

City of Bellevue



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DATE: February 28, 2013
TO: Bellevue Transportation Commission
FROM: Catherine Silva, Graduate Transportation Planning Intern, 452-4183
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SUBJECT: Downtown Bicycle Parking

This memo, and a presentation for the March 14, 2013 Transportation Commission meeting will provide information on the City's longstanding effort to install bicycle racks on Downtown sidewalks, and a summary of the latest installation.

BACKGROUND

This bicycle rack installation project is intended to accommodate the short-term parking needs of bicyclists in Downtown Bellevue. By providing access to abundant, secure bicycle parking, the City encourages and enables more people to travel by bicycle.

This longstanding program has resulted in the installation of over 100 bicycle racks on Downtown sidewalks since 2005. 20 bicycle racks were installed during December 2012.

FUNDING

The installation of Downtown bicycle racks is an ongoing project funded by the City's Capital Investment Program; specifically the Pedestrian Access Improvements Program, PW-WB-56. Each year, City Council allocates approximately \$400,000 to fund small scale pedestrian and bicycle facility improvements. Using this source of funding, the City plans for and installs bicycle racks to enhance Downtown Bellevue mobility and livability.

PLANNING AND PLACEMENT

This Downtown bicycle parking project addresses a need for short-term bicycle parking by installing bicycle parking racks at locations where that need may be demonstrated by bicycles chained to trees, sign posts, and railings. On-street bicycle racks provide bicycle parking to support retail businesses, cafes, civic services, and residential uses. For the convenience and security of bicyclists, bicycle racks are typically installed adjacent to destination entrances where there is no intervening parking lot or driveway.

New bicycle rack locations are determined by Transportation Department staff often at the request of residents, businesses and bicyclists.

This project is consistent with policy adopted in the City's Comprehensive Plan Transportation Element, the Downtown Subarea Plan and the 2009 Pedestrian and Bicycle Transportation Plan.

BICYCLE RACK TYPOLOGY

The City of Bellevue installs two types of bicycle racks on downtown sidewalks: 1) high rail rack; or 2) bike circle rack.

Image 1



Image 2



The high rail rack or inverted “U” shaped rack has been the most commonly installed bicycle rack in Downtown Bellevue. Fabricated using galvanized steel, these racks are weather protected and built to last. This type of rack can accommodate approximately four bicycles.

The bike circle racks, painted black, are new to Downtown Bellevue’s sidewalks with this year’s installation. These racks are compact, occupy considerably less sidewalk space than the high rail racks and can accommodate two bicycles. The sleek design of the bike circle racks adds an attractive, bicycle-friendly element to the Downtown streets.

INSTALLATION AND MAINTENANCE

The goal is to plan for and install bicycle racks to provide convenient parking for cyclists in a manner that does not encroach on the other users of the sidewalks.

Bicycle rack installation in Bellevue follows guidelines developed by the Association of Pedestrian and Bicycling Professionals as well as recommendations by the City’s Transportation Engineering staff. Racks are placed at least 3’ from any street furniture and approximately 2’ from the curb to be generally aligned with light posts and street trees.

To ensure that City-owned bicycle racks are properly maintained, and to distinguish these racks from those owned by the private-sector, stickers will be adhered this Spring to all City-owned bicycle racks. These stickers provide the contact information for the City’s Utilities staff, who would repair the damaged racks, or suggest replacement. Moreover, the stickers may serve to advertise the City’s investment and dedication to providing Downtown bicycle parking.



Downtown Bellevue Bicycle Rack Program Report



2013 Guidelines



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1. INTRODUCTION

To enhance the vision of Downtown Bellevue as a bicycle-friendly destination, this report provides guidelines for installing bicycle racks on sidewalks in the area. This bicycle rack



installation project is intended to accommodate the short-term parking needs of bicyclists in Downtown Bellevue. By providing access to abundant, secure bicycle parking, the City encourages and enables more people to travel by bicycle.

This longstanding program has resulted in the installation of over 100 bicycle racks on Downtown sidewalks since 2005. 20 bicycle racks were installed during December 2012.

1.1 FUNDING SOURCE

The installation of Downtown bicycle racks is an ongoing project funded by the City's Capital Investment Program; specifically the Pedestrian Access Improvements Program, PW-WB-56. Each year, City Council allocates approximately \$400,000 to fund small scale pedestrian and bicycle facility improvements. Using this source of funding, the City plans for and installs bicycle racks to enhance Downtown Bellevue mobility and livability.

1.2 PLANNING AND POLICY DIRECTION

The need for an investment in short-term bicycle parking is exhibited on downtown sidewalks when bicycles are locked to street trees, railings, and signposts. The City's policies call for this need to be addressed. The City's Comprehensive Plan, Downtown Subarea Plan, and Pedestrian and Transportation Plan each encourage programs and investments that improve facilities and access for bicycles and other alternative modes.

Each of these documents highlight that private building owners should actively install both long- and short-term bicycle parking, augmenting to the installation efforts funded by the City. Only the policies within the Comprehensive Plan are adopted by City Council; however, policy recommendations provided by the other two documents influence the direction of the adopted policies.



1.2.1 BELLEVUE'S COMPREHENSIVE PLAN

The Transportation Element of the Bellevue Comprehensive Plan supports and anticipates an increase the use of transit and non-motorized modes of transportation for trips to, from, and within Bellevue. This element directly and indirectly promotes the expansion of bicycle

parking facilities through policies that encourage improvements to multi-modal and inter-modal transportation systems throughout the City.

TR-8: Incorporate transit-supportive and pedestrian-friendly design features in new development through the development review process. Examples include: 7. Provide bicycle connections and secure bicycle parking and storage convenient to major transit facilities.

TR76: Promote and facilitate the effective use of non-motorized transportation.

TR77: Consider pedestrians and bicycles along with other travel modes in all aspects of developing the transportation system.

TR-80: Encourage transit use by improving pedestrian and bicycle linkages to the existing and future transit and school bus systems, and by improving the security and utility of park-and-ride lots and bus stops.

TR-84: Secure sidewalk and trail improvements and easements, and on-site bicycle parking and storage consistent with the Pedestrian and Bicycle Transportation Plan through the development review process.

1.2.2 DOWNTOWN SUBAREA PLAN

The Downtown Subarea Plan identifies opportunities for the private and public sectors to improve pedestrian and bicycle mobility in Downtown Bellevue. Policies indicate that the City should invest in facilities and bicycle-friendly programs, as well as implement provisions to promote the installation of bicycle parking by building owners.

S-DT-163: Designate and enhance bicycle routes through Downtown to create a more pleasant and safe environment for bicycling.

S-DT-164: Encourage the developers and owners of Downtown buildings to provide long-term bicycle parking and storage for employees and short-term bicycle parking for visitors.

S-DT-168: Support programs to meet air quality standards including the continuation and expansion of the state vehicle emission inspection and maintenance program.

1.2.3 PEDESTRIAN AND BICYCLE TRANSPORTATION PLAN

The Pedestrian and Bicycle Transportation Plan report recommends that the City investment in bicycle racks and supports efforts to involve private businesses in expansion of bicycle parking facilities. There is also one policy that endorses the development the guidelines this report presents for bicycle parking.

PB-19: Require new or redeveloping properties to provide bicycle parking and other facilities to encourage the use of bicycles.

PB-19.4: Seek funding whereby the City would install bike racks for businesses that request them.

PB-19.5: The City should investigate and develop basic design guidelines for bicycle racks.

2. RACK TYPOLOGY



Several types of bicycle racks are currently installed on sidewalks in Downtown Bellevue. Each type of bicycle rack offers different styles, functions, and maintenance needs. Based on existing facilities and staff's experience with rack installation and maintenance, two types of bicycle racks are installed by the City on Downtown Bellevue sidewalks: 1) high rail rack; or 2) bike circle rack. The type of rack installed should be consistent with existing racks adjacent to the new rack's location. As demand for bicycle parking increases, the City should consider installing bicycle corrals at popular destinations, in order to accommodate a greater number of parked bicycles.

2.1 HIGH RAIL RACKS

The high rail rack or inverted "U" shaped rack is the most common type used in Bellevue and throughout the Northwest, with over seventy of these racks installed in the downtown area alone. These racks are popular as their design makes them easy to lock multiple bicycles to and the rack occupies a minimal portion of the sidewalk width.

As is approved and recommended by Street Maintenance Staff, the racks are made of galvanized steel. To protect the bicycles locking up to these racks, a black polyurethane tube is attached to the mid-beam. Each rack accommodates approximately four bicycles, however the high rail rack has a utilitarian appearance and is not always recognized as bicycle parking.



2.2 BIKE CIRCLE RACKS

The bike circle racks, painted black, are new to Downtown Bellevue's sidewalks with the 2012 installations. These racks are compact, occupy considerably less sidewalk space than the high rail racks, and can accommodate two bicycles.

Street Maintenance staff advised that racks not be painted, but Transportation Planning staff black paint was selected by as it improves the rack's overall appearance. The sleek design and paint of the bike circle racks adds an attractive, recognizable, and bicycle-friendly element to the Downtown streets.



2.3 RACKS TYPES PREVIOUSLY INSTALLED

In 2009, staff sought out racks that provide the same functionality as the common high rail rack, but with more appealing aesthetics. To this end, bicycle racks painted black and shaped like coffee cups were installed adjacent to locations such as Starbucks Coffee and Top Pot Doughnuts. Staff additionally selected and installed several racks shaped like bicyclists, called Cindy or Clyde racks, which are painted in various bright colors.



Unfortunately, these stylish racks proved to have unstable mounting assemblies and most have been removed and stored.

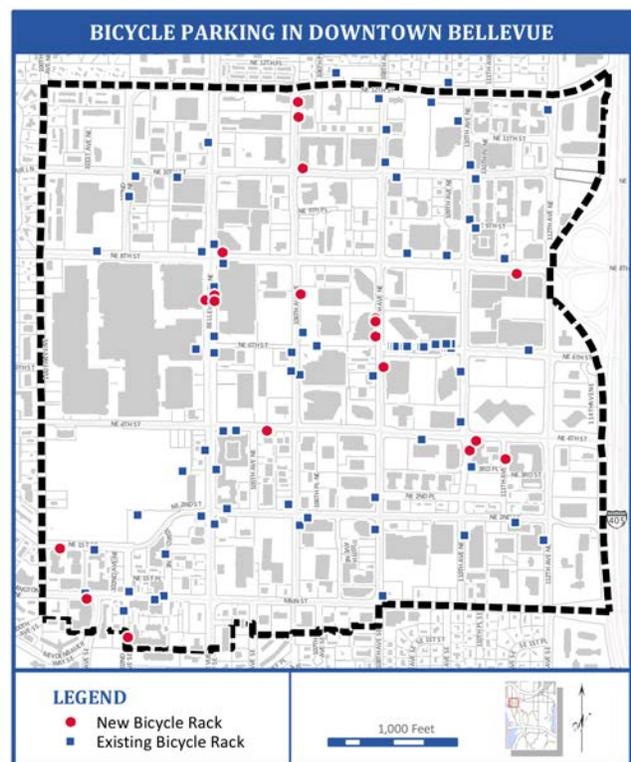


Due to these maintenance concerns, it is not recommended that these racks be purchased again in the future. Staff should, however, maintain and repair those racks currently installed. Only two of these designed racks remain on downtown sidewalks, both of which are coffee cups and are in need of repair.

3. PLANNING AND DESIGN GUIDELINES

To plan the installation of new bicycle racks, it is important have accurate knowledge of where the existing racks are located. The Staff with the Planning and Community Development Department conducted the inventory of bicycle racks on the public right-of-ways in Downtown Bellevue. Using Geographic Information Systems software, the location of each bicycle rack is digitally mapped along with a description of the type of rack and installation date.

Figure A (right): Map of Bicycle Rack Locations, highlighting twenty (20) racks installed in 2012



3.1 LOCATION GUIDELINES

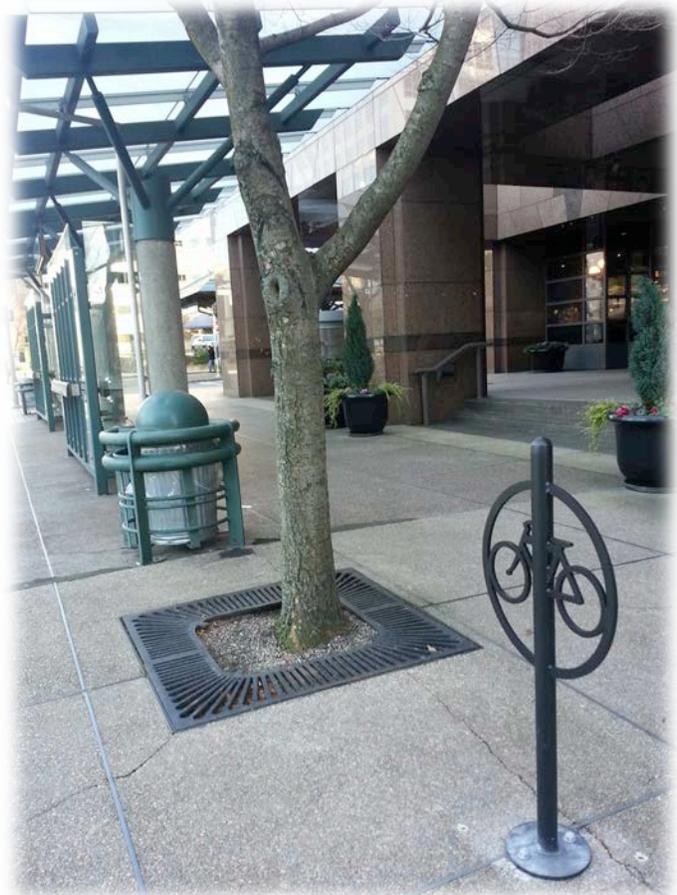
Using this map, staff from the Transportation Department should work with staff from the Planning and Community Development Department to identify locations where additional bicycle racks are needed. Each time this collaborative planning process occurs, staff should confirm the existence and conditions of already installed racks. Transportation Engineering staff also recommend that additional considerations be made when planning new locations for bicycle parking.

- Consider parking demand to determine number of racks for each location.
- Install near entrances of short-term destinations such as civic buildings, retail, coffee shops, restaurants, theatres, and residential structures.
- Install only where rack is adjacent to destination entrance.
- Never install if there are obstacles between racks and destination, such as driving or parking lots, medians, crosswalks, and streets are not suitable for bicycle racks.
- Ensure placement is visible to nearby cyclist routes.

3.2 PLACEMENT GUIDELINES

The Association of Pedestrian and Bicycle Professionals (APBP) has made recommendations for bike rack placement in their accepted *Bicycle Parking Guidelines*. In order to provide clearance for bicycles, the edge of the bike rack should be at least 36” from street trees or furniture and at least 48” from adjacent racks. Bike racks should be installed approximately 24” from the curb to both protect parked bicycles from car doors and allow space for bicycles to lock up to each side of the bike rack.

- Create no obstacles or hazards.
- Avoid placement adjacent to fire hydrants,
- Align with other sidewalk features, such as trees and benches.
- Allow two feet (2') of clearance around the rack for users to be able to access and securely lock bicycle from the side.

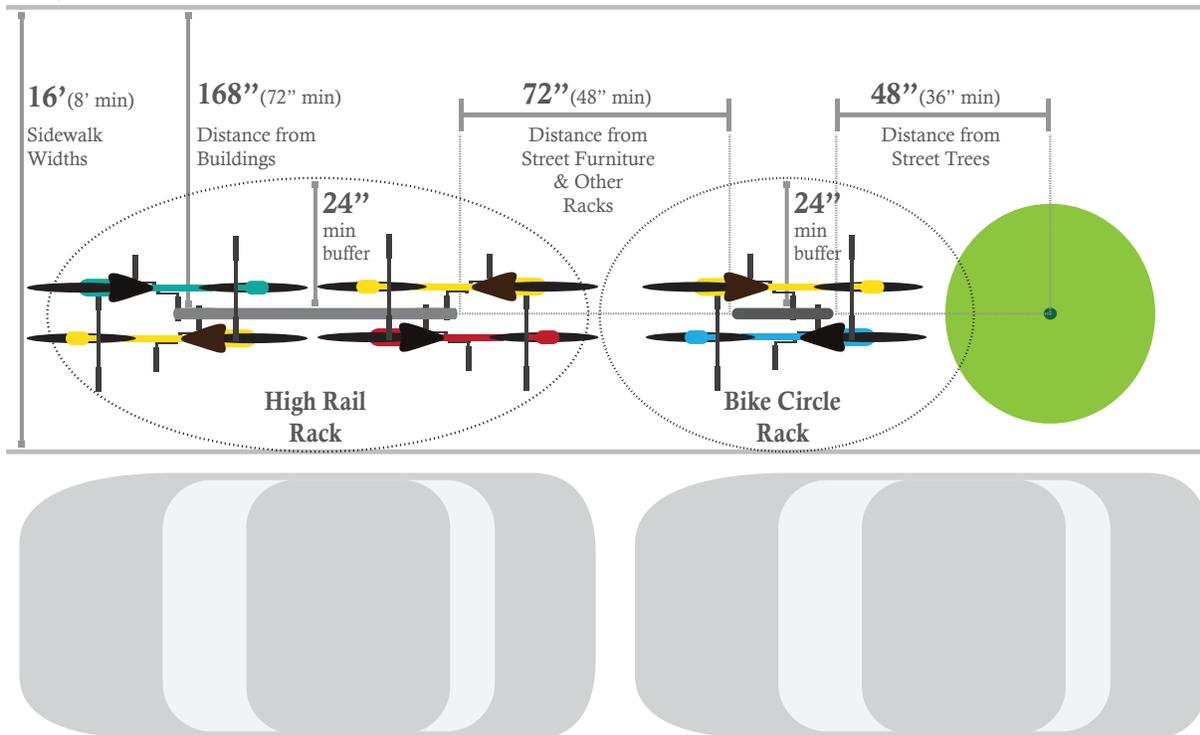


- Avoid handlebar/rack/basket conflicts, which can be accomplished through proper rack spacing or vertical staggering of bicycle racks.
- Ensure adequate end and side clearance for users to maneuver their bicycles around the parking area.
- Ensure adequate clearance from walls and other fixed objects to allow parking of bicycles; too close to a wall and the racks will be unusable.

Figure B: APBP Consistent Guidelines for Bicycle Rack Placement on 8' to 16' Sidewalk Widths in Downtown Bellevue

Downtown Bellevue's Bicycle Rack Placement Guidelines

2013



The APBP guidelines should be generally adhered to when installing new bike racks in Downtown Bellevue. As needs vary at each location, the exact placement and spacing of bike racks may also vary. In locations where existing conditions and street furniture hinder strictly following these guidelines, the best judgement of staff is used to determine the exact placement of a bicycle rack. The main aim of rack placement is to install bicycle racks that provide convenient parking for cyclists in a manner that does not encroach on the other users of the sidewalks.

4. PURCHASING AND INSTALLATION PROCEDURES

All bicycle racks installed through this program are purchased from and installed by private contractors.

4.1 PURCHASING

All bicycle rack installations are small projects and formal bid process is not required to purchase the racks or hire the installation contractor. Procurement Services staff in the Finance Department can provide a list of potential contractors. These contractors are contacted to submit a quote, as are the contractors who have previously been hired through the bicycle rack installation program and provided good and timely service.

To purchase bicycle racks for installation in Downtown Bellevue, quotes should be obtained from potential fabrication contractors to reflect the cost of goods, services, delivery, and any additional fabrication fees. This should be done in the early stages of an installation project to help determine how many bicycle racks can be budgeted and planned for. Once staff has finalized the installation locations and the type of rack has been selected for each site, final price quotes are sought after to select and hire a fabrication contractor.



4.2 FABRICATION AND DELIVERY

Creative Metalworks, LLC received the contract to fabricate the bicycle racks for the installation in 2012. This company, operating out of Dayton, Oregon, designed the bike circle attachments to convert old parking meter poles into bicycle racks in some of Seattle's neighborhoods. The black bike circle racks used by the installation program in Downtown Bellevue are a more elegant version of this concept for bicycle racks.

4.3 INSTALLATION PROCEDURES

The racks should be solidly bolted down and located on public right-of-way or on a permanent easement. The exact placement of each new bicycle rack must be understood between staff and the installation contractor to ensure accurate installation. Prior to installation, staff should accompany the contractor to each location planned and physically mark the sidewalk where the rack should be installed. During this process, staff should check that conditions still allow for a bicycle rack to be installed and that the planned location meets the APBP guidelines discussed in sections 3.1 and 3.2.



In order for installation to begin, a Right of Way Permit must be obtained from the City's Transportation Department. Traffic management plans are not necessary for bicycle rack installation projects as long as installer's vehicle is does not block traffic and is parked in a legal parking spot during the installation work.

5. MAINTENANCE AND REPAIR

After a bicycle rack is installed, general maintenance and repair is managed by the Street Maintenance staff in the Utilities Department.

5.1 GENERAL MAINTENANCE

To ensure that rack maintenance is simple to address, Street Maintenance staff recommends that the City to standardize the type of bicycle used in Bellevue and use the type throughout the City. Although this program plans two different types of racks, the intallation and general maintenance of each type is similar and meet this recommendation by staff.

High rail racks and bike circle racks fabricated by Creative Metalworks, LLC are both made from 2/12" OD schedule 40 pipe. The welded bike circles are made from 3/8" mild steel.



Both types of racks are installed using 2 1/2" x 4" anchor bolts, attached through the mounting holes on each rack's baseplate. The staff from Street Maintenance also requested that spare parts be purchased along with new racks, but the anchor bolts are not be supplied by the fabricator and can easily be purchased through any hardware supplier.

If a bicycle rack is damaged beyond what the Utilities Department is able to repair, staff may consider hiring a contractor to repair the damage. Alternatively, the rack may be removed and replaced in a future wave of bicycle rack installations.

5.2 USERS CAN REPORT DAMAGE

To help ensure that City-owned bicycle racks are properly maintained, and to distinguish these racks from those owned by the City and the private businesses, stickers will be adhered in the Spring of 2013 to all City-owned bicycle racks.

These stickers provide the contact information for the City's Utilities staff, who would repair the damaged racks or that the Transportation Department remove or replace the rack. The stickers also serve to advertise the City's investment and dedication to providing Downtown bicycle parking.



Figure C: Downtown Bicycle Rack Maintenance Sticker and Placement Guidelines



[end]

APPENDIX A

2012 BICYCLE RACK INSTALLATIONS

The most recent wave of bicycle rack installations occurred in December of 2012. The planning for this installation began in 2011, and began with twenty-five (25) planned locations new bicycle racks. The adjacent property owner was contacted and asked for their approval of the bicycle rack installation. When the location was planned on a private right of way, the owner's approval is required for installation. Owner approval is not required for racks planned on public rights of way.

The number of planned racks lowered to twenty (20) after the cost of each rack was determined and responses were received from property owners. A local contractor called Creative Dimensions, operating out of Monroe, WA, provided the lowest installation quote and was selected to install the racks.

The following pages provide a description of each 2012 installation site, including a site map and before and after photos of the rack installation.

RACK NO. 1

A *bike circle* is installed at this location. This rack is replacing a damaged Cindy bicycle rack that has been removed.

Property owner's address: 1150 106th Ave NE, Bellevue, WA 98004

Street location: NE 12th St and 106th Ave NE

Adjacent destination: Flo Japanese Restaurant and Sake Bar

PLANNING



INSTALLATION



RACK NO. 2

A *bike circle* is installed at this location. This rack is replacing a damaged Clyde bicycle rack that has been removed.

Property owner's address: 1150 106th Ave NE, Bellevue, WA 98004

Street location: 106th Ave NE, South of NE 12th St

Adjacent destination: Subway

PLANNING



INSTALLATION



RACK NO. 3

A *bike circle* is installed at this location.

Property owner's address: 1032 106th Ave NE, Bellevue, WA 98004

Street location: NE 10th St and 106th Ave NE

Adjacent destination: CBRE Properties

PLANNING



INSTALLATION



RACK NO. 6

A *high rail rack* is installed at this location. The placement of the rack should match that of the existing high rail rack around the corner.

Property owner's address: *800 Bellevue Way NE, Bellevue, WA 98004*

Street location: *NE 8th St and Bellevue Way NE*

Adjacent destination: *Bellevue Place*

PLANNING



INSTALLATION



RACK NO. 7

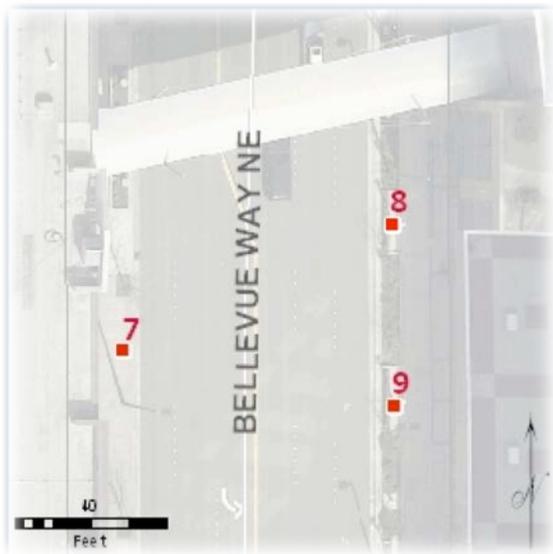
A *bike circle* is installed at this location.

Property owner's address: *504 Bellevue Way NE, Bellevue, WA 98004*

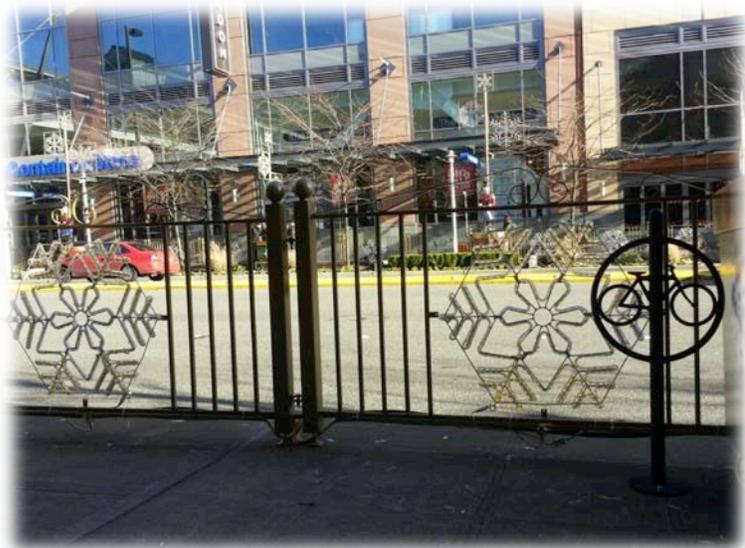
Street location: *West side of Bellevue Way NE, between NE 6th St and NE 8th St*

Adjacent destination: *Blue C Sushi.*

PLANNING



INSTALLATION



RACK NO. 8

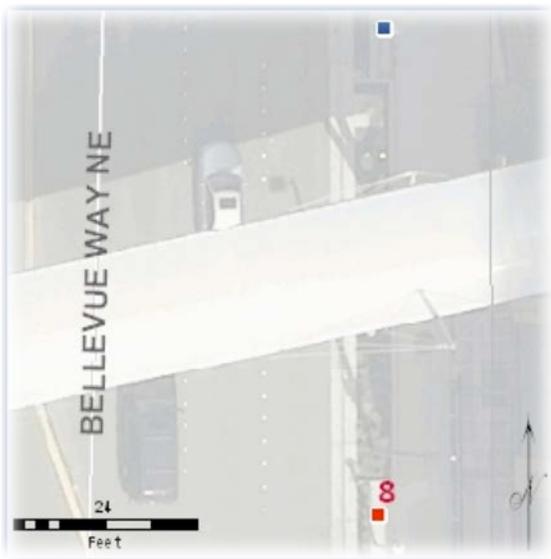
A *high rail rack* is installed at this location. This rack was planned to have matched Rack 9, but was instead shifted south to mirror Rack 8 due to placement of seasonal street installations.

Property owner's address: *700 Bellevue Way NE, Bellevue, WA 98004*

Street location: *East side of Bellevue Way NE, between NE 6th St and NE 8th St*

Adjacent location: *Lincoln Square*

PLANNING



INSTALLATION



RACK NO. 9

A *high rail rack* is installed at this location.

Property owner's address: 700 Bellevue Way NE, Bellevue, WA 98004

Street location: East side of Bellevue Way NE, between NE 6th St and NE 8th St

Adjacent location: Lincoln Square

PLANNING



INSTALLATION



RACK NO. 10

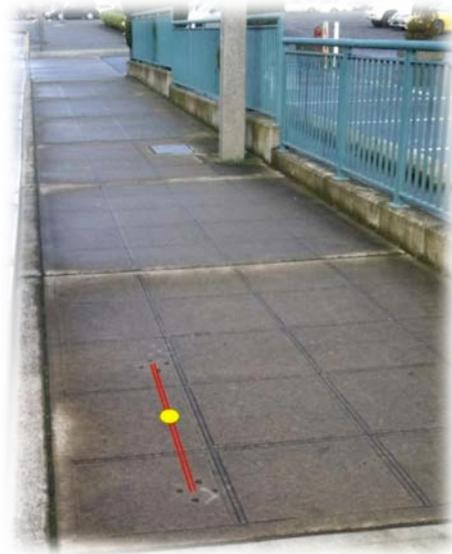
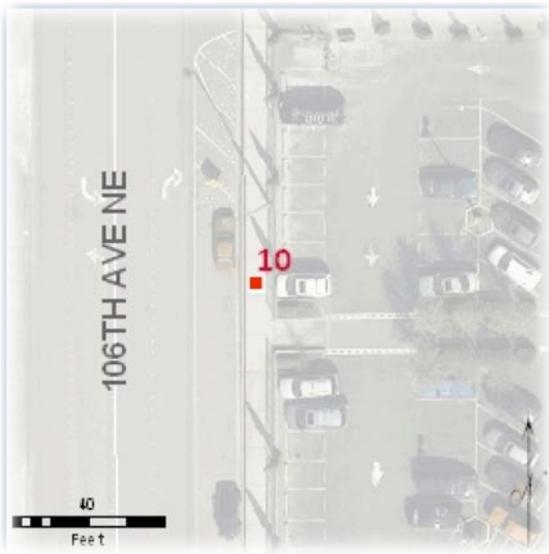
A *bike circle* is installed at this location. This rack is replacing another bike rack that has already been removed.

Property owner's address: 626 106th Ave NE, Bellevue, WA 98004

Street location: 106th Ave NE, between NE 6th St and NE 8th St

Adjacent location: *Barnes and Noble*

PLANNING



INSTALLATION



RACK NO. 12

A *bike circle* is installed at this location.

Property owner's address: 725 108th Ave NE, Bellevue, WA 98004

Street location: 108th Ave NE, between NE 6th St and NE 8th St

Adjacent location: Jimmy John's

PLANNING



INSTALLATION



RACK NO. 13

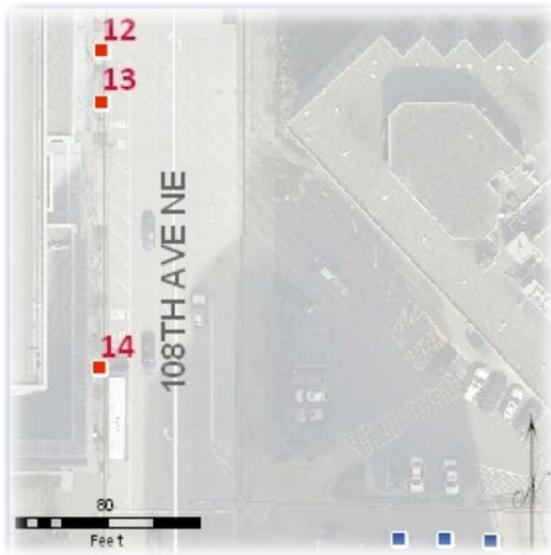
A *bike circle* is installed at this location.

Property owner's address: 725 108th Ave NE, Bellevue, WA 98004

Street location: 108th Ave NE, between NE 6th St and NE 8th St

Adjacent location: Jimmy John's

PLANNING



INSTALLATION



RACK NO. 14

A *bike circle* is installed at this location.

Property owner's address: 601 108th Ave NE, Bellevue, WA 98004

Street location: 108th Ave NE, North of NE 6th St

Adjacent location: Starbucks

PLANNING



INSTALLATION



RACK NO. 15

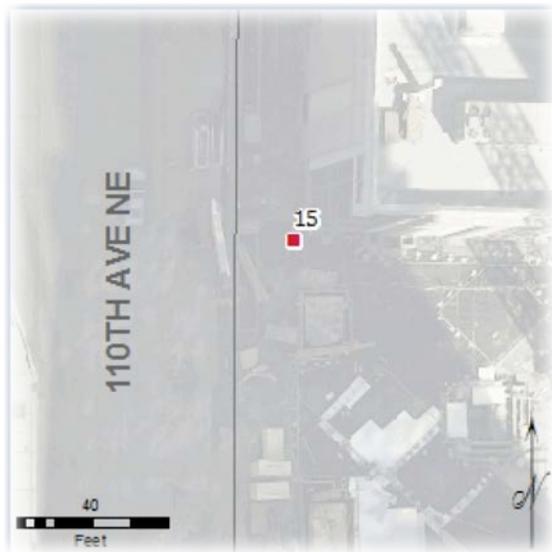
A *bike circle* is installed at this location.

Property owner's address: 688 110th Ave NE, Bellevue, WA 98004

Street location: 110th Ave NE, between NE 6th St and NE 8th St

Adjacent location: *The Bravern*

PLANNING



INSTALLATION



RACK NO. 16

A *bike circle* is installed at this location. The newsstand on this sidewalk has been removed and rack should be installed where it once stood.

Property owner's address: 688 110th Ave NE, Bellevue, WA 98004

Street location: NE 6th St and 108th Ave NE

Adjacent location: City Center Bellevue

PLANNING



INSTALLATION



RACK NO. 19

A *bike circle* is installed at this location.

Property owner's address: 300 110th Ave NE, Bellevue, WA 98004

Street location: NE 4th Stand 110th Ave NE

Adjacent location: Abella Condominiums

PLANNING



INSTALLATION



RACK NO. 20

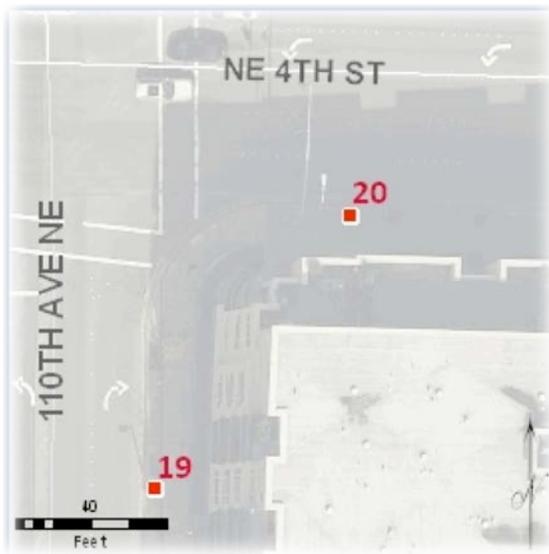
A *bike circle* is installed at this location.

Property owner's address: 300 110th Ave NE, Bellevue, WA 98004

Street location: NE 4th St and 110th Ave NE

Adjacent location: Subway

PLANNING



INSTALLATION



RACK NO. 21

A *bike circle* is installed at this location.

Property owner's address: 318 111th Ave NE, Bellevue, WA 98004

Street location: NE 3rd Pl and 111th Ave NE

Adjacent location: Metro 112

PLANNING



INSTALLATION



RACK NO. 22

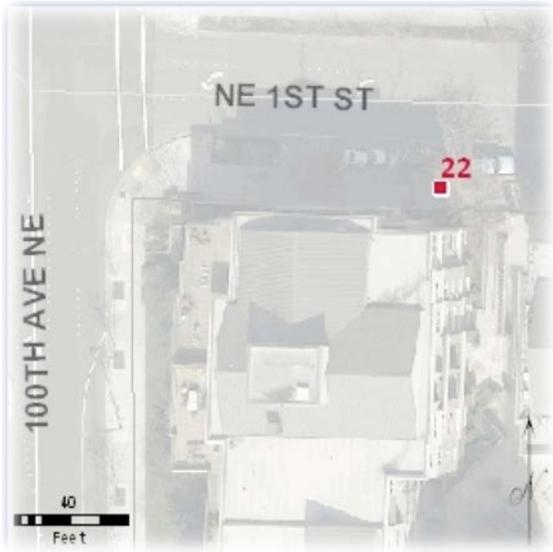
A *bike circle* is installed at this location.

Property owner's address: *10001 NE 1st St, Bellevue, WA 98004*

Street location: *NE 1st St and 100th Ave NE*

Adjacent location: *First St Fitness*

PLANNING



INSTALLATION



RACK NO. 23

A *bike circle* is installed at this location.

Property owner's address: *10047 Main St, Bellevue, WA 98004*

Street location: *Main St and 101st Ave SE*

Adjacent location: *Running Elements*

PLANNING



INSTALLATION



RACK NO. 24

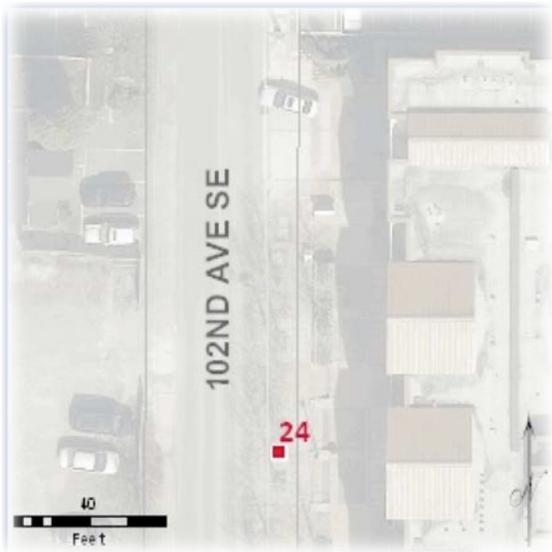
A *bike circle* is installed at this location.

Property owner's address: 136 102nd Ave SE, Bellevue, WA 98004

Street location: 102nd Ave Se, between SE 3rd St and Main St

Adjacent location: Elite Fitness

PLANNING



INSTALLATION



RACK NO. 25

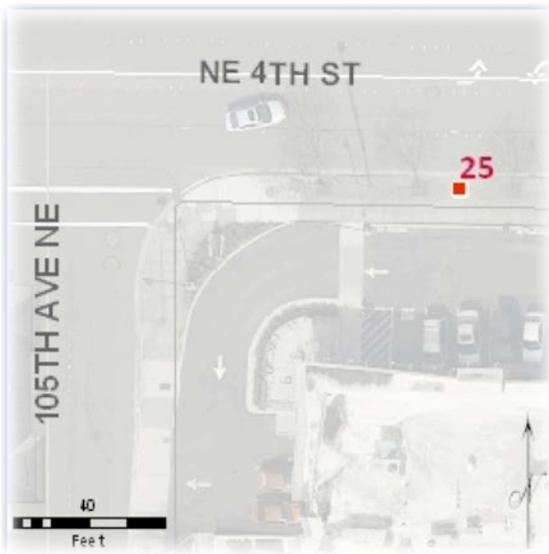
A *bike circle* is installed at this location.

Property owner's address: 318 111th Ave NE, Bellevue, WA 98004

Street location: NE 4th St and 105th Ave NE

Adjacent location: Chipotle Mexican Grill

PLANNING



INSTALLATION



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