Design Framework Manual

For the

Heart of the City

Burnsville, Minnesota U.S.A.

November 1999

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TITLE PAGE

City of Burnsville
Heart of the City
Design Framework
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I. INTRODUCTION

I. INTRODUCTION

"The Heart of the City initiative is both a process and a place. It is a process of citizens taking the initiative to revitalize their community and it is a geographic location in the heart of the City of Burnsville.

First, the process. The Heart of the City initiative grew out of the Partnerships for Tomorrow visioning process and residents survey several years ago, which identified the fact that Burnsville, like most suburban communities, lacked a sense of community. It didn't have a central area—a main street with a pleasing atmosphere where people and families could get together to commune, recreate, shop, and visit, and relax.

In the spring of 1995, residents and business owners located along the Burnsville Parkway and Nicollet Avenue got together to begin the process to identify ways to revitalize the neighborhood and create a focal point or gathering place in the city. After three years of dedicated planning and work by these community volunteers, an investment of over $1.8 million in streetscape improvements has resulted in commitments of over $17 million dollars by property owners to build or upgrade buildings."

Wayne Huelskoetter, Chair, Heart of the City Steering Committee

A. MISSION STATEMENT

The mission of the "Heart of the City" of Burnsville is to create an attractive, vibrant, pedestrian-friendly neighborhood setting in which residents and visitors ... can enjoy, with their families and friends, a combination of the natural beauty and economically viable local businesses that, together with the Burnsville citizens, originate a true sense of community and partnership.

B. HEART OF THE CITY DISTRICT AREA

The Heart of the City (HOC) district, illustrated in Figure I-1, is bounded by I-35W to the west, the existing residential uses to the south of Burnsville Parkway, Eagle Ridge Drive to the east, and TH 13 to the north.

C. RELATIONSHIP WITH THE BURNSVILLE COMPREHENSIVE PLAN AND ZONING ORDINANCE

The Heart of the City district is described as a Special Area Redevelopment Plan in the City's 1999 Comprehensive Plan Update. A new City Center Mixed Use District was created for the HOC, which establishes the City's official land use policies for the area. A new zoning district, the Heart of the City (HOC) district, which applies specifically to the Heart of the City, was adopted as an amendment to the Zoning Ordinance in August of 1999.

This Design Framework is incorporated by reference into the HOC zoning district. Along with this district and the City's redevelopment activities, this framework implements the Heart of the City plan. By providing specific design standards which correspond with the HOC Zoning District, all future development phases will be consistent with the community's vision for the Heart of the City.

Figure I-1

D. PROJECT APPROACH

Through the Heart of the City plan, Burnsville will develop a community center that strategically responds to regional smart growth and livable community issues. An abridged summary of the planning process conducted by the City follows.

- **Community Involvement**
  A successful redevelopment plan responds to the objectives and vision established by the stakeholders. Burnsville citizens have been involved in the Heart of the City design process by serving on the Task Force, and/or by participating in the visual preference survey, interviews, open houses, and other public meetings.

- **Previous Visioning and Planning Exercises**
  The Heart of the City design process reaffirms and builds upon the planning foundation established through the Burnsville 2000 visioning program, the Comprehensive Plan, Partnerships for Tomorrow, and recent improvement projects for the Burnsville Parkway bridge and the Burnsville Parkway and Nicollet Avenue streetscapes.

- **Design Principles Defined**
  Proven traditional town planning principles reinforce the Heart of the City vision and have guided the framework plan's development.

- **Real Market Conditions**
  As with any redevelopment project, the Heart of the City plan must be driven in part by market conditions for commercial, office, and residential uses. Maxfield Research has completed a market research study for the Heart of the City district, which is reflected in the physical plan.

- **Illustrative Framework Plan**
  A design framework plan provides the overall vision for the Heart of the City, guides both public and private investment decisions, and illustrates the intent of the design principles.

- **Implementation Strategies**
  The new Heart of the City Zoning District Ordinance contains standards that effectuate the principles and relationships established in this Framework Plan.

E. HEART OF THE CITY STEERING COMMITTEE

The Heart of the City initiative is comprised of a number of committees responsible for specific areas of interest. A Steering Committee coordinates each subcommittee's activities, establishes priorities, and manages the process. The Heart of the City Special District Committee, a subcommittee of the Heart of the City Steering Committee, has supervised the district's planning and design process. In addition to the chair and co-chair of the various committees, the Steering Committee consists of the City Council, Planning Commission, City Staff, the Chamber of Commerce, residential and commercial property owners, as well as the education and faith communities.

F. DESIGN PROCESS

The following steps were undertaken for this project:

- An analysis of existing site and market conditions;
- A visual preference survey workshop to establish image and character preferences for architecture, signs and streetscapes;
- Preparation of town planning and design principles;
- Preparation of an illustrative framework plan;
- Organization of a Developers' Forum to gain insight and suggestions from the development community;
- Development of the HOC zoning district to support the design principles;
- Preparation of a development cost proforma; and
- Creation of this Design Framework Manual

G. HOW TO USE THIS DESIGN FRAMEWORK MANUAL

As a supplement to the HOC zoning ordinance, this framework serves as a "kit of parts" for evaluating development proposals so that each architectural and streetscape project contributes to a positive image for the district. Illustrations and photos are provided to communicate the intent and character of the principles, guidelines, and standards.

PRIVATE SECTOR

- This manual provides supplemental information to the Zoning Ordinance. As the first step to any project, developers should refer to this manual in order to understand Burnsville's overall goals and to determine how their property fits into the context of the Heart of the City district.
- Developers should refer to the Streetscape Hierarchy Plan in order to understand community expectations for site and streetscape treatments.
- Developers should refer to the building, site and stormwater design guidelines to understand the minimum standards for quality expected by the City.
- The guidelines for parking lot edge treatments and landscaping should serve as a reference during the site design phase of a project. Developers should discuss options for their particular site with City Staff to determine if streetscape, parking, and the parking lot edge treatments will be constructed as part of the site redevelopment or in a larger public improvement project.

PUBLIC SECTOR

- City departments should refer to the objectives in this manual to coordinate, design, and budget for capital improvements.
- The planning, engineering, and inspections departments should refer to the guidelines when reviewing individual development proposals. Each proposed development or renovation should reinforce the principles and comply with the guidelines.
- The prototypical designs illustrated in this manual will guide the selection of specific streetscape elements such as street lamps, benches, paving, parking lot buffers, signs, and other furnishings.

The manual is divided into six sections:

Part II: Background

The Background section describes the Heart of the City's existing conditions, provides a summary of the Maxfield Research market study, and outlines the findings from the Visual Preference Survey and background studies.

Part III: Master Framework Plan

The Master Framework Plan provides an overall vision of the Heart of the City and illustrates the intent of the design principles and objectives.

Part IV: Streets Types

The Street Types section describes the character of each of the street types and the recommended design elements and types of street furniture.

Part V: Building Design Guidelines

This chapter illustrates design guidelines for architecture, site design, signs, and other elements.

Part VI: Stormwater Design Guidelines

The Stormwater Design Guidelines section illustrates a variety of innovative techniques for managing stormwater.

Part VII: Implementation

The Implementation section discusses the role of an advisory Design Review Committee.

II. BACKGROUND

II. BACKGROUND

A. EXISTING CONDITIONS

Circulation

Gateway Areas
The primary regional access points serving the HOC district are Burnsville Parkway at Nicollet Avenue, I-35W at Burnsville Parkway, and Highway 13 at Nicollet Avenue .

Parkways
In addition to Burnsville Parkway and Nicollet Avenue, the portion of Travelers Trail east of Nicollet Avenue possesses a parkway character consisting of tree-lined boulevards and center medians.

Local streets
The current street pattern is shaped by Gateway Boulevard, Pleasant and Pillsbury Avenues. Along 126th Street, the HOC district is divided into approximately 600 ft. modules from east to west and larger segments north to south. Travelers Trail consists of a four-lane divided parkway east of Nicollet Avenue and a four-lane service road west of Nicollet Avenue. These streets are extremely wide, given the minimal number of vehicles they serve each day (See Figure II-1).

Average Vehicles per Day

I-35W	71,000
Highway 13	25,500
Nicollet Avenue	19,500
Burnsville Parkway	19,500

Source: City of Burnsville

Pedestrian & Bicycle Circulation
Sidewalks run along both sides of Nicollet Avenue, Travelers Trail, Eagle Ridge Drive, Gateway Boulevard and Burnsville Parkway in the HOC district and along one side of Pleasant and Pillsbury Avenues and 126th Street. A pedestrian/bike trail runs along Burnsville Parkway and Nicollet Avenue, providing a link to the Burnsville Transit Station on Highway 13 (Figure II-2).

Transit
The HOC district is surrounded by major transit routes along I-35W, Burnsville Parkway, Nicollet Avenue, and Highway 13 and is situated directly across from the Burnsville Transit Station on Highway 13. The transit station is a park and ride facility that provides transit access to employment centers in the Twin Cities area (Figure II-1).

Road Classification

- Interstate Freeway
- Intermediate Arterial
- Thoroughfare
- Collector

Transit System

- Transit Routes
- Transit Station
- Park

Heart of the City

NORTH

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Maxfield Research, Inc.

Source: 1990 Burnsville Comp. Plan,
MN Valley Transit System Map, June 9, 1997

Figure II-1

Pedestrian/ Bicycle Circulation

- Sidewalks
- Ped/Bike Trails
- Traffic Controlled Intersections
- Difficult Crossing Intersection
- Transit Station
- Parks

Heart of the City

NORTH

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Figure II-2

Land-uses and Character Districts

Several areas within the HOC District possess distinct personalities. Their physical identities are shaped by the combination of land uses, building placement, and type of architecture, streetscaping, open spaces, landforms, and vegetation. Figure II-3 reveals that only the residential buildings reach above two stories. Commercial, office, and civic institutions are mainly housed in one-story buildings.

Civic Center

City Hall, the police station, ice arena, athletic fields, and other public uses are located in the Civic Center complex approximately one-half mile to the south on Nicollet Avenue (see Figure II-4).

Office District

The portion of the HOC District west of Pillsbury Avenue is dominated by office uses. Recently, Kraus Anderson constructed a 72,000 square foot office tower along the north side of Burnsville Parkway. Small, one-story retail and office buildings are located along the south side of Burnsville Parkway, while auto-oriented uses are located at the intersection of Travelers Trail and Burnsville Parkway (See Figure II-3).

Directly west of Pillsbury Avenue is the old Diamondhead Mall, recently converted to a senior high school. During the school year, the High School provides an influx of approximately 730 students into the HOC District (see Figure II-4).

Residential Districts

South of the commercial properties along Burnsville Parkway, Multi- and Single-Family Residential uses abut the southern boundary to the HOC District. Burnsville Parkway, east of Nicollet Avenue, is characterized primarily by multi-family residential complexes (see Figure II-5).

Nicollet Avenue Commercial Districts

Nicollet Avenue Commercial district developments are oriented to accommodate the automobile. Commercial uses consist of gas stations, a bank, convenience store and restaurants.

Existing Nighttime Population

Five Minute Walk	
Total Population:	956
Total Households:	413
Total Employees:	380
Ten Minute Walk	
Total Population:	3,455
Total Households:	1,515
Total Employees:	3,735

Existing Buildings Conditions & Uses

- Residential
- Retail/ Restaurant/ Gas
- Financial Institutions
- Business Offices and Services
- Civic Institutions

*Note: Building names are annotated with building heights in stories.

Heart of the City

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Figure II-3

Context Map
Cultural Connections

- School
- Transit Station
- Public Building
- Church/Cemetary
- Park
- Golf Course
- 10 Minute Walking Radius from Burnsville Parkway and Nicollet Avenue Intersection (2000 ft.)

Heart of the City

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Figure II-4

Land Use Plan
600
0
600 Feet
Single Family Residential
Two Family Residential
Medium Density Residential
High Density Residential
Neighborhood Business
General Business
City Center Mixed Use
General Industry
Church
School
Public
Cemetery
Park/Open Space
Golf Course
Right of Way
Water
Heart of the City
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HWY. 13
I-35W
River Ridge Blvd.
Nicollet Av.
Portland Av.
E.
W.
Trail
Travelers
Parkway
Burnsville
Nicollet Av.
Gateway
Blvd.

Figure II-5

B. DEVELOPMENT PATTERNS

Conventional Suburban Development Patterns

As with most suburban commercial areas, the existing Heart of the City area is characterized by widely spaced buildings set back and isolated from the street in order to accommodate parking lots. Since land uses are compartmentalized, residents are forced to make most trips by car. As a result, streets and signs have been designed to accommodate the automobile, creating a cluttered environment lacking a distinct sense of place.

The ultimate challenge for a suburban environment is to balance the functional needs of vehicles with those of pedestrians, to create a sense of personal safety and comfort while also nurturing a memorable image, to define a focus to the area, reduce clutter, and foster a sense of community pride.

Conventional suburban development pattern

Traditional Community Development Pattern

Traditionally developed environments are characterized by densely spaced buildings that collectively shape the street corridors and create a compact, pedestrian-friendly environment.

Traditional community development pattern

Natural Features: Elevation Change, Slopes, and Views

The entire HOC District lies within the upper bluff area of the Minnesota River Valley. The change in elevation provides a dramatic view of the Minneapolis skyline 18 miles to the north. Elevations range 130 feet, from a high point of 980 feet on Nicollet Avenue south of Burnsville Parkway to a low point of 850 feet at Highway 13 and Nicollet Avenue. The 5.5 percent grade along Nicollet Avenue should be reinforced through sensitive site planning and architectural design.

130-foot elevational change on Nicollet Avenue provides dramatic views looking north

C. MARKET RESEARCH ANALYSIS

Maxfield Research Inc. was engaged by the City of Burnsville to conduct an in-depth analysis of the potential to develop a mixed-use community center for the City. Maxfield Research, Inc. conducted demographic and market analysis to assess the potential demand within the Heart of the City district for the following development components: retail, office and lodging. Housing is a component of the redevelopment plan; however, Maxfield was not directed to undertake a specific analysis for housing in the area.

Analysis of retail, office, and lodging consisted of the following: identification of a trade area; an examination of pertinent demographic characteristics, including population, households, employment, age distribution, household income, and consumer expenditures; a comprehensive analysis of the current market situation; and interviews with local property and business owners, leasing agents, real estate agents, city officials, local developers, major employers, among others. Calculations of demand were made for each development component based on demographic characteristics and the information gathered through the market analysis. The amount of demand supportable within the Heart of the City area was determined given some assumptions for redevelopment.

Trade Area

The Primary Draw Area for the Heart of the City was determined through interviews with area business and property owners, man-made and geographic barriers, existing traffic patterns, location of major thoroughfares, and Maxfield Research's knowledge of the draw areas for various types of real estate developments.

Demographic Characteristics

The success of new commercial development in the Heart of the City area would be dependent to a certain degree on its capacity to draw shoppers and other consumers from a radius extending beyond a distance of three miles to the south and west. This would enable such a development to capture a portion of the high rate of population growth expected to occur in Lakeville and Savage over the next two decades.

Consumers aged 25 to 54 typically spend the largest amount of dollars on retail goods and services in metropolitan areas. The percentage of persons ages 25 to 54 living in the Primary Draw Area in 2003 is projected to be 47.4 percent, compared to 44.9 percent for the Metropolitan Area.

The potential exists for commercial development in the Heart of the City area which appeals to the entertainment/recreational, convenience and shopping needs of the growing number of younger to middle-aged adults, singles and couples, and seniors living in nearby multifamily and single-family units in the Primary Draw Area.

In cities across the country, people are attracted to areas that offer a stronger pedestrian orientation, community gathering spaces, interesting architecture, and a connection to the existing neighborhood.

Retail Market Review

It is estimated that the Heart of the City District could capture between 32,000 and 64,000 square feet of additional neighborhood convenience-oriented space between 1998 and 2005, and an additional 59,000 to 99,400 square feet of neighborhood-oriented space between 2005 and 2010.

It is estimated that the Heart of the City District could capture 40,000 to 80,000 square feet of additional destination-oriented retail space between 1998 and 2005 and another 60,000 to 80,000 square feet of destination-oriented retail space between 2005 and 2010.

Office Market Review

Maxfield Research projects that the Heart of the City District could support an additional 80,000 square feet of office space between 1998 and 2005 and another 84,000 square feet between 2005 and 2010. Plans already exist however, for a combined 160,000 square feet of office space in Burnsville between 1998 and 2000 in four new projects, including the Gateway Office Plaza.

Hospitality Market Review

Much of the demand for lodging along the Interstate 494 Corridor and in the Downtown areas of Minneapolis and St. Paul is generated by the MSP Airport, the Mall of America, and national conventions and conferences. However, most of the demand for room-nights at hotels in Burnsville and surrounding areas is dependent largely on the business traveler visiting companies in Eagan and Burnsville, and leisure travelers, primarily from southern Minnesota and Iowa, visiting the Twin Cities.

The popular, newly-emerging all-suite and extended-stay hotel concepts accounted for 70 percent of the 482 new hotel rooms (excluding rooms at new full-service hotels) brought on-line in the Heart of the City submarket between 1996 and 1998. The development of these new products appears to have contributed to a significant reversal in the decline in hotel occupancy rates, which plagued the Heart of the City submarket between 1993 and 1996.

Despite the relatively large increase in room supply in the Heart of the City submarket between 1996

and 1997, the average occupancy rate for the surveyed limited service and all- suite/extended stay hotel properties increased by 6.2 percent. In comparison, average occupancy rates across all hotels in the Twin Cities Metro Area increased by only 0.7 percent during this same period.

Between 1996 and 1997, the Heart of the City area enjoyed a larger increase in revenue per room (7.8 percent) than either the South Suburban region (6.2 percent) or the Twin Cities Metro Area (4.6 percent).

Demand projections indicate that a new 60-unit hotel in the Heart of the City Area could be supported without drawing a significant amount of business away from other existing and proposed new hotels throughout this submarket. However, the Heart of the City District represents only a marginal location for a future hotel development in Burnsville, due to its relatively poor proximity to major room-night generators, such as regional/national conventions, the Mall of America, corporate headquarters of national/regional firms, and corporate training facilities.

Factors Influencing Redevelopment

The demand calculations for each of the development components, retail, office and hospitality, were based on factors that would influence redevelopment in the area in addition to a development structure that would support traditional neighborhood planning principals. The demand calculations must be supported by several factors in order to achieve the optimum impact. These factors are explained below.

- The demand for space will be back-ended. In other words, it will take some time to create the critical mass necessary to establish momentum. Redevelopment is a process that does not occur overnight. However, once the development of new space reaches a sufficient level, absorption increases and spurs additional development.

- The demand figures listed in each section above include expansions and remodelings that would be undertaken by existing businesses in the area that desire to remain in the Heart of the City area and expand.

- The demand figures reflect a cohesive redevelopment plan that to which the City adheres.

- The demand figures assume that a variety of uses will be developed in a compact form and that a mix of uses will occur within most buildings (retail/office, retail/residential). They also include some freestanding uses where appropriate.

- In order to sustain the level of demand projected for the period 2005 through 2010, the Heart of the City must be established as a destination with a strong sense of place.

- The Heart of the City be strongly linked to existing neighborhoods, surrounding employment centers and other key uses in the area, such as public spaces and the transit station.

- Although housing was not directly examined for this study, a wide variety of housing is located very near the Heart of the City. Single-family homes, senior housing, and general occupancy multi-family housing are all located within walking distance of the Heart of the City. Existing residents around and future residents within the Heart of the City District will be attracted to the Heart of the City District as their location for neighborhood goods and services and potentially for entertainment uses such as restaurants and other community gathering spaces. However, the Heart of the City district must be able to draw people from the entire trade area in order to support the level of goods and services identified through the market analysis.

D. VISUAL PREFERENCE SURVEY

A visual preference survey assists residents in determining which components of the built environment contribute to a city's overall image, and helps define the community's preferences for development patterns, architecture, signs, building setbacks, landscaping, parking areas, and other design elements.

The Heart of the City Steering Committee participated in a Visual Preference Survey on March 19, 1999, in order to discuss ways in which the Zoning Ordinance could be amended to facilitate redevelopment of the Heart of the City project area. After viewing approximately 70 slides depicting a broad range of cityscapes in Burnsville and elsewhere, Steering Committee members rated each slide on a scale of -3 for "least preferred" to +3 for "most preferred." Each of the slides were then given an overall score. As a result, the Steering Committee was able to reach a consensus about the preferred visual landscape for the Heart of the City. These development preferences provide the basis for the design guidelines which follow the Visual Preference Survey results.

The two most preferred images and the two least preferred images for each design category are illustrated in the following pages.

VISUAL PREFERENCE SURVEY: General Image & Character

Favorite Images:

(Score +78)
+ outdoor dining
+ pedestrian-scale lighting
+ landscaping
+ wider sidewalk
+ awnings

(Score +74)
+ composition of elements
+ fountain
+ brickwork
+ human scale

Least Favorite Images:

(Score -19)
- parking lot dominates view
- shapeless

(Score -24)
- nondescript architecture
- unappealing to pedestrians
- lacks visual focus
- minimal landscaping
- parking lot hides buildings

VISUAL PREFERENCE SURVEY: Signs

Favorite Images:

(Score +69)
+ sophisticated design
+ subtle materials, color, and scale
+ compatible with building materials
+ strong character

(Score +68)
+ hanging sign
+ sophisticated materials
+ appealing design

Least Favorite Images:

(Score -13)
- too many competing signs
- inconsistent designs/colors
- unattractive plastic above windows
- cheap materials

(Score -19)
- building is a sign
- garish colors
- materials, colors disregard surroundings
- portable sign

VISUAL PREFERENCE SURVEY: Streetscape

Favorite Images:

Least Favorite Images:

(Score +53)
+ integrated with architecture
+ outdoor dining
+ landscaping
+ trees provide shade and enclosure
+ appealing signage
+ elegant brickwork
+ elegant awning
+ defined edge between sidewalk and diners

(Score +48)
+ screened parking lot
+ pedestrian street furniture
+ trees provide enclosure
+ landscaping
+ use of bricks
+ wide sidewalk
+ bollards, trees define edge

(Score -23)
- unattractive street lamps
- no separation between pedestrian and auto zone

VISUAL PREFERENCE SURVEY: Building & Parking Lot Placement

Favorite Images:

(Score +72)
+ sense of enclosure
+ intimate scale
+ activity

Least Favorite Images:

(Score -23)
- buildings set back too far
- parking lots dominate view

(Score +70)
+ traditional downtown
+ continuous building wall
+ generous sidewalk width
+ parking hidden from view

(Score -27)
- parking lot in front, barrier for pedestrian
- front door set back too far from sidewalk
- strip center design
- poor display window design

VISUAL PREFERENCE SURVEY: Facade Treatments

Favorite Images:

(Score +68)
+ traditional architecture
+ strong facade lines
+ numerous windows
+ continuous building wall
+ compatible buildings
+ high quality detailing
+ pedestrian scale

Least Favorite Images:

(Score -26)
- too boxy
- set back too far from sidewalk
- no window detailing
- use of reflective glass
- flat facade
- no visual interest for pedestrian

(Score +65)
+ strong facade lines
+ numerous windows/balconies
+ first floor shop windows
+ awnings
+ continuous building wall
+ variety and cohesiveness
+ traditional architectural details
+ pedestrian scale

(Score -30)
- no first floor display windows on store
- apartment facade cluttered with tacked-on materials

VISUAL PREFERENCE SURVEY: Building Materials

Favorite Images:

(Score +75)
+ use of brick
+ simple, appropriate design for setting

(Score +70)
+ use of brick

Least Favorite Images:

(Score -23)
- trendy design
- garish colors
- does not evoke Burnsville character

(Score -29)
- minimal detailing
- tacked on facade

E. DESIGN OBJECTIVES

The objectives described below were evolved through the site analysis, community input and results of the Visual Preference Survey. The objectives provide the basis for the design of the Heart of the City redevelopment district (see Figure II-6).

Burnsville Parkway and Nicollet Avenue Gateways

- Burnsville Parkway and Nicollet Avenue streetscape improvements will soon be completed, reinforcing these corridors as parkways and gateways to the Heart of the City. Future buildings should be placed up to the street to shape these gateway corridors.

- Reinforce a connection to the MVTA transit station north of Highway 13 through infill development and streetscape improvements.

I-35W Bridge Improvements

- Define the HOC district's west entry by integrating improvements to the I-35W bridge with the Burnsville Parkway and Nicollet Avenue streetscapes.

Intersection of Nicollet Avenue and Burnsville Parkway

- Through the use of landmark architecture and streetscape treatments, define the Nicollet Avenue/Burnsville Parkway intersection as the primary crossroads and entry to the Heart of the City Town Center.

Skyline and Bluff View

- Frame views to the Minneapolis skyline with building massing along the north/south streets.

Freeway Edge

- Define the edge of the HOC District, as viewed from the freeway, through building massing and landscaping.

Street Pattern

- Augment the established street network by creating a 300-foot street grid and by defining a hierarchy of streetscape treatments.

Nicollet Avenue

- Reinforce the segment between Burnsville Parkway and Highway 13 as the Town Center Core.

- Express Nicollet Avenue's elevational change through building massing and architectural treatments.

- Reinforce the connection between the HOC District and Civic and Residential uses to the south through streetscape treatments and appropriate land uses.

Pedestrian District

- Within a 5- to 10-minute walk of the Heart of the City district, intensify the development pattern to create a pedestrian-friendly, compact, mixed-use center of activity.

HEART OF THE CITY REDEVELOPMENT RECOMMENDATIONS
KEY
Vacant Sites
5-Minute Walk Radius
Parkway Character
View Shed
Bluff Line/ Steep Slopes
Primary Intersection/ Gateway
Secondary Intersection
Character Districts
Commercial
Office
Multi Residential
Auto-Oriented Development Pattern
Infill to Create a Compact Mixed Use Center of Activity.
Skyline + Bluff Views
Reinforce through Open Spaces.
Slopes Present Challenging Development Parameter.
Freeway Edge
Define Edge and Views to District Through Development + Landscape Treatment.
Street Grid and Hierarchy
Reinforce Street Grid and Hierarchy of Street Patterns.
Low Point Elevation 850
High Point Elevation 980
Highway 13/ Nicollet Intersection
Define as Primary Gateway
Reinforce Connection to the North and Transit Station.
Pedestrian District
Densify Land Uses and Street Pattern to Create a Compact, Pedestrian Friendly Environment Within 5 Min. Walk Zone to the H.O.C.
Nicollet Avenue
Reinforce Connection between H.O.C., Civic and Residential Districts through Land Uses and Streetscape.
Reinforce as Primary Retail Street North of Parkway.
Sidewalk Slope 5-6.2%
Define as West Gateway
Integrate Bridge and Interchange Landscape Treatments with the Streetscape.
Nicollet and the Parkway
Define as Primary Crossroads and Entry to H.O.C..
Area +/- 210 AC
Heart of the City
NORTH
Dahlgren, Shardlow and Uban, Inc.
Paul Madson + Associates Architects
Maxfield Research, Inc.

Figure II-6

F. GUIDING DESIGN PRINCIPLES

The following design principles serve as a foundation on which the Heart of the City Framework Plan is based. These traditional town planning principles contain urban design components that are essential to maintaining a viable and sustainable town center.

Principle I: Create a Compact and Diverse Critical Mass of Activity

- In order to foster market synergy, vitality, and com munity activity, concentrate commercial, office residential, civic, and cultural uses within (walkable distance.

Principle II: Make the Heart of the City an Identifiable Symbol for the City and the Focus for Civic and Cultural Activities

- Foster a positive image that enhances the unique characteristics of the Heart of the City district;
- Define streetscape and site planning treatments;
- Establish continuity while fostering variety and interest within each subdistrict; and
- Extend the streetscape elements utilized for Nicollet Avenue and Burnsville Parkway throughout the Heart of the City district.

Principle III: Define a Framework of Open Spaces and Linkages

- Provide parks and plazas for a variety of uses and for community gatherings;
- Create pedestrian-friendly linkages within a five- to ten-minute walk of the Heart of the City district; and
- Define a system of streets and open spaces to provide a framework for redevelopment.

Principle IV: Balance the Need to Move Vehicles with the Safety and Aesthetic Needs of a Pedestrian-Oriented Town Center

- Treat streets as public open spaces and linkages, not barriers;
- Define treatments for approach routes, gateways, residential and commercial streets;
- Accommodate alternative forms of transportation, such as bicycles, buses and in-line skates.

Street designed for automobiles only

Contrasting paving defines pedestrian crossing

Burnsville Parkway

Principle V: Promote High-Quality Architecture

- Define design guidelines;
- Focus on building placement to reinforce the streetscape and open spaces;
- Control the increment of development;
- Encourage variety; and
- Promote both visual interest and harmony through proper alignment, proportion, and building materials.

Building wall reinforces pedestrian walk

Traditional Minnesota Downtown

Variety of details and traditional building materials

III. MASTER FRAMEWORK PLAN

III. MASTER FRAMEWORK PLAN

A. PURPOSE

The Master Framework Plan describes the overall vision for the Heart of the City, provides a foundation for both public and private decision making, and illustrates the intent of the design principles, guidelines, standards and objectives (see Figure III-1).

The Town Center Framework (Figure III-4) illustrates the intent of the design guidelines for the area that will have the highest concentration of mixed uses and public improvements.

B. KEY CONCEPTS

The framework plan's development is based on the principles and objectives stated in previous chapters and includes the following key concepts:

A Distinctive, Compact, Mixed-Use Center of Activity

A traditional compact development pattern, extended to all areas of the Heart of the City District within a 10-minute walk to the crossroads of Nicollet Avenue and Burnsville Parkway, will create a vital, pedestrian-friendly, mixed use center of activity.

Build-To Lines

New buildings will be placed at the sidewalk or right-of-way line. Parking lots will be placed in side and rear yards.

Street Hierarchy

A hierarchy of streets will emphasize and respond to the different street functions within the Heart of the City District. A grid system, providing a more interconnected system of pedestrian linkages and consisting of 300-foot blocks, a size conducive to small-scale development, will be integrated into the existing street pattern. A brief description of the street types follows.

1. Gateways and Parkways

Tree-lined boulevards will shape Burnsville Parkway and Nicollet Avenue. Buildings will be positioned up to the street to create distinctive gateways to the Heart of the City.

2. Commercial Streets: Two-Way with Angled Parking

Located within the core around Nicollet Commons, commercial streets will serve the local businesses and parks. Angled parking maximizes the number of on-street spaces and provides a traffic calming measure as well.

3. Local and Residential Streets: Two-Way with Parallel Parking

Local and residential streets serve the surrounding neighborhoods and provide connections to the Town Center core.

Figure III-1: Framework Plan

C. CHARACTER DISTRICTS

The Heart of the City district is composed of two distinct areas possessing different land uses, building types, massings, and densities (see Figure III-2). In the Town Center Core, located east of Pillsbury Avenue and north of Burnsville Parkway, three-story, mixed-use buildings placed up to the street will predominate, creating the most compact development pattern in the district, as well as the highest concentration of residential uses and pedestrian amenities. The Town Center Core corresponds with the City of Burnsville's HOC-1 zoning district.

The area west of Pillsbury Avenue corresponds with the HOC-2 zoning district and will consist of offices, and limited highway- and auto-oriented uses. Possessing a lower density than the core area, setbacks from the street are slightly deeper and buildings are permitted to reach up to six stories in height.

Figure III-2: Zoning

D. TOWN CENTER FRAMEWORK PLAN

Nicollet Commons

A Town Square located near the geographical center of the HOC District, Nicollet Commons is bounded on three sides by a concentration of three-story, mixed-use and institutional buildings, and Nicollet Avenue on the eastern edge. This central gathering space will become the focus of civic and cultural activities, providing an area for programmed events such as a farmers' market, art fairs, sidewalk sales, and concerts, as well as passive recreation space (see Figures III-3 and III-4).

Parking

Parking will consist of a combination of on- and off-street surface parking, surface interior parking, and parking structures. The overall ratio, as illustrated in the Town Center plan, equals 4 parking spaces per 1,000 sf of commercial space and 1.5 parking spaces per residential unit. As the Heart of the City district evolves and develops, the overall ratio will be reduced to 3 parking spaces per 1,000 square feet of commercial space.

Figure III-3: Nicollet Commons

Figure III-4
Town Center Core
Framework Plan

Nicollet Avenue: Main Street

The segment of Nicollet Avenue between Burnsville Parkway and Highway 13 will serve as the core of the Town Center. Retail, office, and residential uses will concentrate along the street and around Nicollet Commons.

A Community Street and Comfortable Pedestrian Environment

The buildings along Nicollet Avenue will be placed 21 feet from the curb. A vital community will be fostered by reducing the perceived width of the street and thus automobile speed, and by providing generous sidewalk space for outdoor dining, seating, and other streetscape furnishings (see Figures III-5 and III-6).

Streetscape treatments and building massings will reinforce the connection between the HOC district, the Civic and Residential uses to the south, and the MVTA transit station to the north.

Figure III-5: Existing Cross Section

Figure III-6: Proposed Cross Section

Figure III-7: Nicollet Avenue (Longitudinal Section)

The intersection of Nicollet Avenue and Burnsville Parkway serves as the primary crossroads and entrance to the Heart of the City Town Center from the south. Landmark architecture and streetscape elements should define this intersection as the entry to the Heart of the City district and frame views to the Minneapolis skyline beyond (see Figure III-9)

Elevational Change

The 5.5 percent slope along Nicollet Avenue will require new buildings to step down with the slope (Figures III-7 and III-8). A building module approximately 27 feet in width will accommodate reasonable commercial, office, and residential building increments and still enable interior parking floors to extend the entire length of the block. Furthermore, the building facades will express the natural elevational change and provide a scale appropriate for a Main Street environment.

Figure III-8: Existing view looking north on Nicollet Avenue

Figure III-9: Proposed view looking north on Nicollet Avenue

Town Center Development Summary

The Town Center Plan illustrates the projected amount of office, retail, and hospitality development. As stated in Maxfield Research's market study, the buildings reflect the design principles and reinforce the Heart of the City vision and design objectives. A summary of potential development for the Town Center core through 2010 follows.

Building/Use

A. *Mixed Use*

1st Floor Retail:	23,000 sf
2 Floors Office:	31,000 sf
Interior Parking:	75 spaces

B. *Mixed Use*

1st Floor Retail:	17,550 sf
2 Floors Office:	35,100 sf
Interior Parking:	56 Spaces

C. *Mixed Use*

1st Floor Retail:	14,000 sf
2 Floors Office:	28,000 sf
Interior Parking:	42 spaces

D. *Mixed Use*

3 Floors Office:	36,000 sf
Interior Parking:	40 spaces

E. *Institutional/Theater* 33,000 sf/floor

Interior Parking:	120 Spaces

F. *Multi-Family Residential*

3 Floors	
Units:	160
Interior Parking:	160 spaces

G. *Mixed Use*

1st Floor Retail:	17,550 sf
2 Floors Office:	35,100 sf
Interior Parking:	56 Spaces

H. *Mixed Use*

1st Floor Retail:	17,550 sf
2 Floors Residential:	40 Units
Interior Parking:	56 Spaces

I. *Mixed Use*

1st Floor Retail:	22,800 sf
2 Floors Residential:	58 Units
Interior Parking:	75 Spaces

J. *Hotel:* 50 Rooms

K. *Retail:* 10,500 sf
Parking: 50 spaces

L. *Mixed Use*

1st Floor Retail:	24,500 sf
2 Floors Residential:	60 Units
Interior Parking:	85 Spaces

M. *Multi-Family Residential*

3 Floors	
Units:	42
Interior Parking:	42 Spaces

N. *Mixed Use/Residential*

First Floor: Retail/Office	24,000 sf
Floors 2&3: Residential	56 Units
Interior Parking:	84 Spaces

O. *Retail/Office*

2 Floors	18,000 sf
Interior Parking:	30 spaces

P. *Mixed Use*

1st Floor Retail:	19,000 sf
2 Floors Residential:	83 units
Interior Parking:	103 spaces

Southeast Surface Parking: 185 spaces
(Serves buildings N, O, & P)

Dakota County HRA Property Proposed Buildings

The Dakota County HRA owns a significant amount of land within the HOC district, most of it vacant. The HRA developed a concept plan, consisting of mixed use commercial and residential uses, for its vacant parcels. A summary of the proposed development is provided below.

Parcel A	
1.9 Acres	
Commercial	6,000 sf
Condominium	48 units
Parcel B	
1.9 Acres	
Commercial	10,000 sf
Townhomes	10 units
Condominiums	48 units
Parcel C	
1.5 Acres	
Back-to-Back Townhomes	22 units
Townhomes	8 units
Parcel D	
2.3 Acres	
Townhome/Condominium	80 units
Existing Building	
Parcel E	
3.3 Acres	
Senior Housing	60 units
Under Construction	
Parcel F	
2.9 Acres	
Senior Housing	66 units
Parking	
On-Street	107 spaces

HRA Summary	
Site Area	13.8 ac
R.O.W.	2.5 ac
Total	**16.3 ac**
(Does not include east row)	
Residential	
Condominiums	96
Townhomes	120
Existing seniors condominiums	126
Total units	**342**
Commercial	**6,000 sf**

HOC TOWN CENTER: TOTAL SITE SUMMARY

Site Area	28.9 ac
R.O.W.	11.2 ac
Total	**40.1 ac**
Residential	
Condominiums	595
Townhomes	120
Total units	**715**
Existing Senior Condominiums	126
Retail:	**196,450 sf**
Office:	**165,200 sf**
Parking Need:	
4/1,000 gfa + 1.5/unit =	2,169 spaces
Proposed:	
Surface Parking:	749 spaces
Interior Parking:	954 spaces
On-Street:	188 spaces
Parking Structures:	278 spaces
Total	**2,169 spaces**

IV. STREET TYPES

IV. STREET TYPES

"Attachment to the area and the sense of place that it imparts expand with the individual's walking familiarity with it. In such locales, parents and their children range freely. The streets are not only safe, they invite human connection."
Ray Oldenburg
The Great Good Place

Streets serve as the stage where people interact in public. The way in which a street is designed often determines the level and quality of interaction.

The Heart of the City's streets strongly delineate the district's identity and open space framework. They provide the backbone to the district, a setting for casual meetings, and open space for public gatherings and festivals.

A hierarchy of streetscape treatments, illustrated in Figure IV-1, will highlight and respond to the different districts and street functions within the Heart of the City. They include:

- Gateways & Parkways: Burnsville Parkway, Nicollet Avenue, and Travelers Trail
- Commercial Streets
- Local & Residential Streets

The term, "streetscape," refers to an area's physical setting, which is shaped by the relationships and design of buildings, parking lots/structures, streets, sidewalks and landscaping, as well as street furniture, such as lamps, benches, planters, kiosks, bus shelters, and public art. The design intent of each of the various street types follows.

Figure IV-1: Street Types

A. GATEWAYS AND PARKWAYS

Burnsville Parkway
Nicollet Avenue
Travelers Trail

Tree-lined boulevards and medians along Burnsville Parkway, Nicollet Avenue, and Travelers Trail will create a distinctive parkway character and provide gateways to the Heart of the City (see Figure IV-1). Primary bicycle pathways will run throughout the district. Treatments include:

- Pedestrian and bicycle linkages to surrounding development, transit facilities, and open spaces;
- Landscaped medians;
- Parallel parking bays defined with curb bump-outs on Travelers Trail, where possible;
- Tree-lined boulevards;
- Walkways ranging in width between 5 and 8 feet;
- Pedestrian-scale lighting;
- Directional signage

Burnsville Parkway

B. COMMERCIAL STREETS: TWO-WAY ANGLED PARKING

125th & 126th Streets, west of Nicollet Avenue

Located within the core around Nicollet Commons, 125th and 126th streets west of Nicollet Avenue will serve the local businesses and parks (see Figure IV-2). Angled parking maximizes the number of on-street spaces while providing a traffic calming measure. The sidewalks lining 125th and 126th Streets will possess the most intense streetscape treatment in the HOC district, including:

- Generous sidewalk space that can accommodate outdoor cafes, farmers' markets, community festivals, public art, sidewalk sales, and other activities.
- Streetscape elements, such as street trees, pedestrian-scale lighting, kiosks, directional signs, colorful banners, sculpture, and benches.

Figure IV-2

Downtown Red Wing, Minnesota

Chancellors Square, Bismarck, North Dakota

Examples of Streets with Two-Way Angled Parking

C. LOCAL & RESIDENTIAL STREETS: TWO-WAY WITH PARALLEL PARKING

125th & 126th Streets, east of Nicollet Avenue
Blaisdell Avenue
First Avenue

Local and residential streets are located primarily outside of the core Town Center area and serve as linkages between the mixed-use centers and residential districts, outlying commercial uses, and parking facilities. Common streetscape elements will provide continuity between the different areas. Treatments include:

- Parallel parking bays defined with curb bump-outs, where possible;
- Tree-lined boulevards;
- Walkways ranging in width between 5 and 8 feet;
- Pedestrian-scale lighting.

Figure IV-3

D. NICOLLET AVENUE

The segment of Nicollet Avenue between Burnsville Parkway and Highway 13 will serve as the core of the Town Center. Retail, office, and residential uses will concentrate along the street and around Nicollet Commons.

The buildings along Nicollet Avenue will be placed 21 feet from the curb (11 feet from the right-of-way line) in order to foster a vital community setting. A comfortable pedestrian environment will be created by reducing the perceived width of the street, thus slowing automobile speed, and by providing generous sidewalk space for outdoor dining, seating, and other streetscape furnishings. As with the streets around Nicollet Commons, this segment of Nicollet Avenue will possess the most intense streetscape treatment in the district, including:

- Sidewalk space generous enough to accommodate outdoor cafes, farmers' markets, community festivals, public art, sidewalk sales, and other activities;
- Streetscape elements, such as sculpture, street trees, pedestrian-scale lighting, kiosks, directional signs, colorful banners, and benches.

Figure IV-4

E. STREETSCAPE DESIGN ELEMENTS

A well-designed streetscape will create a sense of continuity, a pedestrian-friendly scale, and a fresh identity for the Heart of the City. The following section provides more detailed design suggestions for each of the streetscape elements to be used throughout the Heart of the City.

Streetscape improvements along Burnsville Parkway and Nicollet Avenue establish the character and palette of materials for the Heart of the City district's streets. This palette should be extended to include additional complementary elements for the pedestrian-oriented areas, such as benches, trash receptacles, kiosks, public artwork, and a directional and informational sign system. Examples of these elements are included on the following pages.

The Heart of the City's streetscape elements will consist of permanent components that reinforce the architectural character, as well as flexible ones that reflect the season or promotional and cultural events. In order to provide continuity throughout the HOC district, this flexible palette of elements should be designed to adapt to a variety of site conditions and the different street types.

Public vs. Private Streetscape Elements

Streetscape implementation will require a cooperative effort between the public and private sectors. However, the majority of the streetscape elements most likely will be constructed as part of a public street reconstruction project.

Elements that could be included in either a public improvement project or as part of a larger private redevelopment project, include: parking lot railings and other buffer treatments, street trees, sidewalk paving, benches, sculpture, and other street furniture.

Design Criteria

This section provides design specifications to assist in the selection of specific streetscape elements. In order to clearly describe the intent of the design concept and criteria, examples of each of the elements are presented as well.

Lower Level Street Lamps

Location:

Lower level street lamps utilized within the Burnsville Parkway and Nicollet Avenue Streetscapes should be located along all the streets and pathways and within parking lots to emphasize the pedestrian scale of the Town Center.

Criteria:

The poles should accommodate banners, flowers, hanging artwork and electrical outlets at specific street locations.

Multiple luminaires should be used to emphasize intersections and points of interest.

Single luminaires should be used in the mid-block areas.

Materials:

Light Assembly (Type A & B):

Luminaire:
UAR-100HP-MT-B-G3

Lamp:
UAR-100HP-MT-B-G3

Refractor:
UAR-100HP-MT-B-G3

Holopane
15 McKinley Ave.
Newark, OH 43055

Pole: Type A (Double Head)
DB34F14-188 w/banner arm and plant hanger (black)

Pole: Type B (Double Head)
DB34F14-188TRA6U-4 w/banner arm and plant hanger (black)

Planter Arms
18" breakaway banner arm (black)

Architectural Area Lighting
14249 Artesia Blvd.
P.O. Box 1869
La Mirada, CA 90638-1869

Pole: Type C
Decorative Base Fluted Lightpole
Model #140040408R4

Lexington Standard Corp.
P.O. Box 228
Farmington, MN 55024
800/899-7577

Light Assembly Type C:

Luminaire:
RCS-A250S-3P8-1 rectangular cutoff luminaire

Hubbell Lighting, Inc.

Kiosks

Location:

Kiosks should be located in areas possessing a great amount of pedestrian traffic, such as linkages to parking structures, within the park, and at primary intersections.

Criteria:

- The design should be compatible with the architecture.
- The design may change for each location — treating the kiosks as a piece of artwork.
- Color, form and graphics should attract attention.
- Metal work should be compatible with other streetscape elements, placing the most emphasis on color in the changeable graphics.
- The design should be adaptable for two-, three, and four-sided kiosks.
- Kiosk legs should include leveling devices where needed and/or be placed on a brick or precast concrete base.

Materials:

Electrical service for lighting.

Parking Lot Buffer Railings

The treatment of the setback area between parking lots and sidewalks is more important than setback depth. A shallow setback that incorporates overstory trees and a low screen made of concrete, brick, and/or ornamental iron railings can effectively screen views while reinforcing the street wall. The buffer area should measure a minimum of 5 feet in depth to provide adequate space for trees, a railing or wall, and snow storage. In the Heart of the City district, surface parking lots facing a street must be screened with a railing, decorative wall, or hedge, and trees.

Criteria:

Parking lot buffer railing design should recall the detailing of the building railings.

Materials:

- Steel or aluminum pickets and rail posts should be powder coated
- Color: Green, bronze, or black to complement the lighting and building components
- Railing piers should consist of pre-cast concrete and/or brick, or stone.

Example Parking Lot Buffers

Sidewalk Paving

A variety of paving materials, colors, and textures will be used throughout the Heart of the City. The function of the street and sidewalk will determine type of paving materials.

Parkways, Gateways, Commercial Streets and Special Gathering Areas
The concrete interlocking pavers currently used within Nicollet Avenue and Burnsville Parkway are recommended as the principle sidewalk paving material. The paving pattern will be simple and designed to complement the architecture and overall character of the HOC district. Contrasting colors and textures will emphasize special pedestrian gathering areas, crossings, and seating areas.

Local and Residential Streets
A combination of exposed aggregate concrete paving, colored concrete, and/or interlocking concrete pavers is recommended for the secondary streets. The pavers should be used for insets within the normal pattern and for special gathering and seating areas.

Materials

Pavers (Roadway)
Holland Standard 8 cm #HL8
Color: 1/2 Range 9 mix and 1/2 Solid Brown
Size: 21.6 cm x 10.8 cm x 8 cm

Pavers (Walkway)
Holland Standard 6 cm #HL6
Color: 1/2 Range 9 mix and 1/2 Solid Brown
Size: 21.6 cm x 10.8 cm x 6 cm

Interlock Concrete Products, Inc.
or approved equivalent
3535 Bluff Drive
Jordan, MN 55353-8302
612/492-3636

Crosswalk Paving

A successful streetscape design creates a safe and comfortable pedestrian environment. Similar to Burnsville Parkway and Nicollet Avenue, pedestrian crosswalks should be paved with a material that contrasts in both color and texture with the street pavement in order to visually alert motorists that they are entering a pedestrian zone and should exercise caution.

Materials:

Color: Chromix Admixture Color No. C 23

Curing Compound: Lithochrome colorwax No. C 23

L.M. Scofield Company or approved equivalent
6533 Bandini Blvd.
Los Angeles, CA 90040
312/720-3000

Example Informational/Directional Signs

Example Directional Signs for Nicollet Avenue in Minneapolis

Benches & Trash Receptacles

Location:

Benches and trash receptacles should be located in gathering areas such as at bus stops, along sidewalks in the Town Center core area, in gathering areas, and along building fronts if desired by the property owners. Their specific locations will be determined during the detail design stage of each portion of the streetscape.

Criteria:

- Benches and trash receptacles should be designed to reinforce and be compatible with the surrounding streetscape elements.
- Simple metal detailing should create a timeless rather than a nostalgic appearance.
- A modular system including benches with or without backs and armrests and a variety of mounting options should be used.
- Steel or aluminum components should be powder coated.
- Trash receptacles providing separate bins for glass, cans, and trash should be considered.

Example Benches and Trash Receptacles

Sidewalk Tree Treatments

Tree Grates

Location:
Tree grates will be located around trees in the primary and secondary walk areas.

Criteria:
- The proposed tree grates should be compatible with the existing grates.
- The grates should meet ADA requirements.
- The grates should be made of cast iron and possess a minimum width of 5 feet.
- Tree openings should be expandable.

Porous-Planting Strips
Large areas of dry-laid brick or other porous types of paving around the base of street trees permit a greater amount of moisture to permeate the paving surface than would otherwise be possible with concrete paving.

Root Channels
Soil and planting conditions have been found to be the most significant problems facing urban trees. Growth is stunted unless roots are given the room to spread out and gain access to water, air, and nutrients. Root channels guide roots through compacted soil under city sidewalks, promoting healthy growth and, at the same time, protecting sidewalk structure.

Tree Grates

Open Beds

Raised Concrete Planters

Porous Paving

Open Beds

Bollards

Location:

Bollards may be located along the street curb in areas where conflicts between pedestrians and vehicles may occur, such as at bus plazas and crossings. The bollards will create a psychological barrier between the sidewalk and the street.

Criteria:

- Pre-manufactured cast iron or precast concrete bollards may be considered.

Additional Streetscaping Treatments

Monument Sign

Outdoor Seating

Bus Shelter

Fountains & Clock Towers

Flower Pots

Fountains

Public Art

V. BUILDING DESIGN

V. BUILDING DESIGN GUIDELINES

A. DESIGN OBJECTIVES

This chapter outlines the Heart of the of the City building design objectives and illustrates through photographs and sketches the design intent of the objectives and associated zoning code. Each new building and major addition proposed for the Heart of the City district should be reviewed in terms of its details, placement, shape, scale, and materials, as well as its relationship to adjacent buildings and contribution toward a positive image. The design objectives for buildings in the Heart of the City district are illustrated in a summary graphic on the next page (Figure V-1).

Figure V-1: Mixed-Use Building Components

Objective: Shape Community Identity with Buildings not Parking Lots

"An environment without perceivable boundaries is amorphous, indistinguishable from its surroundings, and generally placeless."
Alex Krieger, PLACES, Winter, 1996.

Buildings placed up to the street, especially at intersections, will shape the street corridors and ultimately the identity of the community.

Street corridor edges are defined by:

- Locating buildings in close proximity to the street;
- Locating buildings at the corner of sites abutting intersections;
- Buffering parking lot edges with a combination of trees, plantings, walls or railings; and
- Placing parking at the side or rear of the building

Continuous Building Wall

Traditional downtown streets are lined with contiguous buildings which provide a backdrop for pedestrian activities and visually enclose the street. The Heart of the City district encourages continuous building walls through frontage requirements, build-to lines and minimal interior side yard setbacks.

Alignment

In order to maintain the "street wall," buildings are controlled by the type of street on which they are located in the Heart of the City district. The street types control building massing and setbacks.

- In the HOC-1 District at least 65 percent of the street frontage of any lot must be occupied by building facades meeting the build-to line.
- In the HOC-2 District at least 40 percent of the street frontage of any lot must be occupied by building facades meeting the build-to line.

Figure V-2: Conventional Development Model: Parking Lots Define Streetscape and Identity

Figure V-3: Traditional Development Model: Buildings Define Intersections, Street Corridors and Identity

Build-to Line

Building frontages define the public space by creating an even facade line along the street. The first and second floors are required to meet the build-to line with either an enclosed building or an arcade possessing a permanent roof and constructed of the same materials as the remainder of the building.

Three types of build-to lines have been established for the front and corner side yard setbacks in the HOC District: Classes 10, 15, and 20, which correspond to build-to lines measuring 10, 15, and 20 feet from the front lot line. For lots with more than one street frontage, the build-to line applies to each side fronting a street.

- Build-to Line, Class 10. The required setback measures between 10 feet and 15 feet from the right-of-way or property line for all properties on streets identified as having a Class 10 Build-to Line, except for Nicollet Avenue, which has a setback of 11 feet.

- Build-to Line, Class 15. The required setback measures between 15 feet and 20 feet from the right-of-way or property line for all properties on streets identified as having a Class 15 Build-to Line.

- Build-to Line, Class 20. The required setback measures between 20 feet and 25 feet from the right-of-way or property line for all properties on streets identified as having a Class 20 Build-to Line, except for Burnsville Parkway, which has a setback of 21 feet.

Interior Side and Rear Yard Setbacks

Setbacks for the side and rear yards of principal buildings and accessory structures have been greatly reduced for the Heart of the City District, in particular for the HOC-1 subdistrict where the minimum interior side yard setback is 0 feet.

Objective: Buildings Should Complement Adjacent Buildings

The architectural character established throughout the Heart of the City is intended to evoke a sense of timelessness and tradition. Special attention to massing, proportion, and details are encouraged. Trendy clichés in style should be avoided and corporate identities integrated within the established architectural forms so as not to dominate the facade.

Horizontal Rhythms

Rooftop, cornice, and window alignments should be continuous. New development should incorporate this regularity, using the following guidelines:

- New development should maintain a block's dominant alignment of building windows, cornices, and roof lines. Character and scale should be compatible with surrounding structures through the use of materials, detailing, and window placement. A clear visual division between street level and upper floors should be maintained as well. The use of canopies and awnings are encouraged in order to accentuate the relationship between a building's ground floor and the street, and to protect pedestrians from the elements.

Height

In the Heart of the City District, the minimum and maximum building heights are governed by street type. Minimum heights range between 25 and 30 feet. Maximum heights range between 35 and 50 feet. Office/Retail in HOC-2 are not subject to a maximum height.

Building Modules & Increment of Development

A consistent building width creates a rhythm that contributes to the architectural scale and character of a Town Center. In order to maintain this consistency, the required lot width in the Heart of the City district is 50 feet. The 5.5 percent slope of Nicollet Avenue defines the building module that will enable access to a storefront without the use of steps or ramps.

New construction, including parking ramps that require two or more lots, should respect the street wall pattern by maintaining the 50-foot facade width, and by incorporating similar window openings and entrances.

Complementary building alignments, widths, and rhythms

Materials

Color, often a building's most recognizable element, can greatly enhance or detract from the visual harmony of street facades. In general, the number of colors should be limited in order to maintain simple color schemes. Colors should be selected that will promote visual harmony and integrate buildings within their respective blocks. Where appropriate, buildings must carry over materials and colors of adjacent buildings. A common palette of brick colors and other high-quality materials will establish a degree of conformity, but not uniformity, throughout the Heart of the City district.

Exterior building materials are classified as either primary, secondary, or accent materials.

Primary Materials

Primary materials cover at least 60 percent of the facade of a building. They must be integrally colored and may consist of brick, stone, or glass. Bronze-tinted or mirror glass are prohibited as exterior materials in the HOC-1 district.

Secondary Materials

Secondary materials may cover no more than 30 percent of the facade. They must be integrally colored and may consist of decorative block or stucco. Synthetic stucco may be permitted as a secondary material on upper floors only.

Accent materials

Accent materials may include door and window frames, lintels, cornices, and other minor elements, and may cover no more than 10 percent of the facade. Accent materials may consist of wood or metal if appropriately integrated into the overall building design and not situated in areas which will be subject to physical or environmental damage.

All buildings must incorporate accent materials that are visible from a public street or open space, complementary major material colors, and a combination of vertical and horizontal pattern designs in the building facade.

Consistent interior window treatments are required for multi-family residential complexes and offices.

Sheet metal, corrugated metal, asbestos, iron, shakes, and plain flat concrete block, whether painted, integrally colored, or plain, are unacceptable exterior building materials within the Heart of City district.

Entrances

Building entrances should face and be clearly visible from the street. They should be recessed in order to maintain a coherent pattern along the sidewalk and to define the entry point.

Entrances must be located less than 60 feet apart and must be oriented conveniently to the street as well as to any off-street parking serving the use.

Rear entrances used for public access and pass-throughs must be given the same attention to design as the front entrance.

Objective: Incorporate Architectural Focal Features

To serve as identifiable and memorable landmarks, development projects should enhance prominent corners of buildings with towers, arches, or roof forms.

Examples of Corner Treatments and Focal Features

Objective: Roof Forms Should Provide Visual Interest

Gabled, stepped, and peaked roofs add variety and interest to buildings and should be incorporated in developments.

Example Roof Lines

Objective: Architecture Should Stimulate Interest at the Street Level

Even in a suburban setting, the pedestrian experience helps define a streetscape. Since the pedestrian is keenly aware of the ground-level facades, street-level businesses should stimulate passerby interest through well-lit displays of merchandise or provide windows that reveal internal activity. As a building's use changes, it is important to maintain the existing character, particularly at the street level.

Display Windows

Traditional retail stores typically possess large windows on the first floor for merchandise display, adding life and interest to the streetscape.

Buildings containing office and retail uses in the HOC district must maintain at least a 40 percent window coverage on each first floor facade that fronts a street or public open space.

Outdoor Space

When appropriate, the extension of interior space into the public realm is not only lucrative for the business owner but interesting and visually stimulating for the pedestrian.

Objective: Encourage Outdoor Dining and Seating Facilities

If special consideration is given to their size, location, design, and appearance, sidewalk cafes enhance an area's ambiance. A well-designed outdoor seating area will not block storefront entrances or inhibit access for the pedestrian or physically handicapped.

In the Heart of the City district, outdoor seating placed within the right-of-way or public open space will be permitted as a conditional use. At least six feet in width must be maintained to allow through passage. The use of temporary seasonal landscaping and features such as planter boxes and hanging baskets is encouraged. Outdoor cafe furniture should be of a compatible character and scaled to fit the space.

Examples of Sidewalk Cafes

Objective: Prohibit Boring, Blank Walls

Large expanses of blank walls create an unfriendly pedestrian environment. Walls facing the street or walkway should be punctuated with display windows, doors, indentations, or other fenestration to add visual interest on the street. All sides of a building visible to the public should be treated consistently with quality materials and finishes.

Facades fronting a street or public open space that are wider than 60 feet must be divided architecturally by means of:

- Significantly different materials or textures;
- Horizontal offsets measuring at least four feet in depth;
- Vertical offsets in the roof line measuring at least four feet;
- First floor fenestration recessed horizontally a minimum of one foot into the facade, or
- A combination of these elements.

Special attention should be given to incorporating unique brick patterns, cornice shapes, brackets, scuppers, columns and a variety of architectural accents that enhance the facades and add a traditional character.

Canopies

The use of pilasters and canopies at the transom level above a storefront is appropriate. The sequencing of canopies should vary so as to discourage a long, continuous strip of awnings.

Objective: Signs Should Complement Building Appearance

Signs are an important architectural element for any business. However, since signs influence the overall character and appearance of the streetscape, they should be designed to complement the architecture.

Sign types inappropriate to the HOC-1 district include pylon and free -standing signs, as well as roof signs. See They detract from the appearance of the area, and are not typically needed where buildings are placed closer to the street and thus more visible. Franchise logos and identification signs should be allowed only if they are scaled down in size and are integrated into the building facade and street character. Buildings and gas station canopies designed as signs are prohibited. See page V-15 for examples of monument signs appropriate for the HOC-2 district.

Overhanging Sign

Overhanging Signs

Overhanging signs received the highest rating in the Visual Preference Survey. Overhanging signs, if appropriately designed, can add significant charm and character to a building facade and streetscape. They are permitted with the following restrictions:

- The maximum size for a projecting sign is 12 square feet in area on each side and one foot in thickness.
- Signs may project no more than four feet from the front edge of the building.
- Projecting signs may extend over a public right-of-way or public property with a conditional use permit but are prohibited from extending over a designated parking space or loading area.
- Box and cabinet signs are prohibited, excepting logo signs approved as part of the overall signage plan.

Attached Wall Signs

Multiple tenant buildings may achieve individuality through the use of varied building materials and facade detailing. Signs may be varied in terms of lettering styles and lighting, while maintaining regularity in their size and location. Attached wall signage is allowed in the Heart of the City district with the following restrictions:

- Attached wall signs are permitted within a horizontal band at least 10 feet above the ground to a maximum of 15 feet.
- Wall signs may project no more than one foot from the facade.
- The maximum size for a wall sign is one and one-half square feet per lineal foot of building frontage on a public street, public open space or private parking wall.
- Box and cabinet signs are prohibited, except for logo signs approved as part of the overall signage plan.

Commercial Sign Examples

Wall Sign

Wall Signs

Overhanging Sign

Wall Signs

Wall Signs

Overhanging Sign

Commercial Sign Examples Appropriate for the HOC-2 District

Monument Signs

Awning Signs

Awnings, particularly those located on the second floor of a building, increase a business's visibility. Awning signage complements the building facade and can be easily removed as tastes evolve or new businesses move in. Awnings should be constructed of high-quality opaque material. Backlighting is prohibited.

Signs on canopies are allowed only if they are placed on a surface perpendicular to the ground.

Freestanding Signs

Freestanding signs are prohibited in the HOC-1 District, except directional signs at driveways and within parking areas, subject to the following conditions:

- Maximum size for directional signs is five feet in height and six square feet in area.
- Directional signs must be set back at least two feet from the right-of-way, lot lines and parking spaces.
- Freestanding signs are permitted in the HOC-2 district using the standards for the B-1 District described in the City's Sign Ordinance.

Objective: Design Buildings to Provide People with a Clear Sense of Weather and the Seasons

Trees

Trees placed around a building's perimeter provide shade and reduce precipitation and wind speeds at the pedestrian level.

In the Heart of the City district, at least one overstory tree must be provided for every 500 square feet of landscaped area. In order to provide year-round color and interest, a variety of hardy and appropriately placed overstory and ornamental trees, shrubbery, and ground covers must be included in the landscaping plan.

Balconies

Balconies not only create visual interest within the streetscape, but also provide for a safer outdoor environment by encouraging more eyes on the street.

Winter Warmth

Burnsville is a winter city where the warmth of sunlight in the middle of January can be absorbed on the sunny north side of many of the streets. Streetscape treatments and building designs should take advantage of a sunny winter location by incorporating darker, warmth-absorbing materials and protected areas for pedestrian comfort.

In addition to sheltering pedestrians from the elements, awnings protect window displays from sun damage, and keep store interiors cooler on sunny summer days. Retractable awnings possess the ability to capture sun warmth and natural lighting.

As a general rule, awnings must conform to a standard of 7'-6" of clearance between awning frames and the sidewalk.

Trees, awnings, and balconies provide pedestrian comfort

Objective: Improve Parking Lots and Rear Building Entries to Create a Safe, Attractive, and Viable Commercial and Residential Environment

Rear Building Entrances

In a traditional development pattern, a building's rear entrance often becomes the primary entrance when parking is located in the interior of a block. Rear building entrances should be improved with signs, canopies, landscaping and other complementary architectural detailing to create a welcoming and safe environment.

Parking Requirements

One of the most innovative elements of the Heart of the City's design is the allowance for on-street parking. On-street parking is permitted in most older portions of cities but usually is prohibited by suburban zoning codes. On-street parking creates a downtown atmosphere, provides an additional buffer between the sidewalk and the street, and minimizes the necessity for the gigantic parking lots that separate the sidewalk from the building, thus precluding an inviting pedestrian environment.

The total parking requirement in the Heart of the City district assumes some publicly provided parking, either on-street or in parking structures. On-street parking placed directly in front of a building or lot may be counted toward fulfilling the total parking requirement. If not enough on-street parking is available at the time of development, the same off-street parking as required throughout the City of Burnsville applies unless shared or reduced parking can be provided.

Parking Lots

The number and size of parking lots will be minimized in the Heart of the City District by permitting on-street parking and by the public provision of parking structures. The following guidelines apply to parking lots in order to further minimize their domination of the streetscape.

- **Placement.** All developments should encourage a strong connection between the building and parking areas through unified construction of elements, pedestrian paths, and entries. Parking must be placed along the sides and rear of buildings rather than in front. Parking lots are prohibited within 50 feet of any street intersection.

- **Width.** Parking lots facing a public street are limited to a maximum width of 65 feet in order to retain the building wall rhythm.

- **Setbacks & Build-to Lines.** Parking lots must be placed to the side or rear of the lot. In order to maintain the street wall, parking lots facing the street must be screened at the build-to line. Parking structures must maintain the same build-to line and setbacks as principle structures

- **Pedestrian Accommodation.** Pedestrian passageways through parking lots are encouraged. Commercial buildings should consider providing bicycle parking areas and racks.

- **Shared Parking Lots.** Shared parking areas with varying peak demands may be utilized when possible. Shared parking encourages pedestrian trips since people are able to move between destination points without getting into cars. Shared parking will allow for greater intensity of development, reduce the need for structure parking, and minimize impervious surfaces.

Rear building entries should complement the architecture

Objective: Buffer Parking Lots

Interior parking lot landscaping is essential to improve the appearance of parking lots. Landscaped islands provide visual relief from large expanses of asphalt and automobiles, while shade trees add the vertical dimension that is often needed to maintain a pedestrian scale.

If properly designed, parking lot islands can be landscaped cheaply and effectively. They should incorporate drought- and salt-tolerant trees that are indigenous to the area. The ground layer should consist of materials that will not be destroyed by the weight of snow piles, such as decorative mulch, or shrubs and perennials that may be sheared to the ground in late fall. Islands should be large enough and the soil uncompacted and treated to provide adequate habitat for trees and other plant materials.

In the Heart of the City district, at least 10 percent of the total land area within the parking and driveway areas must be landscaped. Up to five percent of this requirement may be credited from the landscaped areas provided within the build-to line.

- Parking lot islands must measure at least 150 square feet in area and include at least one 2-1/2" caliper overstory tree .
- One tree per 25 feet of parking lot frontage must be included in the perimeter landscape area.

Objective: Landscape Parking Lot Interiors

A narrow setback that includes overstory trees and a low screen made of wood, concrete, brick, or ornamental iron railings can be very effective at screening views of the parking lot and maintaining the street wall.

The combination of railings and trees buffers parking lots and delineates the pedestrian realm

Objective: Enhance Buildings and Landscaping with Appropriate Lighting and Screen Service Areas from Public View

Lighting

Well placed exterior wall lighting avoids excessive brightness and enhances building design and the adjoining landscape. Lighting styles and building fixtures should be of a design and size compatible with the building. All parking lot lights should be uniform in style, color and height.

No light source may be placed more than 16 feet above the ground except by conditional use permit for buildings more than 20 feet in height.

Drive-Through Lanes

Drive -through lanes will be discouraged in the Heart of the City district. With the exception of driveways, drive-through lanes are permitted only as a conditional use and must be located to the side or rear of the building

Trash Handling

Trash, recyclables and equipment for handling them must be stored within the principal building, completely screened from public view or stored within an accessory structure. Compactors must be completely screened from eye-level view from public streets and adjacent properties.

Loading Docks

Loading docks may not be located in the front yard and must be completely screened from view of public streets and open spaces with landscaping.

Mechanical Equipment

Roof-and ground-mounted mechanical equipment must be completely screened from eye-level view of adjacent properties and public streets, or designed to be compatible with the architectural treatment of the principal building.

Objective: Provide Quality Landscaping

At least one overstory tree must be provided for every 500 square feet of landscaped area. In order to provide year-round color and interest, a variety of appropriately placed and hardy overstory and ornamental trees, shrubbery, and ground covers must be included in the landscaping plan.

Figure V-4: Residential Building Components

Example Residential Materials

Example Roof Lines

Example Residential Corner Treatments

Example Outdoor Spaces and Linkages

Example Residential Window Patterns

VI. STORMWATER DESIGN

VI. STORMWATER DESIGN GUIDELINES

According to a 1992 inventory by the U.S. Environmental Protection Agency, more than one-third of American rivers and nearly one-half of its lakes are unfit for drinking, swimming or fishing. Non-point source pollutants such as pesticides, fertilizers, heavy metals, urban sediments, dumpster leachate, oils and detergents pose the greatest threat to water quality. Burnsville's adjacency to the Minnesota River necessitates a responsibility to protect water quality. The Heart of the City redevelopment project affords a unique opportunity to address this issue in an integrated and innovative way.

Nineteenth century perceptions of water as a carrier of filth and disease are still prevalent in current stormwater design. Stormwater traditionally has been regarded as a waste to be disposed of as efficiently and invisibly as possible. This requires large amounts of impervious surface replete with curb and gutters and elaborate subterranean pipe matrices, which, ironically, contribute to lower water quality in rivers and groundwater due to:

- Increased siltation
- Thermal pollution
- Heavier pollutant, nitrogen and phosphorous loading
- Increased erosion

In vegetated areas possessing little impervious surface, a minimal amount of water drains into waterways in the first few hours during and after a storm event. Most of it is either absorbed by vegetation or the ground and takes days to months to reach the river. In contrast, a large amount of impervious surfaces speeds up the process: stormwater can reach the river in a matter of minutes.

Stormwater systems can be designed as an amenity, a multiple use civic infrastructure that makes water processes legible, sustainable, and expressive. If stormwater is perceived as a replenishing amenity and resource, rather than a waste that should be hidden away, stormwater systems can incorporate earth and vegetation to serve as cleansing filters.

Several innovative technologies have been developed to ameliorate poor stormwater quality. Using these strategies to daylight stormwater processes benefits overall water quality by:

- Lowering peak flow velocity and volume.
- Lessening possibilities of erosion.
- Settling heavy metals and silt out of stormwater flow.
- Filtering pollutants, silt, phosphorous and nitrogen.
- Regenerating groundwater.
- Cooling water before it reaches a water body.
- Reusing water for irrigating parks and gardens rather than installing expensive systems.
- Ameliorating the heat island effect of urban areas.

Other benefits include:

- Enhancing the amenity value of the community.
- Supporting biodiversity at the street level by building ecological structure.
- Lowering capital costs for municipal infrastructure.
- Educating the community about drainage and cleansing processes of degraded water.
- Opportunities to incorporate art and education with the use of follies celebrating the hydrologic event.
- Opportunities to reveal the natural terracing to the Minnesota River and to reconnect people experientially to the Minnesota River Valley.
- Opportunities for practicing responsible regional watershed planning at the site scale.
- Opportunities to create public gathering spaces at larger water collection areas which celebrate the ephemeral qualities of a rainstorm or spring thaw.
- Opportunities to create a common vocabulary of streetscape elements rooted in place through the use of native plants and the revelation of ephemeral climatic events.

A. DETENTION PONDS OR MARSHES

Detention ponds and marshes detain and store stormwater runoff to allow for settling of particulate pollutants, vegetative uptake, and control of peak flood rates. They may be constructed above or below grade, be wet or dry. Although these systems control peak rates, they do not mitigate increased runoff volumes.

B. INFILTRATION

Infiltration systems intercept and reduce direct site surface runoff, allowing water to percolate back into the ground through coarse gravel, sand or other filtering media. These types of systems control peak rates, help preserve existing on-site hydrology, maintain stream base flow, and recharge groundwater.

Trenches- Trenches are shallow (two to 10 feet deep) and are placed in relatively permeable soils that are backfilled with coarse stone, a sand filter, and lined with filter fabric. The trench surface can be covered and/or consist of gabion, stone, sand, or a grassed covered area with a surface inlet. Trenches allow for partial or total infiltration of stormwater runoff into the underlying soil.

Basins- Basins are depressions created by excavation, berms, or small dams for the short term ponding of surface runoff until it percolates into the soil.

Pervious Paving Systems- Pervious paving systems consist of strong structural materials, such as concrete or asphalt, regularly interspersed with voids which are filled with pervious materials such as sandy loam or grassed turf. These surfaces are underlain by soils capable of allowing infiltration. Pervious asphalt is not recommended for clay-rich soils since it easily clogs and thus necessitates frequent replacement.

Roof Downspout Systems- Roof downspout systems consist of small-scale chambers or variations of infiltration trenches that are specifically designed to accept and infiltrate roof drainage only. They should be covered with rip rap to dissipate the water's erosive energy.

Figure VI-1: Gravel Trench
Source: Claytor

Figure VI-2: Street Infiltration Trench

Figure VI-3: Pervious Paving

C. BIOFILTRATION

Biofiltration systems use vegetation and/or sand and other natural filtration media to reduce pollutants in stormwater runoff. Filtration, infiltration, adsorption, sedimentation, and biological uptake of stormwater pollutants are all methods utilized by biofiltration systems.

Vegetated Swales- Vegetative swales possess less than six percent side slopes and are wide and shallow to maximize flow residence time and promote pollutant removal. They are often used downstream from detention facilities, around parking lots, in parking lot medians, and along roadsides.

Vegetated Filter Strips- Filter strips consist of vegetated sloped strips in which flow is distributed broadly along the length of the vegetated area as overland sheet flow. Requiring ample space to spread the flow over a wide area at a small depth, suitable areas for filter strips include shoulders along uncurbed roads, areas between parking lots and stormwater inlets, adjacent to vegetated swales and upstream of infiltration facilities.

Media Filters- Media filters strain runoff through a medium, such as sand, peat, compost, pelletized leaf compost, into an underdrain system that conveys treated runoff to a detention facility or the point of ultimate discharge. They can be used in highly developed sites or be retrofit to existing sites.

Catch Basin Filter Inserts- Catch basin filter inserts are suspended within catch basins and designed to strain sediment. Since they require high maintenance to avoid hydraulic failure, they are applicable only to a small drainage area.

Figure VI-4: Vegetated Swale

Figure VI-5: Bioretention Parking Median

D. MULTIFUNCTIONAL SYSTEMS

Multifunctional systems incorporate multiple stormwater treatments

Enhanced Swales & Ponds- Enhanced swales contain infiltration/filtration systems which consist of an infiltration pond with a layer of filter media (sand/crushed limestone) in their beds. They work best where soils are very coarse.

Bioretention- Bioretention systems consist of shallow landscaped areas that allow for ponding and filtration of water runoff. Treatment involves settling, vegetative uptake, and filtering as water passes through layers of sand, loam and compost before infiltration or collection in underlying perforated pipes. Traditionally designed convex grassed medians/parkways and piping/catch basins may be replaced with concave bioretention gardens and vegetated stormwater channels.

Figure VI-6: Bioretention Swale with Level Spreader and Grass Filter Strip - Plan
Source: Claytor

Figure VI-7: Bioretention Swale with Level Spreader and Grass Filter Strip- Section
Source: Claytor

Figure VI-8: Bioretention Swale - Section
Source: Claytor

E. SITE PLANNING PRINCIPLES

Minimize Total Impervious Area- Impervious areas prevent infiltration of rainfall and act as pollutant collectors between storms, while vegetated surfaces tend to treat or uptake pollutants. Total impervious surface may be reduced by locating parking areas beneath buildings, minimizing building footprints by adding stories, and by using porous paving materials rather than traditional asphalt and concrete for parking lots, roads, sidewalks, and driveways.

Minimize Direct Connection Between Impervious Surfaces- Connected impervious surfaces result in rapid stormwater flows. Driveways, sidewalks and streets may be sloped so that runoff drains first to lawns or vegetated swales.

Conduct Watershed-Based Zoning- Conduct land use master planning across scales to ensure that future growth is compatible with high water quality. Create regulation that is preventative rather than reactive, such as Best Management Practices, buffer regulations, limits on impervious surfaces, limits on curb and gutter, and require low irrigation and low fertilizer/pesticide plantings. Adopt sensitive area ordinances to provide for buffers and to ensure development does not occur in key areas such as steep slopes, floodplains and wetlands. Review municipal codes and modify them to protect water quality.

Plant More Trees- Trees and shrubs can capture as much as 35 percent of the annual rainfall through absorption or evaporation. Roots provide a path for increased water infiltration as well.

Use Rooftops for Stormwater Collection and Filtration- Eco-roofs cover all or a portion of a roof with grasses and ground covers and can be retrofitted to existing buildings with little or no structural reinforcement. This soft roof filters and reduces stormwater runoff volume while enhancing the thermal and acoustic insulation of the building.

Figure VI-9: Eco-Roof
Source: Lipton

Use Native Plant Materials Appropriate to Soil Type and Wetness- Plants such as Cattails, Blue flag Iris, Sedgegrass and Common Reed are site specific and respond to wet conditions.

Figure VI-10: Wetland Runnel
Source: Hansen

Sources:

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VII. IMPLEMENTATION

VII. DESIGN STANDARDS IMPLEMENTATION

A. INTRODUCTION

This framework recommends distinct strategies for guiding the Heart of the City district's future form and appearance. Before describing the specific recommendations, understand that the current development pattern in Burnsville evolved over many decades. Likewise, realization of this framework's vision for the Heart of the City will take several years.

The City made a concerted effort to involve a broad cross-section of the community in all phases of this project. Business owners, residents, community leaders, and elected and appointed officials have all contributed greatly to this study. Successful implementation will require each of these sectors of the community to remain involved in the process. Zoning enforcement and design standards will not succeed without the cooperation and commitment of landowners, development interests, and the rest of the community.

B. DESIGN REVIEW

The recommended method for administering design guidelines is to establish a Design Review Advisory Committee and incorporate design review as a standard step in the development review process.

Mission of the Design Review Committee

The mission of the Design Review Committee is to review each public and private development proposal within the Heart of the City district for compliance with the intent of the site design, architectural, landscape and streetscape design guidelines established in this Design Framework.

The Design Review Committee will consist of individuals appointed by the City and include representatives of the Heart of the City Steering and Special District Committees, City Staff, a design consultant, and a representative of the development group selected as a master developer. The review process conducted by this Committee will be separate from the City Staff's development review and approval process.

The Design Review Process

To ensure that the design guidelines are administered in a fair and consistent manner, the review process should be administered in a step-by-step process, emphasizing collaboration and avoiding adversarial relationships.

The design review process should be adopted as a standard step in the review of all public and private development proposals within the Heart of the City district. The design review process could be tailored to fit within the City's development review procedures in many ways. The process, however, should involve the following basic steps:

1. *Publish a Summary Users Guide and Checklist*
   The design review criteria and procedures should be summarized in a brochure and made available to the general public to facilitate understanding of the process. A checklist of submission requirements also should be created and included in the summary brochure.

2. *Informal Review*
   An informal review of the proposed project should be conducted between the Design Review Committee and the developer during the preliminary design stage. This pre-application meeting is an opportunity for all parties to communicate the expectations, attributes, and issues involved in the project before a great deal of design time and dollars are invested.

3. *Staff Analysis*
   Refined site, building and landscaping plans should be submitted to the Design Review Committee for review to ensure they meet the zoning, building code, and design guideline criteria. A brief review report that describes how the proposal does or does not meet the criteria should be produced. The checklist should be used at this point to ensure continuity in the review procedures.

4. *Formal Review Process*
After approval by the Design Review Committee and Planning Commission, the proposal should be scheduled for a public meeting in front of the City Council. This meeting serves as a formal review step that is integrated into the existing public hearing schedule and will be conducted through the City of Burnsville PUD review process. The Design Framework also will be enforced through the City of Burnsville's development review and approval process.

5. *Issuance of Building Permit*
Building permits may be issued subject to any special conditions that may be attached to the approval of the project at the discretion of the City Council.

6. *Enforcement*
Procedures for ensuring the approved design is actually built are critical to the success of the design review process. The design review efforts are of little value if elements of the approved design are discarded.

To ensure compliance, the Design Review Committee could issue financial penalties for failure to conform to the approved design and conduct field inspections during construction.