



**DESIGN STANDARDS FOR
COMMERCIAL & COMMUNITY
FACILITY PARKING LOTS**



GOALS

Improve design of parking lots while minimizing impact on commercial & community facility developments

AESTHETICS

- Mitigate vast expanses of pavement through landscaping
- Improve quality of local streetscape

ENVIRONMENTAL

- Increase tree canopy to reduce 'Heat Island Effect'
- Increase permeability to mitigate storm water runoff

SAFETY

- Improve pedestrian & vehicular circulation



DESIGN COMPONENTS

- STREET TREES
- PERIMETER SCREENING
- INTERIOR LANDSCAPING
- MANEUVERABILITY STANDARDS

APPLICABILITY



STREET TREES

Open parking lots containing at least 18 spaces or 6,000 sf in area



PERIMETER SCREENING

Open parking lots containing at least 18 spaces or 6,000 sf in area



INTERIOR LANDSCAPING

Open parking lots containing at least 36 spaces or 12,000 sf in area



MANEUVERABILITY STANDARDS

All open parking lots

FURTHER APPLICABILITY

PERIMETER SCREENING, INTERIOR LANDSCAPING AND MANEUVERABILITY STANDARDS

Developments containing residences:

Standards would apply only to those in which at least 70% of the floor area on the zoning lot is occupied by commercial or community facility uses

Enlargements:

Standards would apply only to those developments that increase floor area by at least 20% and result in at least 70% of the floor area on the zoning lot occupied by commercial or community facility uses, and those that increase the number of parking spaces by at least 20%

Exempt uses:

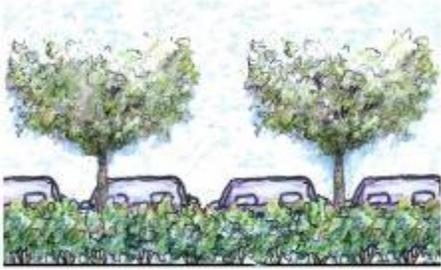
Parking garages, roof parking, gas stations, car washes and other automotive uses

Future subdivisions:

For developments that utilize the waiver provisions for required parking but provide parking nevertheless, perimeter screening would be required

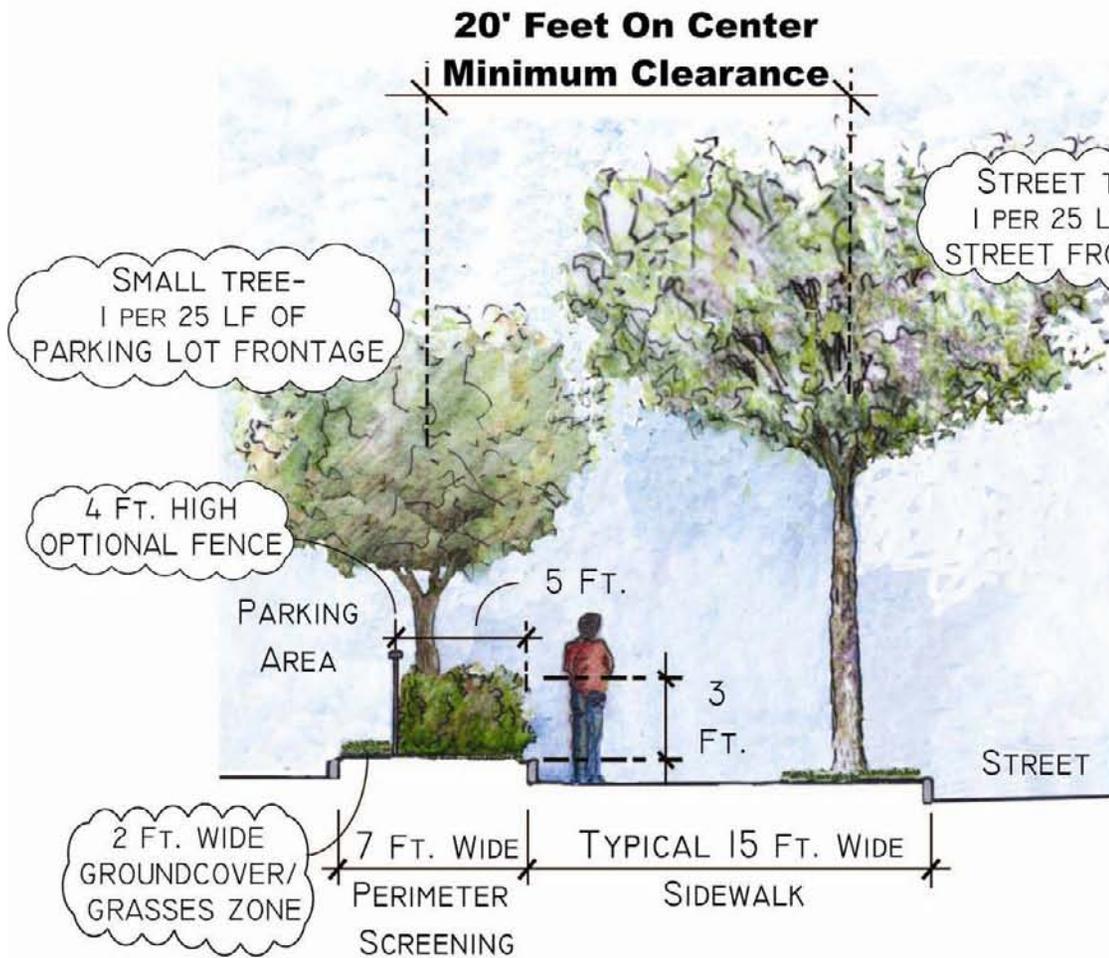
Filing of Plans:

All landscaping plans must be submitted by a licensed landscape architect

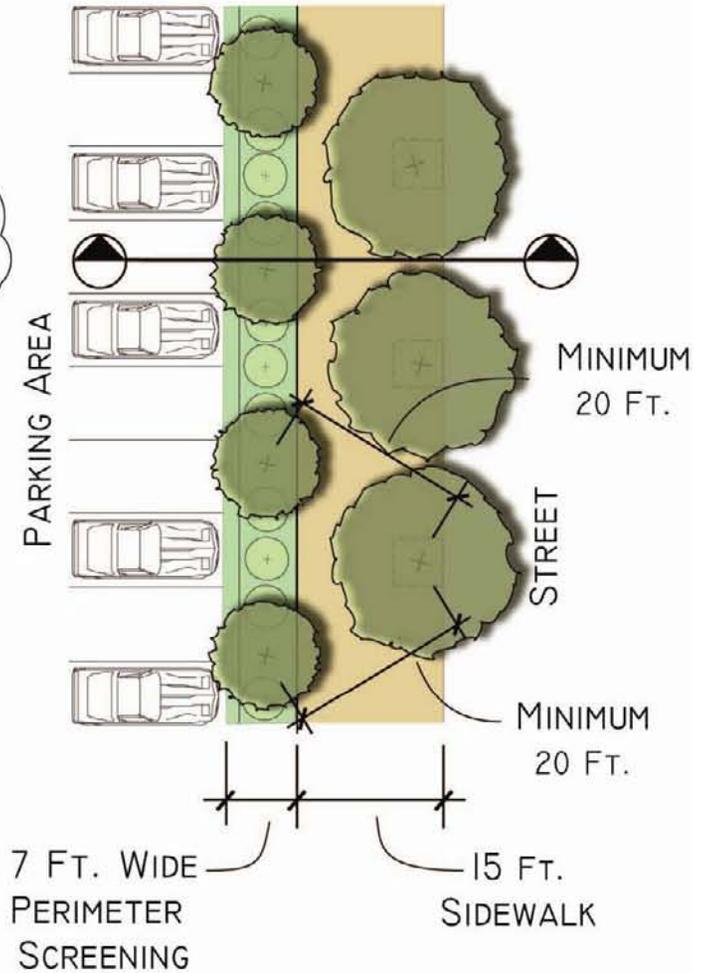


STREET TREES & PERIMETER SCREENING

Illustrative sketch



SECTION



PLAN

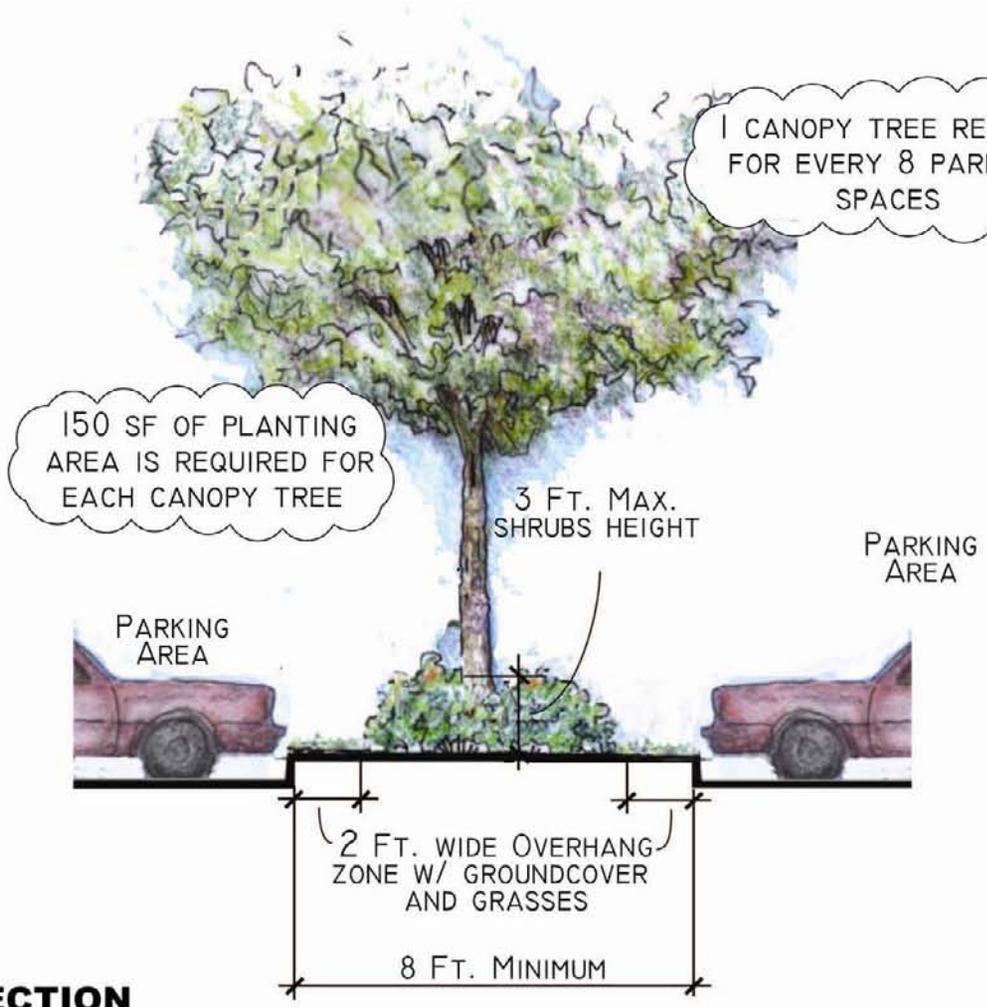
STREET TREES & PERIMETER SCREENING

Precedent image

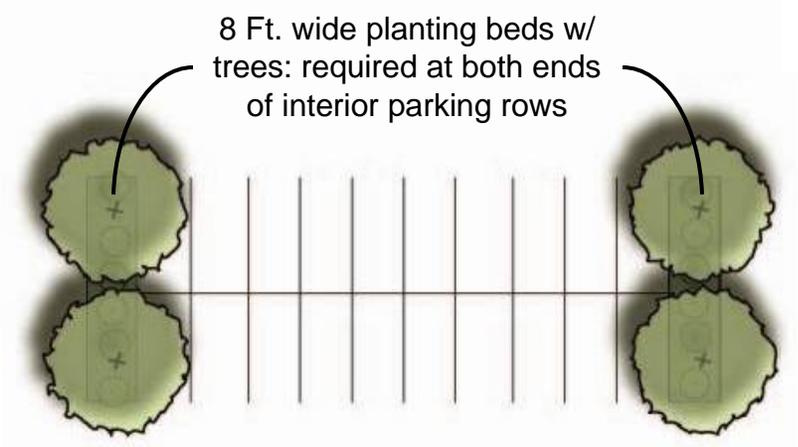
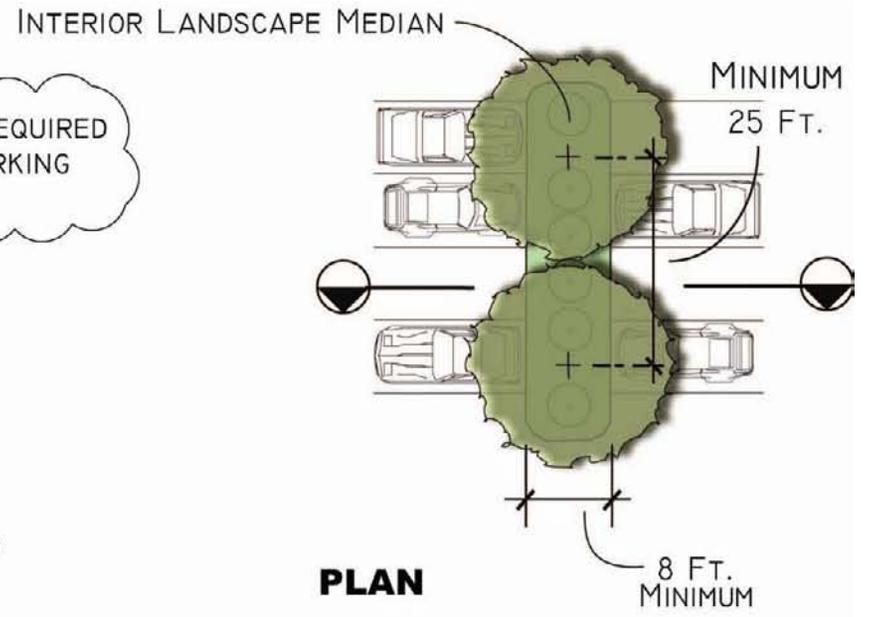


INTERIOR LANDSCAPING

Trees, shrubs, grasses & groundcover planting
Illustrative sketch

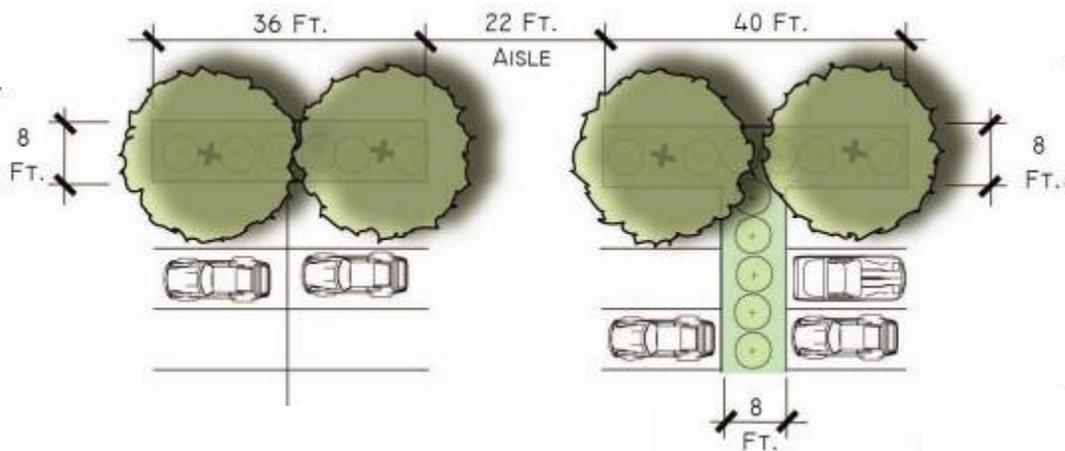
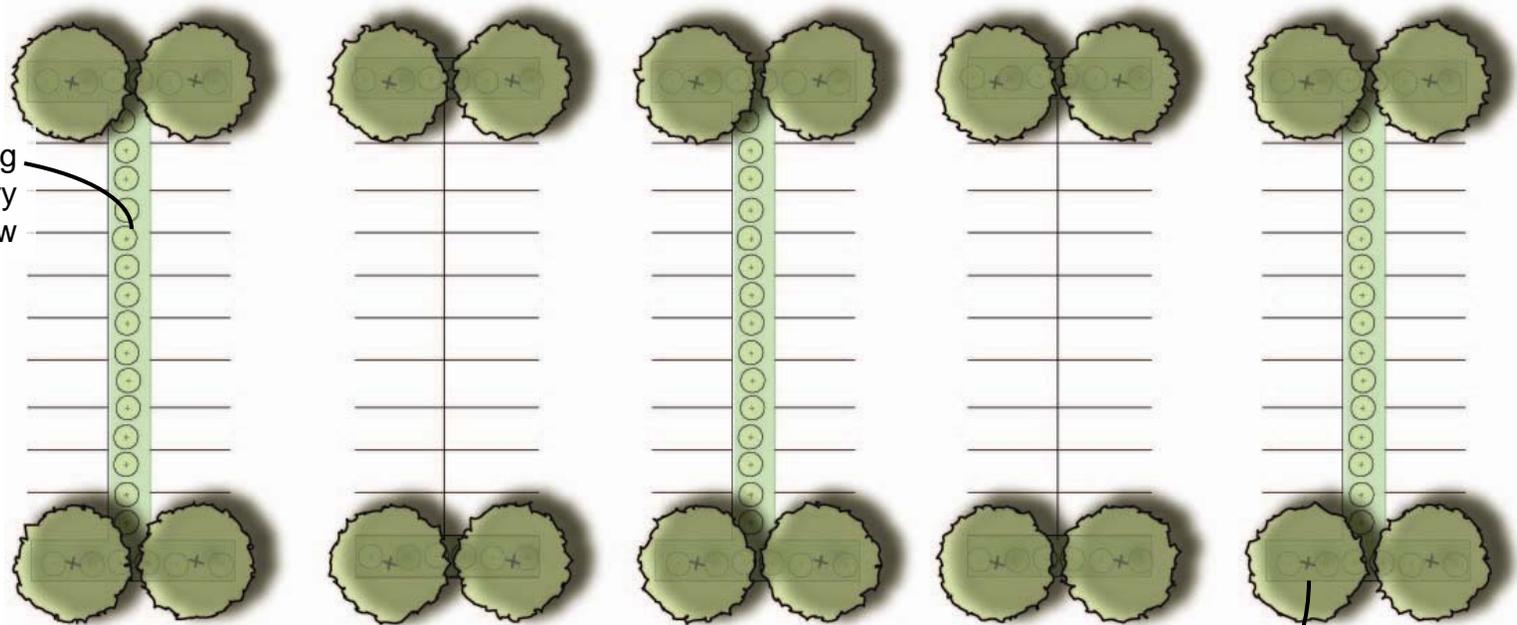


1 CANOPY TREE REQUIRED FOR EVERY 8 PARKING SPACES



LARGE COMMERCIAL PARKING LOT 150,000 SF or greater

8 Ft. wide planting strip: required every other interior row



8 Ft. wide planting beds w/ trees: required at both ends of interior parking rows

INTERIOR LANDSCAPING

Trees, shrubs & groundcover planting

Precedent images



Mitigate vast expanses of pavement through landscaping

STORMWATER RETENTION CELLS (Bioswales)

Precedent images

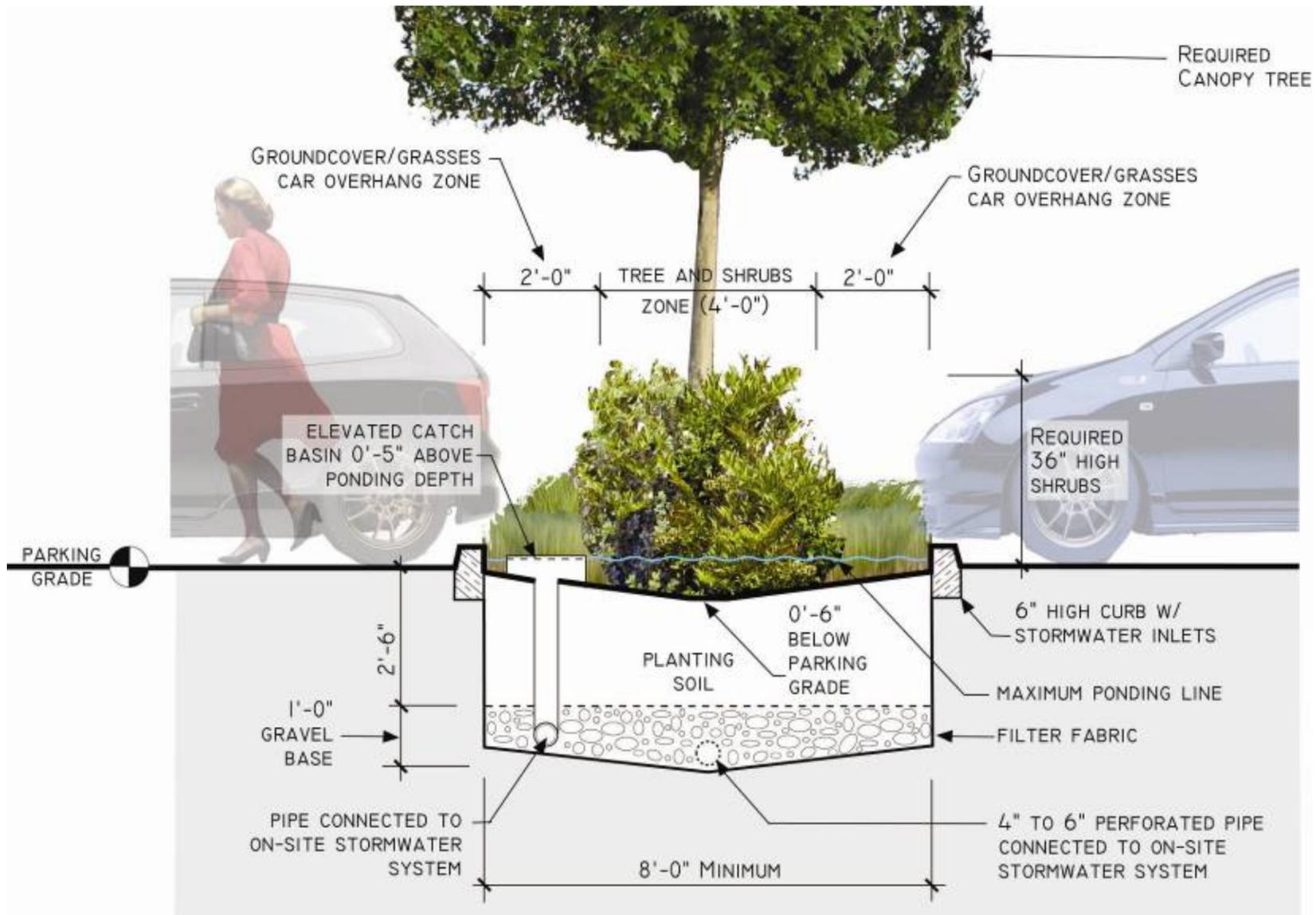


Advantages

- Natural irrigation better ensures planting remains lush and green
- Lower plant material replacement costs
- Most stormwater absorbed on site, less taxation on city sewers
- Natural filter for oil, heavy metals and other pollutants
- Lushness of planting island discourages pedestrian crossing

STORMWATER RETENTION CELL

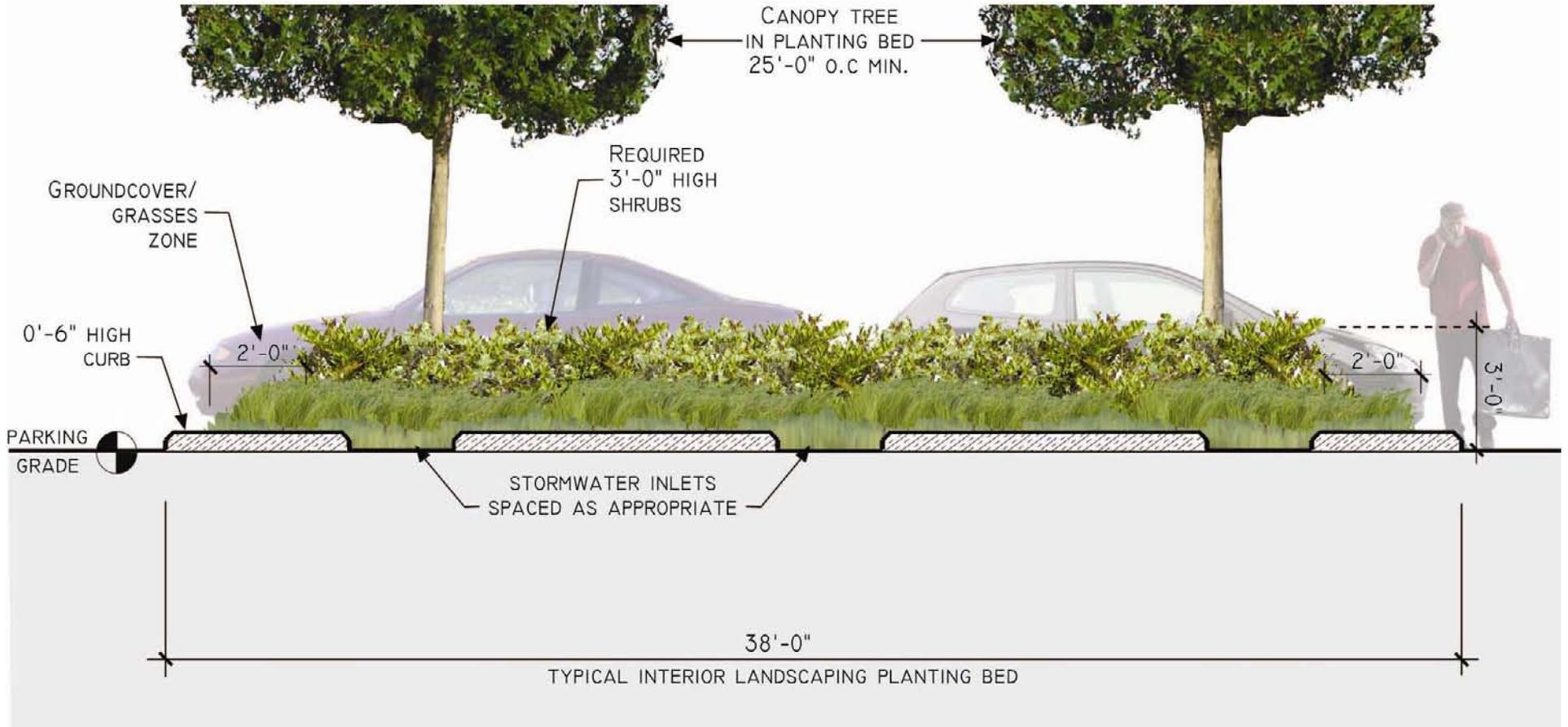
Interior landscaping

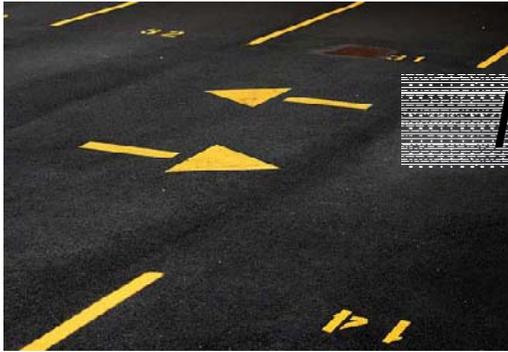




STORMWATER RETENTION CELL

Interior landscaping





MANEUVERABILITY STANDARDS

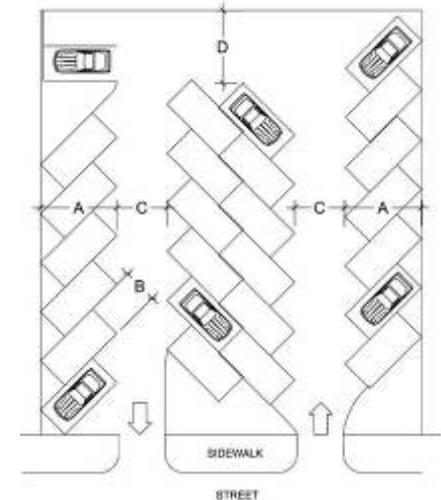
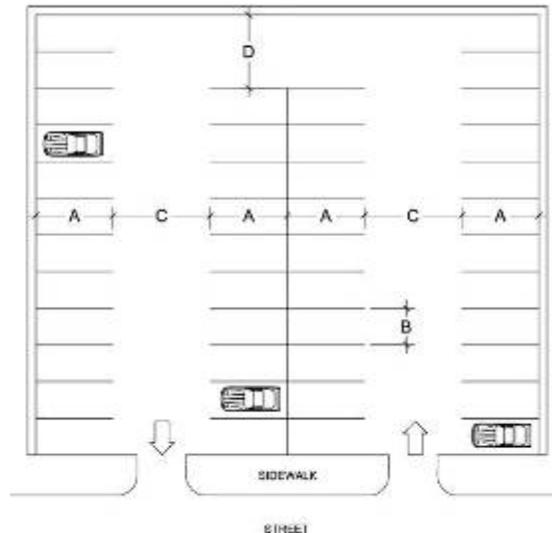
CURB CUT REGULATIONS

1. A curb cut serving one travel lane shall be 12 feet in width, excluding splays
2. A curb cut serving two travel lanes shall be 24 feet in width, excluding splays
3. Parking lots with 100 or more spaces may have curb cuts of up to 30 feet in width, excluding splays
4. Where Fire Department regulations set forth in the Administrative Code of New York City require curb cuts of greater width listed above, such curb cuts may be increased to the minimum width acceptable to the Fire Department
5. There shall be 18 feet distance between curb cuts
6. For zoning lots with 100 ft. or less street frontage, only two curb cuts shall be permitted. For every additional 50 ft. of street frontage one additional curb cut shall be permitted

	A	B	C	D
Angle of Park	Min.Length	Min. Width	Min. Aisle	Min. Turnaround
0*	8'-6"	20'-0"	13'-2"	N/A
0**	8'-6"	20'-0"	23'-3"	N/A
45	17'-1"	8'-6"	12'-10"	18'-0"
50	17'-8"	8'-6"	13'-2"	17'-6"
55	18'-1"	8'-6"	13'-7"	17'-3"
60	18'-5"	8'-6"	14'-6"	17'-0"
65	18'-7"	8'-6"	15'-4"	17'-3"
70	18'-8"	8'-6"	16'-5"	17'-6"
75	18'-7"	8'-6"	17'-10"	18'-0"
90	18'-0"	8'-6"	22'-0"	22'-0"

* Figures given are for one-way traffic

** Figures given are for two-way traffic





CASE STUDIES

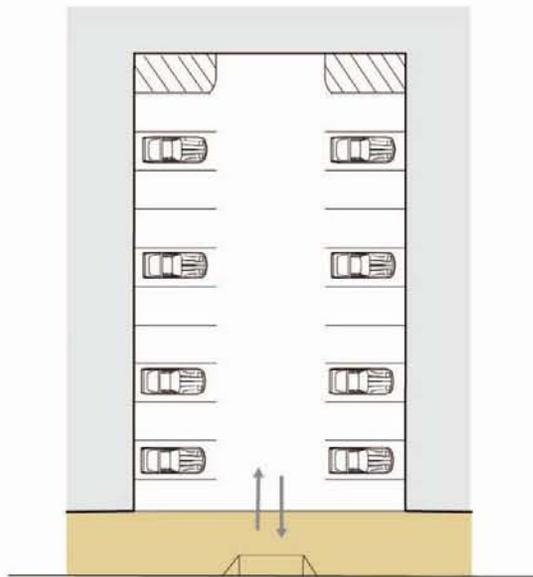
- THRESHOLD FOR PERIMETER SCREENING
(6,000 SF typical)
- THRESHOLD FOR INTERIOR LANDSCAPING
(12,000 SF typical)
- MEDIUM SIZE COMMERCIAL PARKING LOT
- LARGE COMMUNITY FACILITY PARKING LOT
- LARGE COMMERCIAL PARKING LOT

6,000 SF TYPICAL PARKING AREA

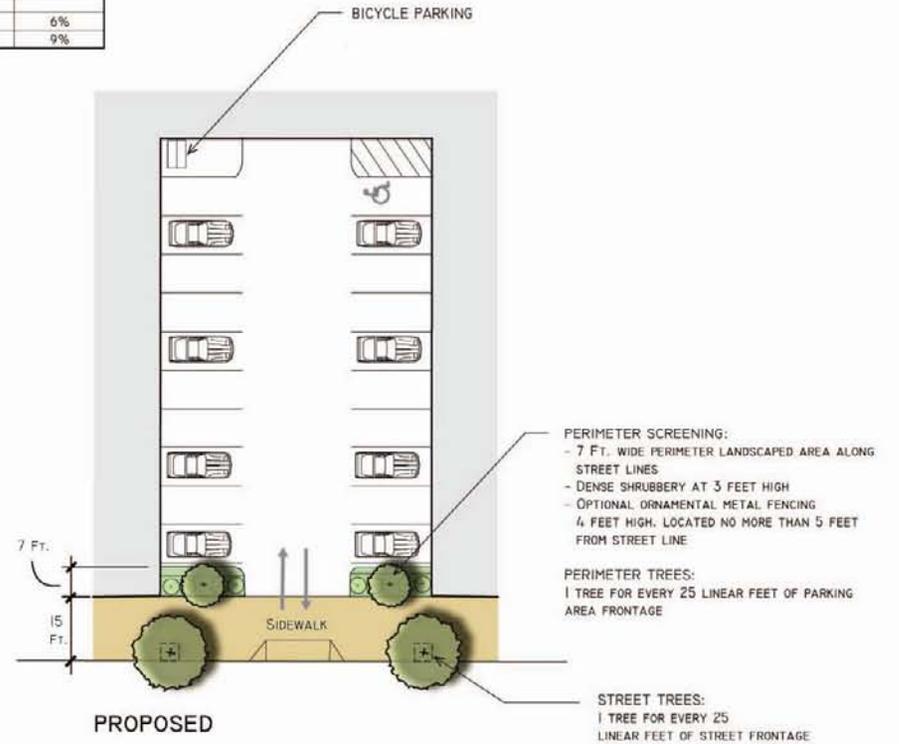
06.18.2007

EXISTING PARKING SPACES: 20
 WITH PROPOSED RULES: 20
 EVEN

	EXISTING	PROPOSAL
PARKING SPACES	20	20
LANDSCAPE REQUIREMENTS:		
+ STREET TREES	--	2
+ PERIMETER		
- SCREENING	--	260 SF
- TREES	--	2
+ INTERIOR PLANTING		
- TREES	--	--
+ SUSTAINABILITY		
- TREE CANOPY COVERAGE	--	6%
- PERMEABLE SURFACE	--	9%



EXISTING



PROPOSED

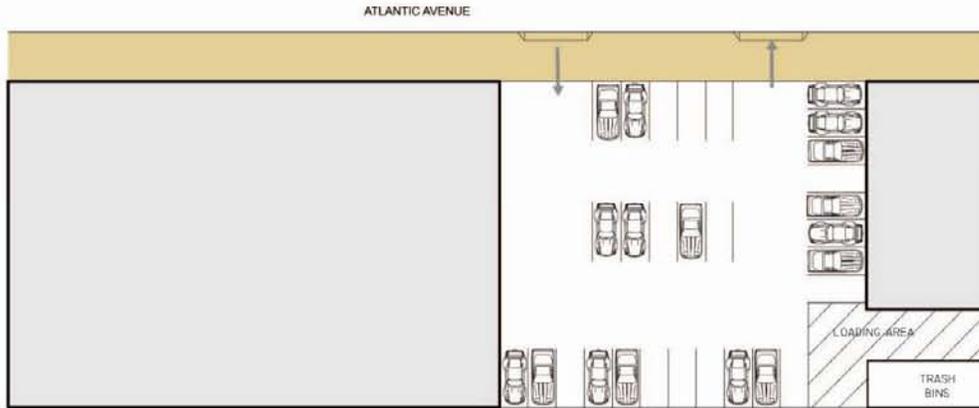


THRESHOLD FOR PERIMETER SCREENING (6,000 SF TYPICAL)

ATLANTIC AVENUE, BROOKLYN

LOT AREA: 30,000 SF ZONING DISTRICT: MI-1
 COMMERCIAL BUILDING AREA: 17,625 SF (0.50 FAR) PARKING LOT AREA: 12,375 SF

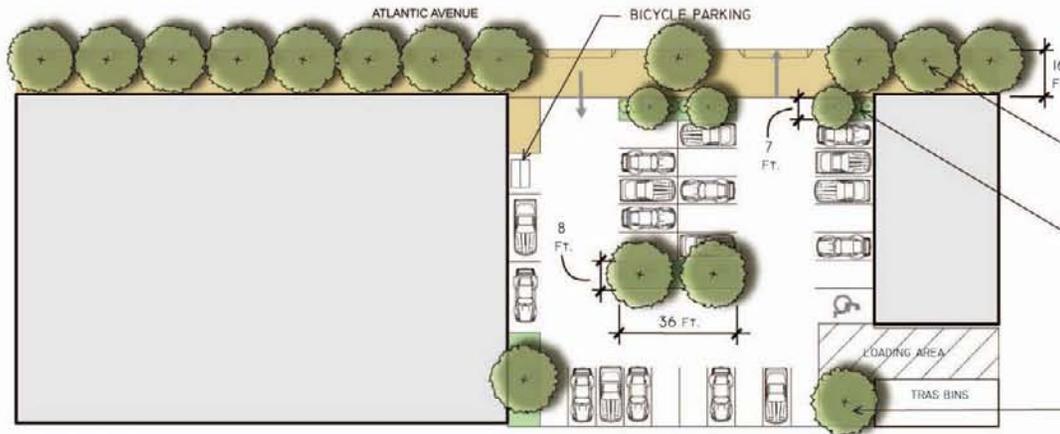
06.18.07



EXISTING

EXISTING PARKING SPACES: 29
 WITH PROPOSED RULES: 29
 EVEN

	EXISTING	PROPOSAL
PARKING SPACES	29	29
LANDSCAPE REQUIREMENTS:		
+ STREET TREES	---	12
+ PERIMETER		
- SCREENING	---	448 SF
- TREES	---	3
+ INTERIOR PLANTING		
- TREES	---	4
+ SUSTAINABILITY		
- TREE CANOPY COVERAGE	---	20%
- PERMEABLE SURFACE	---	9%



PROPOSED

- STREET TREES:
1 TREE FOR EVERY 25 LINEAR FEET OF STREET FRONTAGE
- PERIMETER SCREENING:
- 7 FEET WIDE PERIMETER LANDSCAPED AREA ALONG STREET LINES
- DENSE SHRUBBERY AT 3 FEET HIGH.
- OPTIONAL ORNAMENTAL METAL FENCING 4 FEET HIGH LOCATED NO MORE THAN 5 FEET FROM STREET LINE
- PERIMETER TREES:
1 TREE FOR EVERY 25 LINEAR FEET OF PARKING AREA FRONTAGE
- INTERIOR PLANTING:
- 1 CANOPY TREE IS REQUIRED FOR EVERY 8 PARKING SPACES
- PLANTING ISLANDS REQUIRED NO MORE THAN 15 SPACES APART (MINIMUM OF 150 SF AND 8' WIDE)



THRESHOLD FOR INTERIOR LANDSCAPING (12,000 SF TYPICAL)

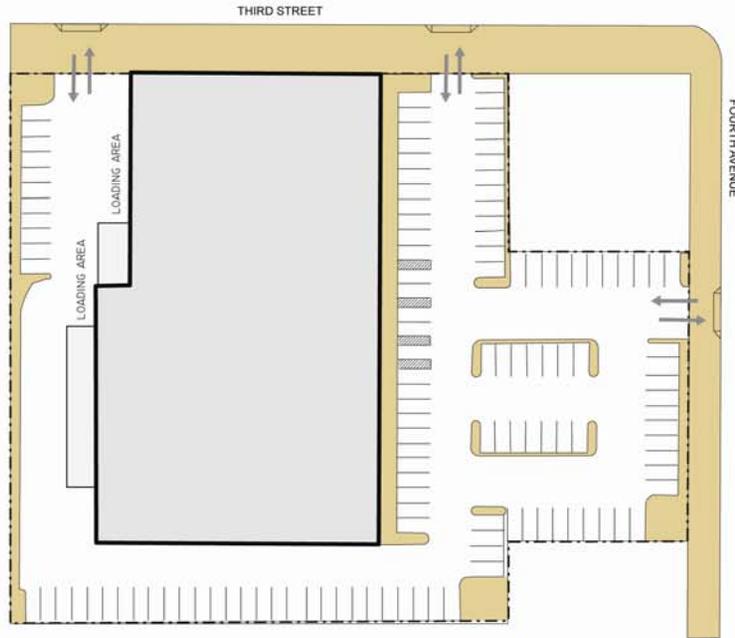
FOURTH AVENUE, BROOKLYN

LOT AREA: 88,380 SF ZONING DISTRICT: MI-2
 COMMERCIAL BUILDING AREA: 38,380 SF (0.43 FAR) PARKING LOT AREA: 50,000 SF

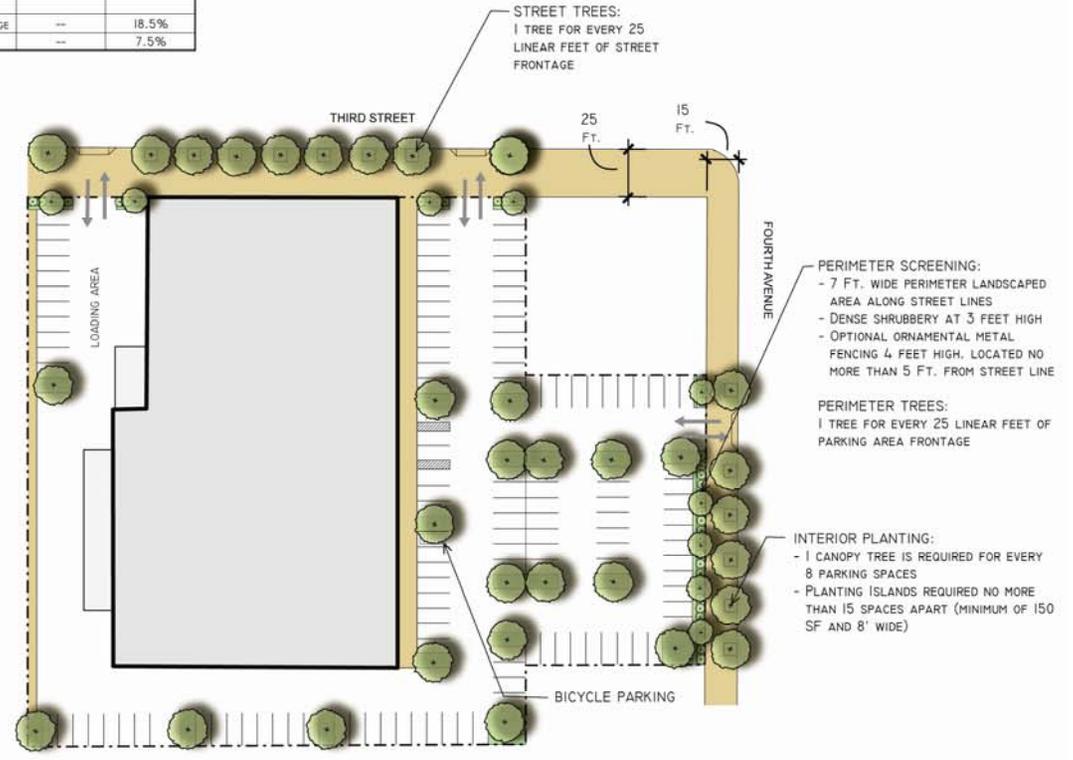
06.18.2007

REQUIRED PARKING SPACES: 127
 PROVIDED PARKING SPACES: 131
 INCREASE BY: 1%

	EXISTING	PROPOSAL
PARKING SPACES	127	131
LANDSCAPE REQUIREMENTS:		
+ STREET TREES	--	15
+ PERIMETER		
- SCREENING	--	1,327 SF
- TREES	--	9
+ INTERIOR PLANTING		
- TREES	--	16
+ SUSTAINABILITY		
- TREE CANOPY COVERAGE	--	18.5%
- PERMEABLE SURFACE	--	7.5%



EXISTING



PROPOSED



MEDIUM SIZE COMMERCIAL PARKING LOT

37th AVENUE, QUEENS

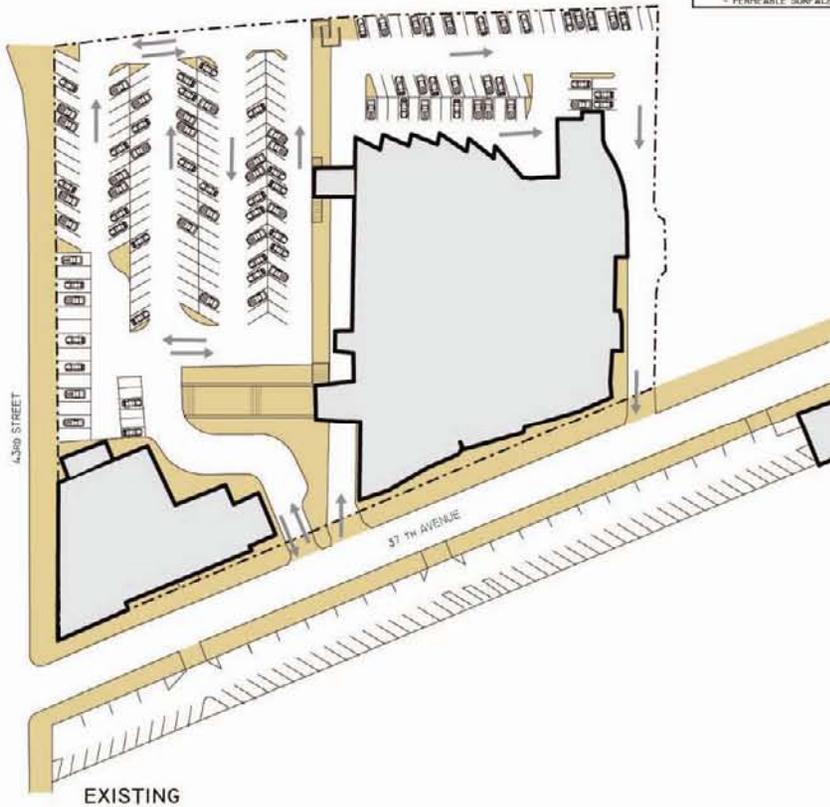
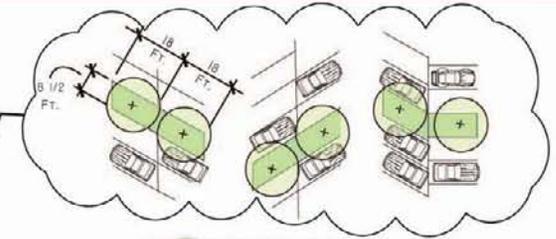
LOT AREA: 190,162 SF ZONING DISTRICT: MI-1

COMMUNITY FACILITY BUILDING AREA: 97,602 SF (0.51 FAR) PARKING LOT AREA: 131,876 SF

06.18.07

REQUIRED PARKING SPACES: 291
 PROVIDED PARKING SPACES: 291
 EVEN

	EXISTING	PROPOSAL
PARKING SPACES	291	291
LANDSCAPE REQUIREMENTS:		
+ STREET TREES	--	62
+ PERIMETER	--	
- SCREENING	--	6,640 SF
- TREES	--	33
+ INTERIOR PLANTING	--	
- TREES	--	32
+ SUSTAINABILITY	--	
- TREE CANOPY COVERAGE	--	17%
- PERMEABLE SURFACE	--	9%



LARGE COMMUNITY FACILITY PARKING LOT

TYSEN PARK, STATEN ISLAND

LOT AREA: 545,822 SF ZONING DISTRICT: C4
 COMMERCIAL BUILDING AREA: 178,222 SF (0.33 FAR) PARKING LOT AREA: 367,600 SF

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REQUIRED PARKING SPACES: 703
PROVIDED PARKING SPACES: 703
EVEN

	REQUIRED	PROVIDED
PARKING SPACES	703	703
LANDSCAPE REQUIREMENTS:	--	--
+ STREET TREES	--	--
+ PERIMETER	--	--
- SCREENING	--	615 SF
- TREES	--	26
+ INTERIOR PLANTING	--	--
- TREES	--	19



EXISTING

LARGE COMMERCIAL PARKING LOT- EXISTING

TYSEN PARK, STATEN ISLAND

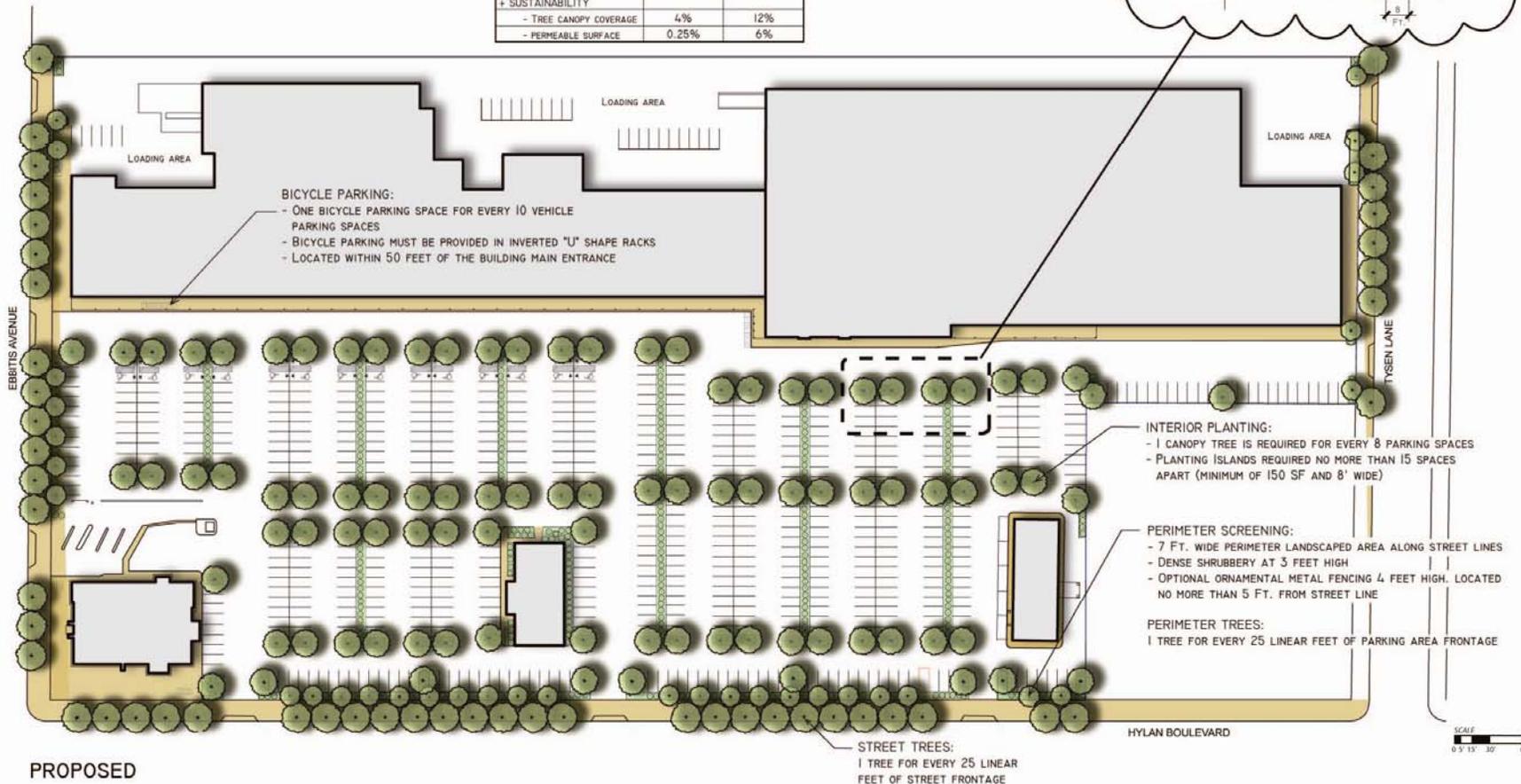
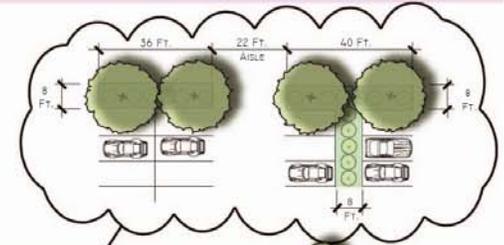
LOT AREA: 545,822 SF ZONING DISTRICT: C4-1

COMMERCIAL BUILDING AREA: 178,222 SF (0.33 FAR) PARKING LOT AREA: 367,600 SF

06.18.2007

REQUIRED PARKING SPACES: 703
 PROVIDED PARKING SPACES: 669
DECREASE BY 6%

	EXISTING	PROPOSAL
PARKING SPACES	703	669
LANDSCAPE REQUIREMENTS:		
+ STREET TREES	--	50
+ PERIMETER		
- SCREENING	615 SF	11,656 SF
- TREES	26	33
+ INTERIOR PLANTING		
- TREES	19	84
+ SUSTAINABILITY		
- TREE CANOPY COVERAGE	4%	12%
- PERMEABLE SURFACE	0.25%	6%



PROPOSED

LARGE COMMERCIAL PARKING LOT- PROPOSED



SUMMARY OF CASE STUDIES

- Average Parking Loss: 2% of total spaces
- Average Permeability of Parking Area: 9.85%
- Average Tree Canopy Coverage: 16.15%