



LANDSCAPE SERVICES MANAGEMENT PLAN

SEPTEMBER 8, 2023 – Draft Document for review

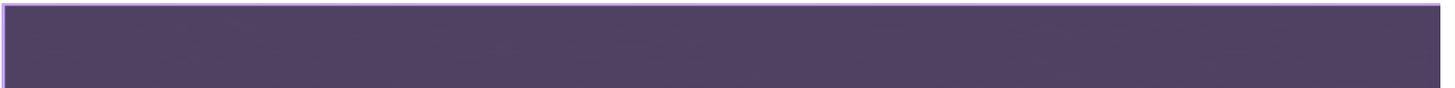


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INTRODUCTION

This Landscape Services Management Plan documents the site and landscape improvements that exist on campus and provides detailed information on maintenance activities performed by Landscape Services. This plan is intended to be used to communicate in a variety of ways:

- The management plan can be used as an important communication tool with Landscape Services customers, including Departments, facility managers, and administration. The plan provides a basis for understanding the kinds of landscapes found on campus and the level to which any given area will be maintained
- The management plan is designed to be used as a field reference tool for Landscape Services superintendent, asst. superintendent and crews. The campus is divided into six Maintenance Areas and this plan contains individual sections for each area that can be used by staff to plan and monitor work activities. While this plan will be a useful resource, detailed task, area and staffing calculations will continue to be done using the University's geographic information system (GIS).
- It should be noted that the management plan only includes those areas of the campus for which Landscape Services has primary responsibility. The management plan does not include the athletics campus, residence halls, or agriculture research areas.

FACILITIES MANAGEMENT

The Division of Facilities is responsible for the planning, construction, operation, and maintenance of general fund-supported academic and administrative support buildings, most campus grounds, and all utility systems.

VISION – Our team provides excellence inside and out

MISSION

Providing a physical environment that promotes University excellence

VALUES

STEWARDSHIP

We manage our resources to benefit present and future generations

We take responsibility for our work and our actions

SAFETY

We believe every injury is preventable

We work together to promote safety and wellness

PRIDE

We are proud of our work

We are dedicated to serving Kansas State University

INNOVATION

We continuously learn, develop and improve

We build upon our successes and learn from our failures

COMMUNITY

We encourage an atmosphere of respect, trust and cooperation

We energize and inspire each other

LANDSCAPE SERVICES

MISSION STATEMENT

Provide the University world - class maintenance by combining the right people, processes, and technologies for continuously optimizing service performance and efficiency.

VISION

A campus landscape that is safe, aesthetically pleasing, well maintained and is user friendly; that is functional, inviting and memorable to students, faculty, staff and visitors.

OBJECTIVES

We embrace Kansas State University's Principles of Community and recognize the important role we play in achieving the initiatives established by K-State's Next-Gen 2030 Strategic Plan.

Safety and Health: First and foremost in each and every plan of action

Communications: An organization that fosters open communication is one that all employees work with each other, share knowledge and skills, and are mutually responsible for the success of the organization. Good communication dictates a continuing effort and commitment.

Maintenance: This is the recurring, periodic or scheduled work required to preserve or restore a landscape to a condition that effectively reflects its designated purpose.

Design: With the University Design Standards as a guide, the University Architect should have a reasoned purpose in formulating a plan for the campus landscape. The design should be flexible and effective in serving its intended purposes.

Resources: The University must provide the resources and guidance to allow the work to be completed efficiently and effectively with fiscal responsibility.

Professional Development: Skill development is an ongoing investment in staff training, not only in areas of technical skill, but also in areas of self-esteem, interpersonal dynamics and team dynamics. A comprehensive, ongoing training program will insure focused and proactive thinking staff.

Accountability: Each individual has a responsibility to follow the rules and procedures required, aiding in the reduction of conflict and to provide consistent guidelines to assist personnel in performing different tasks and world-class maintenance services.

CAMPUS LANDSCAPE MAINTENANCE PLAN

Kansas State University comprises over 6,478 acres of diverse landscape in Riley County Kansas. Approximately 239 acres are under intense landscape management by the Division of Facilities, Landscape Services. In addition, Residence Services, Athletics and Agriculture Research Properties provide landscape maintenance services to property surrounding their facilities.

The visual quality of the campus has a profound influence on the quality of people's experience at Kansas State University. In addition, the visual quality of the campus contributes significantly to the University's ongoing efforts to attract and retain the best students, faculty and staff, and reflect its Land Grant mission in a positive way. With a goal to grow our traditional and nontraditional enrollment to 30,000 by 2030, the campus landscape must provide a variety of quality environments for people to live, work and play.

The maintenance plan is intended to develop a stronger sense of stewardship within Landscape Services. The University campus is an enduring landscape that plays an important role in the mission of the institution. Unlike most other landscape

environments, there are strong memories and attachments developed to campus spaces by those who work, study and visit here. Developing and promoting a culture in Landscape Services that recognizes the importance of a quality landscape requires each member of the Landscape Services team to share in the vision of quality and participate in creating a campus landscape that will preserve and enhance the history and future of the institution.

Kansas State University's Maintenance Plan was prepared as a tool for Landscape Services to assist in advancing the level of landscape maintenance quality on campus by:

- Defining appearance expectations
- Establishing standards for maintenance
- Providing a structure for monitoring results

The first step in improving the quality of the campus landscape is establishing a clear understanding of expectations and standards. With those expectations and standards in place, Landscape Services can program maintenance activities and monitor conformity.



CAMPUS INVENTORY MAPS

The Campus Inventory Maps show the buildings, hardscape improvements, landscape types and site improvements that are currently tracked within the GIS system. Those elements include:

UNIVERSITY BUILDINGS (including projects under construction)

HARDSCAPE IMPROVEMENTS

- Sidewalks and plazas – concrete
- Sidewalks and plazas – specialty paving
- Retaining walls / Outcropping stones
- Parking lots
- Institutional roads

LANDSCAPE TYPES

- Turf (traditional lawns, low mow areas and prairie)
- Perennial beds
- Annual beds
- Groundcover beds
- Shrubs
- Hedges
- Mulched areas
- Wooded areas (Note: Individual trees are inventoried within the GIS system but are not included in this document for clarity)
- Roof garden areas

SITE AMENITIES (Note: Site improvements are inventoried within the GIS system but are not included in this document for clarity.)

- Bike racks
- Benches
- Tables
- Trash and recycling receptacles
- Building identification signs

Hardscape areas and landscape areas are measured in square feet. These areas are used in the calculation of staffing estimates for each Maintenance Area.



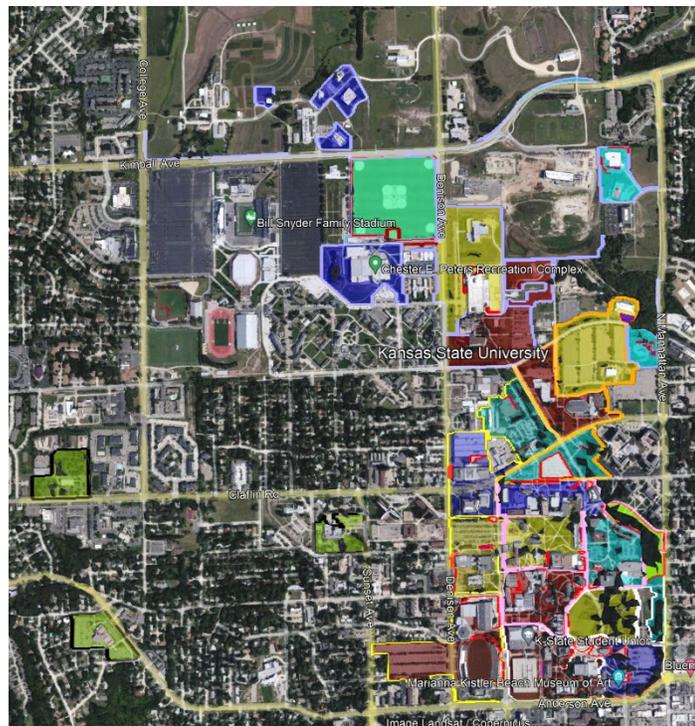
MAINTENANCE AREAS

As mentioned earlier, the campus has been divided into nine (6) Maintenance Areas. These are contiguous areas which are intended to be maintained by an area grounds keeper with assistance from other crews. The sizes of the areas vary greatly depending on the amount and intensity of the individual maintenance activities contained within. In general, however, the overall work effort of any given area correlates with the staff time available to a single crew.

MAINTENANCE AREA MAP



Manhattan Campus



Airport Properties



SERVICE LEVELS WITHIN MAINTENANCE AREAS

Service Levels refer to both the amount and frequency of maintenance activities required for any given area of campus. Currently there are three levels of maintenance; Service Levels 1, 2 and 3. Certainly different parts of campus require different Service Levels. In general, higher Service Levels are assigned to higher profile portions of the campus with the intent of presenting the best possible image to welcome visitors to the University and providing high quality environments for students and staff.

The following section outlines the expected maintenance outcomes for each Service Level. Included with each level is a brief discussion of design issues related to those outcomes.

SERVICE LEVEL A

Several areas on campus are designated Service Level A. The President's Residence, 100 Wilson Court, is designated a Service Level A maintenance area. As the official residence for the University President it is used extensively for fundraising events and entertaining dignitaries from around the world. As a private residence, the need for attention to detail and more refined "residential scale" landscaping necessitates a higher level of maintenance.

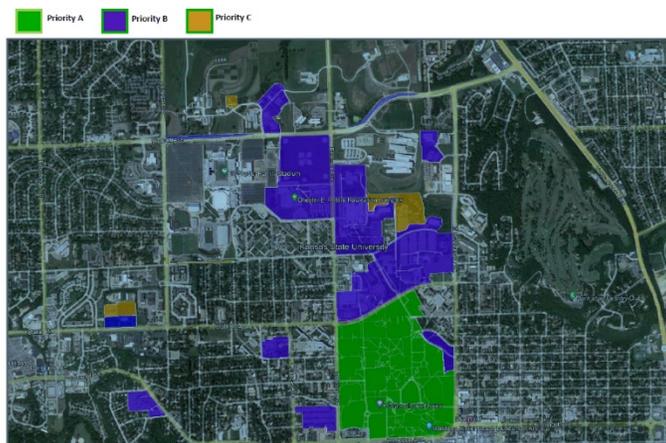
SERVICE LEVEL B

Service Level B areas represent areas of intense use by students, faculty, staff and visitors such as major pedestrian routes, gathering spaces and historically or architecturally significant buildings. In Service Level B areas we would expect maintenance levels to be above average. Service Level B areas would be designated with a simpler palette of plants with more simple arrangements as compared to Service Level A areas. Service Level B areas would have the goal of being superior in appearance.

SERVICE LEVEL C

Service Level C areas are classified as general campus areas, open spaces or natural areas. They are characterized by large open spaces, areas adjacent to high use zones, and campus areas with moderate public exposure. In Service Level C areas, maintenance levels would be done at lower levels. Service Level C areas would be designed with very simple palette of plants with very simple arrangements or no plants at all. Service Level C areas would have the goal of being functional, simple, or natural in appearance.

KSU Landscape Management Priority Map—Main Campus View
Main Campus, Adjacent Areas, & Ancillary Properties



CRITERIA FOR CHOOSING SERVICE LEVEL DESIGNATIONS

SERVICE LEVEL A

- Intense use by students and faculty at gathering places or destination points.
- Historically or architecturally significant buildings or sites.
- Significant area of interface between the University and the public (theatres, visitor areas, major administration areas, gathering places or destination points).
- Locations containing major works of art, fountains, or other unique features or landmarks.
- Identified in the Campus Master Plan as a prominent area on campus

SERVICE LEVEL B

- Passive use by students and faculty such as open space and pedestrian circulation links between area.
- Academic or administrative buildings without historical or architectural significance but in prominent or visible locations.
- Interface between the University and the public is moderate such as borders.

SERVICE LEVEL C

- Natural areas.
- Open space with little to no actual use by students or faculty.
- Area of little or no interface with the public or the interface is automobile oriented.

Service Level designations should be evaluated regularly to reflect changes in the campus and reductions or increases in the landscape maintenance budgets.

SERVICE LEVEL A AREAS - HIGH INTENSITY LANDSCAPING AND MAINTENANCE

MAINTENANCE EXPECTATIONS

- Walks, plazas, and steps are kept free of dirt and debris
- No snow storage on lawn areas
- Lawns, shrub beds, and building areas are kept free of litter
- Walks and bed lines have clean edges
- Leaves are removed promptly
- Shrub, perennial, and annual beds are kept weed free
- Perennials, annuals, trees, and shrubs are fertilized at ideal rates
- All trees and shrubs are treated for disease and insect problems in accordance with Pest Management guidelines of Kansas State University
- Shredded bark mulch is top dressed annually
- Trees have little to no dead wood
- Trees are pruned following ANSI standards
- Lawns are fertilized at ideal rates
- Lawns are kept free of weeds
- Lawns are maintained at approximately 3" high
- Lawns are aerified at ideal rates
- Lawns are restored/renovated promptly

DESIGN ISSUES THAT AFFECT MAINTENANCE

- Some hand mowing and string trimming is acceptable
- High number of ornamental trees and shrubs
- High number of annual and perennial beds
- Complex foundation plantings
- Automatic irrigation in select areas, quick couplers or hose bibs for beds
- Moderate amount of brick paving and alternative ground cover

SERVICE LEVEL B AREAS - MODERATE INTENSITY LANDSCAPING AND MAINTENANCE

MAINTENANCE EXPECTATIONS

- Walks, plazas, and steps are kept moderately clean
- Lawns, shrub beds, and building areas are kept moderately free of litter
- Walks and bed lines are edged monthly
- Leaves are removed regularly
- Shrub and perennial beds are kept moderately free of weeds
- Perennials, trees, and shrubs are fertilized at ideal rates
- Select trees and shrubs receive insect and disease control.
- Shredded bark mulch is top dressed every other year
- Trees have little or some deadwood
- Trees are pruned following ANSI standards
- Lawns are fertilized at ideal rates
- Lawns are on a broadleaf weed control program
- Lawns are maintained within a 3" to 6" range
- Lawns are aerated every year

DESIGN ISSUES THAT AFFECT MAINTENANCE

- Minimal hand mowing and string trimming exist
- Moderate number of ornamental trees and shrubs
- Moderate number of perennial beds and annual beds
- Moderate amount of foundation plantings
- Minimal amount of brick paving

SERVICE LEVEL C AREAS - LOW INTENSITY LANDSCAPING AND MAINTENANCE

MAINTENANCE EXPECTATIONS

- Walks, plazas, and steps are swept seasonally
- Lawns, shrub beds, and building areas receive litter pick up every other week
- Walks and bed lines are not edged
- Leaves are removed only as needed or not removed
- Shrub beds are weeded monthly
- Trees and shrubs receive minimal or no fertilization
- Trees and shrubs receive minimal or no insect and disease control
- Shredded bark mulch is replaced every three years
- Trees are pruned following ANSI standards
- Lawns receive no fertilizer
- Lawns receive minimal or no weed control
- Lawns are kept mowed to a 4" to 8" range or seasonally
- Lawns are not aerified

DESIGN ISSUES THAT AFFECT MAINTENANCE

- Little hand mowing and no string trimming exist
- Minimal number of ornamental trees and shrubs
- Minimal or no foundation plantings
- No perennial or annual beds
- Little to no irrigation, hose bids on buildings
- Little to no brick paving

LITTER & DEBRIS CONTROL

SERVICE LEVEL A

1. Litter and debris will be picked up a minimum of twice per day.
2. Cigarette butts will be picked up from pavement and mulch beds twice per week.
3. Building entrances, stairways and major gathering spaces will be checked daily and kept free of litter and debris as needed.
4. All sidewalks and steps will be cleaned, blown and / or swept after each mowing.
5. Any debris resulting from storms will be cleaned up immediately following the storm and completed by the day following the occurrence.

SERVICE LEVEL B

1. Litter and debris shall be picked up a minimum of 2 times per week and in extremely high use areas more frequently as needed.
2. Cigarette butts will be picked up from pavement and mulch beds a minimum of twice per month.
3. Building entrances, stairways and major gathering spaces will be checked two times per week and kept free of litter and debris as needed.
4. All sidewalks and steps will be cleaned, blown or swept after each mowing.
5. Any debris resulting from storms will be cleaned up as soon as possible following a storm event.

SERVICE LEVEL C

1. Litter and debris shall be picked up a minimum of once every two weeks.
2. Cigarette butts shall be picked up from pavement and mulch beds a minimum of once a month.
3. Major gathering spaces will be checked every two weeks and kept free of litter and debris as needed.
4. Any debris resulting from storms will be cleaned up when possible.

TURF MANAGEMENT

SERVICE LEVEL A

1. Litter in turf areas will be picked up prior to mowing.
2. Mowing shall be scheduled so that no more than one third (1/3) of the grass blade is removed with an ideal cutting height of 3 ½”.
3. Irrigation shall be used as required to maintain a weekly application rate on one (1) inch from rainfall and irrigation during the growing season.
4. Edging walks shall be done a minimum of 2 times per season.
5. An organic fertilizer mixed with minimal pesticides to be applied 1-2times, starting in April.
6. Aeration shall be scheduled each spring and fall in high use area to maintain quality turf.
7. Leaf litter may be mulched in place with mowers throughout the fall as necessary. Leaves will be removed promptly. Leaves will be hauled to the compost pile on campus.
8. Grass clippings and mowing debris will be removed from all paved surfaces immediately after each mowing.
9. Renovations shall be addressed as soon as damage occurs to keep turf and walk edges free of bare spots and worn pathways. All sidewalk edges will be top dressed and sodded without delay once ground conditions permit in the spring.

SERVICE LEVEL B

1. Litter in turf areas will be picked up prior to mowing.
2. Mowing shall be scheduled so that no more than one third (1/3) of the grass blade is removed with an ideal cutting height of 3 ½”.
3. Edging walks shall be done a minimum of one time per season.
4. An organic fertilizer mixed with minimal pesticides to be applied 1 time, in April, as funding allows.

5. Aeration shall be scheduled each fall and more frequently in high use area to maintain quality turf.
6. Leaf litter may be mulched in place with mowers throughout the fall as necessary. Leaves will be removed when their volume / depth is such that it may kill the grass or cause other problems. Leaves will be hauled to the compost pile on campus.
7. Renovations shall be addressed on an as need basis to keep turf and walk edges free of bare spots and worn pathways. All sidewalk edges will be top dressed and seeded before Spring Semester graduation.
8. Grass clippings and mowing debris will be removed from all paved surfaces immediately after each mowing.

SERVICE LEVEL C

1. Litter in turf areas will be picked up prior to mowing.
2. Mowing shall be scheduled every 10 - 14 days with a target height of 4”.
3. Edging walks shall be done every 2 to 3 years.
4. All fertilizing and herbicide applications will be done only when directed by supervisor.
5. Weed control will be utilized only to manage noxious weeds and heavy infestations of invasive weeds.
6. Aeration will not be performed in this level unless scheduled to address a significant turf issue.
7. Renovations will be addressed on an as need basis when time allows.
8. Leaf litter may be mulched in place with mowers throughout the fall if necessary.

TREE MANAGEMENT

GENERAL TREE MANAGEMENT STANDARDS

ARE:

1. Tree selection should be based on the 10-20-30 Rule where there is no more than 10% of one Species, 20% of one Genus, or 30% of one Family comprising the campus forest.
2. Kansas Forest Service publications "Trees for North Central Kansas" and "Trees for Northeast Kansas" will be referred to for tree selection recommendations along with recommendations by the Landscape Superintendent, Landscape Assistant Superintendent, Campus Arborist, and, when appropriate, the Campus Architect and Campus Tree Board.
3. Tree pruning will vary depending on the Service Level, but in general trees should be pruned to:
 - a. follow ANSI A300 Standards
 - b. provide pedestrian and vehicle clearance
 - c. follow the appropriate time of year for Oaks and Elms.
4. Pesticide applications will follow the Landscape Services Integrated Pest Management guidelines.
5. Dead trees will be removed as soon as possible.
6. Trees will be installed in Service Level A Areas first, followed by Service Level B areas, and then Service Level C areas.
7. Watering of newly-installed trees will occur as needed for the first two years after planting.

SERVICE LEVEL A

1. Trees will be inspected monthly for pruning needs.
2. Trees will be inspected monthly for insect and disease concerns or during the appropriate life cycle of the pest.
3. Trees will be mulched annually.
4. Minimum size for new tree installations will generally be 2 inches in caliper (deciduous) or 5' in height (coniferous) when appropriate and feasible.
- 5.

SERVICE LEVEL B

1. Trees will be inspected twice per year for pruning needs.
2. Trees will be inspected once per year for insect and disease concerns.
3. Trees will be evaluated for mulch needs and re-mulched every other year as directed.
4. Minimum size for new tree installations will generally be 2 inches in caliper (deciduous) or 5' in height (coniferous) when appropriate and feasible.
- 5.

SERVICE LEVEL C

1. Trees will be inspected once a year for pruning needs.
2. Trees will be inspected every other year for insect and disease concerns
3. Trees will be re-mulched as directed



TREE MANAGEMENT

Landscape Services is responsible for the management of over 5,000 trees on the main campus, adjacent areas, and ancillary properties. Criteria to manage the Kansas State University campus forest and arboretum are as follows.

INSTALLATION

The selection of tree species and planting sites for campus tree installation by Landscape Services staff will be done collaboratively among the Landscape Architect, Landscape Designer, Grounds Supervisor and Arborist.

Service Level A areas will have new tree plantings scheduled and installed first.

Service Level B areas will have new tree plantings scheduled and installed second.

Service Level C areas will have new tree plantings scheduled and installed last.

PRUNING, MONITORING AND REMOVAL CONSIDERATIONS

Pruning practices shall follow the American National Standards Institute (ANSI) A300 standards. General pruning of oaks and elms shall be done between the months of November through March to minimize the spread of Oak Wilt and Dutch Elm disease.

Service Level A areas shall be inspected annually for tree pruning needs, monitoring for insect and disease problems, and removal considerations.

Tree pruning shall be given to hazard trees. Pruning priorities for clearance, removal of dead/damaged/diseased wood, structural and aesthetic reasons will follow. Clearance over sidewalks shall be 8 feet and clearance over streets shall be 14 feet for medium to mature sized trees per ANSI A300 standards. Scheduling will be done by the Landscape Services Arborist and Landscape Superintendent.

Monitoring for insects and diseases shall be done based on the tree species that could be affected and

the season of the year. Treatment decisions will be determined by severity of the potential tree damage both physically and esthetically.

Tree removal considerations shall be determined based on discussion among the Arborist, Landscape Superintendent and when appropriate, University Architect.

If a decision is made to remove a tree from a Service Level A area, the appropriate communication will be made to the various stakeholders before the tree is scheduled for removal and/or prior to the removal occurring.

Service Level B tree pruning shall be given to hazard trees first followed by clearance, dead/damaged/diseased wood, structural and aesthetic considerations. The same clearance standards stated for Service Level A shall be followed for Service Level B.

Service Level C tree pruning Service shall be given to hazard trees first. Pruning for clearance, removal of dead/damaged/diseased wood, structural, and esthetic reasons will be done after Service Level A and B areas are complete. Special circumstances could push pruning and removal of Service Level C ahead of Service Levels A and B. The Clearance standards stated in Service Levels A and B shall be followed in Service Level C.

WATERING

Watering of newly, installed trees shall occur as needed for two years after planting; this applies to Service Levels A, B and C.

MULCHING

All trees growing in the maintained and/or highly visible portions of campus shall have a mulch ring with a minimum radius of three feet. The purpose of the mulch ring is to protect the tree trunk from mower and string trimmer damage as well as protecting the tree roots by retaining moisture and buffering soil temperatures. Where possible, the outer edge of the mulch ring shall have a three to four inch edge dug to keep the mulch from encroaching into the turf and to have a level interface with the turf. The mulch depth shall not exceed four inches and shall not be piled onto flare roots or against trunk material.

Service Level A areas with trees shall have mulch rings and will be refreshed annually.

Service Level B areas with trees shall have mulch circles and will be refreshed as needed once Service Level A is complete.

Service Level C areas will be evaluated and scheduled after Service Level A and B areas are complete.

TREE INVENTORY

An electronic tree inventory is used as a management tool for maintaining the campus trees. The inventory can be found at: _____.

The tree inventory will identify trees on the Memorial Tree Walk, Tree Campus USA educational species, donated trees and state champion trees located on campus. Information may include date of installation, genus / species / cultivar, maintenance activity, removal dates, photos and a link to Wikipedia.



SHRUB AND GROUND COVER BED MANAGEMENT

GENERAL SHRUB AND GROUND COVER STANDARDS ARE:

1. Plant selection should minimize the need to shear or prune shrubs
2. Shrub pruning will vary depending on the Service Level but in general shrubs should be pruned to:
 - a. maintain size and shape
 - b. provide pedestrian clearance
 - c. provide safe visual exposure of pedestrians at building entrances and other high traffic areas
 - d. encourage flowering
 - e. promote safe, healthy plants
 - f. provide a specified design statement
3. Hedge plantings shall be trimmed regularly in accordance with the plant type and growth rate
4. Height and form shall be determined by Campus Landscape Architect
5. Ornamental grasses shall be cut off three to six inches above the crown in early spring prior to new growth
6. Groundcover should be managed to promote vigorous growth, minimize weeds and control pests

SERVICE LEVEL A

1. Formal hedge plantings will be sheared three times per season
2. Shrubs shall be pruned and shaped two times per season
3. Shrub beds will be edged and mulched as soon as possible in the spring, no later than spring graduation.
4. Pre-emergent will be applied three times per season within the shrub beds
5. All shrub and groundcover beds will be kept free of weeds
6. Any plant material that is dead or dying will be immediately removed and replaced

SERVICE LEVEL B

1. Shrubs shall be pruned and shaped once per season
2. Shrub beds shall be edged and mulched once per season
3. Pre-emergent shall be applied three times per season
4. All shrub and groundcover beds will be weeded weekly
5. Any plant material that is dead or dying shall be removed within two weeks and replaced as soon as possible

SERVICE LEVEL C

1. Shrubs shall be pruned and shaped once every two to three years
2. Shrub beds shall be edged and mulched once every two years to three years
3. Pre-emergent shall be applied twice per growing season
4. All shrub and groundcover beds shall be weeded once a month
5. Any plant material that is dead or dying shall be removed within several weeks and replaced within the proper planting window



ANNUAL AND PERENNIAL FLOWER BED MANAGEMENT

GENERAL ANNUAL AND PERENNIAL STANDARDS ARE:

1. Annual flower beds are only planted in Service Levels A & B
2. Annual flower beds shall be thoroughly prepared to a minimum depth of 8" prior to planting by incorporating decomposed organic matter
3. Pre-emergent (Snap Shot, Broadstar) and slow release fertilizer shall be applied to planting beds in April, July and September
4. Watering of flower beds shall be done regularly and adequately to fit the weather, soil and plant conditions needs
5. Insect and disease control shall occur as needed to maintain healthy plants in all situations
6. Perennial beds shall receive an application of pre-emergent and slow release fertilizer in March. A second application of pre-emergent will be applied June and final application of pre-emergent will be applied in September
7. Pruning of herbaceous perennials shall consist of removing previous years top growth in spring prior to any new growth. Beds shall be cleaned and mulched with one inch of chocolate brown processed mulch
8. Prune foliage from spring flowering bulbs after wilting

SERVICE LEVEL A

1. Annuals in Service Level A will be planted prior to spring graduation in the following order
 - a. Entrance Gates
 - b. President's Residence

- c. Fairchild
- d. College of Business
- e. Chapels
- f. Clock Bed
- g. Birthing Statue

2. Spring flowering bulbs may be planted in key Service Level A locations at discretion of the Campus Landscape Superintendent
3. Remove foliage after dieback
4. Dead heading will be performed on varieties which require it to promote maximum blooming only in Service Level A
5. Hand weeding of annual beds will be done once a week
6. Edging of annual beds will be done monthly

SERVICE LEVEL B

1. Annuals in Service Level B will be planted at the discretion of the Campus Landscape Superintendent with the intent of having all installations completed by spring graduation weather and ground conditions permitting.
2. Spring flowering bulbs may be planted in key Service Level B locations at the discretion of the Campus Landscape Designer
3. Hand weeding of beds in Service Level B areas shall be done every two weeks
4. Edging of annual beds shall be done every other month

SERVICE LEVEL C

1. Although unlikely, minimal low maintenance perennial flower beds may be used in Service Level C areas

DEFINITIONS OF MAINTENANCE TERMS

The following terms are used throughout the management plan and have been defined as follows:

HAND WEEDING -

Mechanical methods will include the complete removal of noxious weeds and other foreign material. Removal will include as much of the root system as possible.

CHEMICAL WEEDING -

Weeding of planting beds, annual beds and perennial beds using chemical methods will include the application of herbicides, both pre and post emergent, to all noxious weeds and other foreign plant material. The Landscape Asst. Superintendent will determine the type of chemical control and application rates.

WATERING -

Watering of planting beds, annual beds, and perennial beds will include the regular application of water at a rate determined by the Landscape Services Asst. Superintendent

FERTILIZING -

Fertilizing of planting beds, annual beds, and perennial beds will include the application of fertilizers at a rate determined by the Landscape Services Asst. Superintendent.

MULCHING -

Mulching of planting or perennial beds will include the application of processed mulch at a depth not to exceed 4". Mulch should always be applied at minimum depths and should not be allowed to come in contact with the root collar of trees or shrubs. After application mulch is to be smoothed within the beds and edges raked to create a crisp transition between the mulch area and surrounding land uses.

TRIMMING HEDGES -

Trimming hedges includes the shearing of plant material into formal geometric forms.

PRUNING -

Pruning of planting beds will include the removal of broken, diseased or insect damaged branches. It will also include the removal of crossing branches or other branches necessary to promote vigorous and functional growth and form.

MONITORING -

Monitoring planting beds, annual beds and perennial beds will include inspection of the plants for disease, insect, or other problems, deadheading of spent flowers and stems, removal of dead leaves, and pruning of broken branches.

CLEANUP OF ANNUAL BEDS -

Cleanup of annual beds will include the removal of annual plants from previous growing season to make way for annual plants from the current growing season. The removal of bulbs for summer annuals, the removal of summer annuals for fall annuals and the removal of fall annuals for spring bulbs are a few examples.

PREPARATION OF ANNUAL BEDS -

Preparation of annual beds will include the amending of soil, tilling, fertilizing or other work necessary to prepare the bed for annual flowers.

PLANTING OF ANNUAL BEDS -

Planting of annual beds will include the installation of annual plants such as bulbs, summer annuals or fall annuals.

BLOW / SWEEP PAVEMENT -

Blowing or sweeping pavement will include the complete removal of dirt, sand or other debris from pedestrian paving surfaces by using power blowers, brooms or both. Debris should be removed from flat surfaces of paving, corners between paving and walls, the tops of walls if visible, from under site furniture, from stair treads and risers and handicap ramps.

CLEAN SITE FURNITURE -

Cleaning site furniture will include the complete removal of postings, flyers, tape, stickers or other foreign objects from benches, tables, litter receptacles and bollards.

LITTER PICK UP -

Litter pick up will include the complete removal of all trash or other foreign objects from paved areas, lawns, steps and ramps. Litter pick up will also include the removal of visible trash from planting beds, annual beds and perennial beds.

LEAF REMOVAL -

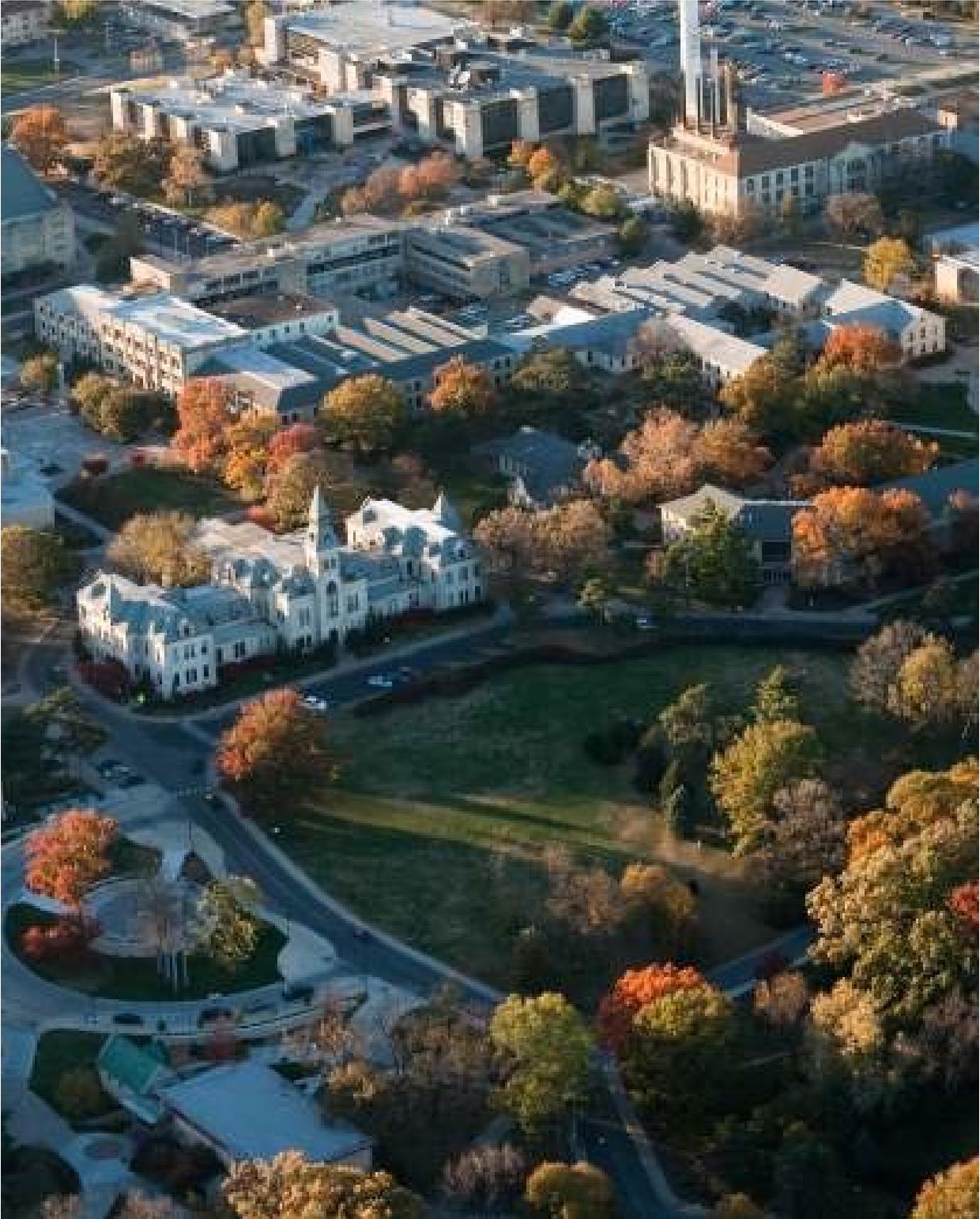
Leaf removal will include removing leaves from lawns, planting beds, perennial beds and annual beds.

ANNUALS IN CONTAINERS -

The complete care of annual plants that are in free standing containers. Care will include weeding, watering and monitoring.

CUTTING BACK PERENNIALS -

Cutting back perennials will include the removal of dead organic material at the end of the growing season. Perennials with winter interest can be left throughout the winter season at the direction of the Landscape Superintendent.



LANDSCAPE SERVICES CALENDAR

JANUARY

ALL STAFF:

- Monitor Compliance Training requirements
- Clean vehicles weekly and assist with departmental equipment/infrastructure improvements

LANDSCAPE TECHNICIAN II:

- Snow removal, as weather dictates. Check for slippery areas each morning on non-snow days.
- Litter, leaves and debris removal
- Winter Projects List – tree work, prairie and native/natural management
- Campus landscape improvements as directed
- Conduct greenhouse work as directed
- Seasonally appropriate shrub pruning

TREE CREW:

- Snow removal, as weather dictates. Assist Area LT's w/ monitoring of slippery areas, as needed.
- Winter Projects List – tree work, prairie and native/natural area management
- Submit burn permit w/ City of Manhattan Fire Dept. for prescribed burning pursuits
- Submit burn permit w/ Coralville Fire Dep't. for prairie burn at Oakdale Hygienic Lab, if intended for this year
- Tree inventory
- Register for and/or attend Shade Tree Short Course held in Ames in February
- Work on the President's Residence and core campus trees as ground conditions allow
- Perform tree work based on tree management plan found in Tree Campus USA Submittal

LANDSCAPE TECH I:

- Snow removal, as weather dictates. Landscape Tech II's w/ monitoring of slippery areas, as needed.
- Winter Projects List – tree work, prairie & native/natural management
- Attend Kansas Turfgrass Conference for those approved (if not held in December)
- Campus landscape improvements as directed

IRRIGATION SPECIALIST:

- Snow removal as weather dictates
- Assist Landscape Tech I & II's with monitoring slippery areas, as needed
- Winter Projects List - tree work, prairie and Native/Natural area management
- Design of irrigation systems
- Campus landscape improvements as directed

MECHANICS:

- Snow removal, as weather dictates
- Service and repairs
- Campus landscape improvements as directed

SUPERINTENDENT & ASST. SUPERINTENDENT:

- Snow Reports
- Planning and scheduling
- Monitor Safety & Compliance Training requirements for self and staff
- AiM – Approve time entries, assign new work requests, close completed work requests
- Track warehouse stock data entry / equipment rental usage
- Performance Appraisals & Annual Goal Setting
- Register for and/or attend Shade Tree Short Course
- Monitor progress of Winter Projects List
- Register Groundskeeper II's, Arborist, Tree Trimmers, and Supervisor for Continuing Instruction Courses as available

LANDSCAPE SERVICES CALENDAR

FEBRUARY

ALL STAFF:

- Monitor Compliance Training requirements
- Clean vehicles weekly. Assist with departmental equipment & infrastructure improvements

LANDSCAPE TECHNICIAN II:

- Snow removal, as weather dictates. Check for slippery areas each morning on non-snow days.
- Litter, leaf and debris removal
- Winter Projects List – tree work, prairie & native/natural area management
- Conduct greenhouse work as directed
- Seasonally appropriate shrub pruning
- Campus landscape improvements as directed

TREE CREW:

- Snow removal, as weather dictates. Assist Area Landscape Tech II's w/ slippery areas, as needed.
- Winter Projects List – tree work, prairie and native/natural area management, complete burn permit w/ Manhattan Fire Department for prescribed burn pursuits
- Tree inventory
- Work on the President's Residence and core campus as ground conditions allow
- Organize Tree Campus USA Service Learning Projects w/ student groups
- Prepare and prioritize projects for upcoming season
- Perform tree work based on Tree Management Plan found in Tree Campus USA submittal

LANDSCAPE TECH I:

- Snow removal, as weather dictates. Assist Area Gk's w/ slippery areas, as needed.
- Winter Projects List – tree work, prairie and native/natural area management
- Litter, leaf and debris removal
- Campus landscape improvements as directed

IRRIGATION SPECIALIST:

- Snow removal as weather dictates
- Assist Area LT's with monitoring slippery areas, as needed
- Winter Projects List - tree work, prairie and native/natural area management
- Design of irrigation systems
- Campus landscape improvements as directed

MECHANICS:

- Snow removal, as weather dictates
- Service and repairs
- Campus landscape improvements as directed

SUPERINTENDENT/ASST. SUPERINTENDENT:

- Snow Reports
- Monitor snow melt systems
- Planning and scheduling
- Monitor Safety & Compliance Training for self and staff
- AiM – Approve time entries, assign new work requests, close completed work requests
- Track warehouse stock data entry / equipment rental usage
- Performance appraisals & planning
- Monitor progress of Winter Projects List
- Tree seedling operation in Micronursery
- Track & pursue staff development opportunities

LANDSCAPE SERVICES CALENDAR

MARCH

ALL STAFF:

- Monitor Compliance Training requirements
- Clean vehicles weekly and assist with departmental equipment/infrastructure improvements

LANDSCAPE TECHNICIANS II:

- Snow removal as weather dictates. Check for slippery areas on non-snow days
- Litter, leaf and debris removal
- Winter Projects List – tree work, prairie and native and natural area management
- Repair turf damage from snow removal operation along sidewalk margins
- Clean up sand from Winter snow removal operation
- Spring clean up
- Pre-emergent applications to landscape beds
- Campus landscape improvements as directed

TREE CREW:

- Snow removal as weather dictates. Assist Area LT's w/ slippery areas as needed
- Winter Projects List – tree work, prairie and native/natural area management
- Tree inventory
- Assist with planning of Tree Campus USA Service Learning Projects w/ student groups
- Conduct prairie burns
- Perform tree work based on Tree Management Plan found in Tree Campus USA submittal

LANDSCAPE TECHNICIAN I:

- Assist LT II's w/ restoring turf damage from Winter snow removal operation
- Winter Projects List – tree work, prairie and native/natural area management
- Apply 1st of two applications of gypsum to sidewalk margins to leach salt from Winter operations
- Aerate turf
- Formalize mow routes for season
- Cut & remove ornamental grasses

IRRIGATION SPECIALIST:

- Assist Area LT's with monitoring slippery areas, as needed
- Winter Projects List - tree work, prairie and native/natural area management
- Irrigation systems turn-on and backflow testing

MECHANICS:

- Snow removal, as weather dictates
- Service and repairs. Inspect mowers for season.
- Equipment Transfers and staging

SUPERVISOR:

- Snow Reports
- Monitor snow melt systems
- Planning and scheduling
- Monitor Safety & Compliance Training for self and staff
- AiM – Approve time entries, assign new work requests, close completed work requests
- Track warehouse stock data entry / equipment rental usage
- Monitor progress of Winter Projects List
- Distribute Pesticide Log sheets to
- Groundkeeper II's, Arborist, and Tree Trimmers
- Notify stakeholders of prescribed burns
- Order cool season annuals if applicable

LANDSCAPE SERVICES CALENDAR

APRIL

ALL STAFF:

- Monitor Compliance Training requirements
- Clean vehicles weekly

LANDSCAPE TECHNICIANS II:

- Litter and debris removal
- Repair turf damage from Winter snow removal operation along sidewalk margins
- Apply pre-emergent herbicide in mulched areas
- Apply 1st fertilizer to turf in week 2.
- Bed maintenance & Spring Clean-up
- Mulch tree rings. See diagram in Appendix.
- Bed mulching as needed/directed
- Install cool-season annuals if applicable
- Tend to seasonal color displays
- Seasonally appropriate shrub pruning
- Monitor/inventory landscape plant material mortality

TREE CREW:

- Tree inventory
- Perform tree work based on Tree Management Plan found in Tree Campus USA submittal
- Lead/Participate in Service Learning Projects w/ student groups for Tree Campus USA requirements
- Prepare site & participate in installation of tree on Arbor Day for TCUSA Activities

LANDSCAPE TECHNICIAN I:

- Average date of first mowing is April 1
- Overseeding as directed window is April 15 – May 31 for majority of projects

IRRIGATION SPECIALIST:

- Charge irrigation systems
- Perform backflow tests

MECHANICS:

- Service and repairs

SUPERVISOR:

- Planning and scheduling
- Monitor Safety & Compliance Training for self and staff
- AiM – Approve time entries, assign new work requests, close completed work requests
- Track warehouse stock data entry / equipment rental usage
- Coordinate warranty work
- Set up area tours

LANDSCAPE SERVICES CALENDAR

MAY

ALL STAFF:

- Monitor Compliance Training requirements
- Clean vehicles weekly

LANDSCAPE TECHNICIAN II:

- Litter and debris removal
- Bed maintenance
- Mulch tree rings. See diagram in Appendix.
- Prune back spring bulb foliage for aesthetics
- Prune back deciduous shrubs such as Forsythia as necessary after the blooming period
- A bed mulching as needed/directed
- Monitor for landscape pests including bagworms.
- Remove tulips after
- Install warm-season annuals as needed/directed
- Seasonally appropriate shrub pruning maintenance
- Tend to seasonal color displays.

TREE CREW:

- Tree inventory
- Perform tree work based on Tree Management Plan found in Tree Campus USA submittal
- Monitor for landscape pests including bagworms

LANDSCAPE TECHNICIANS I:

- Mow turf
- Overseeding window is April 15 – May 31 for majority of projects
- Litter and debris removal

IRRIGATION SPECIALIST:

- See Appendix for maintenance schedule

SUPERVISOR:

- Planning and scheduling
- Monitor Compliance Training requirements for self and staff
- AiM: Approve time entries, assign new work requests, close completed work requests
- Ensure departmental materials are available
- Coordinate tulip bulb disposal

LANDSCAPE SERVICES CALENDAR

JUNE

ALL STAFF:

- Monitor Safety & Compliance Training requirements
- Clean vehicles weekly

LANDSCAPE TECH II:

- Litter and debris removal
- Bed maintenance.
- Landscape bed mulching as needed/required
- Seasonally appropriate shrub pruning.
- Tend to seasonal color displays
- Monitor for landscape pests including bagworms.

TREE CREW:

- Tree inventory
- Perform tree work based on Tree Management Plan found in Tree Campus USA submittal
- Monitor for landscape pests including bagworms.

LANDSCAPE TECH I:

- Mow turf
- Litter and debris removal

IRRIGATION SPECIALIST:

- See Appendix

MECHANICS:

- Service and repairs

SUPERVISOR:

- Planning and scheduling
- Monitor Safety & Compliance Training requirements for self and staff
- Track warehouse stock data entry / equipment rental usage
- AiM: Approve time entries, assign new work requests, close completed work requests
- Set up area tours
- Mid-year reviews/discussion

LANDSCAPE SERVICES CALENDAR

JULY

ALL STAFF:

- Monitor Safety & Compliance Training requirements
- Clean vehicles weekly

LANDSCAPE TECH II:

- Litter and debris removal
- Bed maintenance
- Mulch tree rings. See diagram in Appendix.
- Landscape bed mulching as needed/directed.
- Apply Pre-Emergent in mulched area
- Seasonally appropriate shrub pruning
- Tend to seasonal color displays

TREE CREW:

- Tree inventory
- Perform tree work based on Tree Management Plan found in Tree Campus USA

LANDSCAPE TECH I:

- Mow turf
- Litter and debris removal

IRRIGATION SPECIALIST:

- See Appendix

MECHANICS:

- Service and repairs

SUPERVISOR:

- Mid-year reviews & discussions
- Planning and scheduling
- Monitor Compliance Training requirements for self and staff
- Tulip planning/ordering
- AiM: Approve time entries, assign new work requests, close completed work requests

LANDSCAPE SERVICES CALENDAR

AUGUST

ALL STAFF:

- Monitor Compliance Training requirements
- Clean vehicles weekly

LANDSCAPE TECHNICIAN II:

- Litter and debris removal
- Bed maintenance
- Mulch tree rings. See diagram in Appendix.
- A Landscape bed mulching as needed/directed
- Seasonally appropriate shrub pruning.
- Tend to seasonal color displays.

TREE CREW:

- Tree inventory
- Perform tree work based on Tree Management plan found in Tree Campus USA submittal
- Enroll eligible staff in KAA Fall Training

LANDSCAPE TECH I:

- Mow turf/perform turf care activities
- Overseeding as needed/directed
- Litter and debris removal

IRRIGATION SPECIALIST:

- See Appendix

MECHANICS:

- Service and repairs

SUPERVISOR:

- Planning and scheduling
- Monitor Safety & Compliance Training requirements for self and staff
- AiM: Approve time entries, assign new work requests, close completed work requests
- Set up area tours

LANDSCAPE SERVICES CALENDAR

SEPTEMBER

ALL STAFF:

- Monitor Compliance Training requirements
- Clean vehicles weekly

LANDSCAPE TECH II:

- Litter and debris removal
- Bed maintenance
- Leaf removal
- Mulch tree rings. See diagram in Appendix.
- Landscape bed mulching as needed
- Tend to seasonal color display
- Seasonally appropriate shrub pruning

TREE CREW:

- Tree inventory
- Perform tree work based on Tree Management Plan found in Tree Campus USA submittal
- Enroll eligible staff into KAA Fall Training Course

LANDSCAPE TECH I:

- Mow turf/perform turf care activities
- Overseeding as needed/directed
- Aeration/verti-slicing
- Fertilizer Application

IRRIGATION SPECIALIST:

- See Appendix
- Reserve air compressor for winterization of systems

MECHANICS:

- Service and repairs

SUPERVISOR:

- Planning and scheduling
- Monitor Compliance Training requirements for self and staff
- Track & order inventory as needed to support services
- AiM: Approve time entries, assign new work requests, close completed work requests

LANDSCAPE SERVICES CALENDAR

OCTOBER

ALL STAFF:

- Monitor Compliance Training requirements
- Clean vehicles weekly

LANDSCAPE TECH II:

- Litter and debris removal
- Bed maintenance
- Leaf removal
- Mulch tree rings. See diagram in Appendix.
- Landscape bed mulching as needed/directed
- Seasonally appropriate shrub pruning
- Tend to seasonal color displays
- Install tulip bulbs as directed

TREE CREW:

- Tree inventory
- Perform tree work based on Tree Management plan found in Tree Campus USA submittal
- Collect seeds from selected campus trees and from other contacts

LANDSCAPE TECH I:

- Mow turf/perform turf maintenance activities
- Litter and debris removal
- Litter and debris removal
- Leaf removal

IRRIGATION SPECIALIST:

- See Appendix
- Blow out/winterize irrigation systems

MECHANICS:

- Service and repairs
- Seasonal equipment preparation

SUPERVISOR:

- Planning and scheduling
- Monitor Compliance Training requirements for self
- AiM: Approve time entries, assign new work requests, close completed work requests
- Track inventory stock
- Set up area tours

LANDSCAPE SERVICES CALENDAR

NOVEMBER

ALL STAFF:

- Monitor Compliance Training requirements
- Clean vehicles weekly

LANDSCAPE TECH II:

- Litter and debris removal
- Bed maintenance
- Leaf removal
- Seasonally appropriate shrub pruning
- Tend to seasonal color displays
- Install tulip bulbs/apply Snapshot pre-emergent 10-14 days after installation
- Snow removal as weather dictates

TREE CREW:

- Tree inventory
- Perform tree work based on Tree Management plan found in Tree Campus USA submittal
- Snow removal as weather dictates

LANDSCAPE TECH I:

- Mow turf and fallen leaves
- Assist w/ leaf removal
- Snow removal as weather dictates

IRRIGATION SPECIALIST:

- Blow out/winterize irrigation systems
- Snow removal as weather dictates

MECHANICS:

- Service and repairs
- Prepare equipment for winter maintenance

SUPERVISOR:

- Discuss snow operation plans for the upcoming season
- Monitor snow melt systems
- Planning and scheduling
- Monitor Compliance Training for self
- AiM: Approve time entries, assign new work requests, close completed work requests
- Schedule Continuing Instruction Course credits
- Track warehouse stock

LANDSCAPE SERVICES CALENDAR

DECEMBER

ALL STAFF:

- Monitor Compliance Training requirements
- Clean vehicles weekly

LANDSCAPE TECH II:

- Snow removal as weather dictates. Check for slippery areas each morning on non-snow days.
- Litter, leaf and debris removal
- Winter Projects List – tree work, prairie and native/natural area management
- Seasonally appropriate shrub planting
- Eligible staff to attend Kansas Turfgrass Conference

TREE CREW:

- Snow removal as weather dictates. Assist LTs w/ slippery areas, as needed.
- Tree inventory
- Tree work based on Tree Management plan in Appendix
- Winter Projects List – tree work, prairie and native/natural area management

LANDSCAPE TECH I:

- Snow removal as weather dictates. Assist Landscape Tech II's w/ slippery areas, as needed.
- Winter Projects List – tree work, prairie and native/natural area management
- Eligible staff to attend Kansas Turfgrass Conference

IRRIGATION SPECIALIST:

- See Appendix
- Snow removal as weather dictates.

MECHANICS:

- Service and repairs
- Snow removal as weather dictates

SUPERVISOR:

- Snow Reports
- Planning and scheduling
- ■ Monitor Compliance Training requirements for self and staff
- ■ AiM – Approve time entries, assign new work requests, close completed work requests
- Performance Appraisals & Goals for next year
- Establish new Safety team for upcoming calendar year
- Retrieve Pesticide Log sheets from licensed applicators and file
- Track inventory/warehouse stock