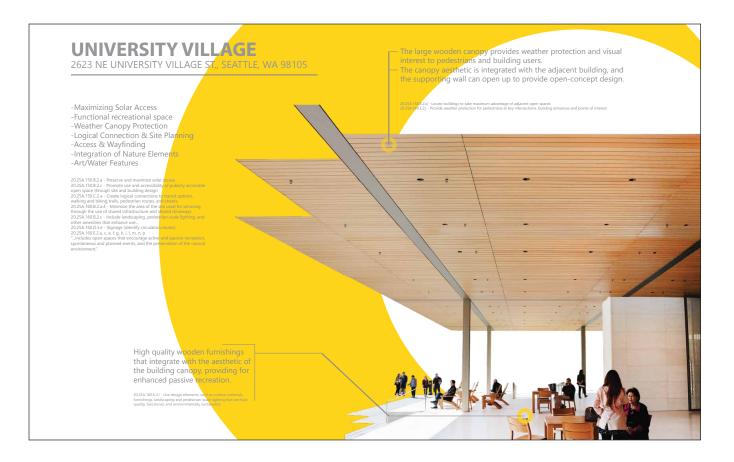
amming - Two continuously active edges the ROW (do not need a distinct sidewalk separate from

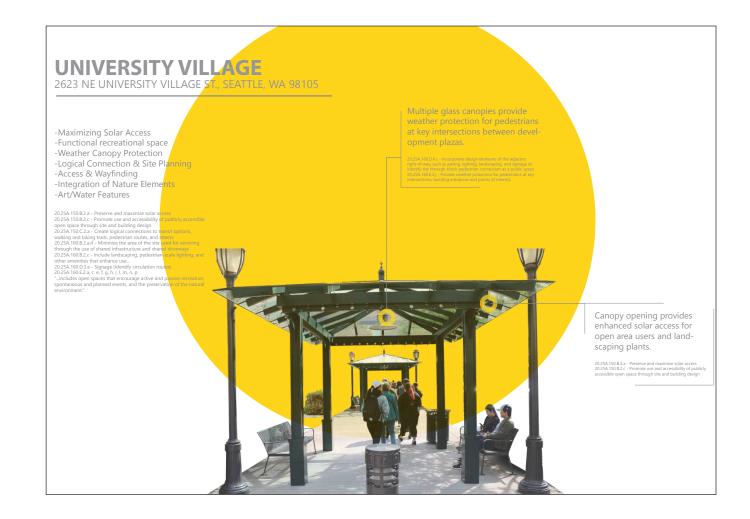
be good to flank a sidewalk street design (Woonerfs) Idrails

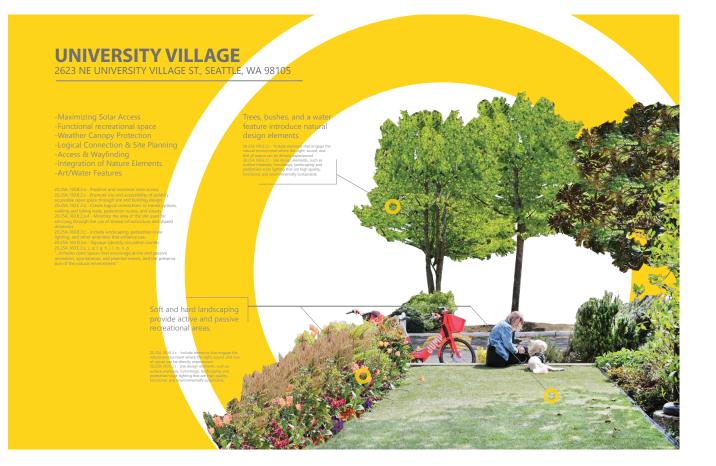
olocks

- space: budget for it, classify it as infrastructure, soft
- ater, restrooms, storage (facilities)),
- ecure, welcome people
- space
- activities (dog parks)
- ets can be examples
- elp a public space
- nvironmental design, lighting, art, surfaces, greenery)

APPENDIX E: MOCK DESIGN HEAVY IMAGE CATALOGUE







UNIVERSITY VILLAGE 2623 NE UNIVERSITY VILLAGE ST., SEATTLE, WA 98105

-Maximizing Solar Access -Functional recreational space -Weather Canopy Protection -Logical Connection & Site Planning -Access & Wayfinding -Integration of Nature Elements -Art/Water Features

A water feature with seating amenities in and around it provides direct engagement to the natural environment through sight, sound, and feel.

2025A-160.E2.e - Create attractive views and focal points; 2025A-160.E2.k - Use artistic elements and water features where possible; 2025A-160.E2.I - Use design elements, such as surface materials, furnichings, landscaping and pedestrian-scale lighting that are high quality, functional, and



APPENDIX F: PRELIMINARY LIST OF LOCATIONS



Project Name: 2nd & University Address: Second and University, Seattle, Washington Built form type: Streetscape Elements of success: Visibility from street (low-iron glass), weather protection for pedestrians, step-back from lot-line



Project Name: City Center Plaza Address: 555 110th Ave NE, Bellevue, WA 98004 Built form type: Public Plaza Elements of success: Visual legibility throughout the space, public programing by the BDA, Active edges, Human scale design





Project Name: Post Alley Address: Post Alley, Seattle, WA 98101 Built form type: Alley Elements of success: Pedestrian-scale connection, active use

Project Name: West Campus Housing – Elm Hall, UW Address: 1218 NE Campus Pkwy, Seattle, WA 98105 Built form type: Public Plaza, greenspace Elements of success: Comfortable scale pedestrian paths, pedestrian-scale lighting, native and varied vegetation Project Name: Granville Island Public Market Address: 1669 Johnston St, Vancouver, BC V6H 3R9, Canada Built form type: development/public plaza Elements of success: Human Scale, Active Edges, Public Programing

Project Name: UW School of Medicine – South Lake Union Address: 850 Republican St, Seattle, WA 98109 Built form type: Pedestrian Path – Mid-block crossing Elements of success: Clear open, visible pedestrian connections, shift in pedestrian path leads to discovery, interest











Project Name: Bellevue Capital One Cafe Address: 400 Bellevue Way NE, Bellevue, WA 98004 Built form type: Streetscape/Public Plaza Elements of success: overhang, public art installation, variation in elevation levels, enclosed space with seating, use of natural light

Project Name: Facebook Dexter Address: 1101 Dexter Ave N, Seattle, WA 98109 Built form type: Streetscape Elements of success: unique weather protection for pedestrians, step-back from lot-line, first-floor transparency from street







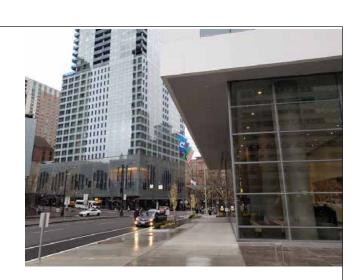


Project Name: Amazon HQ II & III Address: 550 Terry Ave N, Seattle, WA 98109 Built form type: Midblock connection Elements of success: linear park, visual interest, visual continuity

Project Name: Chop House Row Address: 1424 11th Ave, Seattle, WA 98122 Built form type: Alley, plaza Elements of success: midblock pedestrian connection, smallscale courtyard, active use Project Name: University Village Address: 2623 NE University Village St, Seattle, WA 98105 Built form type: Lifestyle Center, Streetscape/Plaza Elements of success: seating with landscaping, Active edges, enclosure and safety

Project Name: West Lake Park Address: 401 Pine St, Seattle, WA 98101 Built form type: Public Plaza Elements of success: Public Programing, Active edges, Tree Canopy and seating Project Name: Hyatt Regency Address: 804 Howell Street, Seattle, WA 98101 Built form type: Streetscape Elements of success: Visibility from street (low-iron glass), weather protection for pedestrians

Project Name: Midtown 21 (Formerly Terry & Stewart St. Address: 1007 Stewart St, Seattle, WA 98101 Built form type: Streetscape Elements of success: Visibility from street (low-iron glass), weather protection for pedestrians, step-back from lot-line, "green street"









Project Name: Harbor Steps, Seattle Address: Harbor Steps, Seattle, WA 98101 Built form type: Midblock connection, streetscape, plaza Elements of success: midblock pedestrian connection, smallscale courtyard, active use, visibility from street, visual interest

Project Name: Kenmore Town Green Address: 6728 NE 181st St, Kenmore, WA 98028 Built form type: Civic Space, Public Park/Plaza Elements of success: Public programing, flex between outdoor and indoor use, Overhang protection