



INDEX

- RETAIL PROGRAM
- VIEW PROTECTION
- SUSTAINABLE DESIGN
- OFFICE CASE STUDIES
- ENTRY/EXIT POINTS STUDY

RETAIL PROGRAM



TOUCHSTONE CORPORATION

April 24, 2008

Kirkland Planning Commission
c/o Angela Ruggeri
123 5th Ave
Kirkland, WA 98033

Re: Kirkland Parkplace Retail Program

Dear Members of the Kirkland Planning Commission:

The following is in response to a question raised in the study session of April 10th in connection with the proposed Kirkland Parkplace development. The question was:

What factors have influenced the decision to build 300,000 square feet of retail at Kirkland Parkplace?

In parlance of real estate, the proposed Kirkland Parkplace project is classified as a Vertically Integrated Mixed Use Development with a mix of three separate and distinct uses: retail, office and hotel. The large Vertically Integrated Mixed Use Development is a relatively new real estate class and has not been studied to the degree that each of its component parts have. A number of tools were used to establish the size of the retail portion of Kirkland Parkplace including; the shopping center industry standards developed by the International Council of Shopping Centers (ICSC), our own industry experience and input from Gibbs Planning Group, Inc. (GPG) and Bob Gibbs, an expert in planning urban retail projects.

One of the key benefits of a mixed use development is efficiency. The easiest way to illustrate this idea is to use the example of a site that on one edge has a movie theater and on the other edge has an office building with a parking lot positioned between the two. The office workers park in the day and the theater-goers use the same parking at night. In this way the parking is shared and the land required for parking is half of what would be required if each of these building were developed in a stand alone setting. Other benefits of mixed use include: vehicle trip reduction by allowing occupants to perform two or more tasks on the same site and the synergy that is created between uses where the activity of one use creates activity for another; such as a business traveler who can dine, lodge and work in the same complex.

Unfortunately, the benefits of mixed use cannot substantiate the quantity of retail space alone. The population of even the largest mixed use project is not sufficient to fuel the traffic required by a successful shopping center. As stated in the EIS, the daytime population of the project at maturity is a little over 6,000 people. By comparison, most grocery store chains require the population in a 3 mile radius to be at least 30,000 people.

The Kirkland Parkplace project program calls for 300,000 square feet of retail space. The quantity of retail space is being dictated by three factors: Site; Retail Characteristics; and Demographics, Shopping Center Classification & Critical Mass.

- 1) Site - Our goal is to maximize the total retail Square feet that can be built for the type of Shopping Center, as discussed below:
 - a) Size - the configuration and size of the site dictate the configuration of the building base where the retail resides. The same factors limit the total amount of parking that can be placed on the site, which dictates the total retail square footage.
 - b) Topography - the slope of the site and surrounding streets puts a limit on the total size any one tenant can be. For example, it would be impractical to put a single level 100,000 square foot retail tenant on the site.
- 2) Retail Characteristics
 - a) Single Level Retail is Optimal - With few exceptions, retailers achieve the highest sales per square foot overall if they are located on one level. We have purposely chosen to locate the majority of our retail on one level in lieu of creating more square footage by building two levels of retail around the site. The only exception to this rule is for large national brand tenants that have proven they can operate efficiently in two level spaces.
 - b) Visibility - Successful retail needs to be seen. More retail space can be placed on the site but it would be at the expense of visibility to the street.
- 3) Demographics, Shopping Center Classification & Critical Mass
 - a) Demographics have a profound influence on the type and therefore the size of a shopping center that a developer would build. ICSC has developed a Summary of Shopping Center Classifications¹, shown in the chart below, which is the industry standard for developers, retailers, lenders and architects to define the core concept of shopping centers. Demographics, as well as the other factors noted above, guide the developer in its choice of shopping center typology with the ultimate goal of achieving the highest sales per square foot potential for the property.

ICSC Current Classifications

Type of Shopping Center	Concept	Square Feet (including anchors)	Acreage	Typical Anchor(s)		Anchor Ratio	Primary Trade Area
				Number	Type		
MALLS							
Regional Center	General merchandise; fashion (mall, typically enclosed)	400,000-800,000	40-100	2 or more	Full-line department store; Jr. department store; mass merchant; discount department store; fashion apparel	50-70%	5-15 miles
Super regional Center	Similar to regional center but has more variety and assortment	800,000+	60-120	3 or more	Full-line department store; Jr. department store; mass merchant; fashion apparel	50-70%	5-25 miles
OPEN-AIR CENTERS							
Neighborhood Center	Convenience	30,000-150,000	3-15	1 or more	Supermarket	30-50%	3 miles
Community Center	General merchandise; convenience	100,000-350,000	10-40	2 or more	Discount department store; supermarket; drug; home improvement; large specialty/discount apparel	40-60%	3-6 miles
Lifestyle Center	Upscale national chain specialty stores; dining and entertainment in outdoor setting.	Typically 150,000-500,000, but can be smaller or larger.	10-40	0-2	Not usually anchored in the traditional sense but may include book store; other large-format specialty retailers; multiplex cinema; small department store.	0-50%	3-12 miles
Power Center	Category-dominant anchors; few small tenants	250,000-600,000	25-80	3 or more	Category killer; home improvement; discount department store; warehouse club; off-price	75-90%	5-10 miles
Theme/Festival Center	Leisure; tourist-oriented; retail and service	80,000-250,000	5-20	N/A	Restaurants; entertainment	N/A	N/A
Outlet Center	Manufacturers' outlet stores	50,000-400,000	10-50	N/A	Manufacturers' outlet stores	N/A	25-75 miles

This Table presents the core concepts and size ranges of the eight subtypes of retail in the current ICSC classification system. There are some overlaps in the various attributes across several retail classes. To provide more insight into proper classification, the ICSC added a number of other distinguishing characteristics (e.g., number of tenants and primary trade areas) as noted.

- b) Shopping Center subtype - Research provided by GPG and Environmental Systems Research Institute (ESRI) indicates that “The (Kirkland) trade area lifestyles reflect a strong base of educated and affluent households. The purchasing patterns of the lifestyles segments reflect shoppers at major department stores and specialty stores”ⁱⁱ.

The conclusion of the demographic report and Touchstone’s own knowledge of the market, indicate that a Lifestyle Center is the best fit for the market.

- c) Shopping Center Critical Mass - In each Shopping Center subtype a critical mass of stores and store types is essential to the success of the center. Without critical mass the center cannot attract a large enough cross section of the trade area population to produce the necessary foot traffic for the occupants of the center to be successful. GPG has validated the size and store type of our model based on a

retail sales forecast for each retail category (see table 2 below). Kirkland Parkplace will have a critical mass with successful retail stores based on the sales forecast presented in the GPG report.

Table 2: Supportable Retail Space: Kirkland, Washington ^{ii, iii}

Retail Category	Recommended Retail Space	Forecast Annual Sales	Forecast Sales Per S/F
Women's Apparel	25,000	\$14,125,000	\$565
Men's Apparel	3,000	\$2,100,000	\$700
Unisex Apparel	36,000	\$21,600,000	\$600
Children's Apparel	4,000	\$1,700,000	\$425
Shoes & Accessories	4,500	\$1,687,500	\$375
Total Apparel, Shoes & Accessories	72,500	\$41,212,500	\$568
Grocery	45,000	\$28,125,000	\$625
Specialty Food Stores	1,000	\$400,000	\$400
Restaurant W/Liquor	36,000	\$24,300,000	\$675
Restaurant W/O Liquor	26,500	\$12,057,500	\$455
Total Food & Restaurant	108,500	\$64,882,500	\$598
Appliances, Computers & Electronics	10,000	\$12,500,000	\$1,250
Book & Music Stores	25,000	\$7,125,000	\$285
Card / Gift Shops	1,500	\$600,000	\$400
Health and Beauty Store	3,000	\$1,650,000	\$550
Furniture, Home Décor & Accessories	32,000	\$14,560,000	\$455
Jewelry Store	3,500	\$2,275,000	\$650
Optical / Vision Care	1,500	\$1,012,500	\$675
Personal Services	7,500	\$3,000,000	\$400
Sporting Goods Store	35,000	\$11,375,000	\$325
Total Other Retail	119,000	\$54,097,500	\$455
Total Supportable Retail	300,000	\$160,192,500	\$534

With the guidance of our architect and GPG we feel that the 300,000 square feet of retail specified in our building program is the right amount given the constraints of the site and trade area characteristics for a well leased and productive shopping center and would meet the needs of the Kirkland community.

Sincerely,



Gary R. Weber
Touchstone Corporation

ⁱ Shopping Center Classifications: Challenges and Opportunities-Runstad Center & ICSC- James R. Delisle, Ph.D.-September 2005

ⁱⁱ Retail Market Analysis-Kirkland Park Place- Gibbs Planning Group, Inc. February 18, 2008

ⁱⁱⁱ This study is used for determining appropriate retail space square footage and tenant mix and is not to be

VIEW PROTECTION

VIEW PROTECTION

Over the past fifteen years, as cities have developed their downtown plans, it has been increasingly common to find language relating to “protecting views.” This is particularly the case with communities having downtowns on sloping topography and a waterfront.

Views are marketable and can affect the value of property and the price of rentable space. Views affect how people feel about their perception of connectedness to the landscape and to the unique geography, water and vegetation that makes up the Pacific Northwest. No wonder that many people get emotional about the subject.

However, **the concept of view protection has become muddled by somewhat vague policies that imply that if “views” are currently available, their preservation trumps other public objectives.** Simply noting in a comprehensive plan that there are “panoramic views” does not in itself suggest a specific direction to retain them. Moreover, broad statements regarding protecting views can convey the impression that a city will ensure that views from private locations – residences or even offices are to be pre-

supports preserving private views. Indeed recent decisions have affirmed that public goods, such as trees in public parks and greenbelts, have a higher priority over private views.

Cities are discovering that protecting public views and vistas cannot be accomplished defensibly by merely having policies or v-

varying interpretations of the law. Having overly vague and broad standards requires discretionary judgment that is to subject to individual opinions and preferences and does not stand up to legal scrutiny. Among other cases, the 1994 State of Appeals Court decision in Anderson v. City of Issaquah made the adoption of clear, easily understood standards mandatory.

Cities are realizing that, as with any well-crafted land use regulations, there must be precision and objectivity in definition and prescriptions regarding the protection of public views. This includes being rigorous in describing what it is that constitutes a “view.”

In fact, the term does have a common usage. Webster’s dictionary defines “**view**” as a “**scene: vista**” or a “**picture of a landscape.**” Landscape involves buildings, landscape, vegetation, and water and those ordinances that protect public views do so for p-

are features to look at, not a void. Otherwise, a view would have no meaning.

To-

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Se-

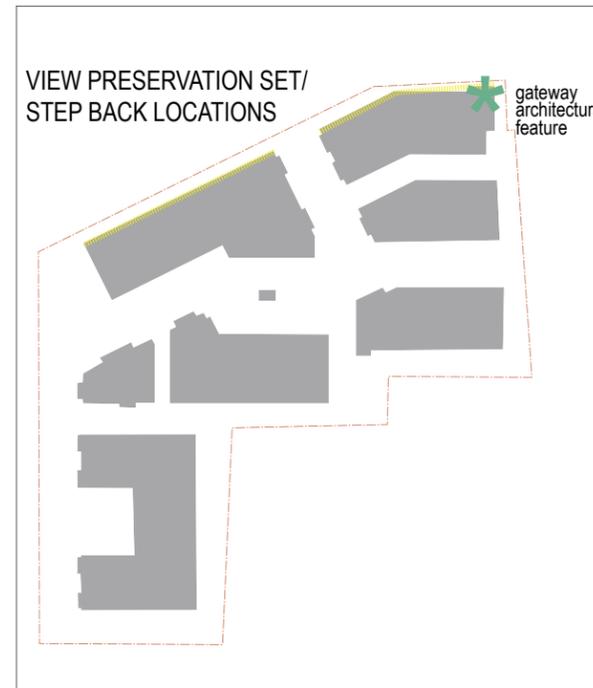
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techniques that allow for predictability and ease of administration. This also allows other long-term public objectives to not be frustrated by sweeping language.

In the case of Kirkland, there are likely many places from which public views could be protected. Central Way and 6th may be a prime candidate. But the terms and conditions that effect development must be clearly set forth. Although building height is often cited by many as being a tool, it might not actually be an effective one. **If a building of a certain height would obstruct a view, merely making it taller does not obstruct the view more.** Some people may hold an opinion that taller buildings are in themselves undesirable, but using the argument of view protection does not automatically support that.

We suggest that the City consider adopting dimensional provisions similar to those used by other communities. While we have focused upon Central Way, this approach may also be applicable in other locations. The intent is to **clearly define a view corridor and how it would affect building envelopes so that limitations can be known in advance by all parties.**

We offer an option that reflects common zoning practices. This technique involves an inclined plane above the street level retail and second story that would allow varied responses, including multiple setbacks. As this technique allows for flexibility for architectural form, it also provides reasonable assurance to the City and citizens of what to expect from proposed development.

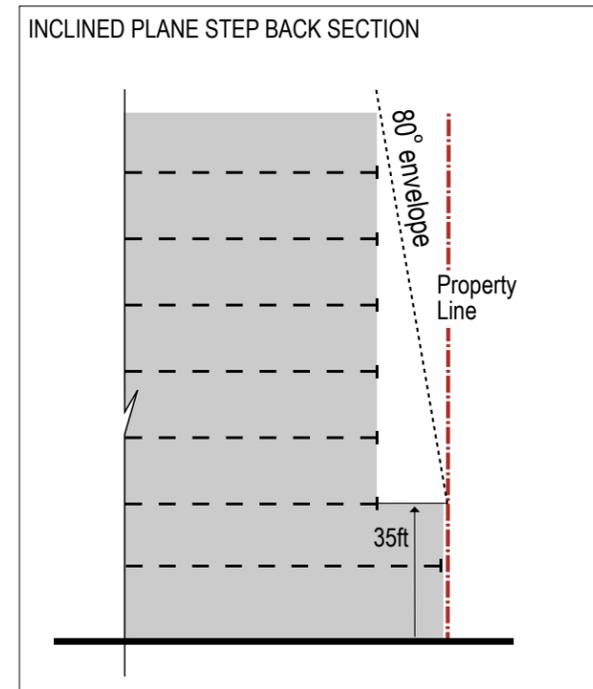


SAMPLE REGULATION LANGUAGE:

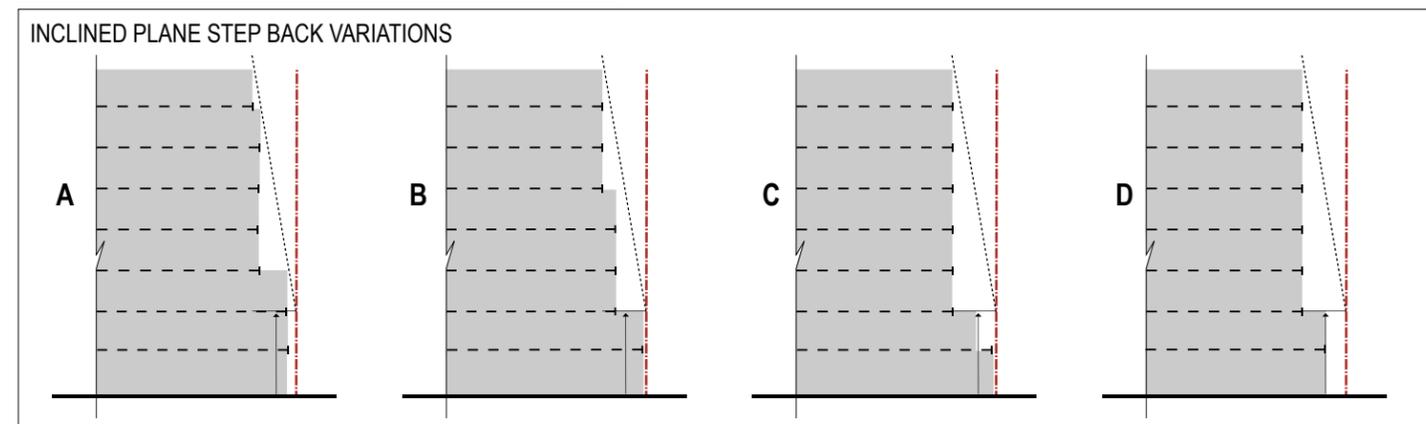
In order to respond to view corridor at the intersection of 6th Street and Central Way, buildings along Central Way should respond by stepping or receding back on the upper levels to enhance the visibility of Lake Washington.

*Step backs should occur on facades facing Central Way. The facade should recess as the height increases along a defined inclined plane from the existing property line.**

**The corner of the building at 6th and Central shall allow a distinctive architectural feature, (such as a tower or sculpted feature) that precludes any set/step back requirement in order to mark and enhance the gateway into Kirkland.*



The building should step back along an incline plane of a 5:1 slope, or 80 degrees, after the 2nd story (or 35 ft) of the building.



VIEW PROTECTION Sample Code Language

San Diego, CA
 Municipal Code 15.6.3.50
 VIEW CORRIDOR STEPBACKS

View Corridor Setbacks/Stepbacks. Buildings shall be set back, or upper floors shall provide stepbacks, along those sections of View Corridor designated streets, a distance measured from the property line adjoining any public street (measured after any required right-of-way dedication), or from any extensions of public street right-of-way lines, as provided in Table: View Corridor Stepbacks.

Seattle, WA
 Title 23 - LAND USE CODE
 SMC 23.49.024 View corridor requirements.

- A. Upper-level setbacks shall be required for the following view corridors:
1. Broad, Clay, Vine, Wall, Battery and Bell Streets west of First Avenue; and
 2. University, Seneca, Spring, Madison and Marion Streets west of Third Avenue.
- B. Upper-level setbacks for view corridors listed in subsection A1 shall be provided.

TABLE 0310-B: VIEW CORRIDOR STEPBACKS		
Street	Required Stepback (Feet)	Stepback Elevation (Feet)
Laural Street	15	30
Juniper Street	15	30
Hawthorne Street	15	30
Grape Street	15	30
Pi Street	15	30
Date Street		
- West of Pacific Hwy	20	Ground Level
- East of Pacific Hwy	15	30
Cedar Street		
- West of India Street	15	Ground Level
- India Street to First Avenue	15	30
Beech Street		
- West of Pacific Highway	20	Ground Level
- Pacific Highway to Kettner Boulevard	15	30
- Kettner Boulevard to Sixth Avenue	15	50
Ash		
- West of Kettner Boulevard	25	50
- Kettner Boulevard to Sixth Avenue (south side only)	15	50
A Street	25	50
B Street	25	50
C Street	25	50
Broadway		
- Harbor Drive to Pacific Hwy (W 1/2 block)	65	Ground Level
- Harbor Drive to Pacific Hwy (E 1/2 block)	55	Ground Level
- Pacific Hwy to Kettner Boulevard	40	Ground Level
- Between Kettner Boulevard and Park Boulevard	15	Ground Level
E Street	25	50
F Street	25	50
G Street	25	50
Pacific Highway	25	45 - 110
Park Boulevard (south of K Street)	10	60
	30	90



Exhibit 23.49.024B
Setback depth on view corridors

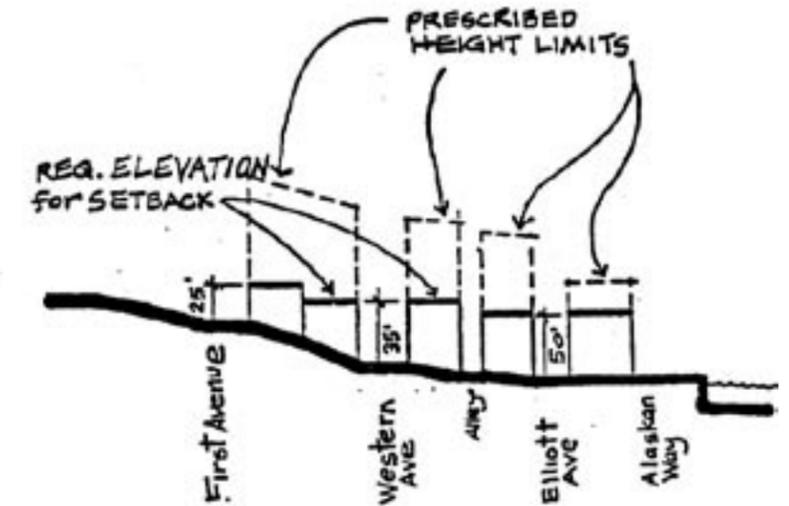


Exhibit 23.49.024A
Elevation at which view corridor setback is required

SUSTAINABLE DESIGN

LMN LEED Projects (as of 3/08)

Constructed:

- Seattle Central Library—LEED Silver
- Spokane Convention Center Expansion—LEED Silver

In Progress:

- Tower 333, Bellevue—LEED Certified (Pre-certified)

Now Targeting LEED Silver (Shell & Core Pilot Program)

- Vancouver, BC Convention and Events Center—LEED Gold- certification submittal pending (LEED Canada)
- University of Washington Business School—LEED Silver- certification submittal pending
- Kent, WA Events Center—LEED Silver- certification submittal pending
- City College of San Francisco Performing Arts Center—LEED Silver- certification submittal pending
- University of Washington Playhouse—LEED Silver- certification submittal pending
- Everett Community College Gray Wolf Hall—LEED Silver- certification submittal pending
- The City of Shoreline, WA City Hall—LEED Silver- certification submittal pending
- Dexter Office Building, Seattle, WA – goal of LEED Silver

In Progress but unregistered-LEED Goals:

- San Jose, CA Convention Center Expansion – goal of LEED Silver
- Summit Office Building – goal of LEED Silver
- Newport Center – goal of LEED Silver
- Washington State Convention and Trade Center Conversion – goal of LEED Silver
- MOHAI – goal of LEED Silver
- SAAM – goal of LEED Silver
- Bellevue Community College Health Sciences (pre-design) – goal of LEED Gold
- Central Washington University Hogue Building—goal of LEED Gold
- WSU Vancouver Applied Technology Building—goal of LEED Silver
- Vulcan Blocks 26 and 32 Office Building—goal of LEED Core and Shell **Gold**

- Augustine Energy Office Building— goal of LEED Core and Shell Silver
- Bellevue Community College Instructional Building—Designed to

LEED Certified

- Peninsula College—Designed to LEED Silver

Hewitt LEED Projects (Landscape)

Constructed:

- Redmond City Hall – LEED New Construction Silver
- Westlake / Terry Building - LEED New Construction Silver
- Kent Pullen RCECC (King Co) – LEED New Construction Certified
- Alcyone Apartments - LEED New Construction Certified

In Progress:

- Nitty Gritty Building – LEED Silver New Construction- certification submittal pending
- WSDOT TMC/EOC – LEED Silver New Construction – registration pending
- Seattle University Housing – LEED for Homes Gold— registration pending

Touchstone LEED Projects

Constructed:

9th & Stewart – LEED Silver Shell and Core
(served as a pilot project for the Shell and Core designation)

In Progress:

West 8th – LEED Gold Shell and Core Pre-certified
North Lake Union Technology Building – Minimum LEED Silver Shell and Core

Our goal is to be LEED Gold or better on our projects moving forward.

9th & Stewart Life Sciences Building

BUSINESS BENEFITS

- 45% less water use, saving 495,000 gallons per year and generating \$5,500 in annual savings.
- Energy performance improved 27% with anticipated annual savings of \$17,650.
- Elevators approximately 30% more efficient with innovative technology that relies on regenerative drives.
- Finalist for NAIOP's 2005 Technology Building of the Year





West 8th is a LEED-Gold pre-certified building that includes many practical features to improve the health, comfort and productivity of tenants. It's the kind of "green" that doesn't just contribute to a tenant's brand, but that also makes good economic sense by enabling businesses to get the job done smarter, retain the best people and keep them productive.

Some of our best features...

- Optimizing the glazing percentage on windows to maximize natural light and minimize energy losses
- Additional fresh air controls on each floor
- Onsite childcare, including emergency drop-in childcare if other childcare falls through
- Non-toxic "green housekeeping" program AND Low VOC (volatile organic compound) paints, carpets and sealants
- Destination based elevator system that saves time AND up to 30% of the energy of a regular system
- Water saving fixtures and landscaping - 30% savings
- Other energy saving features - 15% energy savings

*Assuming 250SF/ employee and 120K of productivity per employee.

In summary, West 8th is a first-class office building that is more than good looking. It's a sensible place to locate for a tenant that values brand, environmental stewardship, and healthy, productive employees. Now that's a SMART kind of location...



Site - Preserving Water & Eco-System Quality

The building was sited and configured to retain as many existing mature trees as possible. Orientation of the classroom wing was selected to maximize daylight opportunities in classrooms. Electronic faucets and waterless urinals will be used in the building rest rooms to achieve **a reduction in potable water use** of 20-30%

Bellevue Community College R Building

architect: LMN ARCHITECTS



Waste - Limiting During Construction and/or Occupation

Construction-site recycling is in use. Recycling areas will be provided within the building. A project goal is to **minimize applied finishes, thereby reducing the overall amount of waste products**. Thus, the structural system is an exposed concrete moment frame, which along with the window system creates the major architectural expression of the building without the need for further cladding. Interior finish ceilings are minimized. The mechanical system greatly reduces the amount of sheet metal duct work.



Integration - Green Design Integrated in the Design & Process

Integration of green building principles has been a primary concern of the project team throughout the design process. Brainstorming workshops with the Owner, Contractor, and entire design team were conducted early in Schematic Design to identify possible design strategies, and follow-up sessions occurred throughout the design process. Use of an extranet web site, and electronic bid documents has helped the team reduce waste during design.

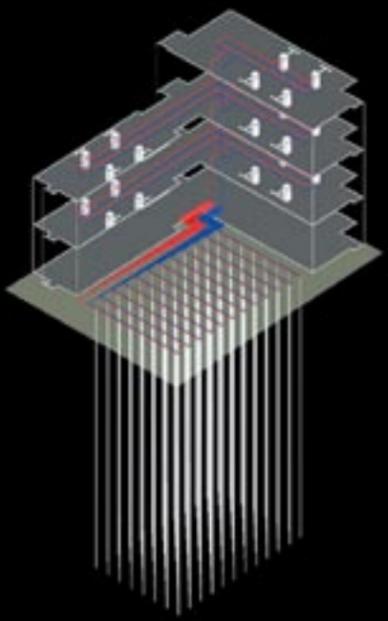


Indoor Air quality

The R Building will incorporate carbon dioxide monitoring as part of an indoor air quality program. All offices and classrooms have **operable windows** for added ventilation control by occupants. Low VOC content materials have been specified. Entryway systems have been designed to minimize intrusion of chemical pollutants, and chemical use areas are separately ventilated.

Energy - Conservation & Creation

The ground-occupied **geothermal heat pump system will provide significant energy savings** compared to the conventional rooftop package units previously used by BCC. To support this unusual system, the building uses a very high performance glazing system to limit heat gain while admitting as much natural light as possible. Fixed exterior sunshades and adjustable interior sunshades will further reduce heat gain during peak load conditions, and will allow occupants control of light and glare.



Materials - Recycled or Re-Used

The R Building uses a very simple palette of materials, incorporating **recycled content** where feasible within the Owner's budget guidelines. The exposed concrete structural frame contains a significant amount of recycled material, including flyash and reinforcing steel. Interior finishes, including gypsum wallboard and acoustical ceiling tile also have recycled content.



Bellevue Community College R Building

architect: LMN ARCHITECTS



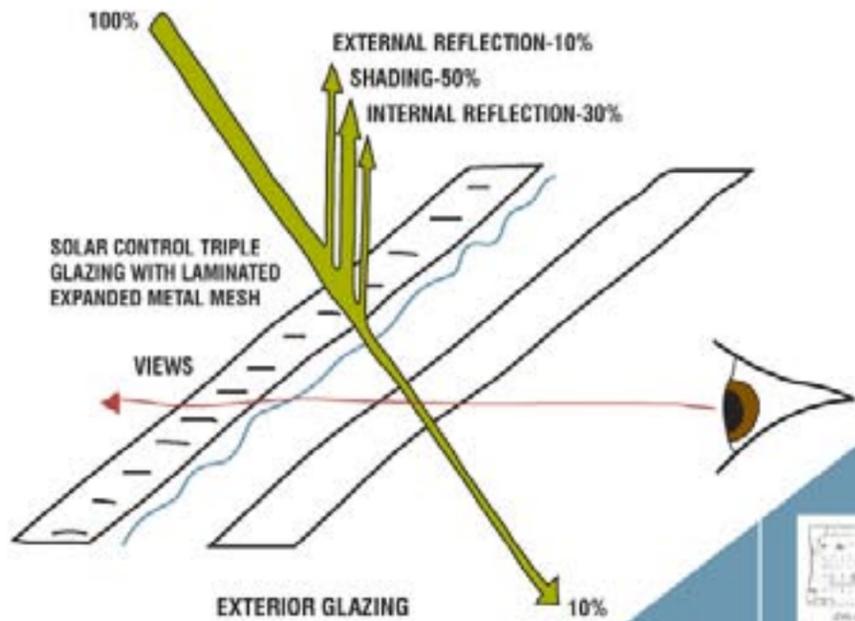
OMA | LMN
A JOINT VENTURE



SEATTLE CENTRAL LIBRARY



Owner: The Seattle Public Library
 Architect: OMA/LMN A JOINT VENTURE
 Civil Engineer: Magnusson Klemencic Associates
 Structural Engineer: Magnusson Klemencic Associates, Arup
 Mechanical Engineer: Arup
 Electrical Engineer: Arup
 Lighting Consultant: Kugler Tilletson Associates
 Interior Designer: Inside/Outside with OMA/LMN
 Landscape Designer: Inside/Outside, Jones & Jones Landscape Architects
 General Contractor: Hoffman Construction
 Commissioning Agent: EEI



MATERIALS

The building contains more than 10% (by cost) recycled content. Examples of recycled-content materials at the library include:

- Concrete rubble used as fill before construction
- Wood flooring made from scrap wood
- Structural steel: 90% recycled scrap
- Steel rebar: 97.5% recycled scrap
- Exterior aluminum: 30% recycled content
- Steel doors and frames: 48% recycled materials
- Sheet aluminum flooring: 20% recycled materials
- Gypsum wall board: 10% recycled materials
- Library shelving: 80-90% recycled materials.

Materials purchased locally or regionally support a healthy economy and reduce transportation impacts. At least 5% of the building products (by cost) were manufactured within 500 miles of Seattle, including:

- Structural steel and steel rebar
- Concrete
- Cabinetry/casework
- Miscellaneous metals
- Gypsum wall board

The Children's Center has bamboo flooring, walls, and desk surfaces. Staff headquarters on level 11 also has a bamboo (rapidly renewable material) floor.

Recycling bins inside the building and on the loading dock encourage library workers to recycle paper generated in office practices and from turnover in library materials such as newspapers.

COLLABORATION

The Seattle Central Library is the result of a successful collaboration between the Office of Metropolitan Architecture and LMN Architects. Of special importance was the extensive 3-month research project the team conducted prior to design, seeking input from internal groups such as librarians, publishers, technology experts, the business community, and the Department of Justice. Additional collaborators leading to the success of this project included Ove Arup, Magnuson Klemencic Associates, Inside/Outside, Jonas & Jones Landscape Architects, Bruce Mau Design, Kugler Tatonson Associates, and several others.

SITE OR BUILDING SELECTION



One of the primary goals of the design was to create a transparent building that would maximize the use of natural light and allow views both into and out of the library. The building's transparency provides connection with the external urban environment and a relief from typical interior spaces. This goal required careful analysis, including a detailed study of the sun path over the building site, and the shading provided by adjacent buildings, to determine the optimum envelope design that would maximize energy efficiency, reduce glare, and maximize daylighting.

The heat island effect of dark and hard landscape surfaces is reduced by locating all parking below grade and designing site landscaping with over forty drought tolerant trees to provide shade around the building. In addition, a high reflectance high emissivity EPA Energy Star roof system was installed.

The storm water collection system consists of a 20,000 gallon concrete retention tank that collects and stores storm water from roof drains and then it is filtered and pumped to irrigate landscape. Based on weather data and a predicted average annual rainfall of 38 inches, this system eliminates 60,000 to 100,000 gallons of potable water annually that would be required for irrigation.

ENERGY

The building's advanced facade, made from a liltwork of high performance glass and expanded metal mesh and steel, provides a high degree of building transparency and energy efficiency, offering the benefits of natural daylight and views. The high performance curtainwall system features a unique use of aluminum expanded metal mesh as a micro sunshade.

Several energy conservation measures were used to achieve an energy performance approximately 40% better than ASHRAE/IESNA 90.1-1999:

The 500 ton High Efficiency Chillers have a full load COP of 7.229 and an IPLV of 10.275, exceeding a standard building by 39% and 94% respectively.

Air Movement: All large pump and fan motors are driven by variable speed drives that reduce motor speed in response to demand.

Daylighting Control: Photocells control lighting based on actual foot-candle levels in space to take advantage of natural light; daylighting control was included in the energy model for both the standard and proposed buildings.

Underfloor Air and Displacement Air Distribution: Air is delivered at a low level and velocity for all high volume spaces conditioning only the occupied areas. This delivery method improves ventilation effectiveness, reduces fan energy, and increases energy efficiency compared to an overhead system. Because air is delivered at a higher temperature than a traditional mixed system, the displacement system also increases the amount of available "free cooling".

CONNECTION

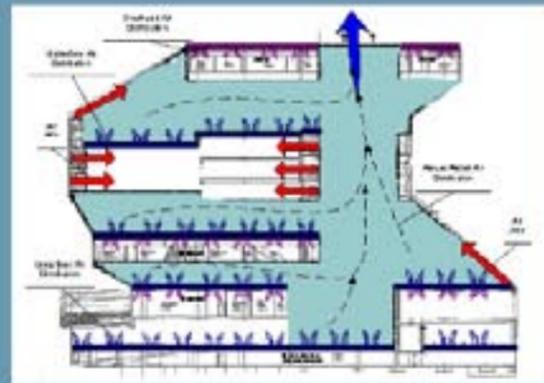
The full-block site, located in the center of downtown Seattle, slopes approximately 25 feet from east to west. It is surrounded, and shaded, by high-rise buildings. The location is well-served by public transportation including buses, ferries, and planned light rail and monorail. The design of the site and building responds to its pedestrian oriented location by encouraging people to use the building as a hill climb shortcut. In addition, local zoning requirements mandate that much of the ground level exterior be transparent, allowing the library to be as open as possible to the public.

The problem of traditional library book organization is fitness. Departments are organized according to floor plans. Each floor is discrete; the unpredictable fits of growth and contraction in certain sections are contained within a single floor.

This library's innovative Books Spiral represents a reaffirmation of the Dewey Decimal System. By arranging the collection in a continuous ribbon, running from "000" to "999", the subjects form a coexistence approaching the organic, each evolves relative to the others, occupying more or less space on the ribbon, but never forcing a rupture.

The Spiral's 6,233 bookshelves have the capacity to hold up to 1,450,000 books. With only 850,000 volumes on opening day, this allows the flexibility for substantial collection growth without building expansion.

INDOOR AIR QUALITY



Materials/strategies contributing to good indoor air quality:

- Most adhesives and carpets are low toxic
- Monitors protect air quality by measuring carbon dioxide
- Indoor air quality management plan during construction managed air filtration and provided for proper materials storage
- A two-week, 100% outside air "flush" before occupant move-in removed residual chemicals/particles left from construction

Air-handling systems serving the building were designed to provide approximately 15 cfm of outside air per person for the maximum predicted occupancy complying with the requirements of ASHRAE 62-1999. In addition, CO2 monitoring sensors were installed throughout to ensure the space carbon dioxide levels are below 530 ppm. The sensors also feed back to the building energy management system (EMS) to modulate the outside air dampers to reduce ventilation, and in turn to reduce energy consumption, when occupancy levels are low.

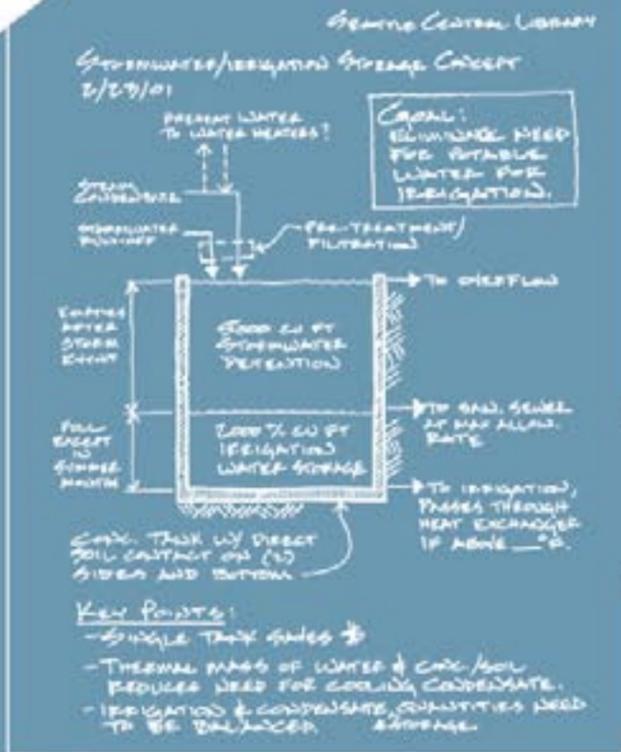
WASTE

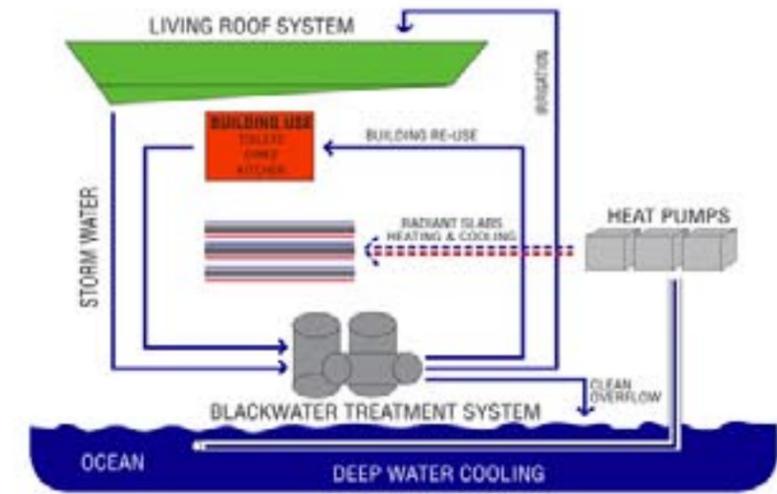
The project recycled or salvaged over 75% (by weight) of the construction waste generated by the demolition of the existing building and construction of the new.

LESSONS LEARNED

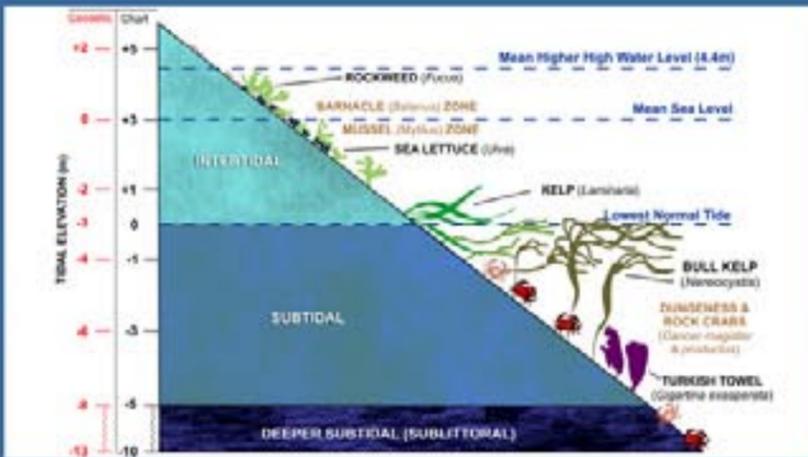
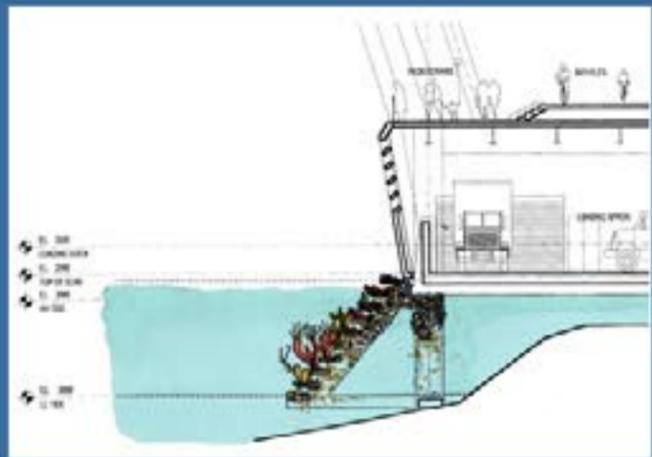
One of the main lessons learned is that it is never too early to start working green strategies into the design concept. In addition, the owner needs to be informed early on about the benefits and costs associated with green design.

Many green strategies involve a higher up-front construction cost with the promise of lower life-cycle costs. However, increasing the construction budget midway into design to accommodate newly developed green strategies is not a possibility. Additional construction costs for green design must be accounted for in the initial project budget.





VANCOUVER CONVENTION CENTRE EXPANSION



- Maximized Views**
EQ Credit 8.2
Daylight and Views
- Optimal Daylight**
EQ Credit 8.1
Daylight and Views
- Reflective Roof**
SS Credit 7.2
Heat Island Effect
- Low-flow Toilets**
WE Credit 3.1
Water Use Reduction
- Public Transportation Access**
SS Credit 4.1
Alternative Transportation

LEED Credits Legend

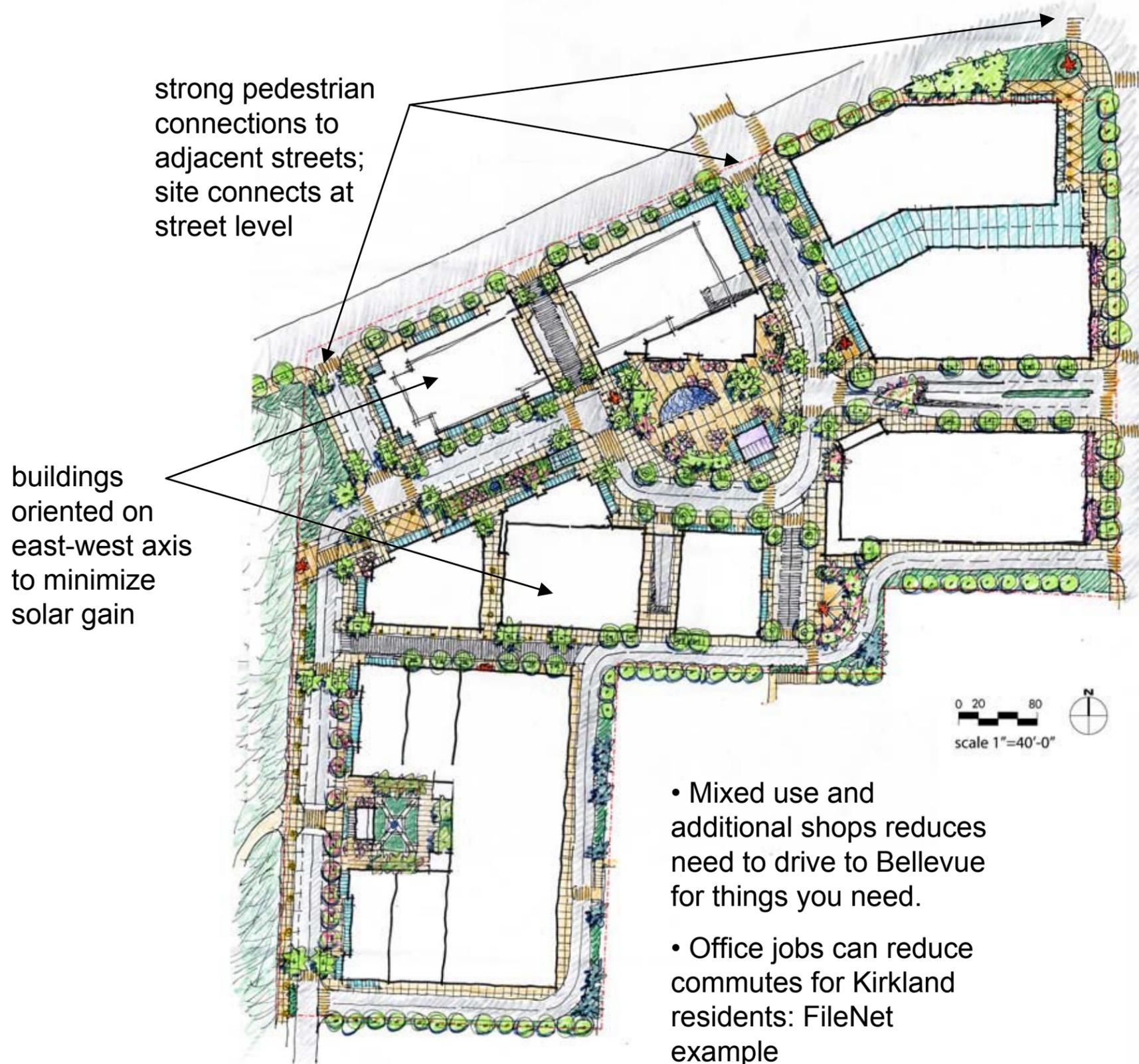
- SS Sustainable Sites
- WE Water Efficiency
- EA Energy and Atmosphere
- MR Materials and Resources
- EQ Indoor Environment Quality
- ID Innovation and Design Process

- Floor-by-floor Mechanical Units**
EA Credit 1
Optimize Energy Performance
EQ Credit 7
Thermal Comfort
- Recycled Building Materials**
MR Credit 4
Recycled Content
- Bike Storage/Showers in Building**
SS Credit 4.2
Alternative Transportation
- Drip Irrigation**
WE Credit 1.1
Water Efficient Landscaping
- No Added Urea-formaldehyde Resins**
EQ Credit 4.4
Low-emitting Materials
- Low VOC Paints**
EQ Credit 4.2
Low-emitting Materials
- Drought-tolerant Plants**
WE Credit 1.1
Water Efficient Landscaping
- "Green Label" Carpets**
EQ Credit 4.3
Low-emitting Materials

LEED Credits Legend

- SS Sustainable Sites
- WE Water Efficiency
- EA Energy and Atmosphere
- MR Materials and Resources
- EQ Indoor Environment Quality
- ID Innovation and Design Process

Macro (Site-Level) Sustainability



strong pedestrian connections to adjacent streets; site connects at street level

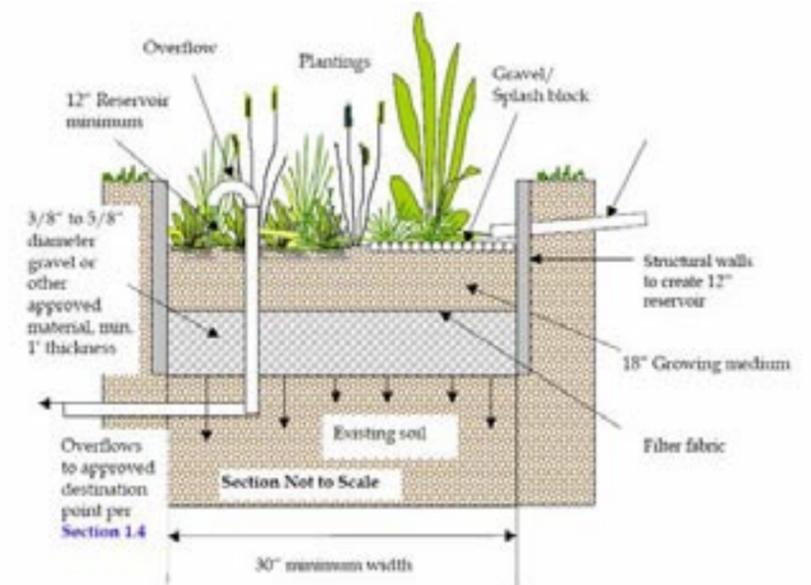
buildings oriented on east-west axis to minimize solar gain

increased density and opportunities for transit

Drought-resistant vegetation



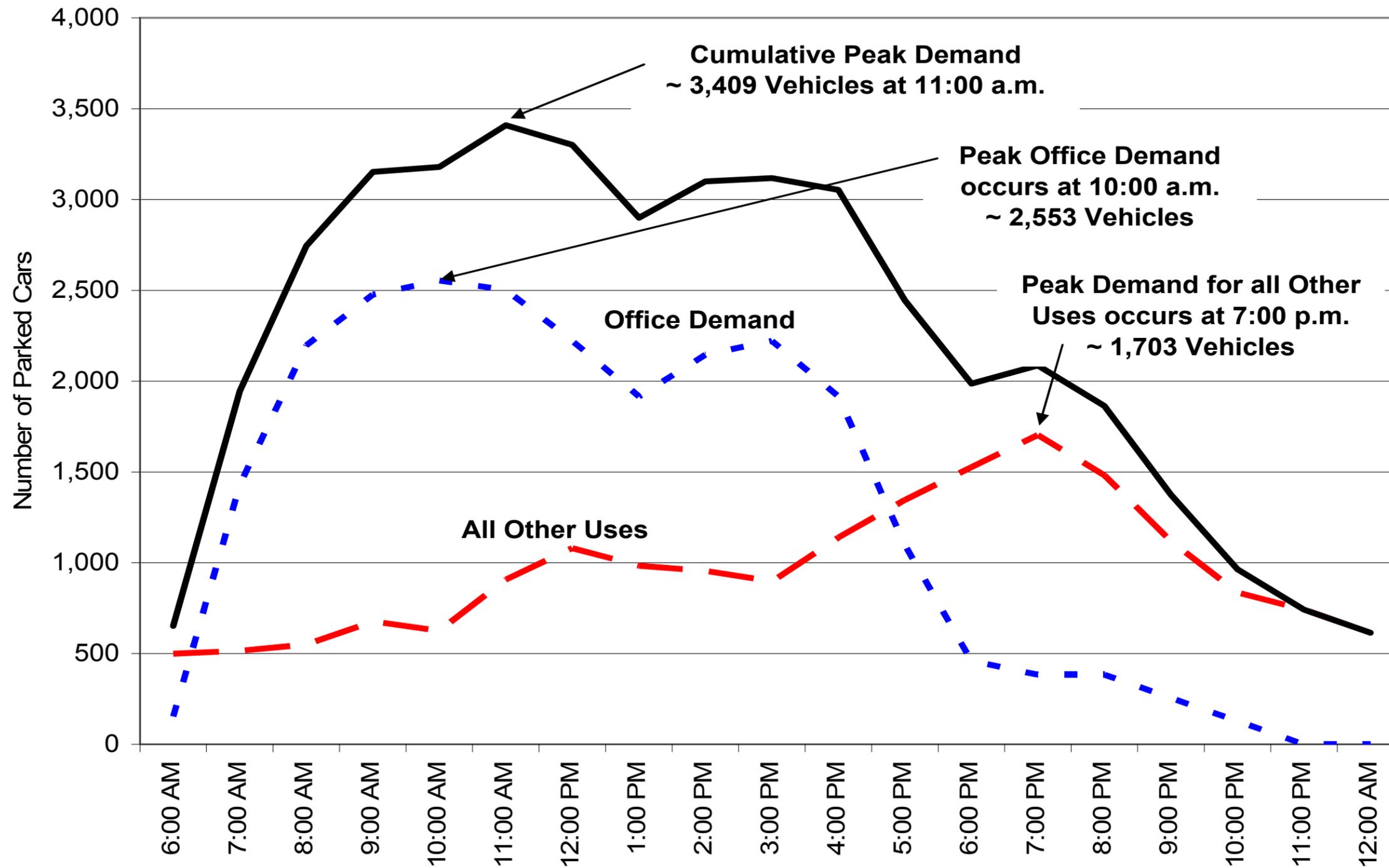
Storm-water filtering example



- Mixed use and additional shops reduces need to drive to Bellevue for things you need.
- Office jobs can reduce commutes for Kirkland residents: FileNet example

Macro (Site-Level) Sustainability

Figure 1. Parking Demand by Time of Day – Weekday



Source: Heffron Transportation, Inc., February 2008.

“Shell and Core” Sustainability Features (things Touchstone/ LMN can affect directly)



- Bike racks and showers
 - Preferred parking for carpools
- to encourage alternative commuting mechanisms



Shading with sunshades or trees to minimize solar gain on buildings and reduce cooling load



Green roof



Geothermal heat-pumps

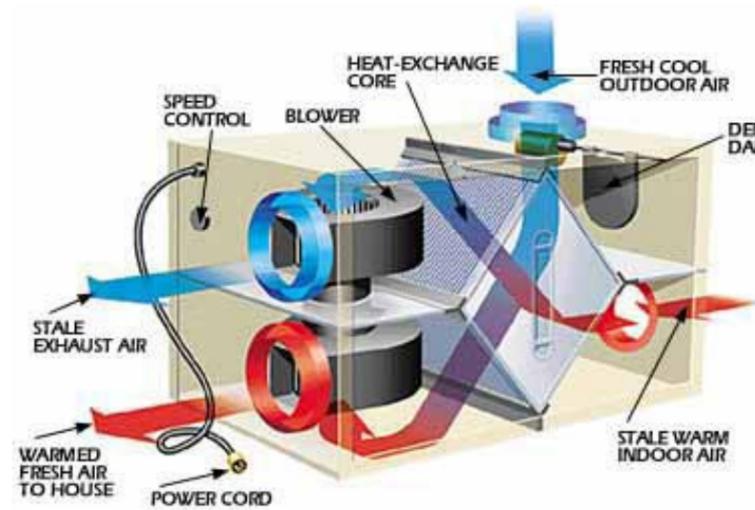


Wood deck

Tenant Improvement Sustainability Features (things Touchstone/ LMN can influence)



solar hot water heating



heat recovery system for office in general, also for server rooms



- Acoustical Ceiling tile containing recycled content
- Energy-saving fluorescent light-bulbs
- Natural day-lighting
- Low-VOC paints over drywall containing recycled materials
- Furniture made from recycled materials
- Carpeting containing recycled yarn and padding
- Ceramic tiles containing recycled materials



Green housekeeping program



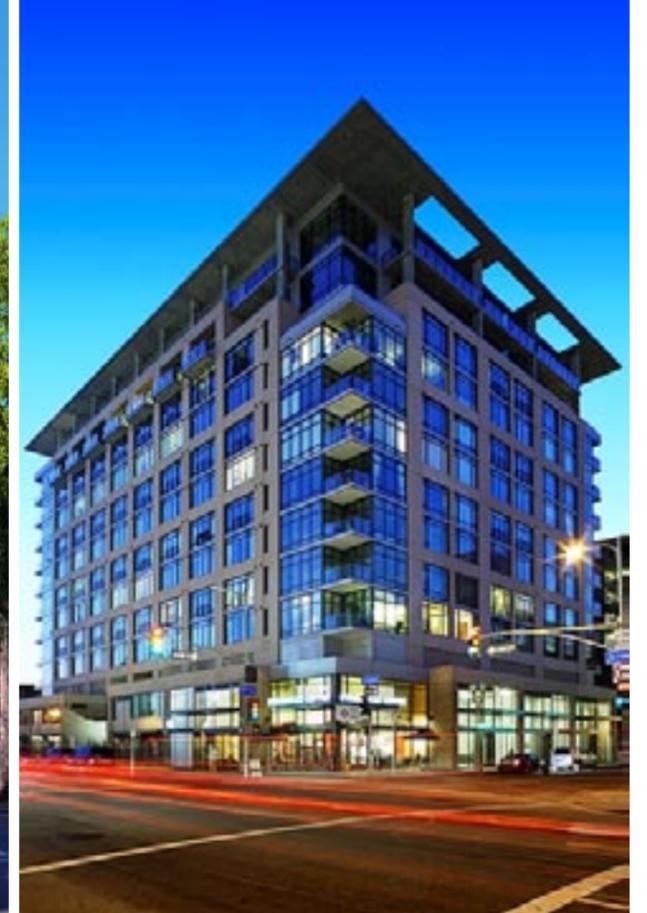
Comprehensive recycling program



Low VOC (Volatile organic Compounds) paints and carpets

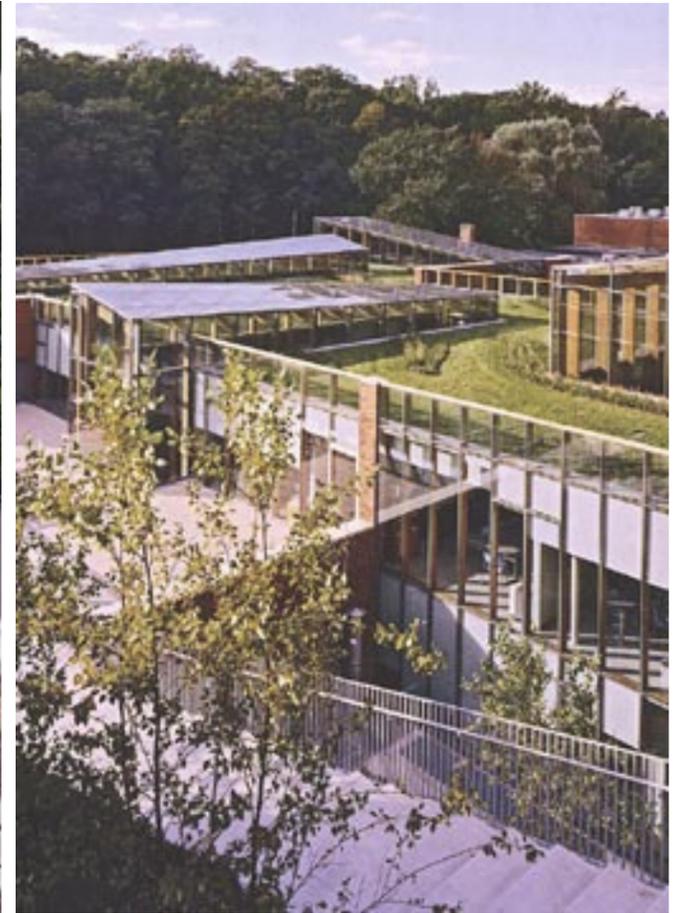
OFFICE CASE STUDIES

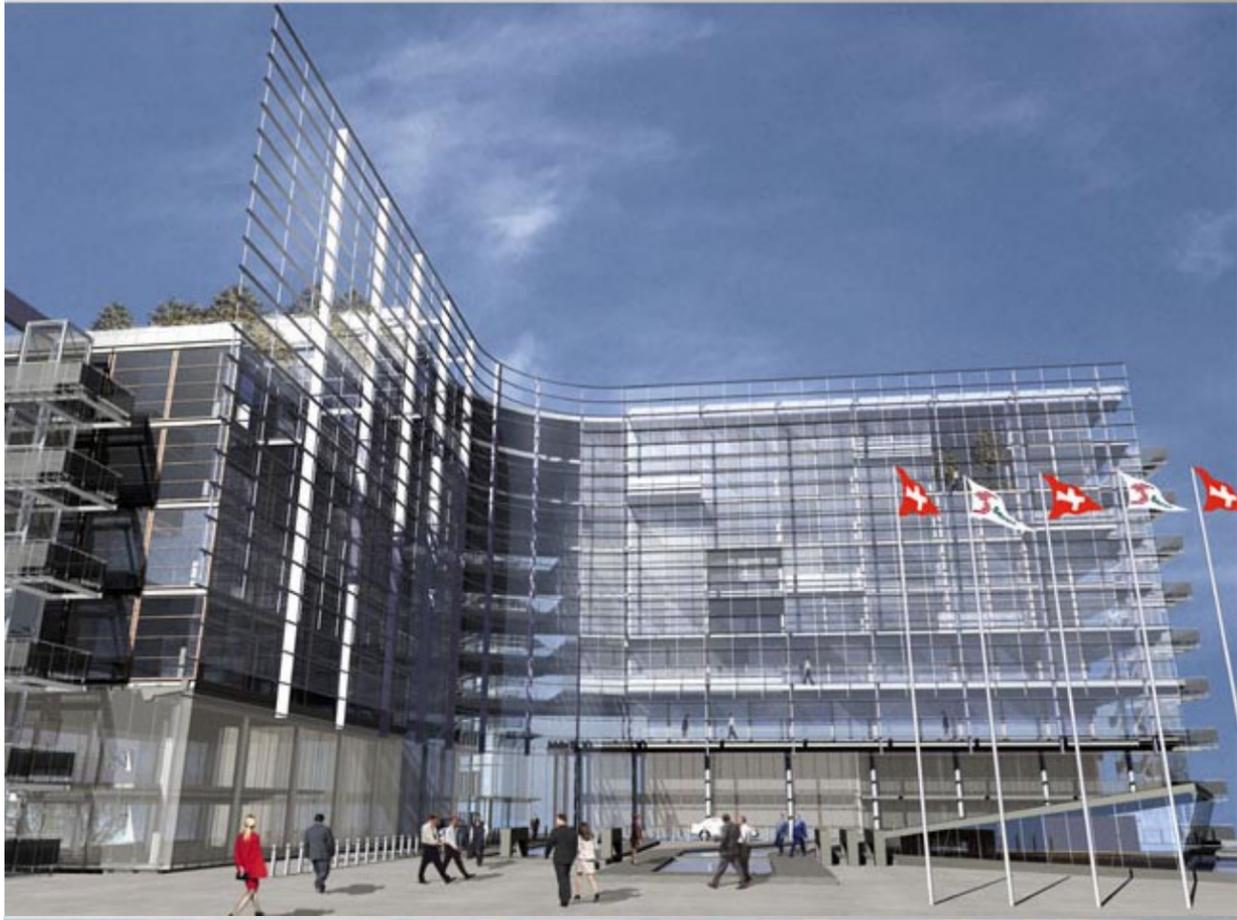
INTERNATIONAL PROJECTS













REGIONAL PROJECTS (SEATTLE AND REDMOND)





TOUCHSTONE and LMN PROJECTS



TOUCHSTONE 9TH AND STEWART



TOUCHSTONE WEST8TH



TOUCHSTONE 5TH AND BELL



LMN CIVICA



LMN DEXTER



LMN SUMMIT



LMN NORM DICS GOVERNMENT CENTER



LMN VULCAN BLOCK 32



LMN TOWER 333



LMN TOWER 333



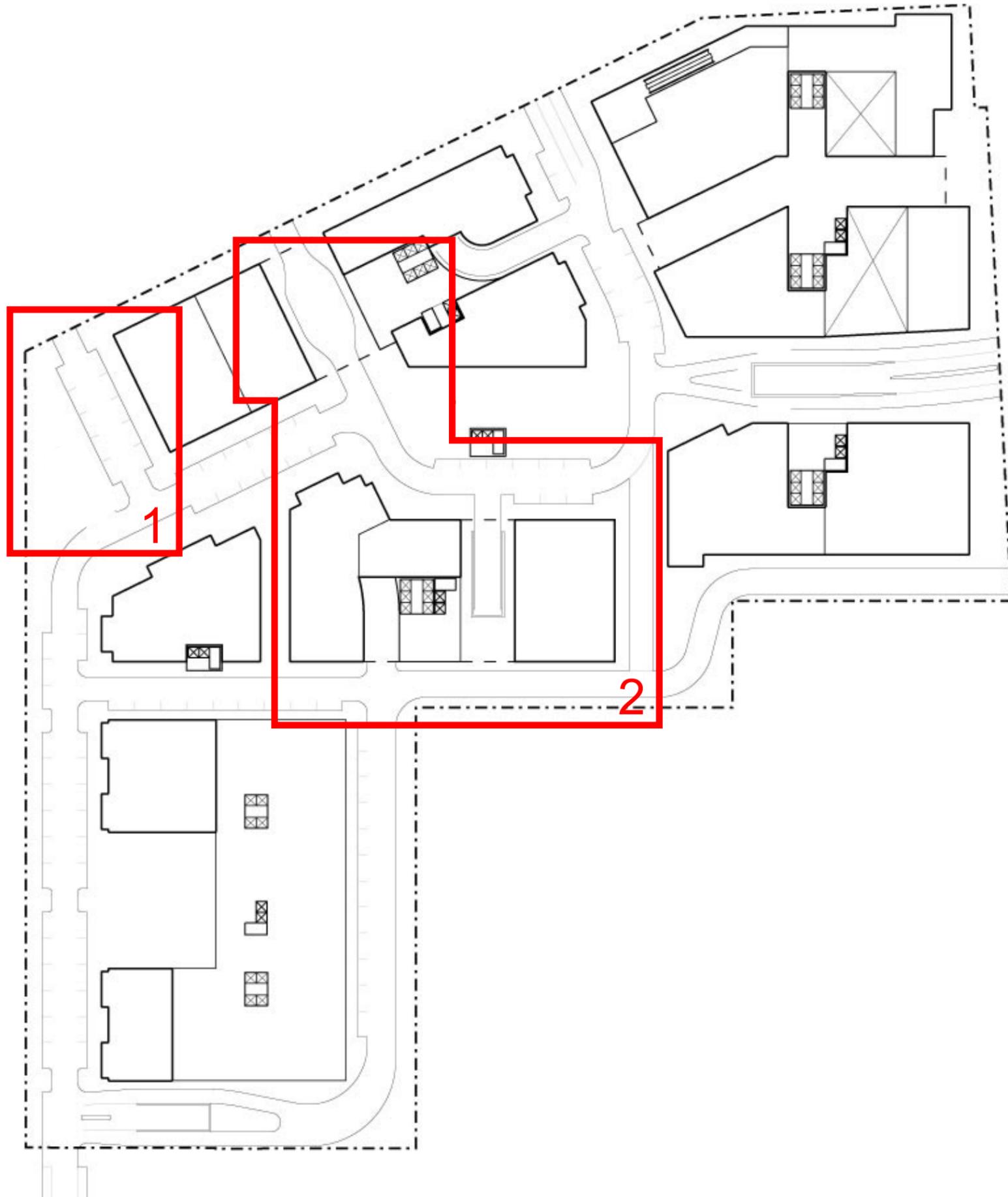
LMN VULCAN BLOCK 26



LMN VULCAN BLOCK 32

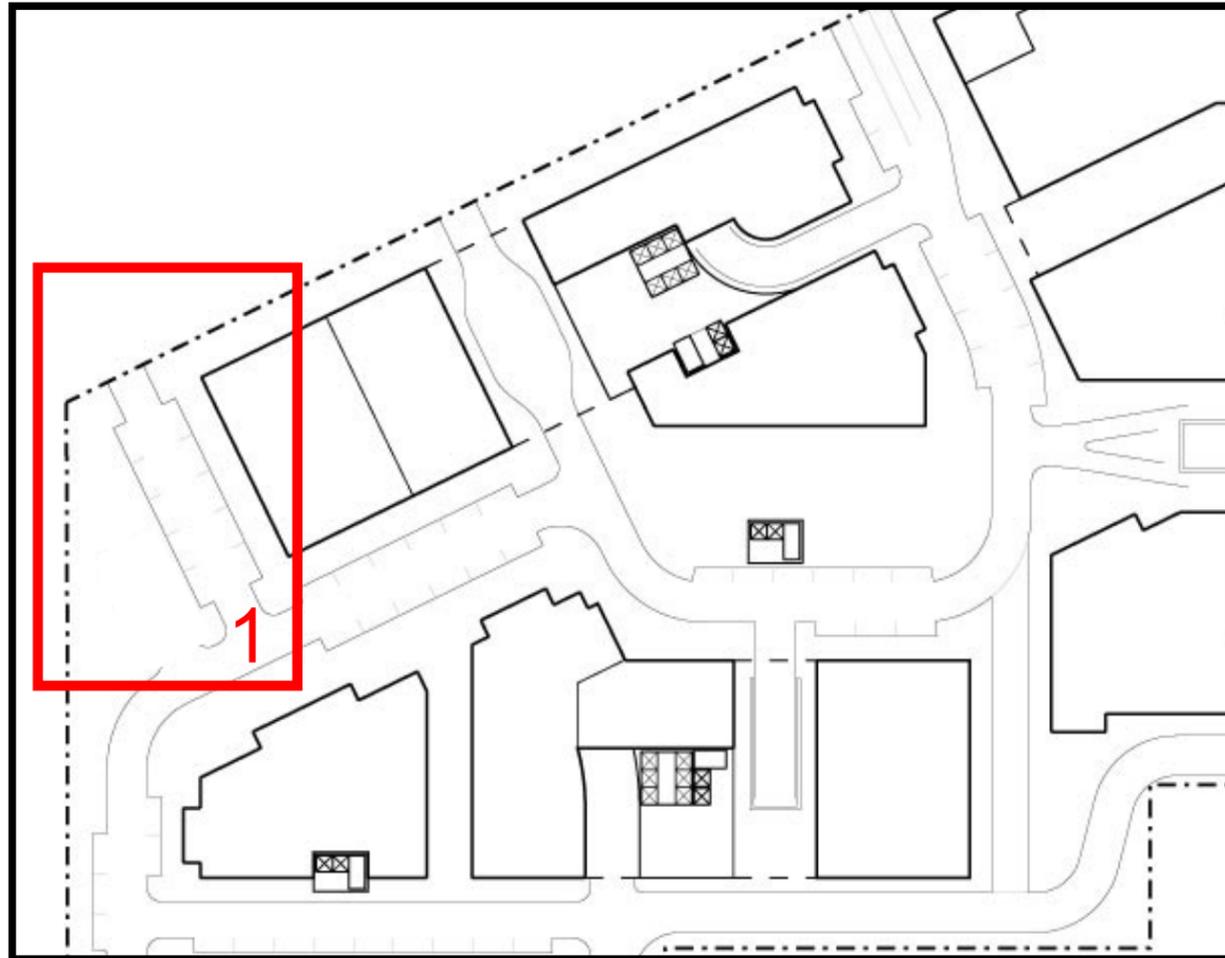
ENTRY/EXIT POINTS STUDY

ENTRY/EXIT POINTS STUDY



CENTRAL WAY ENTRY/EXIT POINT

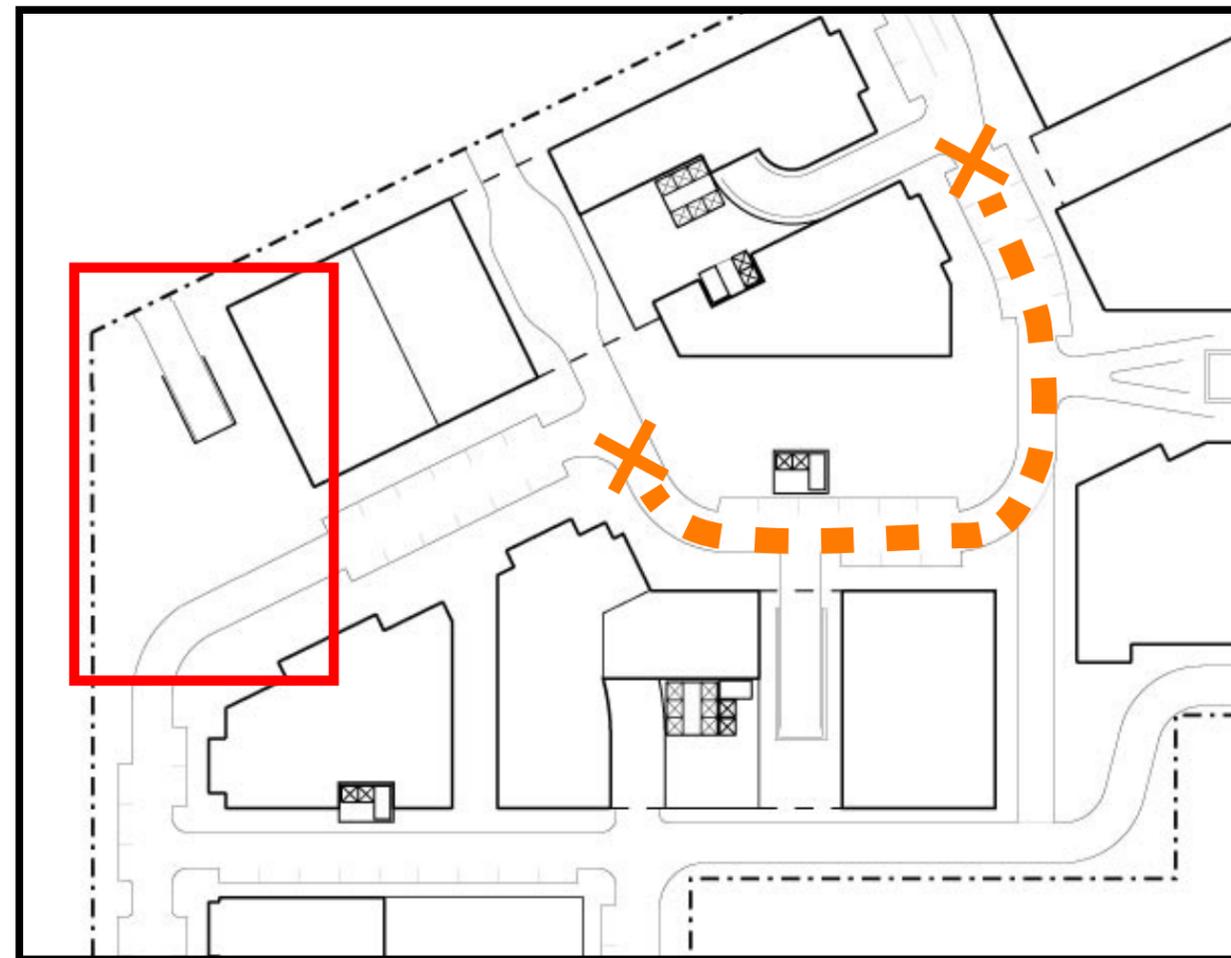
1a



DRB, PLANNING COMMISSION CONCERNS

- Concern of “pass through” from Kirkland Ave to Central Way.
- Not enough integration between project and park.
- Concern of better connection to the park.
- Too many entry/exit points on Central way.

1b



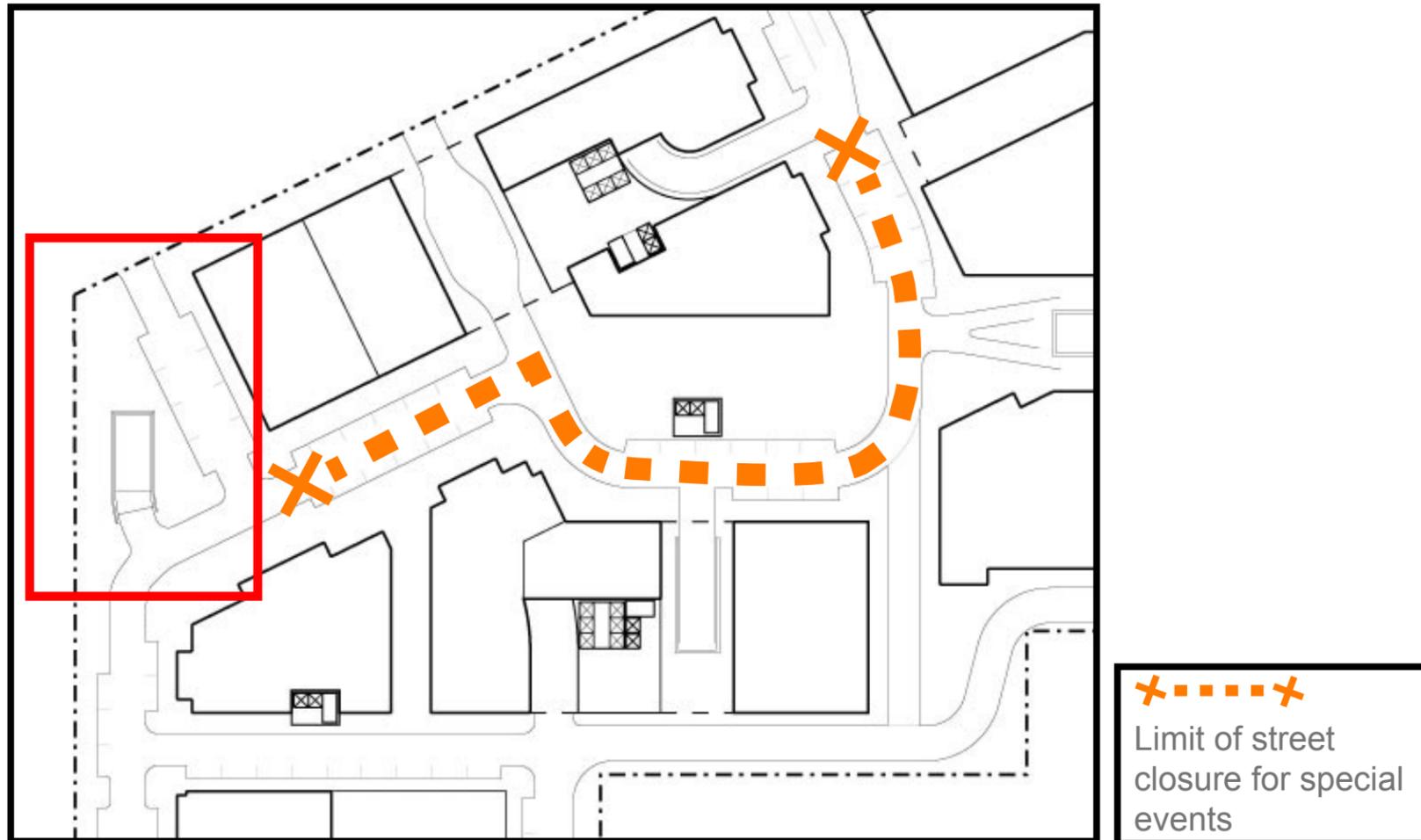

 Limit of street closure for special events

RESPONSE

PARKING ACCESS ONLY OFF CENTRAL

- Quick entry to parking from Central Way.
- Improved connection to Peter Kirk Park.
- Eliminating a street along Peter Kirk Park is contrary to the Comprehensive plan.
- More cars will pass through plaza space without the street connection.
- Smaller pedestrian zone when streets closed off.

1c



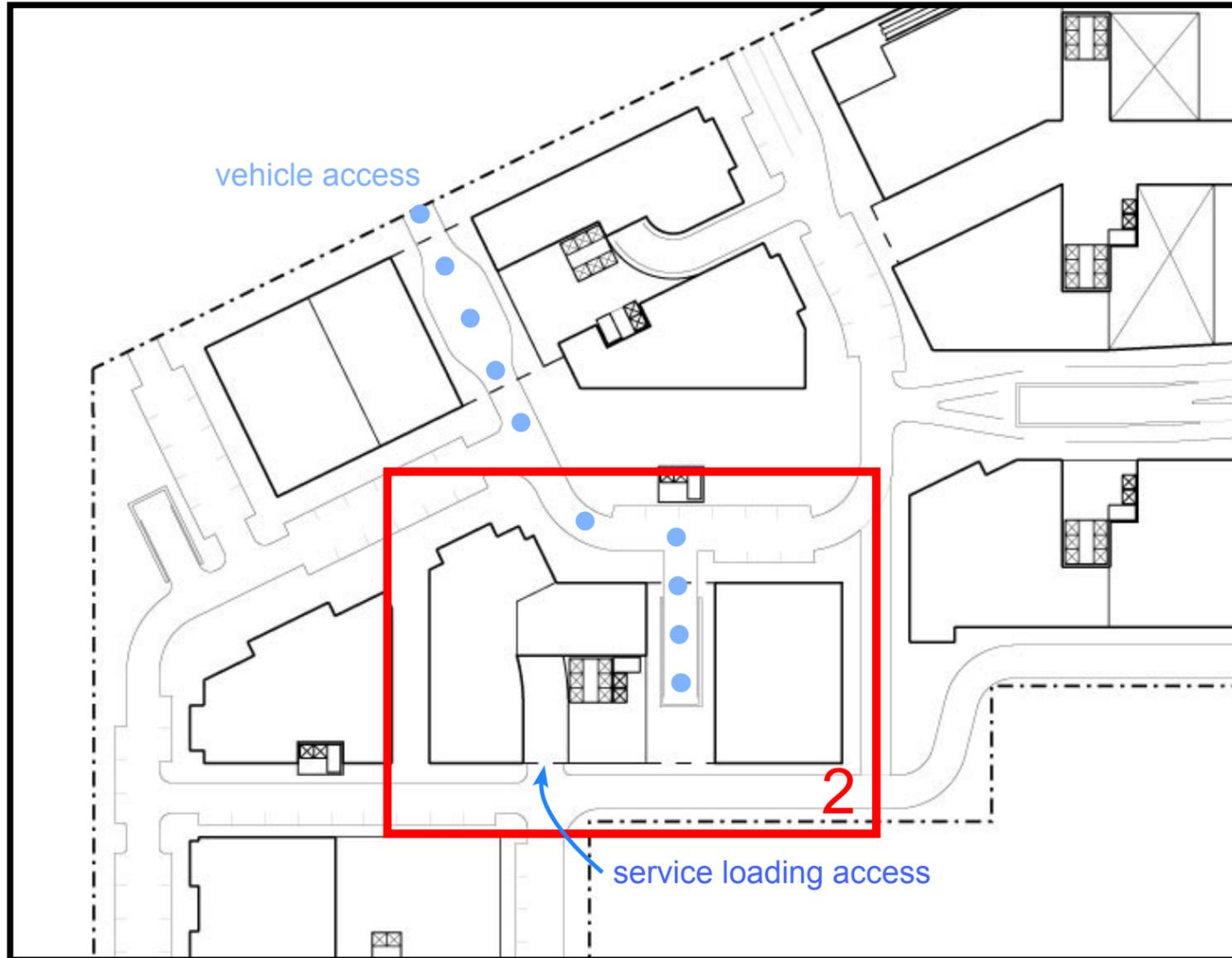
RESPONSE (Preferred Concept)

MAINTAIN SURFACE STREET, ADD ALTERNATE PARKING ACCESS

- Easier entry/exit to parking from Central Way.
- Cars can path through the project without crossing the plaza area
- Larger pedestrian zone when streets closed off

CENTRAL ENTRY/EXIT POINT

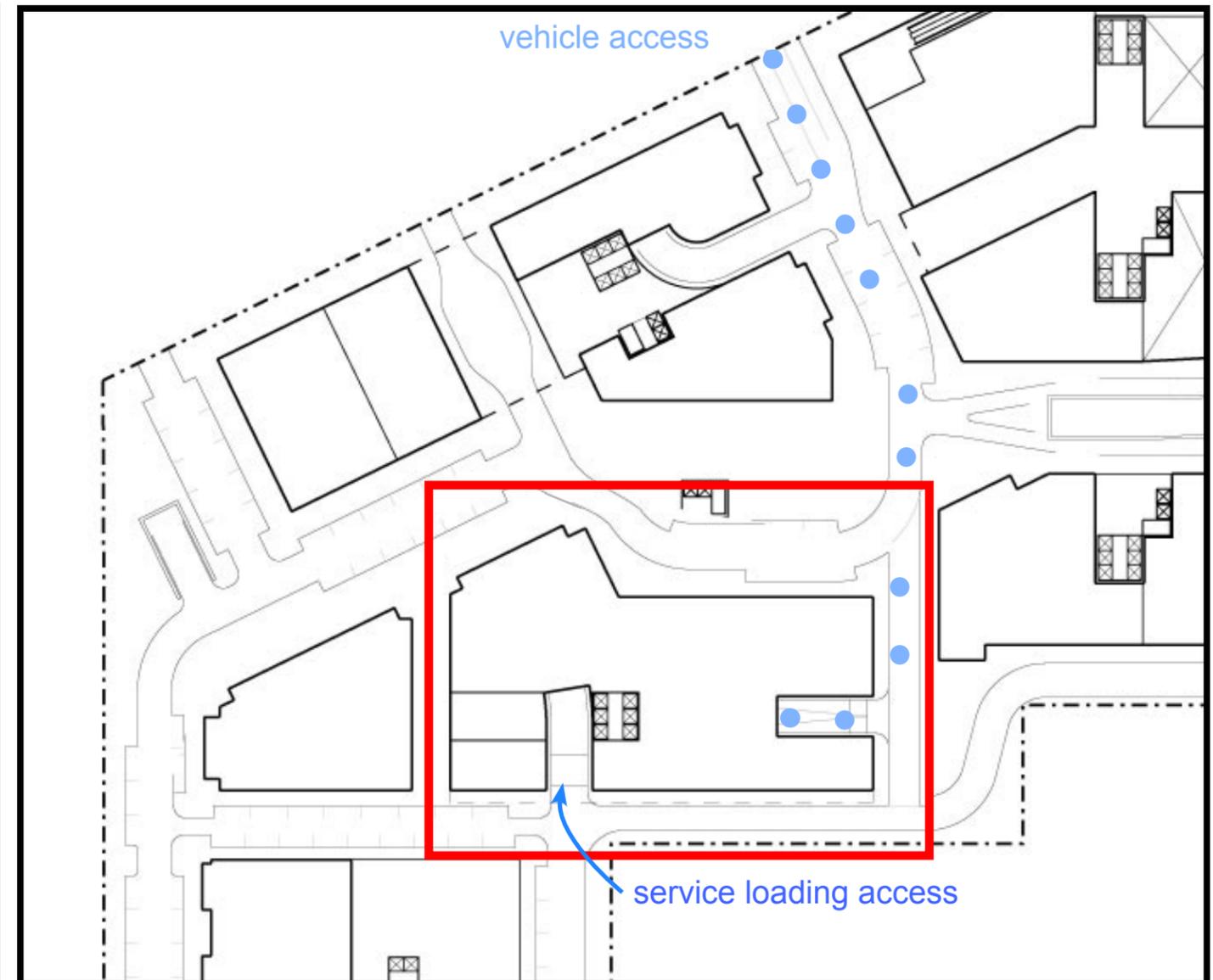
2a



DRB, PLANNING COMMISSION CONCERNS

- Concern of cars crossing the plaza area when entering/exiting parking garage.

2b

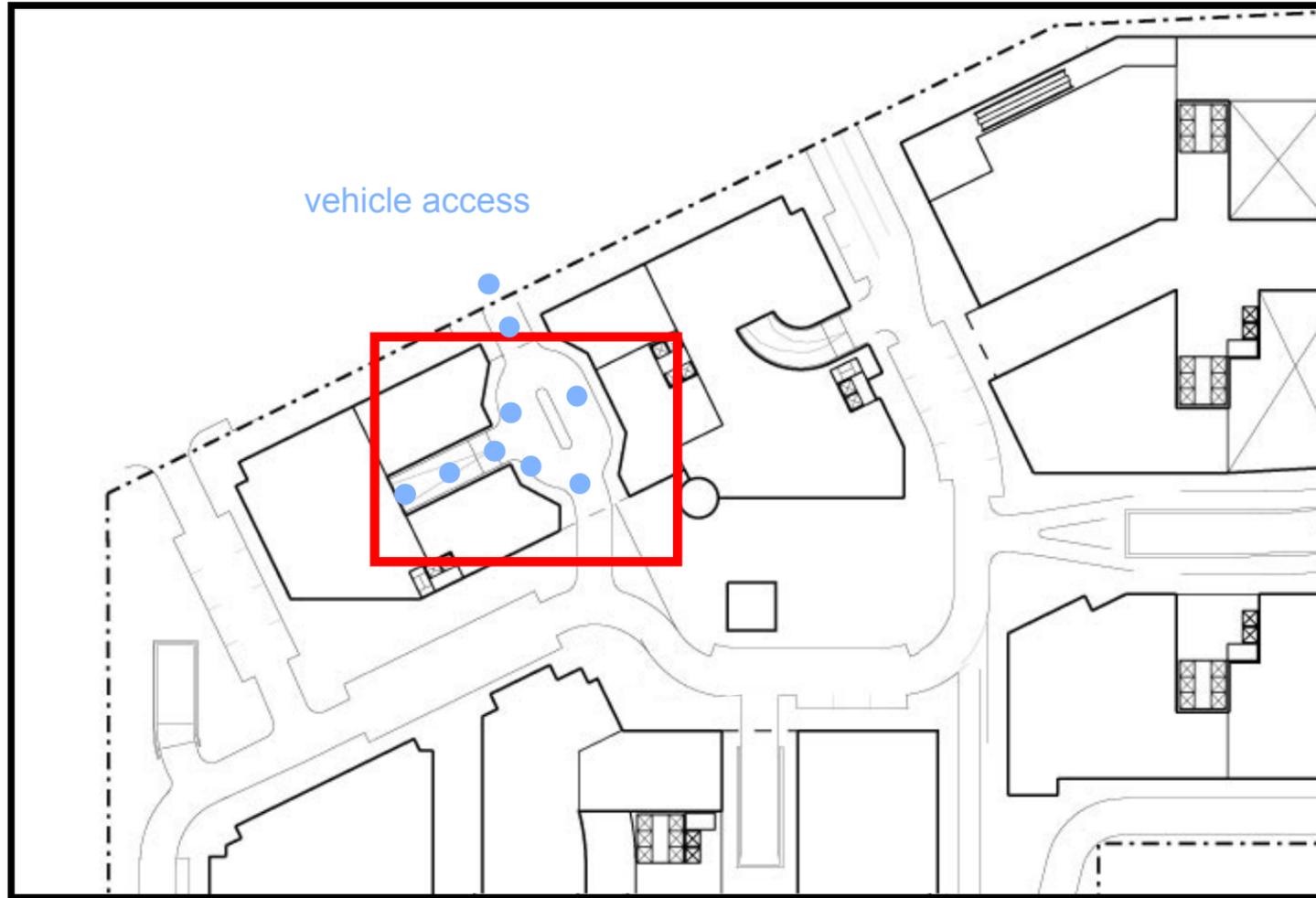


RESPONSE (Preferred Concept)

- Cars enter parking without crossing the plaza area
- Longer queuing area for cars entering/exiting both parking garage and site
- Difficult for Hotel users to find the parking entrance
- Longer route for valet parkers to travel.

HOTEL ENTRY/EXIT POINT

2c



RESPONSE

- Easier for Hotel users and valet parkers to drop off and enter parking.
- Cars enter parking without crossing the plaza area.
- Adds more traffic to entry/exit. Not fully endorsed by the city's traffic engineers.