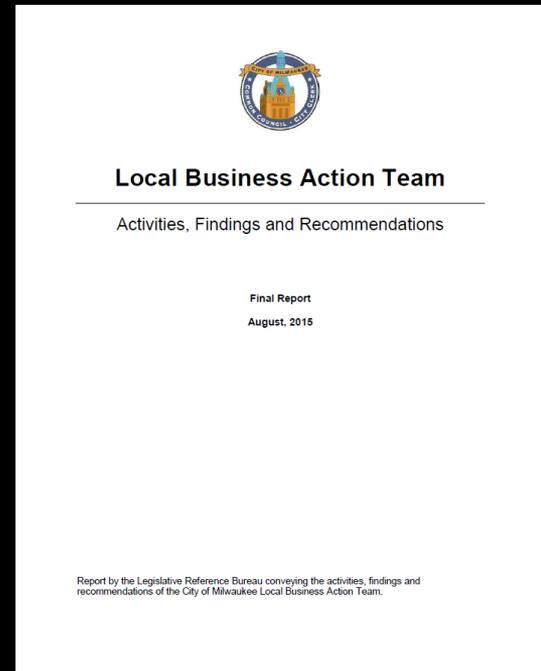


MILWAUKEE LANDSCAPE CODE

Zoning, Neighborhoods and Development Committee
February 20, 2019

CUSTOMER SERVICE GOALS

- **Simplify** the landscape code, and make landscape requirements more practical and user-friendly.
- Build **flexibility** into the code, allowing a broad range of options for planting borders, buffers, and islands
- Provide **solutions for retrofits** of existing sites that are unable to comply with the code.
- Develop a “**landscape pattern book**” that shows acceptable strategies for landscaping



URBAN DESIGN GOALS

- Ensure a safe, well-defined and pedestrian friendly **public realm**.
- Protect and enhance the **aesthetic quality of the city**.
- **Screen unsightly uses** and utilitarian features from public streets.
- Provide **buffers between incompatible uses**.
- Require **existing sites** to be brought up to current standards.



ENVIRONMENTAL GOALS

- Increase the amount of **trees in the city**.
- Reduce the amount of **impervious pavement** in the city.
- Encourage the use of **green infrastructure**.
- Ensure long term **health and maintenance** of plants.
- Require **existing sites** to be brought up to current standards.

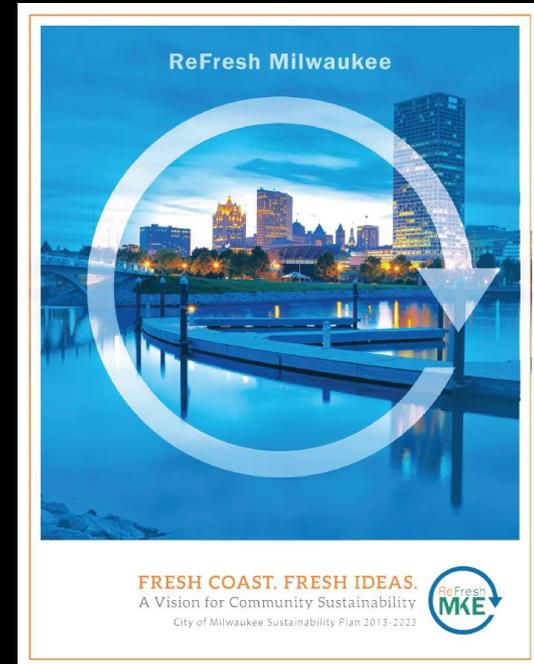


Table 295-405-1-a

PERIMETER LANDSCAPING AND EDGE TREATMENT REQUIREMENTS BY USE AND ZONING DISTRICT

Key:

required - this is the minimum landscaping/edge treatment requirement for this land use in the specified zoning district

allowed - this landscaping/edge treatment type may be used as an alternative to the "required" type for this land use in specified zoning district not permitted - this landscaping/edge treatment type cannot be used for this particular use in the specified zoning district

use not permitted - this land use is not permitted in this zoning district; therefore, no required landscaping type is specified

Type of use	Light Motor Vehicle Parking; Vehicle Operating Area			Motor Vehicle Sales Lot	Heavy Motor Vehicle Parking; Storage Yards; Contractors' Yards; Outdoor Salvage Operations			Mechanical Equipment, etc.	Lt. Motor Veh. Parking Next to Res. Use
	Type A	Type B	Type C	Type D	Type E	Type F	Type I	Type G	Type H
Zoning District									
NS2, LB2, RB2	not permitted	required	allowed	required	not permitted	required	allowed*	required	required
LB3	not permitted	required**	allowed	required	not permitted	required	allowed*	required	required
NS1, LB1, RB1, CS	required	allowed	not permitted	required	required	allowed	allowed*	required	required
C9A-C9H	not permitted	required	allowed	use not permitted	not permitted	required	allowed*	required	required
IM, IC	not permitted	required	allowed	required	not permitted	required	allowed*	required	required
I02, IL2	not permitted	required	allowed	required	required	allowed	allowed*	required	required
IO1, IL1	required	allowed	allowed	required	required	allowed	allowed*	required	required
IH	required	allowed	allowed	required	not permitted	required	allowed*	required	required
PK, TL	required	allowed	allowed	use not permitted	use not permitted	use not permitted	use not permitted	required	required
RM5-RM7, R02	not permitted	required	allowed	use not permitted	use not permitted	use not permitted	use not permitted	required	required
RT3-RT4, RM3-RM4	not permitted	required	allowed	use not permitted	use not permitted	use not permitted	use not permitted	required	required
RS1-RS6, RT1-RT2, RM1-RM2, ROI	required	allowed	not permitted	use not permitted	use not permitted	use not permitted	use not permitted	required	required

*Not permitted for outdoor storage (except heavy motor vehicle outdoor storage) or outdoor salvage operations.

**Masonry piers required, per table 295-405-1-c.

Table 295-405-1-C
 FENCE/WALL AND LANDSCAPING REQUIREMENTS FOR LANDSCAPING TYPES

	Type A Landscaping	Type B Landscaping	Type C Landscaping	Type D Landscaping	Type E Landscaping	Type F Landscaping	Type G Landscaping	Type H Landscaping	Type I Landscaping	
Required Fence/Wall	Fence or wall required?	optional	yes ; if located in LB3, masonry piers required	yes	yes if located in LB2 or LB3	yes	yes	optional	yes	yes
	Fence/wall height requirements	fence optional; see below	3 ft. min.; 6 ft. max.	6 ft.	if provided, 3 ft. min.; 6 ft. max.	6 ft. min.; 9 ft. max.	6 ft. min.; 9 ft. max.	to top of object plus one ft. (min.); 9 ft. max.	6 ft.; shall be reduced to 3.5 ft. when adjacent to a residential front yard	6 ft. min.; 9 ft. max.
	Fence/wall materials required	fence not required	masonry or decorative metal; if located in LB3, masonry piers required	combination masonry/decorative metal	if LB2 or LB3, masonry or decorative metal; other districts, fences are optional	any opaque fence type	any opaque fence type	any opaque fence type	any opaque fence type	masonry or decorative metal
	Fence/wall opacity	fence not required	no opacity standard	solid in lower 3 ft.	no opacity standard	100%	100%	100%	100%	no opacity standard
	Fence/wall location in landscaped area	if provided, adjacent to parking	anywhere within landscaped area	anywhere within landscaped area	anywhere within landscaped area	behind landscaping	behind landscaping	between object being screened and area of visibility	adjacent to residential property line	Anywhere within landscaped area
Allowable Fence/Wall	Masonry wall	up to 6 ft. high	up to 6 ft. high	up to 6 ft. high	up to 4 ft. high	up to 9 ft. high	up to 9 ft. high	up to 9 ft. high	up to 9 ft. high	up to 9 ft. high
	Decorative metal fence	up to 6 ft. high	up to 6 ft. high	up to 6 ft. high; lowest 3 ft. shall be solid wall	up to 6 ft. high	not permitted	not permitted	allowed, but a second row of shrubs shall be required	up to 9 ft. high	Up to 9 ft. high
	Wood fence, open	up to 4 ft. high	not permitted	not permitted	if not in LB2, up to 3.5 ft. high	not permitted	not permitted	not permitted	not permitted	not permitted
	Wood fence, opaque	up to 4 ft. high	not permitted	not permitted	if not in LB2, up to 3.5 ft. high	up to 9 ft. high	up to 9 ft. high	up to 9 ft. high	up to 9 ft. high	not permitted
	Chain link fence (coated wire only)	up to 6 ft. high	not permitted	not permitted	not permitted	optional if fence has slats or mesh screening; up to 6 ft. high	optional if fence has slats or mesh screening; up to 6 ft. high	optional if fence has slats or mesh screening; up to 6 ft. high	not permitted with or without slats or mesh screening	not permitted
Trees and Shrubs Required & Allowed	Minimum landscaped area width	5 ft.	5 ft.	sufficient for wall, trees and optional shrubs	5 ft.	15 ft.	5 ft. ; 15 ft. if a chain-link fence is present	sufficient to accommodate required plantings; 15 ft. if a chain-link fence is present	sufficient to accommodate fence/wall and optional trees/shrubs	10 ft.
	Deciduous street-type trees	minimum 1 every 25 ft.	minimum 1 every 25 ft.	minimum 1 every 25 ft.	minimum 1 every 25 ft.	minimum 1 every 25 ft.	minimum 1 every 25 ft.	allowed but not required unless a loading dock is present	1 every 25 feet or where required by s. 295-405-1-b-8	minimum 1 every 25 feet
	Ornamental tree option	minimum 1 every 20 ft. if landscaped area is at least 10 ft. wide	minimum 1 every 20 ft. if landscaped area is at least 10 ft. wide	optional	minimum 1 every 20 ft. if landscaped area is at least 10 ft. wide	minimum 1 every 20 ft. if landscaped area is at least 10 ft. wide	minimum 1 every 20 ft. if landscaped area is at least 10 ft. wide	minimum 1 every 20 ft. if landscaped area is at least 10 ft. wide	minimum 1 every 20 ft. if landscaped area is at least 10 ft. wide	minimum 1 every 20 feet if landscaped area is at least 10 ft. wide
	Shrub spacing requirement	2 staggered rows with plants a max. of 4 ft. on center in each row; if a 4-ft. opaque fence is provided, only one row shall be planted, max. 3ft	2 staggered rows with plants a max. of 4 ft. on center in each row; if a 4-ft. opaque fence is provided, only one row shall be planted, max. 3ft	low-level shrubs, plantings and grasses are allowed and encouraged, but not required due to wall requirement	if light motor vehicle display plants a max. of 3 ft. on center; if heavy motor vehicle display, 2 staggered rows with plants a max. of 4 ft. on center in each row	one row with plants a max. of 3 ft. on center; if chain-link fence is provided, 2 staggered rows with plants a max. of 4 ft. on center in each row	one row with plants a max. of 3 ft. on center; if chain-link fence is provided, 2 staggered rows with plants a max. of 4 ft. on center in each row	2 staggered rows with plants a max. of 4 ft. on center in each row; if a 4-ft. opaque fence is provided, only one row shall be planted, max. 3ft	option or, where required by s. 295-405-1-b-8, one row with plants a max. of 8 ft. on center	one row with a max. of 4 ft. on center; if a masonry wall is provided, shrubs are optional
Trees and Shrubs Required & Allowed	Shrub size, min. (at time of planting)	2 ft. in diameter	2 ft. in diameter	2 ft. in diameter	if light motor vehicle display, 1.5 ft. in diameter; if heavy motor vehicle display, 2 ft. in diameter	2 ft. in diameter	2 ft. in diameter	2 ft. in diameter	2 ft. in diameter	2 ft. in diameter
	Shrub height, min. (at time of planting)	2 ft.	2 ft.	2 ft.	if light motor vehicle display, 2 ft.; if heavy motor vehicle display, 3 ft.	6 ft.	6 ft.	6 ft.	2 ft.	6 ft.
	Shrub height, max. (at maturity)	3.5 ft.	3.5 ft.	3.5 ft.	if light motor vehicle display, 3.5 ft.; if heavy motor vehicle display, 4.5 ft.	no limit	no limit	no limit	no limit	no limit

**Table 295-405-3-a
OPTIONS FOR SCREENING PARKING LOTS AND VEHICLE OPERATING AREAS FROM STREETS**

	Option A	Option B	Option C
Minimum width of landscaped area	10 ft.	5 ft.	none
Type and minimum number of plants required in landscaped area	4 low shrubs or 8 perennials/ornamental grasses per 10 linear ft.	4 low shrubs or 8 perennials/ornamental grasses per 20 linear ft.	none
Minimum number of canopy trees required	1 canopy tree per 20 linear ft.	1 canopy tree per 20 linear ft.	1 tree per 40 linear ft.
Fence/wall required	none	ornamental metal fence	masonry wall
Minimum fence/wall height	none	3 ft.	3 ft.
Fence/wall opacity requirement	Portions above 4 ft. shall be at least 50% open	Portions above 4 ft. shall be at least 50% open	Portions below 3 ft. shall be at least 50% opaque; portions above 4 ft. shall be at least 50% open

OPTIONS FOR PERIMETER LANDSCAPING ALONG STREETS

	OPTION 1	OPTION 2	OPTION 3
Minimum Width of Landscape Area	10 feet *	5 feet *	None
Fence/Wall Required	None	3 Foot Tall Ornamental Metal Fence	3 Foot Tall Masonry Wall
Plantings Required	Low Shrubs, Perennials and/or Ornamental Grasses	Low Shrubs, Perennials and/or Ornamental Grasses	None
Canopy Trees Required	1 Tree per 20 Linear Feet	1 Tree per 20 Linear Feet	1 Tree per 40 Linear Feet

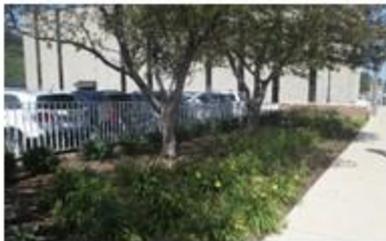
** For existing parking lots, the minimum width of landscape area may be reduced by up to 50%*

PERIMETER LANDSCAPING ALONG STREETS

OPTION 1

A continuous 10-foot wide landscape area between the parking lot and the street filled with closely spaced low-level shrubs, perennials and/or ornamental grasses and one canopy tree every 20 linear feet.





PERIMETER LANDSCAPING ALONG STREETS

OPTION 2

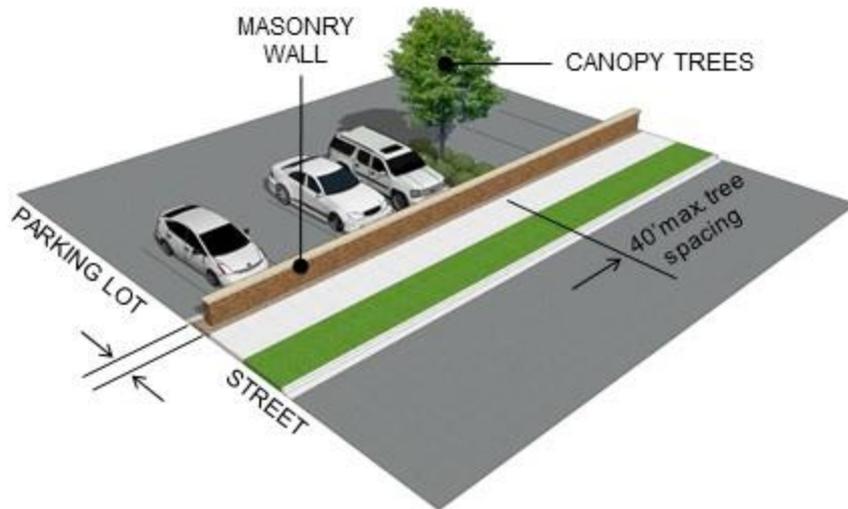
A continuous 5-foot wide landscape area between the parking lot and the street filled with closely spaced low-level shrubs, perennials and/or ornamental grasses, an ornamental metal fence at least 3 feet in height and one canopy tree every 20 linear feet.



PERIMETER LANDSCAPING ALONG STREETS

OPTION 3

A 3' tall opaque masonry wall between the parking lot and the street and one canopy tree every 40 linear feet.



PARKING LOT LANDSCAPING



PARKING LOT LANDSCAPING

Amount Required

1 canopy tree and
100 square feet of landscape area
for every 4 parking spaces.

Location

Within 50 feet of the parking lot.
Perimeter landscape areas count

Green Infrastructure

Landscape requirements may be
reduced to no less than 1 tree and 100
square feet of landscape area per 8
parking spaces if the following green
infrastructure features are provided as
a substitute for trees and landscape
areas.



GREEN INFRASTRUCTURE



Permeable Paving

100 square feet of permeable paving may be substituted for 1 tree and 100 square feet of landscaped area.



Rain Gardens

100 square feet of rain garden with a rain water catchment area of at least 1,000 square feet may be substituted for 1 tree and 100 square feet of landscaped area.



Bioswales

50 cubic feet (375 gallons) of bio-retention capacity with a rain water catchment area of at least 1,000 square feet may be substituted for 1 tree and 100 square feet of landscaped area.

CANOPY TREES



PLANTING AREAS FOR TREES

Planting areas for trees must have a minimum surface area of 100 square feet per tree.

TREE SIZE

Trees must be at least 2.5 inches in diameter

2 trees at least 1.5 inches in diameter may be substituted for 1 tree of 2.5 inches in diameter

CREDIT FOR EXISTING CANOPY TREES

An existing tree may be counted if it meets the standards and if no soil within 5 feet of the tree is disturbed

A tree greater than 12 inches in diameter may be counted as 2 trees if no soil within 10 feet of the tree is disturbed

A tree greater than 18 inches in diameter may be counted as 3 trees if no soil within 15 feet of the tree is disturbed



Armstrong Maple
Acer x freemanii 'Armstrong'



State Street Miyabe Maple
Acer miyabei 'Morton'



Musclewood
Carpinus caroliniana



Hackberry
Celtis occidentalis



Eastern Red Bud
Cercis canadensis



Ginkgo (Male)
Ginkgo biloba



Swamp White Oak
Quercus bicolor



Baldcypress
Taxodium distichum

LIST OF RECOMMENDED CANOPY TREES

BOTANICAL NAME	COMMON NAME	HEIGHT	SPREAD	SUN	ATTRIBUTES
<i>Acer x freemanii</i> spp. *	Freeman Maple	50'	30-40'	☉	N
<i>Acer x freemanii</i> 'Armstrong'	Armstrong Maple	50-60'	15-20'	☉	N
<i>Acer x freemanii</i> 'Autumn Blaze'	Autumn Blaze Maple	50'	40'	☉	
<i>Acer miyabei</i> 'Morton'	State Street Miyabe Maple	50'	40'	☉	S
<i>Acer saccharum</i> 'Barrett Cole'	Apollo Sugar Maple	30'	10'	☉☾	N
<i>Acer truncatum</i> x <i>A. platanoides</i> *	Sunset Maple	35'	25'	☉☾	S
<i>Alnus glutinosa</i>	Black Alder	40-60'	20-40'	☉☾	
<i>Amelanchier arborea</i>	Downy Serviceberry	25'	15'	☉☾	
<i>Amelanchier laevis</i>	Allegheny Serviceberry	25'	15'	☾	
<i>Amelanchier x grandiflora</i> *	Apple Serviceberry	25-30'	25-30'	☉☾	N D S
<i>Betula nigra</i> *	River Birch	40-70'	40-60'	☉	N R S
<i>Carpinus betulus</i> 'Fastigiata'	Upright European Hornbeam	35'	20-30'	☉☾	

☉ Full Sun ☉☾ Part Sun ☾ Full Shade

N=Native to Wisconsin R=Rain Garden/Bioswale D=Drought Tolerant S=Salt Tolerant P=Pet Urine Tolerant

* Choose improved cultivars (cv.) or straight species (spp.) ** Male cultivars only

LOW-LEVEL PLANTS

Low Shrubs, Perennials and Ornamental Grasses

Low-level plants help to define spaces while allowing for natural surveillance of public areas. They should be used along street frontages and in interior landscape areas.

Low-level plants should generally be kept below 3 feet in height. Plants taller than 4 feet in height are prohibited along streets.

Landscape areas used for planting shrubs, perennials and ornamental grasses should consist of healthy non-compact planting soil at least 18 inches in depth.

MINIMUM PLANT SIZE

Low Shrubs	1.5 feet tall 3 gallon container size
Ornamental Grasses	1 foot tall 1 gallon container size

MINIMUM NUMBER OF PLANTS REQUIRED

(Option A): Street edge landscape area without fence	4 low shrubs or 8 perennials/ornamental grasses per 10 linear feet
(Option B): Street edge landscape area with ornamental metal fence	4 low shrubs or 8 perennials/ornamental grasses per 20 linear feet
Interior landscape area	4 low shrubs or 8 perennials/ornamental grasses per 100 square feet

LOW SHRUBS



Dwarf Bush-honeysuckle
Diervilla lonicera



Annabelle Hydrangea
Hydrangea arborescens 'Annabelle'



Little Devil Ninebark
Physocarpus opulifolius 'Donna May'

PERENNIALS



Coronation Gold Yarrow
Achillea x 'Coronation Gold'



Pardon Me Daylily
Hemerocallis x 'Pardon Me'



Denim & Lace Russian Sage
Perovskia atriplicifolia 'Denim & Lace'

ORNAMENTAL
GRASSES



Karl Forester Feather Reed Grass
Calamagrostis acutiflora 'Karl Foerster'



Prairie Blues Little Bluestem
Schizachyrium scoparium 'Prairie Blues'



Prairie Dropseed
Sporobolus heterolepis

LIST OF RECOMMENDED LOW SHRUBS

BOTANICAL NAME	COMMON NAME	HEIGHT	SPREAD	SUN	ATTRIBUTES
<i>Buxus</i> spp. *	Boxwood	2-4'	2-5'	☉ ☌	
<i>Ceanothus americanus</i>	New Jersey Tea	2-3'	2-4'	☉ ☌	N R D
<i>Cotoneaster apiculatus</i> *	Cranberry Cotoneaster	2-3'	3-6'	☉	D S P
<i>Deutzia gracilis</i> *	Deutzia	2'	4'	☉ ☌	
<i>Diervilla</i> spp. *	Dwarf Bush-honeysuckle	3-4'	4-5'	☉ ☌	N D
<i>Forsythia</i> spp. *	Forsythia	2-3'	3-5'	☉	D S P
<i>Fothergilla gardenii</i> *	Fothergilla	2-4'	3-4'	☉ ☌	
<i>Hydrangea</i> spp. *	Hydrangea	3-5'	3-5'	☉ ☌ ●	S
<i>Hypericum kalmianum</i> *	St. John's Wort	2-4'	2-4'	☉ ☌	N R D S
<i>Juniperus</i> spp. **	Juniper	1-3'	4-8'	☉	D S P
<i>Microbiota decussata</i>	Siberian Cypress	1'	5-8'	☉ ☌	
<i>Physocarpus opulifolius</i> *	Ninebark	3-4'	3-4'	☉ ☌	N R D

☉ Full Sun ☌ Part Sun ● Full Shade

N=Native to Wisconsin R=Rain Garden/Bioswale D=Drought Tolerant S=Salt Tolerant P=Pet Urine Tolerant

* Choose improved cultivars (cv.) or straight species (spp.)

** Short cultivars only

*** Tall cultivars only



APPLICABILITY

- New Construction
- Additions or Expansions
- Repaving or Reconstruction
- Change in Use
- Substantial Improvement



EXISTING SITES “RETROFITS”

Reduced standards are permitted applicable due to a...

- repaving or reconstruction, a
- change in the use being screened, or a
- substantial improvement to an existing building.



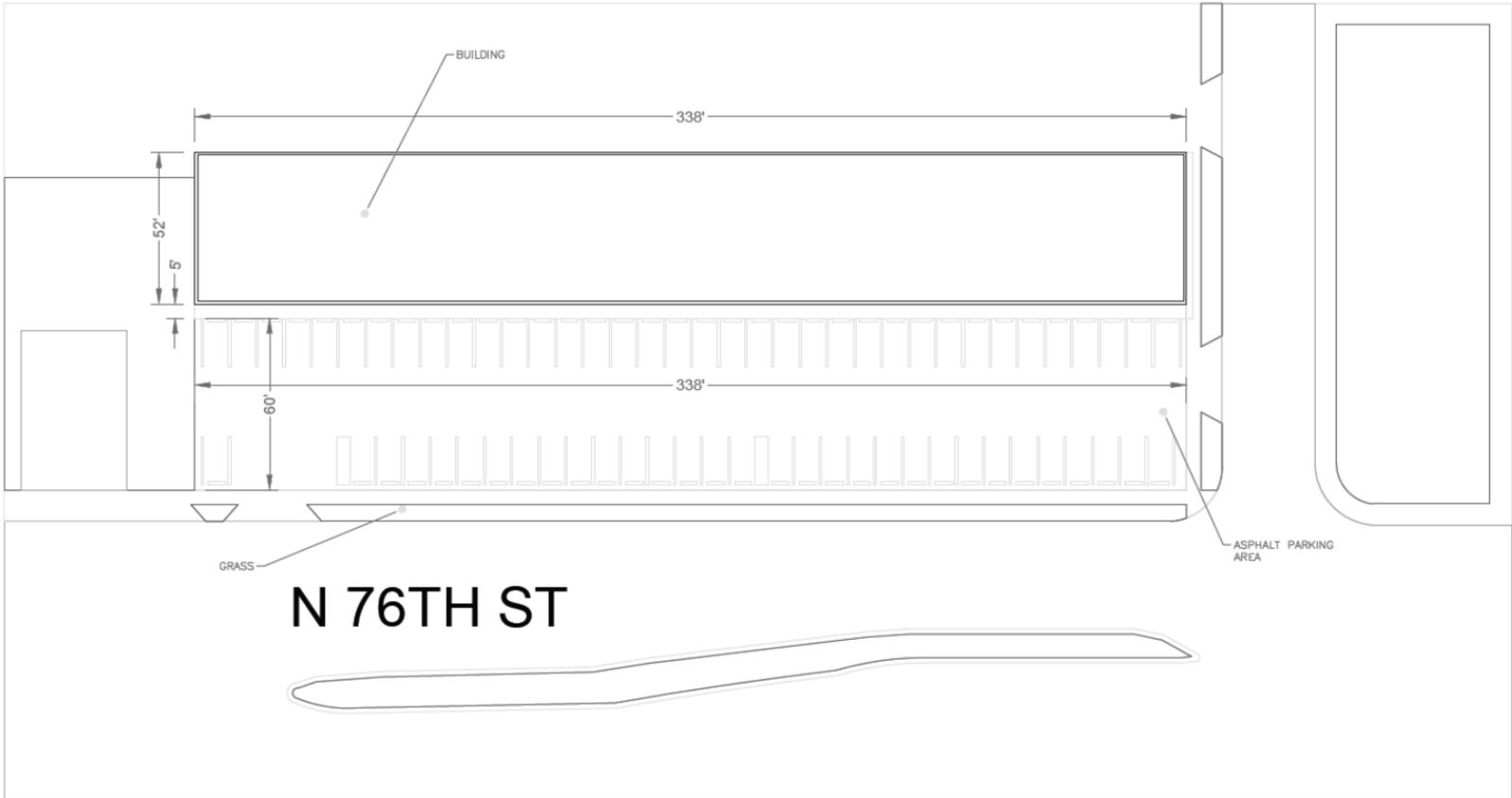
Options A & B: The minimum width of landscape area may be reduced by up to 50%

Option C: An ornamental metal fence with masonry piers may be used rather than a masonry wall.



Landscaping: 1 tree and 100 square feet of landscape area per 8 parking spaces. This may be further reduced through the use of green infrastructure.





BUILDING

338'

52'

5'

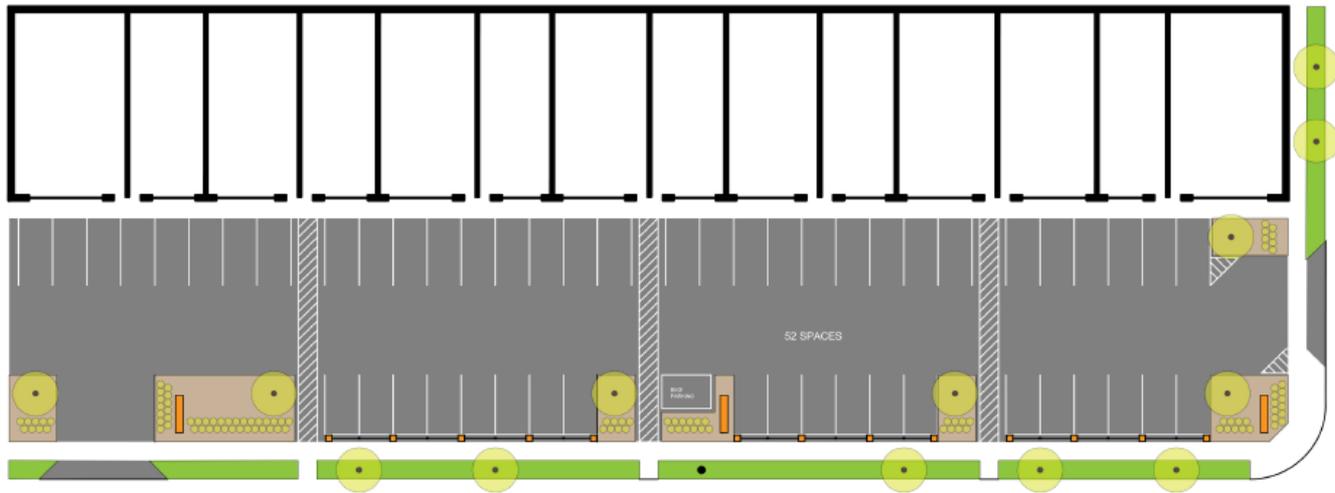
338'

60'

GRASS

ASPHALT PARKING AREA

N 76TH ST



Parking Lot Retrofit at 5601 North Hawley Road



BEFORE



AFTER

Parking Lot Retrofit at 1701 West North Avenue



BEFORE



AFTER

QUESTIONS?

Landscape Design Guide

for Parking Lots in the
City of Milwaukee

