TRAVERSE
landscape architects

Aquidneck Commerce

Landscape Maintenance Manual

CCB Capital and Real Estate 543 Thames Street

Newport, RI 02840

2022

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I. INTRODUCTION

A. Aquidneck Commerce Center is a mixed use development located in Middletown Rhode Island, A.P. 114 Lots 129 & 504

The site is located within the LBA (Limited Business – Traffic Sensitive) zone and is approximately 1.95 Acres

The landscape for Aquidneck Commerce Center is meant to knit the development (specifically the new residential units) into the surrounding area. The landscape design focuses on providing buffer between abutting properties and surrounding uses, new shade trees, open lawn area and attractive foundation plantings to complement the new building.

B. PURPOSE OF THIS DOCUMENT

This document provides general guidance on how the landscape areas should be cared for once the Owner is responsible for maintenance. These guidelines are set up by type of landscape area and should be used on conjunction with the "Stormwater System Operations and Maintenance Plan" Provided by Northeast Engineers and Consultants. The following areas are included within this plan:

- Non Lawn Area Seeding
- Trees
- Shrubbery
- Lawn Areas

These Areas are noted on the attached **Appendix A for reference.*

C. RESPONSIBLE PARTIES

The Owner and party responsible for the operation and maintenance of the Stormwater Management System is:

CCB Capital and Real Estate
543 Thames Street
Newport, RI 02840

The Owner intends that this Plan shall run with the land and be binding upon the Owner and the Owner's successors and assigns. A copy of this Plan shall be provided to any future property owners. This Section shall be amended as necessary.

II. GUIDELINES FOR MAINTENANCE OF PLANTING INSTALLATIONS

the overriding principle is to preserve and promote the natural attributes of each plant species and not try to create a pruned form for which that species was not intended.

A. MAINTENANCE OF NON- LAWN AREA SEED MIXES

All infiltration basins have been seeded with a Conservation Seed Mix as supplied by New England Wetland Plants

The New England Conservation/Wildlife Mix provides a permanent cover of grasses, wildflowers, and legumes. For both good erosion control and wildlife habitat value. The plants in this mix can tolerate infrequent inundation and wet areas. Species include: SPECIES: Virginia Wild Rye (Elymus virginicus), Little Bluestem (Schizachyrium scoparium), Big Bluestem (Andropogon gerardii), Red Fescue (Festuca rubra), Switch Grass (Panicum virgatum), Partridge Pea (Chamaecrista fasciculata), Panicledleaf Tick Trefoil (Desmodium paniculatum), Indian Grass (Sorghastrum nutans), Blue Vervain (Verbena hastata), Butterfly Milkweed (Asclepias tuberosa), Black Eyed Susan (Rudbeckia hirta), Common Sneezeweed (Helenium autunale), Heath Aster (Asterpilosus/Symphyotrichum pilosum), Early Goldenrod (Solidago juncea), Upland Bentgrass (Agrostis perennans).

1. Trimming – These areas may be trimmed each year in the late fall or early spring to keep invasive and woody species at bay. Otherwise, they should be allowed to grow throughout the season provide wildflower interest and to cover areas of rip-rap and depressions.

    (a) Trim back the management areas once a year

    (b) Trimming can take place in the spring before May 15th, or in the fall, after October 1st. For fall mowing, we recommend waiting until October, when late blooming plants have passed.

    (c) Trim back seed mix to a height of 6-8”. Cutting or mowing to a height lower than 6-8” every year will have a negative impact on the seed mix.

    (d) Fertilizing is not required.

    (e) Recommended Equipment: In small areas, use a string trimmer or weed eater. In large areas, a flail mower is the best option (they chop weeds as they are cut, instead of laying the cut weeds on top of seedlings). If a flail mower is unavailable. A rotary mower or sickle bar mower can be used.

B. MAINTENANCE OF TREES

1. Pruning of live growth should be performed when the tree is dormant, whenever possible.
2. Trees should be inspected yearly to evaluate for form and safety and perform necessary corrections.
3. Deadwood should be removed yearly.
4. Cross branching should be eliminated, selecting for strongest branch that best fills the available space.
5. Suckers from trunks and limbs that are left to become large will only promote re-growth of new suckers when removed. They should be removed when small.
6. On deciduous trees, branches that turn inward toward the trunk should be removed when thinning the canopy.
7. Branches that are removed should be pruned back to the branch collar and no farther. This may leave a 'lump' but the tree will heal faster. To leave a stub beyond the branch collar delays healing and could actually promote decay.
8. When choosing between a limb that has a narrow V crotch and one that has a wide-angle crotch, keep the wide-angle crotch when possible.
9. Removal of lower branches can be performed at most times of year. It should be selective to maintain a natural appearance and maintain a safe clearance over pedestrian traffic areas.
10. Trees should be evaluated on a regular basis to determine if such fertilization treatments would be beneficial.
11. Insect and disease issues should be evaluated and addressed on a yearly basis.
12. Yearly, all trees should be inspected based on the general question 'Is there anything about this tree that is unsafe' and potential problems should be addressed.
13. Properly mulched trees have a less stressful existence. Never allow mulch to be placed against the trunk above the root flare. Over time, doing otherwise will weaken and possibly kill the tree. If there are any trees with a trunk that extends straight into the ground, pull soil away from the tree until the root flare is exposed.
14. In any town approved plantings, any loss needs to be reviewed and replaced with the same variety, size and caliper initially installed unless there is an overriding reason not to do so.
15. Any pruning or treatment of a tree that is contrary to the purpose of the originally approved plan will be subject to correction or replacement by the town at the owner's expense.

16. It is recommended that licensed arborists do these inspections on a yearly basis.

C. MAINTANANCE OF SHRUBBERY

1. Most shrubbery should be maintained to retain its natural characteristics. With some evergreen species, the design calls for formal structure as part of the desired effect. It should be specified in the design that this should be the treatment or the evergreens should, otherwise, be maintained displaying their natural characteristics.
2. Flowering shrubbery that needs pruning should be pruned immediately after blooming. This prevents interference with production of flower buds for the following season.
3. Flowering shrubs that produce flower buds on the present season's growth can be pruned, after blooming, at any time before the next season's growth begins.
4. Formally sheered evergreens should not have their last trimming within the last month of the growing season to prevent the appearance of dry, brown tips throughout the winter.
5. Any sheering of evergreens in the dormant season should not be done until late winter and just before new spring growth to prevent desiccation from cold winter winds and frozen ground which inhibits moisture uptake.
6. As with trees, fertilization should not be done without determination of need.
7. Shrubbery should be mulched under the same guidelines as with trees.
8. At no point should landscape fabric be used as a weed control in beds.
9. If mechanical efforts are not used to control weed growth, any chemical applications should be applied by a licensed applicator.
10. As with trees, any plant losses of materials in the original design should be replaced with the same variety and a comparable size to the planting unless there is an acceptable extenuating circumstance or unless the filling in of the other existing plants in the plan make replacement unnecessary.
11. Ornamental Grasses should be cut back once a year in late fall/ early winter.

D. MAINTENANCE OF LAWN AREAS

1. Mowing and trimming- satisfactory turf coverage should be mowed and trimmed as needed to maintain a height-of-cut (HOC) between 2.5" and

3.5" to be determined by the Owner. Clippings will be side discharged or mulched into the turf canopy. Lawns must be maintained to present a neat appearance. In dry weather, lawn mowing may be at a reduced or the cut raised.

2. Fertilization- Turf should receive one annual application of fertilizer in the autumn of each year that consists of at least 1 lb. of actual nitrogen per thousand square feet. Fertilizer products having 30% to 50%+ slow release properties will be favored with the intention of building a "bank" of available nutrients. Additional fertilizer inputs will be driven by labor and resource availability.

   Lawn treatments should be applied by a licensed applicator using a specific program for the location. Applicator shall submit a written plan describing treatments as well as timing. Any treatments need to be made with the utmost care to prevent any chemical runoff from the specific application area and into public drains, water sources and other, non-site properties.

3. Aerification should be done once annually or as equipment and labor are available. Preferred equipment will be the ground driven aerator with a ¾" dual hollow tine set-up. Seeding operations should be coordinated with aerification to maximize the value of both processes.

4. Additional Seeding- Thin or bare areas deemed unacceptable should be documented and addressed by priority. Renovation will consist of soil cultivation, seeding, and fertilization using a "starter" type product. Methods of renovation should be determined by site restrictions, equipment, labor, and material availability.

III. SITE CLEAN UPS

Along with regular maintenance "Site Clean Ups" shall be performed twice a year.

A. SPRING CLEAN UP

1. Spring clean up shall be performed between in early spring generally between April to the End of May thought this may be variable due to weather. Spring clean ups should include removing any site debris, branches and leaves from plant beds and lawn areas. Plant beds shall be amended with compost if required and to make the soil more friable. Beds shall be top dressed with mulch only as required to achieve a light covering no greater then 3". Care shall be taken to ensure that mulch is not piled up against plants and the top of beds elevated beyond the original grade.

B. FALL CLEAN UPS

1. Fall Clean ups shall be performed in late fall between the months of October and November and include the removal of all lawn debris, branches and leaves. At this time all ornamental grasses may be cut back or if desired to maintain plumes they can be cut back in late winter.

IV. MATERIALS

The following materials are defined for refence to ensure the continued maintenance of the property maintains the initial design intent and continuity.

A. MULCH

1. Mulch shall be shredded hardwood mulch shall be derived from hardwood aged to a minimum of six months and no more than eighteen months. The bark shall be shredded so that the resulting pieces are no more than ¼ inch thick and no longer than three inches (3"). The mulch shall be free of stringy material and shall not contain an excess of fine particles. The mulch shall be brown in color, free of dye, leaves, twigs, sod, weeds, shavings and other foreign materials which are injurious to health plant growth. Mulch shall not have an excess of fine particles, overly composted or soggy compost material. Mulch shall not have an unpleasant odor nor have any evidence of fungus growth.

B. CLEAN SCREENED LOAM

1. New loam shall be a fertile, friable medium textured sandy loam free of material toxic to healthy plant growth. Loam shall also be free of all stumps, roots, stones and other extraneous matter an inch (1") or greater in diameter. The pH shall be between 6.5 and 7.5. Organic content shall be a minimum of 5%. The loam shall possess good filtration and permeability rates.

C. ORGANIC COMPOST

1. Organic Compost shall be natural or manufactured mature, composted organic material produced from a DEP-approved composting vendor. Only Federal EPA Class A or Massachusetts Type I compost products shall be used. **Sewage Sludge (Biosolids) shall not be used.** The following shall be requirements shall be met:
2. Compost shall originate from aged organic materials, free from sticks, stones and/or other substances which would be injurious to health plant growth.
3. Test results shall indicate maturity and age of organic compost. Raw uncomposted or unprocessed or incompletely composted organic matter shall be rejected.
4. Compost shall contain no uncomposted bulking agents such as uncomposted wood chips and shall be free from hard lumps and free from seeping water when handled.
5. Compost shall be free from sticks, stones, plastic, debris or other substances which would be injurious to healthy plant growth. 100% of compost material shall pass a ½" sieve.
6. Acidity range shall be pH 6 minimum and 8 maximum when tested according to methods of testing or A.O.A.C.
7. Organic matter shall not be less than 30% as determined by ASTM D2974.
8. Moisture content of 35% to 70%, as determined by ASTM D2974
9. Carbon:Nitrogen ratio of 15:1 to 30:1
10. Solvita intex of 6 to 8
11. Non-phytotoxic
12. There shall be no unpleasant or detectable odor of ammonia or hydrogen sulfide, which would indicate immature compost. Color of compost shall be dark brown.

D. WATER

1. Clean, fresh potable water free of salt and other impurities injurious to vegetation.

Appendix A

TREE SCHEDULE

TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
	AA	4	Acer rubrum 'Armstrong' / Armstrong Red Maple	B&B	2.5"Cal	
	BW	4	Betula populifolia `Whitespire` / Whitespire Birch	B&B, Multi-stem		10`-12`
	CF	4	Carpinus betulus `Frans Fontaine` / Frans Fontaine Hornbeam	#15		
	JS	12	Juniperus chinensis `Spartan` / Spartan Juniper	B&B		8`-9`
	JC	19	Juniperus virginiana 'Canaertii' / Canaerti Eastern Redcedar	B&B		7`-8` H
	PF	3	Picea pungens 'Fat Albert' / Fat Albert Colorado Spruce	B&B		7`-8`
	PM	9	Platanus x acerifolia / London Plane Tree Multi-Trunk	B&B	3"Cal	
	TA	6	Thuja plicata 'Atrovirens' / Western Red Cedar	B&B		7`-8`
	TI	17	Thuja x 'Green Giant' / Green Giant Arborvitae	B & B		8`-10`

-PERCENTAGE OF LANDSCAPE AREA WITHIN LIMIT OF DISTURBANCE EQUALS 40%
-PERCENTAGE OF LANDSCAPE AREA WITHIN ENTIRE SITE EQUALS 35%

EXISTING VEGETATION TO REMAIN
RELOCATED STONE WALL
PROPOSED SITE SIGN LOCATION
EXISTING TREE TO BE REMOVED AND REPLACED WITH (3) LONDON PLANE TREES
SEE CIVIL PLANS FOR CURB
PROPOSED DECK SEE ARCHITECTURAL DRAWINGS
PROPOSED DECK SEE ARCHITECTURAL DRAWINGS
1 LD1.0 CONCRETE PAVING
EXISTING MATURE ARBORVITAE HEDGE TO REMAIN
EXISTING MATURE NORWAY SPRUCE TO REMAIN. SEE DETAIL SHEET FOR TREE PROTECTION.
HATCHING NOTES AREA OF STEEP SLOPE (>15%)
AP 114 LOT 130 N/F ANGELO BOTELHO AND SANDRA BOTELHO ZONED LBA
CHAIN LINK FENCE
IRON ROD FOUND/HELD
SINGLE STORY BRICK BUILDING
811 AQUIDNECK AVENUE
ASPHALT DRIVEWAY
TRASH
GRASS
DRAINAGE SWALE
APPROXIMATE GAS MAIN LOCATION
NORTH
0 10 20 30 feet
1" = 10'

PLANT SCHEDULE

SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT
	Ck	38	Calamagrostis x acutiflora `Karl Foerster` / Feather Reed Grass	#2
	Cr	5	Cornus sericea 'Ivory Halo' / Red Twig Dogwood	#7
	Hl	2	Hydrangea paniculata `Little Lime` / Little Lime Hydrangea	#5
	Is	9	Ilex glabra 'Shamrock' / Shamrock Inkberry Holly	#7
	Po2	24	Prunus laurocerasus 'Otto Luyken' / Otto Luyken English Laurel	#5
	Rc	16	Rhododendron catawbiense 'Cunningham White' / Catawba Rhododendron	#7
	Rb	2	Rosa x `Blushing Knockout` / Rose	#5
	Th	35	Taxus x media `Hicksii` / Hicks Anglo-Japanese Yew	4`-5`

NOTE: ALL DISTURBED AREAS TO RECEIVE LOAM & SEED

SEED/ GROUNDCOVER SCHEDULE

GROUND COVERS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	SPACING
	Ad	22	Astilbe x 'Delft Lace' / Delft Lace Astilbe	#2	24" o.c.
SEED MIXES	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**	**CONT**	**SPACING**
	Sa	369 sf	Conservation Seed Mix / New England Conservation Mix	seed	
	Wl	8,857 sf	Lawn Seed Mix / Lawn Seed Mix	seed	

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STAMP

NOT FOR CONSTRUCTION

REGISTERED LANDSCAPE ARCHITECT ANGELO LA RUFFA No. 447

PROJECT NAME

AQUIDNECK COMMERCE CENTER AP114 LOTS 124 & 504

PROJECT ADDRESS

809, 811, 819 AQUIDNECK AVENUE MIDDLETOWN, RI

NO.	REVISIONS	DATE

SUBMITTAL	DATE
PERMITTING SUBMISSION	03/22/2022

DRAWN BY:	CHECKED BY:
DP	AI
DATE ISSUED: 03/22/2022	SCALE:

PROJ. NO. C1026

SHEET TITLE

PLANTING PLAN

SHEET NO.

LP1.21