

25TH NOVEMBER, 2020



GLIMS SERVICE COMPANY PROFILE

SUBTITLE

PRESENTED BY: GIDADO AHMED GLIMS SERVICES (CEO)

`ADDRESS:

NO 1 ABUJA ROAD ALH. ABDULKAREEM S. GURIN ESTATE, YOLA TOWN
ADADAMAWA STATE NIGERIA

GLIMS SERVICE COMPANY PROFILE

DEVELOP A PLAN

MISSION AND GOALS

Our mission is to give you a sparkling clean work and living space. We are your one - call to facilities management pleasure.

Our goals are to take care of your property as if it's our own. Our services include:

- Cleaning services
- Maintenance
- Landscaping

DEDICATED STAFF

1	We have a team of dedicated house cleaning staff.
2	Our landscape planning and execution team will transform your property.
3	We will make sure that your property is in good working condition.
4	We assist in finding the best options in subscription services.
5	Our staff is trained by international hospitality consultants.

OUR EDGE, WHY YOU WANT US

1	Our board of trustees and consultants have international and local expertise.
2	We develop our teams with regular training.
3	We operate according to international best practices.
4	Registered with all necessary professional institutions.
5	We serve upmarket clientele.

CONTACT US

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PROPOSAL FOR**SCOPE OF WORK**

1	
2	
3	
4	
5	

MILESTONES AND DATES

1	
2	
3	
4	
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BUDGET

1	
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4	
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PUT THE PLAN INTO ACTION

Step	Action	Due date for completion	% complete
1	Action	Date	%

Step	Action	Due date for completion	% complete
2	Action	Date	%
3	Action	Date	%
4	Action	Date	%
5	Action	Date	%

GLIMS SERVICES PROFILE:

GLIMS Services is made up of a group of industry professionals with decades of experience in the cleaning industry, facilities management and landscaping. We are 100% Nigerian owned and operated and the most interesting aspect here is that we are a Green business. We are not your regular cleaning, facilities management and landscaping services. We are actually selling a veritable service to encourage client feedback and satisfaction at all times.

Founded in 2020, we presently servicing 4 major clients and thousands of square feet each and every day of the week. This ranges from small once-a-week offices with just a few staff members to large clients like Dee Establishment Hotel here in Yola, Adamawa State.

Our fully-trained and uniformed cleaning, facilities management crews maintain a top-notch professional image that will complement other business and stand out. All Glims Services personnel are trained and equipped to deliver. In addition, all staff is security checked with the local police authorities ensuring that your building and inventory are always secure.

We are blessed with a robust Board of Directors who are equally authorities and well established personalities in not just Nigeria but the world.

Mission Statement

To provide our clients with the highest level of quality and customer service available in our industry and to always run our company in an honest and ethical manner.

Vision

To be the preferred cleaning, facilities management and landscaping business in the north-east of Nigeria by 2021.

Client Satisfaction

Supervision is the key to our success! Customers will regularly see our quality control personnel inspecting our services of their premises and property. Our day and night time supervisors visit our staff on-site while services are being performed to ensure complete customer satisfaction.

Our mission statement is our commitment to our clients, and it truly sets us apart from our competitors! We don't just talk about what we do; we actually do it.

Our Customer Satisfaction Team members are equipped, and every inspection or customer interaction is logged into our Customer Relationship Management software and a service ticket is created. This ticket is then rated as to the severity of the issue and assigned to an appropriate person for action.

Every step taken will be logged to this ticket and tickets are only resolved once all parties are satisfied with the resolution. These tickets then become a permanent part of the client's record. This ensures the client that any issue, be it service related, billing related etc. will be followed through to complete satisfaction.

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AUN LANDSCAPE MANAGEMENT PLANS

OVERVIEW

Landscaping requirements in AUN are changing to incorporate the AUN Sustainability Vision. A new program designed to create more and better landscaped areas. To improve the landscape and decrease the ecological impacts of development, the AUN Sustainability Landscaping Management Plan encourages the use of layered vegetation, tree preservation, and vegetated walls. Practices for rainwater harvesting and plants with low water requirements are followed.

The Sustainability requires a Landscape Management Plan (LMP) to ensure that landscapes are successfully established and continue to function well over time. The LMP is distinct from more typical Grounds Maintenance Plans which may stress the “look” of the landscape; the Landscape Management Plan is intended to address safety and the successful implementation of environmental goals. Given that Sustainability landscapes may include elements that are unfamiliar to many gardening employees and management – focus should be on developing these skills and knowledge.

There is an opportunity in preparation of an LMP to employ a more natural approach to management of the landscape, such as Integrated Pest Management.

LANDSCAPE MANAGEMENT PLANS SHOULD INCLUDE THE FOLLOWING ELEMENTS WHEN APPLICABLE:

A. LANDSCAPE MANAGEMENT APPROACH – An overview of priorities and special considerations for the landscape.

B. LANDSCAPE MANAGEMENT SCHEDULE – A detailed schedule of regular upkeep tasks.

C. LANDSCAPE MANAGEMENT AREAS – A summary of important issues for the landscape, organized by type of landscape element.

D. INTEGRATED PEST MANAGEMENT - Approved methods for preventing or controlling unacceptable levels of weed, pest, or disease damage. **E. Irrigation** - Annual and monthly inspections, scheduling and maintenance.

F. SPECIAL LANDSCAPE AREAS –

A. LANDSCAPE MANAGEMENT APPROACH

Example:

In addition to meeting the AUN Sustainability criteria, the landscape plan for this mixed-use (campus/housing compounds/club/hotel/special areas/small vegetable gardens) development is designed to:

- Provide an enjoyable outdoor environment for employees/students and visitors
- Ensure public safety for employees/students/visitors/outside stakeholders Sight lines are maintained on all sides of the roads, with low (2 to 3 foot) shrubs and open, limbed-up trees.
- Protect the health of employees/students/visitors, as well as the environment, by minimizing use of pesticides (herbicides, insecticides, fungicides, and rodenticides). Plant selection emphasizes native plants and hardy ornamental cultivars to prevent pests and the use of harmful chemicals, especially where they may contact people or wash off in surface water. Pest, weed, and disease problems that arise are managed through “Integrated Pest Management” (IPM) methods described below.

B. LANDSCAPE MANAGEMENT SCHEDULE

See Sections C through F for definitions and specific practices required by this landscape management plan.

JANUARY:

- Prune any tree branches that interfere with public safety or sight lines. Prune all street trees yearly to encourage strong upward growth. Do not top trees.
- Mulch mow all turf areas once per month. (Use mulching mower that chops clippings finely and blows mulch down into turf to decompose and feed soil.)

FEBRUARY:

- If specified in contract, apply granular fertilizer around trees or shrubs in late February. Make application prior to a moderate rainfall so the rain will wash the fertilizer in. Do not fertilize swale plantings. (See “Fertilization” section for recommended products.)
- Mulch mow all turf areas once per month.
- Add new mulch to planters where the mulch depth has been reduced to less than 2 inches (5 cm) thick. Mulch not required where shrubs or groundcover completely hide the soil surface from view.

MARCH:

- Mulch mow all turf areas twice per month.
- Flush out irrigation systems as needed, run and check for proper operation of each valve zone. Test sensors (rain, soil, or weather sensors).
- Clean or replace plugged sprinkler nozzles. Replace plugged drip emitters.

- Replace irrigation controller program back-up batteries.

APRIL:

- Mulch mow all turf areas weekly.
- Fertilize all landscape areas except for swale. The fertilization of shrubs/groundcover areas may be eliminated when the plants reach maturity or completely fill the planters, without space between them.
- Add new mulch to planters where the mulch depth has been reduced to less than 2 inches (5 cm) thick. Mulch not required where shrubs or groundcover completely hide the soil surface from view.

MAY:

- Mulch mow all turf areas weekly.
- Clean and check that all drainage systems are fully functional to drain rain water.

JUNE:

- Mulch mow all turf areas weekly.
- Prune spring & winter-flowering shrubs as needed to maintain proper shape (natural, touching, not hedged or topiary.).
- Add new mulch to planters where the mulch depth has been reduced to less than 2 inches (5 cm) thick. Mulch not required where shrubs or groundcover completely hide the soil surface from view.
- Prune perennial bulbs back to ground level as soon as leaf blades yellow and wilt (June-Oct. depending on bulb type).

JULY:

- Mulch mow all turf areas weekly.
- Water green roof as needed for the first two years after installation (until plants are fully established).

AUGUST:

- Mulch mow all turf areas weekly.
- Add new mulch to planters where the mulch depth has been reduced to less than 2 inches (5 cm) thick. Mulch not required where shrubs or groundcover completely hide the soil surface from view.

SEPTEMBER:

- Mulch mow all turf areas weekly.

- Fertilize all landscape areas. The fertilization of shrubs/groundcover areas may be eliminated when the plants reach maturity or completely fill the planters, without space between them.
- Inventory all plant materials. Inventory shall include an exact count of all shrubs and trees, itemized by planter. Replace any dead or missing plants subject to the terms of these specifications.
- Maintain 2 inches of mulch on ground surface over bulbs to insulate from cold and prevent winter weed growth.

OCTOBER:

- Mulch mow all turf areas twice per month.
- Turn on and prepare irrigation system for dry season. Any rainy season damage to irrigation system needs to be repaired.
- Add new mulch to planters where mulch depth has been reduced to less than 2 inches (5 cm) thick. Mulch additions are not required where shrubs or groundcover completely hide the soil surface from view.

NOVEMBER:

- Mulch mow all turf areas twice per month.

DECEMBER:

- Mulch mow all turf areas once per month.
- Prune any tree branches that interfere with public safety. Prune all parking lot and street trees yearly as needed to remove dead and crossing branches and to encourage spreading and upward growth that fits the available space. Do not top trees.
- Prune summer and fall-blooming shrubs as needed to maintain proper shape.

C. LANDSCAPE MANAGEMENT AREAS

C.1. GROUNDS MAINTENANCE – ALL OUTDOOR AREAS

Clean-up:

- Remove biodegradable landscape debris to a yard waste recycling facility, including turf clippings (limited to only those times when mulch mowing is not possible), leaves, branches, annuals, dead plant material, potting soil, etc.

Acceptable facilities include composting facilities, topsoil producing facilities or other facilities which utilize yard waste for landscape purposes. No biodegradable material should be disposed of in garbage to land fill sites.

- All trash and sticks are to be picked up from lawn strips and bed areas prior to mowing.
- A weekly general clean-up program will be performed. The clean-up program shall include a policing of all maintained areas for the removal of trash (paper, cans, bottles etc.) and landscape waste such as fallen sticks and limbs.
- All trash and landscape debris shall be removed and disposed of off-site.

- Mulch is to be maintained clear of building foundations and paved areas, and off utility covers.
- Debris shall not be carried into patios, entryways or doorways.
- Debris deposited by typical weather occurrences will be cleaned up.
- Sweep patios and sidewalks at least weekly. Fall leaf removal – September through January
- On a weekly basis remove leaves from lawn areas to prevent heavy build-up and damage to turf by smothering. A single layer of leaves may be mulch-mowed into the turf. Thicker accumulations should be removed.
- Leaves may be raked or shredded by mower and blown into shrub beds for mulch or accumulated leaves will be raked and/or blown from lawn, plants, and high maintenance bed areas and collected and removed from property and disposed of off-site.
- Sweep leaves from patios dailies weekly, to avoid clogging

C.2. PRUNING – TREES, SHRUBS, VINES AND GROUNDCOVERS

TREES

- Trees shall be maintained in a healthy, vigorous growing condition, free from disease and large concentrations of pests.
- Prune trees only to remove dead, diseased, broken, dangerous, or crossing branches, and as required below.
- Prune in accordance with generally accepted standards for proper pruning. Use of a certified arborist, particularly with significant trees, is recommended.
- Discard all tree trimmings to compost facility or for shredding for mulching.
- Any tree found to be dead or missing shall be replaced with plant material of identical. Replacement trees shall be approved for size and appearance by AUN's authorized representative prior to planting.
- Remove tree stakes from trees after two growing seasons. Check tree ties to adjust and loosen as needed after the first growing season. Remove stakes from site and dispose of by a legal method. Recycle used stakes if possible.
- Once a year, prune all trees to encourage a high-branching structure. Remove all non-structural branches between the ground and a point half the tree's total height (for tall trees don't remove branches higher than 20' [6 m] above the ground). Exception to the above: trees planted for screening purposes, such as those at rear perimeters of many sites shall not be pruned except as needed to remove dead, diseased, broken, dangerous, or crossing branches.
- All sucker growth from trunk and base of trees shall be removed monthly or as required up to twelve feet (12') from the ground to maintain a clean appearance.
- The cutting blades on pruning shears, clippers, blades, saws, etc. shall be sterilized after pruning each tree to minimize the possibility of spreading disease. When pruning trees known or suspected to be diseased, cutting blades shall be sterilized (with 10% bleach solution or other approved) after each cut.

- A vertical clearance of 114 inches is required above all parking spaces. A vertical clearance of 80 inches is required above all walkways. Trim trees to remove all limbs within these areas.

SHRUBS

- Shrubs shall be kept in a healthy, vigorous condition, free from disease and large concentrations of pests.
- Shrubs shall be pruned monthly only as needed to remove branches that are dead, broken, extending beyond the face of curbs or sidewalks, or are climbing building walls (not applicable to specified vines). Formal hedges and topiary shall be regularly pruned to maintain a uniform height and width. Except as noted previously, allow the shrubs to grow in their natural form to their mature sizes.
- Shrubs uniformly planted around the perimeter of tree pits shall be pruned so as to encourage a continuous planting where individual plants are not identifiable. Prune to encourage a dense, continuous planting, with natural shape and branches reaching fully to the ground.
- All other shrubs shall be pruned only as required for safety, visibility, and plant health, and allowed to develop into the natural shapes expected of the plant variety. Do not shear shrubs into topiary (shapes) unless specifically instructed.
- Allow shrubs two (2) months to rejuvenate following a hard prune or replacing.
- Any shrub found to be dead or missing shall be replaced with plant material of identical species.
- When pruning shrubs known or suspected to be diseased, the cutting blades shall be sterilized after each cut.

GROUNDCOVERS

- Groundcover shall be maintained in a healthy, vigorous growing condition.
- Any groundcover found to be dead or missing shall be replaced with plant material of identical species.
- Keep groundcover trimmed to edge of sidewalks, curbs, and paved areas on a monthly basis. Do not create vertical edges when pruning groundcover. Cut the edges at an angle /--\ for a more natural appearance and healthier plants. Prune so groundcover just overlaps adjoining paving; an open mulch strip here allows weeds to take hold and trash to accumulate.
- If regular foot traffic through a planter is preventing the groundcover from reaching full coverage of the soil, discuss options for redirecting the foot traffic. Consider installing pavers, stepping stones, a concrete walk, a gravel path, and/or barriers to redirect pedestrians.

C.3. FERTILIZER - TREES, SHRUBS, VINES AND GROUNDCOVERS

- Fertilizers shall be either organically derived or slow-release synthetic products, to minimize water pollution and feed plants over a longer period of time.
- Granular slow release or organic fertilizer shall be 5-5-5 formulation or similar, applied per label rate for plant type. Water immediately after applying to move the fertilizer into the soil and wash the fertilizer off of plant surfaces.

- When applying granular fertilizers to drip-irrigated areas, the fertilizer must be washed in by hand or rainfall before turning on the drip system. Running the drip system immediately after application will push the fertilizer away from the emitters, resulting in a high concentration of fertilizer at the edge of the wetted zone. This highly-concentrated fertilizer can kill or damage plants. It is recommended that granular fertilizers be applied to drip-irrigated areas, just prior to a moderate rainfall.

C.4. MULCH LAYER - TREES, SHRUBS, VINES AND GROUNDCOVERS

Maintaining a deep layer of mulch greatly reduces the labor and materials needed to control weeds, reduces water use, and helps the plants stay healthy.

- Add additional mulch regularly to maintain a layer no less than 2 inches (5 cm) deep at all times in shrub planters, tree wells, and beds where plants have not yet closed in over soil surface. Decomposition of organic mulch is considered normal wear and tear, and replacement of decomposed mulch is required seasonally. Mulch is not required in areas where plant foliage completely covers the soil surface, such that the soil is not visible through the foliage. Any mulch found outside planter areas shall be returned to the planter on a weekly basis.
- Mulch shall be uniform in color and appearance, and free of sticks or trash. Mulch may be compost, shredded fall leaves, or chipped or shredded wood, such as arborist chips, hog fuel, or play chips. Bark is less preferable, because it does not feed the soil as readily, may seal the surface preventing water entry, and may inhibit some plants' growth. When replacing existing mulch, use a mulch product that is similar in appearance to that already at the site.

C.5. TURF CARE

C.5.1. MOWING - TURF

- Mowing schedule: Mow weekly during active growth periods (April-October) and at least once a month during winter. Keep mower blades sharp.
- Clippings should always be left on lawn areas ("mulch-mowing" or "grass cycling"), except if this will create a large surface buildup, for instance if saturated soft soils have prevented mowing for several weeks in spring and the grass is very tall. Grass cycling returns about 2 lb. nitrogen per 1000 sq. ft. per year, and improves resistance to drought damage and weed invasion.
- Mowing height: 2 to 2.5 inches high.
- Mowing frequency: to cause the least stress on the grass plant, mow often enough to remove only one-third of the blade length (e.g., when the grass is 3" high mow it down to 2"). Also, mow un-irrigated summer-dormant turf regularly enough to remove weed seed heads before they mature. Start mowing in late winter as soon as grass begins to grow. On most lawn areas these rules will result in mowing every 5-7 days through the height of the spring growth spurt, tapering to weekly on irrigated summer lawn or 10 days to 2 weeks on dormant lawn, weekly through the fall growth spurt, and once a month during winter. Avoiding over fertilization and soluble "quick release" fertilizers is key to reducing mowing frequency.

C.5.2. FERTILIZATION - TURF

- Natural organic fertilizers or “bridge” (organic plus slow-release synthetic) fertilizers shall be used. Soluble fertilizers, though less expensive, wash off site, volatilize, require more frequent application, and are toxic to beneficial soil life, so tend to be more expensive over time.
- Mid to late fall applications are the key to building carbohydrate reserves in the grass root system over the winter. Early spring applications should be avoided because they promote rapid top growth (requiring more mowing) and can exhaust stored nutrient reserves. If spring applications are desired, they should be in late spring.

C.5.3. AERATION AND DE-THATCHING - TURF

- While aeration is most important on high-use areas (such as playfields and building entrance areas) any lawn area should be considered for annual or more frequent aeration if it shows signs of thin turf, weed invasion, poor irrigation penetration, or soil compaction.
- Thatch buildup (beyond the 1/2 inch that is healthy) is usually a sign of over fertilization, over use of broadcast pesticides, over-watering, soil compaction, or other causes of diminished soil biota to break down thatch. Excess thatch prevents water penetration and promotes shallow rooting. Good maintenance practices will generally prevent thatch buildup, but where present it should be reduced by regular aeration or a vertical mowing (de-thatching), followed by adjusting cultural practices to prevent recurrence.

C.5.4. OVER SEEDING - TURF

- In addition to aeration, spring or fall lawn renovations should include over seeding of thin or weed infested areas, or entire areas subject to heavy wear. This is a key weed control practice.
- Select certified seed appropriate for the site (perennial rye for sport lawn, rye and fescue blends for general lawn: care should be taken not to bring in foreign species but use local meadow for transplanting and seeding).

C.5.5. TOPDRESSING - TURF

- After aeration and over seeding, high-use or worn lawn areas should be top-dressed in spring or fall for greatest improvement.
- General lawn should be top-dressed with pure compost or a compost-sand mixture, 1/4 to 1/2 inch thick, to improve both drainage and soil fertility. Use a weed-free mature compost from a reputable supplier, screened to 3/8 inch minus particle size. Dragging or raking after application can help get compost down into the aeration holes and break up aeration cores and compost clumps.
- Take soil plugs annually to verify that the compost is being incorporated into the soil profile below the aeration depth by earthworms and other soil biota, rather than accumulating on the surface where it could limit water infiltration. (This is a possible problem in cases of low soil biota due to overuse of fertilizers or pesticides, poor drainage, or conditions of acidic or compacted soils. Correct these problems to improve compost incorporation.)

D. INTEGRATED PEST (WEED, INSECT, AND DISEASE) MANAGEMENT

Definition: “Integrated Pest Management, or IPM, is an approach to pest control [weeds, insects, and diseases] that uses regular monitoring to determine if and when treatments are needed, and employs physical, mechanical, cultural, and biological tactics to keep pest numbers low enough to prevent intolerable damage or annoyance. Least-toxic chemical controls are used as a last resort.”

Daar, Olkowski & Olkowski: IPM Training Manual for Landscape Gardeners, 1992

D.1. WEED CONTROL FOR TREES, SHRUBS, VINES, AND GROUNDCOVERS

- Weeds in planted areas, sidewalks, curbs, gutters, or pavement shall be removed or killed weekly as the weeds emerge. Weeds shall be removed (not just killed) if they are larger than 2 inches (5 cm) in height or diameter. Dispose of weeds offsite. Regular maintenance of the mulch layer will help minimize weeds in shrub and groundcover areas.
- AUN landscaping is strongly encouraged to use Integrated Pest Management techniques for controlling weeds. Techniques include mulching, pulling, allowing plantings to grow densely and shade ground, heat and hot water controls. If herbicides must be used, choose the least toxic available and spot apply on weeds. Pre-emergent herbicides are not allowed – maintaining a thick mulch layer combined with mechanical weeding is as effective.

D.2. WEED, INSECT, AND DISEASE CONTROL FOR TURF

- Weed invasion can be effectively prevented or reversed by growing dense lawn, through the above recommended practices. Tolerate some broad-leaved plants in lawn areas. Identify problem (invasive) weeds and target only those species.
 - Control weeds in turf by removal where practical (long-handled weed-pullers do this quickly), and remove them regularly before they go to seed. If weeds have over-run an area, spot-application of the least-toxic herbicide is permitted.
 - No broadcast herbicide or “weed-and-feed” products may be applied.
 - Moderately fertilized turf on well drained organic-rich soils rarely has serious disease problems. Correcting poor soil conditions or cultural practices (like overwatering or over fertilization) will prevent diseases.
 - Insects are rarely a problem on lawn in AUN—IPM techniques of monitoring, setting tolerance levels, and least toxic control can be applied effectively.
- D.3. General IPM Steps and Methods

IPM Steps Include:

- 1) Prevention first: plant vigorous, pest-resistant, site-adapted varieties. Plan cultural practices to minimize pests (watering, mulching, pruning, etc.).
- 2) Identify/know the pest (weed, etc.) life cycle.
- 3) Set action thresholds – tolerate some damage.
- 4) Monitor regularly (keep records of monitoring).

5) When pests exceed threshold, use control method with the least non-target impact. (Try cultural, physical, or biological methods first. As a last resort, use spot applications of least toxic chemical.) Only treat when the pest is most vulnerable and its natural enemies are in their least susceptible life stage.

6) Keep records of control methods and results, evaluate, and adapt cultural practices.

7) Replace problem plants/designs with more pest, disease, and weed-resistant varieties.

Weed Control Methods – General Guidelines:

- Crowd out weeds with dense healthy plantings, ground covers and shade canopies.
- Accept a few weeds – target the problem ones.
- Mulch beds in fall, winter, or early spring.
- Control weeds before they go to seed.
- Hoe, pull, mow, or till (mulch makes hoeing easier).
- Use barriers: newspaper or cardboard covered with mulch, root barriers for spreading plants. Landscape fabric can create problems as weeds grow through it – paper or cardboard is better.
- Don't over-fertilize – it promotes weeds and pests.
- Spot apply the least-toxic chemical (e.g. soap and vinegar-based weed killers, or cut-and-paint stems with systemic herbicides) to minimize non-weed impacts.
- If a pesticide must be used, post signs for at least 24 hours stating: area affected; date/time applied; specific pesticide used; re-entry cautions (from label); and phone number to call with questions. Always follow label for application and protection.

E. IRRIGATION

ALL AREAS

- Monitor the moisture levels around all ornamental plants including, but not limited to trees, lawn, shrubs, perennials, groundcovers and annuals. Report problems (including brown spots or saturated areas) to on-site management during normal maintenance visits.
- Fix irrigation system leaks and broken or misdirected heads as needed on every site visit.
- Hand watering of any ornamental plants not under irrigation is not assumed. Spring start-up
- Open the main valve(s), inspect and adjust all sprinkler heads, re-program and check battery backup in controller, and troubleshoot the entire system.
- Test sensors (rain, soil moisture, weather) and zone coverage while running.

Checks and repairs

- Once per month inspect entire irrigation system. Irrigation inspections shall include the following:
 - o Activation of each zone to inspect for valve function, lateral breaks, damaged heads, coverage or anything else that would indicate any malfunction of the irrigation system.

- o Adjust irrigation heads for proper coverage.
- o Adjust automatic controller to establish frequency and length of watering periods for seasonal requirements and water restrictions.
- o Runoff of water from irrigation systems into or onto streets, sidewalks, stairs, or gutters is not permitted. Immediately shut down the irrigation system and make adjustments, repairs, or replacements as soon as possible to correct the source of the runoff.
- Do not over-water plantings. Use multiple-start times and short run times to prevent runoff. Drip systems should be left on for sufficient time to allow for saturation of the root zone. Shorter runs with drip irrigation do not provide sufficient water penetration for healthy root development. Avoid multiple-start times with drip systems if possible. Do not allow run-off from any irrigation.
- Rain sensors/weather sensor/soil moisture sensors: Install rain shut-off devices where possible. If no rain shut-off device, building manager shuts off irrigation at first sign of rain.
- Maintain the irrigation system, including cleaning of filter screens yearly or more often as needed, and flushing pipes.
- Drip irrigation systems need periodic flushing to remove sediment. Systems shall be flushed at least once a year. Open ends of drip lines and run for at least 15 minutes at full flow to flush. It may be necessary to install flush outlets in order to flush the drip system.

System repair

- Regardless of the cause of damage, take immediate action to prevent further damage by shutting off the damaged part of the irrigation system and commencing with hand watering as needed. The following items are considered to be minor repairs: damaged or clogged sprinkler nozzles, adjustment of sprinkler patterns or arcs, adjustment of sprinkler position (reorient; raise, lower, or straighten sprinkler head), replacement of clogged, broken, or missing barbed-style drip emitters, replacement or repositioning of drip distribution tubing smaller than ½ inch or 15 mm diameter. Any replacement of irrigation system components shall be made with materials of the same manufacturer and model as the original equipment.
- All repairs to the system shall be identical to the original installation, if a change to the installation will result in lower future maintenance costs, less frequent breakage, or an increase in public safety, request authorization to make the change from the AUN's authorized representative.
- For safety, do not install sprinklers on risers above the ground level, even if the risers are flexible. Always use spring-operated, pop-up style, sprinkler heads. Sprinkler heads are available with pop-up heights up to 12 inches (30 cm) above ground level. If the existing sprinklers are mounted on above-ground risers, the replacements shall be pop-up type sprinklers. No exceptions.
- Annually submit recommendations for changes to system that would improve water efficiency while meeting the plants' needs.

F. SPECIAL LANDSCAPE AREAS

STREET TREES AND R.O.W. PLANTINGS

- These areas have additional stress of vehicular, pedestrian traffic, and in this plan are not included in the irrigation system. To avoid compaction and prolong tree life, it is necessary to keep under plantings full and healthy. If low shrubs or groundcovers are damaged, replace them immediately to prevent further damage.

BIO RETENTION AREAS

- Swales and rain gardens, designed to capture and hold roof runoff, will not maintain optimal drainage rates if soils become compacted. Minimize foot traffic in this area, although occasional walking for maintenance is fine.
- In addition to preventing weeds, regular applications of mulch will maximize the swale's ability to capture and break down contaminants. In order to prevent runoff of excess nutrients, rain garden plantings should not be fertilized. Plant selection, a rich soil mix at time of installation, and regular mulching should provide sufficient nutrients to plantings in these areas.

Permeable pavers

- The permeable paving areas (sidewalk and patios) need periodic maintenance to avoid getting clogged with debris over time. Regular sweeping and low-pressure washing 3-4 times a year will keep the area free of organic material and fine particles, maintaining permeability.
- Additional gravel may occasionally be necessary to refill the pores between pavers. Gravel supplements are needed if the gravel channels drop more than 1.5" below the paver surface.