

# INTERIM SITE PLANNING AND LANDSCAPE DESIGN STANDARDS MANUAL

CHARTER TOWNSHIP OF WATERFORD

OAKLAND COUNTY  
MICHIGAN



*“Moving Forward Together”*

Adopted: February 22, 2010  
Effective: March 10, 2010

*INTERIM SPL MANUAL*

**SECTION SPL-001 FENCING**

All fences shall be constructed of poured concrete, masonry, redwood, cedar, No. 1 pressure treated wood, wrought iron, vinyl, or chain link. If another material is used by a fence manufacturer, such material may be used after receiving written authorization from the Zoning Official. Concrete slabs, cinder blocks, or objects created for other purposes (such as doors) are prohibited from use as fencing. All supporting members used in the fence shall face inside and away from adjoining properties.

**SECTION SPL-002 SCREENING AND LANDSCAPING.**

1. Acceptable Screening and Landscaping types.

- A. Landform. Any combination of a raised earth berm and closely spaced plantings which form a complete visual barrier that is at least five (5) feet above grade. Further requirements for the use of a landform screen include the following:
  - (1) The earth berm shall comprise at least two (2) vertical feet of the landform.
  - (2) The berm shall be at least six (6) feet wide with a slope no steeper than 3:1.
  - (3) The berm area shall be curbed or edged and shall be covered by grass or other ground cover to ensure that it withstands wind and weather and retains its height and shape.
  - (4) At least one (1) twelve (12) foot high (two (2) inch caliper) tree shall be required for each thirty (30) lineal feet of landform area, in addition to the visual barrier requirements.
  - (5) At least one eighteen (18) inch high or wide shrub shall be required for each one-hundred (100) square feet of landform surface area, in addition to the visual barrier requirements.
  
- B. Buffer Strip. A strip of trees and other plantings at least fifteen (15) feet in width forming a complete visual barrier with an opacity of at least seventy-five (75) percent at least (5) feet high. Further requirements for the use of a buffer strip/screen include the following:
  - (1) All required trees shall be evergreens.
  - (2) The buffer planting area shall be curbed or edged and shall contain grass, ground cover, four (4) inch deep wood chips, or any combination of the above.
  - (3) The following species and suggested planting spacings are recommended for use in the buffer strip:

COMMON NAME	SCIENTIFIC NAME	MAX. HEIGHT	SPACING (FT. ON CENTER)
Burki (Red Cedar)	Juniperus in Virginia B	20	5
Stone Pine	Pinus Cembra	35	10
Mugo Pine	Pinus Mugo	10	5
American Arborvitea	Thuja Occidentalis	25	5
Canadian Hemlock	Tsuga Occidentali	65	12
Serbian Spruce	Picea Omoriac	50	10
Irish Juniper	Juniperus Communis	10	3
White Fir	Abies Concolor	20	8
Japanese Cryptomeria	Cryptomeria Japonica	40	8
White Pine	Pinus Strobus	65	10
Ketleeri Juniper	Juniperus Chinensis "Ketleeri"	18	5

- C. **Fence Landscape Buffer.** When this option is used for screening, it shall include the following:
- (1) All fence landscape buffers shall be built on the property line unless otherwise specified.
  - (2) The fence shall be a fence wall or solid fence.
  - (3) There shall be a minimum five (5) foot wide planting area adjacent to the fence for its entire length. In this area there shall be at least one (1) twelve (12) foot high (two (2) inch caliper) tree and at least four (4) eighteen (18) inch high or wide shrubs for every thirty (30) lineal feet of length.
  - (4) The required planting area shall be curbed or edged and shall contain grass, ground cover, four (4) inch deep wood chips, or four (4) inch deep crushed stone.
- D. **Greenbelt.** This shall be a planting strip at least twenty (20) feet wide (unless otherwise specified). The requirement includes the following:
- (1) One (1) twelve (12) foot high (two (2) inch caliper) deciduous tree or five (5) foot high evergreen tree, at time of planting, shall be required for every thirty (30) lineal feet of greenbelt area.
  - (2) Two (2) eighteen (18) inch high or wide shrubs shall be required for each fifteen (15) lineal feet of greenbelt area. Location of the shrubbery along the length of the greenbelt area is discretionary.
  - (3) The greenbelt area shall be curbed or edged and shall contain grass, ground cover, four (4) inch deep wood chips, or any combination of the above.
  - (4) Random spacing and grouping of plant materials, as well as the use of berms to increase screening effects is encouraged and is permitted with the approval of the Zoning Official.
  - (5) Necessary access drives from public rights-of-way through required greenbelts shall be permitted, but such drives shall not be subtracted from the lineal dimensions used to determine the minimum number of trees and shrubs required.
  - (6) The land area which lies between the front property line and the edge of pavement of the adjacent public street shall be landscaped with grass. However, a splash panel containing crushed stone or other inert materials of no more than thirty (30) inches in width may be placed adjacent to the curb. Nonmotorized pathways shall be provided within this area.
2. **Interior Landscaping.** For every new development, except in Single Family Residential Districts, there shall be interior landscaping areas exclusive of any other required landscaping, of at least five (5) percent of the total lot area. This landscaped area should be grouped near building entrances, along building foundations, along pedestrian walkways and along service areas. All interior landscaping shall conform to the following:
- A. One (1) twelve (12) foot high (two (2) inch caliper) deciduous tree, or four (4) foot high evergreen tree, shall be required for every four-hundred (400) square feet of required interior landscaping area.
  - B. Two (2) eighteen (18) inch high or wide shrubs shall be required for every two-hundred (200) square feet of required interior landscaping area.
  - C. The interior landscaping area shall be curbed or edged and shall contain grass, ground cover, four (4) inch deep wood chips, or four (4) inch deep crushed stone.
3. **Dumpster and Trash Receptacle Area Screening.** All Dumpster and trash receptacle areas shall be indicated on the site plan and shall be screened on at least three (3) sides by a fence wall or solid fence at least six (6) feet high. The fourth side shall consist of a gate, at least six (6) feet in height, and constructed of opaque material compatible with the material used to screen the other three sides. All dumpsters shall be located on concrete pads (no asphalt or gravel permitted).
- The fence wall or solid fence shall be constructed of materials which are similar to or compatible with the exterior materials utilized in the construction elsewhere on the site, and shall be maintained so as to remain structurally sound and completely obscuring throughout. In locating trash receptacle facilities, primary consideration shall be given to access for service, minimizing on-site traffic congestion, and minimizing visibility or other negative effects on those utilizing the site or adjoining properties. In no instance shall the dumpster pad be located within the required front yard setback.

4. **Existing Plant Material.** In instances where healthy plant material exists on a site prior to its development, the Zoning Official may adjust the application of the above standards to allow credit for such plant material if such an adjustment is in keeping with, and will preserve, the intent of this Section.

All existing plant materials must first be inspected by the Zoning Official to determine the health and desirability of such materials. In the event plant materials are to be saved, prior approval must be obtained from the Zoning Official before any delimiting, root pruning, or other work is done.

If such existing plant material is labeled "To Be Saved" on site plans, protective techniques, such as (but not limited to) fencing or boards placed at the drip-line around the perimeter of the plant material, shall be installed. No vehicle or other construction equipment shall be parked or stored within the drip-line of any plant material intended to be saved.

In the event that healthy trees labeled "To Be Saved" on the approved site plan are destroyed or damaged, as determined by the Zoning Official, the owner, developer or contractor shall replace said trees with trees of comparable type.

5. **Suggested Trees and Shrubs for Parking Interior Landscaping.**

London Plane Tree	Snowdrift Crabapple
Sweetgum	Marshall Green Ash
Linden Trees	Hardy Rubber Tree
Junipers	Hibiscus
Hawthorns	Scotch Pine
Dwarf Callery Pear	

6. **Suggested Trees and Shrubs for Greenbelt Areas and Interior Landscape Areas.**

Amur Maple	Sweetgum	Goldenrain Tree
Hawthorns	European Linden	European Hornbeam
White Ash (seedless)	Scarlet Oak	Littleleaf Linden
Honeylocust	Zelkova	Japanese Tree Lilac
Scotch Pine	Border Privet	Buckhorn
Henry St. Johnswort	Junipers	Gingko
Mugo Pine	Serbian Spruce	Bristly Locust
Mockorange	Evonymus	Eastern Ninebark
Beauty Bush	Smoke Tree	Cottoneaster
Snowdrift Crabapple	Hedge Maple	Dwarf Callery Pear
Hardy Rubber Tree	Bayberry	

7. **Recommended Salt Resistant Trees and Shrubs.**

Pinus Nigra	Honey Locust
Adnorra Juniper	Tamarix
Sweetgum	Hibiscus

8. **Recommended Trees and Shrubs for Shady Areas.**

Euvonymus	Mountain Laurel
Mabonia Aquifolium	Cottoneasters
Amelanchier	Arborviteas
Crownvetch	Dogwoods
Honey Locust	Viburnums
Alpine Currant	

9. **Parking Area Landscaping Requirements.**

- A. A minimum twenty (20) foot wide greenbelt as designed and regulated in **Section SPL-002.1.D** shall be located between any off-street parking areas or vehicular use areas and any adjacent public right-of-way excluding alleys.
- B. Parking interior landscaping shall be provided in parking areas in accordance with the following requirements:
  - (1) Any off-street parking areas containing ten (10) or more parking spaces shall have within the parking area interior landscaping according to the following schedule:

<u>Use</u>	<u>Parking Interior Landscaping Per Parking Space (in sq. ft.)</u>
Commercial/Office	20
Residential (Multiple)	15
Industrial	10

- (2) Each separate landscaped area shall be no less than ninety (90) square feet and shall have a minimum dimension of at least five (5) feet. No more than three (3) landscaped units of ninety (90) square feet may be combined in plans designed to meet the minimum requirements.
- (3) Bumper stops, curbing or wheel chocks shall be provided in conjunction with any driveway, parking aisle or parking space (paved or unpaved) a minimum distance of five (5) feet from any required fence, wall or other screening, or any adjacent building which is constructed on the property line in order to prevent any vehicle from damaging or encroaching upon such required screening or adjacent buildings. Either concrete or asphalt may be used with specifications and plans approved by the Township Engineer.
- (4) All parking interior landscaping shall conform to the following requirements:
  - (A) One (1) twelve (12) foot high, two (2) inch caliper deciduous tree shall be required for every one hundred (100) square feet or fraction thereof of required parking interior landscaping area.
  - (B) The parking interior landscaping area shall be curbed and shall contain grass, ground cover, four (4) inch deep wood chips, or four (4) inch deep crushed stone.

**SECTION SPL-003      PARKING AND LOADING**

- 1. **Off-Street Parking Requirements.** In all districts space for off-street parking of self propelled motor vehicles used by occupants, employees, and/or patrons of building and uses hereafter erected, altered, or extended after the effective date of this Ordinance, shall be provided as herein prescribed. All required off-street parking areas along with the prescribed number of spaces shall not be encroached upon so long as the main building use remains, unless an equivalent number of spaces are provided elsewhere in conformance with this Ordinance. Off-street parking existing at the effective date of this Ordinance shall not be reduced in size or number of spaces less than that required under this ordinance for any existing building or use which it serves. Loading space as required in SECTION 2601 shall not be construed as supplying off-street parking space. The amount of required off-street parking space shall be stated on application for a building permit to build a new building or use, or enlarge an existing one.
- 2. **Parking Area Paving Requirement.** All parking and loading areas, including all access aisles and vehicular use areas, shall be suitably graded and drained, and paved with concrete or asphalt prior to the issuance of an occupancy permit.
- 3. **Collective Parking Provision.** Nothing in this Ordinance shall be construed to prevent collective off-street parking facilities for two or more buildings or uses. However, such facilities shall not provide parking for less than the sum of the requirements for the various individual buildings or uses when computed separately in accordance with the schedule in this Article.

4. **Parking Space Standards, Layouts, and Construction.** Off-street parking areas shall be laid out, constructed, and maintained in accordance with the following standards and regulations:
- A. No parking area shall be constructed unless and until site plan approval in accordance with **Section 4-004** has been granted.
  - B. Plans for the layout of off-street parking facilities shall be in accordance with the following minimum requirements:

Table I Off-Street Parking Lot Layout					
Parking				Total Width of One Tier of	Total Width of Two Tiers of
Parking Pattern	Space Width	Space Length	Aisle Width	Parking Plus Aisle	Parking Plus Aisle
o (parallel)	8'	21'	12'	20' one way	28' one way
				32' two way	40' two way
45	8'6"	18'	14'	32' two way	50' two way
60	8'6"	18'	18'	37'	56'
90	9'	18'	22'	40'	58'

Table II Boat Launch Parking Lot Layout					
Wherever a parking lot is constructed to provide required boat launch parking, such parking lot shall be laid out in accordance with the following requirements:					
Parking				Total Width of One Tier of *	Total Width of Two Tiers of *
Parking Pattern	Space Width	Space Length	Aisle Width	Parking Plus Aisle	Parking Plus Aisle
45	10'	40'	20'	56'	92'
60	10'	40'	20'	65'	105'
90	10'	40'	25'	80'	120'
*These figures include additional maneuvering space immediately adjacent to parking spaces.					

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- C. Handicapped parking spaces shall be provided in all off street parking lots in accordance with the table below (Public Act No. 180, Public Acts of 1974, State of Michigan). These spaces shall be identified by signs as being reserved for physically handicapped persons. Signs shall be located approximately six (6) feet above grade.
- D. Each reserved parking space shall be not less than twelve (12) feet wide. Where a curb exists between a parking lot surface and a sidewalk surface, an inclined approach or curb cut with a gradient of not more than one (1) foot in twelve (12) feet and a width of not less than four (4) feet shall be provided for wheelchair access. Parking spaces for the physically handicapped shall be located as close as possible to walkways and entrances. Signs shall be provided when necessary indicating the direction of travel to an accessible entrance.

Total Parking in Lot		Required Number of Accessible Spaces
Up to	25	1
25 to	50	2
51 to	75	3
76 to	100	4
101 to	150	5
151 to	200	6
201 to	300	7
301 to	400	8
401 to	500	9
501 to	1,000	2 percent of total
Over	1,000	20 plus 1 for each 100 over 1,000

- E. All spaces shall provide adequate access by means of aisles. Backing directly onto a street shall be prohibited.
- F. All parking lots shall have access from clearly limited and defined driveways not less than sixteen (16) feet wide for a one way drive and twenty-two (22) feet wide for a two way drive. Construction within the road right-of-way for driveways shall be under permit from either the Oakland County Road Commission or the Michigan Department of State Highways, whichever is appropriate, said permits(s) being necessary prior to the granting of site plan approval.
- G. Each entrance and exit to and from such parking lot shall be at least twenty-five (25) feet distant from any adjacent property located in any residential district.
- H. Bumper stops, curbing, or wheel chocks shall be provided to prevent any vehicle from damaging or encroaching upon any required wall, fence or buffer strips or upon any building adjacent to the parking lot.



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5. **Schedule of Required Parking Spaces by Type of Use.** The minimum number of parking spaces required for various types of uses shall be determined in accordance with the following schedule. In the case of a use not specifically mentioned, the required off-street parking facilities shall be the same as that for the most comparable use for which a requirement is listed. When measurement determining the number of required parking spaces results in a fractional space, fractions up to and including one-half (1/2) shall be disregarded and fractions over one-half (1/2) shall require one parking space.

USE		REQUIRED NUMBER OF PARKING SPACES PER UNIT OF MEASURE
1.	Residential, single family, two family and duplex unit.	2 for each dwelling unit.
2.	Residential, multiple family, efficiency and one bedroom units -  Two bedroom units or more - Housing for the elderly -	1.5 per unit.  2 per unit. 1 for every two units.
3.	Mobile home parks.	2 for each mobile home site plus one (1) for each three (3) mobile home sites.
4.	Private clubs, fraternities, and dormitories.	1 for every two (2) beds or one hundred-twenty-five (125) square feet of gross floor area, whichever is greater.
5.	Tourist home, motel and hotel.	1 for every rooming unit, plus one (1) for each one-hundred (100) square feet of gross floor area of affiliated uses.
6.	Convents, Convalescent homes, children's homes and orphanages.	1 for every three (3) beds plus one (1) parking space for each employee working on the premises.
7.	Hospitals and sanitariums.	1 for every bed plus one (1) parking space for each employee computed on the basis of the greatest number of persons employed at any given period of time during the day or night.
8.	Elementary schools.	1 for each teacher, employee or administrator in addition to the parking requirements of the auditorium or assembly hall.
9.	Senior high schools.	1 for each teacher, employee or administrator plus one (1) parking space for every ten (10) students, in addition to the parking requirements of the auditorium of assembly hall.
10.	Churches.	1 for every three (3) seats or six (6) feet of pews or 21 (twenty-one) square feet of usable floor area in the main place of assembly, whichever is greater.
11.	Libraries and museums.	1 for every five-hundred (500) square feet of usable floor area.
12.	Theaters, auditoriums and assembly halls.	1 for every three (3) seats.

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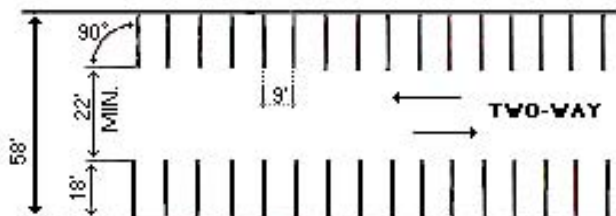
USE		REQUIRED NUMBER OF PARKING SPACES PER UNIT OF MEASURE
13.	Dance halls, exhibition halls (without fixed seats).	1 for every one-hundred-twenty-five (125) square feet of gross floor area.
14.	Mortuary establishments and funeral homes.	1 for every thirty (30) square feet of floor space in the slumber rooms or individual funeral service rooms.
15.	Private clubs and lodges.	1 for each three (3) persons allowed within the maximum occupancy load as established by the local, county or state fire, building and health codes.
16.	Nursery schools or Child Day Care Centers.	1 for each three-hundred-fifty (350) square feet of usable floor area.
17.	Golf courses, except miniature golf courses.	4 per hole plus one (1) for each employee in addition to the requirements for a place serving food or beverages on the site.
18.	Miniature golf courses.	3 for each hole.
19.	Business and professional.	1 for every one offices' hundred-fifty (150) square feet of usable floor area; Medical Offices: 1 for every one-hundred (100) square feet of usable floor area.
20.	Banks and post offices.	1 for every two-hundred-fifty (250) square feet of usable floor area.
21.	Bowling alley	6 for each bowling lane in addition to the requirements for a place serving food or beverages on the site.
22.	Stadiums and sports arenas.	1 for every three (3) seats or six (6) feet of benches.
23.	All places serving food and Beverages	<u>Sit down</u> : 15 per one-thousand (1,000) square feet of usable floor area; <u>Carry-out</u> : 8 per one-thousand (1,000) square feet of usable floor area; <u>Drive-in</u> : 30 per one-thousand (1,000) square feet of usable floor area.
24.	Roadside vegetable and fruit Stands	2 for each one-thousand (100) square feet of sales area.
25.	Coin operated laundromats and dry cleaning establishments.	1 for each two (2) washing or drying cleaning machines.
26.	Barber shops and beauty parlors.	3 for each barber or beauty chair.
27.	Furniture and appliance stores.	1 for every eight-hundred (800) square feet of usable floor area.
28.	Gasoline service station.	3 per lubrication stall or minimum of three (3) per station if no lubrication stalls.
29.	Automobile car washes.	In accordance with the requirements in Section 1304.3.
30.	Motor vehicle sales and service establishments.	1 for every two hundred-fifty (250) square feet of usable floor area of the sales room plus one (1) parking space for each service stall in service room.

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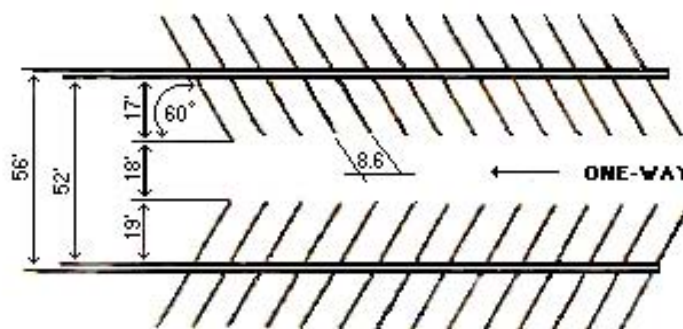
USE		REQUIRED NUMBER OF PARKING SPACES PER UNIT OF MEASURE
31.	Open air business.	1 for each five-hundred (500) square feet of land area being utilized for retail purposes. In the case of outdoor amusement land uses, one (1) parking space is required for every two (2) participant spaces.
32.	Retail stores except otherwise specified herein.	1 for every one-hundred-fifty (150) square feet of usable floor area.
33.	Wholesale establishments.	1 for every two-thousand (2,000) square feet of usable floor area.
34.	Industrial establishments, research and testing laboratories.	1 for every six-hundred-fifty (650) square feet of usable floor area.
35.	Warehouses and storage buildings.	1 for each two (2) employees computed on the basis of the greatest number of persons employed at any given time period.
36.	Mini-warehouses (self-storage warehouses).	5 for each mini-warehouse site.
37.	Boat launch, public or private.	24 combined vehicle and boat trailer spaces (10' x 40') for each one (1) individual boat launch; <b>plus</b> , One (1) space for each employee on a regular shift; <b>plus</b> , Any additional spaces as required for all affiliated uses or facilities.
38.	Boat liveries, public or private. (Effective 9/22/89)	One (1) space for each one (1) boat slip located on, in or above the water; <b>plus</b> , One half (½) space for each one (1) boat slip located on, above or below the land, <b>plus</b> , One (1) space for each employee on a regular shift; <b>plus</b> , 24 combined vehicle and boat trailer spaces (10' x 40') for each one (1) individual boat launch; <b>plus</b> , Any additional spaces as required for all affiliated uses or facilities.
39.	Marinas, public or private.	One (1) space for each one (1) boat slip located on, in or above the water; <b>plus</b> , One half (½) space for each one (1) boat slip located on, above or below the land, <b>plus</b> , One (1) space for each employee on a regular shift; <b>plus</b> , 24 combined vehicle and boat trailer spaces (10' x 40') for each one (1) individual boat launch; <b>plus</b> , Any additional spaces as required for all affiliated uses or facilities.

## PARKING LAYOUTS

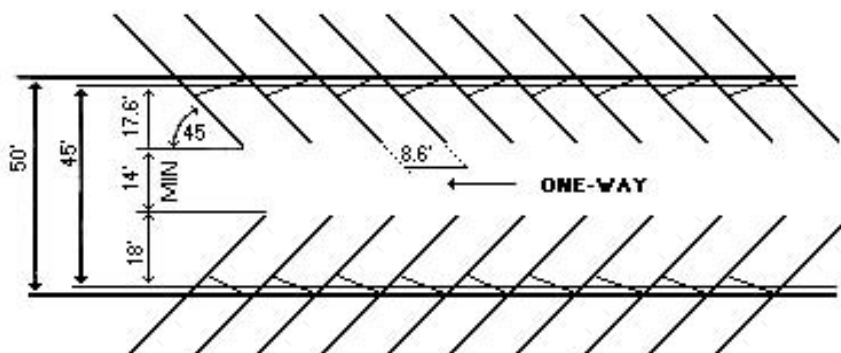
90 DEGREE



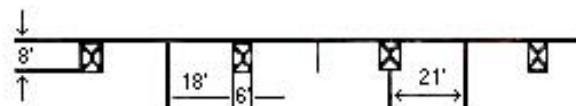
60 DEGREE



45 DEGREE

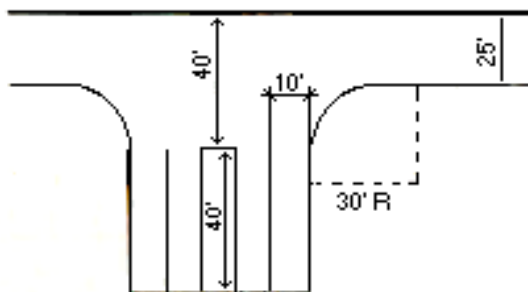


PARALLEL

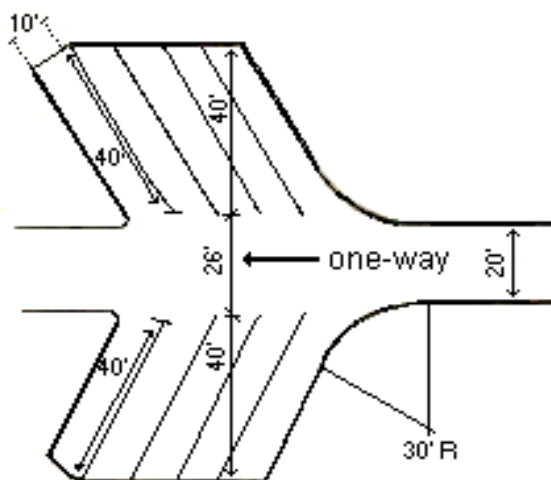


### Boat Launch Parking Layouts

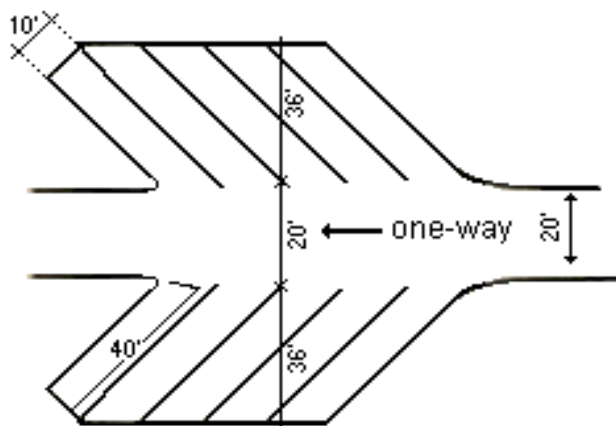
**90 Degree**



**60 Degree**



**45 Degree**



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6. **Off-Street Loading Requirements.** On the premises involved in receipt or distribution of vehicles, materials or merchandise, there shall be provided and maintained adequate space for standing, loading, and unloading services to avoid undue interference with public use of the streets, alleys, or any required access aisles for off-street parking areas. Such loading, and unloading space shall be an area ten (10) feet by fifty (50) feet with fifteen (15) foot height clearance, and such space shall be provided according to the following schedule:

REQUIRED SPACES	GROSS FLOOR AREA (SQ. FT.)
None	0 - 1,999
One space	2,000 - 19,000
One space plus one space for each sq. ft. in excess of 20,000 sq. ft.	20,000 - 99,999
Five space plus one space for each 40,000 sq. ft. in excess of 100,000 sq. ft.	100,000 - 499,999
Fifteen spaces plus one space for each 80,000 sq. ft. in excess of 500,000 sq. ft.	Over - 500,000