



Wayne State University Grounds Maintenance Assessment

A report prepared for the Associate Vice President for
Facilities Planning & Management

December 6, 2011

HuronEducation

YOUR MISSION | OUR SOLUTIONS

Table of Contents

Overview.....	3
Purpose.....	3
Scope.....	3
Approach.....	3
Recommendations.....	4
1. Eliminate vacant positions	4
2. Realign current zone structure and implement a crew-based staffing model.....	5
3. Develop KPIs for grounds maintenance staff	6
4. Implement landscape design standards.....	6
5. Consider using outside firms for tree trimming and seasonal planting.....	6
6. Develop a landscape master plan.....	6
7. Limit vehicle access to pedestrian areas.....	7
8. Repair or repurpose water features	7
9. Ensure auxiliary units are charged for services rendered.....	7
10. Assign housekeeping tasks to groundskeepers	7
Interview List.....	8

Overview

Purpose

Wayne State University (WSU) engaged Huron Consulting Group (Huron) to conduct a high-level assessment of WSU's Grounds Maintenance organization. Huron's assessment was led by Jimmy Powell, Director of Exterior Services and Sustainability at Emory University, located in Atlanta, Georgia. The primary objective of Jimmy's review was to understand the current state of WSU's grounds organization and provide recommendations to improve the overall efficiency and effectiveness of the operation.

Scope

- Analyze current staffing levels and determine whether the current staff size is appropriate for WSU's grounds related operations
- Determine whether opportunities exist to increase the efficiency and effectiveness of current operations
- Provide recommendations for establishing a Quality Assurance program based on service level expectations and staff/crew performance ratings

Approach

During his time on campus, Jimmy met with the senior leadership team of Facilities Planning and Management (FP&M), the Director of Grounds Maintenance, Kent Bolt, Kent's leadership staff, and several front-line staffers. Jimmy also spent time walking the campus and touring the Grounds Maintenance shop.

Based on his visit, and on his knowledge of and experience in the industry, Jimmy has outlined 10 recommendations he believes WSU could take to enhance its Grounds Maintenance operation and improve the overall look and feel of the Detroit campus.

Recommendations

Recommendation 1: The two vacant staff positions, currently filled by temps, are not necessary and could be eliminated

Grounds Maintenance has two vacant positions that are currently filled by workers on temporary status. During my time on campus, I observed a high level of maintenance carried out by the staff currently in place. I would question whether these two positions are necessary since it has been my experience that temporary employees are less productive than full time regular employees. It is my recommendation that WSU consider eliminating these two positions.

APPA recently printed the second edition of the Grounds-Operational Guidelines for Educational Facilities which I have referenced in order to provide some additional thoughts on WSU's current landscape staffing levels.

WSU's Grounds Maintenance group currently consists of 26 FTEs. This number includes staff who are responsible for maintaining the athletic fields and staff who are responsible for moving/staging duties. I believe that these two groups should be excluded when considering the total FTEs involved in maintaining the campus landscape:

- 3 FTEs are assigned to the moving crew and since I assume that 75% of their work is related to moving/staging, it makes sense not to count them as true groundskeepers.
- 3 FTEs are dedicated to athletic/recreational field maintenance and I think it's sensible to isolate these positions and evaluate them separately. According to the information provided by the Grounds Maintenance Director, the Matthaui crew maintains 29.4 acres of turf and a total area of 46.5 acres. I am in agreement that 3 FTE's are adequate for this area especially since they are responsible for "lining" the fields and supporting some of the athletic events.
- The Director position (1 FTE) should not be counted as a groundskeeper either since a majority of his time is spent on managerial and administrative tasks.

When these seven positions are excluded from the total staff count, WSU is left with 19 FTEs who are maintaining the core of the campus landscape.

APPA provides guidelines for calculating the staffing requirements for a particular grounds area based on two essential factors:

1. The type of area that must be maintained and the tasks associated with that maintenance
2. The amount of care to be provided, or the level of attention to be paid, to the grounds area

Based on my on-site assessment, I believe that Wayne State is maintaining its grounds at a Level 2 as defined by APPA.

- APPA guidelines suggest that 2.3 acres of turf per FTE is an appropriate staffing ratio for a Level 2 institution.
- Based on this ratio, Wayne State would require 15.78 FTEs since there are 36.3 acres of maintainable turf on campus (not including athletic fields).
- I think it is also reasonable for an additional FTE to be factored in given the work involved with seasonal color planting and maintenance. This brings the number of FTEs needed for landscape maintenance (excluding moving and athletic fields) to 16.78. This would suggest that Wayne State's operation is overstaffed by 2.22 FTE.

With this said, it is important to note that APPA guidelines are just that, *guidelines*, and each campus has a uniquely different composition which may result in higher or lower staffing needs given a variety of factors. For instance, I suspect that WSU must spend more time picking up litter than its contemporaries located in suburban areas. It would be helpful to know how much "true time" is spent on litter each day in determining if the proposed staffing level is correct.

Additionally, I was asked to look into the feasibility of whether WSU could operate under a "winter routes" approach. In other words, could WSU reduce its full time staff to the minimum level necessary for maintaining the campus during the winter months (i.e. the fall and winter months) when there are fewer planting and turf maintenance activities occurring, and increase its staff with temporary workers during the busier months (i.e. the spring and summer)? This approach is commonly used in the commercial and residential landscape industry,

but it is very difficult to implement in a University setting due to the many non-landscape related responsibilities that campus grounds staff handle on a daily basis. I would recommend WSU not take this approach for two reasons:

- 1) The grounds crew at WSU is largely responsible for deicing and snow removal activities for the campus and I would imagine this is nearly equal to the labor demand associated with the summer/spring planting and turf maintenance tasks.
- 2) This staffing tactic could strain the current organization since it will require supervisors to spend time hiring, training, and managing temporary workers each season.

With that said, I do believe WSU would benefit from using a contractor to install and maintain seasonal color as outlined below under *Recommendation 5*.

Recommendation 2: Realign the campus into larger zones and service these zones using a crew-based model

Currently, the campus is divided into 11 zones. Each zone is maintained by a single worker who serves as a “jack of all trades”. While this model does have some benefits (i.e. developing a sense of ownership between the worker and his/her zone, building a strong relationship between zone occupants and the grounds worker, etc.) it is also a costly and inefficient way to organize.

- Every day, one supervisor has to manage the work occurring in 11 different zones
- Currently, workers are unable to share tools and equipment, which drives up maintenance and operating costs

I recommend that the campus be realigned into larger zones based on the zone-model that Grounds already has in place. Each zone would be maintained by a crew of two to three workers and led by a crew leader. The benefits to this change include:

- Better utilization of equipment and less vehicles needed
- Set routes and daily duties are easier to establish
- Groundskeepers work in teams, no more “lone rangers”
- Supervisors are more effective
- Easier to know where everyone is located at any given time
- Simplifies communication needs (crew leaders are the only workers needing to carry radios)
- Fewer vehicles ease strains on pedestrian traffic flow

Three areas on campus are already maintained using a crew-based model. Grounds could keep this structure intact and add four additional zones, maintained by crews of two to three workers.

Current crew-based zones that should remain intact:

- Moving and relocation services
- Athletics
- West Side

Potential future zones:

- North End
- Center Campus
- South End
- Medical Center (*Note: Grounds Maintenance could consider combining this area with another zone.*)

Ideally, a crew leader would lead each crew. In addition to handling landscape maintenance work, they would be responsible for overseeing the workers assigned to their crew. At Emory University, the pay grade for this position is two grades above the Groundskeeper position and four grades below the Supervisor position.

Implementing this model could allow WSU to reduce its Grounds Maintenance staff by two FTEs with no change to landscape quality.

Lastly, I would recommend that FP&M’s leadership have an “open” and “transparent” discussion with the Grounds Maintenance Director and his staff and involve them in implementing this “crew based” approach. I

believe that they can provide some great insights on how to formulate the new approach and it will allow them an opportunity to become more involved in and supportive of any organizational changes that are made by FP&M.

Recommendation 3: Develop clear expectations for all positions within the Grounds Maintenance Department; Implement a quality rating system for each crew and rate each individual on their performance relative to expectations and established quality standards

The organization currently lacks performance indicators to measure productivity and efficiency of operations. I sense that management would like to develop a system that better defines expectations for staff on a daily basis. Defined daily expectations coupled with a complementary rating system for productivity and quality assurance relative to landscape operations would be a desired goal. The Department should strive to provide ratings on a monthly basis.

Recommendation 4: A campus design standard should be created for landscape furnishings and accessories; a multi-year plan to retrofit the campus according to the new standards should be developed

Wayne State University is built upon approximately 210 acres of urban development in Detroit, Michigan. Approximately 54% of the 210 acres is "open" space consisting of roads, sidewalks, malls, turf, trees, ornamental shrub beds, and fountains. The expansiveness and sheer volume of concrete surfaces gives the campus a stark appearance in winter. I am sure that when the trees are in full leaf that this "starkness" is muted and that the addition of flowering plant materials in pots, planters, and flower beds softens the appearance as well.

There does not appear to be a campus standard for benches, bike racks, posts/chains, bollards, and other landscape furnishings. A campus standard for landscape furnishing and accessories needs to be created and a multi-year plan to retrofit the campus according to the new standards should be developed.

Recommendation 5: Evaluate the use of outside contractors to install and maintain seasonal color and to provide tree trimming services

Since seasonal plantings are not necessary year round it may be possible to augment current operations with an outside contractor. Benefits of using an outside firm for seasonal plantings include:

- Greater aesthetical results since outside firms often employ staff that have greater expertise in selecting and maintaining plantings
- Allowing internal grounds staff to concentrate on their core landscape maintenance functions and which in turn decreases strains on the organization and ultimately leads to reduced costs

WSU's grounds maintenance staff currently handle tree trimming needs on campus. This puts the University at unnecessary risk due to the high potential of worker injury and/or property damage. Arborists also have an extensive knowledge of:

- Identifying and removing dead or weakened limbs that pose a hazard or lead to decay
- Creating better tree structure to reduce wind resistance and potential for storm damage
- Training young trees
- Improving tree shape

Recommendation 6: Engage a landscape architect to develop a long term master plan for the campus landscape; focus should be on reducing hardscape and turf

Developing a master plan that University administrators agree upon will help FP&M leadership stay focused on committed design intent for the look and feel of the campus landscape. WSU's master plan should include:

- Reducing impervious surfaces to mitigate storm water run-off and the urban heat island effect

- Designing a more pedestrian friendly campus that still allows necessary service vehicles to access the campus on a limited basis

Recommendation 7: Limit or restrict vehicle access to the mall area and pedestrian zones wherever possible

Campus planners must develop a plan to limit or restrict vehicular access to mall areas during peak times for pedestrian traffic. There is damage to hardscape and landscape areas that is occurring due to delivery and service vehicles having access to the mall areas. The Grounds department, through necessity, has strategically placed boulders to prevent vehicles from driving on turf areas. Although, this system may be a deterrent to vehicles, the presence of the boulders detracts from the overall appearance of the campus.

Recommendation 8: Repair or repurpose the water features near McGregor and DeRoy

WSU should consider repairing its water features to help soften the interior area of campus, or fill them to provide additional bed space for seasonal color plantings.

Recommendation 9: Ensure auxiliary units are invoiced for services

Grounds Maintenance should review its current billing practices to ensure it is invoicing for rechargeable work. For example, Grounds Maintenance is currently providing landscape maintenance services for parking areas, but Grounds does not charge the Parking Office for the services they provide. WSU operates its parking entity as an auxiliary, so Grounds should explore whether Parking should be billed for services rendered.

Recommendation 10: Give groundskeepers greater responsibility for maintaining their shop

If WSU decides to move to a “crew” based option as outlined in *Recommendation 2*, I would recommend that each crew take responsibility for tidying up their shop area on a rotating basis. I found the Grounds Maintenance shop to be generally well kept, but I believe the space would benefit from a general cleaning on a routine basis.

Every day after lunch, each crew could be assigned a task. For example, one crew could be assigned the task of blowing off the area outside the shop, another crew could be assigned the task of straightening up the break area, another crew could be assigned the task of sweeping the inside work areas, etc. Each of the crews could be tasked with carrying out a housekeeping responsibility for five weeks and then rotate to a new task. This would not take the place of custodians who should still be assigned to the building to service the restrooms, office areas, the break room, etc.

I believe this will not only improve the look of the shop, but it will ingrain a sense of teamwork and provide groundskeepers with a greater sense of ownership over their work space.

Interview List

(Listed in alphabetical order)

Name	Title / Organization	Organization
Marty Bartley	Groundskeeper	Grounds Maintenance Department
Kent Bolt	Director	Grounds Maintenance Department
Steve Bowman	Groundskeeper	Grounds Maintenance Department
Chris Casleton	Landscape Supervisor	Grounds Maintenance Department
Michael Colburn	Senior Director of Facilities Operations	Facilities Planning & Management
Megan Etue	Manager	Facilities Planning & Management
Raymond Lindenmuth	Landscape Supervisor	Grounds Maintenance Department
Jim Sears	Associate Vice President	Facilities Planning & Management



Wayne State University Grounds Maintenance Assessment

A report prepared for the Associate Vice President for
Facilities Planning & Management

December 6, 2011

HuronEducation

YOUR MISSION | OUR SOLUTIONS

Table of Contents

Overview.....	3
Purpose.....	3
Scope.....	3
Approach.....	3
Recommendations.....	4
1. Eliminate vacant positions	4
2. Realign current zone structure and implement a crew-based staffing model.....	5
3. Develop KPIs for grounds maintenance staff	6
4. Implement landscape design standards.....	6
5. Consider using outside firms for tree trimming and seasonal planting.....	6
6. Develop a landscape master plan.....	6
7. Limit vehicle access to pedestrian areas.....	7
8. Repair or repurpose water features	7
9. Ensure auxiliary units are charged for services rendered.....	7
10. Assign housekeeping tasks to groundskeepers	7
Interview List.....	8

Overview

Purpose

Wayne State University (WSU) engaged Huron Consulting Group (Huron) to conduct a high-level assessment of WSU's Grounds Maintenance organization. Huron's assessment was led by Jimmy Powell, Director of Exterior Services and Sustainability at Emory University, located in Atlanta, Georgia. The primary objective of Jimmy's review was to understand the current state of WSU's grounds organization and provide recommendations to improve the overall efficiency and effectiveness of the operation.

Scope

- Analyze current staffing levels and determine whether the current staff size is appropriate for WSU's grounds related operations
- Determine whether opportunities exist to increase the efficiency and effectiveness of current operations
- Provide recommendations for establishing a Quality Assurance program based on service level expectations and staff/crew performance ratings

Approach

During his time on campus, Jimmy met with the senior leadership team of Facilities Planning and Management (FP&M), the Director of Grounds Maintenance, Kent Bolt, Kent's leadership staff, and several front-line staffers. Jimmy also spent time walking the campus and touring the Grounds Maintenance shop.

Based on his visit, and on his knowledge of and experience in the industry, Jimmy has outlined 10 recommendations he believes WSU could take to enhance its Grounds Maintenance operation and improve the overall look and feel of the Detroit campus.

Recommendations

Recommendation 1: The two vacant staff positions, currently filled by temps, are not necessary and could be eliminated

Grounds Maintenance has two vacant positions that are currently filled by workers on temporary status. During my time on campus, I observed a high level of maintenance carried out by the staff currently in place. I would question whether these two positions are necessary since it has been my experience that temporary employees are less productive than full time regular employees. It is my recommendation that WSU consider eliminating these two positions.

APPA recently printed the second edition of the Grounds-Operational Guidelines for Educational Facilities which I have referenced in order to provide some additional thoughts on WSU's current landscape staffing levels.

WSU's Grounds Maintenance group currently consists of 26 FTEs. This number includes staff who are responsible for maintaining the athletic fields and staff who are responsible for moving/staging duties. I believe that these two groups should be excluded when considering the total FTEs involved in maintaining the campus landscape:

- 3 FTEs are assigned to the moving crew and since I assume that 75% of their work is related to moving/staging, it makes sense not to count them as true groundskeepers.
- 3 FTEs are dedicated to athletic/recreational field maintenance and I think it's sensible to isolate these positions and evaluate them separately. According to the information provided by the Grounds Maintenance Director, the Mattheaei crew maintains 29.4 acres of turf and a total area of 46.5 acres. I am in agreement that 3 FTE's are adequate for this area especially since they are responsible for "lining" the fields and supporting some of the athletic events.
- The Director position (1 FTE) should not be counted as a groundskeeper either since a majority of his time is spent on managerial and administrative tasks.

When these seven positions are excluded from the total staff count, WSU is left with 19 FTEs who are maintaining the core of the campus landscape.

APPA provides guidelines for calculating the staffing requirements for a particular grounds area based on two essential factors:

1. The type of area that must be maintained and the tasks associated with that maintenance
2. The amount of care to be provided, or the level of attention to be paid, to the grounds area

Based on my on-site assessment, I believe that Wayne State is maintaining its grounds at a Level 2 as defined by APPA.

- APPA guidelines suggest that 2.3 acres of turf per FTE is an appropriate staffing ratio for a Level 2 institution.
- Based on this ratio, Wayne State would require 15.78 FTEs since there are 36.3 acres of maintainable turf on campus (not including athletic fields).
- I think it is also reasonable for an additional FTE to be factored in given the work involved with seasonal color planting and maintenance. This brings the number of FTEs needed for landscape maintenance (excluding moving and athletic fields) to 16.78. This would suggest that Wayne State's operation is overstaffed by 2.22 FTE.

With this said, it is important to note that APPA guidelines are just that, *guidelines*, and each campus has a uniquely different composition which may result in higher or lower staffing needs given a variety of factors. For instance, I suspect that WSU must spend more time picking up litter than its contemporaries located in suburban areas. It would be helpful to know how much "true time" is spent on litter each day in determining if the proposed staffing level is correct.

Additionally, I was asked to look into the feasibility of whether WSU could operate under a "winter routes" approach. In other words, could WSU reduce its full time staff to the minimum level necessary for maintaining the campus during the winter months (i.e. the fall and winter months) when there are fewer planting and turf maintenance activities occurring, and increase its staff with temporary workers during the busier months (i.e. the spring and summer)? This approach is commonly used in the commercial and residential landscape industry,

but it is very difficult to implement in a University setting due to the many non-landscape related responsibilities that campus grounds staff handle on a daily basis. I would recommend WSU not take this approach for two reasons:

- 1) The grounds crew at WSU is largely responsible for deicing and snow removal activities for the campus and I would imagine this is nearly equal to the labor demand associated with the summer/spring planting and turf maintenance tasks.
- 2) This staffing tactic could strain the current organization since it will require supervisors to spend time hiring, training, and managing temporary workers each season.

With that said, I do believe WSU would benefit from using a contractor to install and maintain seasonal color as outlined below under *Recommendation 5*.

Recommendation 2: Realign the campus into larger zones and service these zones using a crew-based model

Currently, the campus is divided into 11 zones. Each zone is maintained by a single worker who serves as a “jack of all trades”. While this model does have some benefits (i.e. developing a sense of ownership between the worker and his/her zone, building a strong relationship between zone occupants and the grounds worker, etc.) it is also a costly and inefficient way to organize.

- Every day, one supervisor has to manage the work occurring in 11 different zones
- Currently, workers are unable to share tools and equipment, which drives up maintenance and operating costs

I recommend that the campus be realigned into larger zones based on the zone-model that Grounds already has in place. Each zone would be maintained by a crew of two to three workers and led by a crew leader. The benefits to this change include:

- Better utilization of equipment and less vehicles needed
- Set routes and daily duties are easier to establish
- Groundskeepers work in teams, no more “lone rangers”
- Supervisors are more effective
- Easier to know where everyone is located at any given time
- Simplifies communication needs (crew leaders are the only workers needing to carry radios)
- Fewer vehicles ease strains on pedestrian traffic flow

Three areas on campus are already maintained using a crew-based model. Grounds could keep this structure intact and add four additional zones, maintained by crews of two to three workers.

Current crew-based zones that should remain intact:

- Moving and relocation services
- Athletics
- West Side

Potential future zones:

- North End
- Center Campus
- South End
- Medical Center (*Note: Grounds Maintenance could consider combining this area with another zone.*)

Ideally, a crew leader would lead each crew. In addition to handling landscape maintenance work, they would be responsible for overseeing the workers assigned to their crew. At Emory University, the pay grade for this position is two grades above the Groundskeeper position and four grades below the Supervisor position.

Implementing this model could allow WSU to reduce its Grounds Maintenance staff by two FTEs with no change to landscape quality.

Lastly, I would recommend that FP&M’s leadership have an “open” and “transparent” discussion with the Grounds Maintenance Director and his staff and involve them in implementing this “crew based” approach. I

believe that they can provide some great insights on how to formulate the new approach and it will allow them an opportunity to become more involved in and supportive of any organizational changes that are made by FP&M.

Recommendation 3: Develop clear expectations for all positions within the Grounds Maintenance Department; Implement a quality rating system for each crew and rate each individual on their performance relative to expectations and established quality standards

The organization currently lacks performance indicators to measure productivity and efficiency of operations. I sense that management would like to develop a system that better defines expectations for staff on a daily basis. Defined daily expectations coupled with a complementary rating system for productivity and quality assurance relative to landscape operations would be a desired goal. The Department should strive to provide ratings on a monthly basis.

Recommendation 4: A campus design standard should be created for landscape furnishings and accessories; a multi-year plan to retrofit the campus according to the new standards should be developed

Wayne State University is built upon approximately 210 acres of urban development in Detroit, Michigan. Approximately 54% of the 210 acres is "open" space consisting of roads, sidewalks, malls, turf, trees, ornamental shrub beds, and fountains. The expansiveness and sheer volume of concrete surfaces gives the campus a stark appearance in winter. I am sure that when the trees are in full leaf that this "starkness" is muted and that the addition of flowering plant materials in pots, planters, and flower beds softens the appearance as well.

There does not appear to be a campus standard for benches, bike racks, posts/chains, bollards, and other landscape furnishings. A campus standard for landscape furnishing and accessories needs to be created and a multi-year plan to retrofit the campus according to the new standards should be developed.

Recommendation 5: Evaluate the use of outside contractors to install and maintain seasonal color and to provide tree trimming services

Since seasonal plantings are not necessary year round it may be possible to augment current operations with an outside contractor. Benefits of using an outside firm for seasonal plantings include:

- Greater aesthetical results since outside firms often employ staff that have greater expertise in selecting and maintaining plantings
- Allowing internal grounds staff to concentrate on their core landscape maintenance functions and which in turn decreases strains on the organization and ultimately leads to reduced costs

WSU's grounds maintenance staff currently handle tree trimming needs on campus. This puts the University at unnecessary risk due to the high potential of worker injury and/or property damage. Arborists also have an extensive knowledge of:

- Identifying and removing dead or weakened limbs that pose a hazard or lead to decay
- Creating better tree structure to reduce wind resistance and potential for storm damage
- Training young trees
- Improving tree shape

Recommendation 6: Engage a landscape architect to develop a long term master plan for the campus landscape; focus should be on reducing hardscape and turf

Developing a master plan that University administrators agree upon will help FP&M leadership stay focused on committed design intent for the look and feel of the campus landscape. WSU's master plan should include:

- Reducing impervious surfaces to mitigate storm water run-off and the urban heat island effect

- Designing a more pedestrian friendly campus that still allows necessary service vehicles to access the campus on a limited basis

Recommendation 7: Limit or restrict vehicle access to the mall area and pedestrian zones wherever possible

Campus planners must develop a plan to limit or restrict vehicular access to mall areas during peak times for pedestrian traffic. There is damage to hardscape and landscape areas that is occurring due to delivery and service vehicles having access to the mall areas. The Grounds department, through necessity, has strategically placed boulders to prevent vehicles from driving on turf areas. Although, this system may be a deterrent to vehicles, the presence of the boulders detracts from the overall appearance of the campus.

Recommendation 8: Repair or repurpose the water features near McGregor and DeRoy

WSU should consider repairing its water features to help soften the interior area of campus, or fill them to provide additional bed space for seasonal color plantings.

Recommendation 9: Ensure auxiliary units are invoiced for services

Grounds Maintenance should review its current billing practices to ensure it is invoicing for rechargeable work. For example, Grounds Maintenance is currently providing landscape maintenance services for parking areas, but Grounds does not charge the Parking Office for the services they provide. WSU operates its parking entity as an auxiliary, so Grounds should explore whether Parking should be billed for services rendered.

Recommendation 10: Give groundskeepers greater responsibility for maintaining their shop

If WSU decides to move to a “crew” based option as outlined in *Recommendation 2*, I would recommend that each crew take responsibility for tidying up their shop area on a rotating basis. I found the Grounds Maintenance shop to be generally well kept, but I believe the space would benefit from a general cleaning on a routine basis.

Every day after lunch, each crew could be assigned a task. For example, one crew could be assigned the task of blowing off the area outside the shop, another crew could be assigned the task of straightening up the break area, another crew could be assigned the task of sweeping the inside work areas, etc. Each of the crews could be tasked with carrying out a housekeeping responsibility for five weeks and then rotate to a new task. This would not take the place of custodians who should still be assigned to the building to service the restrooms, office areas, the break room, etc.

I believe this will not only improve the look of the shop, but it will ingrain a sense of teamwork and provide groundskeepers with a greater sense of ownership over their work space.

Interview List

(Listed in alphabetical order)

Name	Title / Organization	Organization
Marty Bartley	Groundskeeper	Grounds Maintenance Department
Kent Bolt	Director	Grounds Maintenance Department
Steve Bowman	Groundskeeper	Grounds Maintenance Department
Chris Casleton	Landscape Supervisor	Grounds Maintenance Department
Michael Colburn	Senior Director of Facilities Operations	Facilities Planning & Management
Megan Etue	Manager	Facilities Planning & Management
Raymond Lindenmuth	Landscape Supervisor	Grounds Maintenance Department
Jim Sears	Associate Vice President	Facilities Planning & Management



Wayne State University Grounds Maintenance Assessment

A report prepared for the Associate Vice President for
Facilities Planning & Management

December 6, 2011

HuronEducation

YOUR MISSION | OUR SOLUTIONS

Table of Contents

Overview.....	3
Purpose.....	3
Scope.....	3
Approach.....	3
Recommendations.....	4
1. Eliminate vacant positions	4
2. Realign current zone structure and implement a crew-based staffing model.....	5
3. Develop KPIs for grounds maintenance staff	6
4. Implement landscape design standards.....	6
5. Consider using outside firms for tree trimming and seasonal planting.....	6
6. Develop a landscape master plan.....	6
7. Limit vehicle access to pedestrian areas.....	7
8. Repair or repurpose water features	7
9. Ensure auxiliary units are charged for services rendered.....	7
10. Assign housekeeping tasks to groundskeepers	7
Interview List.....	8

Overview

Purpose

Wayne State University (WSU) engaged Huron Consulting Group (Huron) to conduct a high-level assessment of WSU's Grounds Maintenance organization. Huron's assessment was led by Jimmy Powell, Director of Exterior Services and Sustainability at Emory University, located in Atlanta, Georgia. The primary objective of Jimmy's review was to understand the current state of WSU's grounds organization and provide recommendations to improve the overall efficiency and effectiveness of the operation.

Scope

- Analyze current staffing levels and determine whether the current staff size is appropriate for WSU's grounds related operations
- Determine whether opportunities exist to increase the efficiency and effectiveness of current operations
- Provide recommendations for establishing a Quality Assurance program based on service level expectations and staff/crew performance ratings

Approach

During his time on campus, Jimmy met with the senior leadership team of Facilities Planning and Management (FP&M), the Director of Grounds Maintenance, Kent Bolt, Kent's leadership staff, and several front-line staffers. Jimmy also spent time walking the campus and touring the Grounds Maintenance shop.

Based on his visit, and on his knowledge of and experience in the industry, Jimmy has outlined 10 recommendations he believes WSU could take to enhance its Grounds Maintenance operation and improve the overall look and feel of the Detroit campus.

Recommendations

Recommendation 1: The two vacant staff positions, currently filled by temps, are not necessary and could be eliminated

Grounds Maintenance has two vacant positions that are currently filled by workers on temporary status. During my time on campus, I observed a high level of maintenance carried out by the staff currently in place. I would question whether these two positions are necessary since it has been my experience that temporary employees are less productive than full time regular employees. It is my recommendation that WSU consider eliminating these two positions.

APPA recently printed the second edition of the Grounds-Operational Guidelines for Educational Facilities which I have referenced in order to provide some additional thoughts on WSU's current landscape staffing levels.

WSU's Grounds Maintenance group currently consists of 26 FTEs. This number includes staff who are responsible for maintaining the athletic fields and staff who are responsible for moving/staging duties. I believe that these two groups should be excluded when considering the total FTEs involved in maintaining the campus landscape:

- 3 FTEs are assigned to the moving crew and since I assume that 75% of their work is related to moving/staging, it makes sense not to count them as true groundskeepers.
- 3 FTEs are dedicated to athletic/recreational field maintenance and I think it's sensible to isolate these positions and evaluate them separately. According to the information provided by the Grounds Maintenance Director, the Matthaui crew maintains 29.4 acres of turf and a total area of 46.5 acres. I am in agreement that 3 FTE's are adequate for this area especially since they are responsible for "lining" the fields and supporting some of the athletic events.
- The Director position (1 FTE) should not be counted as a groundskeeper either since a majority of his time is spent on managerial and administrative tasks.

When these seven positions are excluded from the total staff count, WSU is left with 19 FTEs who are maintaining the core of the campus landscape.

APPA provides guidelines for calculating the staffing requirements for a particular grounds area based on two essential factors:

1. The type of area that must be maintained and the tasks associated with that maintenance
2. The amount of care to be provided, or the level of attention to be paid, to the grounds area

Based on my on-site assessment, I believe that Wayne State is maintaining its grounds at a Level 2 as defined by APPA.

- APPA guidelines suggest that 2.3 acres of turf per FTE is an appropriate staffing ratio for a Level 2 institution.
- Based on this ratio, Wayne State would require 15.78 FTEs since there are 36.3 acres of maintainable turf on campus (not including athletic fields).
- I think it is also reasonable for an additional FTE to be factored in given the work involved with seasonal color planting and maintenance. This brings the number of FTEs needed for landscape maintenance (excluding moving and athletic fields) to 16.78. This would suggest that Wayne State's operation is overstaffed by 2.22 FTE.

With this said, it is important to note that APPA guidelines are just that, *guidelines*, and each campus has a uniquely different composition which may result in higher or lower staffing needs given a variety of factors. For instance, I suspect that WSU must spend more time picking up litter than its contemporaries located in suburban areas. It would be helpful to know how much "true time" is spent on litter each day in determining if the proposed staffing level is correct.

Additionally, I was asked to look into the feasibility of whether WSU could operate under a "winter routes" approach. In other words, could WSU reduce its full time staff to the minimum level necessary for maintaining the campus during the winter months (i.e. the fall and winter months) when there are fewer planting and turf maintenance activities occurring, and increase its staff with temporary workers during the busier months (i.e. the spring and summer)? This approach is commonly used in the commercial and residential landscape industry,

but it is very difficult to implement in a University setting due to the many non-landscape related responsibilities that campus grounds staff handle on a daily basis. I would recommend WSU not take this approach for two reasons:

- 1) The grounds crew at WSU is largely responsible for deicing and snow removal activities for the campus and I would imagine this is nearly equal to the labor demand associated with the summer/spring planting and turf maintenance tasks.
- 2) This staffing tactic could strain the current organization since it will require supervisors to spend time hiring, training, and managing temporary workers each season.

With that said, I do believe WSU would benefit from using a contractor to install and maintain seasonal color as outlined below under *Recommendation 5*.

Recommendation 2: Realign the campus into larger zones and service these zones using a crew-based model

Currently, the campus is divided into 11 zones. Each zone is maintained by a single worker who serves as a “jack of all trades”. While this model does have some benefits (i.e. developing a sense of ownership between the worker and his/her zone, building a strong relationship between zone occupants and the grounds worker, etc.) it is also a costly and inefficient way to organize.

- Every day, one supervisor has to manage the work occurring in 11 different zones
- Currently, workers are unable to share tools and equipment, which drives up maintenance and operating costs

I recommend that the campus be realigned into larger zones based on the zone-model that Grounds already has in place. Each zone would be maintained by a crew of two to three workers and led by a crew leader. The benefits to this change include:

- Better utilization of equipment and less vehicles needed
- Set routes and daily duties are easier to establish
- Groundskeepers work in teams, no more “lone rangers”
- Supervisors are more effective
- Easier to know where everyone is located at any given time
- Simplifies communication needs (crew leaders are the only workers needing to carry radios)
- Fewer vehicles ease strains on pedestrian traffic flow

Three areas on campus are already maintained using a crew-based model. Grounds could keep this structure intact and add four additional zones, maintained by crews of two to three workers.

Current crew-based zones that should remain intact:

- Moving and relocation services
- Athletics
- West Side

Potential future zones:

- North End
- Center Campus
- South End
- Medical Center (*Note: Grounds Maintenance could consider combining this area with another zone.*)

Ideally, a crew leader would lead each crew. In addition to handling landscape maintenance work, they would be responsible for overseeing the workers assigned to their crew. At Emory University, the pay grade for this position is two grades above the Groundskeeper position and four grades below the Supervisor position.

Implementing this model could allow WSU to reduce its Grounds Maintenance staff by two FTEs with no change to landscape quality.

Lastly, I would recommend that FP&M’s leadership have an “open” and “transparent” discussion with the Grounds Maintenance Director and his staff and involve them in implementing this “crew based” approach. I

believe that they can provide some great insights on how to formulate the new approach and it will allow them an opportunity to become more involved in and supportive of any organizational changes that are made by FP&M.

Recommendation 3: Develop clear expectations for all positions within the Grounds Maintenance Department; Implement a quality rating system for each crew and rate each individual on their performance relative to expectations and established quality standards

The organization currently lacks performance indicators to measure productivity and efficiency of operations. I sense that management would like to develop a system that better defines expectations for staff on a daily basis. Defined daily expectations coupled with a complementary rating system for productivity and quality assurance relative to landscape operations would be a desired goal. The Department should strive to provide ratings on a monthly basis.

Recommendation 4: A campus design standard should be created for landscape furnishings and accessories; a multi-year plan to retrofit the campus according to the new standards should be developed

Wayne State University is built upon approximately 210 acres of urban development in Detroit, Michigan. Approximately 54% of the 210 acres is "open" space consisting of roads, sidewalks, malls, turf, trees, ornamental shrub beds, and fountains. The expansiveness and sheer volume of concrete surfaces gives the campus a stark appearance in winter. I am sure that when the trees are in full leaf that this "starkness" is muted and that the addition of flowering plant materials in pots, planters, and flower beds softens the appearance as well.

There does not appear to be a campus standard for benches, bike racks, posts/chains, bollards, and other landscape furnishings. A campus standard for landscape furnishing and accessories needs to be created and a multi-year plan to retrofit the campus according to the new standards should be developed.

Recommendation 5: Evaluate the use of outside contractors to install and maintain seasonal color and to provide tree trimming services

Since seasonal plantings are not necessary year round it may be possible to augment current operations with an outside contractor. Benefits of using an outside firm for seasonal plantings include:

- Greater aesthetical results since outside firms often employ staff that have greater expertise in selecting and maintaining plantings
- Allowing internal grounds staff to concentrate on their core landscape maintenance functions and which in turn decreases strains on the organization and ultimately leads to reduced costs

WSU's grounds maintenance staff currently handle tree trimming needs on campus. This puts the University at unnecessary risk due to the high potential of worker injury and/or property damage. Arborists also have an extensive knowledge of:

- Identifying and removing dead or weakened limbs that pose a hazard or lead to decay
- Creating better tree structure to reduce wind resistance and potential for storm damage
- Training young trees
- Improving tree shape

Recommendation 6: Engage a landscape architect to develop a long term master plan for the campus landscape; focus should be on reducing hardscape and turf

Developing a master plan that University administrators agree upon will help FP&M leadership stay focused on committed design intent for the look and feel of the campus landscape. WSU's master plan should include:

- Reducing impervious surfaces to mitigate storm water run-off and the urban heat island effect

- Designing a more pedestrian friendly campus that still allows necessary service vehicles to access the campus on a limited basis

Recommendation 7: Limit or restrict vehicle access to the mall area and pedestrian zones wherever possible

Campus planners must develop a plan to limit or restrict vehicular access to mall areas during peak times for pedestrian traffic. There is damage to hardscape and landscape areas that is occurring due to delivery and service vehicles having access to the mall areas. The Grounds department, through necessity, has strategically placed boulders to prevent vehicles from driving on turf areas. Although, this system may be a deterrent to vehicles, the presence of the boulders detracts from the overall appearance of the campus.

Recommendation 8: Repair or repurpose the water features near McGregor and DeRoy

WSU should consider repairing its water features to help soften the interior area of campus, or fill them to provide additional bed space for seasonal color plantings.

Recommendation 9: Ensure auxiliary units are invoiced for services

Grounds Maintenance should review its current billing practices to ensure it is invoicing for rechargeable work. For example, Grounds Maintenance is currently providing landscape maintenance services for parking areas, but Grounds does not charge the Parking Office for the services they provide. WSU operates its parking entity as an auxiliary, so Grounds should explore whether Parking should be billed for services rendered.

Recommendation 10: Give groundskeepers greater responsibility for maintaining their shop

If WSU decides to move to a “crew” based option as outlined in *Recommendation 2*, I would recommend that each crew take responsibility for tidying up their shop area on a rotating basis. I found the Grounds Maintenance shop to be generally well kept, but I believe the space would benefit from a general cleaning on a routine basis.

Every day after lunch, each crew could be assigned a task. For example, one crew could be assigned the task of blowing off the area outside the shop, another crew could be assigned the task of straightening up the break area, another crew could be assigned the task of sweeping the inside work areas, etc. Each of the crews could be tasked with carrying out a housekeeping responsibility for five weeks and then rotate to a new task. This would not take the place of custodians who should still be assigned to the building to service the restrooms, office areas, the break room, etc.

I believe this will not only improve the look of the shop, but it will ingrain a sense of teamwork and provide groundskeepers with a greater sense of ownership over their work space.

Interview List

(Listed in alphabetical order)

Name	Title / Organization	Organization
Marty Bartley	Groundskeeper	Grounds Maintenance Department
Kent Bolt	Director	Grounds Maintenance Department
Steve Bowman	Groundskeeper	Grounds Maintenance Department
Chris Casleton	Landscape Supervisor	Grounds Maintenance Department
Michael Colburn	Senior Director of Facilities Operations	Facilities Planning & Management
Megan Etue	Manager	Facilities Planning & Management
Raymond Lindenmuth	Landscape Supervisor	Grounds Maintenance Department
Jim Sears	Associate Vice President	Facilities Planning & Management



Wayne State University Grounds Maintenance Assessment

A report prepared for the Associate Vice President for
Facilities Planning & Management

December 6, 2011

HuronEducation

YOUR MISSION | OUR SOLUTIONS

Table of Contents

Overview.....	3
Purpose.....	3
Scope.....	3
Approach.....	3
Recommendations.....	4
1. Eliminate vacant positions	4
2. Realign current zone structure and implement a crew-based staffing model.....	5
3. Develop KPIs for grounds maintenance staff	6
4. Implement landscape design standards.....	6
5. Consider using outside firms for tree trimming and seasonal planting.....	6
6. Develop a landscape master plan.....	6
7. Limit vehicle access to pedestrian areas.....	7
8. Repair or repurpose water features	7
9. Ensure auxiliary units are charged for services rendered.....	7
10. Assign housekeeping tasks to groundskeepers	7
Interview List.....	8

Overview

Purpose

Wayne State University (WSU) engaged Huron Consulting Group (Huron) to conduct a high-level assessment of WSU's Grounds Maintenance organization. Huron's assessment was led by Jimmy Powell, Director of Exterior Services and Sustainability at Emory University, located in Atlanta, Georgia. The primary objective of Jimmy's review was to understand the current state of WSU's grounds organization and provide recommendations to improve the overall efficiency and effectiveness of the operation.

Scope

- Analyze current staffing levels and determine whether the current staff size is appropriate for WSU's grounds related operations
- Determine whether opportunities exist to increase the efficiency and effectiveness of current operations
- Provide recommendations for establishing a Quality Assurance program based on service level expectations and staff/crew performance ratings

Approach

During his time on campus, Jimmy met with the senior leadership team of Facilities Planning and Management (FP&M), the Director of Grounds Maintenance, Kent Bolt, Kent's leadership staff, and several front-line staffers. Jimmy also spent time walking the campus and touring the Grounds Maintenance shop.

Based on his visit, and on his knowledge of and experience in the industry, Jimmy has outlined 10 recommendations he believes WSU could take to enhance its Grounds Maintenance operation and improve the overall look and feel of the Detroit campus.

Recommendations

Recommendation 1: The two vacant staff positions, currently filled by temps, are not necessary and could be eliminated

Grounds Maintenance has two vacant positions that are currently filled by workers on temporary status. During my time on campus, I observed a high level of maintenance carried out by the staff currently in place. I would question whether these two positions are necessary since it has been my experience that temporary employees are less productive than full time regular employees. It is my recommendation that WSU consider eliminating these two positions.

APPA recently printed the second edition of the Grounds-Operational Guidelines for Educational Facilities which I have referenced in order to provide some additional thoughts on WSU's current landscape staffing levels.

WSU's Grounds Maintenance group currently consists of 26 FTEs. This number includes staff who are responsible for maintaining the athletic fields and staff who are responsible for moving/staging duties. I believe that these two groups should be excluded when considering the total FTEs involved in maintaining the campus landscape:

- 3 FTEs are assigned to the moving crew and since I assume that 75% of their work is related to moving/staging, it makes sense not to count them as true groundskeepers.
- 3 FTEs are dedicated to athletic/recreational field maintenance and I think it's sensible to isolate these positions and evaluate them separately. According to the information provided by the Grounds Maintenance Director, the Matthaui crew maintains 29.4 acres of turf and a total area of 46.5 acres. I am in agreement that 3 FTE's are adequate for this area especially since they are responsible for "lining" the fields and supporting some of the athletic events.
- The Director position (1 FTE) should not be counted as a groundskeeper either since a majority of his time is spent on managerial and administrative tasks.

When these seven positions are excluded from the total staff count, WSU is left with 19 FTEs who are maintaining the core of the campus landscape.

APPA provides guidelines for calculating the staffing requirements for a particular grounds area based on two essential factors:

1. The type of area that must be maintained and the tasks associated with that maintenance
2. The amount of care to be provided, or the level of attention to be paid, to the grounds area

Based on my on-site assessment, I believe that Wayne State is maintaining its grounds at a Level 2 as defined by APPA.

- APPA guidelines suggest that 2.3 acres of turf per FTE is an appropriate staffing ratio for a Level 2 institution.
- Based on this ratio, Wayne State would require 15.78 FTEs since there are 36.3 acres of maintainable turf on campus (not including athletic fields).
- I think it is also reasonable for an additional FTE to be factored in given the work involved with seasonal color planting and maintenance. This brings the number of FTEs needed for landscape maintenance (excluding moving and athletic fields) to 16.78. This would suggest that Wayne State's operation is overstaffed by 2.22 FTE.

With this said, it is important to note that APPA guidelines are just that, *guidelines*, and each campus has a uniquely different composition which may result in higher or lower staffing needs given a variety of factors. For instance, I suspect that WSU must spend more time picking up litter than its contemporaries located in suburban areas. It would be helpful to know how much "true time" is spent on litter each day in determining if the proposed staffing level is correct.

Additionally, I was asked to look into the feasibility of whether WSU could operate under a "winter routes" approach. In other words, could WSU reduce its full time staff to the minimum level necessary for maintaining the campus during the winter months (i.e. the fall and winter months) when there are fewer planting and turf maintenance activities occurring, and increase its staff with temporary workers during the busier months (i.e. the spring and summer)? This approach is commonly used in the commercial and residential landscape industry,

but it is very difficult to implement in a University setting due to the many non-landscape related responsibilities that campus grounds staff handle on a daily basis. I would recommend WSU not take this approach for two reasons:

- 1) The grounds crew at WSU is largely responsible for deicing and snow removal activities for the campus and I would imagine this is nearly equal to the labor demand associated with the summer/spring planting and turf maintenance tasks.
- 2) This staffing tactic could strain the current organization since it will require supervisors to spend time hiring, training, and managing temporary workers each season.

With that said, I do believe WSU would benefit from using a contractor to install and maintain seasonal color as outlined below under *Recommendation 5*.

Recommendation 2: Realign the campus into larger zones and service these zones using a crew-based model

Currently, the campus is divided into 11 zones. Each zone is maintained by a single worker who serves as a “jack of all trades”. While this model does have some benefits (i.e. developing a sense of ownership between the worker and his/her zone, building a strong relationship between zone occupants and the grounds worker, etc.) it is also a costly and inefficient way to organize.

- Every day, one supervisor has to manage the work occurring in 11 different zones
- Currently, workers are unable to share tools and equipment, which drives up maintenance and operating costs

I recommend that the campus be realigned into larger zones based on the zone-model that Grounds already has in place. Each zone would be maintained by a crew of two to three workers and led by a crew leader. The benefits to this change include:

- Better utilization of equipment and less vehicles needed
- Set routes and daily duties are easier to establish
- Groundskeepers work in teams, no more “lone rangers”
- Supervisors are more effective
- Easier to know where everyone is located at any given time
- Simplifies communication needs (crew leaders are the only workers needing to carry radios)
- Fewer vehicles ease strains on pedestrian traffic flow

Three areas on campus are already maintained using a crew-based model. Grounds could keep this structure intact and add four additional zones, maintained by crews of two to three workers.

Current crew-based zones that should remain intact:

- Moving and relocation services
- Athletics
- West Side

Potential future zones:

- North End
- Center Campus
- South End
- Medical Center (*Note: Grounds Maintenance could consider combining this area with another zone.*)

Ideally, a crew leader would lead each crew. In addition to handling landscape maintenance work, they would be responsible for overseeing the workers assigned to their crew. At Emory University, the pay grade for this position is two grades above the Groundskeeper position and four grades below the Supervisor position.

Implementing this model could allow WSU to reduce its Grounds Maintenance staff by two FTEs with no change to landscape quality.

Lastly, I would recommend that FP&M’s leadership have an “open” and “transparent” discussion with the Grounds Maintenance Director and his staff and involve them in implementing this “crew based” approach. I

believe that they can provide some great insights on how to formulate the new approach and it will allow them an opportunity to become more involved in and supportive of any organizational changes that are made by FP&M.

Recommendation 3: Develop clear expectations for all positions within the Grounds Maintenance Department; Implement a quality rating system for each crew and rate each individual on their performance relative to expectations and established quality standards

The organization currently lacks performance indicators to measure productivity and efficiency of operations. I sense that management would like to develop a system that better defines expectations for staff on a daily basis. Defined daily expectations coupled with a complementary rating system for productivity and quality assurance relative to landscape operations would be a desired goal. The Department should strive to provide ratings on a monthly basis.

Recommendation 4: A campus design standard should be created for landscape furnishings and accessories; a multi-year plan to retrofit the campus according to the new standards should be developed

Wayne State University is built upon approximately 210 acres of urban development in Detroit, Michigan. Approximately 54% of the 210 acres is "open" space consisting of roads, sidewalks, malls, turf, trees, ornamental shrub beds, and fountains. The expansiveness and sheer volume of concrete surfaces gives the campus a stark appearance in winter. I am sure that when the trees are in full leaf that this "starkness" is muted and that the addition of flowering plant materials in pots, planters, and flower beds softens the appearance as well.

There does not appear to be a campus standard for benches, bike racks, posts/chains, bollards, and other landscape furnishings. A campus standard for landscape furnishing and accessories needs to be created and a multi-year plan to retrofit the campus according to the new standards should be developed.

Recommendation 5: Evaluate the use of outside contractors to install and maintain seasonal color and to provide tree trimming services

Since seasonal plantings are not necessary year round it may be possible to augment current operations with an outside contractor. Benefits of using an outside firm for seasonal plantings include:

- Greater aesthetical results since outside firms often employ staff that have greater expertise in selecting and maintaining plantings
- Allowing internal grounds staff to concentrate on their core landscape maintenance functions and which in turn decreases strains on the organization and ultimately leads to reduced costs

WSU's grounds maintenance staff currently handle tree trimming needs on campus. This puts the University at unnecessary risk due to the high potential of worker injury and/or property damage. Arborists also have an extensive knowledge of:

- Identifying and removing dead or weakened limbs that pose a hazard or lead to decay
- Creating better tree structure to reduce wind resistance and potential for storm damage
- Training young trees
- Improving tree shape

Recommendation 6: Engage a landscape architect to develop a long term master plan for the campus landscape; focus should be on reducing hardscape and turf

Developing a master plan that University administrators agree upon will help FP&M leadership stay focused on committed design intent for the look and feel of the campus landscape. WSU's master plan should include:

- Reducing impervious surfaces to mitigate storm water run-off and the urban heat island effect

- Designing a more pedestrian friendly campus that still allows necessary service vehicles to access the campus on a limited basis

Recommendation 7: Limit or restrict vehicle access to the mall area and pedestrian zones wherever possible

Campus planners must develop a plan to limit or restrict vehicular access to mall areas during peak times for pedestrian traffic. There is damage to hardscape and landscape areas that is occurring due to delivery and service vehicles having access to the mall areas. The Grounds department, through necessity, has strategically placed boulders to prevent vehicles from driving on turf areas. Although, this system may be a deterrent to vehicles, the presence of the boulders detracts from the overall appearance of the campus.

Recommendation 8: Repair or repurpose the water features near McGregor and DeRoy

WSU should consider repairing its water features to help soften the interior area of campus, or fill them to provide additional bed space for seasonal color plantings.

Recommendation 9: Ensure auxiliary units are invoiced for services

Grounds Maintenance should review its current billing practices to ensure it is invoicing for rechargeable work. For example, Grounds Maintenance is currently providing landscape maintenance services for parking areas, but Grounds does not charge the Parking Office for the services they provide. WSU operates its parking entity as an auxiliary, so Grounds should explore whether Parking should be billed for services rendered.

Recommendation 10: Give groundskeepers greater responsibility for maintaining their shop

If WSU decides to move to a “crew” based option as outlined in *Recommendation 2*, I would recommend that each crew take responsibility for tidying up their shop area on a rotating basis. I found the Grounds Maintenance shop to be generally well kept, but I believe the space would benefit from a general cleaning on a routine basis.

Every day after lunch, each crew could be assigned a task. For example, one crew could be assigned the task of blowing off the area outside the shop, another crew could be assigned the task of straightening up the break area, another crew could be assigned the task of sweeping the inside work areas, etc. Each of the crews could be tasked with carrying out a housekeeping responsibility for five weeks and then rotate to a new task. This would not take the place of custodians who should still be assigned to the building to service the restrooms, office areas, the break room, etc.

I believe this will not only improve the look of the shop, but it will ingrain a sense of teamwork and provide groundskeepers with a greater sense of ownership over their work space.

Interview List

(Listed in alphabetical order)

Name	Title / Organization	Organization
Marty Bartley	Groundskeeper	Grounds Maintenance Department
Kent Bolt	Director	Grounds Maintenance Department
Steve Bowman	Groundskeeper	Grounds Maintenance Department
Chris Casleton	Landscape Supervisor	Grounds Maintenance Department
Michael Colburn	Senior Director of Facilities Operations	Facilities Planning & Management
Megan Etue	Manager	Facilities Planning & Management
Raymond Lindenmuth	Landscape Supervisor	Grounds Maintenance Department
Jim Sears	Associate Vice President	Facilities Planning & Management