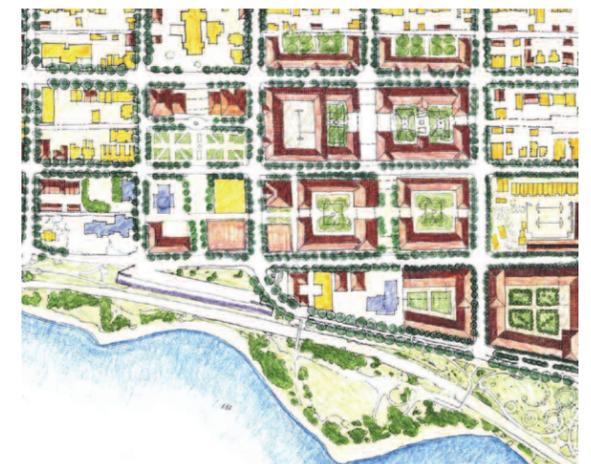
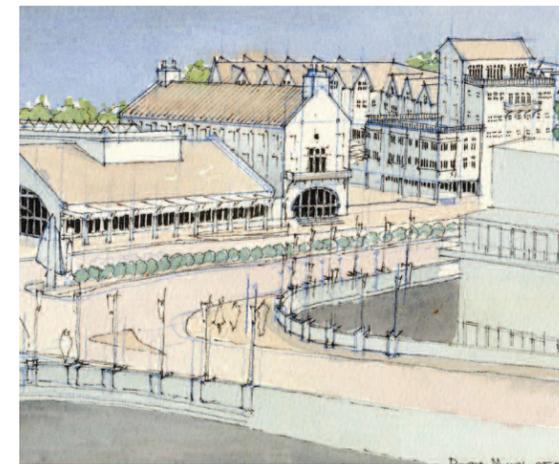
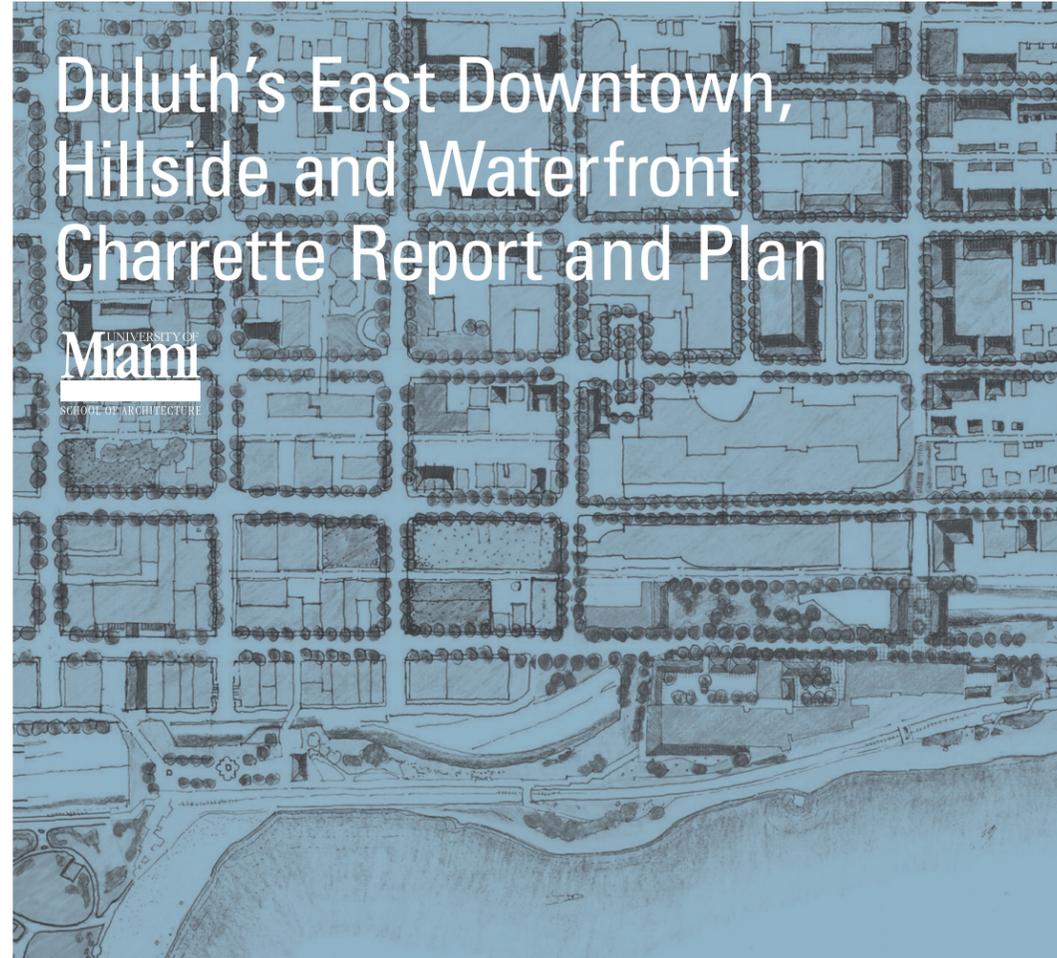


Duluth's East Downtown, Hillside and Waterfront Charrette Report and Plan

UNIVERSITY OF
Miami
SCHOOL OF ARCHITECTURE



DULUTH CHARRETTE PRINCIPLES: GUIDING PRINCIPLES FOR PLACE MAKING AND COMMUNITY BUILDING

Plans, regulations, and projects are some of the means for implementing the vision of Duluth's East Downtown, Hillside and Waterfront Charrette. These implementation tools will continue to evolve over time. They are guided by a broad, holistic vision of place making and community building as represented in the following "Duluth Charrette Principles," generated by the citizens of Duluth during the charrette.

1. Boost Duluth!

Nurture a collaborative culture that maintains a positive dialogue focused on enhancing Duluth's quality of life.

2. Evoke a sense of place

Encourage all new development and public investment in the downtown to say, "This is Duluth," reflecting the city's unique regional geography, climate, history, and character and rejecting "Anywhere USA" models that would erase everything that is special about Duluth.

3. Foster public safety

Encourage mixed-use infill development that brings more residents, businesses, and 24-hour activity to the downtown. More "eyes on the street" create a safer public realm. Pursue place-making initiatives and programming to improve the attractiveness of existing public spaces to reinforce them as magnets for public activity. Increasing the number of people in the city's public spaces, along the lakefront and in the neighborhoods will enhance community livability while promoting public safety.

Enhance focal points within the larger public parks and program them for regularly recurring events such as community "jam sessions" (open stage, bring your own instrument), flea markets, farmers' markets, and participatory arts, sports, and cultural activities. Facilitate a continuous multicultural dialogue that celebrates diversity through similar initiatives in the arts, sports, festivals, and other community-building initiatives.

4. Preserve and enhance heritage resources

Preserve historic buildings, public spaces, and view corridors to the lake. Duluth's industrial history and historic architecture are key aspects of Duluth's quality of life, and contribute to its distinctive identity and attractiveness as a place to live, work, recreate, visit, and invest in the city's homes, businesses, and institutions.

5. Invest in the public realm

Create a continuous network of streets, sidewalks, and parks that are safe, vibrant, and pedestrian-friendly. Replant street trees and prevent exposed parking lots and garages, blank walls, "dead space," and spaces that are difficult to monitor for safety. Encourage glass enclosure of sidewalks that can be opened up during warmer months as a cost-effective alternative to skywalks, capable of providing shelter from harsh weather while retaining pedestrian traffic at the street level to support ground-floor retail businesses.

6. Establish and restore the unique urban ecology of the city's neighborhoods, districts, corridors, and downtown

The highest quality of life is achieved in places that provide a full spectrum of places and experiences across a range of natural and built landscapes. Preserve the city's natural settings and enhance the urbanity of the downtown and adjacent neighborhoods. Build dense, mixed-use in downtown with an urbanscape; infill medium and low-density housing in the surrounding neighborhoods with a greenscape. Start a street tree planting program.



7. Calm traffic and improve connectivity

Make downtown Duluth a safe and inviting place to walk and find your way around. Traditional tree-lined, two-way streets with on-street parking provide greater connectivity, make navigating easier for visitors (in cars and on foot), and increase traffic calming and pedestrian safety compared to one-way streets, whose primary purpose is to move large numbers of vehicles at higher speeds. The extension of I-35 through the downtown has made the majority of the downtown's one-way streets unnecessary.

Restore the historic street network by converting one-way streets back to two-way streets with on-street parking to the fullest extent possible. Start a program of street improvements to enhance bicycle and pedestrian movement, and add pedestrian connections to Lake Place Park. Require new development and redevelopment of properties to reconnect pedestrian- and bicycle-friendly fragments of streets and blocks into a continuous walkable network.

8. Broaden the mix of uses

Create a downtown, hillside, and lakefront where people choose to live, work, and play. Cluster and mix modest retail, dining, and cafes with civic and institutional uses. Reinforce concentrations of retail where it already exists and encourage concentrations of similar types of businesses (e.g., dining, antiques, home furnishings, arts-and-culture related) to magnify their power to attract visitors.

9. Expand housing opportunities for people from all walks of life to live downtown

Tap the market demand for a variety of urban housing types (condominiums, townhomes, live-work, urban apartment buildings, small-lot single-family attached and detached), income levels, and seasonal residences in and around the downtown. Look for win-win development opportunities that accommodate new, profitable housing and mixed-use development while providing some units, funding, land, or other resources to support workforce and low-income housing initiatives. Market Duluth's amenity package of natural beauty, cultural heritage, and excellent health care facilities, low cost of living and high quality of life to attract new seasonal and permanent residents.

10. Improve the regulatory framework

Create a form-based code that provides citizens, decision-makers, and developers with a transparent, visual language to guide new development and redevelopment of properties within the study area. The form-based code should illustrate a predictable build-out that reflects the Duluth Charrette Principles, and revalues rather than removes existing building stock. Simplify the process of review, permitting, and approvals for development proposals consistent with the Duluth Charrette Principles, the charrette plan and the form-based code.

A set of recommendations was then developed and grouped into three categories: policy, design, and management. These recommendations constitute the blueprint, or roadmap, for revitalization. Each recommendation was assigned a primary group responsible for implementation, as well as a general assessment of the time frame in which each could be implemented. Following the charrette, a Stewardship Group consisting of local stakeholders was formed in order to prioritize the recommendations and begin the process of implementing them. The recommendations are presented in the following sections.



The charrette resulted in 64 suggested strategic actions for Duluth, categorized in the areas of policy, design, and management, which are the three primary tools of successful community building programs. These recommendations constitute the blueprint, or roadmap, for revitalization. All three areas must work together to ensure a successful program of urban enhancement.

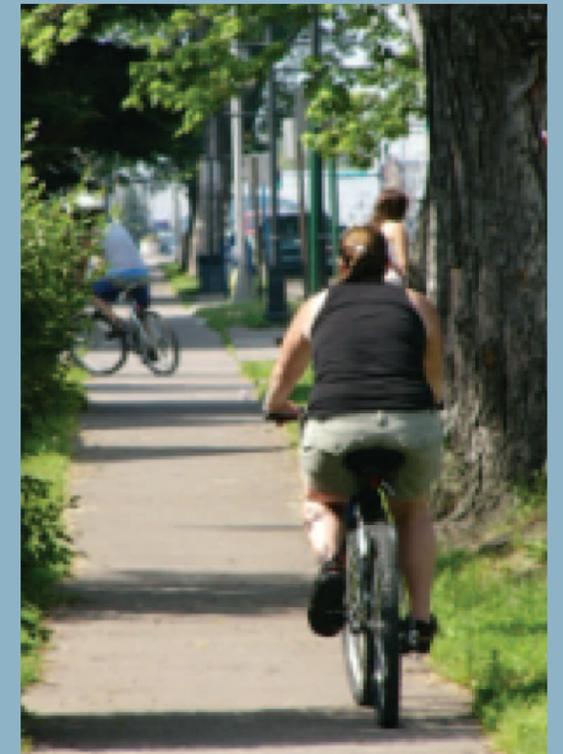
These recommendations were generated by extensive input of citizens, stakeholders and city staff. Each recommendation was assigned a primary group responsible for implementation, as well as a general assessment of the time frame in which each could be implemented. Following the charrette, a Stewardship Group consisting of local stakeholders was formed in order to prioritize the recommendations and begin the process of implementing them.

Policy actions provide the regulatory basis for the master plan's implementation, promoting the physical predictability of the private building, an important assurance of long-term value for property owners and investors.

Design actions include individual projects illustrated in the Master Plan, including the capital improvements, focusing on the public realm, parks, squares, boulevards, streets and pedestrian passages.

Management actions relate to the ongoing work necessary for the function, maintenance and improvement of the physical environment and the management of activities to support downtown retail, businesses, institutions, residents and events.

The recommendations are presented in the following sections (4.3, 4.4, 4.5).



POLICY RECOMMENDATIONS

Policy actions provide the regulatory basis for the Master Plan's implementation, promoting the physical predictability of the private building, an important assurance of long-term value for property owners and investors.

1. Regulating code (form-based code):

Develop a form-based code to replace the outdated zoning ordinance. The form-based code should encourage development that is consistent with the downtown's historic character and pedestrian scale, while allowing for more intensive, urban, mixed-use development in appropriate locations per the urban analysis, master plan and urban design proposals produced during the charrette. The code should define and protect the character of the distinct neighborhoods, corridors and districts identified within the study area, which vary in terms of the intensity, height, and mix of development. The code should specify the residential, commercial, and mixed-use building types permitted; the types of frontages permitted; the siting of buildings on lots; the location of parking to the side and rear of buildings, in parking courts in the interior of blocks, and in structured parking lined with habitable space for housing, retail and office along the perimeter of parking lots and structures; and set a minimum standard for screening and tree planting for parking lots.

2. Regulating code (form-based code):

Send a planning department employee to the Smart Code Workshop (Miami, Oct. 4–8) of the Form-Based Codes Institute (Virginia Tech, Blacksburg, Virginia, Nov. 3–5).

3. Regulating code (mixed-use):

Promote zoning changes that permit mixed use, including live/work units. Potential mixed-use districts include: 4th Street corridor, Lower Chester Creek/Armory-area District, Medical District(s), and Downtown corridor.

4. Regulating code (neighborhood retail):

Implement zoning that permits convenience retail in designated clusters within neighborhoods. Convenience retail includes groceries, laundry facilities, dry cleaners, etc.

5. Historic preservation: Promote historic preservation of existing historic fabric with a historic resources survey, development of educational programs on historic architecture and built heritage, a specific focus on historic preservation in the Comprehensive Plan, and use of federal historic tax credits and establishment of state and local historic tax credit/abatement programs. Give favorable incentives to building owners/developers who apply the Secretary of the Interior's Standards to Rehabilitation.

6. Incentives (for preferred development):

Create incentives for development that complies with a form-based code. Examples include: a streamlined review and approvals process, reduced or waived building permit fees, and density bonuses in exchange for historic façade improvements/façade preservation/façade easements/public art provision.

7. Incentives (for green development):

Promote green roofs, alternative pavers, and porous concrete to reduce impervious surface coverage through incentive programs. Incentives may include reduced stormwater utility fees and density bonuses for green roofs.

8. Permitting: Implement the Revised Project Review and Approvals Process in conjunction with a form-based code that specifies a predictable range of built form.

9. Regulating code (view corridors):

Preserve view shed of the lake by limiting maximum façade dimensions parallel to the lake and maintaining view corridors down streets to the lakefront. Façade dimensions can be regulated through a form-based code.

10. Incentives (focii): Focus city efforts and incentives to support streamlined development at critical sites within study area in order to seed further development at the Armory/Plaza district, Superior and First Avenue East, residential and commercial buildings on Fourth Street and First Avenue East facing Central Hillside Community Park, the intersection of 4th Street and 6th Avenue East, and the Duluth Sheraton Grand at the northeast corner of Superior and 3rd Avenue East.

11. Housing (mix): Encourage balanced housing policies that accommodate several market types, including affordable, middle-income and upper-income units, home ownership and rental units, and different unit sizes and types. Promote middle-income family housing and amenities in the area such as retention of schools in the neighborhood and family-serving recreational activities.

12. Housing (affordability): Reduce and/or minimize the displacement of current residents in the Hillside neighborhood who are very concerned about gentrification. Promote affordable and workforce housing in the study area through use of Section 8 vouchers by private landlords, Community Land Trust, 30-year restrictive covenant mortgages, tax caps for targeted incomes, etc.

13. Housing (home ownership): Promote home ownership with financing alternatives such as location-efficient mortgages, soft second-mortgage programs using CDBG funding to provide loans, employer-financed mortgages, etc.

14. Housing (student): Encourage the construction of student dormitory housing within specified areas such as the downtown core or the Armory area. Discourage further conversion of single-family residences to multi-family housing.

15. Housing (affordability): Encourage the Urban Indian Housing Group's efforts to create affordable housing programs and services directed toward American Indians or those with Native preferences.

16. Housing (affordability): Create "live near your work" programs, such as partnerships between major employers and the City, to financially support homeownership in the study area.

17. Collaborative culture: Encourage health care and educational institutions to create community outreach and collaborative planning programs to improve neighborhoods.

18. Environmental: Promote use of alternative pavers and porous concrete on private properties to reduce impervious surface coverage.

19. Finance: Continue to explore alternate sources of funding for study area, including Federal transportation monies and creation of a municipal property tax abatement program.

20. Collaborative culture: Increase professional community representation on EDA board.

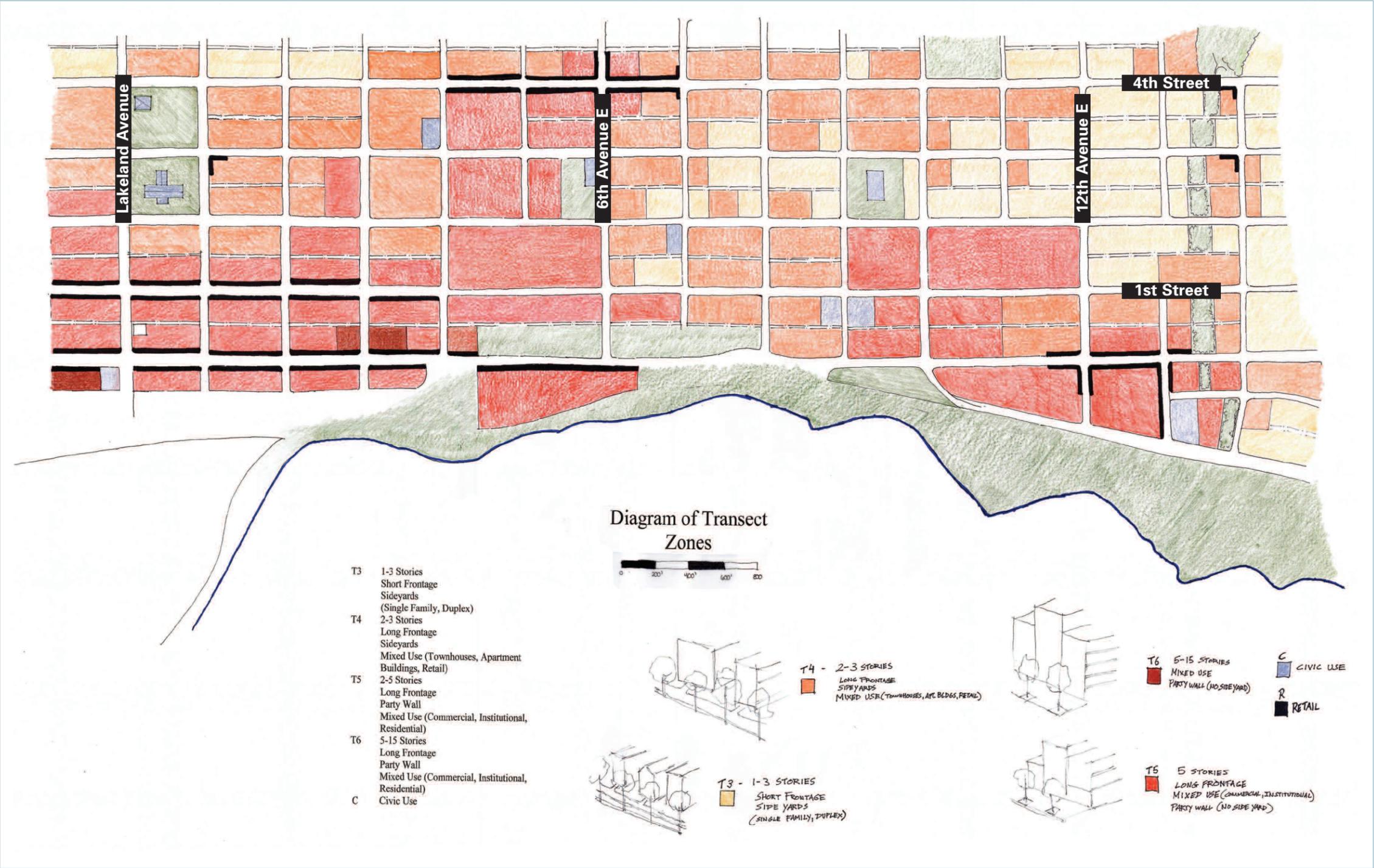
21. Transit: Commission a study and build an advocacy coalition including transit advocates in the Twin Cities and Duluth regions, and elected officials at all levels of local, state and federal government, and create a marketing campaign to restore passenger rail service to Twin Cities. Enlist support of marketing professionals and make the link between transit service, the long-term economic development and environmental benefits to the region and the state, and Duluth's role as the urban gateway to Northern Minnesota servicing the growing market for seasonal housing and vacationers from the Twin Cities and Midwest as we enter an era of \$3.00+/gallon of gasoline.

FORM-BASED CODE AND THE TRANSECT

A primary policy recommendation of the master plan is the transition to a form-based development code for Duluth. Form based codes are emerging nationally as a progressive alternative to conventional used-based zoning ordinances. As the name implies, form-based codes are concerned primarily with regulating the form (height, scale, massing, orientation, proportions, etc.) of buildings, as well as streets and public space, but are far less prescriptive about use than conventional codes. Form-based codes assign various building types (and to a lesser extent, uses) within a spatial framework called the Transect. The Transect is stratified into urban intensities from the most urban to the most rural, with varying degrees between. Each "Transect zone" allows a range of building forms and uses that are appropriate to each zone.

A major difference between this system and conventional Euclidean zoning is that while conventional zoning strictly separates uses such as residential and commercial, form-based codes explicitly allow and even encourage mixing of disparate uses so long as the building forms are compatible. This type of land use pattern was indicative of Duluth and the rest of the U.S. prior to World War II, in which communities also tended to be more walkable, livable, and vibrant. Form-based codes based on the Transect can be an important factor in helping create an enabling environment for revitalization in Duluth, in part because the entire charrette study area was originally developed prior to WWII and experienced its zenith when development practices now being resurrected in form-based codes and the Transect were the norm.

This illustration presents a regulating plan formed by the various Transect zones in the study area that were mapped by the team. The Transect zone categories have been calibrated to local conditions, meaning that the relative intensities of development that exist in Duluth are portrayed across a full spectrum, and only those zones that are present within the study area are shown on the regulating plan (this is why the diagram does not include all zones). In addition, appropriate locations for ground floor commercial uses are shown as black street frontages. For the charrette draft of Elements of a Pilot Form-Based Code developed for the Lower Chester Creek Neighborhood, see 4.6.



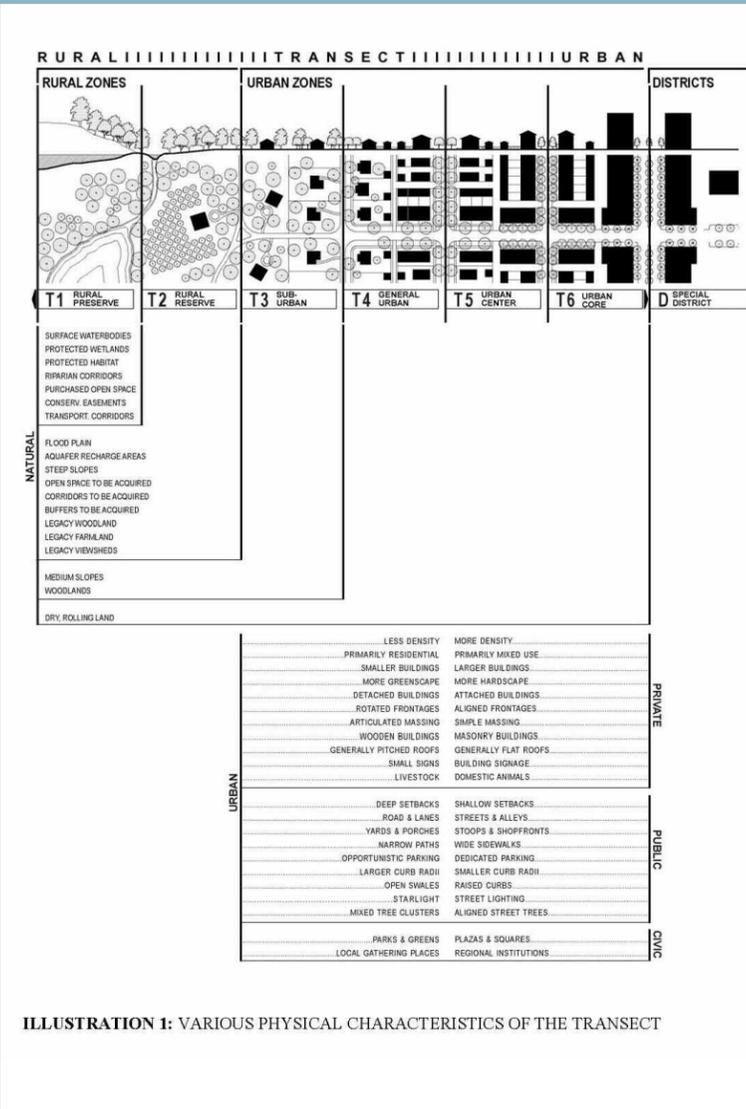
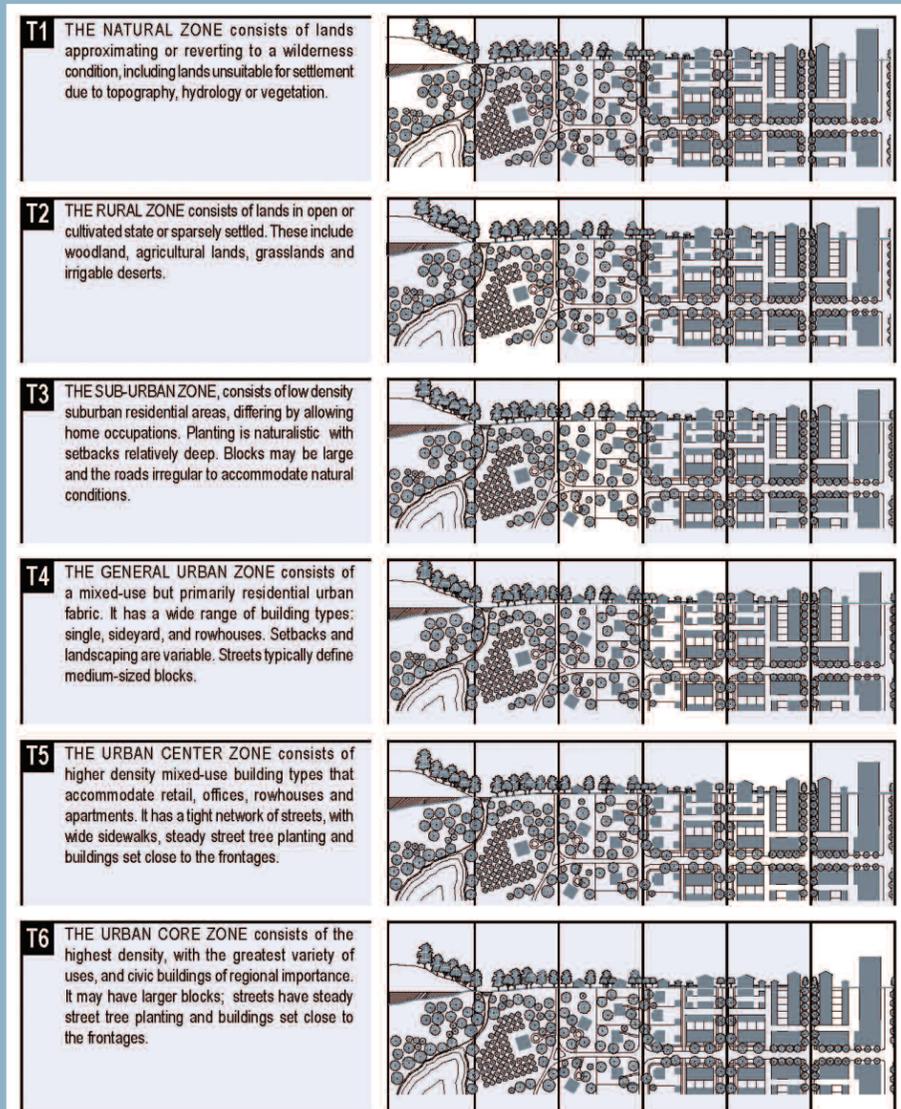
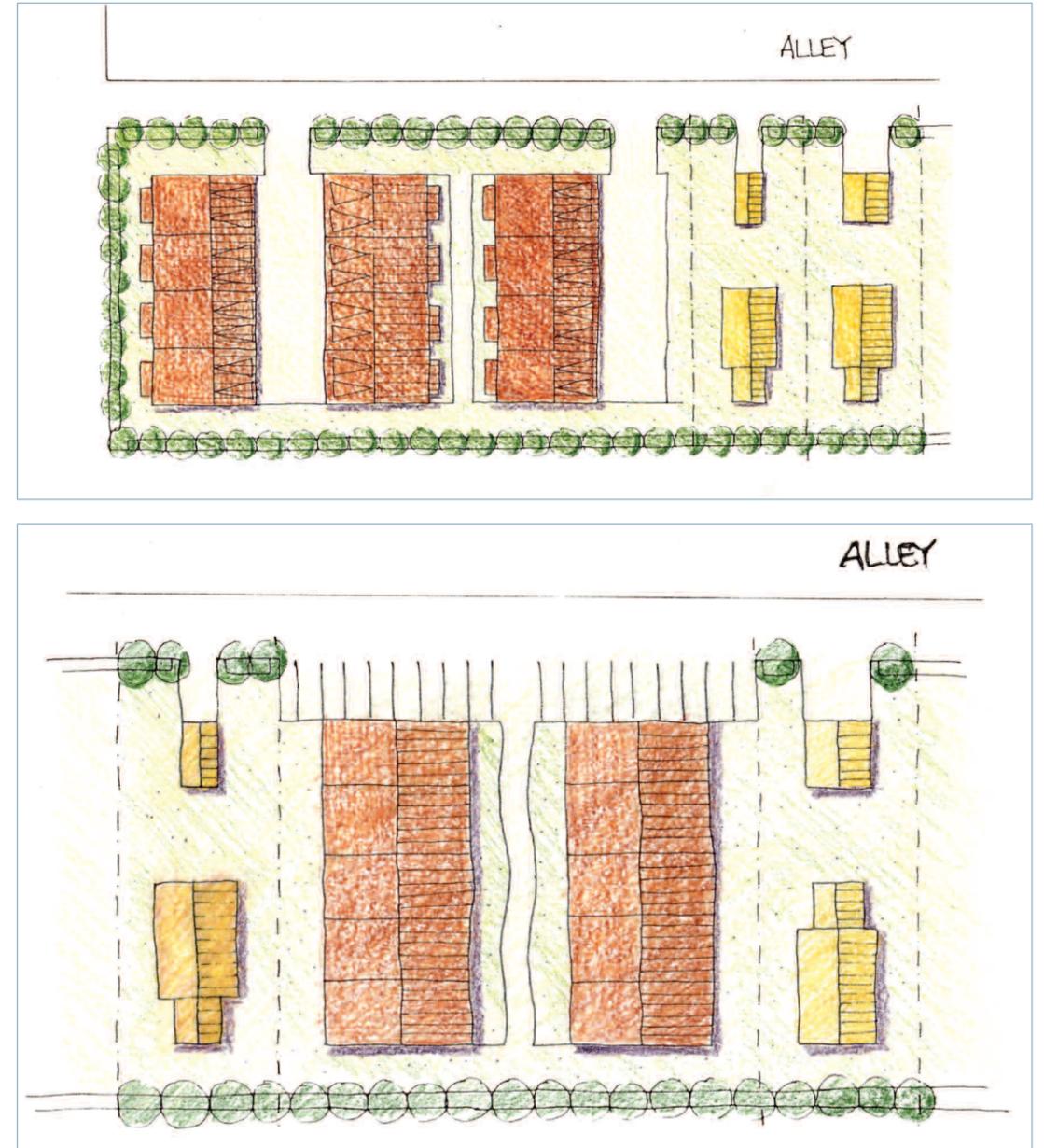


ILLUSTRATION 1: VARIOUS PHYSICAL CHARACTERISTICS OF THE TRANSECT

Physical characteristics of the Transect.
Courtesy of Duany Plater-Zyberk & Company.



Description of the Transect zones.
Courtesy of Duany Plater-Zyberk & Company.



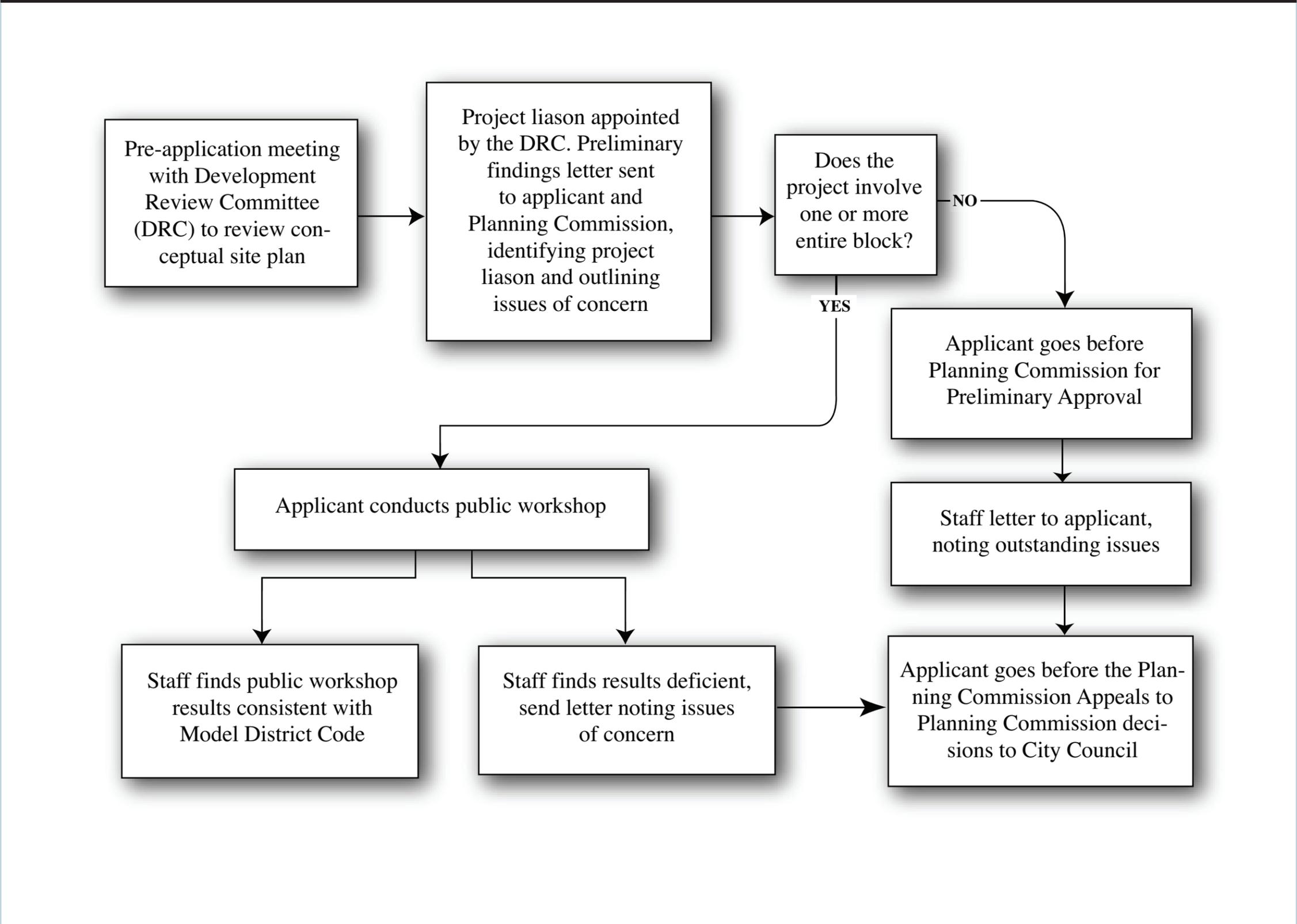
These diagrams are illustrative examples of several allowable building forms and orientations that exist within several of the Transect zones within the study area.

REVAMPING THE REVIEW AND APPROVALS PROCESS

Another important policy recommendation is a significant overhaul of the development review and approval process in Duluth. Currently, a major obstacle to revitalization, attracting new investment, and implementing quality design is the lack of certainty and predictability in the planning review process. During the charrette, a new, enhanced process was developed that would work in conjunction with a new form-based code and within Article 30. This new process would create more predictability and certainty in the development application and review process, as well as increase opportunities for meaningful public participation. The new process would work as follows:

- Pre-application meeting with Development Review Committee, including representatives from the planning, engineering, and fire departments, etc. The applicant presents a concept/sketch plan; a staff project liaison is appointed, who will act as sole point of contact for the project.
- A letter is sent by liaison to applicant and Planning Commission members, outlining issues of concern.
- Applicant a) goes before Planning Commission for Preliminary Approval or b) conducts a public charrette.
- If the applicant submits through a typical Preliminary Approval process, a staff letter is sent to the applicant, noting outstanding issues; the applicant subsequently goes before the Planning Commission for final approval.
- If the applicant submits through a charrette; staff finds charrette results in compliance with code, then gives approval at staff level only; no Planning Commission approval is needed.
- Staff finds charrette results deficient, sends letter noting issues of concern.
- Then applicant may go to Planning Commission for Final Approval.

Proposed Approval Process: Creating Predictability and Certainty in the Development Process



DESIGN RECOMMENDATIONS

Design recommendations represent the “heart and soul” of any charrette Master Plan, and the Duluth charrette was no different. The design recommendations listed below include a matrix of general enhancements to various parts of the study area that can be implemented fairly easily, as well as a set of intensive ideas that would be more catalytic and “transformative” in nature. These studies were the subject of the most intensive focus of the charrette design team, who prepared illustrations to accompany each. These are presented in the remainder of this section.

- 1. Walkable design:** Enhance crosswalk safety through the use of bulb-outs, paving/changes in surface texture, and paint.
- 2. Parking:** Maximize on-street parking wherever possible, including parallel parking on both sides of streets.
- 3. Walkable design (street trees):** Reintroduce street trees where possible, particularly with varieties and spacing that preserves existing view sheds.
- 4. Retail (seasonal):** Provide areas for street vendors, sidewalk cafes and seasonal sidewalk events, with clusters of vendors at bridges and walkways that make linkages to the lakefront and help activate it.
- 5. Heritage (multicultural walking tour):** Create a heritage walking tour to link significant sites of the community’s multicultural and agricultural-environmental-economic-industrial heritage. Include a specific emphasis or themed walking tour devoted specifically to Duluth’s multicultural heritage.
- 6. Heritage (public amenities):** Public amenities (public facilities, infrastructure such as bridges, signage, street furnishings) should promote multi-generational, multi-racial and local heritage ideas.
- 7. Public art:** Encourage public art that celebrates local culture and physical environment.
- 8. Skywalks (public art):** Incorporate public art into the skywalk system.

9. Wayfinding: Reuse and enhance the aesthetics of existing sign pylons (concrete posts) on Superior Street and other downtown streets for wayfinding maps.

10. Public space (picnic areas): Where possible, add picnic facilities, such as grills and picnic tables, to existing parks.

11. Landscape: Enhance the visibility and attractiveness of the trailhead at Chester Creek Park for visitors and to promote tourism.

12. Landscape: Keep landscape—especially at Lakewalk and along Superior Street—trimmed, to improve real and perceived safety, and to enhance view shed.

13. Lighting standards: Reduce light pollution by encouraging—via education and design review—“dark sky” principles such as downlighting. Establish downtown lighting standards for fixtures and bulbs that create an attractive, safe ambience appropriate to a downtown, while prohibiting suburban lighting standards.

14. Lighting: Ensure that public right-of-way lighting is appropriate and adequate. Explore Minnesota Power subsidies and programs where available, or incorporate costs as part of TIF district program.

15. Cycling: Incorporate bicycle facilities and bike racks at popular downtown destinations and along the lakefront. Designate bike paths using “Share the Road” signage in the downtown and, where the existing street width is sufficient, paint bike lanes.

16. Landscape: Enhance access points to the Lakewalk, particularly at Lake Avenue and the “Muffler site,” per design proposals from the charrette.

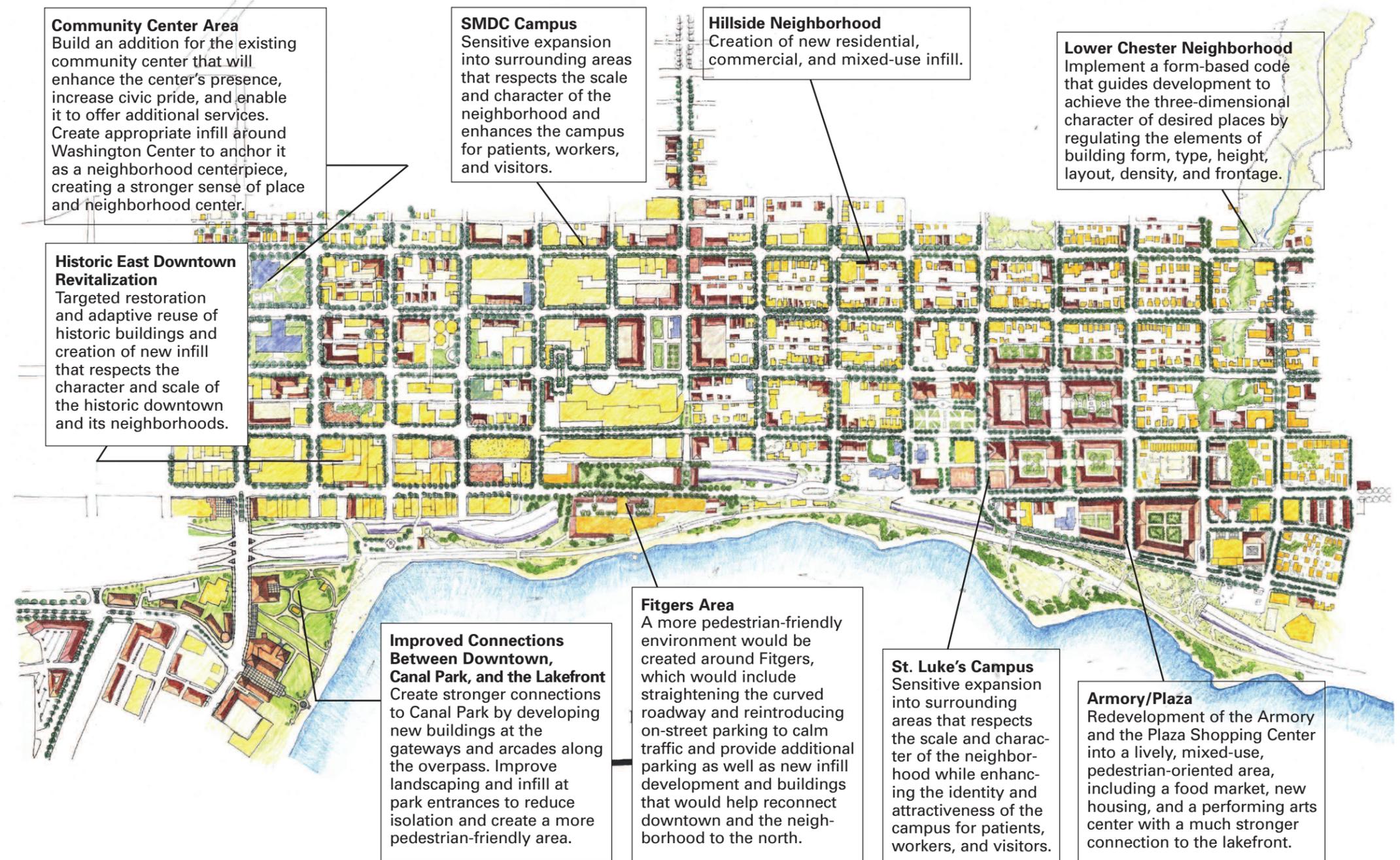
17. Skywalks: Sensitively and strategically expand the skywalk system through rear or side facades of buildings. Consider enclosed sidewalks (local example in a shopping center outside of the downtown) as an alternative that provides comfort while maintaining foot traffic for downtown businesses during cold and inclement weather. Design for enclosed sidewalks should be primarily glass to allow for maximum light and clear view of storefronts from the street and incorporate removable side panels and retractable sections during warm weather (shopping center example includes retractable garage doors).

18. Street design: Work with property owners and through development proposals to upgrade condition and design of alleys, such as using alleys as point of access for residential parking, and ensuring adequate lighting, vegetation and maintenance.

19. Street design: Pursue state and federal grants and budget for a phased conversion of one-way streets to two-way.

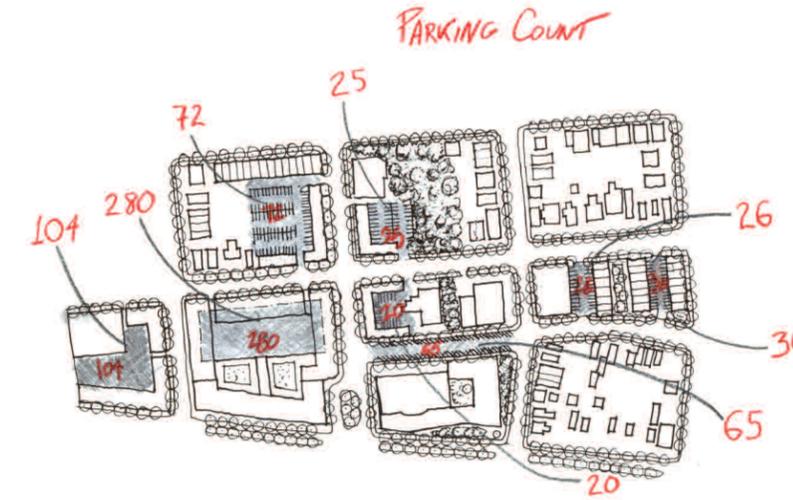
This diagram highlights the intensive design recommendations that would effect positive transformations in key parts of the study area. Each one of these is presented in greater detail within this section.

Duluth East Downtown, Hillside and Waterfront Charrette Master Plan

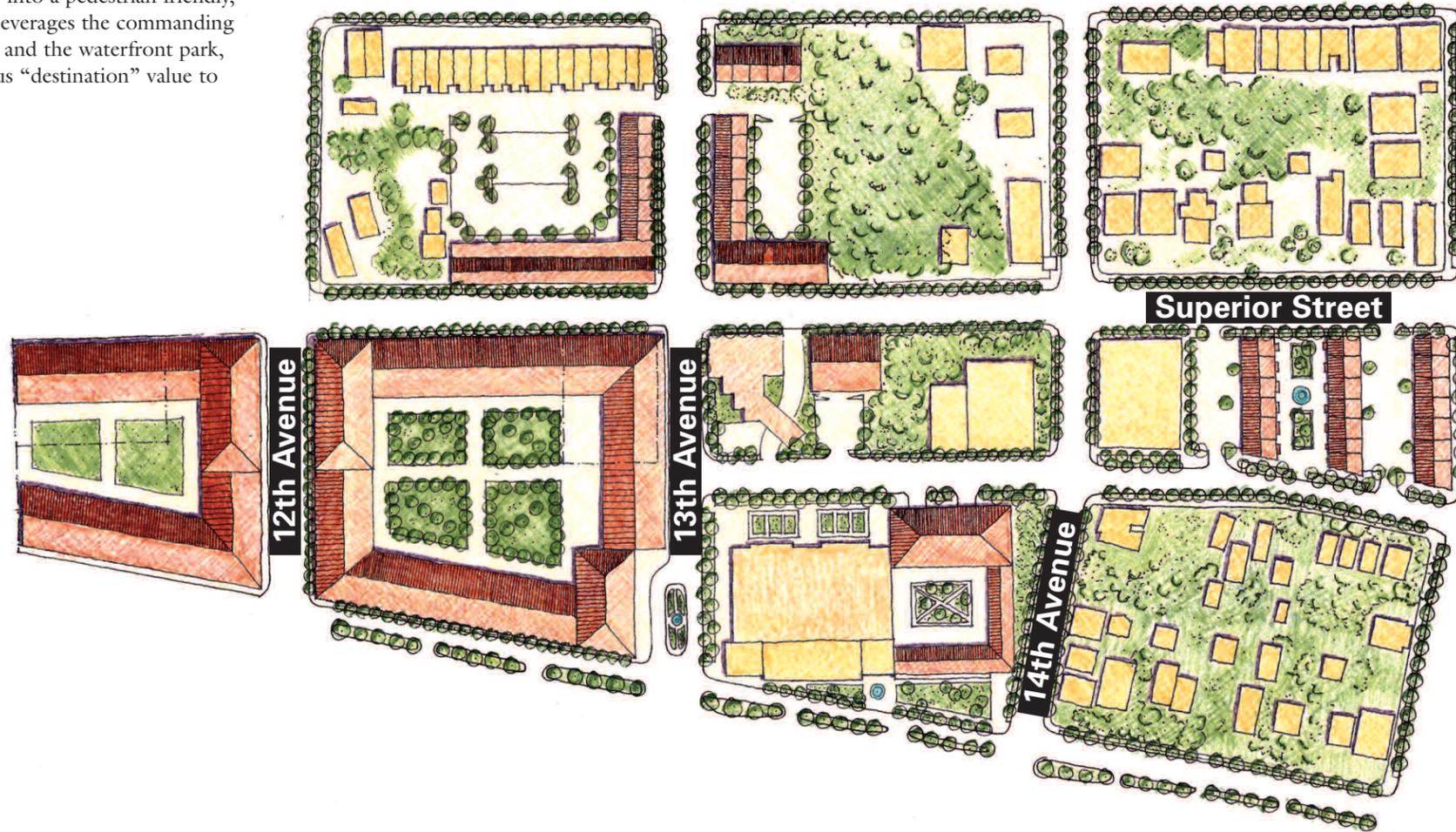


PLAZA/ARMORY NEIGHBORHOOD

There has been a great deal of local grassroots effort to adaptively reuse the Armory and create a new destination. There are current proposals to turn it into a boutique hotel with a performance venue and/or a performing arts center. However, there has also been skepticism among business leaders as to the feasibility of the proposals. The charrette team recognized that in order to be successful, it would be necessary to look beyond the Armory building and property itself and study its relationship to its surrounding environs. The plan that was developed integrates the proposed programmatic elements for the Armory, but goes further by proposing new infill and redevelopment in several blocks around the Armory. Most notably, this includes a redevelopment of the Plaza Shopping Center into a pedestrian friendly, mixed-use center that leverages the commanding views of Lake Superior and the waterfront park, thus adding tremendous “destination” value to this area as a whole.



An analysis of existing parking supply.



Charrette Plan for Armory/Plaza area.



New infill and proposed land use.

HOSPITALS

Two major hospital systems serve the Duluth community. Saint Mary's/Duluth Clinic Health System (SMDC) is located near the 4th Street Business District and Downtown Duluth. St. Luke's is nearby, located in a residential district with distinctive architectural characteristics.

After studying the history of each system, charrette team members met with hospital representatives and community members, and later held an open forum to describe current research in the area of health care design and to identify areas of opportunity and challenge for these systems. Additionally, the team conducted walking tours of each facility, as well as the neighboring blocks around each hospital, to study significant architectural elements that emphasize the unique qualities of each hospital and its neighborhood. The team's consultants related the local context to experience with comparable health care facilities in the U.S. The results of this process are proposals that are new to both hospitals and can serve as starting points for conversations about the future.

Recognizing that St. Luke's would like the opportunity to grow and that St. Luke's neighbors have some concern about this, the design team studied how St. Luke's might build enough volume to secure its future and at the same time enhance the physical and social environment of the neighborhood. If St. Luke's is successful with this strategy, not only can it achieve a distinctive architectural identity, better access, and more effective facilities, but the neighborhood around the hospital will join in the renaissance.

These two goals are linked, since an attractive neighborhood will make St. Luke's more appealing to its clientele and employees, and health care facilities that complement the neighborhood will make it a more attractive place to live. If St. Luke's campus is planned with the concept of embeddedness and connectivity to its neighborhood, then there may be sufficient housing around the hospital to accommodate staff at various income levels and provide attractive short-, medium-, and long-term housing options for people receiving treatment at St. Luke's.

Based on these assumptions, the design recommendations for St. Luke's address the following goals:

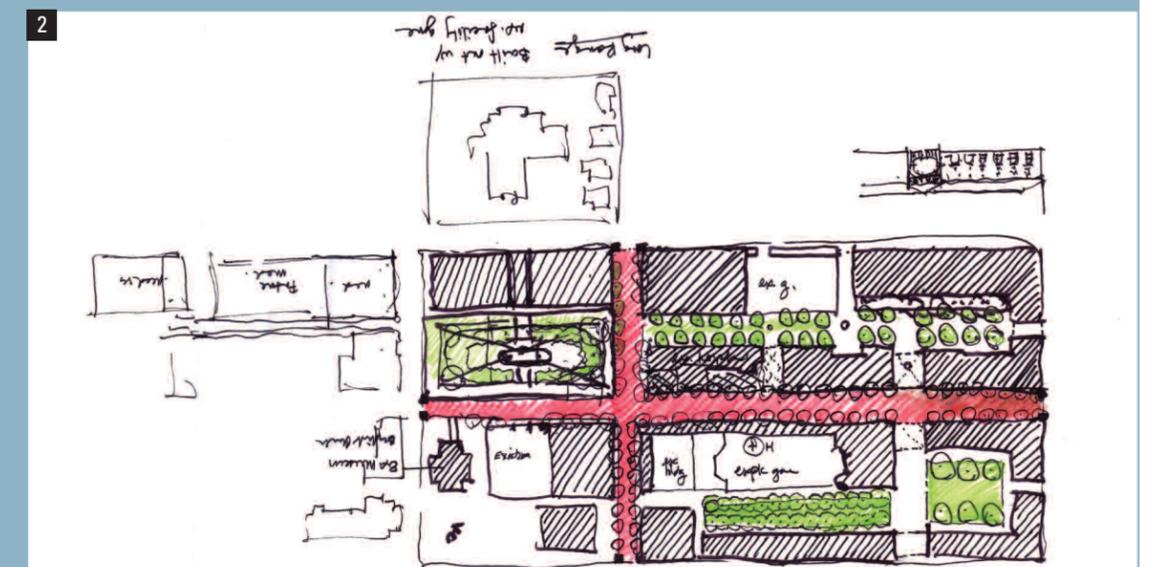
- Establish an architectural character consistent with the neighborhood.
- Draw upon the historic architecture of Duluth as the basis of the architectural language.
- Scale the buildings to dimensions appropriate to the street section.
- Buildings that face the residential neighborhood to the northwest are lower profile (3–4 stories).
- Buildings along the lakefront highway are taller.
- Place higher intensity/use buildings on the internal street.
- Define gateways and entrances, as well as an urban campus edge.
- Build a courtyard campus to introduce quads and greens throughout the facility.
- Develop a streetscape palette unique to St. Luke's: street lights, street trees, benches, local stone, and wrought iron.
- Develop liner programming for parking garages (exposed garages and parking lots are not neighborhood-friendly).
- Develop pedestrian connections to the newly proposed mixed-use Plaza/Armory development.



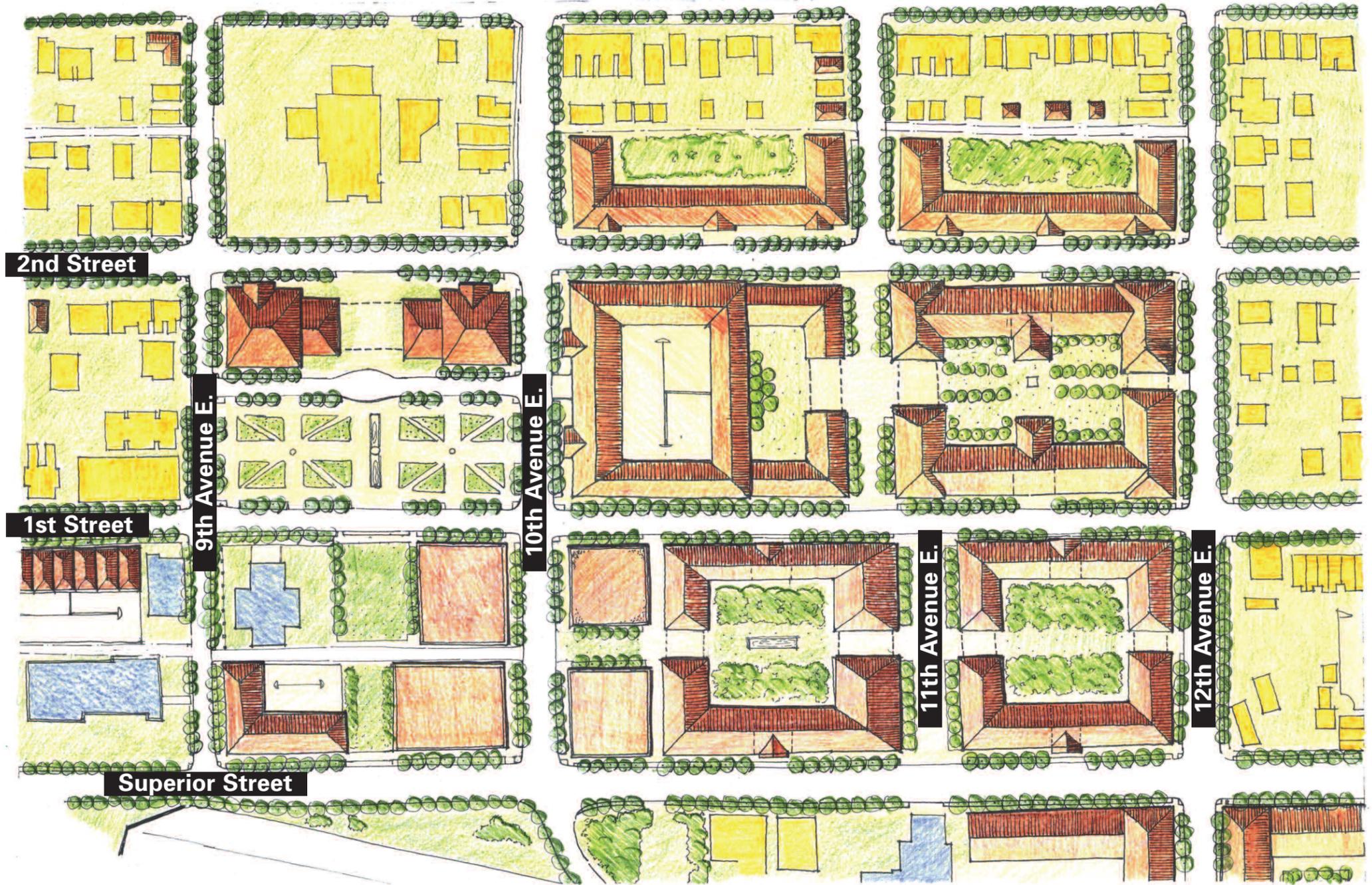
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Rendering of proposed St. Luke's plan.

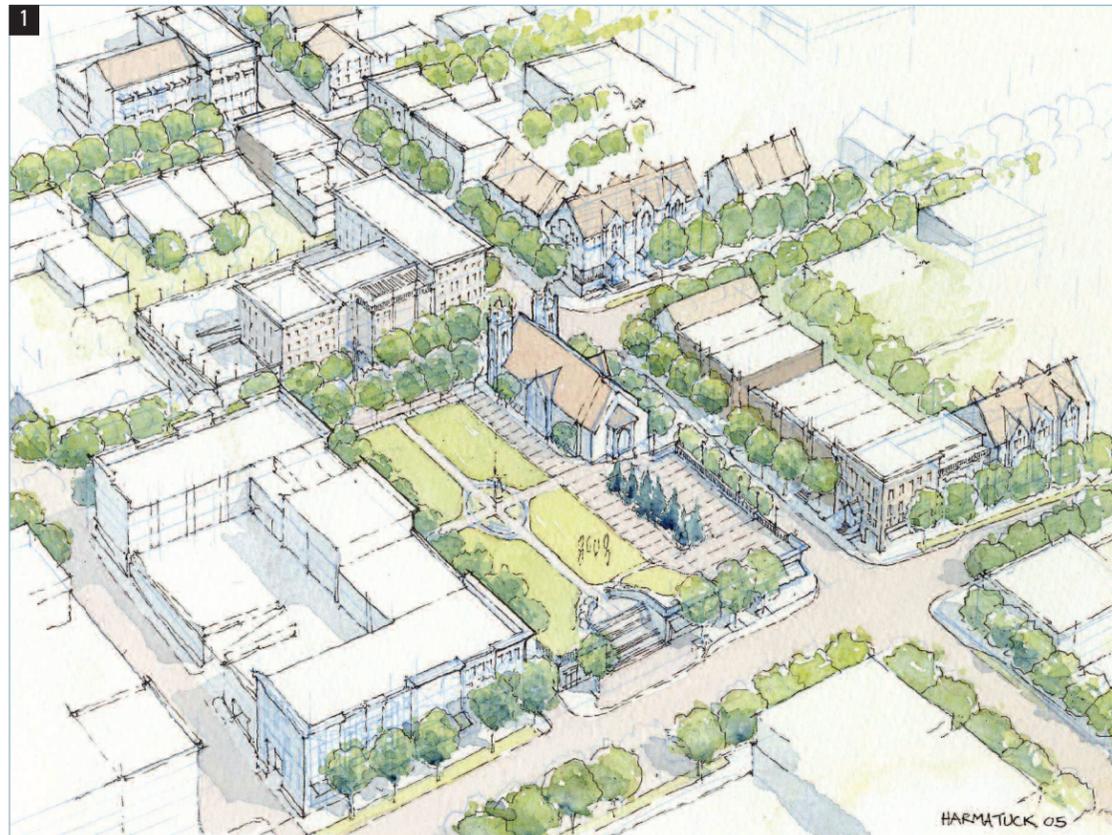
2
St. Luke's plan Phase I.

3
St. Luke's plan Phase II.



Proposed St Luke's plan. This campus setting features a series of green courtyards.





SMDC is currently completing construction of a \$75+ million ambulatory care center and will share in a city-built parking garage and skywalk. While the new facilities provide significant space, the complex of buildings would greatly benefit from a unifying feature that signifies the heart of the complex. A new central plaza, therefore, is proposed by the charrette to provide a focal point for the SMDC campus as well as the neighborhood.

Already surrounded by an area of mixed-use buildings, the proposed plaza is likely to be used as a lunch and break area during the summer and later, as a winter garden. The proposed plaza also provides landscape views for patient and staff areas throughout the hospital. If future new buildings are placed in support of the plaza, and the architectural character responds to the historic institutional architecture of that area, the plaza will make a significant contribution to the identity and attractiveness of the hospital and the downtown as a whole. The Gloria Dei Lutheran Church can also be enhanced as a landmark through its position on the new plaza. Also lining the plaza is the current headquarters of the Benedictine Health System.

Based on these assumptions, the charrette's design proposal for SMDC seeks to:

- Define a new central plaza to serve SMDC and the neighborhood.
- Introduce landscape views to patient and staff areas (highly valued by both groups and clinically beneficial for convalescence).
- Provide a garden for the neighborhoods, including a green gathering area for Gloria Dei.
- Develop streetscape to enhance the pedestrian experience.

1 St. Mary's Square.

2 SMDC proposal showing new lined parking decks and new green central plaza.





CONNECTIONS BETWEEN DOWNTOWN, LAKEFRONT, AND CANAL PARK

Creating stronger connections between downtown and the waterfront areas is vitally important in strengthening Duluth. This will be accomplished in two ways: First, by adding new infill development along connecting routes in order to redefine the public realm in a more pedestrian-friendly form; second, by improving the function and aesthetic of the access points themselves to become more seamless.



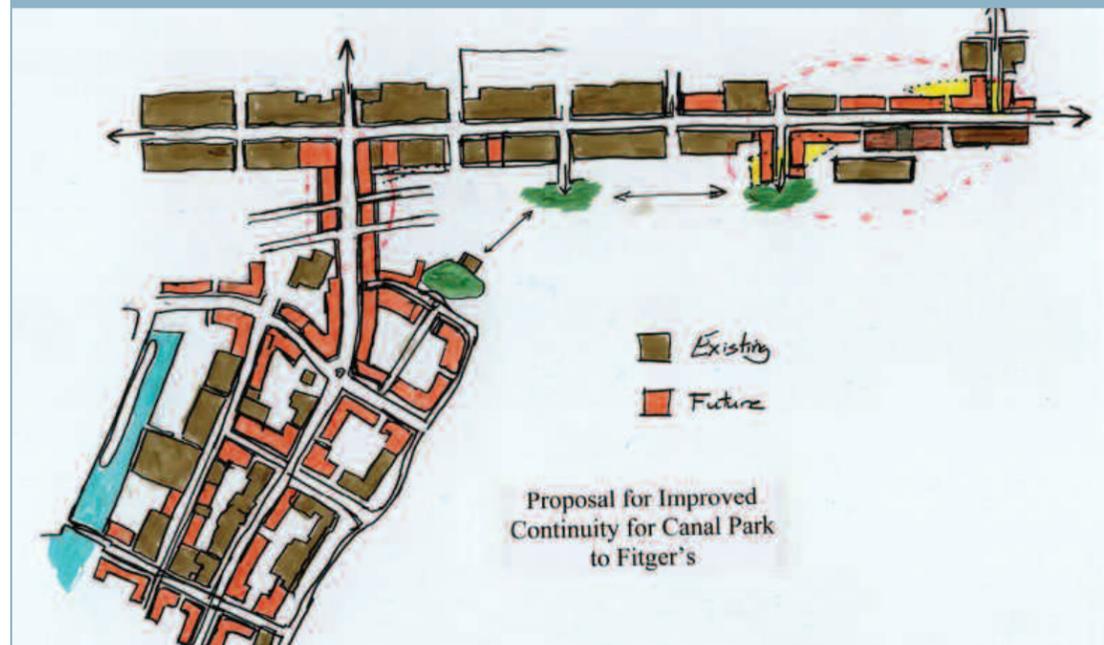
This before and after image shows how a pedestrian path leading from the neighborhood to the downtown and waterfront areas could be opened up to become more welcoming and attractive.



Attractive streetscapes are an important element in creating high-quality pedestrian connections. This street scene in Canal Park is a model that should be repeated and expanded along the route into downtown to the greatest extent possible.

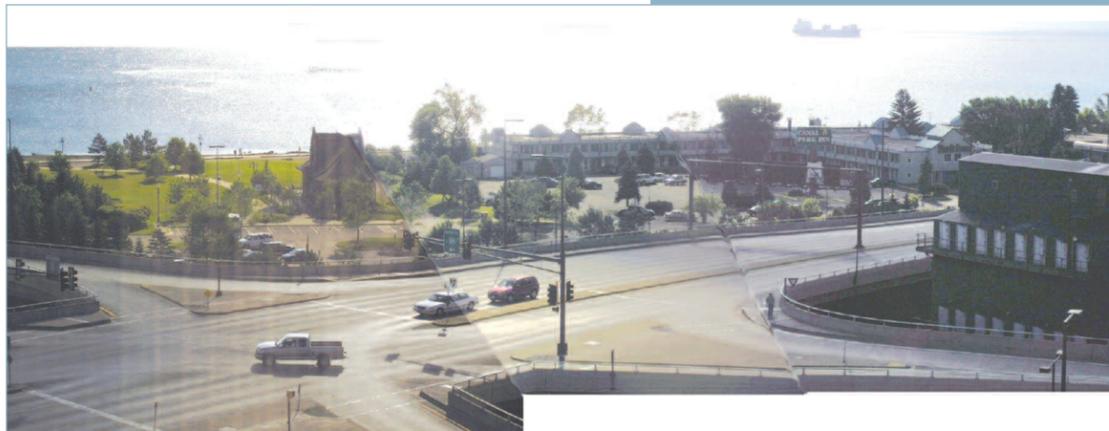


New infill proposed for the former muffler shop site in order to create an inviting connection between East Superior Street, Lake Place Park, and the Lakewalk. See also the plan for this site done by LHB prior to the charrette as another alternative.

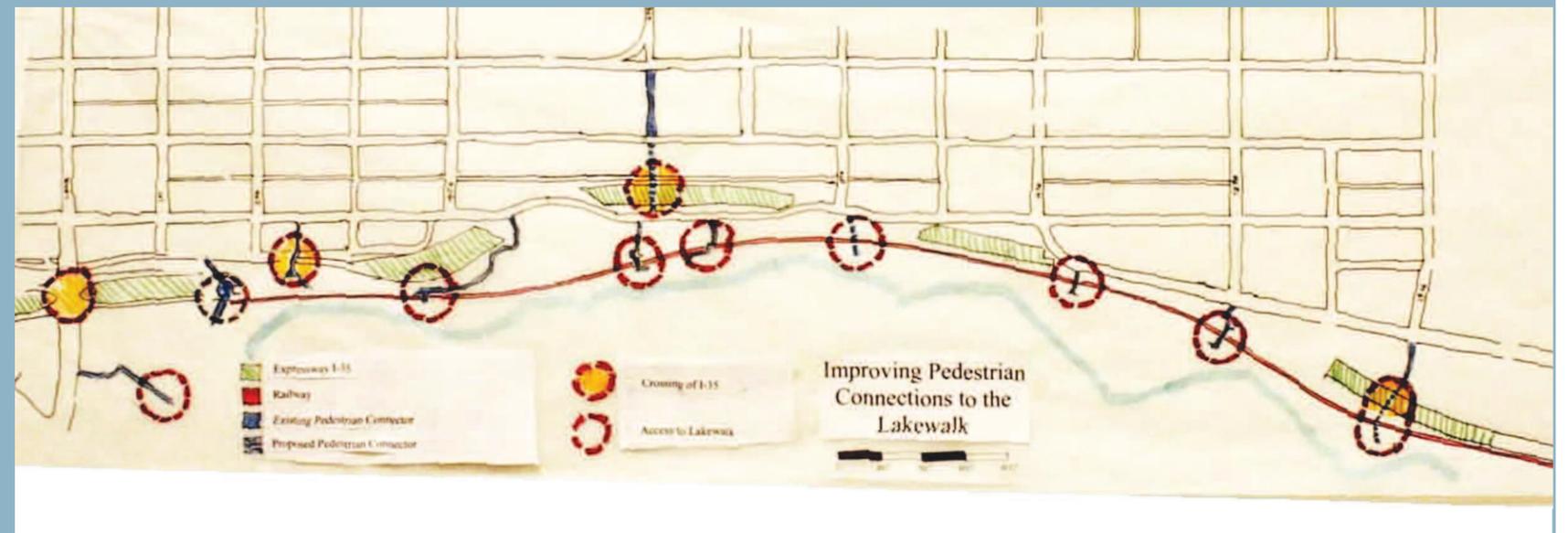


This study shows how targeted infill development could improve continuity between Canal Park, downtown, and the waterfront park.

After: Proposed redevelopment of gateway area from downtown to Canal Park and the Lakewalk.



Before: Existing view from downtown to Canal Park.



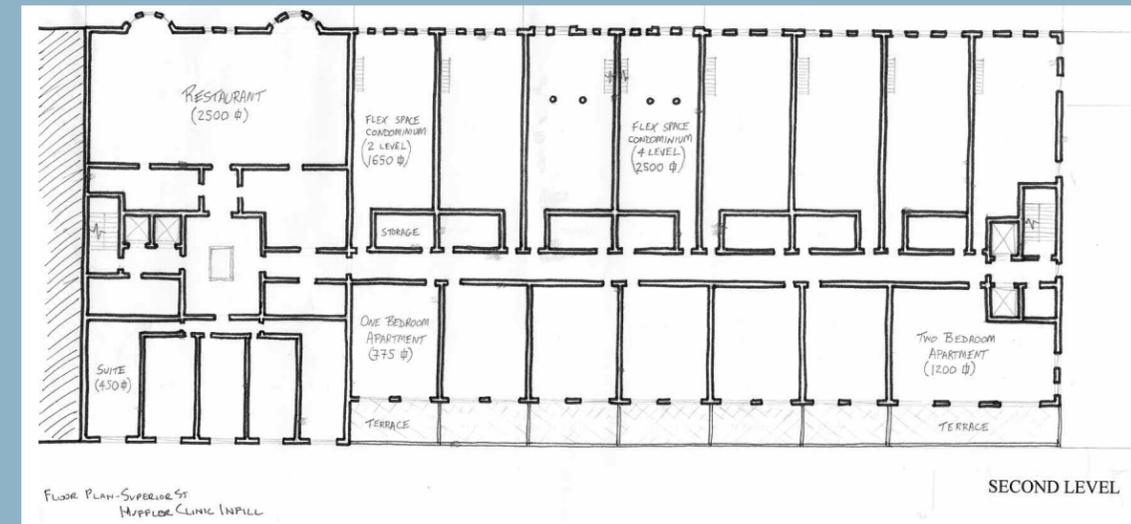
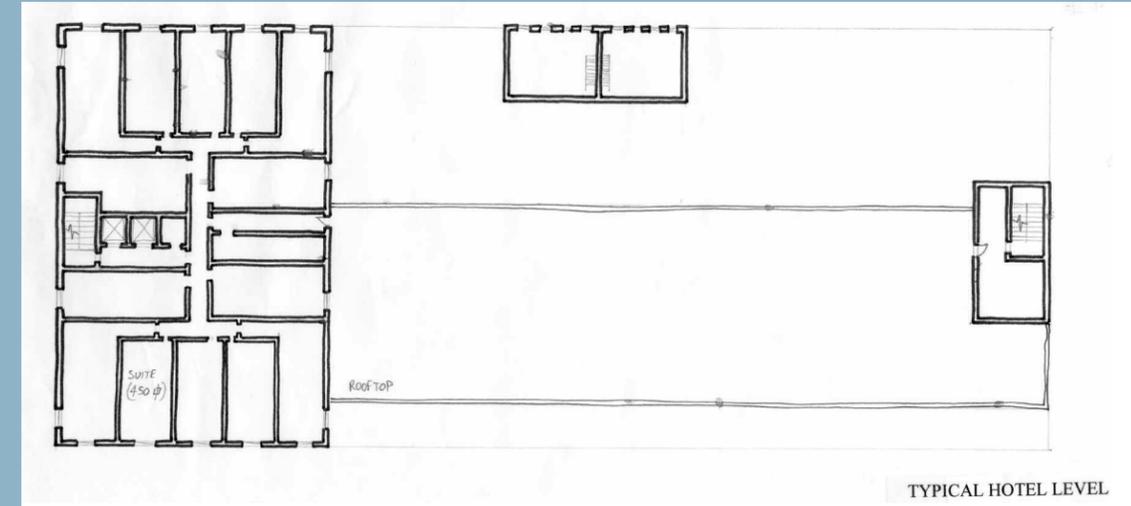
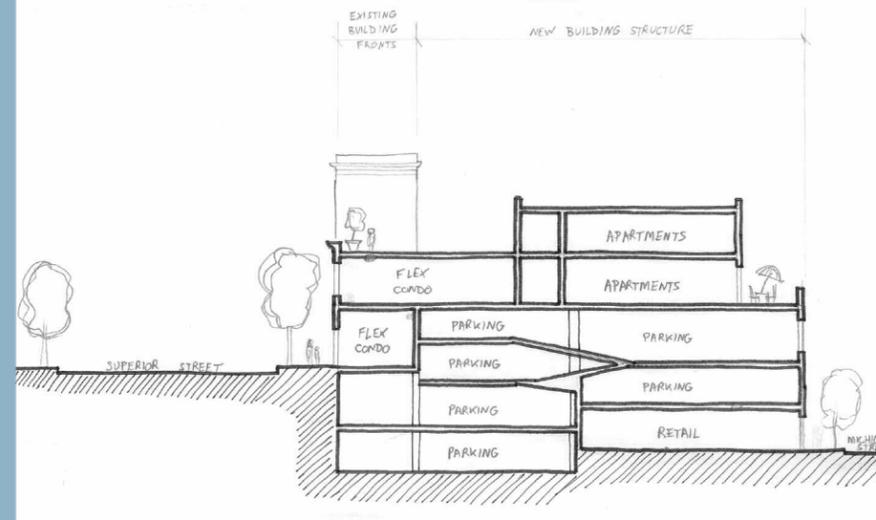
This diagram identifies locations for improved pedestrian connections to the Lakewalk.

PRESERVATION

One of downtown Duluth's greatest assets is its collection of handsome historic buildings. While there are numerous buildings with ornate architecture, even older buildings that do not have ornate façades contribute greatly to the pedestrian scale "street wall" that gives the east side of downtown Duluth in particular a feeling of being an "outdoor room." Every effort should be made to preserve and reuse these buildings for current and future generations to enjoy as a living legacy of Duluth's cultural and built environment.

To demonstrate the potential for historic preservation and reuse, the team focused on a group of buildings along Superior between 1st and 2nd Streets, which, at the time of the charrette, were in danger of being razed as part of a redevelopment proposal for a boutique hotel. The team met with the developer and devised an alternate that would allow saving the façades and the first twenty feet of the buildings back from the street, combined with development of new structures behind and above, as well as new infill on the vacant parcel within the block. Shortly after the charrette, it was learned that the developer was interested in pursuing this alternative and had met with the National Trust for Historic Preservation and key community leaders to discuss this possibility.

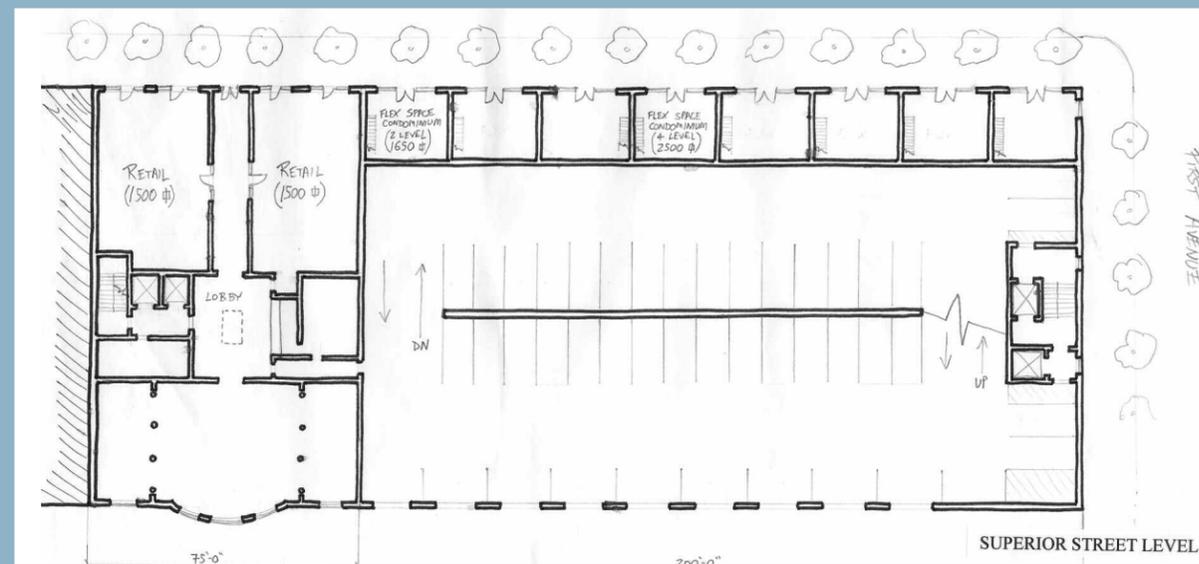
Schematic diagrams showing proposed floorplans of how hotel rooms and meeting space could be integrated with existing building fronts.



The most prominent of the historic buildings.



A view of the block of historic buildings on Superior Street from the roof of the Tech Center.



Perspective sketches and cross-sections demonstrating how the alternative redevelopment plan would save the façades and part of the buildings, while allowing the new program and parking to be tucked behind.

COMMUNITY CENTER BUILD-OUT

The Central Hillside Community Center is a focal point for the neighborhood, yet the building itself, its grounds, and the surrounding area currently lacks a sense of place and presence that it deserves. There are important civic buildings including Washington Center and Studios and the school district's Central Administration Building around the community center that also need to be better integrated into the fabric of the neighborhood as anchors.



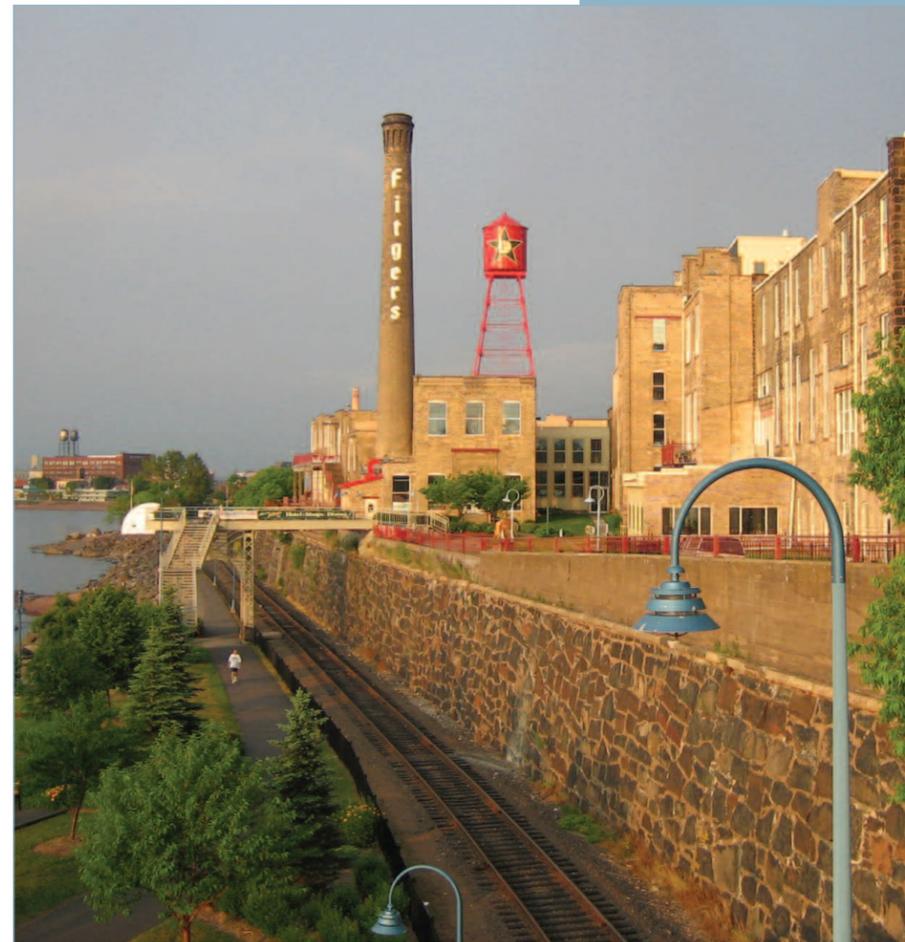
This illustration shows an expanded community center that orients it toward the street and the civic building, Washington Center and Studios, across from it. It also shows opportunities for residential and mixed-use infill development in red.



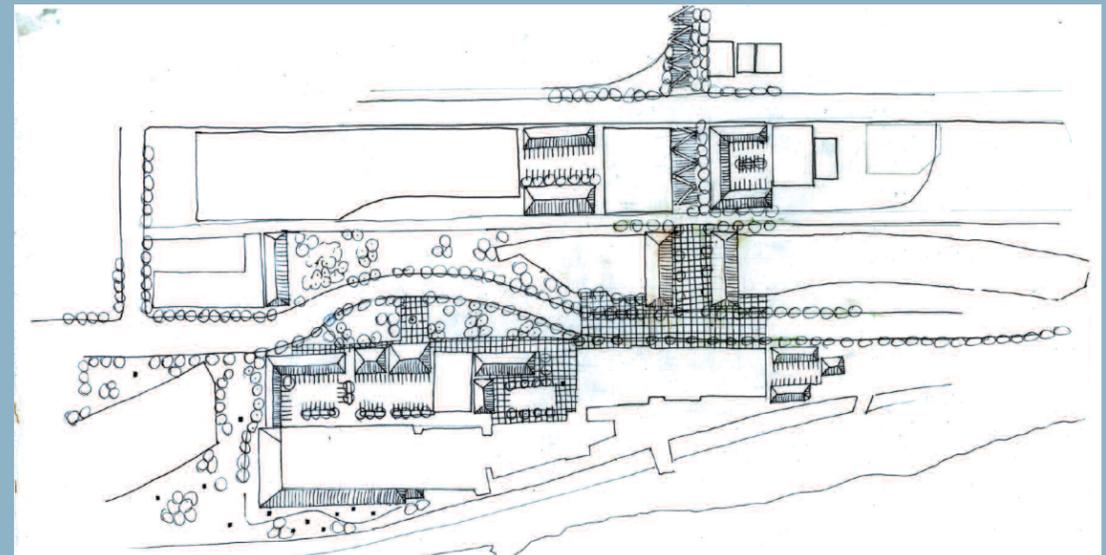
Proposed new infill development, shown here along 1st Avenue East and on 4th Street, would blend seamlessly with the character and scale of existing housing stock and other buildings.

FITGER'S COMPLEX

Fitger's is a popular destination for locals and tourists alike. However, it feels very isolated from the rest of the city. In order to better connect it with the rest of downtown and the adjacent neighborhoods, a redesigned streetscape, re-alignment of Superior Street, new street connections, and new infill development will better integrate this important destination with its surroundings.



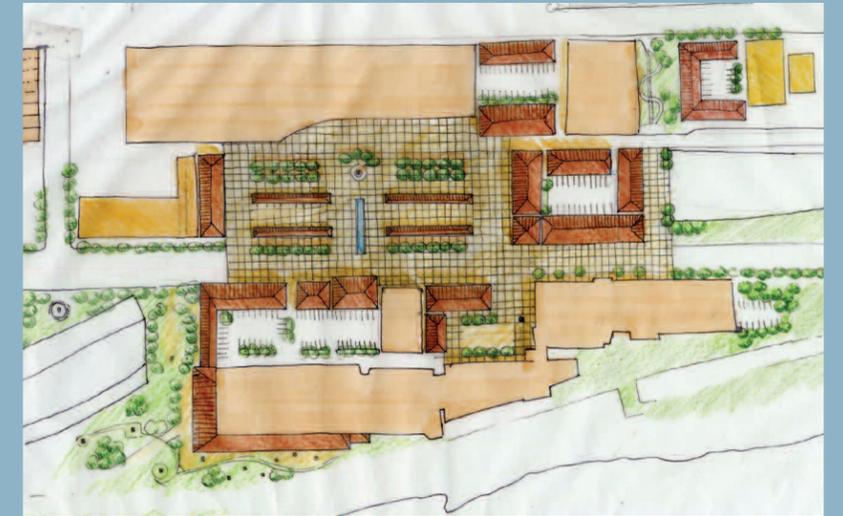
Transforming the streetscape along Superior would expand and extend the pedestrian-friendly scale that currently exists directly in front of Fitger's. This approach would be applied to the areas on either side of Fitger's, which currently are hostile to pedestrians and give Fitger's a sense of being cut off from downtown Duluth.



Diagrams showing the new development that would line the expanded decking, spanning the interstate.



This view from Fitgers towards downtown illustrates the hostile environment that deters people from walking to Fitger's from downtown and keeps this area from becoming more vibrant. The curve in Superior Street was originally designed as a traffic-calming measure, but inadvertently created a "slalom course" that drivers routinely speed through.



This proposal shows a straightened Superior Street flanked by new infill development that lines parking areas, and a new public plaza with active uses across from Fitger's. It also includes an expansion of the decking over the interstate, which creates a new connection to the neighborhood that includes buildings lining the street over the enclosed decking.

SKYWALKS

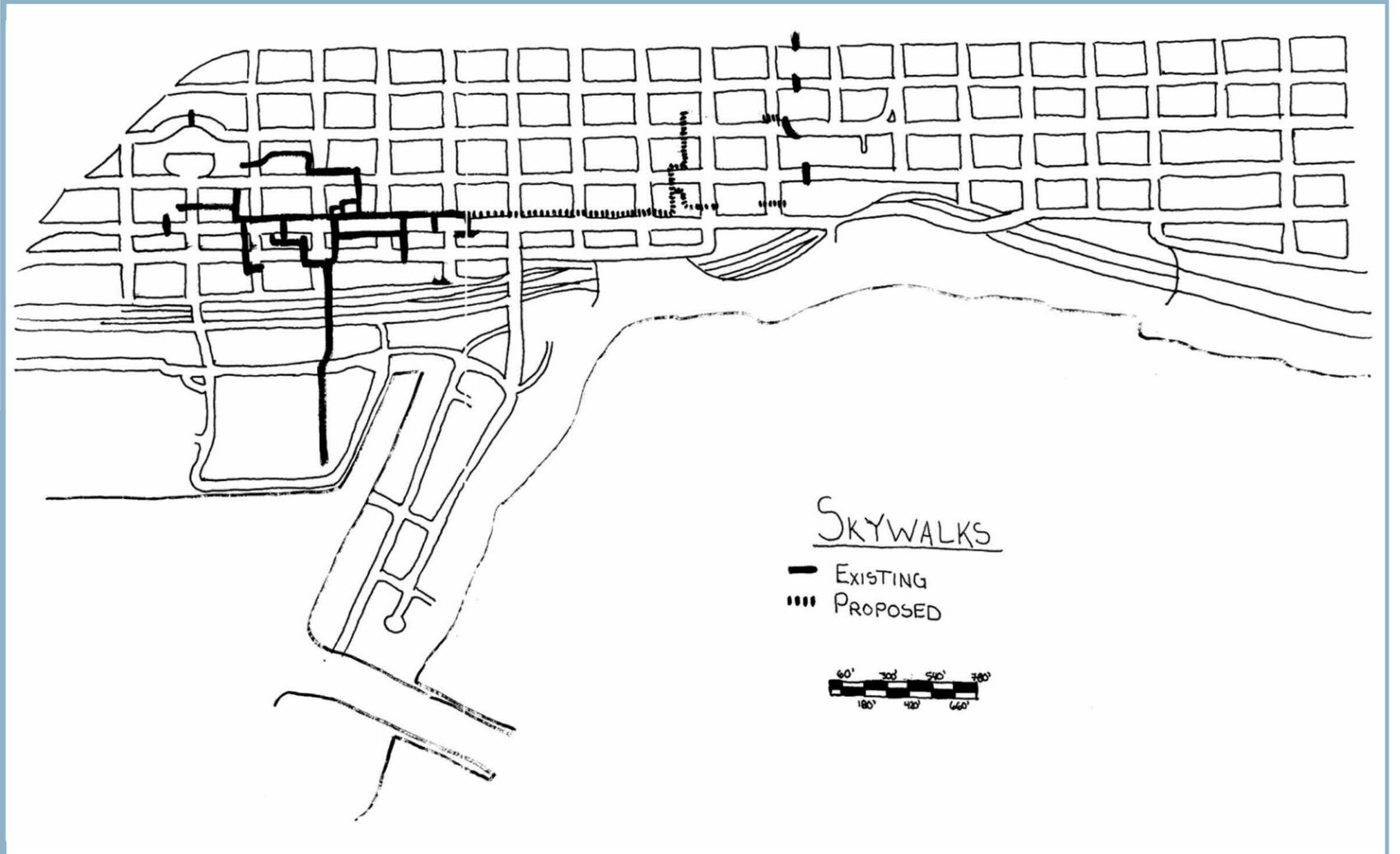
In order to enhance both the aesthetic quality and functionality of Duluth's skywalk system, a set of sketches were developed illustrating how the existing and future skywalks could be transformed into attractive centerpieces for the city. The re-skinned skywalks could even become a symbol of Duluth's renaissance.

In addition to improving its aesthetic quality, the functionality of the skywalk system could also be greatly improved by integrating street-level arcades in retail areas, as well as by adding windows to skywalks that can be opened in the summer.

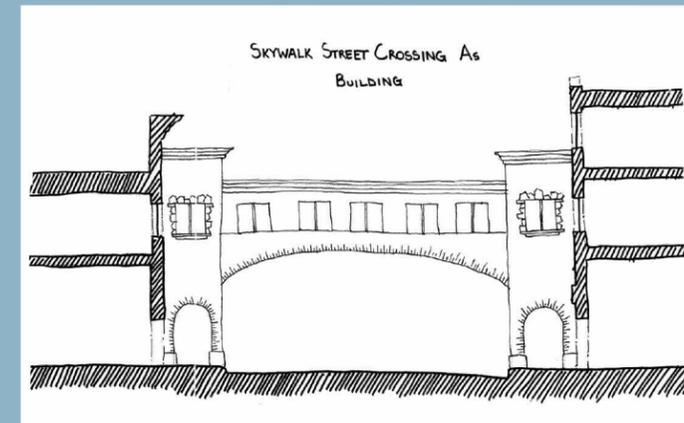
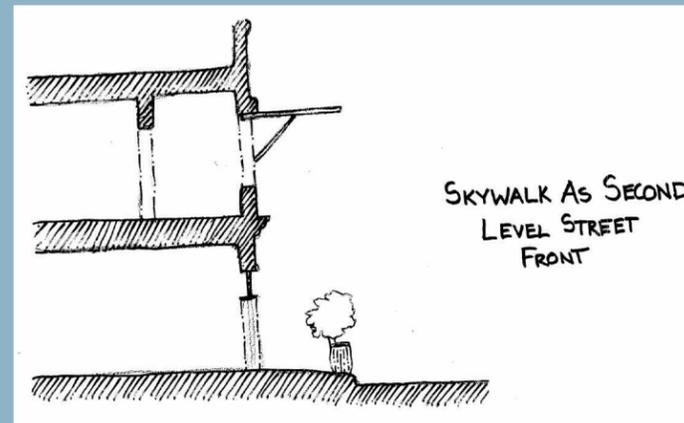
Similarly, climate-controlled street-level arcades can be opened or closed depending on the season, and can help promote a vibrant, year-round streetscape at ground level where activity is desired and needed, particularly along retail frontages. A local example of a glass-enclosed sidewalk that is opened in warmer weather was observed in a shopping center outside of the downtown. To protect and reinforce existing ground-floor retail shops and restaurants, retail frontage should be discouraged along upper floor skywalks, and an improved wayfinding system to make it easier to navigate the system and find stores should be developed.



Skywalks provide shelter to pedestrians during inclement weather but can create conditions that don't promote vibrant, walkable communities over the long term.



Arcades and passageways that can be opened during warmer months to create a better sense of connection to the street.



A re-skinned or new skywalk with street-level arcade.



New street-level arcades to reinforce the streetscape and support retail activity.

LAKE AVENUE INTERSTATE OVERPASS

A related issue to that of the skywalks is how to create a high-quality pedestrian realm in areas where skywalks are not practical. Nowhere is there a greater need for a better pedestrian connection than between downtown Duluth and Canal Park along Lake Avenue. This is the primary gateway and the most direct route between downtown and Canal Park and the waterfront, yet it is currently a hostile environment to pedestrians. Few pedestrians brave crossing the Lake Avenue interstate overpass to get to Canal Park, which makes the waterfront feel more disconnected from downtown than need be.

To overcome this, an innovative solution should be considered in the form of new development built over the interstate along Lake Avenue. One such innovative solution was recently built in Columbus, Ohio, to connect downtown to the adjacent neighborhood of Short North. A row of retail buildings with arcades was built along each side of High Street that instantly created a seamless, high-quality pedestrian connection. This could be replicated in Duluth along Lake Avenue (and at an expanded overpass crossing near Fitger's as well), or a more modest alternative that would include covered arcades only. A combination of the two could also be explored.



Views of the new I-670 "cap" project in Columbus, Ohio, serve as a model for a potential Lake Avenue crossing.



Courtesy Continental Real Estate Company.

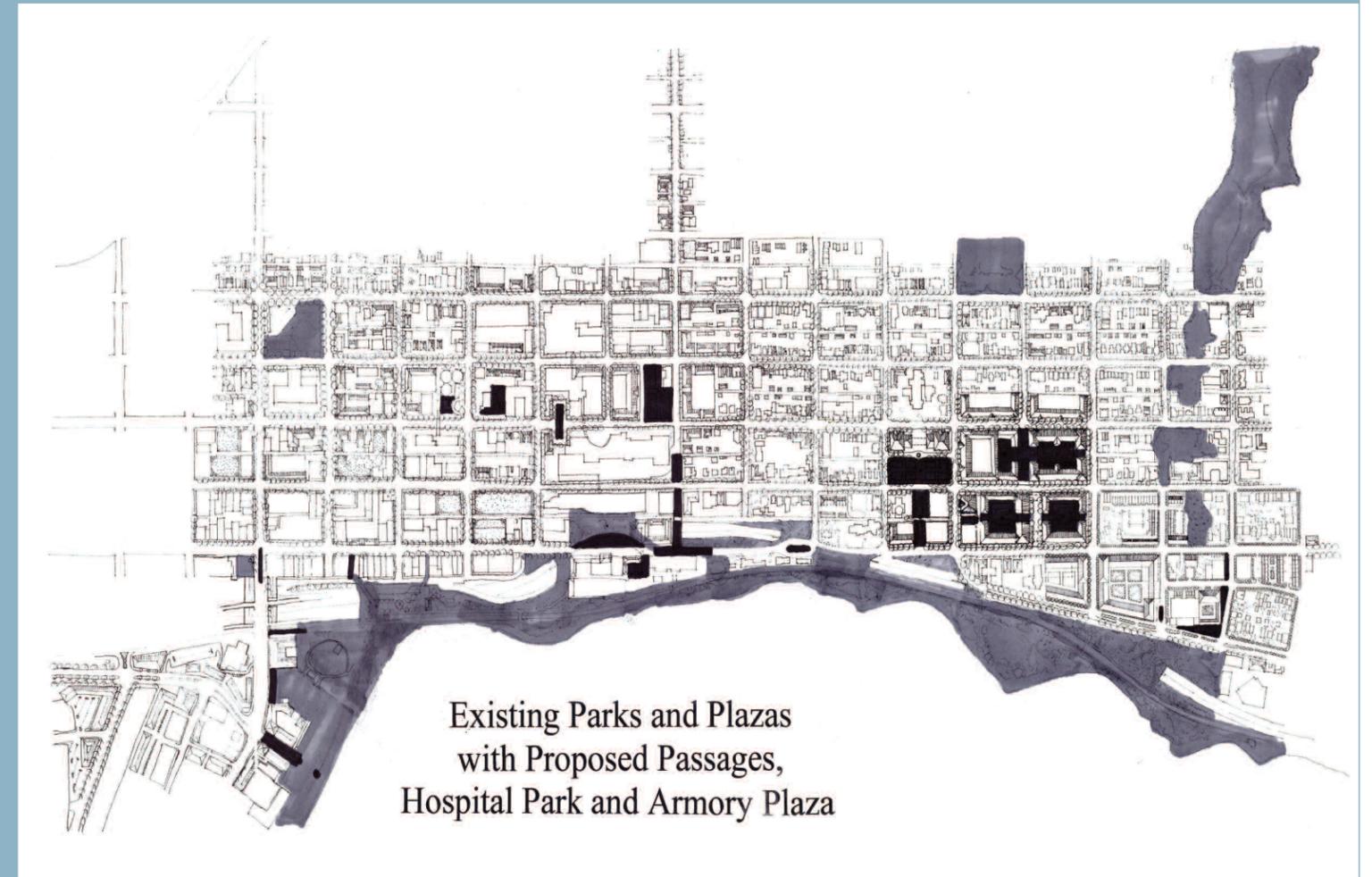


The Ponte Vecchio in Florence, Italy, built in the 14th century, is a pedestrian bridge that has retail stores at the "street" level, and an enclosed walkway on its second level. This inspirational model shows how civil infrastructure can contribute greatly to a memorable and inviting pedestrian experience.

PARKS AND OPEN SPACES

The charrette team made several recommendations to help preserve, nurture, and enhance the outdoor ethic, parks, and open spaces in Duluth. In addition to recommendations already discussed in this report to enhance access points to the Lakewalk and improve connections between downtown, Canal Park, and the lakefront, other recommendations included:

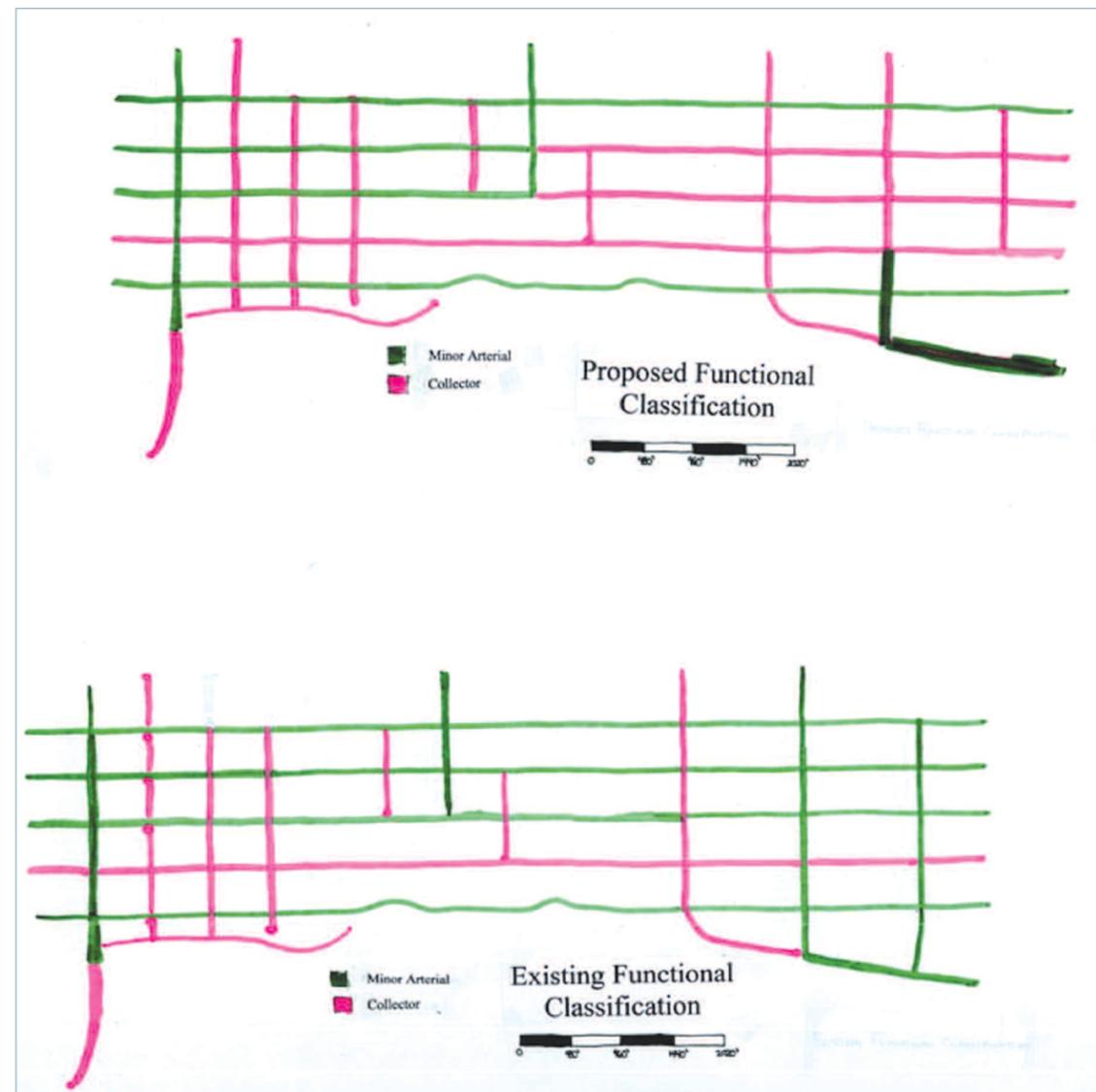
- Pursue place-making initiatives and programming to improve the attractiveness of existing public spaces to reinforce them as magnets for public activity; for example, programming in larger public parks could include community “jam sessions,” flea markets, farmers’ markets, and participatory arts, sports, and cultural activities.
- In the downtown, improve existing parks and open spaces and add new, small urban open spaces such as plazas, squares, and courtyards that are lacking in the study area and can greatly enhance the attractiveness and livability of the downtown
- Incorporate bicycle facilities and bike racks at popular downtown destinations and along the lakefront; designate bike paths using “Share the Road” signage in the downtown and, where the existing street width is sufficient, paint bike lanes.



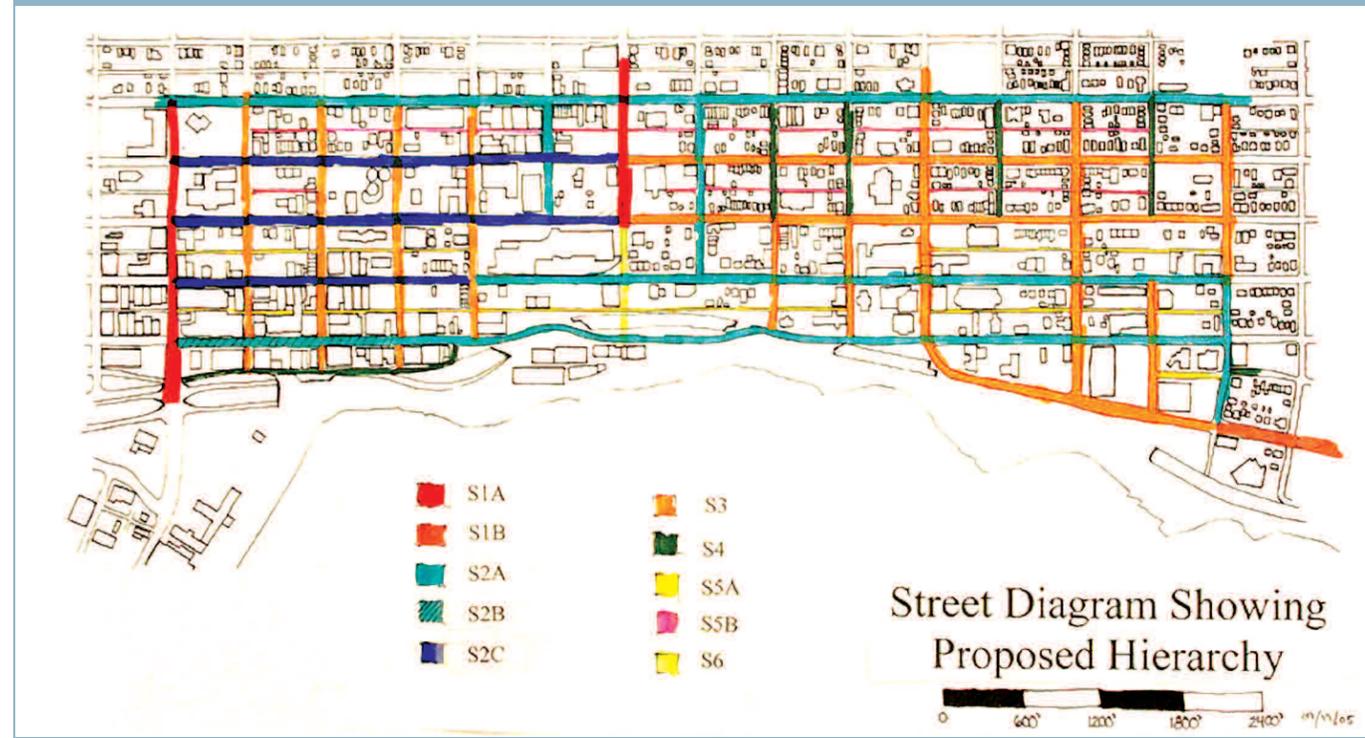
STREETS

An important aspect of creating healthy, vibrant communities is that the streets must be pleasant to be on. Before and during the charrette, team members with expertise in “livable street” design did extensive documentation of the existing street types and conditions. They found that many of the streets were functioning in such a way that encouraged traffic to move too quickly and freely, which created a less desirable street for pedestrians and adjacent residents and businesses.

In order to create a balance, the team developed a “context-based” approach to the street network. This meant that streets would be given different characteristics based on their function and adjacent land uses, rather than treating streets uniformly with the sole purpose of moving cars. This hierarchy could be phased in over time; however, one change that the team felt was of paramount importance for the near-term was the conversion of most, if not all, one-way streets back to two-way. One-way streets promote speeding and have been increasingly recognized as harmful to communities. They can no longer be justified in Duluth, particularly since the completion of I-35 through the city.



Existing and proposed functional classification of the street network in the study area



The proposed street hierarchy of the street network in the study area.

Duluth East Downtown Charrette
Street Types and Dimensions with Bike Lanes

Street Type	Name	Lane Widths - Feet										Curb to Curb	Right of Way	Existing Example
		Walk	Parking	Bike	Travel	Travel	Travel	Travel	Bike	Parking	Walk			
S1A	Boulevard without parking	10	0	5	11	11	11	11	5	0	10	54	74	6th Avenue
S1B	Boulevard with parallel parking	9	8	5	11	11	11	11	5	0	9	62	80	London Road
S2A	Avenue with parallel parking - Two Way	9	8	5			11		5	8	9	48	66	4th Street
S2B	Avenue with angle parking - Two Way	11	17	0			14		0	11	13	56	80	Superior Street
S2C	Avenue with parallel parking - One Way	10.5	8	5			12		0	8	10.5	45	66	1st Street
S3	Community Street with parallel parking	9	8	5			11		5	8	9	48	66	Superior
S4	Neighborhood Street with parallel parking	16					28				16	28	60	10th Avenue
	Yield Street condition	16	8				12			8	16	28	60	13th Avenue
	Parking one side condition	16	0				10			7	16	28	60	10th Avenue
S5A	Residential Alley	0	0				16			0	0	16	16	
S5B	Commercial Alley	0	0				20			0	0	20	20	
S6	Pedestrian Lane						12-16						60	

■ Bicycle lanes not appropriate for this street type

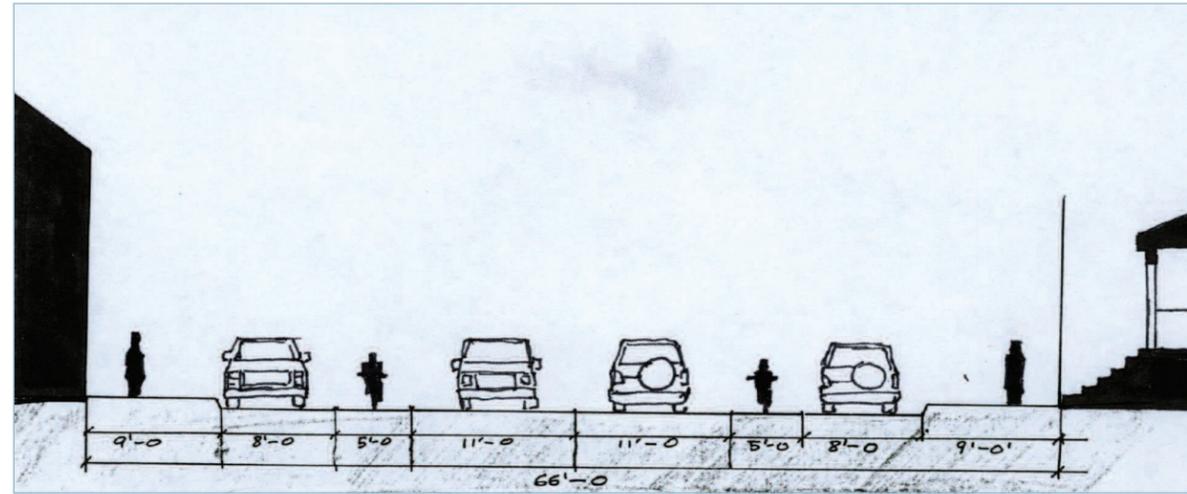
■ Low speeds and low volumes of traffic allow bicycles share these streets with other users

The table above provides dimensions and descriptions of recommended street types.

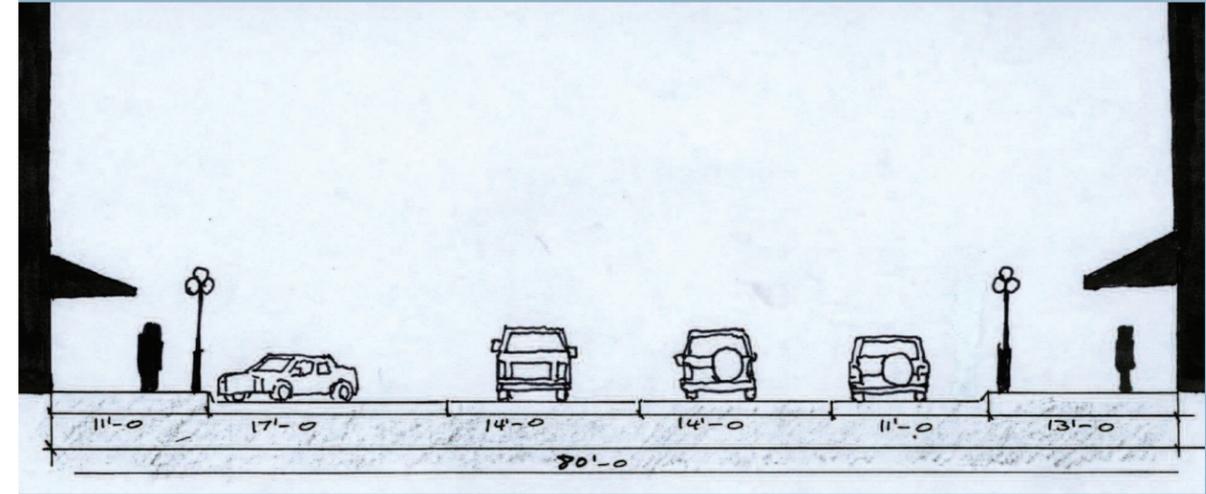


This section of Superior Street represents a good model for an “S2A” street

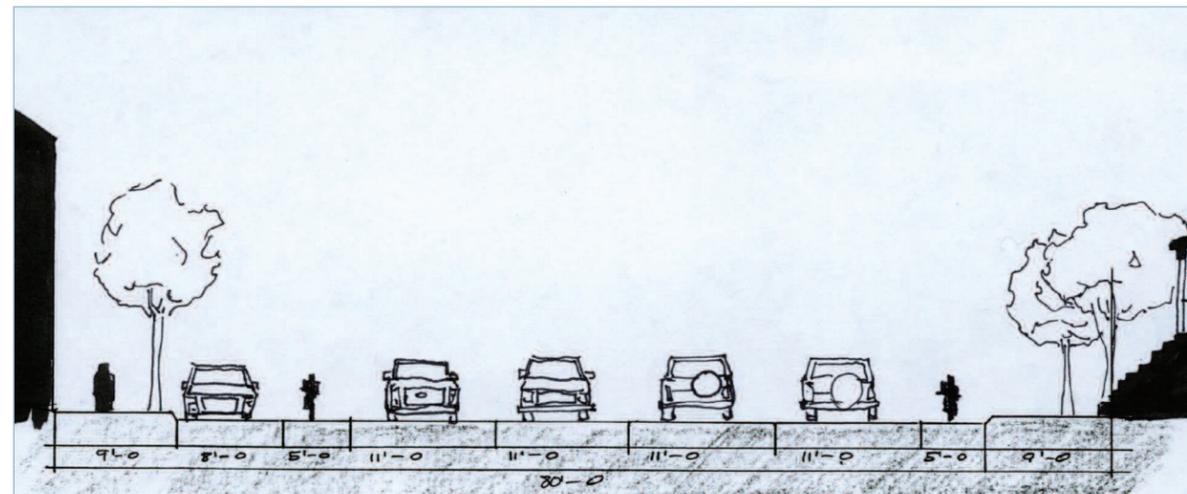
The following are diagrams for the six basic street types in the proposed hierarchy:



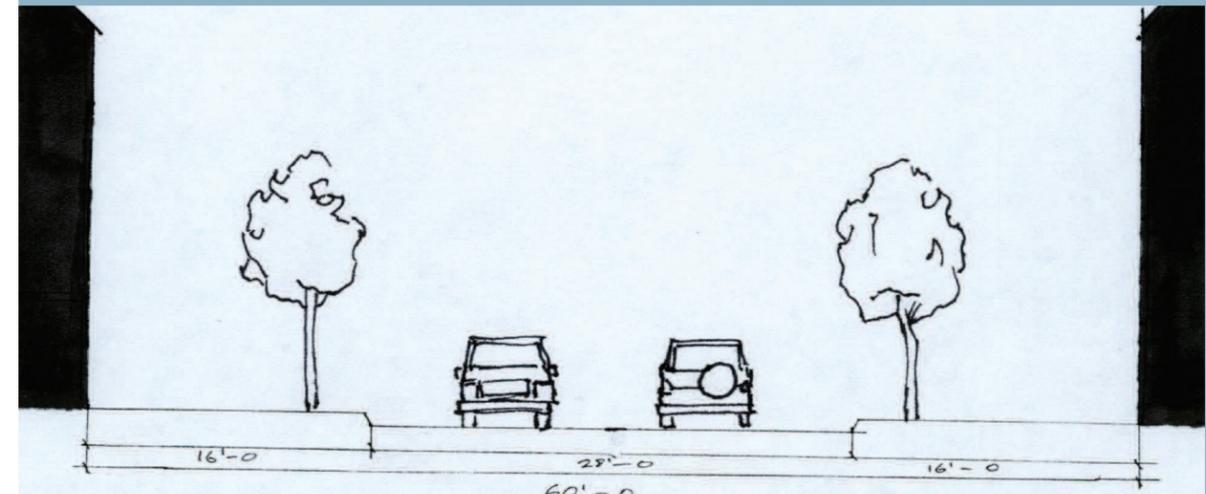
S1. Boulevard



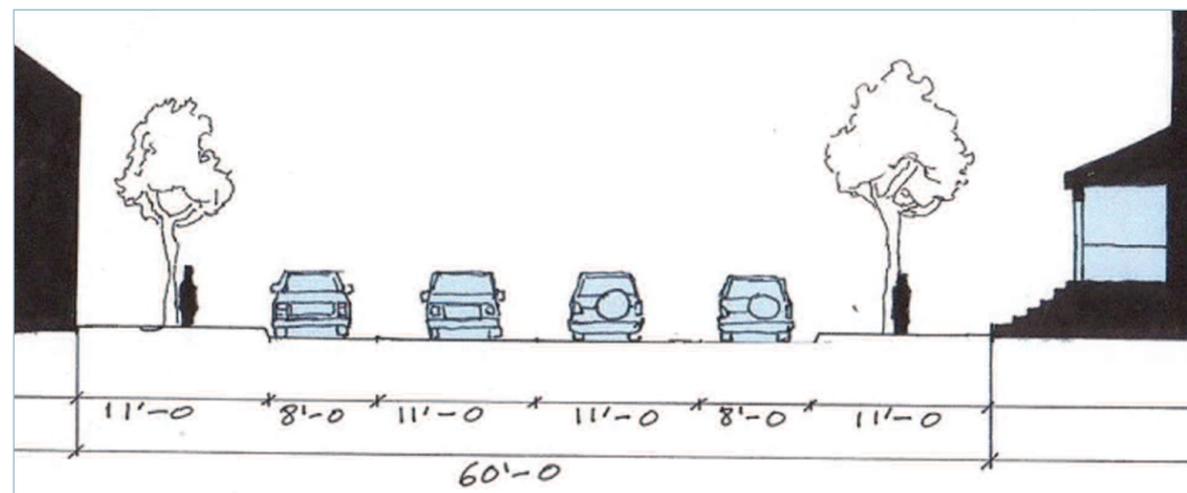
S4. Neighborhood Street



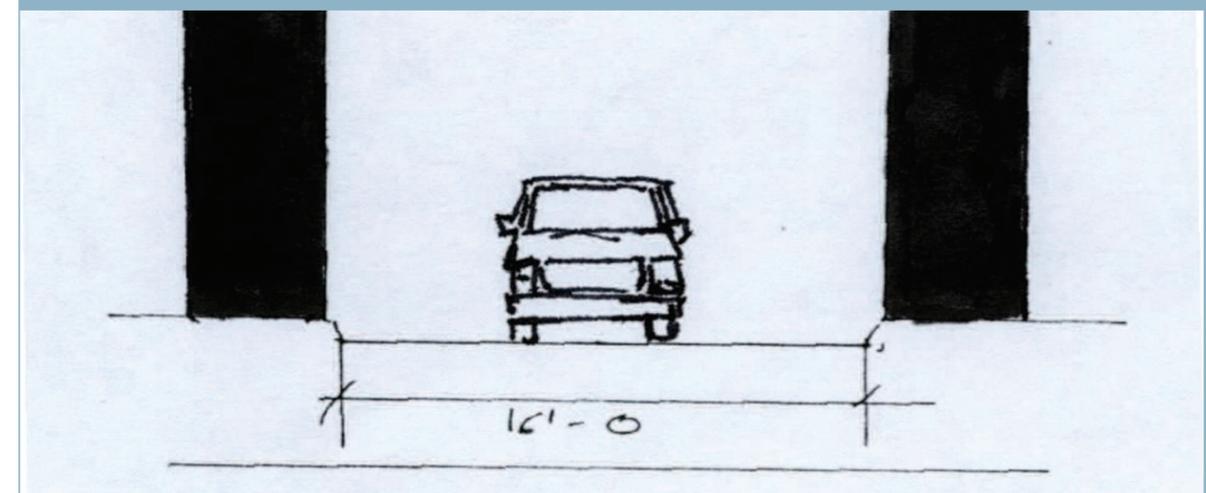
S2. Avenue



S5. Residential Alley



S3. Community Street



S6. Urban Alley

MANAGEMENT RECOMMENDATIONS

Through discussions with citizens, comments at the various meetings, and observations and analysis, the charrette team developed a series of management recommendations that complement the policy and design recommendations. These management recommendations are important for carrying out the policies that are to be enacted, and will also help create the kind of immediate visible changes to Duluth's built environment that will help encourage the significant design recommendations and reinvestment in the charrette focus area. The management recommendations are as follows:

Hospitality: Better publicize the presence of street-level restrooms in the Tech Center, at the Holiday Center and elsewhere for the convenience of tourists and visitors.

Skywalks (retail): Reinforce existing businesses and avoid overbuilding and dispersing retail by restricting or prohibiting retail activity in skywalks. Design skywalks to provide regular connections to street-level businesses via stairways leading to sidewalks and access directly into two-level retail businesses (e.g., a two-level bookstore/cafe with entrances on the street and from the skywalk). Pursue enclosed sidewalk design as alternative to skywalks to support existing retail.

Parking (shared parking): Develop a shared parking management strategy to make more efficient use of the abundant parking available downtown.

Parking (valet): Develop valet parking at hospitals and central valet stations at key downtown locations to respond to customer wants and needs for convenience and access to facilities and businesses during inclement weather.

Wayfinding: Develop an attractive, easy-to-understand wayfinding system and signage for the downtown.

Focus downtown reinvestment: Apply form-based code and offer streetscape, infrastructure improvements, tax increment financing and other incentives at five critical sites in order to leverage private sector investment, spur additional development and change the perception of the area:

- Plaza/Armory district (consider TIF and connections to Lakewalk)
- Superior and First Avenue East (consider density and height bonuses)

- Residential and commercial buildings on Fourth Street and First Avenue East, facing Central Hillside Community Park (consider improving park)
- Intersection of 4th Street and 6th Avenue East (consider infrastructure improvements)
- Duluth Sheraton Grand at the northeast corner of Superior and 3rd Avenue East (consider partnering with Minnesota Power to offer reduced rates for redevelopment sites)

Public space: Conduct a needs assessment/priority matrix for open space.

Identify areas of need for squares, plazas, greens, and pocket parks.

Identify better uses for existing open space.

Address maintenance backlog.

Wayfinding: Work with Visit Duluth to design and implement wayfinding and signage plan and Web site to promote access to "soft" recreational resources.

Entertainment District: Create an entertainment district (TIF overlay to help fund streetscape improvements) around casino and Norshor Theater.

Transit: Conduct feasibility study for a streetcar system connecting Superior Street and Canal Park to support downtown business and tourism.

Preservation: Work with representatives of the National Trust, the state, and property owners to resolve reservations concerning the designation of contributing and noncontributing structures to proposed historic districts. Survey (or re-survey) historic neighborhoods and create new National Register districts through the Preservation Development Initiative program.

Public Safety: Focus on Clean and Safe improvements through the BID as a core function to be paid for with BID revenue.

Transit: As City purchases new buses, ensure they include larger bicycle racks.

Collaborative culture: As new positions become available, the City should seek to increase staff diversity, including American Indians and other persons of color.

Collaborative culture: Institute multicultural training for all public employees.

Collaborative culture: City and Sustainable Duluth (SD) should collaborate to ensure that SD is represented on policy-making bodies.

Collaborative culture: Local foundations and funders should promote collaboration among nonprofits, specifically among those working on complementary issues (such as housing rehabilitation) but also to identify gaps and new tools (such as co-housing).

Collaborative culture: LISC should take the lead on forming or strengthening neighborhood groups/associations.

Crime prevention and neighborhood watch programs

Lawn and home maintenance, and code enforcement

Neighborhood cleanup programs

Parking: Encourage BID members to restrict employee abuse of on-street parking.

Education: Metropolitan Planning Organization and colleges should take lead in regional education program about effects of urban sprawl and exemplary smart growth and livable community design policies, community designs and management strategies.

Collaborative culture: Convene youth forum driven by neighborhood teenagers and sponsored by local funders to develop activities and services for teenagers, such as city league sports, youth public art, and a teen center.

Transit: Increase frequency of both peak and off-peak bus service in Central Hillside district to serve those most in need of public transportation.

Public safety: Improve monitoring and safety of skywalks through people-monitoring systems, thus allowing extended hours of use.

Public space (programming): Pursue placemaking initiatives and programming to improve the attractiveness of existing public spaces to reinforce them as magnets for public activity. Enhance focal points within the larger public parks and program them for regularly recurring events such as community "jam sessions" (open stage, bring your own instrument), flea markets, farmers' markets, and participatory arts, sports, and cultural activities. Facilitate a continuous multicultural dialog that celebrates diversity through similar initiatives in the arts, sports, festivals, and other community-building initiatives.

Public space (programming): Send a city parks employee to a Project for Public Spaces training session.



These images are examples of pedestrian friendly urban areas. The sidewalks are wide enough for shady trees and restaurant seating.

INTRODUCTION

At the city's request, the charrette produced a draft of elements of a pilot form-based code for the Lower Chester Creek neighborhood – that document immediately follows this introductory statement.

Duluth is considering adopting a form-based code as it updates its comprehensive plan and zoning ordinance. In 1958, Duluth – like nearly every other city in the U.S. – adopted a zoning ordinance that assumed separating land uses, such as residential and commercial, was desirable in all situations. Today, many of the nation's cities have found this segregated, single-use approach to be ineffective and are seeking ways to improve their zoning through the adoption of form-based codes, a major advance in code writing.

A form-based code regulates the built form of a city, rather than land use and density. Conventional zoning has proven detrimental to the urban fabric of established cities, imposing suburban standards for segregated land uses and disconnected buildings onto places that were defined by their urban, mixed-use character prior to World War II. The conventional use-based code typically results in isolated, single-use “pods” of housing, commercial, or office space; overly wide roads; excessive parking lots and garages in front of buildings; and unnecessarily deep setbacks from nearby streets and buildings.

Rather than focusing on zoning private lands into segregated uses, a form-based code sets desirable and flexible parameters for creating the types of places a community prefers, regulating the three-dimensional elements of places including: building frontages, height, and use as well as public spaces such as streets, sidewalks, and blocks. Form-based codes are designed by studying the specific characteristics of the best places in a community.

Form-based codes also regulate other physical elements such as greens and squares, and civic infrastructure such as bridges, rail lines, and canals. Through urban design, they attempt to more sensitively reconcile relationships between manmade elements and natural features like lakes, forests, riparian corridors, and bluffs.

The assumptions behind form-based codes include:

1. The land uses that occupy sites and buildings will change over time in response to changing market conditions, and changes in business and industry. A form-based code allows for the uses to evolve while maintaining the quality of a city's three-dimensional character of great streets, gathering places, and buildings.
2. Codes should enable the creation and protection of a variety of distinct mixed-use neighborhoods, centers, and districts within the city that share a safe, walkable, interconnected public realm of calm streets and attractive gathering places.
3. In cities, form-based codes should support walkable, urban, mixed-use patterns.
4. The role of city government is to regulate the form of the public (taxpayers) realm first, ensuring safe, attractive streets, sidewalks, and public spaces.

Developers often prefer form-based codes because they provide investment predictability. Currently, Duluth developers often find it hazardous to propose new construction because too many variables, such as height, seem to be arbitrary. A form-based code would set up a more clear rationale for height regulations.

Citizens will benefit from form-based codes because they can get the walkable, human-scaled communities they desire. City officials like form-based codes because they provide a clearer visual guide for the preparation and review of development proposals and allow staff to be proactively involved with proposals.

Ultimately, the form-based code's emphasis on producing a specific type of “place,” rather than focusing on “use,” delivers a built environment that respects an established city's architectural history and form, while ensuring that future development delivers what its citizens have deemed desirable.





Lower Chester Creek Neighborhood
Duluth, Minnesota

Elements of a Pilot Form-Based Code: Charrette Draft
Spring 2006

Lower Chester Creek Neighborhood Development Code

This pilot development code for the Lower Chester Creek Neighborhood is designed to regulate the built form of the urban environment over time. It does this by identifying physical parameters for new construction of all parts of the neighborhood. These parameters are based on the aspirations of citizens as defined through community-based urban design. The purpose of this code is further stated by Article 30 of the Duluth Zoning Code.

DESIGNING THE PUBLIC REALM

This code assumes that it is the responsibility of municipal government to ensure a successful public realm that provides for:

- the movement of people and goods throughout the sector in a safe and efficient way via motor vehicles
- the opportunity for pedestrians and non-motorized vehicles to move throughout the sector in a safe and efficient way
- the opportunity for citizens to enjoy the outdoors and have social events in a public setting
- the opportunity for land owners within the neighborhood to be accessed and serviced fairly and efficiently
- the safety, protection and/or evacuation of all citizens and, if necessary, property, in the case of emergency or natural disaster.

Therefore the code supplies a public realm plan that specifies the manner in which all of the above will be accomplished. This plan includes:

- a right-of way plan comprehensively identifying the hierarchical network of thoroughfares and public spaces throughout the neighborhood
- a set of street diagrams outlining the aspirational design of all thoroughfares and public spaces in typical plan view and cross-section
- frontage assignments: a range of private frontages is assigned to each street and public space in order to ensure that right-of-ways are supported and function successfully. (In the Lower Chester Creek Neighborhood Development Code, only storefronts (FI) frontage types are specifically assigned to certain streets.)

Note: A "Right-of-Way" Plan and street diagrams are not included in this draft pilot code. These will be published in the full charrette report.



REGULATING PRIVATE PROPERTY

This code assumes that it is the responsibility of private government to regulate the effects of private property development on the successful functioning of the public realm plan. Therefore it puts into place parametric regulations on certain aspects of private property within the neighborhood. To that end the code specifies basic regulations for the development and redevelopment of private property throughout the neighborhood. The code includes:

- a land-use regulating plan that identifies which parcels of private land are more suitable for urban growth vs. districts of single-use vs. farmland vs. natural preserves, etc.
 - a set of land-use definitions clarifying design, policy and management goals for each classification
 - a set of intensity zones (transect zones) are further defined for urban growth areas; they help identify property by property the appropriate intensity of development based on context of the neighborhood
- These transect zones generally lay out the locations of more urban areas vs. less urban areas within the neighborhood. These zones set out parameters for:
- o construction durability and long-term reuse
 - o overall height and volume in proportion to acreage (bulk)
 - o relationship to adjacent properties
 - o parking requirements and configuration
 - o uses permitted by level
- frontage assignments: a range of private frontage types are assigned to each transect zone based on the range of permitted ground level uses



WAYS TO PUBLISH THIS CODE

Using conventional hardcopy publication:

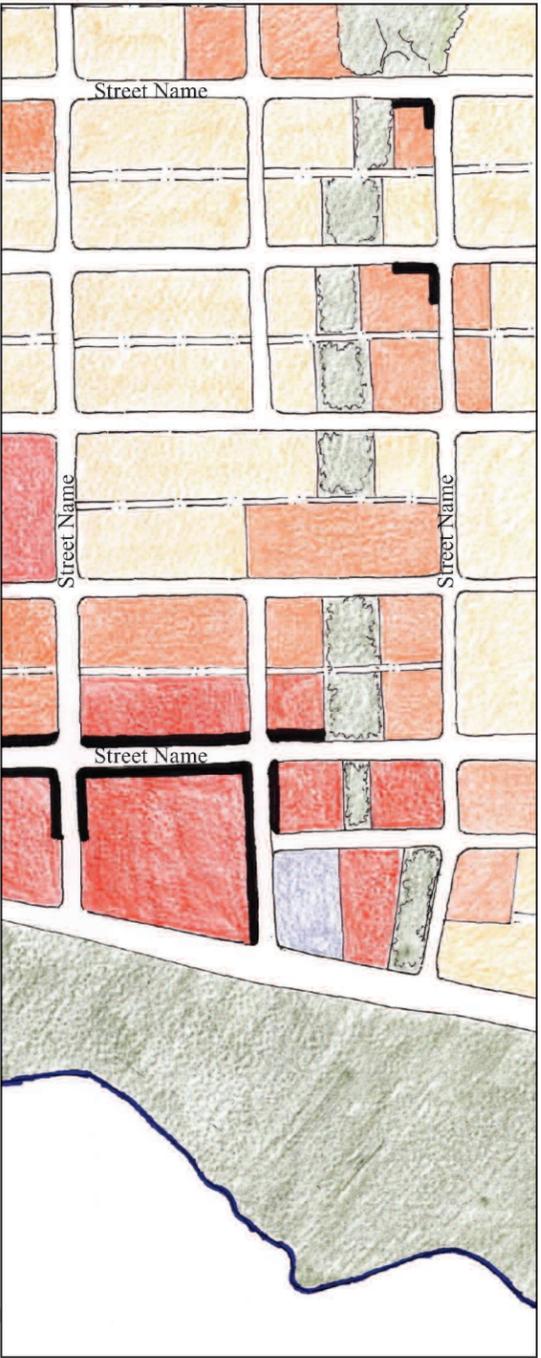
Refer to several tables to find regulations pertinent to each property:

1. To determine city plans for streets and parks near each parcel or in the neighborhood: See the public realm plan, then see the corresponding street and public space diagrams.
2. To determine regulatory parameters for the development of your property: See the private land regulating plan.
3. To determine frontage design parameters for each parcel, see first the transect zone assigned to the parcel, then find the ranges of assigned private frontage types. Then see frontage design parameters for the parameters specific to each frontage type. See also the public realm plan for parcels called out to be dedicated storefronts (Frontage Type I).

If using GIS Web-based application:

Simply enter in via Web the address of your parcel. The Website will display all regulatory parameters pertinent to the development of your parcel.

The Regulating Plan



- Key**
- T-5 Urban Center
 - T-4 General Urban
 - T-4 Required retail frontage in T-4
 - T-3 Sub-urban
 - Civic/Institutional

Frontages Allowed by Zone

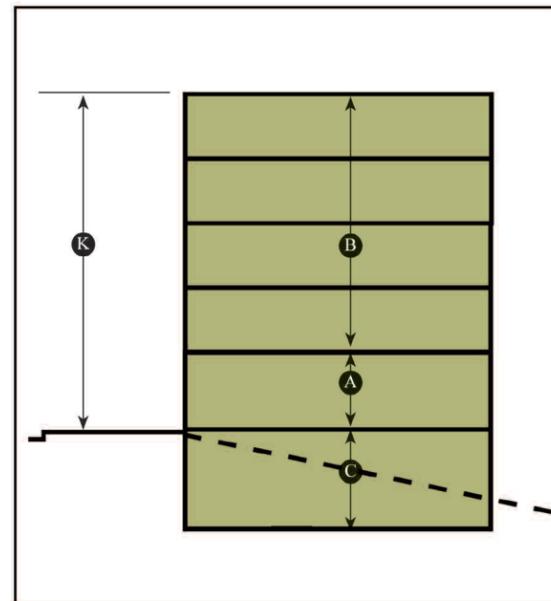
Context Zone		Frontage Type										
		F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11
		storefront	arcade	doorway	stoop	porch	terrace	alley	garden	courtyard	parking	wall
T6	Urban core											
T5	Urban center	Y	Y	Y	Y			Y		Y	Y	
T4	General urban			Y	Y	Y		Y		Y	Y	Y
T3	Sub-urban				Y	Y	Y	Y	Y	Y		Y
T2	Rural reserve											
T1	Rural preserve											

Frontages Allowed by Street*

Street types		F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11
S1B	Boulevard parking										Y	
S2B	Avenue - 2 way - parallel parking	Y	Y	Y	Y					Y	Y	
S3	Community street	Y	Y	Y	Y	Y	Y			Y		Y
S4	Neighborhood street				Y	Y	Y		Y	Y		Y
S5A	Residential alley							Y	Y			
S5B	Urban alley							Y				

* An alternative way to regulate frontage types is to tie them specifically to the street design. In order for this to be successful, the Public Works department must first sign off on the street design. The street design recommendations can be seen in previous portions of this document.

T-5R Zone



Allowable Frontage Types

F1

Lot Coverage

100% maximum

Notes

All floors must have a primary ground-floor entrance that faces the primary or side street.

Rear-facing buildings, loading docks, overhead doors, and other service entries are prohibited on street-facing facades.

Any section along the build-to-line (BTL) not defined by building must be defined by a 2'6" to 4'6" fence, stucco or masonry wall.

Use

Ground Floor Service, Retail or Recreation, Education and Public Assembly* **A**

Upper Floor(s) Residential or Services* **B**

Below Grade Residential or Parking **C**

*See Table 1.1 for specific uses

Height

Building Minimum 3 stories

Building Maximum 3 stories or 40'* **K**

Notes

Buildings greater than 16 units must provide adequate common space for residents in the form of community rooms, roof terraces or courtyards.

Parking

Location

Distance from Property Line

Front Setback 20' min.*

Side Setback 0'

Side Street Setback 5' min.

Rear Setback 5' min.

*Unless below grade

Required Spaces

Ground Floor

Uses <3,000 sf No off-street parking required

Uses >3,000 sf 1 space/400 sf

Upper Floors

Residential uses 1 space/unit; .5 space/studio

Other uses 1 space/450 sf

Notes

Parking Drive Width 15' max.

On corner lots, primary parking drive shall not be located on primary street.

Shared drives are encouraged between adjacent lots to minimize curb cuts along the street.

Parking may be provided off-site within 1,300' or as shared parking.

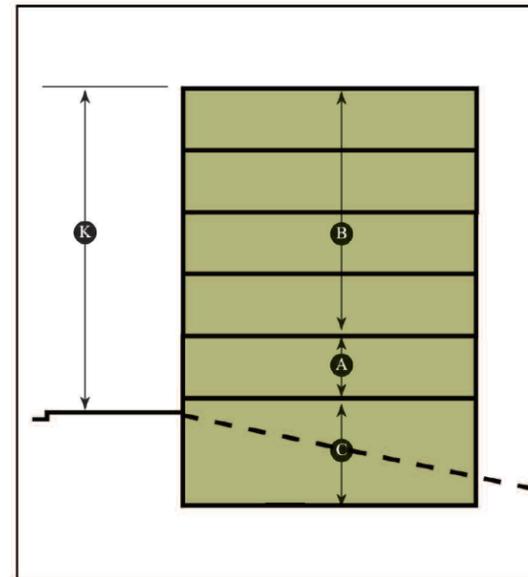
Bicycle parking must be provided in a secure environment.

Land Use Table: T-5R Zone

Table 1.1: T5R

Land Use Type ¹	Permit Required	Specific Use Regulations
Recreation, Education and Public Assembly		
Commercial recreation facility:	MUP	
Indoor		
Health/fitness facility	MUP	
Library, museum	P	
Meeting facility, public or private	UP	
Park, playground	UP	
School, public or private	UP ²	
Studio: art, dance, martial arts, music, etc.	P	
Theater, cinema or performing arts	MUP	
Residential		
Dwelling: Multi-family - Duplex, triplex, fourplex	—	
Dwelling: Multi-family - Rowhouse	—	
Dwelling: Single family	—	
Home occupation	P	
Live/work unit	P	
Mixed-use project residential component	P	
Residential accessory use or structure	—	
Residential care, 6 or fewer clients, in a home	—	
Second unit or carriage house	—	
Key		
P	Permitted Use	
MUP	Minor Use Permit Required	
UP	Use Permit Required	
—	Use Not Allowed	
End Notes		
¹ A definition of each listed use type is in Article 6 (Glossary).		
² Allowed only on second or upper floors, or behind ground-floor use.		
Retail		
Bar, tavern, night club	UP	
General retail, except with any of the following features:	P	
Alcoholic beverage sales	MUP	
Drive-through facilities	—	
Floor area over 10,000 sf	UP	
On-site production of items sold	MUP	
Operating between 9 p.m. and 7 a.m.	UP	
Used merchandise	MUP	
Neighborhood market	P	
Restaurant, café, coffee shop	P	
Services: Business, Financial, Professional		
ATM	P	
Bank, financial services	P	
Business support service	P	
Medical services: Clinic, urgent care	P ²	
Medical services: Doctor office	P ²	
Medical services: Extended care	—	
Office: Business, service	P	
Office: Processing	P ²	
Office: Professional, administrative	P ²	
Services: General		
Day care center: Child or adult	P ²	
Day care center: Large family	P	
Day care center: Small family	P	
Lodging: Bed and breakfast inn	MUP	
(B&B)		
Lodging: Hotel	MUP	
Personal services	P	
Public safety facility	UP	
Transportation, Communications, Infrastructure		
Parking facility, public or commercial	UP	
Wireless telecommunications facility	UP	

T-5 Zone



Use		
Ground Floor	Service, Retail or Recreation, Education and Public Assembly*	A
Upper Floor(s)	Residential or Services*	B
Below Grade	Residential or Parking	C
*See Table 1.1 for specific uses		
Height		
Building Minimum	3 stories	
Building Maximum	3 stories or 40'*	K
Notes		
Buildings greater than 16 units must provide adequate common space for residents in the form of community rooms, roof terraces or courtyards.		

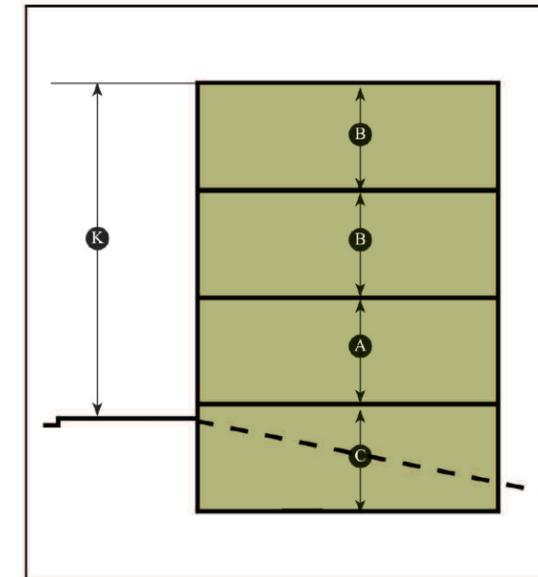
Allowable Frontage Types
F1, F2, F3, F4, F7, F9, F10
Lot Coverage
100% maximum
Notes

All floors must have a primary ground-floor entrance that faces the primary or side street.

Rear-facing buildings, loading docks, overhead doors, and other service entries are prohibited on street-facing facades.

Any section along the Build-To-Line (BTL) not defined by building must be defined by a 2'6" to 4'6" fence, stucco or masonry wall.

T-4 Zone



Use		
Ground Floor	Residential, Retail or Service*	A
Upper Floor(s)	Residential*	B
Below Grade	Residential or Parking	C
*See Table 1.1 for specific uses		
Height		
Building Minimum	3 stories	K
Building Maximum	3 stories or 40'*	
Notes		
Buildings greater than 16 units must provide adequate common space for residents in the form of community rooms, roof terraces or courtyards.		

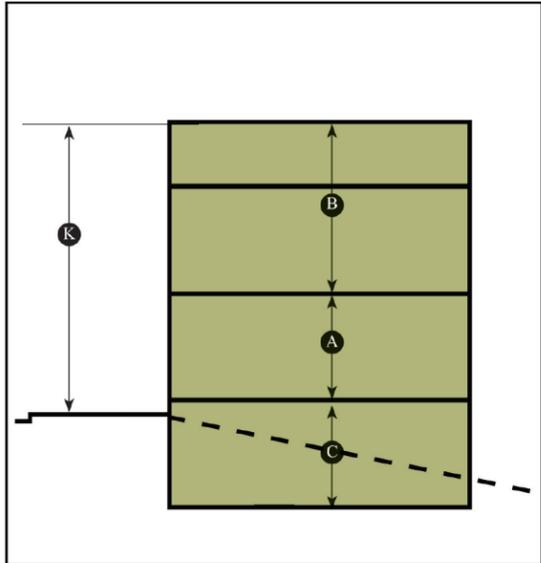
Allowable Frontage Types
F3, F4, F5, F7, F9, F10, F11
Lot Coverage
70% maximum
Notes

All floors must have a primary ground-floor entrance that faces the primary or side street.

Rear-facing buildings, loading docks, overhead doors, and other service entries are prohibited on street-facing facades.

Any section along the Build-To-Line (BTL) not defined by building must be defined by a 2'6" to 4'6" fence, stucco or masonry wall.

T-3 Zone



Use		
Ground Floor	Residential*	A
Upper Floor(s)	Residential*	B
Below Grade	Residential, Parking*	C
*See Table 1.1 for specific uses		
Height		
Building Minimum	2 stories	
Building Maximum	2.5 stories	
Notes		

Allowable Frontage Types

F4, F5, F6, F7, F8, F9

Lot Coverage

40% maximum

Notes

All floors must have a primary ground-floor entrance that faces the primary or side street.

Rear-facing buildings, loading docks, overhead doors, and other service entries are prohibited on street-facing facades.

Any section along the BTL not defined by building must be defined by a 2'6" to 4'6" fence, stucco or masonry wall.

THE FRONTAGES

The private frontage is the interface between private property and the public realm. The sum of the interplay between the public and private forms the identity and character of the public spaces in a neighborhood, and consequently is at the center of conflict over the review of private development projects. This code attempts to lay out parameters for the design of each private frontage – providing citizens some predictability in the overall form of their shared streetscape while supplying flexibility in the stylistic execution and function of each individual building. This code is therefore not only a device for defining the distinctly public areas and defining parameters for distinctly public areas, it is further an arbitration device for the review of private building proposals, protecting the freedoms of individual landowners while also protecting the rights of the citizenry to a successful public realm.

FRONTAGE TYPES

Through preliminary study in the Duluth Downtown Charrette process, several frontage types were found to be appropriate for the Lower Chester Creek Neighborhood.

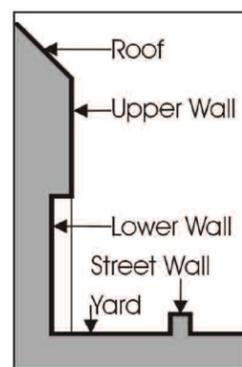
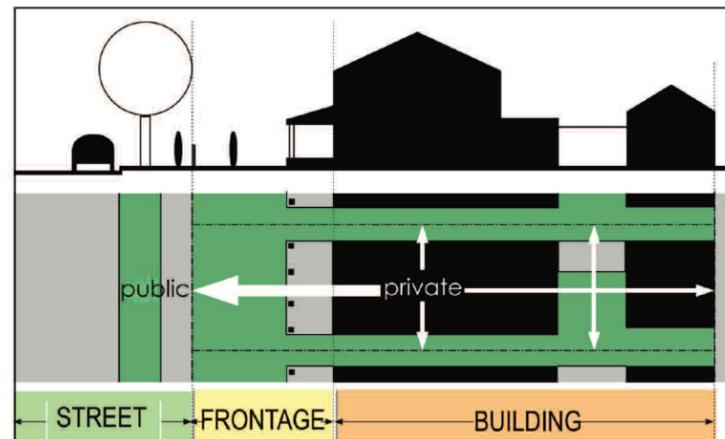
- F1 Storefront
- F3 Doorway
- F4 Stoop
- F5 Porch

FRONTAGE DESIGN PARAMETERS

Each frontage is defined by a set of eight design elements that are common to all frontages. Each element is governed by a set of design parameters that define basic boundaries for:

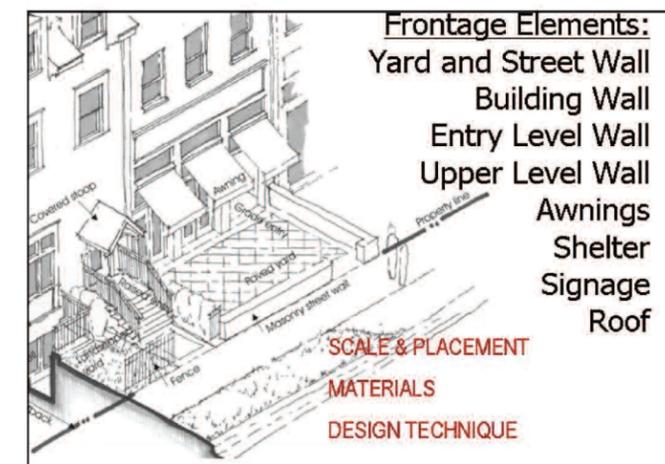
- Function: location, arrangement, size, and use of each element
- Durability: type and quality of materials of each element
- Beauty: aesthetic quality, proportion, detailing, and style of each element.*

* Like existing codes, it is up to the community-based design and planning process to define the extent to which these parameters are specified. It is left to municipal project review authorities to what extent the parameters are enforced.

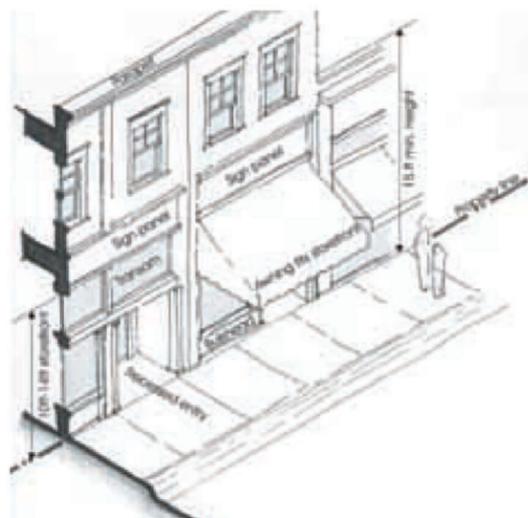


FRONTAGE DESIGN ELEMENTS

- **Yard and Street Wall:** The yard is the space between the property line and the building face. The street wall defines how the juncture of the public and private realm is treated. The desired level of openness, privacy or screening of the yard, and the treatment and use of the yard is governed by this design parameter.
- **Building Placement:** The maximum and minimum building setbacks from the street and adjacent properties are defined by this design parameter. The bay width of the frontage helps establish the scale of the building.
- **Entry-Level Wall:** The transparency, scale and rhythm of the frontage entry level and the relationship of the ground floor to the street are governed by this design parameter.
- **Upper-Level Wall:** The relationship of the upper wall materials, design and openings to the entry level wall is defined by this design parameter. Building style can be defined if desired.
- **Awnings:** The placement of awnings in relation to the entry- and upper-level wall openings, as well as their height above grade and projection into the public realm, is defined by this design parameter. The placement of the awning helps create shelter and pedestrian scale to the frontage street level. Awning material, color, and shape of the awning relate to the overall character of the building and design district. The use of graphics and signage on awnings in relationship to overall signage parameters is governed here.
- **Shelter:** Porches and stoops, shelter elements that are integral to the architecture of the building, are defined by this design parameter. The placement and size of the shelter elements establish the desired semi-private outside space.
- **Signage:** The placement, size, and number of sign elements are defined to be integrated into the architecture of the building in this design parameter. The materials and methods of lighting signage are also important characteristics that are governed by this parameter.
- **Roofline:** How the building terminates and meets the sky is governed by this design parameter. Termination of the building has a strong relationship to the entry- and upper-level walls, and the character or style of the frontage.



F-1 Storefront



Yard and Street Wall

- N/A

Shelter

- N/A

Awnings

- Min depth: 6'-0"
- Relationship to opening
- Material
- Shape

Building Placement

- Front and side: Build to property line
- Rear yard: Flexible

Entry-Level Wall

- Materials: Masonry
- Min. opening height: 12'-0" to 14'-0"
- Percentage of wall opening: 70% to 80%
- Recessed doorway
- Window sill height: 16" to 24"

Upper-Level Wall

- Materials: Consistent with entry-level materials
- Vertical proportions of windows
- Wall to opening ratio: 25% to 50%

Signage

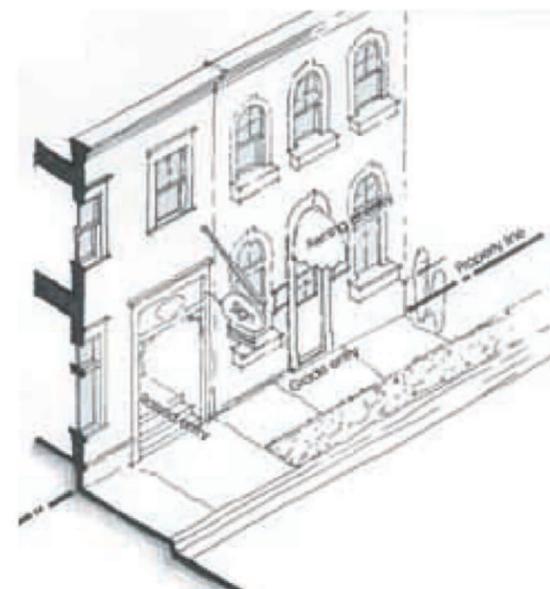
- Must relate to architectural features
- Can be parallel and/or perpendicular to building wall
- Maximum square feet: TBD

Roof line

- Parapet Wall
- Cornice maximum projection: 3'-0"

Lower Chester Creek Study Area: Duluth, Minnesota

F-3 Doorway



Yard and Street Wall

- Pedestrian only: no driveways or parking
- Porous surface or landscape
- Street wall max. height: 32"

Shelter

- Only allowed over entry
- Style must relate to main building

Awnings

- Over entry only

Building Placement

- Setback: 6'-0"; maximum TBD

Entry-Level Wall

- Materials: Masonry and/or wood
- Max. wall opening: 50%

Upper-Level Wall

- Wall-to-opening ratio: 25% to 50%
- Windows: Vertical proportion

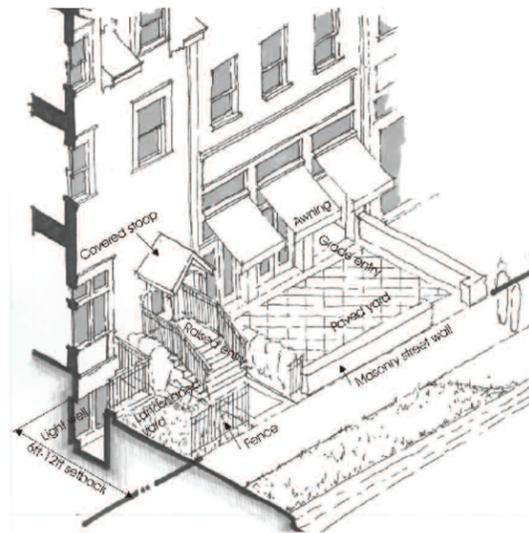
Signage

- Parallel to building wall
- max. square feet: TBD by Duluth

Roof line

- Flat or sloped roof
- Min. slope: TBD by Duluth
- Material: TBD by Duluth

F-4 Stoop



Lower Chester Creek Study Area: Duluth, Minnesota

Yard and Street Wall

- Pedestrians only: no driveways or parking
- Porous surface or landscape
- Street wall max. height: 32"

Shelter

- Only allowed over entry
- Style must relate to main building

Awnings

- Over entry only

Building Placement

- Setback: 6'-0" to maximum figure to be determined by Duluth

Entry-Level Wall

- Materials: Masonry and/or wood
- Percentage of wall opening: 50%

Upper-Level Wall

- Vertical proportions of windows
- Wall to opening ratio: 25% to 50%

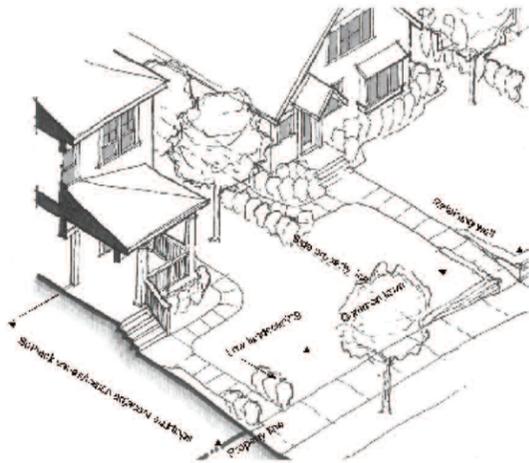
Signage

- Parallel to building wall
- Maximum square feet: TBD

Roof line

- Flat or sloped roof
- Min. slope: TBD by Duluth
- Material: TBD by Duluth

F-6 Terrace



Yard and Street Wall

- Pedestrian only: no driveways or parking
- Landscape
- Street wall max. height: 32"

Shelter

- Min. front wall coverage of 80%
- Style must relate to main building

Awnings

- N/A

Building Placement

- Setback: 30'-0" or average of adjacent neighbor or same as one of the adjacent neighbors
- Rear yard: Flexible
- Porch may encroach 10'-0" into setback

Entry-Level Wall

- Materials: Masonry and/or wood
- Percentage of wall opening: 50%

Upper-Level Wall

- Materials: Consistent with entry-level materials
- Vertical proportions of windows
- Max. wall-to-opening ratio: 40%

Signage

- N/A

Roof line

- Hip, gabled, double-shed roof
- Dormers allowed
- Min. slope: TBD by Duluth
- Material: TBD by Duluth

Coding for Special Topographic Conditions

Building Front Perpendicular to Topography



Noteworthy characteristics taken from historic examples: There should be frequent entries on these edges of the buildings (60' max. between entries); the type should be partially integrated into the hill at the uphill portion of the site, which prevents the feeling of the building sitting on a large podium; a programmable floor should be integrated on the lower half of the site (not parking garage); all buildings with three or more stories should have a horizontally articulated base to break down the scale.

Building Front Parallel to Topography



Noteworthy characteristics taken from historic examples: Buildings should be integrated into the slope (brought to the front of the lot to deal with dramatic drop in topography so that it can be entered at grade); entire usable floors can be integrated into the rear of the buildings as the building terraces down the hill (this condition is ideal for the location of parking or additional units); parking should be entered from the alley; all buildings with three or more stories should have a horizontally articulated base to break down the scale.

The way in which the buildings respond to the topography is extremely important to the unique character of the urbanism of Duluth. When writing the final code, a complete understanding of the way in which the dramatic topography is dealt with by the built environment is necessary. It is recommended that a complete phase of topographic analysis be undertaken to gain an understanding of the typical topographic conditions and the way different building types have responded to these conditions. This can be done simply by drawing cross-sections through the existing blocks and beginning to illustrate and document through photographs of these conditions. These typical conditions and responses can then be used to code the individual areas.

The two typical conditions that were found in our study area are: 1) building fronts perpendicular to topography, and 2) building fronts parallel to the topography. An example of each of these conditions is shown in the photographs at left. For the Chester Creek area, these could be two of the typical conditions and responses to the topography. The other factor that should be considered in the documentation and factored into the code is the width of the frontage of buildings or lots themselves that are likely to be redeveloped. Smaller buildings have more flexibility in responding to the topography, but there are some very good examples of larger historic buildings that very gracefully deal with the topography.

Information to be documented and considered during the analysis phase

Document the following information as the basis for each neighborhood's code:

Table Information
Lot size
Setbacks (front, side, rear, corner)
Height
Height above/below walk
Corner units: location of entry
Notes: access from alley to units
Block location: (ex. block A)
Block type (severity of slope)
Number of units
Number of off-street parking spaces
Number of on-street parking spaces
Percentage of slope-North
Percentage of slope-South



An example of how a group of townhomes responds to the topography across its frontage. The cornice height and second floor level stays the same, but the ground floor heights change.

IMPLEMENTATION STRATEGY

Duluth's East Downtown, Hillside and Waterfront Charrette Report and Plan represents the collective ideas and visions of the community's citizens and stakeholders. Nearly 1,000 Duluthians from all walks of life participated in the charrette. The most important aspect of the charrette is that it generates the local stewardship to champion the ideas and visions of the charrette recommendations. Stewardship ensures that the collaborative spirit of the charrette process – of convening, dialogue, deliberation, and action – continues beyond the charrette.

Following the charrette, one of Mayor Herb Bergson's first acts was to appoint a coalition of public- and private-sector representatives to coordinate and implement the visionary ideas discussed during the event, while encouraging ongoing involvement from Duluth residents.

Named the Charrette Stewardship Group (CSG), the 15-member committee—which includes the mayor—meets monthly to address issues related to the charrette vision. Current and ongoing efforts include:

- Monitoring the implementation progress
- Adjusting the vision as necessary, based on consensus
- Creating a communications strategy that encourages continued public input
- Developing strategies to attract resources and community support for implementation of public and private projects
- Assisting public and private developers with adjustments to their proposals that will make them consistent with the shared community vision
- Prioritizing 64 design policy and management recommendations by need, impact, and feasibility

In the months following the charrette, several manageable initiatives were already realized, reports CSG chair Pam Kramer, senior program director of the Duluth Local Initiatives Support Corporation (LISC), a charrette co-sponsor with the City of Duluth.

“Smaller efforts like tree-trimming, opening up views on public property, landscaping—we've realized those things already,” she says. “And there is real progress being made toward larger projects in all three of the areas that were studied during the charrette.”

Sustaining the energy from the charrette and implementing the action steps are top priorities for the CSG, according to Kristi Stokes, president of the Duluth Greater Downtown Council.

“Community members were enthusiastic about providing their input and helping to shape this vision, and they will be eager to see some results. We know some items will take a long-term approach, but others can be tackled in the near future, which will help keep the vision in the forefront. We're really turning a corner in the Old Downtown district, for example. There is a great deal of development and private investment taking place there, and many of the businesses are feeling optimistic about the future,” Stokes says.

The inclusive format and atmosphere that attracted so many Duluthians to the charrette has spilled over into the conduct of the CSG members themselves—even those with competing interests outside the boardroom, says Don Ness, a local business owner and Duluth City Councilor.

“For me it's exciting to get a wide variety of community leaders in the same room. Representatives from hospitals, plus business leaders, city leaders, landlords in the downtown area—all coming together and talking about the future of our downtown. You'd think this would be more common, but this is one of the first opportunities I've had to have everyone at the table, representing their interests,” Ness says. “I think that the relationships that have already started to form are really positive things. I've been pleasantly surprised with the amount of energy and enthusiasm for the plan, as well as how common the vision is for downtown. Our priorities are aligning. I think the larger vision is coming into place more quickly than I thought it would.”

For Penny Perry, an artist and local business owner who sits on the Duluth Public Arts Commission, the CSG is an “intelligent, open-minded approach that breathes fresh air into our situation.”

Perry sees the CSG as a real catalyst for change. “We're already doing things that people think are important, based on the principles that guide our decisions. If we—the CSG and the citizens—can keep the buzz going and not get reticent, we could transform our city.”



The Duluth Charrette Stewardship Group at a December 2005 meeting